

Application Descriptions

HVAC General Functional Blocks

HVAC Common Functional Blocks

Summary:

This Approved Standard is a part of the HVAC Application Interworking Standard for HVAC applications. This Chapter describes the HVAC Common Functional Blocks.

Version 02.05.02 is WGI approved

This document is part of the KNX Specifications v2.1.

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Document updates

Version	Date	Modifications		
2.4 AS	2008.09.10	AN106 "Phasing out TP0" integrated.		
		AN107 "Phasing out LT-R" integrated.		
		AN108 "Phasing out LT-S" integrated.		
		AN109 "Phasing out PL132" integrated.		
		AN110 "Phasing out A-Mode" integrated.		
2.4 AS	2009.05.06	Editorial update in view of publication in the KNX Specifications v2.4.		
2.5 Draft	1013.10.07	 ComfortProlongEff, TempRoomSetpUserOffsetEff, 		
		TempRoomSetpAbsEff added to FB RSMHD		
		 HumRelSetpUserEff, HumDehumMode added to FB SMRH 		
		→ new DPT_HumDehumMode 20.114		
		 AQSetpUserEff added to FB SMAQ 		
		• FBs PMC, HVACOPT, BOS: Enumerations of inputs and outputs with		
		DPT_HVACContrMode / DPT_HVACContrMode_Z updated according		
		updated DPT specifications, see [1].		
		• Editorial		
2.5.01 Draft	2012.10.14	Editorial		
02.05.02	2013.10.28	Editorial updates for the publication of KNX Specifications 2.1.		

Copies with the same version number but newer save date contain small corrections without impact on the content.

References

References, relevant for this document.

- [1] Chapter 3/7/2 "Datapoint Types"
- [2] Chapter 7/10/1 "HVAC Sensor Functional Blocks"
- [3] Chapter 7/10/2 "HVAC HMI Functional Blocks"
- Chapter 7/10/3 "HVAC Actuator Functional Blocks" [4]
- [5]
- Chapter 7/10/4 "HVAC Common Functional Blocks" Chapter 7/10/5 "HVAC Scheduler Functional Blocks" [6]
- [7] Part 7/11 "Hot Water Heating" (all Chapters)
- [8] Part 7/12 "Direct Electrical Heating" (planned)
- Part 7/13 "Terminal Units" [9]
- [10] Part 7/14 "Ventilation, Air Conditioning and Cold Water"
- Part 10/1 "LTE Specificatio" [11]

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1 Introduction

1.1 Scope

This document is part of the KNX HVAC Application Interworking Standard.

It contains the specification of the Sensor Functional Blocks used for HVAC applications.

Other general purpose Functional Blocks used for HVAC applications such as 'HVAC HMI' [3], 'HVAC Actuators' [4], 'HVAC Common Functions' [5] and 'HVAC Schedulers' [6] are described in separate documents.

Functional Block specification for the applications 'Hot Water Heating' (HWH) [7], 'Direct Electrical Heating' (DEH) [8], 'Terminal Units' (TU) [9] and 'Ventilation & Air Conditioning' (VAC) [10] are described in separate documents.

1.2 Objectives

This document includes the information necessary to build interoperable HVAC sensor products using the KNX system. Runtime process interworking between HVAC control devices at the application level is the focus. Also data-interfaces for parameter setting, visualisation etc. are specified where appropriate (only state of the art Datapoints generally used in all companies).

In addition, this document specifies the specific mechanisms for zoning and runtime process data distribution used in HVAC for an 'E-Mode installation' system (LTE-HEE Mode [11]).

This is a technical specification with informative material provided as needed to convey key concepts. The approach taken here is a top-down view of interoperability. The HVAC system model is based on the decomposition of the distributed HVAC application by means of Functional Blocks, i.e. black-box description of Functional Blocks including data-interface and relationship to other Functional Blocks.

Every Functional Block may be part of a complex device (e.g. a heating controller) containing more than one Functional Block. Because of this modular approach, there is no attempt in this specification to describe or dictate the internal construction of a Functional Block or to describe specific device types.

This document only includes details of the transport protocol as needed to specify interoperability and easy installation mechanisms. The document does not specifically cover implementation aspects, but guidelines are included where appropriate.

This part of the KNX HVAC specification is mainly but not completely independent of the underlying protocol since specific mechanisms for "easy configuration" and runtime data distribution must be available on the network.

Completely protocol dependent parts of the HVAC sensor specification such as data encoding and Datapoint Types, object address tables, Group Address Tables etc. are not part of this document.

1.3 Dependence on Configuration Modes

1.3.1 Focus

The main focus of this document is the specification of the **Basic Functional Blocks** and the **LTE specific parts**.

The document provides all necessary information needed

- for a complete implementation of the Functional Blocks in LTE mode, and
- for the implementation of mandatory objects used for runtime interworking in standard mode (Basic Functional Block)

1.3.2 Runtime Interworking

Configuration Mode dependent (S-Mode, Ctrl-Mode, PB-Mode) implementation of optional runtime interworking objects is not specified in this document, e.g. "E-Mode Channel" definitions.

The following table (example) shows the mode dependencies concerning runtime interworking

			STANDARD MODE	EXTENDED MODE	
		Basic FB	S-Mode	Standard Mode Interface	HEE
Inputs	Inp1	NA	NA	NA	M
	Inp2	NA	NA	NA	0
	Inp3	(GO _b)		(GO)	О
Outputs	Outp1	NA	NA	NA	M
	- Outp1-1	GO_b	GO	GO	NA
	- Outp1-2	GO_b	GO	GO	NA
	Outp 2	GO_b	GO	GO	M

- Inp1: is mandatory M in LTE Mode but the information is not available NA in the Basic FB and all other modes because the Datapoint Type (DPT) is <u>today</u> not available in standard mode and there are no products on the market with this functionality.
- Inp2: is optional O in LTE Mode but the information is not available NA in the Basic FB and all other modes because the DPT is <u>today</u> not available in standard mode and there are no products on the market with this functionality.
- Inp3: is optional O in LTE Mode and an optional Group Object in the Basic FB (GO_b). The Datapoint is optionally supported as Group Object in the LTE Standard Mode Interface (GO). For all other modes the implementation is not defined. This is indicated by an empty field.
- Outp1: is mandatory M in LTE Mode and has a structured DPT or a DPT with extended features which is today not available in standard mode. In the Basic FB the information of Outp1 is split up into Outp1-1 and Outp1-2 (separate Datapoints with standard DPT).

 Outp1-1 and Outp1-2 are mandatory Group Objects GO in the Basic FB and are therefore mandatory in all modes.

Outp2: is mandatory in all modes.

1.3.3 Parameters and Diagnostic Data

LTE implementation

- Parameters and Diagnostic Data of a Functional Block shall be implemented as Properties of the corresponding Interface Object that are accessed using point-to-point communication.
- These Properties are addressed via the standard Interface Object Type (IO Type) for this Functional Block. This IO Type is also used for Datapoint addressing in the LTE runtime interworking model.
- Standard DPT or HVAC specific DPT with extended features are used where appropriate.

Other modes

- Parameters and Diagnostic Data can in principle be implemented as memory mapped Datapoints or Group Objects or Properties of an Interface Object using point-to-point communication mode. This document does not lay down how to implement Parameters and Diagnostic Data in S-Mode, Ctrl-Mode and PB-Mode.
- In case of **Memory Mapped** Datapoints the DPT may be manufacturer specific
- In case of **Group Objects** standard DPT shall be used instead of HVAC specific (extended) DPT. The description of these Group Objects shall be part of the mode-dependent specification (e.g. E-Mode Channel definition).
- In case of Properties, the implementation of HVAC specific DPT with extended features may be a problem (depending on the available microcontroller resources). The manufacturer has the choice
 - to use the LTE style Property implementation as specified in this document (with the DPT and IO Type for LTE implementations)

 IO Type^{used} = IO Type^{HVAC-LTE}
 - to implement these Properties using standard DPT only.

In this case, the same Property ID but a different IO Type shall be used since the DPT of a Property shall be unambiguous for each IO Type.

Simple IOT mapping rule:

IO Type^{used} = IO Type^{standardDPT} = IO Type^{HVAC-LTE} + 10 000d EXAMPLE BUC^{HVAC-LTE} =
$$128 \Rightarrow BUC^{standardDPT} = 10 128$$

It is allowed to implement in a device both Interface Object Types IO Type^{HVAC-LTE} and IO Type^{standardDPT}. The implementation of parameters and diagnostic data of one given Functional Block shall however be complete. It is thus not allowed to implement part of the Datapoints of a Functional Block in IO TypestandardDPT and the remaining in IO Type^{HVAC-LTE}.

	Implementation of Parameter and Diagnostic Data			
	Property based LTE style Standard DPT		Group Object	Memory mapped
IO Type	IO Type ^{HVAC-LTE} e.g. BUC=128	IO Type ^{HVAC-LTE} + 10000 e.g. BUC=10128		
Property ID	Property ID x	Property ID x		
	if standard DPT	⇒ same standard DPT	⇒ same standard DPT	company specific
DPT	if HVAC-LTE specific*) e.g. 205.100	\Rightarrow mapped standard DPT, e.g. 9.001	⇒ mapped standard DPT, e.g. 9.001	

In this document only the **HVAC-LTE style** of Parameters and Diagnostic Data is specified for IO Type HVAC-LTE.

In the FB Datapoint overview those Parameters and Diagnostic Data with HVAC-LTE specific (extended) DPT are marked "*)".

The mapping of HVAC specific DPT to standard DPT is generic and described in the document [1].

1.4 Glossary

This glossary only contains a few positions, which might be misunderstood.

Term		Description
Supervisor		Supervisor stands for building management station, programme
		unit or similar installations, which normally are computer based.

1.5 Abbreviations

1.5.1 Functional Blocks

1.5.1.1 Sensors [2], HMI [3], Actuators [4], Common Controller Functions [5]

Abbreviation	[Doc]	Description	
BOS	[5]	Building/Occ-Mode Source	
HVACEMS	[5]	HVAC Emergency Source	
HVACOPT	[5]	HVAC Optimiser	
PMC	[5]	Programme to HVAC-Mode Conversion	
PRD	[2]	Presence Detector	
RSMHD	[5]	Room Setpoint Manager HVAC-Mode Driven	
RSMTD	[5]	Room Setpoint Manager Temperature Driven	
RTSA	[5]	Room Temperature Setpoint Absolute	
SMAQ	[5]	Setpoint Manager Air quality	
SMRH	[5]	Setpoint Manager Relative Humidity	
SSLSTA	[5]	Setpoint Shift by Loadshedding & Tariff	
UAQSS	[3]	User Air Quality Setpoint Setting	
UEARTS	[3]	User Enable Alternative Room Temperature Setpoint	
UHRS	[3]	User HVAC Room Settings	
UPS	[3]	User Presence Setting	
URHSS	[3]	User Relative Humidity Setpoint setting	
WOS	[2]	Window Switch	

1.5.1.2 Schedulers [6]

As far as relevant in this document.

Abbreviation	Description
ARTSS	Absolute Room Temperature Setpoint Scheduler
HVACS	HVAC Scheduler

1.5.2 General

Abbreviation	Description		
CS	Company Specific		
GO	Group Object mandatory		
(GO)	Group Object optional		
M	Mandatory		
NA	Not Allowed / Not Applicable		
0	Optional		
S	Has to be implemented in Standard Mode,		
	if implemented in LTE-HEE Mode		

Abbreviation	Description		
HEE	HVAC Easy Extension		
HVAC	Heating Ventilation Air Conditioning		
LTE	Logical Tag Extended		

Abbreviation	Description
IR	LTE-Service InfoReport
W	LTE-Service Write

Abbreviation	Description	
DEH	Direct Electric Heating	
DHW	Domestic Hot Water	
TU	Terminal Unit	
VAC	Ventilation and Air Conditioning	

2 Formal matters

2.1 Introduction to Functional Blocks

The Functional Blocks are described in a standard way as described below.

Every Functional Block may be part of a complex device (e.g. a controller) containing more than one Functional Block.

A Functional Block never can be split. Although not all Inputs, Outputs etc. are mandatory. The optional Inputs, Outputs do not have to be realised.

2.2 Description of Functional Blocks

2.2.1 Aims and objectives

This clause shall give an overview of the functionality of the Functional Block, as well as possibly information about Interworking with other Functional Blocks.

2.2.2 Functional specifications

This clause gives detailed information about the Inputs, the Outputs, the Parameters, the Diagnostic Data, the Alarms and the Hardwired I/O's.

2.2.3 Constraints

Constraints for the use of the Functional Block as well as for the use of Inputs, Outputs, Parameters, Diagnostic Data, Alarms etc. are described here.

2.2.4 Functional Block

On top of the Functional Block the name and its abbreviation is marked.

Then the Inputs / Outputs are following.

The Inputs / Outputs are grouped in Binding Groups, according to LTE (Logical Tag Extended).

Mandatory Inputs / Outputs have a grey arrow with the letter M.

They also have to be available in the Standard Mode.

Optional Inputs / Outputs have a white arrow.

Some of these Inputs / Outputs, in case of being implemented, also have to be available in the Standard Mode. These Inputs / Outputs have a white arrow with the letter S.

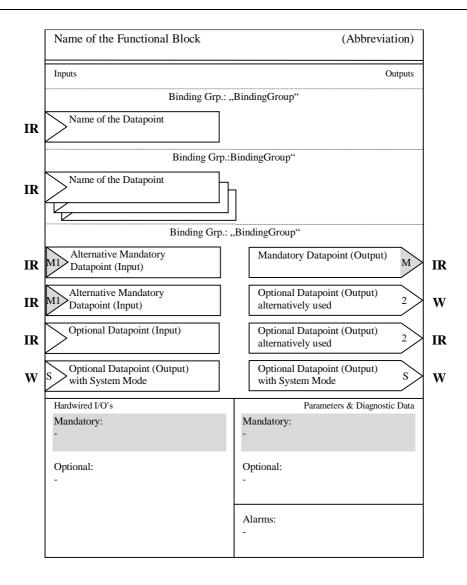
Some of the Inputs / Outputs only make sense in combination, others may be used either / or. Such Inputs / Outputs are grouped with numbers.

At the bottom there are three fields:

On the left-hand side we find the Hardwired Inputs / Outputs, the mandatory ones in a grey field, the optional ones in a white field.

On the right-hand side there is a field for the Parameters and the Diagnostic Data used in the Functional Block (mandatory in grey, optional in white).

On the right-hand side at the bottom there is the field for the Alarms, generated in the Functional Block (for use in the Functional Block Alarm Source).



2.2.5 Datapoints / Formats

Datapoints	Description / Remarks	Datapoint Type	Additional information
Inputs			
Name of the Data- Point	Descriptions, remarks if necessary	Name of the Datapoint Type and/or coding	
		LTE: DPT_TempHVACAbs_Z $V_{16}Z_8$	
		S: DPT_Value_Temp F ₁₆	
			M = mandatory, with system mode M1/M2 = alternative mandatory
			O = optional, system mode optional
			S = optional, but if implemented, then with system mode
			1,2 the numbers represent alternative packages
			Unit of the Datapoint Value Default Value
			Range indications
Outputs			
Name of the Data- Point	see above	see above	see above
Parameters			
Name of the Parameter	see above	see above	see above
Diagnostic Data			
Name of the Diagnostic Data	see above	see above	see above

Alarm	Description / Remarks	Error		Additional information
		Code	Prio	
Name of the Alarm	Descriptions, remarks if necessary	Code of the Alarm	Priority of the Alarm	Additional information

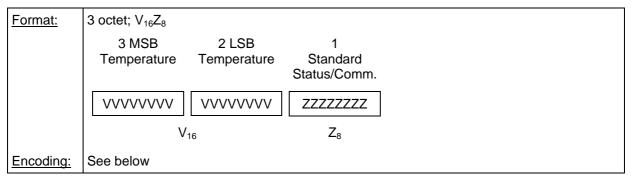
Detailed specification of the Datapoints

Detailed description of the Datapoints is given in a separate document [1].

Notations

Symbol	Field
Α	Character
A[n]	Character String with Length n
В	Boolean / Bit set
С	Control
E	Exponent
F	Float (with ME)
M	Mantisse
N	eNumeration
S	Sign
U	Unsigned value
V	2's Complement signed value
Z ₈	Standardised Status/Command B ₈

Example:



Octets are transmitted from left to right, i.e. octet 1 is transmitted last.

Standard Status/Command Information

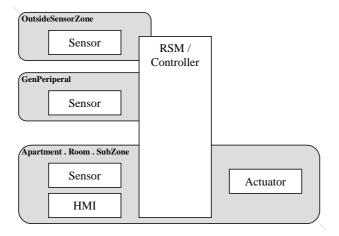
Some of the Datapoints are combined with Standard Status/Command Information. For further information see [1].

3 Common HVAC Functional Blocks

3.1 Introduction to Common HVAC Functional Blocks

This document contains some HVAC common Functional Blocks.

It is possible to combine more than one Functional Block in a device.



3.2 Programme to HVAC-Mode Conversion (PMC)

3.2.1 Aims and objectives

The purpose of the Functional Block 'Programme to HVAC-Mode Conversion' is to extract from general programme information the present and the next 'HVACMode' as well as the time to the latter. In addition the 'EnableComfort' and the 'ContrMode' may be determined.

In parallel to this Functional Block there may be similar Functional Blocks for other 'installations' as e.g. light, shutter, security etc., all basing on the same programme information.

This solution is e.g. used in larger building automation systems. For smaller systems refer to the schedulers, described in [6].

Here only the HVAC part is defined.

3.2.2 Functional specification

According to TC247 for the outputs HVACMode and HVACModeNext the following HVAC-Modes are used: Comfort, Standby, Economy and Building Protection

In the LTE-Mode the Outputs support the LTE zoning "Apartment . Room . SubZone".

Inputs

• BuildingMode: Current/present building mode (Used, Not Used, Protection) being

provided by a "supervisor".

• BuildingModeNext: Next mode (Used, Not Used, Protection) and the delay to it being

provided by a "supervisor".

• OccMode: Current/present occupancy mode (Occupied, Standby, Not Occupied)

being provided by a "supervisor".

• OccModeNext: Next mode (Occupied, Standby, Not Occupied) and the delay to it

being provided by a "supervisor".

• ContrModeBO: The Controlling mode defines all special HVAC functions and is

provided by a "supervisor".

Outputs

HVACMode Current/present mode (Comfort, Standby, Economy, Building

Protection) for the room setpoint manager.

• HVACModeNext Next mode (comfort, standby, economy, building protection) and the

delay to it for the room setpoint manager.

• EnableComfort This output can be used to inhibit the Room Setpoint Manager to go to

comfort when the 'local influences' e.g. HMI ask for it. This inhibit

may be necessary e.g. due to lack of hot water etc.

• ContrMode This output defines all special HVAC functions which may be

demanded by a supervisor. It is delivered to the controller.

Binding Groups (LTE)

• Binding group i, j, k This binding group is used for the BuildingMode and the OccMode

(mostly part of a supervisor).

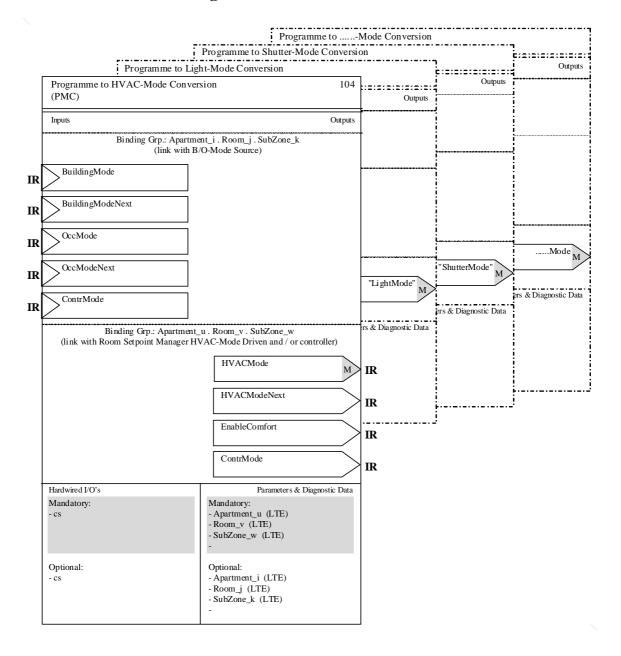
• Binding group u.v.w This binding group is used for the time programmes. (see 'Room

Setpoint Manager HVAC Mode Driven'.)

3.2.3 Constraints

None.

3.2.4 Functional Block diagram



3.2.5 Datapoint description

Overview

Datapoints	Description / remarks	Datapoint Type	Additional info
Inputs			
Building Mode	Present Building Mode with: - COV and RepPer - Z ₈ STATUS supported from FB Building/Occ-Mode Source	LTE: 201.107 DPT_BuildingMode_Z N ₈ Z ₈ S: 20.002 DPT_BuildingMode N ₈	LTE: O S: (GO) 0 = Building in Use 1 = Building not Used 2 = Building Protection
Building Mode Next	Next Building Mode plus time to next mode with: - COV and RepPer from FB Building/Occ-Mode Source Time = 0: Next mode undefined (as e.g. not valid)	LTE: 206.105 DPT_BuildingModeNext U ₁₆ N ₈ S: NA	LTE: O S: NA 0 = Building in Use 1 = Building not Used 2 = Building Protection
Occ Mode	Present Occupancy Mode with: - COV and RepPer - Z ₈ STATUS supported from FB Building/Occ-Mode Source	LTE: 201.108 DPT_OccMode_Z N ₈ Z ₈ S: 20.003 DPT_OccMode N ₈	LTE: O S: (GO) 0 = Building Occupied 1 = Building Standby 2 = Building not Occupied
Occ Mode Next	Next Occupancy Mode plus time to next mode with: - COV and RepPer from FB Building/Occ-Mode Source Time = 0: Next mode undefined (as e.g. not valid)	LTE: 206.104 DPT_OccModeNext U ₁₆ N ₈ S: NA	LTE: O S: NA 0 = Building Occupied 1 = Building Standby 2 = Building not Occupied time = min
Contr ModeBO	HVAC Controlling Mode with: - COV and RepPer - Z ₈ STATUS supported from FB Building/Occ-Mode Source	LTE: 201.104 DPT_HVACContrMode_Z N ₈ S: 20.105 DPT_HVACContrMode N ₈	LTE: O S: (GO) see DP description

Datapoints	Description / Remarks	Datapoint Type	Additional info
Outputs			
HVAC Mode	Present HVAC Mode with: - COV and RepPer - Z ₈ STATUS supported to FB 'Room Setpoint Manager HVAC Mode Driven'	LTE: 201.100 DPT_HVACMode_Z N ₈ Z ₈ S: 20.102 DPT_HVACMode N ₈	LTE: M S: GO 0 = NA 1 = Comfort 2 = Standby 3 = Economy 4 = Building Protection
HVAC Mode Next	Next HVAC Mode plus time to next mode with: - COV and RepPer to FB 'Room Setpoint Manager HVAC Mode Driven' Time = 0: Next mode undefined (as e.g. not valid)	LTE: 206.100 DPT_HVACModeNext U ₁₆ N ₈ S: NA	LTE: O S: NA 0 = NA 1 = Comfort 2 = Standby 3 = Economy 4 = Building Protection
Enable Comfort	Local comfort is possible (1) or not possible (0) with: - COV and RepPer to FB 'Room Setpoing Manager HVAC Mode Driven'	LTE: 1.003 DPT_Enable B ₁ S: 1.003 DPT_Enable B ₁	LTE: O S: (GO) 0 = disabled 1 = enabled
Contr Mode	HVAC Controlling Mode with: - COV and RepPer - Z ₈ STATUS supported to FB various controllers	LTE: 201.104 DPT_HVACContrMode_Z N ₈ S: 20.105 DPT_HVACContrMode N ₈	LTE: O S: (GO) see DP description

Datapoints	Description / Remarks	Datapoint Type	Additional info
Parameter			
Apartment_u	LTE zoning number for Apartment	202.002 DPT_UcountValue8_Z U ₈ Z ₈	M Programme zone
Room_v	LTE zoning number for Room	202.002 DPT_UcountValue8_Z U ₈ Z ₈	M Programme zone
SubZone_w	LTE zoning number for SubZone	202.002 DPT_UcountValue8_Z U ₈ Z ₈	M Programme zone
Apartment_i	LTE zoning number for Apartment	202.002 DPT_UcountValue8_Z U ₈ Z ₈	O Building/Occ mode zone
Room_j	LTE zoning number for Room	202.002 DPT_UcountValue8_Z U ₈ Z ₈	O Building/Occ mode zone
SubZone_k	LTE zoning number for SubZone	202.002 DPT_UcountValue8_Z U ₈ Z ₈	O Building/Occ mode zone

PMC Runtime Interworking - Dependence on Configuration Modes

			STANDARD MODE		NDED ODE
		Basic FB	S-Mode	Standard Mode Interface	нее
Inputs	BuildingMode	(GO _b)		(GO)	0
	BuildingModeNext	NA _b	NA	NA	0
	OccMode	(GO _b)		(GO)	0
	OccModeNext	NA _b	NA	NA	0
	ContrModeBO	(GO _b)		(GO)	0
Outputs	HVACMode	GO_b		GO	M
	HVACModeNext	(GO _b)		(GO)	0
	EnableComfort	(GO _b)		(GO)	0
	ContrMode	(GO _b)		(GO)	0

PMC LTE specific Properties

		Support
Parameter	Apartment_u	M
	Room_v	M
	SubZone_w	M
	Apartment_i	0
	Room_j	0
	SubZone_k	О

PMC Standard Properties of Interface Objects (or memory mapped DP)

	Support
Parameter	

3.2.6 Detailed specification of the Datapoints

3.2.6.1 Input BuildingMode

Standard Mode

DF	Name:	Bui	ildingMode					Abbr.:		1		Mar			
FB	Name:	PM	IC									Car	n be	internal	
	scription														
Th	is informati	on i	s provided by	y a sup	ervisor	and d	efine	es the b	uilding	j mo	de.				
	tapoint Ty														
	PT_Name: DPT_BuildingMode														
	T Format:	_	N ₈							DP	T_ID:				
Fie			Description							Sı	лрр.	Range	9	Unit	Default
Bu	ildingMode											02		enum.	cs
			0 = Building	g in Use)						M				
			1 = Building								M				
			2 = Building								M				
			all other enu	meratio	n					1	NΑ				
Ac	cess Type														
•	Input														
	$N \rightarrow this$			$1 \rightarrow th$	is	\boxtimes									
	Spontaneo	us			Cyclic	ally:		\boxtimes			Time-out: 31			31 min	(rec.)
	Request				Polling	g:					Perio	d:			
Co	mmunicat	ion	Туре												
♦	Group Ob	ject	Datapoint									Manda	tory	/:	
	Default Gro	oup	Address:												
Dy	namics														
	Power dow	vn:	Save:												
	Power up:		Value:	No in	itialisat	tion:			Defau	ılt va	alue:				
				Save	d value	э:									
									Read	fron	n bus:				
Ex	ception Ha	and	ling												
Sp	ecial Featu	ıres	3												
					•	·									

LTE-HEE Mode

FB:	PMC	LTE Clie	ent	Buildin	ιgΜ	ode				Mandatory			
		Input Na	ame:									Optiona	I 🛛
	ription:												
This in	nformation is	provided	by a su	pervisor	and	defines	the build	ling	mode.				
DPT:	Name D	PT_Build	lingMode	_Z	I	DPT ID	201.10	7	Dataty	/ре	format	N_8Z_8	
Field			Descrip	tion							Sup.	Unit	Default
Buildi	ngMode											enum.	CS
				ilding in							М		
			1 = Building not used							М			
			2 = Building Protection							М			
			all other	enumer	ratio	n					NA		
STAT												Bitset	
- Ou	tOfService			n out of S							0	t/f	false
- Fa	ult			tion is co							0	t/f	false
_	erridden						erridden				0	t/f	false
- InA				tion with							0	t/f	false
- Alaı	mUnAck			ledgeme	ent o	of alarm					0	t/f	false
			all other	bits							NA		
	munication:												
	ding Group:												
Clas	SS		Type						efault				
	eographical	\square	Apartme	ent . Roo	om .	SubZon	e	1.	1.1				
Ap	plication Spe	ecific 🔲											
Pe	ripheral		Broadca			Configur							
	Address:		IO Type			109 (BO		Р	roperty	/ ID	:	51	
	-Service (ev	/ent <u>):</u>			er or	n Bindin	g Group:			-	-		
	oReport		Timeout	<u>: </u>			31	M	in				
	-Service (po ead – Respor		Read W	ildcard /	Res	sp Sniffe	r on Bind	ding	Group	: -	-		
Value after Power-up: Default Value ⊠						-	(Stored Val	ue 🗌				
Exce	otion Handli							ive at Powerdown					
Speci	ial Features												

3.2.6.2 Input BuildingModeNext

Standard Mode: NA LTE-HEE Mode

FB:	PMC	LTE Cli	-	Building	/lodeNext				Mandatory			
		Input N	ame:							Optiona	ΙX	
	ription:											
				pervisor an		the next b	ouilding i	mode	and the	e time to it	. If the	
next r	next mode is not available the time is set to zero.											
DPT:	Name	DPT_Build	dingMode	Next	DPT ID	206.105	Data	type	format	$U_{16}N_8$		
Field			Descript	ion					Sup.	Unit	Default	
Time			Time to	next Buildir	ng Mode ir	n minutes				min	0	
			0 = Next	t mode und	lefined							
Buildi	ngModeNe	ext								enum	CS	
			0 = Bui	ilding in Us	е				М			
			1 = Bui	lding not U	sed				М			
			2 = Bui	Iding Prote	ection				М			
			all other	enumeration	on				NA			
Comi	nunicatio	n:	-							•		
Bin	ding Grou	p:										
Clas	SS		Туре				Default					
Ge	eographica	ıl 🖂	Apartme	nt . Room	. SubZone	;	1.1.1					
Ap	plication S	Specific 🗌										
Pe	ripheral		Broadca	ıst 🗌	Configura	ıble 🗌						
DP.	Address:		IO Type	(ID):	109 (BOS	S)	Proper	ty ID:	:	52		
LTE	-Service (event):	InfoRep	ort Sniffer o	on Binding	Group:			-			
	oReport	\boxtimes	Timeout	:		31	Min					
LTE	-Service (polling):	Dood W	ildcard / Re	on Cniffor	on Dindi	oa Crou	n:				
Re	ead – Resp	onse	Reau W	ilucalu / Ke	ssp Silliei	OH BIHUII	ng Grou	ρ	-			
Value	after Pov	ver-up:	-	Default V	′alue 🛚				;	Stored Val	ue 🗌	
						e at Po	werdown					
Spec	ial Feature	es:										

3.2.6.3 Input OccMode

Standard Mode

DP Nar	me: Od	ccMode		Abbr.:				Mandatory			
FB Nar	ne: PN	ЛС					Can b	e internal			
Descri	ption										
This inf	This information is provided by a supervisor and defines the occupancy mode.										
	int Type										
DPT_Name: DPT_OccMode											
DPT Fo	ormat:	N ₈				DPT_ID:	20.00				
Field		Description				Supp.	Range	Unit	Default		
ОссМо	de	0 = Building 1 = Building 2 = Building all other enur	Standby not Occupied			M M M NA	02	enum.	CS		
Access	s Type										
♦ Inp	ut										
$N \rightarrow$	this		$1 \rightarrow \text{this}$								
Spo	ntaneous	\boxtimes	Cyclically:	\square		Time-	out:	31 min	(rec.)		
	uest		Polling:			Perio	d:				
Comm	unication	Туре									
		t Datapoint					Mandato	ry: 🛛			
		Address: -									
Dynam			1								
	er down:	Save:		_							
Pow	er up:	Value:	No initialisation:	<u> </u>	Defaul	t value:					
			Saved value:	<u> </u>							
				F	Read f	rom bus:					
•	ion Hand	lling									
 C:-	I Faatuur	_									
-	I Feature	S									

LTE-HEE Mode

FB:	PMC	LTE Cli		· · · · · · · · · · · · · · · · · · ·								
		Input N	ame:							Optiona	IX	
	ription:											
	nformation is			ervisor a						ı		
DPT:	Name D	PT_Occl			DPT ID	201.108	Dataty	/pe f		N_8Z_8		
Field			Descripti	ion					Sup.	Unit	Default	
OccM	ode									enum.	CS	
				lding Occi					М			
				lding Stan					М			
				lding not (М			
			all other	enumerat	tion				NA			
STAT									Bitset			
	tOfService			out of Se			0	t/f	false			
- Fa	ult		Informati			0	t/f	false				
- Ov	erridden		Informati	ion is tem	porarily over	erridden			0	t/f	false	
- InA	larm			ion with al edgement					0	t/f	false	
- Alaı	mUnAck				0	t/f	false					
			all other	bits					NA			
Comr	nunication:		-					-		=		
Bine	ding Group:											
Clas	S		Type				Default					
Ge	ographical	\boxtimes	Apartme	nt . Room	ı . SubZone	ө	1.1.1					
Ap	plication Spe	ecific 🔲										
Pe	ripheral		Broadca	st 🗌	Configura	able 🗌						
DP	Address:		IO Type(ID):	109 (BO	S)	Property	/ ID:		53		
	-Service (ev	ent):	InfoRepo	ort Sniffer	on Binding							
	oReport	\boxtimes	Timeout:	1		31	Min					
	-Service (po ad – Respor		Read Wi	ldcard / R	esp Sniffe	r on Bindiı	ng Group	:				
Value	after Powe	r-up:	-	Default \	Value 🛚				(Stored Val	ue 🗌	
Exce	otion Handli	ng:						Sav	e at Po	werdown		
Speci	al Features:											
				<u> </u>	<u> </u>					<u> </u>		

3.2.6.4 Input OccModeNext

Standard Mode: NA LTE-HEE Mode

FB:	PMC	LTE CI	-	OccMode	Next			Mandatory ☐ Optional ⊠						
Desc	ription:	mpati	idilio.							Ориона				
		is provide	d by a su	pervisor an	d defines	the next of	occupano	zv mo	de and	the time t	o it. If			
				me is set to				.,						
DPT:	Name	DPT_Occ	ModeNex	ct	DPT ID	206.104	Datat	vpe f	ormat	U ₁₆ N ₈				
Field			Descript		I.	l	I		Sup.	Unit	Default			
Time			Time to	next Occup	oancy Mod	le in minu	ites			min	0			
			0 = Nex	t mode und	efined									
OccM	lodeNext							Ī		enum	cs			
				ilding Occu					M					
				ilding Stand			M							
				uilding not Occupied M NA NA										
				NA										
Comr	nunicatio	n:												
	ding Grou	p:												
Clas			Туре				Default							
	eographica		Apartme	ent . Room	. SubZone) 	1.1.1							
	plication S	pecific []											
	ripheral		Broadca		Configura									
	Address:		IO Type		109 (BOS		Propert	ty ID:		54				
	-Service (event <u>):</u>	InfoRep	ort Sniffer o	on Binding									
	oReport	\boxtimes	Timeout	:		31	Min							
	-Service (Read W	ildcard / Re	sn Sniffer	on Rindi	na Groun	·						
	ead – Resp		ixcad vv			OH DIHAI	ing Croup	,. 						
	after Pov			Default V	′alue 🛚					Stored Val	lue			
Exce	ption Hand	dling:						Sav	e at Po	werdown				
Speci	ial Feature	es:												

3.2.6.5 Input ContrModeBO

Standard Mode

		ContrModeB	O		Abbr.:	-	Mand	atory				
FΒ	Name: PMC Can be internal											
De	scription											
Thi	s information	on is provided	d by a supervi	sor and define	es the controll	ing mode.						
Da	tapoint Ty											
DP	T_Name:	DPT_HV	ACContrMode)								
DP	T Format:	N ₈				DPT_ID:	20.10	5				
Fie		Description	on			Supp.	Range	Unit	Default			
Co	ntrMode						020	enum.	cs			
		0 = Auto)			0						
		1 = Hea	t	2 = Mrng V	Vmup	0						
		3 = Coo	l	4 = Night F	Purge	0						
		5 = Pred	cool	6 = Off		0						
		7 = Test	İ	8 = Emerg	Heat	0						
		9 = Fan	Only	10 = Free C		0						
		11 = Ice	,	12 = Max. ⊢	leating Mode	0						
		13 = Eco	. H/C Mode	14 = Dehum		0						
		15 = Calil	bration Mode	16= Emerg	Cool Mode	O						
			erg Steam	20 = No Dei		Ö						
			enumeration			NA						
Ac	cess Type											
*	Input											
	$N \rightarrow this$		$1 \rightarrow \text{this}$									
-	Spontaneo	us	Су	clically:		Time	-out:	31 min	(rec.)			
	Request			lling:		Perio	d:		, ,			
Co	mmunicati	ion Type										
♦	Group Ob	ject Datapoir	nt				Mandato	ry: 🛛				
	Default Gro	oup Address:						-				
Dy	namics											
	Power dow	/n: Save:										
	Power up:	Value:	No initial	lisation:	Defa	ult value:						
			Saved va	alue:								
					Read	from bus:						
Ex	ception Ha	ındling										
Sp	ecial Featu	ıres										

LTE-HEE Mode

	TE Clie		ContrMo	odeBC)					Mandator Optiona	
Description:	iiput ive	aiiie.	-							Ориона	🔼
This information is p	rovideo	l by a sur	pervisor a	nd def	ines t	he contr	ollir	na mode			
DPT: Name DP				DPT		201.104		_	oe format	N ₈ Z ₈	
Field		Descript		, _, .		201110	•	Dataty	Sup.	Unit	Default
ContrMode		2 000p							- Сир.	enum.	CS
		0 = Aut	to						0		
		1 = He	at		2 =	Mrng W	mu	р	0		
		3 = Co	ol		4 =	Night Pu	urge	9	0		
		5 = Pre	ecool		6 =		•		0		
		7 = Tes	st			Emerg F		ıt	0		
		9 = Far	n Only			Free Co			0		
		11 = Ice				Max. He					
			o. H/C Mo			Dehumi			0		
			libration M			Emerg (0		
			erg Stear		20 =	No Dem	nand	d	0		
		all other	enumera	tion					NA.		<u> </u>
STATUS										Bitset	
Bit 0 - OutOfServic	e		out of Se						0	t/f	false
Bit 1 - Fault			ion is cor			مرم امام است			0	t/f	false
Bit 2 - Overridden Bit 3 - InAlarm			ion is tem ion with a		iy ove	maaen			0	t/f t/f	false false
Bit 4 - AlarmUnAck				-	arm.					t/f	false
bit 4 - Alaimonack		all other	edgemen bits	it or ar	allli				NA	l VI	laise
Communication:	<u> </u>								<u></u>	<u>+</u>	-
Binding Group:											
Class		Туре						efault			
Geographical	\boxtimes	Apartme	nt . Room	n . Sub	Zone		1.	1.1			
Application Spec	ific 🔲										
Peripheral		Broadca			figura						
DP Address:		IO Type			(BOS		Р	roperty	ID:	55	
LTE-Service (eve	<u> </u>		ort Sniffer	on Bi	nding						
InfoReport	\boxtimes	Timeout	:			31	М	in			
LTE-Service (poll		Read W	ildcard / F	Resp S	niffer	on Bind	ing	Group:			
Read – Respons								<u> </u>	_	0: 1)/	. –
Value after Power-			Default	value	<u> </u>			Γ.		Stored Va	iue 🔲
Exception Handling	g:							{	Save at Po	werdown	
Special Features:											

3.2.6.6 Output HVACMode

Standard Mode

				le				At	obr.:		1	Mand	atory	
FB N	lame:	PMC										Can b	e interna	al 🗌
Desc	cription													
This	output co	ntain	s the	HVA	C mode									
Acco	ording to T	C247	7 the f	follov	ving HV	AC-M	odes a	re used:	Comf	ort,	Standby, I	Economy,	, Building	I
Prote	ection.													
Data	point Typ	эе												
DPT.	_Name:	DP	$T_{H}V$	'ACN	1ode									
	Format:	N ₈									DPT_ID:	20.10	2	
Field		Des	scripti	on							Supp.	Range	Unit	Default
HVA	C Mode											14	enum.	cs
		0 :	= Aut	0							NA			
			= Cor								M			
		2 :	= Sta	ndby	i						M			
			= Eco								M			
	4 = BuildingProtection M													
	all other enumeration NA													
Acce	ccess Type													
	Output													
th	$nis \rightarrow M$				this \rightarrow	1								
S	pontaneo	us		CO				a-Value:			MinRepTir		10 sec	
				Cyc	lic		Perio	od:	15m	in (r	recommer	nded value	e)	
	equest													
Com	municati	on T	ype											
	Group Obj											Mandato	ry: 🛛	
D	efault Gro	oup A	ddres	ss:										
	amics													
Р	ower dow	n:	Save:											
Р	ower up:	,	Value	: :	No in	itialisa	ation:		D	efau	ult value:			
						d valu	e:		Α	ctua	al value:		\boxtimes	
		•	Trans	mit o	on bus:			\boxtimes						
Exce	eption Ha	ndlin	ıg											
Spec	cial Featu	ires												
	·							-			·			

LTE-HEE Mode

FB:	PMC	LTE S	erver It Name:	HVACM	ode			Mandatory ⊠ Optional □			
Descr	ription:							<u> </u>			
		ns the I	HVAC mode.								
			ollowing HV		s are used	: Comfo	rt. Sta	ndbv. E	conomy.	Buildina	
Protec	ction.						,	,, _	,		
DPT:	Name D	PT H\	/ACMode_Z		DPT ID	201.10	0 D	atatype	format	N_8Z_8	
Field	1	_	Description			Sup.	Rang		Unit	COV	Default
HVAC	Mode		•					4	enum.	yes	CS
			0 = Auto			NA					
			1 = Comfor	t		М					
			2 = Standb	У		M					
			3 = Econor			М					
			4 = Building		on	М					
			all other enu			NA					
STAT	US		For LTE-Ser	vice Infol	Report				Bitset		
			and Property	/-Service	-						
			Response of								
- OutC	OfService		RSM out of	service		0	true	/false		Υ	false
- Faul	t		Value is corr	upted		0	true	/false		Υ	false
- Ovei	rridden		RSM is temp	orarily o	verridden	0	true	/false		Υ	false
- InAla	arm		RSM is in al	arm		0	true	/false		Υ	false
- Alarr	mUnAck		Acknowledg	ement of	alarm	0	true	/false		Υ	false
- all ot	ther bits		_			NA					
Comr	nunication:					-	-		-	-	
Bind	ding Group:										
Clas	S		Туре					Defa	ult		
Ge	ographical		Apartmen Apartmen	t . Room	. SubZone	!		1.1.1			
Ар	plication Sp	ecific [
Pe	ripheral	[Broadcast	: 🔲	Configu	rable 🔲					
DP /	Address:		IO Type(II	D):	104 (PMC		Pro	perty ID):	51	
LTE	-Services (e	event):	COV	ĺ	MinRepTin	ne:	10	sec	Heart	beat:	15 min
Inf	oReport	Ø	Output pe	r default o	communic	ating [Bin	ding Gr	oup Wildo	ard allov	ved 🛛
	•		Tx Prio:		High 🗌			lormal		Low	
(LT	ΓΕ Read-Re	sponse									
po	lling of the o	utput	Tronom of	tor Dowo	r un: Store	ad Molius		Act Va	M . r	efault V	oluo 🖂
sha	all always be	Э	Transili ai	ter Fowe	r-up: Store	d value	; 🗀	ACI Va	iue 🖂 L	relault V	alue 🔲
	pported)										
	perty-Service		Read only	,		Read/	M/rita	\boxtimes	1		
•	ividual acce		ixeau only			i (Cau)	vviile		<u></u>		
Excep	otion Handl	ing:							Save a	t Power	down
Speci	al Features	:									
							-				· · · · · · · · · · · · · · · · · · ·

3.2.6.7 Output HVACModeNext

Standard Mode: NA LTE-HEE Mode

FB:	PMC	LTE S		HVACModeNe			N	1andator			
Doco	ription:	Outpt	ıt Name:							Optiona	
		ning tha i	ovt HVAC r	node and the tir	no to	it If the	novt m	odo io	not ovoi	labla tha	time is
set to		allis tile i	IEXT HVAC I	node and the th	ne to	it. II ti ie	e next mo	Jue 15	110t avai	iable trie	ume is
		217 tha f	ollowing U\/	AC-Modes are ι	icoq.	Comfo	rt Stand	hv =	conomy	Building	
Prote		24 <i>1</i> 111 0 1	ollowing i iv.	AC-Modes are t	iseu.	Comio	ri, Stariu	оу, ⊏	Jononny,	Building	
DPT:		DDT LIV	/ACModeNe	xt DPT	ın l	206.10	0 Doto	tupo !	format	I NI	
	iname	חבוקט		Xt DP1	טו					J ₁₆ N ₈	Default
Field			Description			Sup.	Range		Unit .	COV	Default
Time				t HVAC mode ir			full		min	15 ²⁾	0
			minutes, 0 =	no next mode	., 						
Next	HVACMode	9		1)			04		enum.	yes	CS
				undefined 1)		М					
			1 = Comfo			М					
				my $4 = Build.P$	rot.	М					
			all other enu	umeration		NA					
Com	nunication	1:									
Bine	ding Group	o :									
Clas	SS		Type					Defau	lt		
Ge	eographical		Apartmer	it . Room . SubZ	Zone		1	1.1.1			
Ap	plication S	pecific [
	ripheral	[Broadcas	t 🗌 Con	figur	able 🗌					
DP	Address:		IO Type(I	D): 104 (РМС)	Proper	rty ID:	: !	52	
LTE	-Services	(event):	COV 🗵	MinRe	pTim	ie:	10 se	С	Heart	beat:	15 min
	oReport		Output pe	er default comm	unica	ating 🗌	Bindin	g Gro	up Wildo	ard allov	ved 🛛
			Tx Prio:	High				mal 🛭		Low	
(L	TE Read-R	esponse							_		
ро	lling of the	output		((D		.1.71 -	_ ^	() / - 1	. 🖂 🕝	N - C - 10 N /	
sh	all always b	oe .	i ransm a	fter Power-up: S	store	a value	e ∐ Ac	t Valu	ıe ⊠ L	efault V	aiue 🗀
su	pported)										
Pro	perty-Serv	ice	Dood only	,		Read/	Mrito	\square			
(ind	ividual acc	cess):	Read only	/		Read/	vviile	\boxtimes			
Exce	ption Hand	lling:							Save a	t Power	down
Spec	ial Feature	s:									
1) end			nditions, see	table below							
²⁾ CC	V value is i	<u>identic</u> al	to heart bea	t time (15 min).							

Interpretation of Time and HVACMode fields

Time	HVACMode	
= 0 (Undefined)	= 0 (Undefined)	The content of the Datapoint is void / undefined.
		⇒ No next HVAC Mode is available for an undefined time
		period.
= 0 (Undefined)	= {14}	The next HVACMmode is defined and valid but the delay time is
		undefined (unknown).
		⇒ The next HVACMode is deactivated
> 0	= 0 (Undefined)	The HVACMode is undefined (unknown) during a defined delay time.
		⇒ In practice this combination is useless and is interpreted like
		as Time =0 and HVACMode = 0 (default value).
> 0	= {14}	HVACMode and delay time are defined and valid.

3.2.6.8 Output EnableComfort

Standard Mode

DP Nan	ne: I	Enal	bleCo	mfort	<u>t</u>								Mandatory		
FB Nam	ne: I	PMC Can be internal													
Descrip	otion														
This out	tput cor	ntain	s the	enab	le/disa	able for	the loc	al comfo	ort m	ode (I	HMI).				
Datapo	int Typ	е													
DPT_N	ame:	DP	T_En	able											
DPT Fo	rmat:	B ₁									DPT_ID:	1.00	3		
Field		De	scripti	ion							Supp.	Range	Unit	Defau	ult
												0/1	Bit.	CS	
Access	Туре														
♦ Out	put														
this -	$\rightarrow M$				this -	→ 1									
Spor	Spontaneous 🖂 COV: 🖂 Delta-Value: MinRepTime: 10 sec														
				Cyc	lic		Perio	od:	15n	nin (r	recommer	ided valu	ıe)		
Requ															
Commu															
	up Obj											Mandate	ory: 🛛 🖂		
	ult Gro	up A	Addres	SS:											
Dynam															
Pow	er dowi	า:	Save:	:											
Pow	er up:		Value) :	No	initialisa	ation:			Defau	ult value:				
						ed valu	ie:			Actua	al value:				
				mit c	on bus	:									<u>] </u>
Excepti	ion Hai	ndliı	ng												
Special	Featu	res													

LTE-HEE Mode:

FB:	PMC	LTE S Outpu	erver It Name:						Mandatory ☐ Optional ⊠			
Desci	iption:	-						_				
This c	utput contain	ns the e	enable/disab	le for the	local comfo	ort mod	e (HMI)	١.				
DPT:	Name D	PT_En	able		DPT ID	1.003	Da	tatype	format	B ₁		
Field			Description			Sup.	Range	!	Unit	COV	Default	
							0/	1	Bit	yes	CS	
Comr	nunication:					-						
Bind	ding Group:											
Clas	S		Type					Defau	ılt			
Ge	ographical		Apartmen	t . Room	. SubZone			1.1.1				
Ap	plication Spe	ecific [
Pe	ripheral		Broadcas									
DP /	Address:		IO Type(I	IO Type(ID): 104 (PMC) Propert						53		
	-Services (e		COV 🖂		MinRepTim		10 s	sec	Hear	rtbeat:	15 min	
Inf	oReport	\boxtimes	Output pe	r default	communica	ating 🗌	Bind	ing Gro	oup Wild	card allov	ved 🛛	
			Tx Prio:		High 🗌		No	ormal [\boxtimes	Low	, <u> </u>	
	ΓE Read-Re											
	lling of the o		Transm a	fter Powe	er-up: Store	d Value		Act Val		Default V	ا عبراد	
	all always be	9	Transma	iter i owe	i up. Otoro	u value	'	tot vai	uc 🖂	Delault V		
	oported)											
	perty-Servic ividual acce		Read only	<i>'</i>		Read/	Write	\boxtimes]			
	otion Handli								Save	at Power	down	
Speci	al Features	:										

3.2.6.9 Output ContrMode

Standard Mode

DP		ContrMode Abbr.: Mandatory												
FΒ	Name:	PMC												
Des	scription													
Thi	s output cor	ntains the	controllin	g mode										
Dat	tapoint Typ	е												
DP	T_Name:	DPT_H\	VACContr	Mode										
DP	T Format:	N ₈						DPT_ID:	20.10	5				
Fie	ld	Descript	tion					Supp.	Range	Unit	Default			
Co	ntrMode								020	enum.	CS			
		0 = Au	to					0						
		1 = He	at		2 = Mrng Wr	nup		0						
		3 = Co	ol		4 = Night Pu	raė		0						
		5 = Pre	ecool		6 = Off	Ü		0						
		7 = Te	st		8 = Emerg H	eat		0						
	9 = Fan Only 10 = Free Cool O													
	9 = Fan Only 10 = Free Cool O 11 = Ice 12 = Max. Heating Mode O													
		13 = Ec	o. H/C Mc		4 = Dehumic	_		O						
	15 = Calibration Mode 16= Emerg Cool Mode O 17 = Emerg Steam 20 = No Demand O													
			enumera			aa		NA						
Ac	cess Type	10 010.	0.1.0											
•	Output													
Ī	this \rightarrow M		this	$\rightarrow 1$										
_	Spontaneou		COV:		Delta-Val	ne.	N	//inRepTin	ue.	10 sec				
	opomanoo.		Cyclic		Period:			ecommen						
-	Request		O y o o		i onog.		······ (·	00011111011	aca raide	2)				
	mmunication	1												
*	Group Obj		oint						Mandato	ry: 🛛				
	Default Gro									,				
	namics													
	Power dow	n: Save	e: [
	Power up:	Valu	e: N	o initiali	sation:		Defau	ılt value:						
	•		S	aved va	lue:		Actua	l value:						
		Tran	smit on bu	JS:	1									
Exc	ception Ha	ndling												
	•													
Spo	ecial Featu	res												

LTE-HEE Mode:

FB:	PMC	LTE Se	ver ContrMode Name:						Mandatory ☐ Optional ⊠			
Descr	iption:	Gutput	- Tullio							puona		
		ains the Co	ntrolling m	ode.								
DPT:	Name		CContrMo		DPT ID	201.10	14 D	atatype for	mat No	7.		
Field	ITTAITIC	Description		<u>uo</u>	ו ווטן	1201.10	Sup.	Range	Unit	COV	Default	
Contri	Mode	Description					Оар.	020	enum.	yes	CS	
Contin	viouc	0 = Auto					0	020	Criain.	yco	00	
		1 = Heat		2 = M	Wmup		Ô					
		3 = Cool			gt Prge		Ö					
		5 = Preco	ool	6 = Of			Ö					
		7 = Test	,		ngHeat		Ö					
		9 = Fan c	nlv		ee Cool		Ö					
		11 = lce	,		ax. Heating	a Mode	Ö					
			H/C Mode				Ö					
			ration Mode				Ô					
		17 = Emer			Demand		Ö					
			numeration		, <u> </u>		NA					
STATI	US		ervice Infol		nd Propert	V-			Bitset			
			esponse on			,						
- OutC	OfService	RSM out o		,			0	true/false	Bit 0	Υ	false	
- Fault		Value is co					Ö	true/false	Bit 1	Ý	false	
	ridden		nporarily o	verridder	า		Ô	true/false	Bit 2	Ϋ́	false	
- InAla		RSM is in		· oi i i daoi	•		Ö	true/false	Bit 3	Ϋ́	false	
	nUnAck		lgement of	alarm			Ô	true/false	Bit 4	Ý	false	
	her bits	7 (01(11011100	.gomoni o	NA NA					Bit 5-7	•	iaioo	
	nunicatio	n:										
	ling Grou											
Clas		•	Type					Default				
	ographica	ı 🖂	Apartmen	t . Room	. SubZone			1.1.1				
	plication S											
	ripheral		Broadcast	· []	Configu	rable [ī					
	Address:		IO Type(II		104 (PM		Pro	perty ID:	54			
	-Services	(event):	COV 🖂		MinRepTi			sec	Heartbe		5 min	
	oReport				communic			ding Group				
			Tx Prio:	- doladic	High _]		lormal 🖂	TTIIGGG	Low		
(LT	E Read-F	Response	121110.		- ' ''g'' <u> </u>	ı						
•	ling of the	•	_		_		_		_		_	
	all always		Transm at	ter Powe	er-up: Stor	ed Value	- □	Act Value	⊠ De	fault Val	ue 📙	
	oported)											
	perty-Serv	/ice	Dandank		1	Daad	/\					
	ividual ac		Read only	′ <u> </u>]	Read/	vvrite	\boxtimes				
	tion Han								Save at	Powerdo	own 🗌	
		_										
Speci	al Feature	es:										

3.2.6.10 Parameter Apartment_u

FB:	PMC	Prop	ert	ty Name (<u>Server</u>):	Apartm	ent_u			Mandatory $oxtimes$ Optional $oxtimes$		
Desci	Description:										
	Number of the apartment zone. (schedule)										
DPT:	Name	DPT_U	co	untValue8_Z	DPT ID	202.002	2 Data	type format	U ₈ Z ₈		
Field			Г	Description			Sup.	Range	Unit	Default	
Zone			١	lumber of the Apartn	nent			(0) 1126		1	
STAT	US								Bitset		
- Outo	ofService 1			one active / inactive			0	true/false	Bit 0	false	
- all of	ther bits		n	ot supported, fixed to	o '0'		NA			false	
COM	MAND							enum		CS	
- Norr	nalWrite		!			М	0				
- SetC	SV & Res	etOSV	Set zone inactive / active			0	3 / 4				
- all of	ther comm	ands	not supported			NA					
Comr	nunicatio	n:				-	•		-		
DP /	Address:			IO Type(ID): 104 (PMC)			Property ID: 101				
(in t	he server)		Start-Index:	1 N° of elements 1				1		
Pro	perty acce	ess:		Read only	only 🗌 Read/Write 🛛						
Prot	ection			Read level	-		Write le	evel	-		
Excep	otion Han	dling:	٧	alue after Power-up	: Stored	l Value ⊠	Act Va	lue 🗌 Def	ault Value	<u> </u>	
Special Features:											
Zone for the schedule.											
Zone = 0 (wildcard): Sends to all listeners											
The d	evice is no	t LTE co	m	municating in this zo	one if zone	e is 'OutO	fService	•			
If Apartment u is 'OutOfService' Room v and SubZone w automatically are 'OutOfService' too.											

3.2.6.11 Parameter Room_v

FB:	PMC	Prope	erty Name (<u>Server</u>):	Room_v	/			Mandatory ⊠ Optional □			
Descr	Description:										
	Number of the room zone. (schedule)										
DPT:	Name	DPT_U	countValue8_Z DPT ID 202.002			Data	type format	U_8Z_8			
Field			Description				Range	Unit	Default		
Zone			Number of the Room				(0) 163		1		
STAT	US							Bitset			
- Outo	ofService		zone active / inactive			0	true/false	Bit 0	false		
- all ot	her bits		not supported, fixed to	o '0'		NA			false		
COM									cs		
- Norn	nalWrite			M	0						
- SetC	SV & Re	setOSV	Set zone inactive / active			0	3/4				
- all ot	her comn	nands	not supported			NA					
Comn	nunicatio	n:									
DP /	Address:		IO Type(ID):	104 (PMC) Prope							
(in t	he server	·)	Start-Index:	1 N° of elements				1			
Prop	perty acc	ess:	Read only	Read/Write							
Prot	ection		Read level	-		Write le	evel	-			
Excep	otion Han	dling:	Value after Power-up	: Stored	Value 🛚	Act Val	ue 🗌 Def	ault Value	: 🔲		
Speci	al Featur	es:									
Zone	for the scl	nedule.									
Zone = 0 (wildcard): Sends to all listeners											
			mmunicating in this zo		is 'OutOf	fService'					
'OutO	OutOfService' is taken over from Apartment_u.										

${\bf 3.2.6.12\ Parameter\ SubZone_w}$

FB:	PMC	Prop	er	ty Name (<u>Server</u>):	SubZon	e_w				Mandatory ⊠ Optional □		
Desci	Description:											
Number of the SubZone. (schedule)												
DPT:	Name	DPT_U	СО	ountValue8_Z	DPT ID	202.002	2	Data	Datatype format U ₈ Z ₈			
Field				Description			S	up.	Range	Unit	Default	
Zone			1	Number of the SubZo	ne				(0) 115		1	
STAT	US									Bitset		
- Outo	ofService 1		Z	zone active / inactive				0	true/false	Bit 0	false	
- all o	ther bits		lr	not supported, fixed to	o '0'			NA			false	
COMI	MAND								enum		CS	
- Norr	nalWrite							M	0			
- SetC	SV & Re	setOSV	5	Set zone inactive / active				0	3 / 4			
- all of	ther comn	nands	not supported			١	۱A					
Comr	nunicatio	n:				<u>_</u>		-		-		
DP A	Address:			IO Type(ID):	104 (PMC	()	Property ID:			103		
(in t	he server	·)		Start-Index:	1		N'	° of e	lements	1		
Pro	perty acc	ess:		Read only Read/Write 🖂								
Prot	ection			Read level	-		W	rite le	evel	-		
Exce	otion Han	dling:	\	/alue after Power-up	: Stored	Value 🛚	Α	ct Va	lue 🗌 Def	ault Value		
Special Features:												
Zone for the schedule.												
Zone = 0 (wildcard): Sends to all listeners												
The d	The device is not LTE communicating in this zone if zone is 'OutOfService'.											
'OutOfService' is taken over from Apartment_u.												

3.2.6.13 Parameter Apartment_i

FB:	PMC	Prope	ert	y Name (<u>Server</u>):	Apartme	ent_i				Mandator Optiona	· =
Descr	Description:										
	Number of the apartment zone. (BuildingMode and OccMode)										
DPT:	Name	DPT_U	cou	untValue8_Z	DPT ID	202.002	. [Data	type format	U ₈ Z ₈	
Field	•		D	escription			Sι	ıp.	Range	Unit	Default
Zone			Ν	umber of the Apartn	nent				(0) 1126		1
STAT	US									Bitset	
- Outo	ofService		Z	one active / inactive			()	true/false	Bit 0	false
- all ot	her bits		not supported, fixed to '0'				N	A			false
COM	MAND								enum		CS
- Norn	nalWrite						Λ	/	0		
- SetC	SV & Res	setOSV	Set zone inactive / active			()	3/4			
- all ot	her comm	nands	not supported			N	Α				
Comn	nunicatio	n:									
DP /	Address:			IO Type(ID):	104 (PMC)	Pro	opert	y ID:	104	
(in t	he server)		Start-Index:	1 N° of eler			ements 1			
Prop	perty acce	ess:		Read only		Read/W	rite		\boxtimes		
Prot	ection			Read level	-		Wr	ite le	evel -		
Excep	otion Han	dling:	V	alue after Power-up	: Stored '	Value 🛚	Ac	t Val	ue 🔲 Def	ault Value	
Special Features:											
Zone of the controller itself.											
Zone = 0 (wildcard): Sends to all listeners											
				municating in this zo							
If Apartment x is 'OutOfService' Room y and SubZone z automatically are 'OutOfService' too.											

3.2.6.14 Parameter Room_j

FB:	PMC	Prop	erty Name (<u>Server</u>):	Room_j		Mandatory ☐ Optional ⊠					
Desci	Description:										
Numb	Number of the room zone. (BuildingMode and OccMode)										
DPT:	Name	DPT_U	countValue8_Z	DPT ID 202.002	2 Data	type format	U_8Z_8				
Field			Description		Sup.	Range	Unit	Default			
Zone			Number of the Room			(0) 163		1			
STAT	US						Bitset				
	ofService		zone active / inactive		0	true/false	Bit 0	false			
- all o	ther bits		not supported, fixed to	o '0'	NA			false			
	MAND					enum		CS			
_	nalWrite			M	0						
	OSV & Rese		Set zone inactive / ac	0	3 / 4						
- all o	ther comma	ınds	not supported NA								
Comr	nunication	:		104 (PMC)							
	Address:			Property ID: 105							
(in t	he server)		Start-Index:	1	ements	1					
	perty acces	ss:	Read only	Read/Write							
Prof	ection		Read level	-	Write le	evel	-				
Exce	otion Hand	ling:	Value after Power-up	: Stored Value 🛛	Act Val	ue Def	ault Value	: 🗆			
Speci	al Feature	s:									
Zone	of the contr	oller itse	elf.								
Zone	Zone = 0 (wildcard): Sends to all listeners										
			mmunicating in this zo		fService'						
'OutO	OutOfService' is taken over from Apartment_x.										

3.2.6.15 Parameter SubZone_k

FB:	PMC	Pro	pe	rty Name (<u>Server</u>):	er): SubZone_k				Mandatory ☐ Optional ⊠		
Desci	Description:										
	Number of the SubZone. (BuildingMode and OccMode)										
DPT:	Name	DPT	Uco	ountValue8_Z	DPT ID	202.002	Data	type format	U ₈ Z ₈		
Field	•			Description				Range	Unit	Default	
Zone			T I	Number of the SubZo	ne		•	(0) 115		1	
STAT	US								Bitset		
- Outo	fService		1	zone active / inactive			0	true/false	Bit 0	false	
- all of	ther bits			not supported, fixed to	o '0'		NA			false	
COM	MAND							enum		CS	
- Norr	nalWrite						M	0			
- SetC	SV & Re	setOSV	′ ;	Set zone inactive / active			0	3 / 4			
- all of	ther comr	nands	J	not supported			NA				
Comr	nunicatio	n:				_					
DP /	Address:			IO Type(ID):	104 (PMC) Property I						
(in t	he serve	r)		Start-Index:	1 N° of elements			1			
Pro	perty acc	ess:		Read only	y ☐ Read/Write ⊠						
Prot	ection			Read level	-		Write le	evel	-		
Excep	otion Har	dling:	,	Value after Power-up	: Stored	Value 🛚	Act Va	lue 🗌 Def	ault Value	:	
Special Features:											
Zone	of the cor	troller i	tsel	f.							
	Zone = 0 (wildcard): Sends to all listeners										
The d	evice is n	ot LTE	con	nmunicating in this zo	ne if zone	is 'OutO	fService	' .			
'OutO	OutOfService' is taken over from Apartment_x.										

3.3 HVAC Optimiser (HVACOPT)

3.3.1 Aims and objectives

The Functional Block 'HVAC Optimiser' is typically part of a supervisor. It optimises the HVAC installation, such as heating/cooling and domestic hot water preparation.

This Functional Block provides the information for these purposes. The inputs and the algorithms are company specific.

3.3.2 Functional specification

The information of this Functional Block is delivered to the TU controller FB's [9] and/or to the 'Domestic Hot Water Controller' [7] as well as to other HWH or VAC controllers [7], [10].

In the LTE-Mode the outputs for TU, HWH or VAC support the LTE zoning "Apartment . Room . SubZone" and for DHW the "DHW_Zone".

Inputs

• Inputs company specific

Outputs

HVACModeOptim: Optimised HVAC mode (Comfort, Standby, Economy, Building

Protection) for the controller (higher priority than

HVACModeEff).

• TempRoomSetpOptimHeatShift: This shift value is used for adjusting the heating setpoint

according to the optimisation. It is delivered to the controller and is added to the effective value coming from the room setpoint

manager.

• TempRoomSetpOptimCoolShift: This shift value is used for adjusting the cooling setpoint

according to the optimisation. It is delivered to the controller and is added to the effective value coming from the room setpoint

manager.

• TempRoomSetpSetHeatShift: These three shift values (Comfort, Standby and Economy) are

used for adjusting the heating setpoints according to the

optimisation. They are delivered to the controller and are added to the effective values coming from the room setpoint manager.

• TempRoomSetpSetCoolShift: These three shift values (Comfort, Standby and Economy) are

used for adjusting the cooling setpoints according to the

optimisation. They are delivered to the controller and are added to the effective values coming from the room setpoint manager.

• ContrMode: This output defines all special HVAC functions which may be

demanded by a supervisor. It is delivered to the controller FB's.

• EnableHeat: There are applications with two heating stages (A and B). They

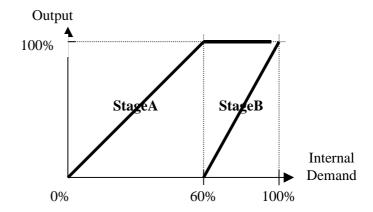
even may depend on different energies (e.g. A = water, B = electrical). The optimiser may now decide (based on different other information - cs), which stages should be active. The

information is given by this Datapoint.

• SplitHeat:

The split of stage A and stage B may be different from 50%. The optimiser may calculate an optimal split. The SplitHeat value defines at which percentage of the demand the split is made.

EXAMPLE 60%



EnableCool:

There are applications with two cooling stages (A and B). They even may depend on different energies (e.g. A = water, B = chiller). The optimiser may now decide (based on different other information - cs), which stages should be active. The information is given by this Datapoint.

SplitCool:

The split of stage A and stage B may be different from 50%. The optimiser may calculate an optimal split. The SplitCool value defines at which percentage of the demand the split is made. (see also SplitHeat)

• DisableDamper:

The optimiser can disable a fresh air damper in the controller.

• DHWModeOptim:

Optimised DHW mode (LegioProtect, Normal, Reduced, Off/FrostProtect) for the domestic hot water controller (higher priority than DHWModeEff).

• TempDHWSetpOptimShift:

This shift value is used for adjusting the DHW setpoint according to the optimisation. It is delivered to the controller and is added to the effective, active value delivered from the DHW setpoint manager.

Binding Groups (LTE)

Binding group x.y.z:

This binding group corresponds with the room / zone to which the TU controller belongs. (See TU controller Functional Blocks [9], HWH [7], VAC [10].)

• Binding group u.v.w:

This binding group corresponds with the scheduler zone to which the TU controller belongs. (See TU controller Functional Blocks [9], HWH [7], VAC [10].)

• Binding group DHW_Zone:

This binding group is used for the domestic hot water. (See 'Domestic Hot Water Controller [7]'.)

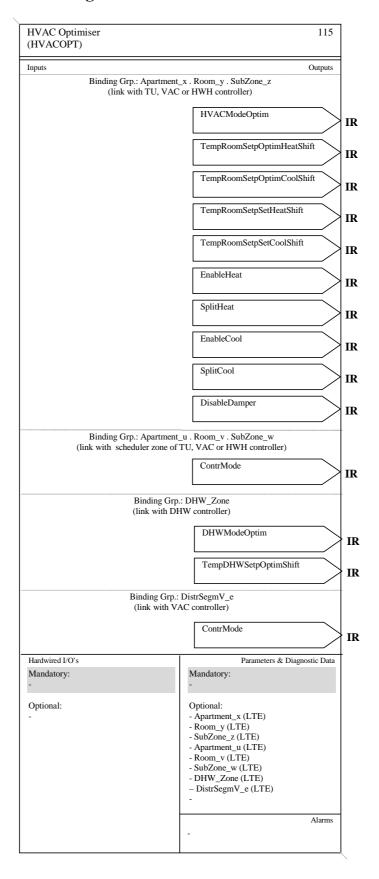
• Binding group DistrSegmV:

This binding group is used for additional distribution of the ContrMode to the VAC controller.

3.3.3 Constraints

None.

3.3.4 Functional Block diagram



3.3.5 Datapoint description

Overview

Datapoints	Description / Remarks	Datapoint Type	Additional info
Outputs			
HVACModeOptim	Optimised HVAC Mode with: - COV and RepPer - Z ₈ STATUS supported to FB various controller	LTE: 201.100 DPT_HVACMode_Z N ₈ Z ₈ S: 20.102 DPT_HVACMode N ₈	LTE: O S: (GO) 0 = Auto 1 = Comfort 2 = Standby 3 = Economy 4 = Build.Prot.
TempRoomSetp-OptimHeatShift	Setpoint shift value heating with: - COV and RepPer - Z ₈ not supported to FB various controller	LTE: 205.101 DPT_TempHVACRel_Z $V_{16}Z_8$ S: 9.002 DPT_Value_Tempd F_{16}	LTE: O S: (GO) K
TempRoomSetp- OptimCoolShift	Setpoint shift value cooling - COV and RepPer - Z ₈ not supported to FB various controller	LTE: 205.101 DPT_TempHVACRel_Z $V_{16}Z_8$ S: 9.002 DPT_Value_Tempd F_{16}	LTE: O S: (GO) K
TempRoomSetp- SetHeatShift	Setpoint shift values (3) heating with: - COV and RepPer - Z ₈ not supported to FB various controller	LTE: 212.100 DPT_TempRoomSetpSet Shift $V_{16}V_{16}V_{16}$ S: 222.101 DPT_ TempRoomSetpSetShiftF 16 $F_{16}F_{16}F_{16}$	LTE: O S: (GO) K, K, K
TempRoomSetp- SetCoolShift	Setpoint shift values (3) cooling - COV and RepPer - Z ₈ not supported to FB various controller	LTE: 212.100 DPT_TempRoomSetpSet Shift $V_{16}V_{16}V_{16}$ S: 222.101 DPT_ TempRoomSetpSetShiftF 16 $F_{16}F_{16}F_{16}$	LTE: O S: (GO) K, K, K
ContrMode	HVAC Controlling Mode with: - COV and RepPer - Z ₈ STATUS supported to FB various controller	LTE: 201.104 DPT_HVACContrMode_Z N ₈ S: 20.105 DPT_HVACContrMode N ₈	LTE: O S: (GO) see DP description

Datapoints	Description / Remarks	Datapoint Type	Additional info
Outputs			
EnableHeat	Control of the different heat stages with: - COV and RepPer - Z ₈ not supported to FB various TU controller	LTE: 201.105 DPT_ EnableH/CStage_Z N ₈ Z ₈ S: NA	LTE: O S: NA 0 = disabled 1 = enable stage A 2 = enable stage B 3 = enable both stages
SplitHeat	Percentage of energy demand at which heating stage B will start to FB various TU controller	LTE: 5.004 DPT_Percent_U8 U ₈ S: NA	LTE: O S: NA 0100%
EnableCool	Control of the different cool stages - COV and RepPer - Z ₈ not supported to FB various TU controller	LTE: 201.105 DPT_ EnableH/CStage_Z N ₈ Z ₈ S: NA	LTE: O S: NA 0 = disabled 1 = enable stage A 2 = enable stage B 3 = enable both stages
SplitCool	Percentage of energy demand at which cooling stage B will start to FB various TU controller	LTE:5.004 DPT_Percent_U8 U ₈ S: NA	LTE: O S: NA 0100%
DisableDamper	Disable local damper with: - COV and RepPer to FB various TU controller	LTE: 1.003 DPT_Enable B ₁ S: 1.003 DPT_Enable B ₁	LTE: O S: (GO) 0 = disabled 1 = enabled
DHWModeOptim	Optimised DHW Mode with: - COV and RepPer - Z ₈ STATUS supported to FB Domestic Hot Water Control	LTE: 201.102 DPT_DHWMode_Z N ₈ Z ₈ S: 20.103 DPT_DHWMode N ₈	LTE: O S: (GO) 0 = Auto 1 = LegioProtect 2 = Normal 3 = Reduced 4 = Off/FrostProtect
TempDHWSetp- OptimShift	Setpoint shift value for DHW with: - COV and RepPer - Z ₈ STATUS supported to FB Domestic Hot Water Control	LTE: 205.101 DPT_TempHVACRel_Z $V_{16}Z_8$ S: 9.002 DPT_Value_Tempd F_{16}	LTE: O S: (GO) K

Datapoints	Description / Remarks	Datapoint Type	Additional info
Parameter			
Apartment_x	LTE zoning number for Apartment	$\begin{array}{c} 202.002 \\ DPT_UcountValue8_Z \\ U_8Z_8 \end{array}$	O Controller zone
Room_y	LTE zoning number for Room	202.002 DPT_UcountValue8_Z U ₈ Z ₈	O Controller zone
SubZone_z	LTE zoning number for SubZone	202.002 DPT_UcountValue8_Z U ₈ Z ₈	O Controller zone
Apartment_u	LTE zoning number for Apartment	202.002 DPT_UcountValue8_Z U ₈ Z ₈	O Scheduler zone
Room_v	LTE zoning number for Room	202.002 DPT_UcountValue8_Z U ₈ Z ₈	O Scheduler zone
SubZone_w	LTE zoning number for SubZone	202.002 DPT_UcountValue8_Z U ₈ Z ₈	O Scheduler zone
DHW_Zone	LTE zoning number for DHW_Zone	202.002 DPT_UcountValue8_Z U ₈ Z ₈	O DHW zone

HVACOPT Runtime Interworking - dependence on Configuration Modes

			STANDARD MODE		NDED DDE		
		Basic FB	S-Mode	Standard Mode Interface	нее		
Inputs							
Outputs	HVACModeOptim	(GO _b)		(GO)	0		
	TempRoomSetpOptimHeatShift	(GO _b)		(GO)	0		
	TempRoomSetpOptimCoolShift	(GO _b)		(GO)	0		
	TempRoomSetpSetHeatShift	(GO _b)		(GO)	0		
	TempRoomSetpSetCoolShift	(GO _b)		(GO)	0		
	ContrMode	(GO _b)		(GO)	0		
	EnableHeat	NA _b	NA	NA	0		
	SplitHeat	NA _b	NA	NA	0		
	EnableCool	NA _b	NA	NA	0		
	SplitCool	NA _b	NA	NA	0		
	DisableDamper	(GO _b)		(GO)	О		
	DHWModeOptim	(GO _b)		(GO) O			
	TempDHWSetpOptimShift	(GO _b)		(GO)	0		

HVACOPT LTE specific Properties

		Support
Parameter	Apartment_x	0
	Room_y	0
	SubZone_z	0
	Apartment_u	0
	Room_v	0
	SubZone_w	0
	DistrSegmV	0
	DHW_Zone	0

HVACOPT Standard Properties of Interface Objects (or memory mapped DP)

	Support
Parameter	

3.3.6 Detailed specification of the Datapoints

3.3.6.1 Output HVACModeOptim

DP Name:	HVA	ACMod	deOptin	n				Ab	br.:	-			Man	datory		
FB Name:	HVA	4COP	Τ										Can	be intern	al	
Description																
This output																
According to	TC24	17 the	followir	ng HVA	AC-Mc	odes ar	e us	sed:	Con	nfort	t, Stan	idby, l	Economy	, Buildin	g	
Protection.																
Datapoint 1																
DPT_Name			/ACMo	<u>de</u>												
DPT Forma												T_ID:		_	T	
Field		escript	ion								Sι	ıpp.	Range	Unit	Defa	ault
HVAC Mode													14	enum.	CS	3
	_	= Aut									_	۱A				
	-	= Cor										M				
		2 = Sta										M				
			onomy									M				
			IdingPr		n							M				
all other enumeration NA																
Access Type																
◆ Output	. 15	7	1		. 1											
this \rightarrow M				his \rightarrow 1					1		T			1.2		
Spontan	eous		COV:			Delta		lue:	4 -			tepTir		10 se	2	
-			Cyclic	;		Perio	d:		15r	nın	(reco	mmer	nded valu	ie)		
Request																
Communic			• .										1.4	167	1	
♦ Group C													Mandat	ory: 🛛 🖂	1	
Default C	3roup /	Addres	SS: -													
Dynamics		1_														
Power do		Save		Ц.,			. —		-							
Power up	p:	Value	€:	No ini			Щ				ault va				1	
				Saved	l value	e:	Ш	15-7		Actu	ual val	ue:			1	
			smit on	bus:												
Exception I	Handli	ing														
	-															
Special Fea	Special Features															

FB:	HVACOPT	Outpu	erver it Name:	HVACM	odeOptim	l		Mandatory ∐ Optional ⊠			
Desci	ription:	-		-							
	output contains										
	ding to TC247	the fol	lowing HVA	C-Modes	s are used	: Comfo	rt, Stand	dby, E	conomy,	Building	
Prote	ction.										
DPT:	Name DP		CMode_Z		DPT ID	201.10		atype	format I	N_8Z_8	
Field		Des	cription			Sup.	Range		Unit	COV	Default
HVAC	Mode						0	4	enum.	yes	CS
		0 =	= Auto			M					
			(no optimi	ised HVA	CMode)						
			= Comfort			M					
			Standby			M					
			Economy			М					
			= BuildingP			М					
			ther enum			NA					
STAT	US		LTE-Service						Bitset		
			perty-Servi			_					
- Out	OfService		ACOPT out			0	true/fa	alse		yes	false
		(no	optimised I	HVACMod	de)						
	ther bits					NA			-		
	nunication:										
	ding Group:										
Clas			Туре					Defau	ult		
	eographical	\square	Apartmen ³	t . Room .	SubZone	:		1.1.1			
	plication Spec	ific 🔲									
	ripheral		Broadcast		Configu						
	Address:		IO Type(II		115 (HVA			erty ID		51	
	-Services (ev		COV 🖂		//inRepTin		10 s		Heart		15 min
Inf	oReport	\boxtimes	Output pe	r default c		ating 🗌			oup Wildo	ard allov	ved 🛛
			Tx Prio:		High 🗌		No	rmal [\boxtimes	Low	<u>' </u>
	ΓΕ Read-Resp										
	lling of the out	put	Transm af	ter Power	r-un: Store	ed Value	Δ П	ct Val	ue 🛛 🏻 🖸	efault V	alue 🖂
	all always be		Transma	101 1 01101	ap. Otore	o value	, П , ,	ot vai		oraan v	a.ao 🗀
	pported)										
	perty-Service		Read only	,		Read/	Write	\boxtimes	1		
	ividual acces										
Exce	otion Handlin	g:							Save a	at Power	down
Speci	al Features:										

3.3.6.2 Output TempRoomSetpOptimHeatShift

DP Name	: T	empF	Room	Setp	Optim	TeatSl	hift	A	obr.:		•	Manda	tory		Ш
FB Name	: H	IVAC	OPT									Can be	interna	<u>a</u> l [
Descripti	on														
This outpu	ut con	tains t	the he	eatin	ig setpo	oint sh	ift.								
Datapoin	t Type	9													
DPT_Nan		DPT_	_Valu	e_Te	empd										
DPT Form	nat:	F ₁₆									DPT_ID:	9.002			
Field		Desc	riptio	n							Supp.	Range	Unit	Defa	ult
												full	K	cs	
Access T	уре														
♦ Outpu	ıt														
this \rightarrow	М				this \rightarrow	1									
Sponta	Spontaneous 🛛 COV: 🔻 Delta-Value: 0.2 MinRepTime: 10 sec														
	Cyclic Period: 15min (recommended value)														
Reque	st		\boxtimes												
Commun	icatio	n Typ	ре												
♦ Group	Obje	ct Da	tapoii	nt								Mandatory	/:		
Defaul		ıp Add	dress	:											
Dynamics	S														
Power	down	: Sa	ave:												
Power	up:	Va	alue:			itialisa					ult value:				
						d value	e:			Actua	al value:				
				nit or	n bus:			\triangleright]]
Exception	n Han	dling													
Special F	eatur	es													

FB:	HVACOPT		Server out Name:	TempRe	oomSetpC	ptimHe	atS	hift	Mandatory ☐ Optional ⊠				
Desc	ription:	Outp	ut Name.							Optioi			
	output contains	heati	ing setpoint s	shift.									
DPT:	Name DP	T_Ter	mpHVACRel	_Z	DPT ID	205.10	205.101 Datatype form				nat V ₁₆ Z ₈		
Field			Description			Sup.	Ra	nge	Unit	CO,	/ Default		
Temp	erature		Effective hea	ating setp	ooint			full	K	0.2	cs		
STAT	US												
- all b	its		Not supporte	ed		NA							
	nunication:	-				_	-			-			
Bine	ding Group:												
Clas	ss		Type					Def	ault				
	eographical		Apartment	. Room	. SubZone			1.1.	.1				
Ap	plication Spec	ific [
Pe	ripheral		Broadcast		Configu								
	Address:		IO Type(II		115 (HVA		F	roperty		52			
	-Services (ev		COV 🖂		MinRepTin			0 sec		eartbeat:	15 min		
Inf	oReport	\boxtimes		r default	communic	ating 🗌] E			ildcard a	lowed 🛛		
			Tx Prio:		High 🗌			Norma	l 🖂	L	ow 🗌		
po sh	ΓE Read-Resp Iling of the out _l all always be pported)		Transm af	ter Powe	er-up: Store	ed Value	: <u> </u>	Act V	′alue 🛚	Defaul	: Value □		
	perty-Service ividual access	s):	Read only			Read/	Writ	te	\boxtimes				
Exce	otion Handling	g:							Sav	e at Pow	erdown 🗌		
Speci	al Features:												

3.3.6.3 Output TempRoomSetpOptimCoolShift

DP Name:	T	TempRoomSetpOptimCoolShift Abbr.: Mandatory _												
FB Name:	Н	VACOF	PT								Can be	interna	<u>]</u> الإ	
Description	on													
This outpu	it cont	ains co	oling	setpoint	t shift.									
Datapoint														
DPT_Nam		DPT_V	alue_	Tempd										
DPT Form		F ₁₆								DPT_ID:	9.002			
Field		Descrip	tion							Supp.	Range	Unit	Defau	ılt
											full	K	CS	
Access Ty	ype													
♦ Output	t													
this \rightarrow	M			this -) 1									
Sponta	Spontaneous 🛛 COV: 🔻 Delta-Value: 0.2 MinRepTime: 10 sec													
	Cyclic Period: 15min (recommended value)													
Reques														
Communi	catio	n Type												
♦ Group	Obje	ct Data	ooint								Mandatory	/:		
Default		p Addre	ess:											
Dynamics														
Power	down:	Sav	e:											
Power	up:	Valu	ıe:		nitialisa					ult value:				
					ed valu	e:			Actua	ıl value:				
			nsmit (on bus:										
Exception	Han	dling												
Special Fo	eature	es												

FB:	HVACOPT		Server out Name:	TempR	oomSetpC	ptimCo	olS	Shift	Mandatory ☐ Optional ⊠				
Desc	ription:	Outp	ut Name.							Ориона			
	output contains	the c	ooling setpo	int shift.									
DPT:	Name DP	T_Ter	mpHVACRel	_Z	DPT ID	205.10	205.101 Datatype format V ₁₆ Z ₈						
Field			Description			Sup.	Ra	nge	Unit	COV	Default		
Temp	erature		Effective hea	ating setp	ooint			full	K	0.2	CS		
STAT	US												
- all b	its		Not supporte	ed		NA							
	nunication:	-				_	-		_	-			
Bine	ding Group:												
Clas	ss		Type					Defa	ault				
	eographical		Apartment	. Room	. SubZone			1.1.	1				
Ap	plication Spec	ific [
Pe	ripheral		Broadcast		Configu								
	Address:		IO Type(II		115 (HVA		F	Property I		55			
	-Services (eve		COV 🖂		MinRepTin			0 sec		artbeat:	15 min		
Inf	oReport	\boxtimes		r default	communic	ating 🗌] E			dcard allo	wed 🛛		
			Tx Prio:		High 🗌			Normal	\boxtimes	Lov	v 🗌		
po sh	ΓE Read-Resp Iling of the outρ all always be pported)		Transm af	ter Powe	er-up: Store	ed Value	: <u> </u>	Act V	alue 🛚	Default V	′alue 🗌		
	perty-Service ividual access	s):	Read only			Read/	Writ	te [\boxtimes				
Exce	otion Handling	g:							Save	at Power	down		
Speci	al Features:												
	·				<u>'</u>					<u>'</u>			

3.3.6.4 Output TempRoomSetpSetHeatShift

DF	Name:	Tem	ıpRoo	mSetp\$	SetHeatS	<u>nift</u>		A	obr.:			Manda	tory			
FB	Name:	HVA	COP	Γ								Can be	interna	al		
De	escription															
É	is output co	ntair	ns thre	e heati	ng setpoi	nt s	shifts.									
Da	tapoint Typ	ре														
DF	PT_Name:	DF	PT_Te	mpRod	mSetpSe	tSh	niftF16	i								
	PT Format:	F ₁₀	F ₁₆ F ₁₆	6							DPT_ID:	222.10	1			
Fie	eld		escripti								Supp.	Range	Unit	Defa	ault	;
	omfort	_			omfort he						M	full	K	CS	3	
Sta	andby				tandby he						M	full	K	CS	3	
Ec	Economy shift value for economy heat											full	K	CS	3	
Access Type																
•	Output															
	this \rightarrow M \square this \rightarrow 1 \square															
	Spontaneo	us		COV:	\boxtimes		Delta	-Value:	0.2	. [MinRepTir	ne:	10 sec			
				Cyclic			Perio	d:	15r	min (ı	recommer	nded value)				
	Request															
Co	ommunicati	on 1	Гуре													
♦	Group Obj											Mandatory	': X			
	Default Gro	up A	Addres	ss: -												
Dy	namics															
	Power dow	n:	Save	:												
	Power up:		Value	e:	No initial	isat	tion:			Defa	ult value:					
					Saved va	<u>alue</u>) :			Actua	al value:					
			Trans	smit on	bus:			\triangleright								
Ex	ception Ha	ndli	ng													
i																
Sp	ecial Featu	res														
-													-			

FB:	HVACOP			Server out Name:	TempRo	oomSetpS	etHeatS	Shift	t	M	landatory Optional	
Descr	iption:		Outp	out maine.	<u>.</u>						Ориона	
		ains	three	e heating se	tpoint shif	ts.						
DPT:	Name			mpRoomSe			212.10	0	Datatype	format	V ₁₆ V ₁₆ V ₁₆	5
Field				Description		•	Sup.	Rai	nge	Unit	COV	Default
Comfo	ort			shift value f	or comfor	t heat	M		full	K	0.2	CS
Standl	by			shift value f	orstandby	heat	M		full	K	0.2	CS
Econo	my			shift value f			M		full	K	0.2	CS
Communication:								•				
Bind	ling Grou	p:										
Clas	S			Type					Defa	ult		
Ge	ographica	l		Apartmer	t . Room	. SubZone			1.1.1			
Apı	plication S	peci	fic [
Pe	ripheral			Broadcas	t 🔲	Configu	able 🗌					
DP A	Address:			IO Type(I	D):	115 (HVA	COPT)	Р	roperty ID):	62	
LTE-	-Services	(eve	ent):	COV 🛚		MinRepTin	ne:	1	0 sec	Hea	rtbeat:	15 min
Info	Report		\boxtimes	Output pe	er default	communica	ating 🗌] B	inding Gr	oup Wild	card allov	ved 🛚
				Tx Prio:		High 🗌			Normal	\boxtimes	Low	' 🗌
pol sha	E Read-Raling of the all always oported)	outp		Transm a	fter Powe	r-up: Store	ed Value	: <u> </u>	Act Va	ue 🗵	Default V	alue 🗌
Property-Service (individual access):							Read/	Writ	e 🗵]		
Excep	tion Han	dling	j :	•						Save	at Power	down
	·								<u>-</u>			
Specia	al Feature	es:										

3.3.6.5 Output TempRoomSetpSetCoolShift

DF	P Name:	Tem	pRoor	mSetp8	SetCoolShif	t	Ab	br.:			Manda	tory		Ш	
FE	Name:	HVA	COPT	Γ							Can be	interna	al		
De	escription														
Th	is output co	ntain	s thre	e cooli	ng setpoint	shifts.									
Da	tapoint Typ	е													
DF	PT_Name:	DP	T_Tei	mpRod	mSetpSetS	ShiftF16									
DF	PT Format:	F ₁₆	F ₁₆ F ₁₆	6						DPT_ID:	222.10	1			
Fie	eld	Des	scripti	on						Supp.	Range	Unit	Defa	ult	
Сс	mfort	shif	ft valu	e for c	omfort cool					M	full	K	CS	;	
Sta	andby	shif	ft valu	e for s	tandby cool					M	full	K	CS	6	
Ec	Economy shift value for economy cool M											K	CS	6	
A	Access Type														
*	Output														
	this \rightarrow M \square this \rightarrow 1 \square														
	Spontaneo	us	\boxtimes	COV:		Delta-\	/alue:	0.2	Ν	/linRepTin	ne:	10 sec			
				Cyclic	; 🛛	Period:		15min	(r	ecommen	ided value)				
	Request		\boxtimes												
ŏ	ommunicati	on T	уре												
*	Group Obj	ect D	atapo	oint							Mandatory	/: X			
	Default Gro	up A	ddres	ss: -											
Dy	/namics														
	Power dow	n:	Save:												
	Power up:		Value	:	No initialisa	ation:		De	fau	ılt value:					
					Saved valu	ie:		Act	tua	l value:					
			Trans	mit on	bus:		\boxtimes								
Ex	ception Ha	ndlir	ng												
Sp	ecial Featu	res													
i															
															_

FB:	HVACOP			Server ut Name:	TempRo	omSetpS	etCoolS	Shift		М	andatory Optional	
Descri	iption:	-										
This or	utput conta	ains th	hree	colling setp	oint shifts	3.						
DPT:	Name	DPT_ ft	_Ten	npRoomSet	pSetShi	DPT ID	212.10	0	Datatype	format	V ₁₆ V ₁₆ V ₁₆	3
Field				Description			Sup.	Ran	ige	Unit	COV	Default
Comfo	rt			hift value fo	r comfort	cool	М		full	K	0.2	CS
Standb	ру			hift value fo			М		full	K	0.2	cs
Econo	my			hift value fo			М		full	K	0.2	cs
Comm	unication	า:										
Bind	ing Grou	p:										
Class	3			Туре					Defau	ılt		
Ged	ographica			Apartment	. Room	. SubZone			1.1.1			
App	olication S	pecific	c 🗀]								
Per	ripheral			Broadcast		Configur	able 🗌					
DP A	ddress:			IO Type(ID	D):	115 (HVA	COPT)	Pr	operty ID		63	
LTE-	Services	(even	nt):	COV 🖂		MinRepTim			sec		tbeat:	15 min
Info	Report		\boxtimes	Output per	r default d	communica	ating 🗌	Bi	nding Gro	oup Wild	card allov	ved 🛛
				Tx Prio:		High 🗌			Normal [\boxtimes	Low	
poll sha sup	E Read-Ring of the always loported)	outpu be		Transm af	ter Powe	r-up: Store	d Value		Act Val	ue 🛚	Default Va	alue 🗌
	erty-Serv vidual ac		:	Read only			Read/\	Vrite	• X			
Excep	tion Hand	dling:								Save	at Power	down
Specia	al Feature	es:										

3.3.6.6 Output ContrMode

DP		ContrMode	Abbr.:		Mand	atory	
		HVACOPT			Can b	e interna	
Des	cription						
This	output cor	ntains the controlling mode.					
Dat	apoint Typ						
DPT	Γ_Name:	DPT_HVACContrMode					
DPT	Γ Format:	N ₈		DPT_ID:	20.10	5	
Fiel	d	Description		Supp.	Range	Unit	Default
Con	trMode				020	enum.	cs
		0 = Auto		0			
		1 = Heat 2 =	Mrng Wmup	0			
			Night Purge	0			
		5 = Precool 6 =		Ö			
			Emerg Heat	Ö			
			Free Cool	ŏ			
		,	Max. Heating Mode	Ö			
			Dehumidification	Ö			
			Emerg Cool Mode	0			
			No Demand	0			
		17 = Emerg Steam 20 = all other enumeration	No Demand	_			
۸	T.m	all other enumeration		NA			
	ess Type						
	Output		7				
_	$his \rightarrow M$					1	
5	Spontaneou			/linRepTim		10 sec	
<u> </u>			Period: 15min (r	ecommend	ded value	9)	
	Request						
	nmunicatio	,		1.	\ <u></u>	167	
		ect Datapoint			Mandato	ry: 🛛	
		up Address:					
	amics						
_	Power down						
1	Power up:	Value: No initialisation		ılt value:			
		Saved value:		l value:			
		Transmit on bus:					
Exc	eption Har	ndling					
Spe	cial Featu	res					

FB: HVAC	COPT	LTE S Outpu	erver It Name:	Contri	Mode					datory otional	
Description	1:							•			
This output	contains	the Co	ontrolling m	ode.							
DPT : Nar	me DP	T_HVA	CContrMo	de_Z	DPT ID	201.104	l Da	tatype form	at N ₈ Z	В	
Field	Des	scriptio	n				Sup.	Range	Unit	COV	Default
ContrMode								020	enum.	yes	CS
	_	= Auto					0				
	-	= Heat			M Wmup		0				
		= Cool			Ngt Prge		0				
		= Preco	ool	6 =			0				
		= Test			EmgHeat		0				
		= Fan d	only		Free Cool		0				
		= Ice	H/C Mode		Max. Heatii Dehumidifid		0				
			ration Mod			0					
			g Steam		0						
			numeration	20 =	u	NA					
STATUS			ervice Info		tv-	14/1		Bitset			
0171100	Ser	vice Re	esponse or	nlv	ana i ropor	· y			Bitoot		
- OutOfServ			Γout of ser				0	true/false	Bit 0	Υ	false
- all other bit							NA			•	
Communica	ation:						•				
Binding G	roup:										
Class			Туре					Default			
Geograp		\boxtimes	Apartmen	t . Roor	n . SubZone	Э		1.1.1			
Application		ific 🔲									
Periphera			Broadcast		Configu						
DP Addres			IO Type(II	D):	115 (HV			erty ID:	56		
LTE-Servi	•		COV 🖂		MinRepTi		10 s		leartbea		5 min
InfoRepo	ort	\boxtimes		r defaul	It communic	cating		ing Group \	Vildcard	allowe	ed 🛛
" TE D			Tx Prio:		High _		No	ormal 🛚		Low	
(LTE Rea											
polling of		put	Transm at	fter Pov	ver-up: Stor	ed Value	\Box A	Act Value 🗵	Defa	ult Val	ue 🗍
shall always	•				•			_	_		
supporte Property-											
(individua		e).	Read only	<i>'</i> [Read/V	Vrite	\boxtimes			
Exception I			L					S	ave at P	owerdo	own \square
	- and m	9.						100	avo at i	o word	74411
Special Fea	tures:										

3.3.6.7 Output EnableHeat

Standard Mode: NA LTE-HEE Mode

FB:	HVACOPT	_	Server ut Name:	Enable	Heat				Mandator Option	
Desci	ription:	Outpo	ut ivailie.						Ориоп	ai 🔼
	output contains	the co	ontrol for the	e differe	nt heating s	tages				
DPT:			bleH/Cstag		DPT ID	201.10	5 Dataty	ype forma	t N ₈ Z ₈	
Field	I valle Bi		Description	<u>,c_</u>	וטו וט	Sup.	Range	Unit	COV	Default
Mode			occomption.			Oup.	03	enun		CS
Wiodo			0 = disable	ed		М	00	Orian	. ,00	00
			1 = enable	stage A	\	М				
			2 = enable			М				
			3 = enable			М				
		а	all other enu			NA				
STAT	US									
- all b	its	N	Not supporte	ed		NA				
Comr	nunication:	-				-	-	-	-	-
Bine	ding Group:									
Clas	SS		Туре				D	efault		
G€	eographical	\boxtimes	Apartmen	t . Roon	n . SubZone		1.	1.1		
Ap	plication Spec	ific 🗌]							
Pe	ripheral		Broadcas	t 🔲	Configu	able 🗌				
	Address:		IO Type(II	D):	115 (HVA		Property		57	
LTE	-Services (ev	ent):	COV 🖂		MinRepTin		10 sec		artbeat:	15 min
Inf	oReport	\boxtimes	Output pe	r defaul	t communica	ating 🗌			ildcard allo	wed 🛛
			Tx Prio:		High 🗌		Norm	nal 🛚	Lov	v 🗌
	TE Read-Resp									
	lling of the out	put	Transm a	fter Pow	er-up: Store	d Value	. □ Δct	Value ⊠	Default V	ا مبياد/
	all always be		Transin a	itei i ow	rei-up. Store	u value	,	value 🖂	Delault v	aide 🗀
	pported)									
	perty-Service		Read only	, г	7	Read/	Write	\boxtimes		
	ividual acces		Trodu offin			rtoda	***************************************			
Exce	ption Handlin	g:						Sav	e at Power	down
Spec	ial Features:									

3.3.6.8 Output SplitHeat

Standard Mode: NA LTE-HEE Mode

FB:	HVACOPT	LTE S	erver it Name:	SplitHea	at				1	Mandator Optiona	
Desc	ription:	- unipo								0 1 1	🔼
	output contains	the sp	lit value for	the diffe	rent heatin	g stage	S.				
DPT:	Name DP	T_Perc	ent_U8		DPT ID	5.004	Data	type t	format	U ₈	
Field		D	escription			Sup.	Range		Unit	COV	Default
Split v		S	tart value fo	or stage E	3		010	0	%	yes	CS
Comi	munication:										
	ding Group:										
Clas			Type					Defau	lt		
	eographical	<u>\</u>	Apartmen	t . Room	. SubZone		1	1.1.1			
	plication Spec	ific 🔃		- <u></u>		<u></u> -					
	ripheral		Broadcast		Configur						
	Address:		IO Type(II		115 (HVA		Prope	rty ID:		58	
	-Services (ev		COV 🛛		MinRepTim		10 se	-		tbeat:	15 min
Inf	oReport	\boxtimes		r default o	communica	ating 🗌				card allov	ved 🗌
			Tx Prio:		High 🗌		Nor	mal 🛭		Low	'
po sh	TE Read-Resp Iling of the out all always be pported)		Transm af	ter Powe	r-up: Store	d Value	e 🗌 Ac	t Valu	ue 🛛 🏻 [Default V	alue 🗌
	perty-Service ividual acces		Read only			Read/	Write	\boxtimes			
Exce	ption Handlin	g:	-						Save a	at Power	down
Spec	ial Features:										

3.3.6.9 Output EnableCool

Standard Mode

FB:	HVACOPT		Server ut Name:	Enable	Cool			N	Nandator Optiona		
Desc	ription:										
This o	output contains	the co	ontrol for the	e differer	nt cooling st	tages.					
DPT:	Name DP	T_Ena	bleH/Cstag	e_Z	DPT ID	201.10	5 Dat	atype	format	N_8Z_8	
Field			Description			Sup.	Range		Unit	COV	Default
Mode							0:	3	enum.	yes	CS
			0 = disable	-		M					
			1 = enable			M					
			2 = enable			M					
			3 = enable	both sta	ges	M					
		а	all other enu	meration	า	NA					
STAT	US										
- all b		١	Not supporte	ed		NA					
Comr	munication:							_			
Bine	ding Group:										
Clas	-		Type					Defau	ılt		
	eographical		Apartment	t . Room	. SubZone			1.1.1			
	plication Spec	ific 🗌]								
	eripheral		Broadcast		Configu						
	Address:		IO Type(ID	D):	115 (HVA			erty ID		59	
	-Services (ev		COV 🖂		MinRepTin		10 s			tbeat:	15 <u>min</u>
Inf	oReport	\boxtimes		r default	communica	ating				card allov	ved 🗵
			Tx Prio:		High 🗌		No	rmal 🛭	\overline{A}	Low	
	TE Read-Resp										
	lling of the out	put	Transm of	ter Pow	er-up: Store	مرالد/\ امر	Δ 🗆	ct Vali	ue 🛛 🏻 🛭	Default Va	□ مبياد
	all always be		Transm ai	ter i owi	er-up. Otore	u value		Ct van	ue 🖂 L	Jerault V	
	pported)										
	perty-Service		Read only	,	1	Read/\	M/rita	\boxtimes			
_	ividual acces		ixeau only	L		i\eau/	vviile				
Exce	ption Handling	g:							Save a	at Power	down
Spec	ial Features:										

3.3.6.10 Output SplitCool

Standard Mode: NA

FB:	HVACOPT		Server ut Name:							Mandator Optiona	
Desci	ription:										
This c	output contains	s the s	plit value for	the diffe	rent coolin	g stage:	S.				
DPT:	Name DF	PT_Pei	cent_U8		DPT ID	5.004	Da	atatype	format	U ₈	
Field			Description			Sup.	Range	Э	Unit	COV	Default
Split v	/alue	;	start value fo	or stage E	3		0	100	%	yes	CS
Comr	nunication:	_				-	_				
Bind	ding Group:										
Clas	SS		Туре					Defau	ult		
Ge	eographical	Σ	Apartmen	t . Room	. SubZone			1.1.1			
Ap	plication Spec	cific [
	ripheral		Broadcast	: 🔲	Configur	able 🗌					
DP A	Address:		IO Type(II	D):	115 (HVA	COPT)	Prop	erty ID):	60	
LTE	-Services (ev	rent):	COV 🖂		MinRepTim	ne:	10 :	sec	Hear	tbeat:	15 min
Inf	oReport	\boxtimes	Output pe	r default	communica	ating 🗌	Bind	ling Gro	oup Wildo	card allov	ved 🛚
			Tx Prio:		High 🗌		N	ormal 🏻	\boxtimes	Low	' [
•	ΓΕ Read-Resp										
	lling of the out	tput	Transm at	tar Powa	r-up: Store	d Value		Act Val	ا 🏿 میں	Default V	□ مبياد
	all always be		Transin ai	iter r owe	i-up. Store	u value	, L.,	nci vai	ue 🖂 .	Jelault V	alue 🔲
	pported)										
	perty-Service ividual acces		Read only	, <u> </u>		Read/	Write	\boxtimes			
	otion Handlin								Sava	at Power	down
LACE	Juon Handiii	ıy.							Save	at FUWER	
Speci	ol Footuros.										
Speci	al Features:										

3.3.6.11 Output DisableDamper

DP Name:	Disa	bleDa	mpe	r			Al	obr.:			Man	datory		
FB Name:	HVA	COPT	Γ								Can	be interna	al	
Description														
This output co	ontair	ns the	enab	le/disab	le for	a local	damper							
Datapoint Ty	ре													
DPT_Name:	DF	PT_En	able											
DPT Format:	B ₁									DPT_ID:	1.00	3		
Field	De	escripti	on							Supp.	Range	Unit	Defa	ult
											0/1	Bit.	CS	
Access Type	<u> </u>													
♦ Output														
this \rightarrow M				this \rightarrow	1									
Spontaneo	ous	\boxtimes	CO,	V:	\square	Delta	-Value:			//InRepTin		10 sec		
			Cyc	lic	\boxtimes	Perio	d:	15n	nin (r	ecommer	ided valu	ıe)		
Request														
Communicat														
♦ Group Ob	•										Mandat	ory: 🛛		
Default Gr	oup A	Addres	ss:											
Dynamics														
Power dov	vn:	Save:												
Power up:		Value	: :	No in	itialisa	tion:		I	Defau	ılt value:				
					d valu	e:			Actua	ıl value:		\boxtimes		
			mit c	n bus:			\boxtimes]
Exception Ha	andli	ng												
Special Feat	ures													

FB:	HVACOP			Server ut Name:	Disable	Damper					Mandator Optiona	
Desci	ription:	-	<u> </u>		=				<u> </u>			
This c	utput conta	ains t	he e	nable/disabl	le for a lo	cal dampe	r.					
DPT:	Name	DPT.	_Ena	able		DPT ID	1.003	[Datatype	format	B ₁	
Field				Description			Sup.	Ran	ige	Unit	COV	Default
									0/1	Bit	yes	cs
Comr	nunicatior	ղ։	-				-	-			-	
Bind	ding Group	p:										
Clas				Туре					Defau	ılt		
Ge	ographical	l	\boxtimes	Apartmen	t . Room	. SubZone	!		1.1.1			
Ар	plication S	pecifi	ic []								
Pe	ripheral			Broadcast	: 🔲	Configu	rable 🗌					
DP /	Address:			IO Type(II	D):	115 (HVA	COPT)	Pr	operty ID):	61	
LTE	-Services	(ever	nt):	COV 🖂		MinRepTin	ne:	10	sec	Hear	tbeat:	15 min
Inf	oReport		\boxtimes	Output pe	r default	communic	ating 🗌] Bii	nding Gro	oup Wild	card allov	ved 🛚
				Tx Prio:		High 🗌			Normal [\boxtimes	Low	' 🗌
po sha su	ΓE Read-R Iling of the all always I pported)	outpu be		Transm af	fter Powe	er-up: Store	ed Value	e 🗌	Act Val	ue 🛛 🗆	Default V	alue 🗌
	oerty-Serv ividual acc):	Read only	, <u> </u>		Read/	Write	e 🛚			
Excep	otion Hand	dling:								Save	at Power	down
Speci	al Feature	es:										

3.3.6.12 Output DHWModeOptim

DF	P Name:	DHWModeOptim	1		Abbr.:			Mand	atory		
FB	Name: I	HVACOPT						Can b	e interna	al	
	scription										
Th	is output cor	itains the optime	sed DHW m	ode.							
	tapoint Typ										
	PT_Name:	DPT_DHWMod	le								
	PT Format:	N ₈					DPT_ID:				
Fie		Description					Supp.	Range	Unit	Defa	ult
Dŀ	HW Mode							14	enum.	CS	;
		0 = Auto					NA				
		1 = LegioProte	ect				M				
		2 = Normal					M				
		3 = Reduced					M				
		4 = Off/FrostP					М				
		all other enume	eration				NA				
Ac	cess Type										
♦	Output										
	this \rightarrow M		his → 1								
	Spontaneou			Delta-Valu			/linRepTir		10 sec		
		Cyclic		Period:	15mi	n (r	ecommer	nded value	e)		
	Request	\boxtimes									
C	mmunicatio										
♦		ect Datapoint						Mandato	ry: 🛛		
	Default Gro	up Address: -									
Dy	namics										
	Power down										
	Power up:	Value:	No initialisa	tion:	D	efau	ılt value:				
			Saved value	e: 🔲		ctua	l value:		\boxtimes		
		Transmit on	bus:								
Ex	ception Har	ndling									
Sp	ecial Featur	es									

FB:	HVACOPT		Server ut Name:	DHWM	odeOptim				Mandator Option	
Desc	ription:			-				<u> </u>	<u> </u>	
	output contains	the o	ptimised DH	IW mode						
DPT:			WMode_Z		DPT ID	201.10	2 Datat	ype format	N ₈ Z ₈	
Field		_ [Description			Sup.	Range	Unit	COV	Default
	CMode		•				04	enum	yes	CS
			0 = Auto			M				
			(no opti	mised D	HWMode)					
			1 = LegioP	rotect		M				
			2 = Normal			M				
			3 = Reduce	ed		M				
			4 = Off/Fros	stProtect	t	M				
		a	all other enu	meration	1	NA				
STAT	US	I	or LTE-Ser	vice Info	Report			Bitset		
		á	and Property	/-Service	9					
			Response of	nly						
- Out	OfService	l l	HVACOPT o	out of ser	vice	0	true/fals	e	yes	false
		(no optimise	d DHWN	/lode)					
all oth	ner bits					NA				
Comi	munication:					-	•	-	Ÿ	
Bin	ding Group:									
Clas	-		Туре				D	efault		
Ge	eographical		Apartment	t . Room	. SubZone		1.	1.1		
Ap	plication Spec	ific [
Pe	eripheral		Broadcast		Configur	able 🗌				
DP	Address:		IO Type(II	D):	115 (HVA	COPT)	Propert		53	
	-Services (eve	ent):	COV 🖂		MinRepTin	ne:	10 sec	Hea	rtbeat:	15 min
Inf	oReport	\boxtimes	Output pe	r default	communica	ating 🗌	Binding	Group Wile	dcard allov	wed 🛚
			Tx Prio:		High 🗌		Norm	nal 🛚	Low	<i>'</i> 🗌
	TE Read-Resp									
	lling of the outp	out	Transm of	tor Dowe	er-up: Store	d Value	\	Value 🖂	Default V	مايام 🏻
	all always be		Transin ai	ter rowe	si-up. Store	u value	;	value 🖂	Delault v	alue 🔲
	pported)									
	perty-Service		Read only		1	Read/	\/\rite	\boxtimes		
	ividual acces		Ttodd offiy			T C C C C C	VVIIIC			
Exce	ption Handling	g:						Save	at Power	down
Spec	ial Features:									

3.3.6.13 Output TempDHWSetpOptimShift

DP Name:	Te	mpDHV	VSetp(OptimShif	t		Ab	br.:			Manda	itory	
FB Name:	HV	ACOPT	Γ								Can be	e interna	<u> ال</u>
Description													
This output of	conta	ins the	DHW:	setpoint s	hift.								
Datapoint T	уре												
DPT_Name:		PT_Val	lue_Te	empd									
DPT Format	: F	16								DPT_ID:	9.002		
Field	D	escripti	on							Supp.	Range	Unit	Default
											full	K	CS
Access Typ	е												
♦ Output													
this $\rightarrow M$		\boxtimes		his \rightarrow 1									
Spontane	eous		COV:	\boxtimes	De	elta-Va	alue:	0.2	1	MinRepTin	ne:	10 sec	
			Cyclic		Pe	eriod:		15m	ıin (ı	ecommen	ded value))	
Request		\boxtimes											
Communica	ation	Type											
♦ Group C)bject	Datapo	oint								Mandatory	y: 🛛	
Default G	roup	Addres	ss: -										
Dynamics													
Power do	wn:	Save:											
Power up):	Value	:	No initia	lisation	n: 📗			Defau	ılt value:			
				Saved va	alue:			P	Actua	ıl value:		\boxtimes	
		Trans	mit on	bus:			\boxtimes						
Exception F	land	ling											
Special Fea	tures	3											

FB:	HVACOPT		Server out Name:	TempDl	HWSetpO _l	otimShi	ft	Mandatory ☐ Optional ⊠			
Desci	ription:	Outp	at Hame.					<u>.</u>		optional [
	output contains	the D	HW setpoin	t shift.							
DPT:	Name DP	T_Ter	mpHVACRel	_Z	DPT ID	205.10	1 D	atatype	format	$V_{16}Z_{8}$	
Field			Description			Sup.	Rang	je	Unit	COV	Default
Temp	erature		Effective hea	ating setp	ooint		f	ull	°C	0.2	CS
STAT	US										
- all bi	its		Not supporte	ed		NA					
	nunication:										
Bind	ding Group:										
Clas	S		Type					Defa	ult		
	eographical		Apartment	. Room	. SubZone			1.1.1			
Ap	plication Spec	ific [
Pe	ripheral		Broadcast		Configu	able 🗌					
	Address:		IO Type(II		115 (HVA		Pro	perty ID		54	
LTE	-Services (eve	ent):	COV 🖂		MinRepTin		10	sec	Hea	rtbeat:	15 min
Inf	oReport	\boxtimes		r default	communic	ating 🗌				lcard allov	wed 🛚
			Tx Prio:		High 🗌		1	Normal [\boxtimes	Low	<i>i</i> 🗌
po sh	ΓE Read-Resp Iling of the outρ all always be pported)		Transm af	ter Powe	er-up: Store	ed Value	; <u> </u>	Act Va	lue 🛚	Default V	alue 🗌
	perty-Service ividual access	s):	Read only			Read/	Write	\boxtimes			
Exce	otion Handling	g:							Save	at Power	down
Speci	al Features:										

3.3.6.14 Parameter Apartment_x

FB:	HVACOF	T P	rop	erty Name (<u>Server</u>):	Apartm	ent_x			Mandator Optiona	
Desci	ription:									<u> </u>
	•	partm	ent z	zone. (controller itself	:)					
DPT:	Name	DPT_	_Ucc	ountValue8_Z	DPT ID	202.002	Data	type format	U ₈ Z ₈	
Field	•]	Description				Range	Unit	Default
Zone			1	Number of the Apartm	nent		•	(0) 1126		1
STAT	US								Bitset	
- Outo	ofService		2	zone active / inactive			0	true/false	Bit 0	false
- all o	ther bits		r	not supported, fixed to	o '0'		NA			false
COMI	MAND							enum		CS
- Norr	nalWrite					M	0			
- SetC	OSV & Res	setOS\	V	Set zone inactive / ac		0	3/4			
Comr	nunicatio	n:					-			
DP A	Address:			IO Type(ID):	115 (HVAC	OPT)	Proper	ty ID:	101	
(in t	he server)		Start-Index:	1		N° of e	lements	1	
Pro	perty acco	ess:		Read only		Read/W	'rite	\boxtimes		
Prot	ection			Read level	-		Write le	evel	-	
Exce	otion Han	dling:	'	Value after Power-up:	: Stored V	′alue 🛚	Act Va	lue 🗌 Def	ault Value	
Speci	al Featur	es:								
Zone	of the con	troller i	itsel	f.						
Zone	= 0 (wildca	ard): S	end	s to all listeners						
Th	e device is	s not L	TE o	communicating in this	zone if zoi	ne is 'Ou	utOfServ	ice'.		
If Apa	rtment x i	s 'Out(OfSe	ervice' Room v and S	SubZone z	automat	tically ar	e 'OutOfServ	rice' too.	

3.3.6.15 Parameter Room_y

FB:	HVAC	OP	T	Prop	perty Name (<u>Ser</u>	ver):	Room	_y				Mandator Optiona	•
Desci	ription						_				<u> </u>		
Numb	er of th	e r	oom 2	zone	e. (controller itself	f)							
DPT:	Nan	ne	DPT	_Uc	countValue8_Z		DPT ID	202.002	2	Data	type format	U_8Z_8	
Field					Description				Si	лр.	Range	Unit	Default
Zone					Number of the R	loom					(0) 163		1
STAT	US											Bitset	
- Outo	ofServio	е			zone active / ina	ctive)	true/false	Bit 0	false
		3			not supported, fi	xed to	o '0'		N	ΙΑ			false
COMI	MAND										enum		CS
		-							-	Л	0		
- SetC	- all other bits COMMAND - NormalWrite - SetOSV & ResetOS - all other commands Communication: DP Address:			SV)	3 / 4		
- all o	ther co	nm	ands		not supported				N	IA			
Comr	nunica	tio	n:										
DP A	Addres	s:			IO Type(ID):		115 (HVA	(COPT)			y ID:	102	
(in t	he ser	/er)		Start-Index:		1				ements	1	
Pro	perty a	cce	ess:		Read only			Read/W	/rite		\boxtimes		
Prot	ection				Read level		-		Wı	rite le	evel	-	
Exce	otion H	and	dling	:	Value after Powe	er-up	: Stored	Value 🛚	Ac	t Val	ue 🗌 Def	ault Value	
Speci	al Feat	ure	es:										
Zone	of the o	ont	troller	r itse	elf.								
					ds to all listeners								
					mmunicating in th			is 'OutO	fSer	vice'			
'OutO	fServic	e' is	s take	en ov	ver from Apartme	ent_x.							

${\bf 3.3.6.16~Parameter~SubZone_z}$

FB:	HVAC	PT	Pro	pe	erty Name (<u>Server</u>):	Su	bZo	ne_z				Mandator Optiona	
Desci	ription:					_					-	Орионе	🔼
Numb	er of the	Sub	Zone.	(0	controller itself)								
DPT:	Nam	e D	PT_U	co	untValue8_Z	DPT	ID	202.002	2	Data	type format	U ₈ Z ₈	
Field		•		Е	Description				S	up.	Range	Unit	Default
Zone				١	lumber of the SubZo	ne					(0) 115		1
STAT	US			Ī]		Bitset	
- Outo	ofServic)		z	one active / inactive					0	true/false	Bit 0	false
- all o	ther bits			n	ot supported, fixed to	o '0'			1	۱A			false
COMI	MAND										enum		CS
- Norr	nalWrite									M	0		
- SetC	- SetOSV & ResetOS				Set zone inactive / active					0	3 / 4		
- all of	ther con	man	nds	not supported					١	NA			
Comr	nunicat	on:		-						_		-	
DP A	Addres	5 :			IO Type(ID):	115 (F	HVA	COPT)	Pı	roper	ty ID:	103	
(in t	he serv	er)			Start-Index:	1			N'	° of e	lements	1	
Pro	perty ac	cess	s:		Read only			Read/W	rite)	\boxtimes		
Prot	ection				Read level	-			W	rite le	evel	-	
Exce	otion H	ndli	ng:	٧	/alue after Power-up:	: Sto	red \	√alue 🛚	Α	ct Va	lue 🗌 Def	ault Value	
Speci	al Feat	ıres:											
Zone	of the c	ntro	ller itse	elf									
Zone	= 0 (wild	lcard	l): Sen	ds	s to all listeners								
The d	device is not LTE communicating in this zone if zone is 'OutOfService'.												
'OutO	fService	' is ta	aken o	ve	er from Apartment_x.								

3.3.6.17 Parameter Apartment_u

FB:	HV	ACOP	T F	Prop	erty Name (<u>Server</u>):	Aparti	ment_u				Mandator Optiona	
Desci	rinti	on.								<u> </u>	Орионе	AI [2]
	_		nartm	ent	zone (scheduler zone	2)						
						DPT ID	202.002)	Data	atype format	U ₈ Z ₈	
		lanie	ַו זען			טר ו וט	202.002				Unit	Default
								0	up.	Range	UTIIL	
					Number of the Apartin	ient				(0) 1126	·	1
									_		Bitset	
					zone active / inactive				0	true/false	Bit 0	false
- all o	ther	bits			not supported, fixed to	o '0'			۱A			false
COMI	MAN	ID								enum		CS
- Norr	Description: Number of the apartr DPT: Name DPT Field Zone STATUS OutofService all other bits COMMAND NormalWrite SetOSV & ResetOS all other commands Communication: DP Address: (in the server) Property access: Protection Exception Handling The device is not LT				M 0							
Zone STATUS - OutofService - all other bits COMMAND - NormalWrite - SetOSV & ResetOS - all other commands Communication: DP Address: (in the server) Property access:				V	Set zone inactive / act		(0	3 / 4			
PPT: Name DPT_UcountValue8_Z Field Description Zone Number of the A STATUS - OutofService zone active / ina - all other bits not supported, fi COMMAND - NormalWrite - SetOSV & ResetOSV Set zone inactiv - all other commands not supported Communication: DP Address: IO Type(ID): (in the server) Start-Index: Property access: Read only Protection Read level Exception Handling: Value after Pow Special Features:					not supported			١	١A			
Comr	mun	icatior	ո։	-					•		-	-
DP A	Add	ress:			IO Type(ID):	115 (HV <i>A</i>	ACOPT)	Pi	oper	ty ID:	106	
(in t	he s	erver))		Start-Index:	1	•			lements	1	
•					Read only		Read/W	/rite	;	\boxtimes		
					Read level	-		W	rite le	evel	-	
Exce	ptio	n Hand	dling:		Value after Power-up:	Stored	Value 🛚	A	ct Va	lue 🔲 De	fault Value	: 🗌
					•							
Speci	ial F	eature	es:									
Zone	of th	e sche	eduler									
Zone	= 0	(wildca	ard): S	Send	ls to all listeners							
					nmunicating in this zo	ne if zone	e is 'OutO	fSe	rvice	' .		
					ervice' Room v and S						rice' too.	

3.3.6.18 Parameter Room_v

FB:	HVACC	PT	Pro	pe	erty Name (<u>Server</u>):		Room	_v				Mandator Optiona	
Desci	ription:		<u>.</u>			-						Ориона	<u> 🔼 </u>
Numb	er of the	room	zone	Э.	(scheduler zone)								
DPT:	Name	DP	T_U	co	untValue8_Z	DF	PT ID	202.00	2	Data	type format	U ₈ Z ₈	
Field				Г	Description	•			S	Sup.	Range	Unit	Default
Zone				١	Number of the Room						(0) 163		1
STAT	US								[Bitset	
- Outo	ofService			z	one active / inactive					0	true/false	Bit 0	false
- all o	ther bits			n	ot supported, fixed to	0'0)'			NA			false
COMI	MAND										enum		CS
- Norr	- NormalWrite								M	0			
- SetC	- SetOSV & ResetOS'								0	3 / 4			
- all of	ther com	mand	ls	not supported					NA				
Comr	nunicati	on:		-								_	
DP A	Address	:			IO Type(ID):	115	5 (HVA	COPT)	Р	roper	ty ID:	107	
(in t	he serve	r)			Start-Index:	1			Ν	l° of e	lements	1	
Pro	perty ac	cess:			Read only			Read/V	Vrit	е	\boxtimes		
Prot	ection				Read level	-			٧	Vrite le	evel	-	
Exce	otion Ha	ndlin	g:	٧	/alue after Power-up	: 3	Stored	Value 🗵] A	ct Va	lue 🗌 Def	ault Value	
Speci	ial Featu	res:											
Zone	of the so	hedul	er.										
Zone	= 0 (wild	card):	: Sen	ds	s to all listeners								
The d	evice is	not LT	ГЕ со	m	municating in this zo	one	if zone	is 'OutC)fSe	ervice	•		
'OutO	fService	is tak	cen o	ve	er from Apartment_x.								

3.3.6.19 Parameter SubZone_w

FB:	HVACOPT	Pro	perty Name (<u>Server</u>):	SubZone	\A/			Mandator	v \square
1 0.	IIVACOI I	1 10	berty Hame (<u>berver</u>).	Subzone.	vv			Option	
Desc	ription:	<u>L</u>		-				Орион	а. <u>Г</u>
	per of the Subz	one	(scheduler)						
DPT:			countValue8_Z	DPT ID 20	02.002	Data	atype format	U ₈ Z ₈	
Field	Traine Di		Description		22.002	Sup.	Range	Unit	Default
Zone			Number of the SubZo	ne		oup.	(0) 115	O m	1
STAT								Bitset	
	ofService		zone active / inactive			0	true/false	Bit 0	false
	ther bits		not supported, fixed to	o '0'		NA			false
COM	MAND						enum		CS
- Nori	malWrite					M	0		
- Set0	OSV & ResetO	SV	Set zone inactive / ac	tive		0	3/4		
- all o	ther command	ls	not supported			NA			
Com	munication:				_		-	-	-
DP	Address:		IO Type(ID):	115 (HVACC	PT)	Proper		108	
(in t	the server)		Start-Index:	1		N° of e	elements	1	
Pro	perty access:		Read only	R	ead/W	rite	\boxtimes		
Pro	tection		Read level	-		Write I	evel	-	
Exce	ption Handlin	g:	Value after Power-up	: Stored Val	lue 🛚	Act Va	lue 🗌 Def	ault Value	9 🗌
Spec	ial Features:								
Zone	of the schedul	er.							
			ds to all listeners						
			mmunicating in this zo		'OutOf	Service	·'.		
'OutC)fService' is tak	cen o	ver from Apartment_x.	Ī					

${\bf 3.3.6.20~Parameter~DHW_Zone}$

FB:	HVACOP	T Pro	operty Name (<u>Server</u>):	DHW_2	Zone			Mandator	у 🗌
								Optiona	al 🛛
Desc	ription:	-		-			-		
Numb	er of the D	HW_Zc	one						
DPT:	Name	DPT_L	JcountValue8_Z	DPT ID	202.002	Data	type format	U_8Z_8	
Field			Description			Sup.	Range	Unit	Default
Zone			Number of the DHW_	Zone			131		1
STAT	US							Bitset	
- Outo	ofService		zone active / inactive			0	true/false	Bit 0	false
- all o	ther bits		not supported, fixed to	o '0'		NA			false
COMI	MAND						enum		CS
- Norr	nalWrite					M	0		
- SetC	SV & Res	etOSV	Set zone inactive / ac	tive		0	3/4		
- all o	ther comma	ands	not supported			NA			
Comr	nunication	1:	-		-			-	-
DP	Address:		IO Type(ID):	115 (HVA	COPT)	Proper	ty ID:	104	
(in t	he server)		Start-Index:	1		N° of e	lements	1	
Pro	perty acce	ss:	Read only		Read/W	'rite			
Pro	ection		Read level	-		Write le	evel	-	
Exce	otion Hand	lling:	Value after Power-up:	Stored	Value 🛚	Act Va	lue 🔲 Def	ault Value	e 🗌
					<u>-</u>			·	
Speci	al Feature	s:							
The d	evice is no	t LTE c	ommunicating in this zo	ne if zone	is 'OutOf	Service	·		

3.3.6.21 Parameter DistrSegmV

FB:	HVACOPT	Prop	perty Name (<u>Server</u>):	DistrSeg	gmV			Mandator Optiona				
Desc	ription:	L		_			<u> </u>					
Numb	per of the venti	lation	distribution segment.									
DPT:	Name DP	T_Uc	countValue8_Z	OPT ID 2	202.002	Data	atype format	U ₈ Z ₈				
Field			Description	•		Sup.	Range	Unit	Default			
Zone			Number of the ventialtie	on segmer	nt	-	(0) 131		1			
STAT	US							Bitset				
- Outo	OutofService zone active / inactive O true/false Bit 0 false											
- all o	ther bits		not supported, fixed to		NA			false				
COM	MAND				enum		cs					
- Norr	malWrite			M	0							
- SetC	OSV & ResetO	SV	Set zone inactive / active	ve		0	3/4					
- all o	ther command	ls	not supported			NA						
Comi	munication:						-	-	-			
DP.	Address:		IO Type(ID): 1	15 (HVAC	OPT)	Proper	ty ID:	105				
(in t	he server)		Start-Index: 1			N° of e	elements	1				
Pro	perty access:		Read only		Read/W	'rite	\boxtimes					
Pro	tection		Read level -			Write I	evel	-				
Exce	ption Handlin	g:	Value after Power-up:	Stored V	alue 🖂	Act Va	llue 🔲 De	fault Value	;			
Spec	ial Features:	•							·			
The d	The device is not LTE communicating in this zone if zone is 'OutOfService'.											

3.4 Room Setpoint Manager HVAC-Mode Driven (RSMHD)

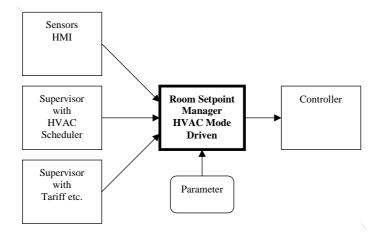
3.4.1 Aims and objectives

See also Room Setpoint Manager Temperature Driven in clause 3.5.

The Functional Block 'Room Setpoint Manager HVAC-Mode Driven' provides the HVAC facilities with the necessary temperature setpoints as well as the information about the present and the next operating mode with it's delay.

This information is built from the present and the next HVAC mode, delivered from a supervisor and the local influences given by HMI.

According to TC247 the following HVAC-Modes are used: Comfort, Standby, Economy and Building Protection.



3.4.2 Functional specifications

Inputs

HVACMode: Current/present mode (Comfort, Standby, Economy, Built	aing
--	------

Protection) being provided by a "supervisor". Normally this input is used as a basic information. Although it is possible to have an implementation, only using HVACModeUser (see below).

HVACModeNext: Next mode (No Next Mode, Comfort, Standby, Economy, Building

Protection) and the delay to it being provided by a "supervisor".

• EnableComfort: This input can be used to inhibit the Room Setpoint Manager to go

to comfort when the 'local influences' e.g. HMI ask for it. This inhibit may be necessary e.g. due to lack of hot water etc.

This function may be inhibited by means of a parameter.

• TempRoomSetpTariffShift: This input allows to shift the setpoint according to the demands of a

tariff information.

• TempRoomSetpLoadShedShift: This input allows to shift the setpoint according to the demands of

load shedding.

• HVACMode User: HVACMode (Comfort, Standby, Economy, Building Protection or

AUTO) being provided by a HMI unit, in order to be able to change

the mode manually (see also 'EnableComfort').

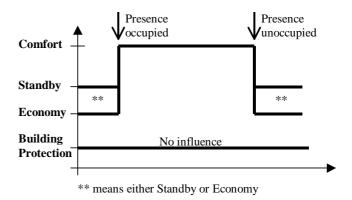
WindowStatus: Information that can be used to change the 'HVACMode' in case of

an open window.

• PresenceStatus:

Information from a presence detector or switch about the occupation of the room.

The following behaviour is e.g. possible:



Occupied changes from Economy or from Standby (HVAC Mode from supervisor) to Comfort. Unoccupied changes back to the mode from the supervisor (Standby or Economy). This functionality can be locked by means of the input 'EnableComfort'

• ComfortPushbutton:

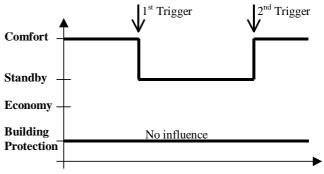
The following examples may be realised:

Functionality A:

 $'Comfort Pushbutton' form \ 'Comfort':$

If the controller is in the 'Comfort' mode the trigger information changes the mode to 'Standby'.

The next trigger changes back to 'Comfort'. If the HVAC mode from the supervisor changes this function is deleted and the new HVAC mode is active.



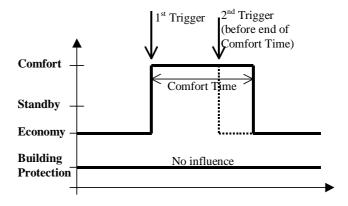
Functionality B:

'ComfortPushbutton' from 'Economy':

If the controller is in the 'Economy' mode the trigger information changes the mode to 'Comfort' for a defined period (e.g. parameter 3h) then falls back to the HVAC Mode defined above (normally 'Economy').

If a second trigger occurs before the time has elapsed the controller changes back to 'Economy'. If the HVAC mode from the supervisor changes this function is deleted and the new HVAC mode is active.

This functionality can be locked by means of the input 'EnableComfort'.



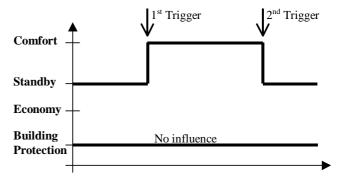
Functionality C:

'ComfortPushbutton' from 'Standby':

If the controller is in the 'Standby' mode the trigger information changes the mode to 'Comfort'. A second trigger brings the controller back to 'Standby'.

If the HVAC mode from the supervisor changes this function is deleted and the new HVAC mode is active.

This functionality can be locked by means of the input 'EnableComfort'



ComfortProlongUser:

The following example may be realised.

o 'ComfortProlongUser' TRUE during 'Comfort'

If 'ComfortProlongUser' is set to TRUE during a 'Comfort' period, the following behaviour is possible.

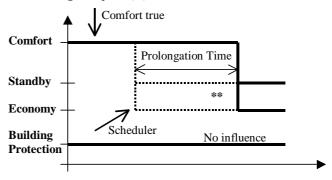
- a. The prolongation period will be added at the end of the 'Comfort' period.
- b. The prolongation period will start immediately.
- o 'ComfortProlongUser' TRUE during not 'Comfort':

If 'ComfortProlongUser' is set to TRUE outside the 'Comfort' period, the prolongation period will start immediately.

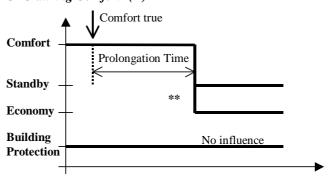
o 'ComfortProlongUser' also my be set to FALSE anytime.

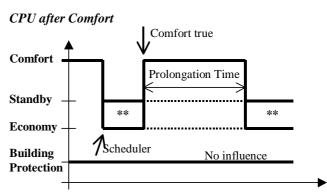
In this case the prolongation is cancelled.

CPU during Comfort (A)



CPU during Comfort (B)





** means either Standby or Economy

• TempRoomSetpUserAbs: One absolute setpoint value (e.g. 'Comfort' or 'BasicSetpoint') from

a HMI.

• TempRoomSetpUserOffset: One offset value for shifting e.g. the 'Comfort' setpoints or the

'BasicSetpoint'.

• TempRoomSetpSetHeat: Three values for the heating setpoints 'Comfort', 'Standby' and

'Economy'. (Only in the S-Mode available, in LTE-Mode =

property.)

• TempRoomSetpSetCool: Three values for the cooling setpoints 'Comfort', 'Standby' and

'Economy'. (Only in the S-Mode available, in LTE-Mode =

property.)

• TempRoomSetpSetHeatShift: Three delta values for shifting the heating 'Comfort', 'Standby' and

the 'Economy' setpoints. This input may be used for e.g.

economising purposes.

• TempRoomSetpSetCoolShift: Three delta values for shifting the cooling 'Comfort', 'Standby' and

the 'Economy' setpoints. This input may be used for e.g.

economising purposes.

Outputs

• HVACModeEff: Contains the effective 'HVACMode' (result out of all inputs) for

the controller. Also to be used for HMI and supervisor.

HVACModeEffNext: Contains the effective next 'HVACMode' and the delay to it (result

out of all inputs) for the controller.

• HVACModeUserEff: This output provides the result of HVACModeUser and RSMHD

internal settings. It is delivered e.g. to the FB 'User HVAC

Display'

• ComfortProlongEff: This output provides the information if comfort prolongation is

active or not. It is delivered e.g. to FB 'User HVAC Display'

• TempRoomSetpSetHeatEff: The effective temperature setpoints (4) for heating for 'Comfort',

'Standby', 'Economy' and 'BuildingProtection' for the controller.

• TempRoomSetpSetCoolEff: The effective temperature setpoints (4) for cooling for 'Comfort',

'Standby', 'Economy' and 'BuildingProtection' for the controller.

• TempRoomSetpHeatEff: The effective actual temperature setpoint for heating for the

controller.

(For simple heating only applications.)

• TempRoomSetpCoolEff: The effective actual temperature setpoint for cooling for the

controller.

(For simple cooling only applications.)

TempRoomSetpAbsEff
 The effective absolute temperature setpoint, as RSMHD's result of

all TempRoomSetpUserAbs inputs to RSMHD. It is delivered e.g.

to FB 'User HVAC Display'

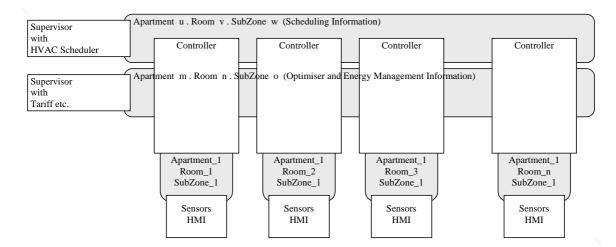
• TempRoomSetpUserOffsetEff The effective relative temperature setpoint, as RSMHD's result of

all TempRoomSetpUserOffset inputs to RSMHD. It is delivered

e.g. to FB 'User HVAC Display'

Binding Groups (LTE)

The Functional Block shows 3 different binding groups.



Binding group x.y.z:

This binding group corresponds with the room / zone to which the Functional Block effectively belongs.

Binding group u.v.w:

This binding group is used to get the 'programme information' from the supervisor. This information is bound to a specific room / zone from where the other zones get the information. It may be identical to x.y.z.

EXAMPLE

There are four rooms / zones with the same 'programme':

3.1.1 3.2.1 3.3.1 3.4.1

The supervisor is bound to 3.1.1.

So in this room / zone both binding groups x.y.z and u.v.w have the address 3.1.1.

In the other three rooms / zones the binding group x.y.z corresponds to the proper zone, whereas the binding group u.v.w is 3.1.1 (programme).

• Binding group m.n.o:

This binding group represents a group for optimising / energy management purposes. The behaviour is similar to the zone for the 'programme'.

Parameters

• Temperature Setpoints

The room temperature setpoints may be defined in two different ways. Method A should be preferred.

Method A:	Method B:	
BuildProtCool	 BuildProtCool	
EconomyCool		Δ Eco Cool
StandbyCool		Λ Stby Cool
ComfortCool	 Basic Setpoint	Deadband H/C
ComfortHeat	 Basic Scipolit	Δ Stby Heat
StandbyHeat		Δ Stoy Heat Δ Eco Heat
EconomyHeat		<u> </u>
BuildProtHeat	 BuildProtHeat	

• TimeComfort This parameter defines the time period for the

comfort prolongation.

• DisableEnableComfort With this parameter the input EnableComfort can

be disabled. In this case a local change to comfort always

is possible.

• LimitLowerTempRoomSetp This parameter defines a lower limit for the room

temperature setpoint. If this value is violated, an alarm

can be created.

• LimitUpperTempRoomSetp This parameter defines a upper limit for the room

temperature setpoint. If this value is violated, an alarm

can be created.

Alarms

• SetpointLimit This alarm is created if the setpoint violated the

setpoint limits.

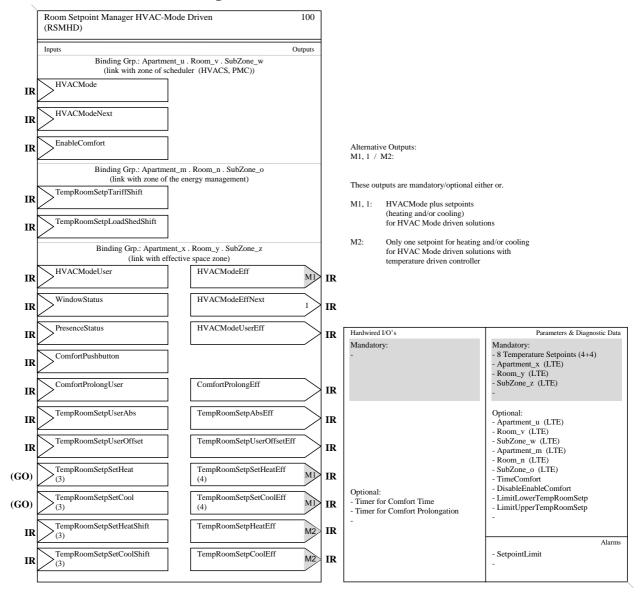
3.4.3 Constraints

The functionality of this Functional Block is based on HVAC-Modes.

Another Room Satpoint Manager, based on temperatures is described in clause.

Another Room Setpoint Manager, based on temperatures is described in clause 3.5 of this document.

3.4.4 Functional Block diagram



3.4.5 Datapoint description

Overview

Datapoints	Description / Remarks	Datapoint Type	Additional info
Inputs			
HVAC Mode	Present HVAC Mode with: - COV and RepPer - Z ₈ STATUS supported from FB Programm to HVAC-Mode Conversion, HVAC Scheduler	LTE: 201.100 DPT_HVACMode_Z N ₈ Z ₈ S: 20.102 DPT_HVACMode N ₈	LTE: O S: (GO) 0 = NA 1 = Comfort 2 = Standby 3 = Economy 4 = Bld.Prot.
HVAC Mode Next	Next HVAC Mode plus time to next mode with: - COV and RepPer from FB Programm to HVAC-Mode Conversion, HVAC Scheduler Time = 0: Next mode undefined (as e.g. not valid)	LTE: 206.100 DPT_HVACModeNext U ₁₆ N ₈ S: NA	LTE: O S: NA 0 = No Next Mode 1 = Comfort 2 = Standby 3 = Economy 4 = Bld.Prot. time = min
Enable Comfort	Local comfort is possible (1) or not possible (0) with: - COV and RepPer from FB Programm to HVAC-Mode Conversion, HVAC Scheduler	LTE: 1.003 DPT_Enable B ₁ S: 1.003 DPT_Enable B ₁	LTE: O S: (GO) 0 = disabled 1 = enabled
Temp Room Setp Tariff Shift	Temperature setpoint shift value with: - COV and RepPer - Z ₈ STATUS supported from FB tariff calculation.	LTE: 205.101 DPT_TempHVACRel_Z $V_{16}Z_8$ S: 9.002 DPT_Value_Tempd F_{16}	LTE: O S: (GO) K
Temp Room Setp LoadShed Shift	Temperature setpoint shift value with: - COV and RepPer - Z ₈ STATUS supported from FB load management.	LTE: 205.101 DPT_TempHVACRel_Z $V_{16}Z_8$ S: 9.002 DPT_Value_Tempd F_{16}	LTE: O S: (GO) K
HVAC Mode User	User HVAC Mode with: - COV and RepPer - Z ₈ STATUS supported from FB User HVAC Room Setting	LTE: 201.100 DPT_HVACModeUser_Z N ₈ Z ₈ S: 20.102 DPT_HVACMode N ₈	LTE: O S: (GO) 0 = Auto 1 = Comfort 2 = Standby 3 = Economy 4 = Bld.Prot.
Window Status	Window status with: - COV and RepPer from FB Window Switch	LTE: 1.019 DPT_Window_Door B ₁ S: 1.019 DPT_Window_Door B ₁	LTE: O S: (GO) 0 = closed 1 = open

Datapoints	Description / Remarks	Datapoint Type	Additional info
Inputs			
Presence Status	Presence status with: - COV and RepPer from FB Presence Detector User Presence Switch see Functional specifications	LTE: 1.018 DPT_Occupancy B ₁ S: 1.018 DPT_Occupancy B ₁	LTE: O S: (GO) 0 = not occupied 1 = occupied
Comfort Pushbutton	Comfort pushbutton trigger with: - COV and NO RepPer from FB User HVAC Room Settings see Functional specifications	LTE: 1.017 DPT_Trigger B ₁ S: 1.017 DPT_Trigger B ₁	LTE: O S: (GO) 1= Trigger (0 not used)
Comfort Prolong User	Comfort prolongation trigger with: - COV and NO RepPer from FB User HVAC Room Settings see Functional specifications	LTE: 1.017 DPT_Trigger B ₁ S: 1.017 DPT_Trigger B ₁	LTE: O S: (GO) 1= Trigger (0 not used)
Temp Room Setp User Abs	One temperature value, normally for comfort with: - COV and NO RepPer - Z ₈ STATUS supported from FB User HVAC Room Settings	LTE: 205.100 DPT_TempHVACAbs_Z $V_{16}Z_8$ S: 9.001 DPT_Value_Temp F_{16}	LTE: O S: (GO) °C
Temp Room Setp User Offset	One temperature offset value, normally for comfort values or for Basic Setpoint with: - COV and NO RepPer - Z ₈ STATUS supported from FB User HVAC Room Settings		LTE: O S: (GO) K
Temp Room SetpSet Heat (3)	Three heating setpoint values (for comfort, standby and economy) with: - NO RepPer from FB supervisor	LTE: NA S: 222.100 DPT_TempRoomSetpSetF16 F ₁₆ F ₁₆ F ₁₆ F ₁₆	LTE: NA S: (GO) 3 x °C
Temp Room SetpSet Cool (3)	Three cooling setpoint values (for comfort, standby and economy) with: - NO RepPer from FB supervisor	LTE: NA S: 222.100 DPT_TempRoomSetpSetF16 F ₁₆ F ₁₆ F ₁₆	LTE: NA S: (GO) 3 x °C
Temp Room SetpSet Heat Shift (3)	Three heating shift values (for comfort, standby and economy) with: - COV and RepPer from FB supervisor	$\begin{tabular}{lllllllllllllllllllllllllllllllllll$	LTE: O S: (GO) 3 x K

Datapoints	Description / Remarks	Datapoint Type	Additional info	
Inputs				
Temp Room SetpSet Cool Shift (3)	Three cooling shift values (for comfort, standby and economy) with: - COV and RepPer from FB supervisor	$\begin{tabular}{lllll} LTE: & 212.100 \\ DPT_ \\ TempRoomSetpSetShift[3] \\ V_{16}V_{16}V_{16} \\ \\ S: & 222.101 \\ DPT_ \\ TempRoomSetpSetShiftF16 \\ F_{16}F_{16}F_{16} \\ \\ \end{tabular}$	LTE: O S: (GO) 3 x K	

Datapoints	Description / Remarks	Datapoint Type	Additional info
Outputs			
HVAC Mode Eff	Effective HVAC Mode with: - COV and RepPer - Z ₈ STATUS and - Z ₈ COMMAND supported to FB various controller, HMI and supervisor	LTE: 201.100 DPT_HVACMode_Z N ₈ Z ₈ S: 20.102 DPT_HVACMode N ₈	LTE: M1 S: GO1 0 = NA 1 = Comfort 2 = Standby 3 = Economy 4 = Bldg.Prot.
HVAC Mode Eff Next	Next HVAC Mode plus time to next mode with: - COV and RepPer to FB various controller, HMI and supervisor Time = 0: Next mode undefined	LTE: 206.100 DPT_HVACModeNext U ₁₆ N ₈ S: NA	LTE: O S: NA 0 = No Next Mode 1 = Comfort 2 = Standby 3 = Economy 4 = Bld.Prot. time = min
HVAC Mode User Eff	Effective user HVAC Mode with: - COV and RepPer - Z ₈ not supported to FB User HVAC Display	LTE: 201.100 DPT_HVACMode_Z N ₈ Z ₈ S: 20.102 DPT_HVACMode N ₈	LTE: O S: (GO) $0 = \text{Auto}$ $1 = \text{Comfort}$ $2 = \text{Standby}$ $3 = \text{Economy}$ $4 = \text{Bldg.Prot.}$
Comfort Prolong Eff	Effective state of comfort prolongation (active/inactive) with: - COV and RepPer - Z ₈ not supported to FB User HVAC Display	LTE: 1.011 DPT_State B ₁ S: 1.011 DPT_State B ₁	LTE: O S: (GO) 0 = not active 1 = active
Temp Room SetpSet Heat Eff (4)	4 temperature values for heating for: 'Comfort', 'Standby' 'Economy', 'BuildingProtection' with - COV and RepPer to FB various controller	LTE: 213.100 DPT_TempRoomSetpSet[4] $V_{16}V_{16}V_{16}V_{16}$ S: NA	LTE: M1 S: NA 4 x °C
Temp Room SetpSet Cool Eff (4)	4 temperature values for cooling for: 'Comfort', 'Standby' 'Economy', 'BuildingProtection' with - COV and RepPer to FB various controller	LTE: 213.100 DPT_TempRoomSetpSet[4] V ₁₆ V ₁₆ V ₁₆ V ₁₆ S: NA	LTE: M1 S: NA 4 x °C

Datapoints	Description / Remarks	Datapoint Type	Additional info		
Outputs					
Temp Room Setp Heat Eff	1 temperature value for heating for simple heating only applications with: - COV and RepPer - Z ₈ not supported to FB various controller		LTE: M2 S: (GO2) °C		
Temp Room Setp Cool Eff	1 temperature value for cooling for simple cooling only applications with: - COV and RepPer - Z ₈ not supported to FB various controller		LTE: M2 S: (GO2) °C		
Temp Room Setp Abs Eff	Effective absolute temperature setpoint (result of all TempRoomSetpUserAbs inputs) with - COV and RepPer - Z ₈ STATUS supported to FB User HVAC Display	$ \begin{array}{lll} LTE: & 205.100 \\ DPT_TempHVACAbs_Z \\ V_{16}Z_8 \\ S: & 9.001 \\ DPT_Value_Temp \\ F_{16} \end{array} $	LTE: O S: (GO) °C		
Temp Room Setp User Offset Eff	Effective relative temperature setpoint (result of all TempRoomSetpUserOffset inputs) with - COV and RepPer - Z ₈ STATUS supported to FB User HVAC Display	LTE: 205.101 DPT_TempHVACRel_Z V16Z8 S: 9.002 DPT_Value_Tempd F16	LTE: O S: (GO) K		

Datapoints	Description / Remarks	Datapoint Type	Additional info
Parameter			
Apartment_x	LTE zoning number for Apartment	202.002 DPT_UcountValue8_Z U ₈ Z ₈	M Controller zone
Room_y	LTE zoning number for Room	202.002 DPT_UcountValue8_Z U ₈ Z ₈	M Controller zone
SubZone_z	LTE zoning number for SubZone	202.002 DPT_UcountValue8_Z U ₈ Z ₈	M Controller zone
Apartment_u	LTE zoning number for Apartment	202.002 DPT_UcountValue8_Z U ₈ Z ₈	O Programme zone
Room_v	LTE zoning number for Room	202.002 DPT_UcountValue8_Z U ₈ Z ₈	O Programme zone
SubZone_w	LTE zoning number for SubZone	202.002 DPT_UcountValue8_Z U ₈ Z ₈	O Programme zone
Apartment_m	LTE zoning number for Apartment	202.002 DPT_UcountValue8_Z U ₈ Z ₈	O E-management zone

and cooling of: fort' lby' omy' ingProtection'	202.002 DPT_UcountValue8_Z U ₈ Z ₈ 202.002 DPT_UcountValue8_Z U ₈ Z ₈	O E-management zone O E-management zone M °C / K
and cooling of: fort'	DPT_UcountValue8_Z U ₈ Z ₈ 202.002 DPT_UcountValue8_Z	E-management zone O E-management zone M
and cooling n of: fort' lby' omy'	DPT_UcountValue8_Z	E-management zone
and cooling n of: Fort' lby' omy'		
pported		
omSetpHeatEconomy omSetpHeatStandby omSetpHeatComfort omSetpCoolComfort omSetpCoolStandby omSetpCoolEconomy	8 times	12°C 15°C 19°C 21°C 24°C 28°C 35°C 40°C
etpoint' of 'Comfort') and' for 'Comfort' ionValue' ndby' eValue' ndby' ionValue' onomy' eValue' for my' teHeatValue' for ngProtection' teCoolValue' for		
n with the pushbutton	7.006 1) DPT_TimePeriodMin U ₁₆	O min
e input EnableComfort	1.003 1) DPT_Enable B ₁	O 0 = disabled 1 = enabled
-	205.100 1) DPT_TempHVACAbs_Z V ₁₆ Z ₈	O °C
_	205.100 1) DPT_TempHVACAbs_Z V ₁₆ Z ₈	O °C
	omy' lingProtection' oported comSetpHeatBuildProt comSetpHeatEconomy comSetpHeatStandby comSetpHeatComfort comSetpCoolComfort comSetpCoolBtandby comSetpCoolBuildProt 3: etpoint' of 'Comfort') and' for 'Comfort' cionValue' andby' seValue' andby' seValue' for ony' seValue' for ingProtection' ateCoolValue' for ingProtection' ateCoolValue' for ingProtection' ate input EnableComfort upported att for internal setpoint upported	poported comSetpHeatBuildProt comSetpHeatEconomy comSetpHeatComfort comSetpCoolComfort comSetpCoolStandby comSetpCoolBuildProt 3: etpoint' of 'Comfort' comSetpCoolBuildProt 3: etpoint' of 'Comfort' comValue' comby' comSetpCoolBuildProt actionValue' comomy' covalue' for comport compomy' covalue' for comfort period in m with the pushbutton colongation ate input EnableComfort ate input Enab

¹⁾ Implementation of Properties using standard DPT see 1.3.2.

RSMHD Runtime Interworking - Dependence on Configuration Modes

			STANDARD MODE	EXTEN MO	
		Basic FB	S-Mode	Standard Mode Interface	HEE
Inputs	HVACMode	(GO _b)		(GO)	О
	HVACModeNext	NA _b	NA	NA	0
	EnableComfort	(GO _b)		(GO)	0
	TempRoomSetpTariffShift	(GO _b)		(GO)	0
	TempRoomSetpLdShedShift	(GO _b)		(GO)	0
	HVACModeUser	(GO _b)		(GO)	0
	WindowStatus	(GO _b)		(GO)	0
	PresenceStatus	(GO _b)		(GO)	0
	ComfortPushbutton	(GO _b)		(GO)	0
	ComfortProlongUser	(GO _b)		(GO)	0
	TempRoomSetpUserAbs	(GO _b)		(GO)	0
	TempRoomSetpUserOffset	(GO _b)		(GO)	0
	TempRoomSetpSetHeat(3)	(GO _b)		(GO)	NA
	TempRoomSetpSetCool(3)	(GO _b)		(GO)	NA
	TempRoomSetpSetHeatShift(3)	(GO _b)		(GO)	0
	TempRoomSetpSetCoolShift(3)	(GO _b)		(GO)	0
Outputs	HVACModeEff	(GO _b)		(GO)	M1 ¹⁾
Julpuis	HVACModeEffNext	NA _b	NA	NA	0
	HVACModeUserEff	(GO _b)	1111	(GO)	0
	ComfortProlongEff	(GO_b)		(GO)	0
	TempRoomSetpSetHeatEff(4)	NA _b	NA	NA	M1 ¹⁾
	TempRoomSetpSetCoolEff(4)	NA _b	NA	NA	M1 ¹⁾
	TempRoomSetpHeatEff	(GO _b)		(GO)	M2 ¹⁾
	TempRoomSetpCoolEff	(GO _b)		(GO)	M2 ¹⁾
	TempRoomSetpAbsEff	(GO _b)		(GO)	0
	TempRoomSetpUserOffsetEff	(GO _b)		(GO)	0

¹⁾ See Functional Block diagram

RSMHD LTE specific Properties

		Support
Parameter	Apartment_x	M
	Room_y	M
	SubZone_z	M
	Apartment_u	О
	Room_v	О
	SubZone_w	О
	Apartment_m	О
	Room_n	О
	SubZone_o	О

RSMHD Standard Properties of Interface Objects (or memory mapped DP)

		Support
Parameter	TempRoomSetpHeatBuildProt	$\mathbf{M}^{1)}$
	TempRoomSetpHeatEconomy	$\mathbf{M}^{1)}$
	TempRoomSetpHeatStandby	$\mathbf{M}^{1)}$
	TempRoomSetpHeatComfort	$\mathbf{M}^{1)}$
	TempRoomSetpCoolComfort	$\mathbf{M}^{1)}$
	TempRoomSetpCoolStandby	$\mathbf{M}^{1)}$
	TempRoomSetpCoolEconomy	$\mathbf{M}^{1)}$
	TempRoomSetpCoolBuildProt	$\mathbf{M}^{1)}$
	TimeComfort	0
	DisableEnableComfort	0
	LimitLowerTempRoomSetp	0
	LimitUpperTempRoomSetp	0

¹⁾ Alternatively values according to method B (see Datapoint description Overview).

3.4.6 Detailed specification of the Datapoints

3.4.6.1 Input HVACMode

DP Name:	HVACMode		Abbr.:			Mand	atory		
FB Name:	RSMHD								
Description	Description								
	This information is provided by a scheduler or a supervisor and defines the actual HVAC operating mode.								
According to	Γ C247 the following HVAC	-Modes are us	sed: Con	nfort,	Standby, I	Economy,	Building		
Protection.									
Datapoint Type									
DPT_Name:	DPT_HVACMode								
DPT Format:	N ₈				DPT_ID:	20.10			
Field	Description				Supp.	Range	Unit	Default	
HVAC Mode						14	enum.	cs	
	0 = Auto				NA				
	1 = Comfort				M				
	2 = Standby				M				
	3 =Economy				M				
	4 = BuildingProtection				M				
	all other enumeration				NA				
Access Type									
♦ Input									
$N \rightarrow this$	\square 1 \rightarrow this	\square							
Spontaneo		/clically:	\boxtimes		Time	-out:	31 min	(rec.)	
Request		olling:			Perio	d:			
Communicat	ion Type								
	ject Datapoint					Mandato	ry: 🛛		
	oup Address:								
Dynamics									
Power dov	/n: Save: □								
Power up:	Value: No initia	lisation:		Defau	ılt value:		\boxtimes		
	Saved v	value:							
				Read	from bus:				
Exception Handling									
Special Featu	ıres								

FB:	RSMHD	LTE Clie		HVACMod	de				N	/landatory Optional	
Desc	Description: This information is provided by a scheduler or a supervisor and defines the									<u> </u>	
This i	nformation is ding to TC24										g mode.
DPT:	Name D	PT_HVA	CMode_2	Z	DPT ID	201.100	Datat	type	format	N_8Z_8	
Field			Descrip	tion					Sup.	Unit	Default
HVAC	CMode		4 = Bu	mfort					NA M M M M	enum.	cs
- Fa - Ov - InA	tOfService		Informa Informa Informa	n out of Sei tion is corru tion is temp tion with ala rledgement r bits	upted oorarily ov arm	erridden			0 0 0 0 0 0 NA	Bitset t/f t/f t/f t/f t/f	false false false false false
Comi	munication:									•	
Bin	ding Group:										
Clas	SS		Type				Default				
Ap Pe	eographical oplication Spe eripheral Address:	ecific [Apartmo Broadca IO Type	· <u> </u>	Configura 110 (HVA	able 🔲 ACS)	1.1.1 Propert	ty ID:		51	
				· ,	104 (PM		Пореп	ty ID.	•	51	
Inf	E-Service (ev FoReport	\boxtimes	InfoRep Timeou	ort Sniffer o t:	on Binding		Min		-		
	- Service (po ead – Respor		Read Wildcard / Resp Sniffer on Binding Group:								
Value	after Powe	r-up:		Default V	alue 🖂				5	Stored Val	ue 🗌
Exce	ption Handli	ng:						Sav	e at Pov	verdown	
Spec	ial Features:										

3.4.6.2 Input HVACModeNext

Standard Mode: NA LTE-HEE Mode:

FB:	RSMHD	LTE	-		HVACMod	leNext				N	/landatory				
		Input	: Na	me:	Optional Cheduler or a supervisor and defines the next HVAC operating mode										
	ription:														
									nex	t HVAC	operating	mode			
					not availal										
	-	247 the	follo	owing H\	AC-Modes	are used:	Comfort	, Standb	у, Е	conomy,	Building				
Prote						•									
DPT:	Name	DPT_H	VAC	CModeNe	ext	DPT ID	206.100	Data	type	format	$U_{16}N_8$				
Field				Descript						Sup.	Unit	Default			
Time					next HVAC		ninutes				min	0			
				0 = no n	ext mode	1) 									
HVAC	ModeNex	t									enum	CS			
				0 = No	Next Mode					M					
				1 = Co	mfort	2 = S	Standby			M					
				3 = Ecc	onomy	4 = E	Build.Prot			M					
				all other	enumerati	on				NA					
Comr	nunicatio	n:								-	-				
Bine	ding Grou	p:													
Clas	SS			Type				Default							
Ge	ographica	l	\boxtimes	Apartme	nt . Room	. SubZone		1.1.1							
Ap	plication S	pecific													
Pe	ripheral			Broadca	st 🗌	Configura	ble 🗌								
DP A	Address:			IO Turno	(ID).	110 (HVA	CS)	Dropor	+. ID		52				
				IO Type	(וט).	104 (PMC	()	Proper	ty ID	•	52				
LTE	-Service (event):		InfoRep	ort Sniffer o	on Binding	Group:			-					
Inf	oReport	\boxtimes		Timeout	:		31	Min							
LTE	-Service (polling)	:	Pood W	ildoord / Da	on Cniffor	on Dindi	na Crou	n:						
Re	Read — Response — Read Wildcard / Resp Sniffer on Binding Group:														
Value	/alue after Power-up: Default Value Stored Value Stored Value □														
Exce	xception Handling: Save at Powerdown														
	-														
Speci	al Feature	es:													
1) end	coding of s	pecial co	ondi	tions, se	e table bel	OW									

Interpretation of Time and HVACMode fields

Time	HVACMode	
= 0 (Undefined)	= 0 (Lindefined)	the content of the Datapoint is void / undefined
= 0 (Oridefinica)	= 0 (Oridefilied)	⇒ no next HVAC Mode available for an undefined time period
		defined and valid next HVACMode but the delay time is undefined
= 0 (Undefined)	= {14}	(unknown)
		⇒ next HVACMode is deactivated
		undefined (unknown) HVACMode during a defined delay time
> 0	= 0 (Undefined)	⇒ in practice this combination is useless and is interpreted like
		Time=0 / HVACMode=0 (default value)
> 0	= {14}	defined and valid HVACMode and delay time

3.4.6.3 Input EnableComfort

DP Name:	Ena	ableComfort			Abbr.:			Manda	tory	
FB Name:	RSI	MHD						Can be	internal	
Description										
This informati (HMI).	on is	provided by	a sch	eduler or a supe	rvisor an	id enat	oles / disal	bles a loca	comfort	mode
Datapoint Ty	ре									
DPT_Name:	DI	PT_Enable								
DPT Format:	B₁						DPT_ID:	1.003		
Field		escription					Supp.	Range	Unit	Default
	_	= disabled, 1	= ena	bled					Bit	1
Access Type	•									
♦ Input										
$N \rightarrow this$			$1 \rightarrow th$	is 🛛						
Spontaneo	ous			Cyclically:			Time-	out:	31 min	(rec.)
Request				Polling:			Perio	d:		
Communicat	ion	Туре								
	•	Datapoint						Mandatory	<u>′</u> : ⊠	
Default Gr	oup	Address:								
Dynamics										
Power dov		Save:		T ==	_					
Power up:		Value:		nitialisation:]	Defau	ılt value:			
			Save	d value:						
						Read	from bus:			
Exception Ha	andl	ing								
Special Feat	ures									

FB:	RSMHD	LTE Cli		· · · · · · · · · · · · · · · · · · ·							
Desci	ription:	-		_				-			
This in (HMI)		is provided	d by a scl	neduler or a	superviso	or and en	ables	s / disabl	les a loc	al comfort	mode
DPT:	Name	DPT_Enal	ole		DPT ID	1.003	D	atatype	format	B ₁	
Field			Descrip	tion					Sup.	Unit	Default
			0 = disa	abled, $1 = er$	nabled					Bit	1
Comr	nunication	า :	-						=	-	
Bind	ding Grou	p:									
Clas	SS		Type				Defa	ault			
	eographica		Apartm	ent . Room	. SubZone)	1.1.1	1			
Ap	plication S	pecific 🗌									
	ripheral		Broadca	ast 🗌	Configura						
DP A	Address:		ІО Туре	e(ID):	110 (HVA 104 (PMC	,	Pro	perty ID	:	53 53	
LTE	-Service (event):	InfoRep	ort Sniffer o	on Binding	Group:		-	-		
Inf	oReport	\boxtimes	Timeou	t:		31	Min				
	-Service (ad – Resp		Read W	/ildcard / Re	esp Sniffer	on Bindi	ing G	roup: -	-		
Value	after Pow	/er-up:	-	Default Va	alue 🛚			-	5	Stored Val	ue 🗌
Exce	otion Hand	dling:						Sav	e at Pov	verdown	
Speci	al Feature	s:									

${\bf 3.4.6.4} \quad Input \ TempRoomSetpTariffShift$

DF	P Name:	Ten	npRoomSetp	TariffS	Shift		Abbr.:				Mandat	tory	
FB	3 Name:	RSN	ИHD								Can be	internal	
De	escription												
					ervisor with t					e is a	added to	the con	nfort and
			e standby, e	conom	y and the bu	ilding	gproted	ction va	ılue.				
	tapoint Ty	_											
	PT_Name:		PT_Value_T	empd									
DF	PT Format:	F ₁	6						DPT_II): 	9.002		
Fie	eld	De	escription						Supp.	F	Range	Unit	Default
											full	K	CS
Ac	cess Type												
•	Input												
	$N \rightarrow this$			$1 \rightarrow th$	is 🛚								
	Spontaneo	us			Cyclically:				Tim	e-ou	t:	31 min	(rec.)
	Request				Polling:				Per	iod:			
Co	mmunicati	on T	Гуре										
•	Group Ob	ject	Datapoint							M	andatory	': X	
	Default Gro	oup /	Address:										
Dy	namics												
	Power dow	'n:	Save:										
	Power up:		Value:	No in	itialisation:			Defau	ılt value:				
				Save	d value:								
								Read	from bu	s:			
Ex	ception Ha	ndli	ng										
Sp	ecial Featu	ıres											

FB:	RSMHD	LTE Clie		TempRod	omSetpTa	riffShift			N	Mandatory Optional			
Dagg	intion.	Imputive	iiie.				<u> </u>			Ориона			
	ription:	ام مادان ده د	h a am		the towiff from		The val	:-	ا مامام ما	40 400 0000	-fort or d		
	nformation is							ue is	added	to the con	nort and		
	oly also to th				_					N 7			
DPT:	Name D	PT_Temp		_	DPT ID	205.101	Datat	ype t	ormat	$V_{16}Z_{8}$	D ();		
Field			Descrip						Sup.	Unit	Default		
	ve Tempera	ture	Shift val	ue for the	setpoint					K	0		
STAT										Bitset			
	tOfService			n out of Se					0	t/f	false		
- Fa	ult			tion is corr					0	t/f	false		
- Ov	erridden				porarily ov	erridden/			0	t/f	false		
- InA				action with alarm O t/f false									
- Alaı	mUnAck		Acknow	wledgement of alarm O t/f false									
			all other	her bits NA NA									
Comr	nunication:		-							-	-		
Bine	ding Group:												
Clas	SS		Type				Default						
Ge	eographical	\boxtimes	Apartme	ent . Room	ı . SubZon	е	1.1.1						
Ap	plication Sp	ecific 🗌											
Pe	ripheral		Broadca	ast 🗌	Configur	able 🗌							
DP A	Address:		IO Type		121 (SS		Propert	ty ID:		51			
LTE	-Service (ev	/ent):			on Binding	g Group:							
Inf	oReport	\boxtimes	Timeout	t:		31	Min						
	-Service (po		Pood W	/ildeard / B	oca Saiffa	r on Rindi	na Grour	٠.					
Re	Read Wildcard / Resp Sniffer on Binding Group:												
Value	after Powe	ower-up: Default Value ⊠ Stored Value □											
Exce	otion Handli	ing:						Save	e at Pov	werdown			
		·	-				·			·			
Speci	al Features	:											

3.4.6.5 Input TempRoomSetpLoadShedShift

DF	P Name:	Ten	npRoomSet	pLoadS	ShedShift		Abbr.:			Manda	tory	
FB	3 Name:	RSN	ИHD							Can be	internal	
De	escription											
					ervisor with						s added	to the
			oly also to th	ne stan	dby, econom	ny ar	d the b	uilding	protection	ı value.		
	tapoint Ty											
	PT_Name:	_	PT_Value_T	empd								
	PT Format:	F ₁							DPT_ID:	9.002		
Fie	eld	De	escription						Supp.	Range	Unit	Default
										full	K	CS
Ac	cess Type											
•	Input											
	$N \rightarrow this$			$1 \rightarrow th$	is 🛛							
	Spontaneo	us			Cyclically:				Time	-out:	31 min	(rec.)
	Request				Polling:				Perio	d:		
C	mmunicati	ion ⁻	Гуре									
•	Group Ob	ject	Datapoint							Mandatory	/:	
	Default Gro	oup /	Address:									
Dy	/namics											
	Power dow	n:	Save:									
	Power up:		Value:	No in	itialisation:			Defau	ılt value:			
				Save	d value:							
								Read	from bus:			
Ex	ception Ha	ndli	ng									
Sp	ecial Featu	ıres										
i					·							

RSMHD	_		TempRo	omSetpLo	adShedS	Shift		Mandator			
uludian.	Imputiv	iailie.	_					Ориона	al 🔼		
				24 1 1 1	111 6	41 114					
								is added	to the		
				_							
Name [OPT_Ten		_	DPT ID	205.101	Dataty	1	$V_{16}Z_{8}$	1		
							Sup.		Default		
ive Tempera	ture	Shift valu	e for the	setpoint				K	0		
US								Bitset			
tOfService		Function	out of Se	rvice	0	t/f	false				
ult		Information	on is corr	upted		0	t/f	false			
erridden		Information	on is tem	porarily ove		0	t/f	false			
Alarm		Information	on with al	arm		0	t/f	false			
rmUnAck		Acknowle	edgement	t of alarm	0	t/f	false				
munication:	1	"					"	-	i .		
ding Group											
SS		Туре				Default					
eographical	\boxtimes	Apartmer	nt . Room	. SubZone		1.1.1					
plication Sp	ecific										
eripheral		Broadcas	st 🗌	Configural	ble 🗌						
Address:		IO Type(ID):	121 (SSL	STA)	Property	ID:	52			
-Service (e	vent):	InfoRepo	rt Sniffer	on Binding	Group:						
foReport	\boxtimes	Timeout:			31	Min					
-Service (p	olling):	Dood Wil	doord / D	oon Cniffor	an Dindir	og Crauni					
		Read Wildcard / Resp Shiffer on Binding Group:									
e after Powe	er-up:	Default Value ☐ Stored Value ☐									
ption Handl	ing:						Save at Po	owerdown			
ial Features	;:										
	ription: Information is ort and possion and possion is ort l	Input Noription: Information is provide out and possibly also in Name DPT_Tendered Temperature US tofService out the erridden of Name Information:	Input Name: ription: Information is provided by a suport and possibly also to the stand possibly also	Input Name: ription: Information is provided by a supervisor want and possibly also to the standby, economic a	Input Name: ription: Information is provided by a supervisor with load she ort and possibly also to the standby, economy and the ort and possibly also to	Input Name: Information is provided by a supervisor with load shedding fur and possibly also to the standby, economy and the building and the price of the standby and the building and the price of the standby and the building	Input Name: Information is provided by a supervisor with load shedding functionality. Information is provided by a supervisor with load shedding functionality. Information is provided by a supervisor with load shedding functionality. Information is the building protection in the building in the buildi	Input Name: Information is provided by a supervisor with load shedding functionality. The value ort and possibly also to the standby, economy and the building protection value. Name DPT_TempHVACRel_Z DPT ID 205.101 Datatype format Description Sup. Ive Temperature Shift value for the setpoint US tOfService Function out of Service O Information is corrupted O Information is temporarily overridden O Information with alarm O Information with alarm O Information with alarm O Information: ding Group: Iss Type Default Degraphical Apartment . Room . SubZone 1.1.1 Deplication Specific I InfoReport Sniffer on Binding Group: Read Wildcard / Resp Sniffer on Binding Group: Patter Power-up: Default Value Specific IIII Save at Poption Handling: Save at Poption Handling: Save at Poption IIII III III III III III III III III	Input Name: Information is provided by a supervisor with load shedding functionality. The value is added ont and possibly also to the standby, economy and the building protection value. Name DPT_TempHVACRel_Z DPT ID 205.101 Datatype format V₁eZ8 Description Sup. Unit V1eZ8 V1eZ8 Description Sup. Unit V1eZ8 V1eZ8 Description Sup. Unit V1eZ8 US Sup. Unit V1eX8 WE Temperature Shift value for the setpoint K K US Bitset tofService Information out of Service O V1f Uf Unit Information is corrupted O V1f Unit Information is temporarily overridden O V1f Uf Unit Information with alarm O V1f Uf Unit Information with alarm O V1f Uf Uf Unit Information with alarm O V1f Uf Unit Information with alarm O V1f Uf Uf Uf Unit Information with alarm O V1f Uf		

3.4.6.6 Input HVACModeUser

DP	Name:	<u>HVACModeUser</u>	•	Abbr.:			Mand	atory		
FΒ	Name:	RSMHD					Can b	e internal		
Des	scription									
			a local HMI and defin							
		C247 the following	ng HVAC-Modes are ເ	used: Co	mfort, S	Standby, I	Economy,	Building		
_	tection.									
	tapoint Typ									
	T_Name:	DPT_HVACMo	de		-					
	T Format:	N ₈				DPT_ID:	20.10			
Fie		Description				Supp.	Range	Unit	Defa	ult
	er HVAC						04	enum.	cs	
mo	de	0 = Auto (no r)	nanual input)			M				
		1 = Comfort				M				
		2 = Standby				M				
		3 = Economy				M				
		4 = BuildingPr				M				
_		all other enume	eration			NA			<u> </u>	
Ac	cess Type									
*	Input									
	$N \rightarrow this$		$I \to \text{this}$							
_	Spontaneou	us 🗵 au	Cyclically:			Time		NO *		
	Request		Polling:			Perio	d:			
Co	mmunicati	on Type								
•		ect Datapoint					Mandato	ry: 🛛		
		up Address: -								
Dyı	namics									
	Power dow	n: Save:								
	Power up:	Value:	No initialisation:		Defau	It value:				
			Saved value:]						
					Read	from bus:				
	ception Ha									
			ty with existing EIB pr	oducts.						
Spe	ecial Featu	res								

FB:	RSMHD	LTE CI		HVACMo	odeUser					Mandator Optiona	
Desc	ription:							<u> </u>		<u> </u>	
This i	nformation is										
	ding to TC2	47 the fo	llowing H\	/AC-Mode	es are used	d: Comfor	t, Sta	andby, E	conomy	, Building	
Prote					T	T				I	
DPT:	Name I	OPT_HV	ACMode_2		DPT ID	201.100)	Datatype		N_8Z_8	D (1)
Field	20.4 - 1 - 1 1		Descripti	on					Sup.	Unit	Default
HVAC	CModeUser		O A	. /	(المرسمة المري				N.4	enum.	CS
			1 = Con	o (no man	uai input)				M M		
			2 = Stai						M		
			3 = Eco	,					M		
				dingProte	ction				M		
				enumerati					NA		
STAT	US									Bitset	
- Ou	tOfService			out of Ser					0	t/f	false
- Fa	ult			on is corru					0	t/f	false
_	erridden				orarily ove	erridden			0	t/f	false
	Marm			on with ala					0	t/f	false
- Ala	rmUnAck			edgement	of alarm				0	t/f	false
_			all other	bits					NA		
	munication:										
	ding Group	<u>: </u>	I +				D - (- 11			
Clas			Type	-4 D	0			ault			
	eographical		Apartmei	nt . Room	. SubZone	}	<u>1.1.</u>	1			
	oplication Sp	ecilic	Broadcas		Configura	hio [
	eripheral Address:		IO Type(Configura 384 (UHF		Dro	perty ID		55	
	-Service (e	vont).			on Binding		PIC	репу ір	•	55	
	foReport		Timeout:		on binding	NO *	Min	-	-		
	LTE Service (polling):										
Re	ead – Respo	nse	Read Wi		esp Sniffer	on Bindir	ng G	roup: -	-		
	after Powe			Default \	Value ⊠					Stored Val	lue 🗌
	ption Hand								ve at Po	werdown	
	NO timeout due to compatibility with S-Mode and existing EIB products.										
Spec	ial Features	S :									

3.4.6.7 Input WindowStatus

Standard Mode:

DP Name:	Wind	dowStatus			Abbr.:		ı	Manda	tory	
FB Name:	RSN	ИHD						Can be	internal	
Description										
This informati	ion is	provided b	by the F	unctional Block	window	switch.				
Datapoint Ty	ре									
DPT_Name:	DF	PT_Windov	v_Door							
DPT Format:	B ₁						DPT_ID:	1.019		
Field	De	scription					Supp.	Range	Unit	Default
	0 =	closed, 1	= open						Bit	0
Access Type)									
◆ Input										
$N \rightarrow this$			$1 \rightarrow th$	nis 🛛						
Spontaneo	ous			Cyclically:			Time-	out:	NO *	
Request				Polling:			Perio	d:		
Communicat	tion T	уре								
♦ Group Ob	oject I	Datapoint						Mandatory	/: 	
Default Gr	oup A	Address:								
Dynamics										
Power dov	vn:	Save:								
Power up:		Value:	No ir	nitialisation:		Defau	ult value:		\square	
			Save	ed value:						
						Read	from bus:			
Exception Ha										
* NO timeout	due	to compati	bility wit	th existing EIB	products.					
Special Feat	ures									

FB:	DEMILD	LTE C	liont	Windows	totus					/ondoton	, \square
rb:	RSMHD		Name:	WindowS	เสเนร				ľ	Mandatory Optiona	
Doco	ription:	IIIput	ivailie.							Ориона	
			la al la 4la a	C	ام ما در دام ما						
	nformation is				_					Tr.	
DPT:	Name [OPT_W	indow_Do	or	DPT ID	1.019	Datat	type	format	B ₁	
Field			Descri	otion					Sup.	Unit	Default
			0 = clo	sed, 1 = op	en					Bit	0
Com	munication	:	-						-	-	-
Bin	ding Group	:									
Cla	SS		Туре				Default				
G	eographical		Apartm	nent . Room	. SubZone	9	1.1.1				
A	oplication Sp	ecific [
Pe	eripheral		Broado	ast 🗌	Configura	able 🗌					
DP	Address:		ІО Тур	e(ID):	343 (WO	S)	Proper	ty ID	:	51	
LTE	-Service (e	vent):	InfoRe	port Sniffer	on Binding	Group:		-	-		
In	foReport	\boxtimes	Timeo	ut:		NO *	Min				
	E -Service (p ead – Respo	U ,	Read \	Vildcard / R	esp Sniffe	r on Bind	ing Grou	p: -	-		
				Defects	/alua 🔽					240 40 4 \/0	lua 🗆
	after Powe			Default \	raiue 🔼					Stored Va	iue
	ption Hand							Sav	e at Pov	verdown	
* NC	timeout due	e to con	npatibility v	vith S-Mode	and existi	ng EIB pi	roducts.				
Spec	ial Features	s:									

3.4.6.8 Input PresenceStatus

Standard Mode:

DP Name:	PresenceStatus	;		Abbr.:	-			Manda	tory		
FB Name:	RSMHD							Can be	internal		
Description											
This information	n is provided by	the Fu	nctional Block	s presen	ce det	tector	or use	er presence	e switch.		
Datapoint Typ	<u>e</u>										
DPT_Name:	DPT_Occupar	псу									
DPT Format:	B ₁					DF	T_ID:	1.018			
Field	Description					S	upp.	Range	Unit	Defa	ault
	0 = not occupi	ed, 1 =	occupied						Bit	CS	s
Access Type											
♦ Input											
$N \rightarrow this$		$1 \rightarrow \text{this}$	s 🛛								
Spontaneou	us 🛛	(Cyclically:				Time-	out:	NO *		
Request			Polling:				Perio	d:			
Communication	on Type										
♦ Group Obj	ect Datapoint							Mandatory	/: X		
Default Gro	up Address:										
Dynamics											
Power down	n: Save:										
Power up:	Value:	No ini	tialisation:		Defa	ault v	alue:		\boxtimes		
		Saved	d value:								
					Rea	d fro	m bus:				
Exception Hai											
* NO timeout of	due to compatib	ility with	existing EIB	products.							
Special Featu	res										

FB:	RSMHD	LTE Cli		Presenc	eStatus				ľ	Mandatory				
		Input N	ame:							Optiona	ΙX			
Desc	ription:													
This	information is	s provided	by the F	unctional	Blocks pres	sence de	tector or	use	r presen	ce switch.				
DPT:	Name [PT_Occi	ıpancy		DPT ID	1.018	Data	type	format	B ₁				
Field			Descrip	tion					Sup.	Unit	Default			
			0 = not	occupied,	1 = occupie	ed				Bit	CS			
Com	munication:	i I	<u>.</u>						'	<u> </u>	<u>.</u>			
Bin	ding Group	:												
Cla	SS		Type				Default							
G	eographical	\boxtimes	Apartm	ent . Roor	n . SubZone	;	1.1.1							
A	oplication Sp	ecific 🔲												
P	eripheral		Broadc	ast 🗌	Configura	ıble 🗌								
DP	Address:		ІО Туре	e(ID):	345 (PRE 391 (UPS		Prope	rty ID):	51 51				
LTE	E-Service (e	vent):	InfoRep	ort Sniffe	r on Binding	Group:		-	-					
	foReport `	Á	Timeou		J	NO *	Min							
	E-Service (pe ead – Respo		Read W	Vildcard / F	Resp Sniffer	on Bind	ing Grou	ıp: -	-					
Value	e after Powe	er-up:	-	Default	Value ⊠			_	;	Stored Va	lue 🗌			
Exce	ption Handl	ing:						Sav	e at Pov	werdown				
* NC	timeout due	to compa	atibility w	rith S-Mod	e and existii	ng EIB pi	roducts.							
Spec	ial Features):	•	•			•			•				

3.4.6.9 Input ComfortPushbutton

Standard Mode:

DP Name:	Con	nfortPushbu	ıtton		Abbr.:			Manda	tory	
FB Name:	RSN	ИHD						Can be	internal	
Description										
This informati	ion is	provided b	y the Fu	unctional Block	user com	nfort pu	shbutton.			
Datapoint Ty	ре									
DPT_Name:	DF	PT_Trigger								
DPT Format:	B ₁						DPT_ID:	1.017		
Field	De	escription					Supp.	Range	Unit	Default
	1 =	= Trigger							Bit	CS
Access Type)									
◆ Input										
$N \rightarrow this$			$1 \rightarrow th$	is 🛛						
Spontaneo	ous			Cyclically:			Time	-out:	NO *	
Request				Polling:			Perio	d:		
Communicat	tion 1	Гуре								
♦ Group Ob	oject	Datapoint						Mandatory	/:	
Default Gr	oup /	Address:								
Dynamics										
Power dov	vn:	Save:								
Power up:		Value:	No in	itialisation:		Defau	ılt value:			
			Save	d value:						
				<u>.</u>		Read	from bus			
Exception Ha	andli	ng								
* This Datapo	oint h	as NO hea	rtbeat (¯	Trigger).						
Special Feat	ures									

FB:	RSMHD	LTE C		Comfort	Pushbutto	n			N	Mandatory	
		Input	Name:							Optiona	I 🛛
Desc	ription:	-		_				-			
This i	information is	s provid	ed by the I	Functional	Block user	comfort p	oushbutto	on.			
DPT:	Name [OPT_Tri	gger		DPT ID	1.017	Datat	type	format	B ₁	
Field			Descrip	otion	•	•	•		Sup.	Unit	Default
			1 = Trig	gger					•	Bit	CS
Com	munication		<u> </u>						<u> </u>	=	<u> </u>
Bin	ding Group	:									
Cla	SS		Type				Default				
G	eographical		Apartm	ent . Room	ո . SubZone	9	1.1.1				
Ap	oplication Sp	ecific									
Pe	eripheral		Broadc	ast 🗌	Configura	able 🗌					
DP	Address:		10 Туре	e(ID):	384 (UHI	RS)	Proper	ty ID	:	54	
LTE	E-Service (e	vent):	InfoRep	oort Sniffer	on Binding	Group:		-	-		
In	foReport	\boxtimes	Timeou	ıt:		NO *	Min				
	E -Service (p ead – Respo	<u> </u>	Read V	Vildcard / F	Resp Sniffe	r on Bind	ing Grou	p: -	-		
Value	e after Powe	er-up:	-	Default \	√alue ⊠			-	5	Stored Va	lue 🗌
Exce	ption Hand	ling:						Sav	e at Pov	werdown	
* Thi	s Datapoint	has NO	heartbeat	(Trigger).							
Spec	ial Features	S:									

3.4.6.10 Input ComfortProlongUser

Standard Mode:

DP Name:	Com	fortProlon	gUser		Abbr.:			Manda	tory	
FB Name:	RSM	1HD						Can be	internal	
Description										
This informati	on is	provided b	y the F	unctional Block	k user com	nfort pro	olongation	l ₌		
Datapoint Ty	ре									
DPT_Name:	DP	T_Trigger								
DPT Format:	B ₁						DPT_ID:	1.017		
Field	De	scription					Supp.	Range	Unit	Default
	1 =	: Trigger							Bit	CS
Access Type	!									
♦ Input										
$N \rightarrow this$]	$1 \rightarrow tr$	nis 🛛						
Spontaneo	us			Cyclically:			Time-	out:	NO *	
Request				Polling:			Perio	d:		
Communicat	ion T	уре								
♦ Group Ob	ject [Datapoint						Mandatory	/: 🛛	
Default Gr	oup A	\ddress:							-	
Dynamics										
Power dov	vn:	Save:								
Power up:		Value:	No ir	nitialisation:		Defau	ılt value:			
			Save	ed value:						
						Read	from bus:			
Exception Ha										
* This Datapo	oint h	as NO hea	artbeat (Trigger).						
Special Featu	ures									
	امامه									

FB:	RSMHD	LTE C	liont	Comfort	ProlongUs			/andatan	, 🗀		
FD.	KSWIDD		Name:	Cominorti	rololigus	EI			ľ	Mandatory Optiona	
Dosc	ription:	Input	ivaille.	_				<u> </u>		Ориона	<u> </u>
					Disalassas			4.1			
	information is			-unctional						Tr.	
DPT:	Name [OPT_Tri	gger		DPT ID	1.017	Data	type	format	B ₁	
Field			Descrip	otion					Sup.	Unit	Default
			1 = Trig	gger						Bit	CS
Com	munication:		•							_	
Bin	ding Group	:									
Cla	SS		Туре				Default				
G	eographical		Apartm	ent . Room	ո . SubZone)	1.1.1				
A	oplication Sp	ecific [
P	eripheral		Broadc	ast 🗌	Configura	able 🗌					
DP	Address:		Ю Тур	e(ID):	384 (UHF	RS)	Proper	ty ID	:	53	
LTE	E-Service (e	vent):	InfoRe	ort Sniffer	on Binding	Group:	-	-	-		
In	foReport	\boxtimes	Timeou	ıt:		NO *	Min				
LTE	E-Service (p	olling):	Poad V	Vildeard / E	Resp Sniffe	on Rind	ina Grou	n· -	_		
R	ead – Respo	nse	ixeau v	viidcard / i	resp Sillie	OH BIHU	ing Grou	ρ			
Value	e after Powe	er-up:	-	Default \	√alue ⊠			_	5	Stored Va	lue 🗌
Exce	ption Hand	ling:						Sav	e at Pov	werdown	
* Thi	s Datapoint	has NO	heartbeat	(Trigger).				•			
Spec	ial Features	S :									

${\bf 3.4.6.11\ Input\ TempRoomSetpUserAbs}$

DF	P Name:	Tem	<u> pRoomSet</u>	pUserA	bs			Abbr.:				N	<u>landate</u>	ory		
FB	Name:	RSN	ИHD									С	an be	internal		
De	escription															
	is information									erat	ure se	etpoin	nt abso	lute set	ing.	
_	is value ove		es internal s	setpoint	valu	es (com	pany	y specif	ic).							
	tapoint Ty															
	PT_Name:	DF	PT_Value_1	Temp												
DF	PT Format:	F ₁₆	3							DP	T_ID:	9.	.001			
Fie	eld	De	escription							Sı	лрр.	Ra	nge	Unit	Defa	ult
												fu	ull	°C	CS	;
Ac	cess Type															
•	Input															
	$N \rightarrow this$]	$1 \rightarrow th$	is											
	Spontaneo	us			Сус	lically:					Time-	-out:		NO *		
	Request				Polli	ing:					Perio	d:				
Co	mmunicati	on 1	Гуре													
•	Group Ob	ject l	Datapoint									Man	datory:			
	Default Gro	oup /	Address:													
Dy	namics															
	Power dow	'n:	Save:													
	Power up:		Value:	No in	itialis	sation:			Defau	ılt va	alue:					
				Save	d val	lue:										
									Read	fror	n bus:					
Ex	ception Ha	ndli	ng													
*	NO timeout	due	to compatik	oility wit	h exi	sting Elf	3 pro	oducts.								
Sp	ecial Featu	ıres														
i																
			•													

FB:	RSMHD	LTE Clie		TempRod	omSetpUs	serAbs			N	/landatory	
	-	Input Na	ime:	_						Optional	X
	ription:										
	nformation is						nperature	esetp	point ab	solute set	ting.
This v	alue overrid	es interna	ıl setpoin	ıt values (c	ompany s	pecific).					
DPT:	Name D	PT_Temp	HVACA	.bs_Z	DPT ID	205.100	Datat	ype t	format	$V_{16}Z_{8}$	
Field			Descrip	tion					Sup.	Unit	Default
Temp			Temper	ature value	e					°C	cs
STAT	US									Bitset	
	tOfService		Functio	n out of Se	rvice				0	t/f	false
- Fai	ult			tion is corr					0	t/f	false
- Ov	erridden			tion is tem		erridden/			0	t/f	false
- InA				tion with al					0	t/f	false
- Alaı	mUnAck			rledgement	t of alarm				0	t/f	false
			all other	r bits					NA		
Comr	nunication:										-
Bine	ding Group:										
Clas	ss		Type				Default				
Ge	eographical		Apartm	ent . Room	. SubZon	е	1.1.1				
Ap	plication Sp	ecific 🗌									
Pe	ripheral		Broadca	ast 🗌	Configur	able 🗌					
DP A	Address:		ІО Турє		384 (UH		Propert	y ID:		51	
LTE	-Service (ev	vent):		ort Sniffer	on Binding						
Inf	oReport	\boxtimes	Timeou	t:		NO *	Min				
LTE	-Service (po	olling):	Dood M	/ildcard / R	ocn Sniffo	r on Rindi	na Grau	٠.			
Re	ead – Respo	nse	iteau vi	/ilucalu / IX	esp Sillie	i on bindi	ng Group	J			
Value after Power-up: Default Value ∑									5	Stored Val	ue 🗌
	otion Handl							Save	e at Pov	verdown	
* NO	timeout due	to compa	tibility w	ith S-Mode	and exist	ing EIB pr	oducts.				
Speci	ial Features	:									
								•			

3.4.6.12 Input TempRoomSetpUserOffset

DP Na	ame:	Tem	<u>ipRoomSet</u>	tpUserC)ffset		Abbr.:			Manda	tory	
FB Na	ıme:	RSN	ИHD							Can be	internal	
Descr	iption											
									erature se	etpoint relat	ive setti	∩g. This
			nternal set	ooint val	lues (con	npany s	pecific).					
	oint Typ	_										
	Name:		PT_Value_	Tempd								
	ormat:	F ₁₆							DPT_ID:	9.002		
Field		De	escription						Supp.	Range	Unit	Default
										full	K	0
Acces	ss Type											
♦ In	put											
N -	\rightarrow this			$1 \rightarrow th$	is 🛭	3						
Spe	ontaneo	us			Cyclical	ly:			Time-	·out:	NO *	
Re	quest				Polling:				Perio	d:		
Comn	nunicati	on T	Гуре									
♦ Gi	roup Obj	ect I	Datapoint							Mandatory	': X	
De	fault Gro	up A	Address:									
Dynar	nics											
Po	wer dow	n:	Save:									
Po	wer up:		Value:	No in	itialisatic	n:		Defau	ılt value:		\boxtimes	
				Save	d value:							
								Read	from bus:			
Excep	tion Ha	ndli	ng									
			to compatil	bility wit	h existin	g EIB pi	oducts.					
Speci	al Featu	res										

FB:	RSMHD	LTE Clie		TempRo	omSetpUs	erOffset			N	Mandatory Optional	
Desci	ription:	<u>-</u>		-						<u> </u>	
This in	nformation is	provided	by the F	unctional	Block user	room tem	perature	esetp	oint rel	ative setti	ng. This
value	is added to i	nternal se	etpoint va	alues (com	pany spec	cific).					
DPT:	Name D	PT_Temp	HVACR	el_Z	DPT ID	205.101	Datat	ype f	format	$V_{16}Z_{8}$	
Field			Descrip	tion					Sup.	Unit	Default
Temp			Temper	ature deld	a value					K	0
STAT	US									Bitset	
	tOfService		Function	n out of Se	ervice				0	t/f	false
- Fau	ult			tion is corr					0	t/f	false
- Ov	erridden		Informa	tion is tem	porarily ov	erridden			0	t/f	false
- InA				tion with a					0	t/f	false
- Alar	mUnAck			ledgemen	t of alarm				0	t/f	false
			all other	bits					NA		
Comr	nunication:							_			-
Bind	ding Group:										
Clas			Type				Default				
Ge	ographical		Apartme	ent . Room	າ . SubZon	е	1.1.1				
Ap	plication Spe	ecific 🔲									
Pe	ripheral		Broadca	ast 🗌	Configur						
	Address:		10 Туре		384 (UH		Propert	ty ID:		52	
	-Service (ev	rent):			on Binding						
	oReport		Timeou	t:		NO *	Min				
	-Service (po		Read W	/ildcard / R	Resp Sniffe	r on Rindi	na Graur	o·			
Re	ad – Respor	nse 🗌	ixeau vi	ilucalu / I	resp Sillie	i on bindi	ng Group	ρ			
Value after Power-up: Default Value ∑										Stored Val	ue 🗌
	otion Handli							Save	e at Pov	werdown	
* NO	timeout due	to compa	tibility w	ith S-Mode	e and exist	ing EIB pr	oducts.				
Speci	al Features										

3.4.6.13 Input TempRoomSetpSetHeat

LTE-HEE Mode: NA (see parameter)

DP Na	ame:	Tem	pRoomSetp	SetHe	at			Abbr.	:			М	landat	ory			
FB Na	ame:	RSN	ИHD									C	an be	internal			
	ription																
The th	ree setp	oint	s for heating	are pr	rovide	ed by a s	supe	rviso	ſ.								
	oint Typ	е															
DPT_I	Name:	DF	PT_TempRo	omSet	pSetI	F16											
DPT F	ormat:	F ₁₆	₆ F ₁₆ F ₁₆								DPT_ID:	22	22.100)			
Field		De	escription								Supp.	Rai	nge	Unit	Defa	aul	t
Temp	erature		mpComfort (M	fu	الد	°C	C	s	
	erature		mpStandby								M	fu	الد	°C	C	S	
	erature	Te	mpEconomy	/ (heat	ing)						M	fι	ıll	°C	C	S	
Acces	ss Type																
♦ In	put																
N -	\rightarrow this] [$1 \rightarrow th$	is												
Sp	ontaneo	us	\boxtimes		Cycl	ically:			NO		Time-	out:		NO			
Re	quest				Polli	ng:					Perio	d:					
Comn	nunicati	on 1	Гуре														
♦ G	roup Obj	ect l	Datapoint									Mano	datory:	$ \square $			
De	fault Gro	up /	Address: -														
Dynar	mics																
Po	wer dow	n:	Save:														
Po	wer up:		Value:	No in	itialis	ation:			De	efau	It value:			\boxtimes			
				Save	d val	ue:											
									Re	ead	from bus:						
Excep	otion Ha	ndli	ng														
			ten is stored	l in Fla	sh or	EEPRO	OM v	vith lir	nited	nur	nber of w	rite cy	/cles. ⁻	Therefo	e the	ere	
	neartbea																
Speci	al Featu	res															
						·											

3.4.6.14 Input TempRoomSetpSetCool

LTE-HEE Mode: NA (see parameter)

DP	Name:	TempRoomSetpSetCool				Abbr	:				Mandatory						
FB Name: RSMHD						Can b					be internal						
	Description																
The	The three setpoints for cooling are provided by a supervisor.																
	Datapoint Type																
DP	DPT_Name: DPT_TempRoomSetpSetF16																
DP	T Format:	F	₁₆ F ₁₆ F ₁₆								DPT_ID:	222.	.100)			
Fiel	ld	D	escription								Supp.	Range	е	Unit	Defa	aul	t
Ter	nperature		empComfort (M	full		°C	C	s	
	nperature		empStandby (M	full		°C	C	S	
	nperature	T	empEconomy	(cooli	ing)						M	full		°C	C	S	
Acc	cess Type																
*	♦ Input																
	$N \rightarrow \text{this} \qquad \square \qquad \qquad 1 \rightarrow \text{this} \qquad \square$																
Spontaneou			ıs 🛛 (Cyclically:			NO	Time-o		out:	ut: NO				
Request					Polli	ng:		Period:			d:						
Col	Communication Type																
♦ Group Object Datapoint Mandatory:																	
	Default Gro	oup	Address: -														
Dyr	namics																
	Power dow	n:	Save:														
	Power up: Value: No initialisation: Default value:																
				Save	d val	ue:											
	Read from bus:																
Exc	Exception Handling																
This information often is stored in Flash or EEPROM with limited number of write cycles. Therefore there																	
is no heartbeat.																	
Spe	Special Features																
	·	_	·			·	_						_	·			

${\bf 3.4.6.15\; Input\; TempRoomSetpSetHeatShift}$

DF	Name:	TempRoomSe			ory						
FE	Name:	RSMHD									
FB Name: RSMHD Can be internal Description											
Th	This information is provided by a supervisor with e.g. optimising functionality. The heating values are										
ad	added to the comfort, the standby and the economy setpoint value. The heating values and the cooling										
va	values are in separate Datapoints.										
Da	Datapoint Type										
DF	DPT_Name: DPT_TempRoomSetpSetShiftF16										
DF	PT Format:	F ₁₆ F ₁₆ F ₁₆				DPT_ID:	222.10	1			
Fie	eld	Description				Supp.	Range	Unit	Default		
Te	mperature	TempShiftCo	mfort (heating)			М	full	K	0		
Te	mperature	TempShiftSta	andby (heating)			М	full	K	0		
Te	mperature	TempShiftEc	onomy (heating)			М	full	K	0		
Ac	cess Type										
♦	♦ Input										
	$N \rightarrow this$		$1 \rightarrow \text{this}$								
	Spontaneo	us 🛛		Time-	out:	31 min	(rec.)				
Spontaneous □ Cyclically: □ Request □ Polling: □							Period:				
Co	mmunicati	on Type									
◆ Group Object Datapoint Mandatory:											
	Default Group Address:										
Dy	namics										
	Power dow	n: Save:									
	Power up:	Value:	No initialisation:		Defau	It value:					
			Saved value:								
	Read from bus:										
Ex	Exception Handling										
	-	-									
Sp	Special Features										

FB:	RSMHD LTE Clie			TempRoomSetpSetHeatShift					Mandatory ∐ Optional ⊠				
Desci	ription:	•	-							•			
		is provided											
				ndby and the economy setpoint value. The heating values and the cooling									
		parate Data	points.										
DPT:	Name	DPT_			DPT ID	D 212.100 Dat		type f	ormat	$V_{16}V_{16}V_{16}$			
		TempRoon		SetpSetShift[3]									
Field			Description						Sup.	Unit	Default		
	erature		TempShift(М	K	0		
	erature		TempShiftS						М	K	0		
	erature		TempShiftEconomy (heating)						M	K	0		
Comr	nunicatio	n:											
Bind	ding Grou	p:											
Clas			Type Default										
	ographica	 -	Apartment . Room . SubZone 1.1					.1.1					
	plication S	Specific 🔲											
Pe	ripheral		Broadcast Configurable										
	Address:		IO Type(ID		115 (HVACOPT) Property ID				D: 62				
	-Service (event):	InfoReport	InfoReport Sniffer on Binding Group:									
	oReport	\square	Timeout: 31 Min										
	-Service (ad – Resp	· <u> /</u>	Read Wildcard / Resp Sniffer on Binding Group:										
Value	after Pov	ver-up:	Default Value ⊠					=	Stored Value				
Excep	otion Han	dling:						Save	at Pov	verdown			
Special Features:													
		•	•				•						

3.4.6.16 Input TempRoomSetpSetCoolShift

DP Name:	P Name: TempRoomSetpSetCoolShift Abbr.: Mandatory										
FB Name: RSMHD Can be internal Description											
This information is provided by a supervisor with e.g. optimising functionality. The cooling values are											
added to the comfort, the standby and the economy setpoint value. The heating values and the cooling											
values are in separate Datapoints.											
Datapoint Type											
DPT_Name: DPT_TempRoomSetpSetShiftF16											
DPT Format:	F ₁₆ F ₁₆ F ₁₆	•				DPT_IC): 222.1	01			
Field	Description					Supp.	Range	Unit	Default		
Temperature	TempShiftCo	mfort (cooling)				М	full	K	0		
Temperature		ndby (cooling)				М	full	K	0		
Temperature	TempShiftEco	onomy (cooling)				М	full	K	0		
Access Type											
♦ Input											
$N \rightarrow this$		$1 \rightarrow \text{this}$									
Spontaneo	us 🛛	Cyclically		Time-out:		31 min	(rec.)				
Request		Polling:				Period:					
Communicati	on Type										
♦ Group Obj	ect Datapoint						Mandato	ry: 🛛			
Default Gro	up Address:										
Dynamics											
Power dow	n: Save:										
Power up:	Value:	No initialisation: Defaul					ılt value:				
	Saved value:										
Read from bus:											
Exception Handling											
_ 											
Special Features											

FB:	RSMHD	Input Na		empRooi	mSetpSet	CoolShi	Optional ⊠						
Desci	ription:	•	-						•				
		is provided											
		mfort, the st		the econ	omy setpo	int value	. The he	ating	values	and the c	ooling		
		parate Data	points.										
DPT:	Name	DPT_			DPT ID	212.100	Datat	type f	ormat	$V_{16}V_{16}V_{1}$	6		
		TempRoon	nSetpSetSh										
Field			Description						Sup.	Unit	Default		
	erature		TempShift					M	K	0			
	erature		TempShift:				M	K	0				
Temp	erature		TempShift	Economy		М	K	0					
Comr	nunicatio	n:											
Bind	ding Grou	ling Group:											
Clas	SS		Type				Default						
Ge	eographica	ı 🔲	Apartment	. Room	. SubZone		1.1.1						
Ap	plication S	Specific 🔲											
Pe	ripheral		Broadcast		Configura	ble 🗌							
DP A	Address:		IO Type(ID	D):	115 (HVA	COPT)	Proper	ty ID:		63			
LTE	-Service (event):	InfoReport	Sniffer o	n Binding	Group:							
Inf	oReport	\boxtimes	Timeout:			31	Min						
LTE-Service (polling): Read – Response Read Wildcard / Resp Sniffer on Binding Gi													
Value	after Pov	ver-up:		Default Va	alue 🛚			-	5	Stored Va	lue 🗌		
Excep	otion Han	dling:						Save	at Pov	verdown			
Special Features:													

3.4.6.17 Output HVACModeEff

FB Name: RSMHD Abbr.: Mandatory												
FB Name: RSMHD Can be internal												
Description This output contains the effective demanded HVAC mode, manual inputs included.												
	tains the effective C247 the following						Building					
Datapoint Type	е											
DPT_Name:	DPT_HVACMo	de										
DPT Format:	N_8				DPT_ID:	20.10	2					
Field	Description				Supp.	Range	Unit	Default				
HVAC Mode	0 = Auto 1 = Comfort 2 = Standby 3 = Economy 4 = BuildingPr				NA M M M	14	enum.	CS				
Access Type	all other enumeration NA NA											
◆ Output												
this → M Spontaneou Request			Delta-Value: Period:	15min	MinRepTin (recommen		2sec ¹⁾					
Communicatio	n Type											
	ect Datapoint					Mandato	ry: 🛛					
Default Grou		-										
Dynamics												
Power down	: Save:											
Power up: Value: No initialisation: Default value: Saved value: Actual value: Transmit on bus:												
Exception Han	xception Handling											
Support of Data	point see Funct	ional Block dia	agram.									
Special Featur	es											
However the	The MinRepTime of 2sec shall be respected it the COV of the signal is the result of a calculation. However the signal may be sent immediately if the COV is the result of a user interaction (locally or by input signal).											

FB:	RSMHD	LTE S			HVACM	odeEff				Ŋ	Mandator Optiona	
Desc	ription:				-						<u> </u>	
	output contai	ins the	effe	ctive dem	nanded H	VAC mode	e, manu	al in	puts incl	uded.		
	ding to TC2	47 the f	ollo	wing HV/	AC-Modes	s are used	: Comfo	ort, S	Standby,	Economy	, Building	
Prote												
DPT:	Name D	OPT_HV		:Mode_Z		DPT ID	201.10			e format	N_8Z_8	
Field			Des	scription			Sup.	Ra		Unit	COV	Default
HVAC	CMode								14	enum.	yes	CS
				= Auto			NA					
				= Comfor			M					
				= Standb	,		M					
				= Econor			M					
					gProtectio	on	M					
			all (other enu	ımeration		NA					
STAT	US		For	r LTE-Ser	vice InfoF	Report				Bitset		
			and	d Property	y-Service							
			Res	sponse o	nly							
- Out	OfService		RS	M out of	service		0	tru	ue/false		Υ	false
- Fau	lt		Val	lue is corr	rupted		0	tru	ue/false		Υ	false
- Ove	rridden				orarily ov	/erridden	0	tru	ue/false		Υ	false
- InAl				M is in al			0		ue/false		Υ	false
	mUnAck		_		ement of	alarm	Ö		ue/false		Ý	false
	ther bits		, (01	anomioag	ornorit or	alaiiii	NA		20/10/00			10100
	munication:	:					<u> </u>	<u> </u>			<u>.</u>	
	ding Group											
Clas			•	Туре					Defa	ault		
Ge	eographical				nt . Room	. SubZone	9		1.1.	1		
	plication Sp		Ħ									
	eripheral	[ŦĦ	Broadcas	st 🗍	Configu	rable [j				
	Address:	-	_	IO Type(I		100 (RSI		F	Property I	D:	51	
	-Services (event):		cov 🛱		MinRepTir		2	1) sec		rtbeat:	15 min
	oReport `	Ź	1	Output pe		communic		□ le	Binding G	roup Wild	card allo	
	•			Tx Prio:		High	<u> </u>		Norma		Lo	
(L	TE Read-Re	sponse										<u></u>
	lling of the o			_		_		_		. 🗖		
	all always be			Transm a	ifter Powe	er-up: Store	ed Valu	е	Act V	alue 🛚	Default \	/alue ∐
	pported)	•										
	perty-Service	ce	1									
	lividual acc			Read only	y 🗵		Read	/VVri	te [
	ption Handl									Save	at Power	rdown
Supp	ort of Datapo	oint see	Fu	nctional E	Block diag	ıram.						
	ial Features											
	ne MinRepTi											
	owever the s	signal m	ay	be sent ir	nmediate	ly if the CO	DV is th	e re	sult of a ι	user intera	action (lo	cally or by
l in	nut signal)											

3.4.6.18 Output HVACModeEffNext

Standard Mode: NA LTE-HEE Mode:

FB:	RSMHD	LTE S	Server ut Name:	HVACModeEffN	lext				N	/landator Optiona	
Desc	ription:	-		-				-			
		ains the i	next effective	demanded HVA	C mode	an	d the	time to	it. If the n	ext mode	e is not
availa	ıble (manua	al influen	ce etc.) the ti	me is set to zero.							
Accor	ding to TC	247 the f	ollowing HVA	AC-Modes are use	ed: Con	nfoi	rt, Sta	andby, E	conomy,	Building	
Prote									•		
DPT:	Name	DPT_H\	/ACModeNe	xt DPT ID	206	.10			format l	$J_{16}N_{8}$	
Field			Description		Su	p.	Ran	ge	Unit	COV	Default
Time				t HVAC mode in				full	min	15 ²⁾	0
			minutes, 0 =	no next mode 1)]	
Next	HVACMode	9					(04	enum.	yes	CS
				ındefined ¹⁾	N	1					
				rt 2 = Standby	N	1					
				my4 = Build.Prot.	N	1					
			all other enu	ımeration	N.	4					
	nunication										
Bine	ding Group) :									
Clas			Type					Defau	lt		
Ge	eographical		Apartment	. Room . SubZor	ne			1.1.1			
Ap	plication S	pecific [
Pe	ripheral		Broadcast		urable						
	Address:		IO Type(ID				Pro	perty ID		52	
	-Services	,	COV 🖂	MinRepT				sec	Heartl		15 min
Inf	oReport	\boxtimes		default communi	cating		Bin	ding Gro	up Wildc	ard allow	ed 🛛
			Tx Prio:	High [N	lormal 🛭		Low	
	TE Read-R										
	lling of the		Transm aft	ter Power-up: Sto	red Val	uе		Act Valu	ie 🕅 D	efault Va	lue 🖂
	all always l	ре	Tranom an	ioi i owoi up. Oto	roa vai	uo		7 tot vare		oldali Va	.00
	pported)										
	perty-Serv		Read only		Rea	d/V	Vrite				
_	ividual acc								T_	_	
	ption Hand								Save a	t Powerd	lown
	upport of Datapoint see Functional Block diagram.										
	ial Feature										
0)			nditions, see								
-, CC	IV value is	identical	to heart heat	time (15 min)							

Interpretation of Time and HVACMode fields

Time	HVACMode	
- 0 (Undofined)	= 0 (Undefined)	the content of the Datapoint is void / undefined
= 0 (Officerified)	= 0 (Officerified)	⇒ no next HVAC Mode available for an undefined time period
		defined and valid next HVACMode but the delay time is undefined
= 0 (Undefined)	= {14}	(unknown)
		⇒ next HVACMode deactivated
		undefined (unknown) HVACMode during a defined delay time
> 0	= 0 (Undefined)	⇒ in practice this combination is useless and is interpreted like
		Time=0 / HVACMode=0 (default value)
> 0	= {14}	defined and valid HVACMode and delay time

3.4.6.19 Output HVACModeUserEff

DP Name: HVACModeUserEff Abbr.: Mandatory FB Name: RSMHD Can be internal												
This output contains the effective user HVAC mode, internal and Bus.												
	C247 the following H	HVAC-Mode	es are used: (Comfor	t, Standby, I	Economy,	Building					
Protection.												
Datapoint Typ												
DPT_Name:	DPT_HVACMode											
DPT Format:	N ₈				DPT_ID:	20.10						
Field	Description				Supp.	Range	Unit	Default				
HVAC Mode						14	enum.	CS				
	0 = Auto				M							
	1 = Comfort				M							
	2 = Standby				M							
	3 = Economy				M							
	4 = BuildingProte				M							
	all other enumerati	on			NA							
Access Type	Access Type											
♦ Output												
this \rightarrow M												
Spontaneo			Delta-Value:		MinRepTin		2sec 1)					
	Cyclic	□ F	Period:	15min	(recommen	ided value	e)					
Request												
Communicati	on Type											
♦ Group Obj	ect Datapoint					Mandato	ry: 🛛					
	up Address:											
Dynamics												
Power dow	n: Save:											
Power up:	Value: No	initialisatio	n:	Def	ault value:							
	Sa	ved value:		Act	ual value:							
	Transmit on bus:											
Exception Ha	xception Handling											
Support of Dat	apoint see Function	al Block dia	gram.									
Special Featu	res											
	pTime of 2sec shall											
However th	e signal may be ser	nt immediate	ely if the CO\	/ is the	result of a u	iser intera	ction (lo	cally or by				
input signa	l)											
·	<u></u>	·	·		· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·						

FB:	RSMHD	LTE Sei Output		HVACModeUserE	ff			Mandator Optiona	
Desc	ription:		-				-	-	
	ding to TC24			HVAC mode, inter C-Modes are used			y, Econom	y, Building)
DPT:	Name D	PT_HVA	CMode_Z	DPT ID	201.10	00 Data	type format	N ₈ Z ₈	
Field		D	escription		Sup.	Range	Unit	COV	Default
HVAC	Mode					14	enum	yes	CS
			0 = Auto		M				
			1 = Comfort		M				
			2 = Standby		M				
			3 = Econom		M				
			4 = Building		M				
OT 4 T	110	aı	ll other enui	meration	NA		Dite		
STAT	US						Bitset		
- all b		N	ot supporte	d	NA				
	munication:								
	ding Group:								
Clas			Type				efault		
	eographical	\square	Apartmen	t . Room . SubZone)	1	.1.1		
Ap	plication Spe	ecific 🔲	1						
	ripheral		Broadcast						
	Address:		IO Type(II			Proper		57	
	-Services (e		COV 🖂	MinRepTir		2 ¹⁾ sec		artbeat:	15 min
Inf	oReport	\boxtimes		r default communic	ating [g Group Wi	ldcard allo	wed 🛚
			Tx Prio:	High 🗌		Norr	mal 🛚	Lo	w 🗌
po sh	TE Read-Res Iling of the o all always be pported)	utput	Transm at	ter Power-up: Store	ed Valu	e □ Ac	t Value ⊠	Default '	Value □
	perty-Servic ividual acce		Read only		Read	/Write			
Exce	otion Handli	ng:					Sav	e at Powe	rdown
			unctional B	lock diagram.					
	ial Features								
Н				respected it the CO nmediately if the CO					

3.4.6.20 Output TempRoomSetpSetHeatEff

Standard Mode: NA LTE-HEE Mode:

FB:	RSMHD	LTE Se	-	TempRe	oomSetpSe	etHeatE	ff [4]			ndatory	∑ ¹)	
_		Output	Name:							Optional		
	ription:											
					rrections) h					id for the)	
					values are i							
DPT:	Name		pRoomSet	pSet[4]	DPT ID	213.10				$V_{16}V_{16}V_{1}$		
Field			escription				Range		Unit	COV	Default	
	erature		Comfort setp			M	full		°C	0.2	cs	
	erature		Standby setp			M	full		°C	0.2	CS	
	erature		conomy se			M	full		°C	0.2	CS	
Temp	erature	B	Building prot	ection se	etpoint	M	full		°C	0.2	cs	
		h	eating									
	nunication							•				
Binding Group:												
Class Type Default												
Ge	eographical	\boxtimes	Apartmen	it . Room	n . SubZone			1.1.1				
Ap	plication S	pecific _] [
	ripheral		Broadcas	Broadcast Configurable C								
DP	Address:		IO Type(I	D):	100 (RSM	1HD)	Prop	erty ID):	53		
LTE	-Services	(event):	COV 🖂		MinRepTim	ne:	10 s	ес	Hear	tbeat:	15 min	
Inf	oReport		Output pe	er default	communica	ating [Bindi	ng Gr	oup Wilde	card allo	wed 🛚	
			Tx Prio:		High 🗌		No	ormal		Lov	w 🔲	
po sh	TE Read-R Iling of the all always t pported)	output	Transm a	fter Pow	er-up: Store	ed Value	e 🗌 - A	Act Va	lue 🛛 🛚 I	Default \	/alue □	
Property-Service Read only Read/Write												
(ind	ividual acc	cess):	rtead only	y L	<u> </u>	rrcau,	VVIIIC					
Exce	ption Hand	lling:							Save a	at Powe	down 🗌	
Spec	ial Feature	s:										
Special Features: 1) Support of Datapoint see Functional Block diagram.												

3.4.6.21 Output TempRoomSetpSetCoolEff

Standard Mode: NA LTE-HEE Mode:

FB:	RSMHD	LTE Se		TempRe	oomSetpSe	etCoolE	Eff [4]			ndatory		
		Output	Name:							Optional		
	ription:											
	output contain									id for the)	
	oller. The hea							apoin [.]	ts.			
DPT:	Name D	PT_Tem	pRoomSet	pSet[4]	DPT ID	213.10	00 Dat	atype	format	$V_{16}V_{16}V_{1}$	₆ V ₁₆	
Field			escription			Sup.	Range		Unit	COV	Default	
Temp	erature		omfort setp			M	full		°C	0.2	CS	
	erature		tandby set			M	full		°C	0.2	cs	
	erature		conomy se			M	full		°C	0.2	cs	
Temp	erature	В	uilding prot	ection se	etpoint	M	full		°C	0.2	cs	
		C	ooling									
Comr	munication:											
Binding Group:												
Class Type Default												
Ge	eographical	\square	Apartmen	partment . Room . SubZone 1.1.1								
Ap	plication Spe	ecific 🔲	1									
Pe	ripheral		Broadcas	t 🔲	Configu	rable 🗌						
DP.	Address:		IO Type(I	O Type(ID): 100 (RSMHD) Property ID: 54								
LTE	-Services (e	event):	COV 🖂		MinRepTin		10 s	ec	Hear	tbeat:	15 min	
Inf	oReport	\boxtimes	Output pe	er default	communic	ating [Bindi	ng Gr	oup Wilde	card allo	wed 🛚	
			Tx Prio:		High 🗌		No	rmal	\boxtimes	Lov	w 🗌	
	TE Read-Realling of the o				_							
sh	all always be		Transm a	fter Pow	er-up: Store	ed Valu	e∐ A	ct Va	llue 🖂 🗆	Default \	/alue ∐	
	pported)											
	perty-Servic		Read only	/ 🗵	◁	Read	/Write					
	ividual acce								10-	- 1 D		
Exce	ption Handli	ıng:							Save	at Power	raown	
4.	ial Features											
'' Su	Support of Datapoint see Functional Block diagram.											

${\bf 3.4.6.22\ Output\ TempRoomSetpHeatEff}$

												\boxtimes		
FB	FB Name: RSMHD Can be internal													
De	scription													
Th	is output co	ntair	s the	effecti	ve (afte	r corr	ections)	heatin	g setp	oint	which is v	alid for the	e contro	ller. This
inf	ormation is	used	l for sir	mple a	applicat	ions (neating	only).						
Da	tapoint Typ	эе												
DF	PT_Name:	DP	T_Val	lue_Te	emp									
	PT Format:	F ₁₆	6								DPT_ID:	9.001		
Fie	eld	De	scripti	on							Supp.	Range	Unit	Default
												full	°C	CS
Ac	cess Type													
♦	Output													
	this \rightarrow M \square this \rightarrow 1 \square													
	Spontaneo	us		COV	:		Delta-\	/alue:	0.2	١	//////////////////////////////////////	ne:	10 sec	
	•			Cycli	С	\boxtimes	Period:		15mi			ded value)		
	Request				•				•			•		
Co	mmunicati	on T	уре											
*	Group Obj	ject [Datapo	oint								Mandatory	/ : 🛛	
	Default Gro	oup A	Addres	ss:										
Dy	namics													
	Power dow	n:	Save:											
	Power up:		Value	:	No ini	tialisa	tion:		D	efau	ılt value:			
					Saved	l value	e: [Ad	ctua	l value:			
	Transmit on bus:													
Ex	ception Ha	ndlii	ng											
Sp	ecial Featu	ecial Features												
1)	Support of [Data	point s	ee Fu	ınctiona	l Bloc	k diagra	m.						

FB:	RSMHD	LTE S	Server ut Nam		mpRo	omSetpH	eatEff				ndatory Optional	
Descr	iption:	.									-	
This o	utput conf	ains the	effectiv	e (after c	orrecti	ons) heatir	ng setp	oint wh	ich is v	alid for th	ne contro	ller. This
inform	ation is us	sed for sir	mple ap	plication	s (hea	ting only).						
DPT:	Name	DPT_Te		ACAbs_Z		DPT ID	205.10	00 D	atatype	e format	$V_{16}Z_{8}$	
Field			Descri	ption			Sup.	Range	9	Unit	COV	Default
Temp	erature		Effecti	ve heatin	g setp	oint		fu	ıll	°C	0.2	cs
STAT										Bitset		
- all bi			Not su	pported			NA					
Comn	nunicatio	n:										
Bind	ding Grou	p:										
Clas			Туре							ult		
	ographica		⊠∐Apa	artment . I	Room	. SubZone) 		1.1.1			
	plication S	Specific]	<u></u>			<u></u>					
	ripheral			adcast 🗌		Configu						
	Address:			Type(ID):		100 (RSM			perty II		55	
	-Services					MinRepTin			sec		tbeat:	15 min
Inf	oReport	\boxtimes			efault	communic					wed 🛛	
				Prio:		High 🗌		1	Iormal		Lov	N \square
pol sha suj	FE Read-F Iling of the all always oported)	output be		nsm after	Powe	er-up: Store	ed Valu	e 🗌	Act Va	alue 🛚	Default \	/alue □
	perty-Servividual ac		Rea	ad only			Read	/Write				
Excep	otion Han	dling:								Save	at Power	rdown 🗌
	al Feature											
1) Sup	port of Da	atapoint s	ee Fun	ctional B	lock di	agram.						

3.4.6.23 Output TempRoomSetpCoolEff

DH	Name:	I em	pRooi	<u>mSetp</u>	Coolett			At	obr.:			Manda	itory '		\boxtimes
FE	Name:	RSM	IHD									Can be	e interna	al	
De	escription														
	is output co								g setp	oint	which is v	alid for the	e contro	ller. Ti	his
inf	ormation is	used	for si	mple a	applicati	ons (cooling	only).							
Da	tapoint Typ	ре													
DF	PT_Name:	DP	T_Va	lue_Te	emp										
DF	PT Format:	F ₁₆									DPT_ID:	9.001			
Fie	eld	De	scripti	on							Supp.	Range	Unit	Defa	ault
												full	°C	CS	3
Ac	cess Type														
•	Output														
	this \rightarrow M			1	this \rightarrow 1										
	Spontaneo	us	\boxtimes	COV:		\boxtimes	Delta-	-Value:	0.2	N	MinRepTin	ne:	10 sec		
				Cyclic	С	\boxtimes	Period	d:	15m	in (r	ecommen	ded value))		
	Request														
Co	mmunicati	on T	уре												
*	Group Obj	ect D	Datapo	oint								Mandatory	y: 🛛		
	Default Gro	oup A	ddres	ss: ·											
Dy	/namics														
	Power dow	n:	Save:	:											
	Power up:		Value	: :	No init	ialisa	tion:			efau	ılt value:				
					Saved	value	э:		Α	ctua	ıl value:				
	Transmit on bus:														
Ex	ception Ha	ndlir	ng											•	
	-														
	ecial Featu	res													
1)	Support of D	Datap	oint s	see Fu	nctiona	l Bloc	k diagr	am.							

FB:	RSMHD	LTE S	Server ut Name:	TempRo	omSetpCo	oolEff			Mandatory ⊠ 1) Optional □			
Descr	iption:											
This o	utput cont	ains the	effective (af	ter correcti	ons) coolir	ng setpo	oint wh	ich is v	alid for th	ne contro	ller. This	
inform	ation is us	ed for si	mple applica	ations (coo	ling only).							
DPT:	Name	DPT_Te	mpHVACAb		DPT ID	205.10	00 D	atatype	format	$V_{16}Z_{8}$		
Field			Description			Sup.	Range)	Unit	COV	Default	
Temp	erature		Effective co	oling setp	oint		fu	<u> </u>	°C	0.2	cs	
STAT									Bitset			
- all bi			Not suppor	ted		NA						
Comn	nunicatio	n:						_				
Bind	ding Grou	p:										
Clas			Type					Defa	ult			
	ographica		⊠∣Apartme	nt . Room	. SubZone			1.1.1				
	plication S	pecific [<u> </u>									
	ripheral		Broadca	st 🗌	Configu							
	Address:			IO Type(ID): 100 (RSMHD) Property ID: 56								
	-Services	`			MinRepTin			sec		Heartbeat: 15 min		
Inf	oReport	\boxtimes		er default	communic	ating [dcard allowed 🛚		
			Tx Prio:		High 🗌		N	Iormal		Lov	<i>N</i>	
	TE Read-R		•									
	lling of the		Transm	after Powe	er-up: Store	ed Valu	e 🗀	Act Va	lue 🕅	Default \	/alue □	
	all always	be	Transmi	and i owe	n up. Otore	od Vala	о 🗀	7101 70		Doladie		
	oported)											
	erty-Serv		Read on	ly 🖂		Read	/Write		7			
	ividual ac				•							
Excep	otion Hand	dling:							Save	at Power	rdown	
	al Feature											
'' Sup	port of Da	tapoint s	ee Function	al Block di	iagram.							

3.4.6.24 Output ComfortProlongEff

DF	Name:	Co	mfortProlo	ongE	iff			Abbr	.:			Mand	atory		
FΒ	Name:	RS	MHD									Can b	e interna	al	
De	scription														
Th	is output pro	ovic	des the inf	orma	ation if com	fort pro	long	ation is	activ	e or not.					
Da	tapoint Ty	ре													
	PT_Name:	D	PT_HVAC	CMo	de										
DF	PT Format:	В	1							DPT_II	D:	1.011			
Fie	eld	D	escription							Supp.	Ra	nge	Unit	Defa	ault
		0	= not acti	ve, 1	1 = active						true/	false	bool.	CS	3
Ac	cess Type														
♦	Output														
	$this \to M$		\boxtimes	th	his \rightarrow 1										
	Spontaneo	us	⊠ C	OV:	\boxtimes	Delta	-Val	ue:		MinRep1	Γime:		1)		
			С	yclic		Perio	d:	15	<u>5min</u>	(recomm	ended	d value	9)		
	Request														
Co	mmunicati	ion	Type												
♦	Group Ob	ject	t Datapoin	t							Ma	andato	ry: 🛛		
	Default Gro	oup	Address:												
Dy	namics														
	Power dow	n:	Save:												
	Power up:		Value:		No initialis	ation:			Defa	ault value	:				
					Saved valu	ue:			Actu	ıal value:			\boxtimes		
			Transmi	it on	bus:										
Ex	ception Ha	ınd	ling												
	ecial Featu														
1)	No minimum repetition time recommended, since change of the value may be caused by user interaction on an HMI. HMI users expect immediate feedback.														
	interaction	on	an HMI. F	IMI ı	users expe	ct imme	diate	e feedb	ack.						

FB:	RSMHD	LTE Se	erver	Comfort	ProlongEf	f			Mandatory				
		Output	t Name:							Optiona	al 🛛		
Desc	ription:												
This c	output provide	es the ir	nformation if	comfort p	orolongatio	n is act	ive or	not.					
DPT:	Name D	PT_Sta	te		DPT ID	1.011		Datatype	e format	B ₁			
Field			Description			Sup.	Rang	ge	Unit	COV	Default		
		(0 = not active	e, 1 = act	ive		true	/false	bool.	yes	CS		
Comr	nunication:	-			•					•			
Bine	ding Group:												
Clas	ss		Type					Defa	ult				
	eographical		Apartmen	t . Room	. SubZone			1.1.1					
	plication Spe	ecific [<u></u>									
	ripheral		Broadcas	t 🗌	Configu								
	Address:		IO Type(I		100 (RSM MinRepTin		Pro	operty II	D:	60			
	-Services (e	<u> </u>	COV 🖂		rtbeat:	15 min							
Inf	oReport	\boxtimes		r default	communica	ating [Bir	nding G	roup Wild	lcard allo	wed 🗵		
			Tx Prio:		High 🗌			Normal	\boxtimes	Lov	N _		
po sh	TE Read-Res Iling of the or all always be pported)	utput	Transm a	fter Powe	r-up: Store	ed Valu	е 🗌	Act Va	alue 🏻	Default \	/alue □		
	perty-Servic ividual acce		Read only	/ X		Read	/Write	. [
Exce	otion Handli	ng:							Save	at Power	down		
	ial Features:												
	No minimum repetition time recommended, since change of the value may be caused by user interaction on an HMI. HMI users expect immediate feedback.												

3.4.6.25 TempRoomSetpAbsEff

DP Name:	TempRoomSetp.	AbsEff		Abbr.:		1	Man	idatory					
FB Name:	RSMHD	IHD Can be internal											
Description													
This output pr	ovides the effective	ve absolute te	emperature	e setpoir	nt, as	RSMHD	s result c	of all					
TempRoomSe	etpUserAbs input	s to RSMHD.											
Datapoint Ty													
DPT_Name:	DPT_Value_Te	emp											
DPT Format:	F ₁₆					DPT_I	D: 9.00)1					
Field	Description					Supp.	Range	Unit	Defa	ult			
							full	°C.	cs	i			
Access Type	•												
♦ Output													
this $\rightarrow M$	this \rightarrow M \square this \rightarrow 1 \square												
Spontaneo	us 🛛 COV:		Delta-Value	ue:	N	MinRepT	īme:	1)					
	Cyclic		Period:	15r	nin (r	recomme	ended val	ue)					
Request	\boxtimes												
Communicat	ion Type												
♦ Group Ob	ject Datapoint						Mandat	tory: 🛛					
Default Gro	oup Address: -												
Dynamics													
Power dow	n: Save:												
Power up:	Value:	No initialisat	ion:		Defau	ult value:	1						
		Saved value	e:		Actua	al value:		\boxtimes					
	Transmit on	bus:											
Exception Ha	ındling												
Special Featu	ıres												
	ım repetition time					value ma	ay be cau	sed by use	∍r				
interaction	on an HMI. HMI	users expect	immediate	e feedba	ck.								

FB:	RSMHD	LTE Ser	-	TempRo	N	Mandatory ☐ Optional ⊠						
		Output I	Name:	-						Optiona	al 🔀	
	ription:											
	output provid				perature se	etpoint,	as R	RSMHD's	result of	all		
Temp	RoomSetpU											
DPT:	Name D		HVACAb	s_Z	DPT ID	205.10			e format	$V_{16}Z_{8}$		
Field		Descrip	tion			Sup.	Ran		Unit	COV	Default	
Temp)							Full	°C	yes	CS	
STAT												
- Out	OfService	Functio	n Out of S	ervice		0	tru	e/false	bool.		false	
- all o	ther bits					NA						
Com	munication:						-		-			
Bine	Binding Group:											
Clas	Class Type Default											
Ge	eographical	\square	Apartmer	nt . Room	. SubZone			1.1.1	l 			
Ap	plication Sp	ecific 🔲										
Pe	eripheral		Broadcas	st 🗌	Configu	rable 🗌						
DP.	Address:		IO Type(I	D):	100 (RSM	1HD)		roperty I	D:	59		
LTE	-Services (e	event):	COV 🛚		MinRepTin			1) sec	Hear	rtbeat:	15 min	
Inf	oReport	\boxtimes	Output pe	er default	communic	ating [] B	inding G	roup Wild	lcard allo	wed 🛚	
			Tx Prio:		High 🗌			Normal		Lov	w 🗌	
	TE Read-Re											
	lling of the o		Transm a	fter Powe	er-up: Store	ad Valu	<u> </u>	Δct \/:	alue 🏻	Default \	ا مباد/	
	all always be	•	TTAITSITT A	iitoi i owo	i up. Otorc	a valu	- Ш	ACC VC		Delault	aluc 🗀	
	pported)											
	perty-Service		Read only	v 🖂		Read	/Writ	e [
•	ividual acce										. —	
Exce	ption Handli	ing:							Save	at Power	rdown	
4.	ial Features											
	No minimum repetition time recommended, since change of the value may be caused by user											
in	teraction on	an HMI. F	IMI users (expect im	mediate fe	edback						

3.4.6.26 TempRoomSetpUserOffsetEff

DP Name:	Te	empRoor	nSetpl	<u> UserOffsetE</u>	ff	Abbr.:				Λ	Mandatory		
FB Name:	RS	SMHD								C	Can be	e interna	al L
Description													
This output p						re setp	oint, a	s R	SMHD's	s result	t of all		
TempRoomS	_		inputs	s to RSMHD).								
Datapoint T													
DPT_Name:		OPT_Val	lue_Te	empd									
DPT Format		16							DPT_I		0.001		
Field		Descripti	on						Supp.	Ran	ge	Unit	Default
										ful		K	CS
Access Typ	е												
♦ Output													
$\text{this} \to M$		\boxtimes		his \rightarrow 1									
Spontane	eous	\boxtimes	COV:		Delta-V	alue:			1inRepT			¹⁾	
			Cyclic		Period:		15mir	n (re	ecomme	ended	value))	
Request													
Communica	ation	Type											
♦ Group C)bjec	t Datapo	oint							Man	dator	y: 🛛	
Default G	roup	Addres	ss: -										
Dynamics													
Power do	wn:	Save:											
Power up):	Value	:	No initialisa	ation:		De	fau	It value:				
				Saved valu	ie:		Ac	tual	l value:			\boxtimes	
			mit on	bus:		\boxtimes							
Exception F	land	lling											
Special Fea													
	No minimum repetition time recommended, since change of the value may be caused by user												
interaction	n or	n an HMI	I. HMI	users expec	t immedia	ate fee	dback						

FB:	RSMHD	LTE Ser		TempRo	omSetpUs		Mandatory				
		Output I	Name:							Optiona	
	ription:										
	output provid				erature set	point, a	s RSN	IHD's r	esult of a	all	
Temp	RoomSetpU	serAbs in	puts to RS	MHD.							
DPT:	Name D	PT_Temp	HVACRe	_Z	DPT ID	205.10			format	$V_{16}Z_{8}$	
Field		Descrip	tion			Sup.	Range	9	Unit	COV	Default
	erature								K	yes	cs
STAT											
	OfService	Functio	n Out of S	ervice		0	true/	false	bool.		false
- all o	- all other bits NA										
Comr	munication:										
	Binding Group:										
Clas	Class Type Default										
	eographical	<u>\</u>	Apartmer	t . Room	. SubZone			1.1.1			
	plication Sp	ecific 🔲		<u></u>		<u></u>					
	eripheral		Broadcas		Configu						
	Address:		IO Type(I		100 (RSN			perty IE		58	
	-Services (e		COV 🛚		MinRepTin		1)	sec		rtbeat:	15 <u>min</u>
Inf	oReport	\boxtimes		er default	communica commun	ating [dcard allo	wed 🗵
			Tx Prio:		High 🗌		١	lormal	\boxtimes	Lov	v 🗌
	TE Read-Re										
	lling of the o		Transm a	fter Powe	er-up: Store	ed Value	e 🗀	Act Va	lue 🖂	Default \	/alue □
	all always be)					_				
	pported)										
	perty-Servic		Read only	y 🛛		Read	Write				
	ividual acce								To	- 1 D	
Exce	ption Handli	ing:							Save	at Power	down
	ial Features		•								
	o minimum re							ie may	be caus	ed by use	er
ını	teraction on	<u>an HIVII</u> . F	iivii users (expect imi	mediate fe	eaback					

3.4.6.27 Parameter Apartment_x

FB:	RSMHD	Prop	er	ty Name (<u>Server</u>):	Apartme	ent_x			Mandator Optiona		
Desci	ription:	<u>!</u>			-						
Numb	er of the a	partmen	t z	one. (controller itself	f)						
DPT:	Name	DPT_U	СО	untValue8_Z	DPT ID	202.002	2 Data	type format	U_8Z_8		
Field				Description			Sup.	Range	Unit	Default	
Zone			١	Number of the Apartn	nent		-	(0) 1126		1	
STAT	US		Ī						Bitset		
- Outo	ofService		z	one active / inactive			0	true/false	Bit 0	false	
- all o	ther bits		Jn	ot supported, fixed to	o '0'		NA			false	
COMMAND								enum		CS	
	nalWrite						М	0			
- SetC	OSV & Res	etOSV	S	Set zone inactive / ac	tive		0	3 / 4			
- all of	ther comm	ands	n	ot supported			NA				
Comr	nunicatio	n:				-	•		-		
DP A	Address:			IO Type(ID):	100 (RSM	(HD)	Proper	ty ID:	101		
(in t	he server)		Start-Index:	1		N° of e	lements	1		
Pro	perty acce	ess:		Read only		Read/W	/rite	\boxtimes			
Prot	ection			Read level	-		Write le	evel	-		
Exce	otion Han	dling:	٧	/alue after Power-up	: Stored	Value 🛚	Act Va	lue 🔲 Def	ault Value		
Speci	al Feature	es:									
Zone	of the con	troller its	elf								
Zone	= 0 (wildca	ard): Ser	ds	s to all listeners							
The d	e device is not LTE communicating in this zone if zone is 'OutOfService'.										
If Apa	partment x is 'OutOfService' Room y and SubZone z automatically are 'OutOfService' too.										

3.4.6.28 Parameter Room_y

FB:	RSMHD	P	rope	erty Name (<u>Server</u>):	Room_y	/			Mandator Optiona	· =
Descr	iption:				_					
Numb	er of the	room	zone	e. (controller itself)						
DPT:	Name	DP	T_Uc	countValue8_Z	DPT ID	202.002	2 Data	type format	U_8Z_8	
Field				Description				Range	Unit	Default
Zone				Number of the Room				(0) 163		1
STAT	US								Bitset	
- Outo	fService			zone active / inactive			0	true/false	Bit 0	false
- all ot	her bits			not supported, fixed to	o '0'		NA			false
	COMMAND							enum		cs
- Norn	nalWrite						М	0		
- SetC	SV & Re	setO	SV	Set zone inactive / ac	tive		0	3 / 4		
- all ot	her comr	nand	S	not supported			NA			
Comn	nunicatio	n:								
DP /	Address:			IO Type(ID):	100 (RSN	ИHD)	Proper	ty ID:	102	
(in t	he serve	r)		Start-Index:	1		N° of e	lements	1	
Prop	perty acc	ess:		Read only		Read/W	/rite	\boxtimes		
Prot	ection			Read level	-		Write le	evel	-	
Excep	tion Ha	ndling	g:	Value after Power-up	: Stored	Value 🖂	Act Va	lue 🗌 Def	ault Value	
Speci	al Featu	es:								
Zone	of the co	ntrolle	er itse	elf.						
Zone	= 0 (wilda	ard):	Send	ds to all listeners						
The d	e device is not LTE communicating in this zone if zone is 'OutOfService'.									
'OutO	fService'	is tak	en ov	ver from Apartment_x.						

3.4.6.29 Parameter SubZone_z

FB:	RSMHD	Pro	perty Name (<u>Server</u>): SubZone_z							Mandator Optiona	
Desci	ription:				_					Орионе	<u>" </u>
	•	SubZon) . (controller itself)							
DPT:	Name	DPT_I	Jcc	ountValue8_Z	DPT ID	202.002	2	Data	type format	U_8Z_8	
Field			[Description			S	up.	Range	Unit	Default
Zone			1	Number of the SubZo	ne				(0) 115		1
STAT	US]		Bitset	
- Outo	ofService		2	zone active / inactive				0	true/false	Bit 0	false
- all o	ther bits		l	not supported, fixed to	o '0'			NΑ			false
COMI	MAND							enum		CS	
- Norr	nalWrite							M	0		
- SetC	OSV & Re	setOSV	3	Set zone inactive / ac			0	3/4			
- all of	ther comr	nands	r	not supported			١	NA			
Comr	nunicatio	n:	_			_		-		_	
DP A	Address:			IO Type(ID):	100 (RSN	1HD)	Pı	roper	ty ID:	103	
(in t	he serve	r)		Start-Index:	1		N'	° of e	lements	1	
Pro	perty acc	ess:		Read only		Read/W	/rite)	\boxtimes		
Prot	ection			Read level	-		W	/rite le	evel	-	
Exce	otion Har	dling:	١	Value after Power-up	: Stored	Value 🛚	Α	ct Va	lue 🔲 Def	ault Value	
Speci	al Featur	es:									
Zone	of the cor	troller it	sel	f.							
Zone	= 0 (wildo	ard): Se	nd	s to all listeners							
The d	e device is not LTE communicating in this zone if zone is 'OutOfService'.										
'OutO	fService'	s taken	ΟV	er from Apartment_x.							

3.4.6.30 Parameter Apartment_u

FB:	RSMHD	Prope	erty Name (<u>Server</u>): Apartment_u							Mandator Optiona	<i>'</i> =
Descr	iption:				_					Op. 101.10	·· <u> </u>
		partment	t z	one. (schedule)							
DPT:	Name			untValue8_Z	DPT ID	202.002	2	Data	type format	U ₈ Z ₈	
Field			D	escription		-1			Range	Unit	Default
Zone			Ν	umber of the Apartn	nent				(0) 1126		1
STATI	JS									Bitset	
- Outo	fService		Z	one active / inactive			()	true/false	Bit 0	false
- all ot	her bits		n	ot supported, fixed to	o '0'		N	ΙA			false
COMMAND									enum		CS
- Norm	nalWrite		Sat zana inactiva / activa					Λ	0		
- SetO	SV & Res	etOSV	Set zone inactive / active)	3/4		
- all ot	her comm	ands	not supported					IA			
Comm	nunicatio	n:				•		-		•	
DP A	Address:			IO Type(ID):	100 (RSN	RSMHD) Propert			y ID:	104	
(in th	ne server)		Start-Index:	1		N°	of el	lements	1	
Prop	erty acce	ess:		Read only		Read/W	rite/		\boxtimes		
Prot	ection			Read level	-		W	rite le	evel	-	
Excep	tion Han	dling:	٧	alue after Power-up	: Stored	Value 🛚	Ac	t Val	ue 🗌 Def	ault Value	
Specia	al Feature	es:									
Zone f	or the sch	edule.									
				to all listeners							
The device is not LTE communicating in this zone if zone is 'OutOfService'. If Apartment, u is 'OutOfService' Room, v and SubZone, w automatically are 'OutOfService' too.											

3.4.6.31 Parameter Room_v

FB:	RSMHD	Prope	erty Name (<u>Server</u>):	Room_v			Mandator Optiona				
Desc	ription:	-		_							
Numb	er of the roo	m zone	e. (schedule)								
DPT:	Name [DPT_U	countValue8_Z	DPT ID 202.002	2 Data	type format	U_8Z_8				
Field			Description		Sup.	Range	Unit	Default			
Zone			Number of the Room			(0) 163		1			
STAT	US						Bitset				
	ofService		zone active / inactive		0	true/false	Bit 0	false			
- all o	ther bits		not supported, fixed to	0 '0'	NA			false			
	MAND					enum		CS			
	nalWrite				M	0					
- SetC	OSV & Rese	tOSV	Set zone inactive / ac								
- all o	ther comma	nds	not supported		NA						
Comr	nunication:										
DP	Address:		IO Type(ID):	100 (RSMHD)	Propert		105				
(in t	he server)		Start-Index:	1	N° of el	ements	1				
	perty acces	s:	Read only	Read/W	√rite	\boxtimes					
Prof	tection		Read level	-	Write le	evel	-				
Exce	otion Handl	ing:	Value after Power-up	: Stored Value 🛚	Act Val	ue 🗌 Def	ault Value	: 🗌			
Speci	ial Features	: :									
Zone	for the sche	dule.									
Zone	= 0 (wildcare	d): Sen	ds to all listeners								
	e device is not LTE communicating in this zone if zone is 'OutOfService'.										
'OutO	fService' is t	taken o	ver from Apartment_u.	i							

3.4.6.32 Parameter SubZone_w

FB:	RSMHD	I	Prope	erty Name (<u>Server</u>):	SubZon	e_w			Mandator Optiona	· =
Descr	iption:	-			-					
Numb	er of the	Subz	Zone.	(schedule)						
DPT:	Name	DP	T_Uc	countValue8_Z	DPT ID	202.002	Data	type format	U_8Z_8	
Field				Description			Sup.	Range	Unit	Default
Zone				Number of the SubZo	ne			(0) 115		1
STATUS									Bitset	
- Outo	fService			zone active / inactive			0	true/false	Bit 0	false
- all ot	her bits			not supported, fixed to	o '0'		NA			false
COM	MAND							enum		CS
- Norn	nalWrite						M	0		
- SetC	SV & Re	setO	SV	Set zone inactive / active			0	3 / 4		
- all ot	her comr	nanc	ls	not supported			NA			
Comn	nunicatio	n:								
DP /	Address:			,	100 (RSN	ИHD)	Proper		106	
(in t	he serve	r)		Start-Index:	1			lements	1	
Prop	perty acc	ess:	1	Read only		Read/W	rite	\boxtimes		
Prot	ection			Read level	-		Write le	evel	-	
Excep	otion Har	ndlin	g:	Value after Power-up:	Stored	Value 🛛	Act Va	lue 🗌 Def	ault Value	: 🔲
Speci	al Featui	es:								
Zone	for the sc	hedu	ıle.							
				ds to all listeners						
				mmunicating in this zo		is 'OutO	fService	' .		
'OutO	OutOfService' is taken over from Apartment_u.									

3.4.6.33 Parameter Apartment_m

FB:	RSMHD	Prop	er	ty Name (<u>Server</u>):	Apartment_m				Mandatory ☐ Optional ⊠		
Desci	ription:				-				Optiona	al 🔼	
		nartmen	· 7	one. (energy manag	lement)						
DPT:				untValue8_Z	DPT ID	202.002	Data	atype format	U ₈ Z ₈		
Field	INAITIC	101 1_0	_	Description	טו וטן	202.002	Sup.	Range	Unit	Default	
Zone			_	Sumber of the Apartn	nent		Oup.	(0) 1126	OTIIC	1	
STATUS			idinibol of the / ipartit				1.107	Bitset			
	fService		7	one active / inactive			0	true/false	Bit 0	false	
	ther bits			ot supported, fixed to			NA	1. 0.07.10.100		false	
	MAND		j					enum		CS	
- Norr	nalWrite						М	0			
- SetC	SV & Res	etOSV	S	Set zone inactive / ac	tive		0	3/4			
- all of	ther comm	ands	n	ot supported			NA				
Comr	nunicatio	n:						<u>-</u>	_	-	
DP A	Address:			IO Type(ID):	100 (RSN	ЛHD)	Prope	ty ID:	107		
(in t	he server)		Start-Index:	1		N° of e	elements	1		
Pro	perty acce	ess:		Read only		Read/W	/rite	\boxtimes			
Prot	ection			Read level	-		Write I	evel	-		
Exce	otion Han	dling:	٧	/alue after Power-up	: Stored	Value 🛚	Act Va	lue 🔲 🛮 Def	ault Value	: 🗌	
Speci	al Feature	es:									
	for 'energy										
				s to all listeners							
	The device is not LTE communicating in the										
If Apa	f Apartment_m is 'OutOfService' Room_n and SubZone_o auto					o automa	atically a	are 'OutOfSer	vice' too.		

3.4.6.34 Parameter Room_n

FB:	RSMHD	Prop	erty Name (<u>Server</u>):	Room_n				Mandatory ☐ Optional ⊠	
Doco	ription:			-			<u> </u>	Ориона	ai 🔼
	•	20m 70n	a (anaray managamar	n+\					
			e. (energy managemer			15.		I 	
DPT:	Name	ש_ואם	countValue8_Z	DPT ID 20	02.002		type format	U ₈ Z ₈	
Field			Description			Sup.	Range	Unit	Default
Zone			Number of the Room				(0) 163]	1
STAT	US							Bitset	
- Outo	fService		zone active / inactive			0	true/false	Bit 0	false
- all of	ther bits		not supported, fixed to	o '0'		NA			false
COM	MAND						enum		CS
- Norr	nalWrite					M	0		
- SetC	SV & Res	etOSV	Set zone inactive / ac	tive		0	3 / 4		
- all of	ther comm	ands	not supported			NA			
Comr	nunicatio	า:	<u>-</u>		-			-	
DP /	Address:		IO Type(ID):	100 (RSMHD))	Proper	ty ID:	108	
(in t	he server)		Start-Index:	1		N° of e	lements	1	
Pro	perty acce	ess:	Read only	Re	ead/Wi	rite	\boxtimes		
Prot	ection		Read level	-		Write le	evel	-	
Excep	otion Hand	dling:	Value after Power-up	: Stored Val	lue 🖂	Act Va	lue 🔲 Def	ault Value	: 🔲
			·						
Speci	al Feature	es:							
Zone	for 'energy	manage	ement'.						
Zone	= 0 (wildca	ırd): Sen	ds to all listeners						
	The device is not LTE communicating in this zone if zone				'OutOf	Service	' .		
	utOfService' is taken over from Apartment_m.								

3.4.6.35 Parameter SubZone_o

FB:	RSMHD	Prop	ert	y Name (<u>Server</u>):	SubZone_o					Mandator Optiona	
Desci	ription:	<u> </u>			_				<u>.</u>		
Numb	er of the S	SubZone.	(e	energy management)						
DPT:	Name	DPT_U	COI	untValue8_Z	DPT ID	202.002	2	Data	type format	U_8Z_8	
Field			D	escription			S	лр.	Range	Unit	Default
Zone			N	lumber of the SubZo	ne]	(0) 115		1
STATUS									Bitset		
	ofService		_	one active / inactive				O	true/false	Bit 0	false
	ther bits		n	ot supported, fixed to	o '0'			IA			false
	MAND								enum		CS
- Norr	nalWrite						I	M	0		
- SetC	SV & Res	setOSV	Set zone inactive / active			(C	3/4			
- all of	ther comm	ands	n	ot supported			N	IA			
Comr	nunicatio	n:				_		_			
DP A	Address:			IO Type(ID):	100 (RSM	1HD)			ty ID:	109	
(in t	he server)		Start-Index:	1		N	of el	lements	1	
Pro	perty acce	ess:		Read only		Read/W	rite/		\boxtimes		
Prot	ection			Read level	-		W	rite le	evel	-	
Exce	otion Han	dling:	٧	alue after Power-up	: Stored	Value 🛚	A	ct Val	ue 🗌 Def	fault Value	
Speci	al Feature	es:									
Zone	for 'energy	/ manage	m	ent'.							
Zone	Zone = 0 (wildcard): Sends to all listeners										
The d	The device is not LTE communicati			municating in this zo	ne if zone	is 'OutO	fSe	rvice'			
'OutO	fService' is	s taken o	ve	r from Apartment m	1						

3.4.6.36 Parameter TempRoomSetpHeatBuildProt

FB:	RSMHD	Prop	erty Name (<u>Server</u>):): TempRoomSetpHeat BuildProt				Mandatory ⊠ Optional □		
Desc	ription:			-			-			
Heatii	ng setpoint	for build	ling protection.							
DPT:	Name	DPT_Te	empHVACAbs_Z	DPT ID	205.100	Data	atype format	$V_{16}Z_{8}$		
Field			Description			Sup.	Range	Unit	Default	
Temperature							full	°C	12	
STAT	STATUS									
- all b	its		not supported, fixed	to '0'		NA			false	
COM	MAND									
- Norr	malWrite					M	0			
	ther comma		not supported			NA				
Com	nunication	:								
DP .	Address:		IO Type(ID):	100 (RSM	HD)	Proper		111		
(in t	he server)		Start-Index:	1		N° of e	lements	1		
Pro	perty acce	ss:	Read only		Read/W	/rite	\boxtimes			
Pro	tection		Read level	-		Write I	evel	-		
Exception Handling: Value after Power-up: Stored Value				Value 🛚	Act Va	lue 🗌 De	fault Value			
							·	<u>'</u>		
Spec	ial Feature	s:								
						•				

3.4.6.37 Parameter TempRoomSetpHeatEconomy

FB:	RSMHD	Prop	perty Name (<u>Server</u>): TempRoomSetpHeat					Mandatory 🗵		
				Econom	у			Option	al 🗌	
Desci	ription:	•		-			•			
Heatir	ng setpoint	for ecor	nomy.							
DPT:	Name	DPT_Te	empHVACAbs_Z	DPT ID	205.100	Data	atype format	$V_{16}Z_{8}$		
Field			Description			Sup.	Range	Unit	Default	
Temp	erature						full	°C	15	
STAT	US									
- all b	its		not supported, fixed to	o '0'		NA			false	
COMI	MAND									
- Norr	nalWrite					M	0			
- all of	ther comma	ands	not supported			NA				
Comr	nunicatior	า :								
DP A	Address:		IO Type(ID):	100 (RSM	HD)	Proper	ty ID:	112		
(in t	he server)		Start-Index:	1		N° of e	elements	1		
Pro	perty acce	ss:	Read only		Read/W	rite/	\boxtimes			
Prot	ection		Read level	-		Write I	evel	-		
Exce	otion Hand	lling:	Value after Power-up	: Stored \	√alue 🛚	Act Va	llue 🗌 Def	ault Value		
Speci	pecial Features:									
	-									

${\bf 3.4.6.38\ Parameter\ TempRoomSetpHeatStandby}$

FB:	RSMHD	Prope	erty Name (<u>Server</u>): TempRoomSetpHeat Standby					Mandatory ⊠ Optional □	
Desci	ription:	<u> </u>		<u>-</u>			-		
Heatir	ng setpoint	for stan	dby.						
DPT:	Name	DPT_Te	empHVACAbs_Z	DPT ID	205.100	Data	type format	$V_{16}Z_{8}$	
Field			Description			Sup.	Range	Unit	Default
Temperature							full	°C	19
STATUS									
- all bits not supported, fixed to '0'				NA			false		
COM	MAND								
- Norr	nalWrite					М	0		
- all of	ther comma	ands	not supported			NA			
Comr	nunication	:							
DP /	Address:		IO Type(ID):	100 (RSM	1HD)	Proper		113	
(in t	he server)		Start-Index:	1		N° of e	lements	1	
Pro	perty acces	ss:	Read only		Read/W	/rite	\boxtimes		
Prot	ection		Read level	-		Write le	evel	-	
Excep	otion Hand	lling:	Value after Power-u	p: Stored	Value 🛚	Act Va	lue 🔲 Def	ault Value	<u> </u>
Speci	al Feature	s:							
	•								•

3.4.6.39 Parameter TempRoomSetpHeatComfort

FB:	RSMHD	Prop	erty Name (<u>Server</u>):		Mandatory 🔀				
				Comfort				Optiona	al 🗌
Desci	ription:	-		-			9		
Heatir	ng setpoint	for com	fort.						
DPT:	Name	DPT_Te	empHVACAbs_Z	DPT ID	205.100	Data	atype format	$V_{16}Z_{8}$	
Field			Description			Sup.	Range	Unit	Default
Temp	erature						full	°C	21
STAT	US								
- all b	its		not supported, fixed t	o '0'		NA			false
COMI	MAND								
- Norr	nalWrite					M	0		
- all o	ther comma	ands	not supported			NA			
Comr	nunicatior								
DP A	Address:		IO Type(ID):	100 (RSM	HD)	Proper	•	114	
(in t	he server)		Start-Index:	1		N° of e	lements	1	
Pro	perty acce	ss:	Read only		Read/W	rite/	\boxtimes		
Prot	ection		Read level	-		Write le	evel	-	
Exce	otion Hand	lling:	Value after Power-up	: Stored \	√alue 🛚	Act Va	lue 🗌 Def	ault Value	, 🗌
Speci	pecial Features:								
	-					•			

3.4.6.40 Parameter TempRoomSetpCoolComfort

FB:	RSMHD	Prope	erty Name (<u>Server</u>):		Mandatory ⊠ Optional □				
Desci	ription:	<u> </u>		-			<u> </u>	<u> </u>	
Coolir	ng setpoint f	or comf	ort.						
DPT:	Name [PT_Te	mpHVACAbs_Z	DPT ID	205.100	Data	type format	$V_{16}Z_{8}$	
Field	<u> </u>		Description			Sup.	Range	Unit	Default
Temp	erature						full	°C	24
STAT	US								
- all bits not supported, fixed to '0'				NA			false		
COMI	MAND								
	malWrite					M	0		
- all o	ther comma	nds	not supported			NA			
Comr	nunication:								
DP A	Address:		IO Type(ID):	100 (RSM	IHD)	Propert	y ID:	115	
(in t	he server)		Start-Index:	1		N° of e	lements	1	
Pro	perty acces	s:	Read only		Read/W	rite	\boxtimes		
Prot	tection		Read level	-		Write le	evel	-	
Exce	otion Handl	ing:	Value after Power-up	: Stored	Value 🛚	Act Val	ue 🔲 Def	ault Value	
Speci	Special Features:								

3.4.6.41 Parameter TempRoomSetpCoolStandby

FB:	RSMHD	Prop	perty Name (<u>Server</u>): TempRoomSetpCool				Mandatory 🔀		
				Standby				Optiona	al 🗌
Desci	ription:	÷		-			9		
Coolir	ng setpoint	for stand	dby.						
DPT:	Name	DPT_Te	empHVACAbs_Z	DPT ID	205.100	Data	atype format	$V_{16}Z_{8}$	
Field			Description			Sup.	Range	Unit	Default
Temp	erature						full	°C	28
STAT	US								
- all b	its		not supported, fixed t	o '0'		NA			false
COMI	MAND								
- Norr	nalWrite					M	0		
- all of	ther comma	ands	not supported			NA			
Comr	nunication):							
DP A	Address:		IO Type(ID):	100 (RSM	HD)	Proper	ty ID:	116	
(in t	he server)		Start-Index:	1		N° of e	lements	1	
Pro	perty acce	ss:	Read only		Read/W	rite	\boxtimes		
Prot	ection		Read level	-		Write le	evel	-	
Exce	otion Hand	lling:	Value after Power-up	: Stored \	√alue 🛚	Act Va	lue 🗌 Def	ault Value	
Speci	pecial Features:								
	-								

3.4.6.42 Parameter TempRoomSetpCoolEconomy

FB:	RSMHD	Prope	erty Name (<u>Server</u>): TempRoomSetpCool					Mandator	у 🛛
				Econom	ıy			Optiona	al 🗌
Desci	ription:	-		-			-		
Coolir	ng setpoint f	or econ	omy.						
DPT:	Name [DPT_Te	empHVACAbs_Z	DPT ID	205.100	Data	type format	$V_{16}Z_{8}$	
Field			Description			Sup.	Range	Unit	Default
Temp	erature						full	°C	35
STAT	US								
- all bits not supported, fixed to '0'				NA			false		
COMI	MAND								
	malWrite					M	0		
- all of	ther comma	nds	not supported			NA			
Comr	nunication:								
DP A	Address:		IO Type(ID):	100 (RSM	IHD)	Propert	y ID:	117	
(in t	he server)		Start-Index:	1		N° of el	ements	1	
Pro	perty acces	s:	Read only		Read/W	'rite	\boxtimes		
Prot	tection		Read level	-		Write le	evel	-	
Exce	otion Handl	ing:	Value after Power-up	: Stored	Value 🛚	Act Val	ue 🔲 Def	ault Value	
Speci	Special Features:							·	

3.4.6.43 Parameter TempRoomSetpCoolBuildProt

FB:	RSMHD	Prope	erty Name (<u>Server</u>): TempRoomSetpC					Mandator	andatory 🛛	
				BuildPro	t			Optiona	al 🗌	
Desci	ription:	-					-			
Coolir	ng setpoint	for build	ing protection.							
DPT:	Name	DPT_Te	mpHVACAbs_Z	DPT ID	205.100	Data	type format	$V_{16}Z_{8}$		
Field			Description			Sup.	Range	Unit	Default	
Temp	erature						full	°C	40	
STAT	US									
- all b	its		not supported, fixed to	o '0'		NA			false	
COMI	MAND									
- Norr	nalWrite					М	0			
- all o	ther comma	ands	not supported			NA				
Comr	nunication	:								
DP A	Address:		IO Type(ID):	100 (RSM	HD)	Proper	•	118		
(in t	he server)		Start-Index:	1		N° of e	lements	1		
Pro	perty acces	ss:	Read only		Read/W	rite /	\boxtimes			
Prot	tection		Read level	-		Write le	evel	-		
Exce	otion Hand	lling:	Value after Power-up	: Stored \	√alue 🛚	Act Va	lue 🔲 Def	ault Value	<u> </u>	
Speci	pecial Features:									
	-					•			•	

3.4.6.44 Parameter TimeComfort

FB:	RSMHD	Proper	rty Name (<u>Server</u>):	TimeCo	omfort			Mandator Optiona	
	iption:			•			-		
Time of	duration for	manual	comfort.						
DPT:	Name [OPT_Tim	nePeriodMin	DPT ID	7.006	Data	atype format	U ₁₆	
Field			Description		•	Sup.	Range	Unit	Default
Time							full	min	0
Comn	nunication					3	-	-	3
DP A	Address:		IO Type(ID):	100 (RSN	ИHD)	Proper	ty ID:	119	
(in t	he server)		Start-Index:	1		N° of e	elements	1	
Prop	perty acces	s:	Read only		Read/W	/rite	\boxtimes		
Prot	ection		Read level	-		Write I	evel	-	
Excep	tion Hand	ling: `	Value after Power-up	: Stored	Value 🛚	Act Va	lue 🗌 Def	ault Value	
Speci	al Features	s:		_	-	-			-
					-				

3.4.6.45 Parameter DisableEnableComfort

FB:	RSMHD	Prope	erty Name (<u>Server</u>):	Disable	DisableEnableComfort			Mandatory ☐ Optional ⊠	
Desc	Description:								
This p	oarameter c	an disab	le the input EnableC	omfort. This	means	that loca	al comfort alw	ays is pos	sible.
DPT:	Name	DPT_En	able	DPT ID	1.003	Data	type format	B ₁	
Field			Description			Sup.	Range	Unit	Default
							bool		1
Comr	<u>munication</u>):							
DP A	Address:		IO Type(ID):	100 (RSM	HD)	Proper	ty ID:	120	
(in t	he server)		Start-Index:	1		N° of e	lements	1	
Pro	perty acce	ss:	Read only		Read/W	/rite	\boxtimes		
Prof	tection		Read level	-		Write le	evel	-	
Exce	ption Hand	lling:	Value after Power-up	o: Stored	Value 🛚	Act Va	lue 🔲 Def	ault Value	
Speci	ial Feature	s:		_	-				-
						•			

3.4.6.46 Parameter LimitLowerTempRoomSetp

FB:	RSMHD	Prop	perty Name (<u>Server</u>): LimitLower				Mandatory 🗌		
			TempRoomSetp					Optiona	al 🛛
Desci	ription:	•		-			•		
Lowe	r limit for in	ternally	calculated setpoint.						
DPT:	Name	DPT_Te	empHVACAbs_Z	DPT ID	205.100	Data	type format	$V_{16}Z_{8}$	
Field			Description			Sup.	Range	Unit	Default
Temp	erature						full	°C	12
STAT	US								
- all b	its		not supported, fixed t	o '0'		NA			false
COMI	MAND								
- Norr	nalWrite					M	0		
- all of	ther comma	ands	not supported			NA			
Comr	nunicatior								
DP A	Address:		IO Type(ID):	100 (RSM	HD)	Proper	ty ID:	121	
(in t	he server)		Start-Index:	1		N° of e	lements	1	
Pro	perty acce	ss:	Read only		Read/W	'rite	\boxtimes		
Prot	ection		Read level	-		Write le	evel	-	
Exce	otion Hand	lling:	Value after Power-up	: Stored \	√alue 🛚	Act Va	lue 🗌 Def	ault Value	
									·
Speci	al Feature	s:							

${\bf 3.4.6.47\ Parameter\ Limit Upper Temp Room Setp}$

FB:	RSMHD	Prope	erty Name (Server):	LimitUp	per			Mandator	
			TempRoomSetp				Option	al 🛛	
Desc	ription:	•		-			•		
Uppe	r limit for inte	ernally o	calculated setpoint.						
DPT:	Name [DPT_Te	mpHVACAbs_Z	DPT ID	205.100	Data	atype format	$V_{16}Z_{8}$	
Field			Description			Sup.	Range	Unit	Default
Temp	erature						full	°C	12
STAT	US								
- all b	its		not supported, fixed t	to '0'		NA			false
	MAND								
1	nalWrite					M	0		
	ther comma		not supported			NA			
Comr	munication:								
	Address:		IO Type(ID):	100 (RSM	1HD)	Property ID:		122	
(in t	he server)		Start-Index:	1			lements	1	
Pro	perty acces	s:	Read only		Read/W	/rite	\boxtimes		
Protection Read level -				Write I	evel	-			
Exce	Exception Handling: Value after Power-up: Stored Value ☐ Act Value ☐ Default Value ☐								
Speci	Special Features:								
									·

3.5 Room Setpoint Manager Temperature Driven (RSMTD)

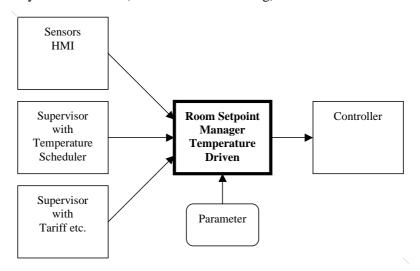
See also Room Setpoint Manager HVAC-Mode Driven 3.4

3.5.1 Aims and objectives

The Functional Block 'Room Setpoint Manager Temperature Driven' provides the HVAC controller with the necessary temperature setpoints. Depending on the realisation there is a present setpoint and a next setpoint with it's delay.

This Functional Block is limited to heating only or cooling only operation. This means that only the corresponding outputs and parameters will be used.

The effective setpoints are built from the present and the next setpoint, delivered from a supervisor and the influences given by external shifts (tariff and load shedding) and the local HMI.



3.5.2 Functional specifications

Inputs

inputs	
• TempRoomSetpAbs	Actual/present temperature setpoint being provided by a "supervisor" or a HMI.
• TempRoomSetpAbsNext	Next temperature setpoint and the delay to it being provided by a "supervisor".
• TempRoomSetpTariffShift	This input allows to shift the setpoint according to the demands of a tariff information.
• TempRoomSetpLoadShedShift	This input allows to shift the setpoint according to the demands of load shedding.
• WindowStatus	Information that can be used to change the setpoint in case of an open window (e.g. building protection).
• PresenceStatus	Information from a presence detector or switch about the occupation of the room which can be used to change the setpoint.

• ComfortProlongUser The following example may be realised:

If the RSMTD is working with the input

'TempRoomSetpAbs' the trigger changes it for the defined time to the input 'TempRoomSetpUserAbs'. Another trigger before the elapse of the time changes

the operation back to 'TempRoomSetpAbs'.

When the time is elapsed, the operation goes back to

the value of 'TempRoomSetpAbs'.

• EnableTempRoomSetpAlt Information from a HMI or a 'clock'. The effective

setpoint changes to the parameter value

'TempRoomSetpHeatAltAbs' or 'TempRoomSetpCoolAltAbs'

• TempRoomSetpUserAbs Actual/present temperature setpoint being provided

by the user. This value has higher priority than

'TempRoomSetpAbs'.

together with 'TempRoomSetpUserAbs'.

Possible behaviour of setpoints:

(only **examples** - to be defined by the manufacturer)

A: Normal setpoint is provided by a supervisor (TempRoomSetpAbs)

Active setpoint values		Temp Room Setp Abs	Temp Room Setp User Offset	Temp Room Setp User Abs	Temp Room Setp He/Co BuildProt	Temp Room Setp He/Co Alt Abs	Temp Room Setp Alt Offset
Inputs							
X = active	Prio						
None	1	X					
Window Status	2				X		
Presence Status	3	X	X				
Comfort Prolong User	4			X			
Enable	5					X	
TempRoom SetpAlt		X					X

B: Normal setpoint is provided by the user (TempRoomSetpUserAbs)

Active setpoint values	Temp Room Setp Abs	Temp Room Setp User	Temp Room Setp User	Temp Room Setp He/Co	Temp Room Setp He/Co	Temp Room Setp Alt
		Offset	Abs	BuildProt	Alt	Offset
					Abs	

Inputs X = active	Prio	not used	not allowed				
None	1			X			
Window Status	2				X		
Presence Status	3			X			
Comfort Prolong User	4			X			
Enable	5					X	
TempRoom SetpAlt				X			X

Outputs

• TempRoomSetpHeatEff The effective actual temperature setpoint for heating.

• TempRoomSetpHeatEffNext The next temperature setpoint for heating plus

the time to it.

• TempRoomSetpCoolEff The effective actual temperature setpoint for cooling.

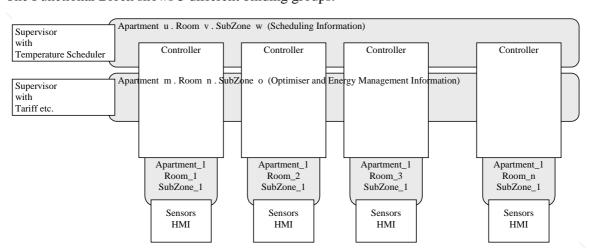
• TempRoomSetpCoolEffNext The next temperature setpoint for cooling plus

the time to it.

• StatusTempRoomSetpEff Information about valid setpoint.

Binding Groups (LTE)

The Functional Block shows 3 different binding groups.



• Binding group x.y.z

This binding group corresponds with the room / zone to which the Functional Block effectively belongs.

Binding group u.v.w

This binding group is used to get the 'programme information' from the supervisor. This information is bound to a specific room / zone from where the other zones get the information.

Example:

There are four rooms / zones with the same 'programme':

3.1.1 3.2.1 3.3.1 3.4.1 The supervisor is bound to 3.1.1.

So in this room / zone both binding groups x.y.z and u.v.w have the address 3.1.1. In the other three rooms / zones the binding group x.y.z corresponds to the proper zone,

whereas the binding group u.v.w is 3.1.1 (programme).

Binding group m.n.o

This binding group represents a group for optimising / energy management purposes. The behaviour is similar

to the zone for the 'programme'.

Parameters

TempRoomSetpHeatBuildProt This value defines the protection value for heating.

TempRoomSetpCoolBuildProt This value defines the protection value for cooling.

TempRoomSetpHeatAltAbs This value defines the alternative setpoint value for

heating. This value is activated by means of the

input 'EnableRoomTempSetpAlt'.

TempRoomSetpCoolAltAbs This value defines the alternative setpoint value for

cooling. This value is activated by means of the

input 'EnableRoomTempSetpAlt'.

TempRoomSetpAltOffset This value defines the alternative setpoint offset value.

This value is activated by means of the input

'EnableRoomTempSetpAlt' and is added to the value of

'TempRoomSetpAbs'.

TimeComfort This parameter defines the time period for the

comfort prolongation.

LimitLowerTempRoomSetp This parameter defines a lower limit for the room

temperature setpoint. If this value is violated, an alarm

can be created.

LimitUpperTempRoomSetp This parameter defines a upper limit for the room

temperature setpoint. If this value is violated, an alarm

can be created.

Alarms

SetpointLimit This alarm is created if the setpoint violated the

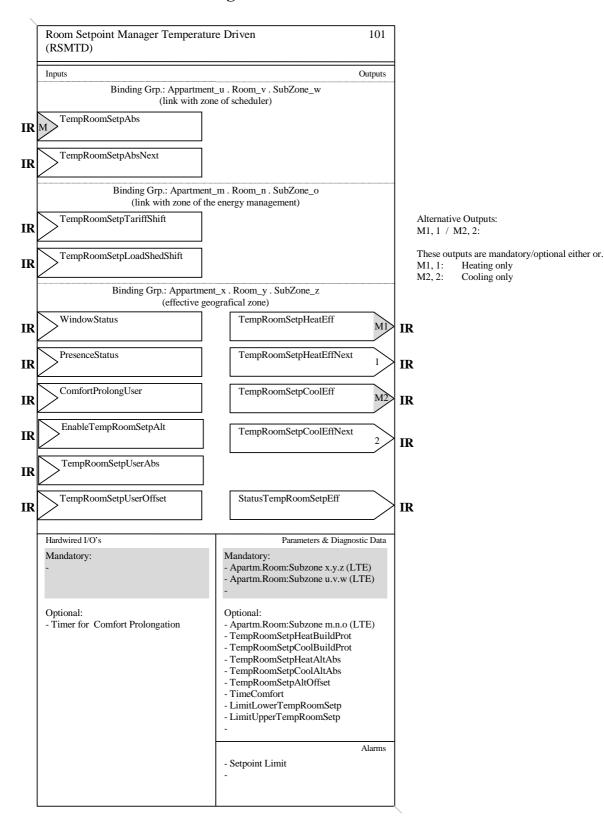
setpoint limits.

3.5.3 **Constraints**

The functionality of this Functional Block is based on setpoint temperatures (no HVAC mode). For this reason it is dedicated to simple heating only or cooling only applications.

Another Room Setpoint Manager, based on HVAC modes is described in Chapter 3.4 of this document.

3.5.4 Functional Block diagram



3.5.5 Datapoints Description

Overview

Datapoints	Description / Remarks	Datapoint Type	Additional info
Inputs			
Temp Room Setp Abs	Present temperature Setpoint with: - COV and RepPer - Z ₈ STATUS supported from FB various supervisor or a HMI	LTE: 205.100 DPT_TempHVACAbs_Z $V_{16}Z_8$ S: 9.001 DPT_Value_Temp F_{16}	LTE: M S: (GO) °C
Temp Room Setp Abs Next	Next temperature setpoint plus time to next temperature setpoint with: - COV and RepPer from FB various supervisor Time = 0: No next mode	LTE: 220.100 DPT_TempHVACAbsNe xt U ₁₆ V ₁₆ S: NA	LTE: O S: NA °C
Temp Room Setp Tariff Shift	(as e.g. not valid) Temperature setpoint shift value with: - COV and RepPer - Z ₈ STATUS supported from FB tariff calculation.	LTE: 205.101 DPT_TempHVACRel_Z V ₁₆ Z ₈ S: NA	LTE: O S: NA K
Temp Room Setp LoadShed Shift	Temperature setpoint shift value with: - COV and RepPer - Z ₈ STATUS supported from FB load management.	LTE: 205.101 DPT_TempHVACRel_Z V ₁₆ Z ₈ S: NA	LTE: O S: NA K
Window Status	Window status with: - COV and RepPer from FB Window Switch	LTE: 1.019 DPT_Window_Door B ₁ S: 1.019 DPT_Window_Door B ₁	LTE: O S: (GO) 0 = closed 1 = open
Presence Status	Presence status with: - COV and RepPer from FB Presence Detector User Presence Switch see Functional specifications	LTE: 1.018 DPT_Occupancy B ₁ S: 1.018 DPT_Occupancy B ₁	LTE: O S: (GO) 0 = not occupied 1 = occupied
Comfort Prolong User	Comfort prolongation trigger with: - COV and NO RepPer from FB User HVAC Room Settings see Functional specifications	LTE: 1.017 DPT_Trigger B ₁ S: 1.017 DPT_Trigger B ₁	LTE: O S: (GO) 1= Trigger (0 not used)

Datapoints	Description / Remarks	Datapoint Type	Additional info
Inputs			
Enable Temp Room Setp Alt	Enable information for alternative room temperature setpoint with: - COV and RepPer from FB User Enable Alt Room Temperature Setpoint	LTE: 1.003 DPT_Enable B ₁ S: 1.003 DPT_Enable B ₁	LTE: O S: (GO) 0 = disabled 1 = enabled
Temp Room Setp User Abs	One temperature value, normally for comfort with: - COV and RepPer - Z ₈ STATUS supported from FB User HVAC Room Settings	LTE: 205.100 DPT_TempHVACAbs_Z $V_{16}Z_8$ S: 9.001 DPT_Value_Temp F_{16}	LTE: O S: (GO) °C
Temp Room Setp User Offset	One temperature offset value, normally for comfort values or for Basic Setpoint with: - COV and RepPer - Z ₈ not supported from FB User HVAV Room Settings	LTE: 205.101 DPT_TempHVACRel_Z $V_{16}Z_8$ S: 9.002 DPT_Value_Tempd F_{16}	LTE: O S: (GO) K

Datapoints	Description / Remarks	Datapoint Type	Additional info
Outputs			
Temp Room Setp Heat Eff	1 temperature value for heating for simple heating only applications with: - COV and RepPer - Z ₈ not supported to FB various controller	LTE: 205.100 DPT_TempHVACAbs_Z V ₁₆ Z ₈ S: 9.001 DPT_Value_Temp F ₁₆	LTE: M1 S: GO1 °C
Temp Room Setp Heat Eff Next	Next temperature setpoint for heating plus time to it for simple heating only applications with: - COV and RepPer to FB various controller	LTE: 220.100 DPT_TempHVACAbsNe xt U ₁₆ V ₁₆ S: NA	LTE: O1 S: (GO1) °C
	0 = no next temperature (as e.g. not valid)		time = min
Temp Room Setp Cool Eff	1 temperature value for cooling for simple heating only applications with: - COV and RepPer - Z ₈ not supported to FB various controller	LTE: 205.100 DPT_TempHVACAbs_Z $V_{16}Z_8$ S: 9.001 DPT_Value_Temp F_{16}	LTE: M2 S: GO2 °C

Datapoints	Description / Remarks	Datapoint Type	Additional info
Outputs			
Temp Room Setp Cool Eff Next	Next temperature setpoint for cooling plus time to it for simple cooling only applications with: - COV and RepPer to FB various controller	LTE: 220.100 DPT_TempHVACAbsNe xt U ₁₆ V ₁₆ S: NA	LTE: O2 S: (GO2) °C
	0 = no next temperature (as e.g. not valid)		time = min
Status Temp Room Setp Eff	Status information for room temperature setpoint with - COV and RepPer to FB various HMI and supervisor	LTE: 20.113 DPT_StatusRoomSetp N ₈ S: 20.113 DPT_ StatusRoomSetp N ₈	LTE: O S: (GO) 0 = form HMI / supervisor 1 = alternative 2 = BuildingProtection

Datapoints	Description / Remarks	Datapoint Type	Additional info
Parameters			
Apartment_x	LTE zoning number for Apartment	202.002 DPT_UcountValue8_Z U ₈ Z ₈	M Controller zone
Room_y	LTE zoning number for Room	202.002 DPT_UcountValue8_Z U ₈ Z ₈	M Controller zone
SubZone_z	LTE zoning number for SubZone	202.002 DPT_UcountValue8_Z U ₈ Z ₈	M Controller zone
Apartment_u	LTE zoning number for Apartment	202.002 DPT_UcountValue8_Z U ₈ Z ₈	M Programme zone
Room_v	LTE zoning number for Room	202.002 DPT_UcountValue8_Z U ₈ Z ₈	M Programme zone
SubZone_w	LTE zoning number for SubZone	202.002 DPT_UcountValue8_Z U ₈ Z ₈	M Programme zone
Apartment_m	LTE zoning number for Apartment	202.002 DPT_UcountValue8_Z U ₈ Z ₈	O E-management zone
Room_n	LTE zoning number for Room	202.002 DPT_UcountValue8_Z U ₈ Z ₈	O E-management zone
SubZone_o	LTE zoning number for SubZone	202.002 DPT_UcountValue8_Z U ₈ Z ₈	O E-management zone

Datapoints	Description / Remarks	Datapoint Type	Additional info		
Parameters					
Temp Room Setp Heat BuildProt	Building protection value for heating with: Z_8 not supported	205.100 1) DPT_TempHVACAbs_Z V ₁₆ Z ₈	0 °C		
Temp Room Setp Cool BuildProt	Building protection value for cooling with: Z_8 not supported	$\begin{array}{c} 205.100 & 1) \\ DPT_TempHVACAbs_Z \\ V_{16}Z_8 \end{array}$	°C		
Temp Room Setp Heat Alt Abs	Alternative temperature setpoint for heating with: Z_8 not supported	$\begin{bmatrix} 205.100 & 1) \\ DPT_TempHVACAbs_Z \\ V_{16}Z_8 \end{bmatrix}$	O °C		
Temp Room Setp Cool Alt Abs	Alternative temperature setpoint for cooling with: Z_8 not supported	$ \begin{array}{c} 205.100 & 1) \\ DPT_TempHVACAbs_Z \\ V_{16}Z_8 \end{array} $	°C		
Temp Room Setp Alt Offset	Alternative temperature offset for setpoint with: Z_8 not supported	$\begin{array}{c} 205.101 & 1) \\ DPT_TempHVACRel_Z \\ V_{16}Z_8 \end{array}$	O K		
Time Comfort	Time for comfort period in connection with the pushbutton $0 = \text{no prolongation}$	7.006 1) DPT_TimePeriodMin U ₁₆	O min		
Limit Lower Temp Room Setp		$\begin{array}{c} 205.100 & 1) \\ DPT_TempHVACAbs_Z \\ V_{16}Z_8 \end{array}$	0 °C		
Limit Upper Temp Room Setp	Upper limit for internal setpoint with: - Z_8 not supported	$ \begin{array}{c} 205.100 & 1) \\ DPT_TempHVACAbs_Z \\ V_{16}Z_8 \end{array} $	°C		

¹⁾ Implementation of Properties using standard DPT see chapter 1.3.2

Datapoints	Description / Remarks	Datapoint Type	Additional info
Diagnostic Data			

Alarms	Description / Remarks	Er:	ror	Additional info
		Code	Prio	
Setpoint Limit	Setpoint violates limits			

RSMTD Runtime Interworking - Dependence on Configuration Modes

			STANDARD MODE		NDED ODE
		Basic FB	S-Mode	Standard Mode Interface	HEE
Inputs	TempRoomSetpAbs	GO_b	GO	GO	M
	TempRoomSetpAbsNext	NA _b	NA	NA	0
	TempRoomSetpTariffShift	NA _b	NA	NA	0
	TempRoomSetpLdShedShift	NA _b	NA	NA	0
	WindowStatus	(GO _b)		(GO)	0
	PresenceStatus	(GO _b)		(GO)	0
	ComfortProlongUser	(GO _b)		(GO)	0
	EnableRoomTempSetpAlt	(GO _b)		(GO)	0
	TempRoomSetpUserAbs	(GO _b)		(GO)	0
	TempRoomSetpUserOffset	(GO _b)		(GO)	0
Outputs	TempRoomSetpHeatEff	(GO _b)		(GO)	M1 ¹⁾
	TempRoomSetpHeatEffNext	NA _b	NA	NA	O1 ¹⁾
	TempRoomSetpCoolEff	(GO _b)		(GO)	M2 ¹⁾
	TempRoomSetpCoolEffNext	NA _b	NA	NA	O2 ¹⁾
	StatusTempRoomSetpEff	NA _b	NA	NA	0

¹⁾ See Functional Block diagram

RSMTD LTE specific Properties

		Support
Parameter	Apartment_x	M
	Room_y	M
	SubZone_z	M
	Apartment_u	M
	Room_v	M
	SubZone_w	M
	Apartment_m	О
	Room_n	0
	SubZone_o	0

RSMTD Standard Properties of Interface Objects (or memory mapped DP)

		Support
Parameter	TempRoomSetpHeatBuildProt	0
	TempRoomSetpCoolBuildProt	0
	TempRoomSetpHeatAltAbs	0
	TempRoomSetpCoolAltAbs	0
	TempRoomSetpAltOffset	0
	TimeComfort	0
	LimitLowerTempRoomSetp	0
	LimitUpperTempRoomSetp	0

3.5.6 Detailed specification of the Datapoints

3.5.6.1 Input TempRoomSetpAbs

Standard Mode:

This information is provided by a supervisor. It contains the actual room temperature setpoint. Datapoint Type													
This information is provided by a supervisor. It contains the actual room temperature setpoint. Datapoint Type	SMTD Can be internal												
Datapoint Type DPT_Name: DPT_Value_Temp DPT Format: Field DPT_ID: 9.001 Field Description Supp. Range Unit Field Description Supp. Range Unit Access Type Input N → this Spontaneous Cyclically: Time-out: 31 min Spontaneous Polling: Period: Request Period: Communication Type Image: Communication Type <td></td>													
$ \begin{array}{ c c c c c c } \hline DPT_Name: & DPT_Value_Temp \\ \hline DPT_Format: & F_{16} & DPT_ID: & 9.001 \\ \hline Field & Description & Supp. & Range & Unit & °C \\ \hline $	This information is provided by a supervisor. It contains the actual room temperature setpoint.												
DPT Format: F16 DPT_ID: 9.001 Field Description Supp. Range Unit Access Type Input Input													
Field Description Supp. Range Unit Access Type Input N → this □ 1 → this ⊠ Spontaneous □ Cyclically: □ Time-out: 31 min Request □ Polling: □ Period: Communication Type Group Object Datapoint													
Access Type Input N → this □ 1 → this ⊠ Spontaneous ⊠ Cyclically: ⊠ Time-out: 31 min Request □ Polling: □ Period: Communication Type Group Object Datapoint Mandatory: ☑ Default Group Address: Dynamics Power down: Save: □ Power up: Value: No initialisation: □ Default value: ☑													
Access Type Input N → this □ 1 → this □ Spontaneous □ Cyclically: □ Period: Request □ Polling: □ Period: Communication Type Forup Object Datapoint □ Mandatory: □ Default Group Address: Dynamics Power down: Save: □ Power up: Value: No initialisation: □ Default value: □	it Default												
N → this 1 → this Spontaneous Cyclically: Request Polling: Polling: Period: Communication Type Group Object Datapoint Default Group Address: Power down: Save: Power up: Value: No initialisation: Default value: Default value:	cs												
N → this □ 1 → this Spontaneous □ Cyclically: □ Time-out: 31 min Request □ Polling: □ Period: Communication Type Group Object Datapoint Default Group Address: Default Group Address: Power down: Save: Power up: Value: No initialisation: □ Default value: □													
Spontaneous													
Request □ Polling: □ Period: Communication Type ◆ Group Object Datapoint Mandatory: □ Default Group Address: Dynamics Power down: Save: □ Power up: Value: No initialisation: □ Default value: □													
Communication Type ◆ Group Object Datapoint	nin (rec.)												
◆ Group Object Datapoint Mandatory: Default Group Address: Power down: Save: Power up: Value: No initialisation: □ Default value: □													
Default Group Address: Dynamics													
Dynamics Power down: Save: □ Power up: Value: No initialisation: □ Default value:	◁												
Power down: Save: □ No initialisation: □ Default value: □													
Power up: Value: No initialisation: Default value:													
Saved value:													
Read from bus:													
Exception Handling													
Special Features													

FB:	RSMTD	LTE Clie		TempRoo	mSetpAb	s			Mandatory ⊠ Optional □			
	•	Input Na	ıme:	-						Optional		
	Description: This information is provided by a supervisor. It contains the actual room temperature setpoint.											
										-		
DPT:	PT: Name DPT_TempHVACAbs_Z DPT ID 205.100 Datatype format V ₁₆ Z ₈											
Field			Descrip	tion					Sup.	Unit	Default	
Temp)		Temper	ature setpo	oint value					°C.	cs	
STAT	US									Bitset		
- Ou	tOfService		Function	n out of Sei	rvice				0	t/f	false	
- Fa	ult		Informa	tion is corru	upted				0	t/f	false	
- Ov	erridden		Informa	tion is temp	orarily over	erridden			0	t/f	false	
- InA	Marm		Informa	tion with ala	arm				0	t/f	false	
- Ala	rmUnAck		Acknow	ledgement	of alarm				0	t/f	false	
			all other	r bits					NA			
Comi	nunicatio	า:								•	-	
Bin	ding Grou	p:										
Clas	SS		Type				Default					
Ge	eographica	I 🛛	Apartme	ent . Room	. SubZone)	1.1.1					
Ap	plication S	pecific										
Pe	ripheral		Broadca	ast 🗌	Configura	able 🗌						
DP	Address:		ІО Турє	e(ID):	113.(ART 385 (RTS		Proper	ty ID	:	51 51		
LTE	-Service (event):	InfoRep	ort Sniffer	on Binding	Group:		-	-			
Int	oReport	\boxtimes	Timeou	t:		31	Min					
	LTE-Service (polling): Read – Response Read Wildcard / Resp Sniffer on Binding Group:											
Value after Power-up: Default Value ⊠ Stored Value [ue 🗌				
Exception Handling: Save at Powerdown												
Spec	ial Feature	es:										

3.5.6.2 Input TempRoomSetpAbsNext

FB:	RSMTD	Input Na		, , , , , , , , , , , , , , , , , , ,								
Desc	Description:											
This information is provided by a supervisor. It contains the next room temperature setpoint and the time												
to it.												
DPT:	Name	DPT_Temp	HVACA	HVACAbsNext DPT ID 220.100 Datatype format U ₁₆ V ₁₆								
Field			Descript	tion				;	Sup.	Unit	Default	
Time			Time to minutes	next room	temperatu	ire setpoi	nt in			min	0	
			0 = no n	ext setpoi	nt							
Temp				om temper		oint				°C.	cs	
Comr	nunication	:	-					-		-	-	
Bine	ding Group):										
Clas	SS		Type				Default					
Ge	eographical		Apartme	ent . Room	. SubZone	9	1.1.1					
	plication Sp	pecific 🔲										
	ripheral			Broadcast Configurable								
	Address:		IO Type		113 (AR		Proper	ty ID:		52		
	-Service (e	event <u>):</u>		ort Sniffer	on Binding							
	oReport	\boxtimes	Timeout	t:		31	Min					
	-Service (p ead – Respo		Read W	/ildcard / R	esp Sniffe	r on Bindi	ng Grou	p:				
Value after Power-up: Default Value ⊠ Stored Value								ue 🗌				
Exception Handling: Save at F							at Pov	verdown				
Speci	al Feature	s:										

3.5.6.3 Input TempRoomSetpTariffShift

FB:	RSMTD	LTE			TempRe	oon	nSetpTa	riffShift				ľ	Mandatory	
		Inpu	it Na	ıme:								Optional 🛚		
	Description:													
This information is provided by a supervisor with tariff functionality. The value is added to the comfort											nfort and			
eventually also to the standby, economy and the building protection value.														
DPT:	Name	DPT_	Temp	HVACR	ACRel_Z DPT ID 205.101 Datatype format V ₁₆ Z ₈									
Field				Descrip								Sup.	Unit	Default
	ve Tempe	erature		Shift va	lue for th	e se	etpoint						K	0
STAT	US												Bitset	
	tOfServic	е		Functio	n out of S	Serv	rice					0	t/f	false
- Fa	ult				tion is co							0	t/f	false
	erridden				tion is te			erridden				0	t/f	false
- InA	larm				tion with							0	t/f	false
- Ala	rmUnAck				/ledgeme	ent o	f alarm					0	t/f	false
				all othe	r bits							NA		
Comi	nunicatio	n:												
Bin	ding Grou	лр:												
Clas	SS			Type					D	efault				
Ge	eographic	al		Apartm	ent . Roo	m .	SubZon	9	1.	1.1				
Ap	plication	Specific												
Pe	ripheral			Broadca	ast 🗌	(Configur	able 🗌						
	Address:			IO Туре			121 (SSI		P	roperty	/ ID:		51	
LTE	-Service	(event):		InfoRep	ort Sniffe	er or	ո Binding	Group:						
Inf	oReport	\geq]	Timeou	t:			31	M	in				
LTE	-Service	(polling):	Pood M	/ildcard /	Pos	en Sniffa	r on Rine	dina	Group				
Re	Read – Response Read Wildcard / Resp Sniffer on Binding Group:													
Value after Power-up: Default Value ∑ Stored Value								ue 🗌						
Exception Handling: Save at Powerdown														
Spec	ial Featur	es:												

3.5.6.4 Input TempRoomSetpLoadShedShift

FB:	RSMTD	LTE Clie		, , , , , , , , , , , , , , , , , , , ,									
Desc	ription:	par								o pulona.			
	nformation is	provided	by a sur	pervisor w	rith load she	dding fun	ctionality	y. The	e value	is added	to the	_	
comfo	ort and event	ually also	to the st	andby, ec	conomy and	the build	ing prote	ection	value.				
DPT:	Name D	PT_Temp	HVACR	el_Z	DPT ID	205.101	Datat	type f	ormat	$V_{16}Z_{8}$			
Field			Descrip	tion					Sup.	Unit	Default		
Relati	ve Tempera	ture	Shift val	lue for the	setpoint					K	0	_	
STAT	US									Bitset			
	tOfService		Function	n out of Se	ervice				0	t/f	false		
- Fa	ult			tion is cor					0	t/f	false		
- Ov	erridden				nporarily over	erridden			0	t/f	false		
- InA	larm		Informa	tion with a	alarm				0	t/f	false		
- Alaı	AlarmUnAck Acknowledgement of alarm O t/f false												
all other bits NA													
Comr	munication:												
Bine	ding Group:												
Clas	SS		Type				Default						
Ge	eographical	\square	Apartme	ent . Roon	n . SubZone)	1.1.1						
Ap	plication Sp	ecific 🗌											
Pe	ripheral		Broadca	ast 🗌	Configura	able 🗌							
	Address:		IO Type		121 (SSL		Proper	ty ID:		52			
	:-Service (ev	/ent <u>):</u>	InfoRep	ort Sniffer	r on Binding	Group:							
	oReport	\square	Timeout	t:		31	Min						
	-Service (po		Read W	/ildcard / F	Resp Sniffer	on Rindii	na Graui	n·					
Re	ead – Respo	nse	iteau w	niucaiu / i	resp Sillie	OH BIHUII	ilg Glou	ρ					
Value	after Powe	r-up:		Default '	Value 🛚					Stored Val	ue 🗌		
Exce	ption Handl	ing:						Save	at Pov	verdown			
Spec	ial Features	:											

3.5.6.5 Input WindowStatus

Standard Mode:

DP Name:	Win	dowStatus			Abbr.:			Manda	itory	
FB Name:	RSN	ИTD						Can be	e internal	
Description										
This informati	ion is	provided by	y the Fu	unctional Block	window sv	witch.				
Datapoint Ty	ре									
DPT_Name:	DF	PT_Window	_Door							
DPT Format:	B ₁						DPT_ID:	1.019		
Field	De	escription					Supp.	Range	Unit	Default
	0 =	= closed, 1 =	= open						Bit	0
Access Type)									
◆ Input										
$N \rightarrow this$			$1 \rightarrow thi$	is 🛛						
Spontaneo	ous			Cyclically:			Time	-out:	NO *	
Request				Polling:			Perio	d:		
Communicat	tion 1	Гуре								
♦ Group Ob	oject	Datapoint						Mandator	y: 🔲	
Default Gr	oup /	Address:								
Dynamics										
Power dov	vn:	Save:								
Power up:		Value:	No in	itialisation:		Defau	ılt value:			
			Save	d value:						
				<u>.</u>		Read	from bus			
Exception Ha	andli	ng								
* NO timeout	due	to compatib	ility witl	h existing EIB p	roducts.					
Special Feat	ures									

FB:	RSMTD	LTE C	liont	WindowS	Status				N	Mandatory	, 🗆
1 6.	KOWIT		Name:	Williaowa	otatus				ı,	Optiona	
Desc	ription:	1 1 1 1		-				L		- p	
	nformation i	s provid	ed by the	Functional	Block wind	ow switcl	า.				
DPT:	Name [OPT_W	ndow_Doo	or	DPT ID	1.019	Data	type	format	B ₁	
Field			Descri	otion	•	•	•		Sup.	Unit	Default
			0 = clo	sed, 1 = op	en					Bit	0
Com	munication	:	<u> </u>						-	-	-
Bin	ding Group	:									
Cla	ss		Type				Default				
G	eographical	[$\boxtimes $ Apartm	Apartment . Room . SubZone 1.1.1							
	oplication Sp	ecific [
	eripheral			Broadcast Configurable							
DP	Address:		ІО Тур		343 (WO		Proper	ty ID	:	51	
	E-Service (e	vent <u>):</u>	InfoRe	port Sniffer	on Binding	g Group:		-	-		
	foReport	\boxtimes	Timeou	ut:		NO *	Min				
	E -Service (p ead – Respo		Read V	Read Wildcard / Resp Sniffer on Binding Group:					-		
Value	after Powe	er-up:	-	Default \	/alue 🛚			-		Stored Va	lue 🗌
Exce	ption Hand	ling:						Sav	e at Pov	werdown	
* NC	timeout due	e to con	patibility v	vith S-Mode	and existi	ng EIB pi	roducts.				
Spec	ial Features	<u></u>			_				_		

3.5.6.6 Input PresenceStatus

Standard Mode:

DP Name:	Pre	senceStatus	3		Abbr.:		1	Manda	tory]
FB Name:	RS	MTD						Can be	internal]
Description											
This informat	ion is	s provided by	y the Fu	unctional Block	s presen	ce dete	ctor or use	er presence	switch.		
Datapoint Ty	/ре										
DPT_Name:	D	PT_Occupar	ncy								
DPT Format:	B	1					DPT_ID:	1.018			
Field	D	escription					Supp.	Range	Unit	Defau	lt
	0	= not occupi	ied, 1 =	occupied					Bit	cs	
Access Type)										
♦ Input											
$N \rightarrow this$			$1 \rightarrow th$	is 🛛							
Spontane	ous			Cyclically:			Time-	out:	NO *		
Request				Polling:			Perio	d:			
Communica	tion	Туре									
♦ Group Ol	oject	Datapoint						Mandatory	/:		
Default G	oup	Address:									
Dynamics											
Power do	wn:	Save:									_
Power up:		Value:	No in	itialisation: [Defau	ult value:				
			Save	d value:							
						Read	from bus:		-		
Exception H	andl	ing									
* NO timeou	t due	to compatib	ility wit	h existing EIB	oroducts.						
Special Feat	ures	}									
			•			•					
			•		•		•		•		

FB:	RSMTD	LTE C		Prese	nce	Status					ľ	Mandatory	
		Input I	Name:									Optiona	I 🔀
Desc	ription:												
This	nformation i	s provide	ed by the	Function	nal E	Blocks pres	sence de	tec	tor or u	ıser	presen	ce switch	
DPT:	Name [OPT_Oc	cupancy			DPT ID	1.018		Dataty	/pe	format	B ₁	
Field			Descrip	otion							Sup.	Unit	Default
			0 = not	occupie	ed, 1	= occupie	ed					Bit	cs
Com	munication	:	<u>.</u>							-		-	-
Bin	ding Group):											
Cla	SS		Туре					De	efault				
G	eographical		Apartm	Apartment . Room . SubZone 1.1.1					1.1				
A	oplication Sp	ecific [
P	eripheral		Broado	Broadcast Configurable									
DP	Address:		ІО Тур	IO Type(ID): 345 (PRD) 391 (UPS)			,	Р	roperty ID: 51				
LTE	-Service (e	vent):	InfoRe	port Sni	ffer	on Binding	Group:						
In	foReport	\boxtimes	Timeou	ıt:			NO *	Mi	in				
	E -Service (p ead – Respo		Read V	Vildcard	/R	esp Sniffe	on Bind	ing	Group	:			
Value	e after Pow	er-up:	Ī	Defa	ılt V	alue 🛚					,	Stored Va	lue 🗌
Exce	ption Hand	ling:								Sav	e at Pov	werdown	
* NC	timeout due	e to com	oatibility w	vith S-M	ode	and existi	ng EIB p	rod	ucts.				
Spec	ial Features	s:											

3.5.6.7 Input ComfortProlongUser

Standard Mode:

DP Name:	Con	nfortProlon	gUser			Abbr.:		-		Manda	atory	
FB Name:	RSI	MTD								Can be	e interna	
Description												
This informat	ion is	provided b	y the F	unction	al Block	user cor	mfort p	rolong	ation	<u>.</u>		
Datapoint Ty	/ре											
DPT_Name:	DF	PT_Trigger	,									
DPT Format:	B ₁							DPT	_ID:	1.017		
Field	De	escription						Su	pp.	Range	Unit	Default
	1 :	= Trigger									Bit	CS
Access Type	9											
♦ Input												
$N \rightarrow this$			$1 \rightarrow th$	nis	\boxtimes							
Spontane	ous			Cyclic	ally:			-	Time-	out:	NO *	
Request				Pollin				F	Period	d:		
Communica	tion ⁻	Туре			_							
		Datapoint								Mandator	y: 🛛	
Default G	•									•		
Dynamics												
Power do	wn:	Save:										
Power up:		Value:	No ir	nitialisa	tion:		Defa	ult val	lue:			
			Save	ed valu	e:							
			•		•		Read	d from	bus:			
Exception H	andli	ing										
* This Datap			artbeat (Triggei	r).							
Special Feat			,		•							
	/r1	_										

FB:	RSMTD	LTE C	lient Name:						N	Mandatory Optiona	
Desc	ription:	Impat	itaino.	_						Ориона	
	nformation i	s provid	ed by the I	Functional	Block user	comfort p	orolongat	tion.			
DPT:		DPT_Tri			DPT ID	1.017			format	B ₁	
Field			Descrip	otion			•		Sup.	Unit	Default
			1 = Trig	gger						Bit	CS
Com	munication	:						•		-	-
Bin	ding Group):									
Cla	SS		Type				Default				
G	eographical		Apartm	Apartment . Room . SubZone 1.1.1							
Ar	oplication Sp	ecific [][
Pe	eripheral		Broadc	ast 🗌	Configura	able 🗌					
	Address:		IO Type		384 (UHI		Proper	ty ID	:	53	
	E-Service (e	vent):	InfoRep	oort Sniffer	on Binding				•		
	foReport	\boxtimes	Timeou	ıt:		NO *	Min				
	E -Service (p ead – Respo	<u> </u>	Read V	Vildcard / R	esp Sniffe	r on Bind	ing Grou	p:	-		
Value	after Powe	er-up:		Default \	/alue ⊠			-	5	Stored Va	lue 🗌
Exce	ption Hand	ling:						Sav	e at Pov	verdown	
* Thi	s Datapoint	has NO	heartbeat	(Trigger).							
Spec	ial Features	<u></u>									

3.5.6.8 Input EnableTempRoomSetpAlt

Standard Mode:

DP Name:	EnableTempRo	omSetp	Alt	Abbr.:			Manda	tory	
FB Name:	RSMTD						Can be	internal	
Description									
This information	on is provided by	y the Fur	nctional Bloc	k enable a	lternati	ve room t	emperature	setpoin	t.
Datapoint Typ	ре								
DPT_Name:	DPT_Enable								
DPT Format:	B ₁					DPT_ID:	1.003		
Field	Description					Supp.	Range	Unit	Default
	0 = disabled,	1 = enab	led					Bit	1
Access Type									
♦ Input									
$N \rightarrow this$		$1 \rightarrow \text{this}$	s 🛛						
Spontaneo	us 🛛	(Cyclically:			Time	-out:	31 min	(rec.)
Request		ı	Polling:			Perio	d:		
Communicati	on Type								
♦ Group Obj	ject Datapoint						Mandatory	/:	
Default Gro	oup Address:								
Dynamics									
Power dow	n: Save:								
Power up:	Value:	No init	tialisation:		Defau	ılt value:			
		Saved	l value:						
					Read	from bus			
Exception Ha	ndling								
Special Featu	ires								

FB:	RSMTD	LTE C	lient							Mandatory	
		Input	Name:		_					Optiona	I 🛛
Desc	ription:	-		-			•				
This i	nformation i	s provid	ed by the F	Functional E	Block enab	le alterna	ative roor	n ter	nperatu	re setpoin	ıt.
DPT:	Name [OPT_En	able		DPT ID	1.003	Datat	ype	format	B ₁	
Field			Descrip	otion					Sup.	Unit	Default
			0 = disa	abled, $1 = e$	nabled					Bit	1
Com	munication	:	-								
Bin	ding Group	:									
Cla	SS		Type				Default				
G	eographical		Apartm	Apartment . Room . SubZone 1.1.1							
	oplication Sp	ecific [][
	eripheral		Broadc	Broadcast Configurable							
	Address:			IO Type(ID): 396 (UEARTS) Property ID						51	
	E-Service (e	<u> </u>	InfoRep	ort Sniffer	on Binding			-	•		
	foReport	\boxtimes	Timeou	ıt:		31	Min				
	E -Service (p ead – Respo		Read V	Vildcard / R	esp Sniffe	on Bindi	ng Grou	p:	-		
Value	e after Powe	er-up:	•	Default V	′alue ⊠			-	9	Stored Va	lue 🗌
Exce	ption Hand	ling:						Sav	e at Pov	werdown	
Spec	ial Features	s:									

3.5.6.9 Input TempRoomSetpUserAbs

Standard Mode:

DP Name:	Ten	npRoomSet	pUserA	lbs	Abbr.:			Manda	tory			
FB Name:	RSN	ИTD						Can be	internal			
Description												
				unctional Block			erature se	etpoint abso	olute set	ting.		
		es internal s	etpoint	values (compar	ny specif	ic).						
Datapoint Ty												
DPT_Name:	_	PT_Value_1	emp				T					
DPT Format:	F ₁						DPT_ID:	9.001	T			
Field	De	escription					Supp.	Range	Unit	Default		
								full	°C	CS		
Access Type												
♦ Input												
$N \rightarrow this$			$1 \rightarrow th$	is 🛛								
Spontaneo	us	\boxtimes		Cyclically:			Time-	out:	NO *			
Request				Polling:			Perio	d:				
Communicat	ion ⁻	Гуре										
♦ Group Ob	ject	Datapoint						Mandatory	': <u> </u>			
Default Gr	oup /	Address:										
Dynamics												
Power dov	vn:	Save:										
Power up:		Value:	No in	nitialisation:		Defau	ılt value:					
			Save	ed value:	<u> </u>							
						Read	from bus:					
Exception Ha												
		to compatib	oility wit	h existing EIB p	roducts.							
Special Feat	ecial Features											

FB:	RSMHD	LTE Clie		TempRoomSetpUserAbs Mandatory								
	-	Input Na	ime:	_						Optional	X	
	ription:											
	nformation is						nperature	esetp	point ab	solute set	ting.	
This v	alue overrid	es interna	ıl setpoin	ıt values (c	ompany s	pecific).						
DPT:	Name D	PT_Temp	HVACA	.bs_Z	DPT ID	205.100	Datat	ype t	format	$V_{16}Z_{8}$		
Field			Descrip	tion					Sup.	Unit	Default	
Temp			Temper	ature value	e					°C	cs	
STAT	US									Bitset		
	tOfService		Functio	n out of Se	rvice				0	t/f	false	
- Fai	ult			tion is corr					0	t/f	false	
- Ov	erridden			tion is tem		erridden/			0	t/f	false	
- InA				tion with al					0	t/f	false	
- AlarmUnAck												
all other bits NA												
Comr	nunication:										-	
Bine	ding Group:											
Clas	ss		Type				Default					
Ge	eographical		Apartm	ent . Room	. SubZon	е	1.1.1					
Ap	plication Sp	ecific 🗌										
Pe	ripheral		Broadca	ast 🗌	Configur	able 🗌						
DP A	Address:		ІО Турє		384 (UH		Propert	y ID:		51		
LTE	-Service (ev	vent):		ort Sniffer	on Binding							
Inf	oReport	\boxtimes	Timeou	t:		NO *	Min					
LTE	-Service (po	olling):	Dood M	/ildcard / R	ocn Sniffo	r on Rindi	na Grau	٠.				
Re	ead – Respo	nse	iteau vi	/ilucalu / IX	esp Sillie	i on bindi	ng Group	J				
Value	after Powe	r-up:		Default \	/alue ⊠				5	Stored Val	ue 🗌	
	otion Handl							Save	e at Pov	verdown		
* NO	timeout due	to compa	tibility w	ith S-Mode	and exist	ing EIB pr	oducts.					
Speci	ial Features	:										
								•				

${\bf 3.5.6.10\; Input\; TempRoomSetpUserOffset}$

Standard Mode:

DP	Name:	, , , , , , , , , , , , , , , , , , , ,										
FΒ	Name:	RSN	ИTD							Can be	internal	
De	scription											
	is information								erature se	etpoint relat	ive setti	ng. This
_	lue is added		nternal set	ooint val	lues (comp	any s	pecific).					
	tapoint Ty	ре										
	PT_Name:	DF	PT_Value_	Tempd								
	PT Format:	F ₁							DPT_ID:	9.002		
Fie	eld	De	escription						Supp.	Range	Unit	Default
										full	K	0
Ac	cess Type											
•	Input											
	$N \rightarrow this$			$1 \rightarrow th$	is 🛛							
	Spontaneo	us			Cyclically:				Time-	·out:	NO *	
	Request				Polling:				Perio	d:		
C	mmunicati	ion 🛚	Гуре									
•	Group Ob	ject	Datapoint							Mandatory	':	
	Default Gro	oup /	Address:									
Dy	namics											
	Power dow	n:	Save:									
	Power up:		Value:	No in	itialisation:			Defau	ılt value:		\boxtimes	
				Save	d value:							
	Read from bus:											
Ex	ception Ha	ındli	ng									
	NO timeout			bility wit	h existing I	EIB pr	oducts.					
Sp	ecial Featu	ıres										

FB:	RSMTD	LTE Clie		TempRod			N	Mandatory Optional			
Desci	ription:										
	nformation is	provided	by the F	unctional	Block user	room tem	nperature	setp	oint rel	ative setti	ng. This
	is added to i							•			
DPT:	Name D	PT_Temp	HVACR	el_Z	DPT ID	205.101	Datat	ype f	format	$V_{16}Z_{8}$	
Field			Descrip	tion					Sup.	Unit	Default
Temp			Temper	ature delta	a value					K	0
STAT										Bitset	
	tOfService		Function	n out of Se	ervice				0	t/f	false
- Fau	ult			tion is corr					0	t/f	false
	erridden				porarily ov		0	t/f	false		
- InA				tion with a			0	t/f	false		
- Alar	mUnAck		Acknowledgement of alarm							t/f	false
	all other bits NA										
Comr	nunication:										
Bind	ding Group:										
Clas			Type				Default				
	ographical	\square	Apartme	ent . Room	ı . SubZon	е	1.1.1				
Ap	plication Spe	ecific 🔲									
Pe	ripheral		Broadca	ast 🗌	Configur						
	Address:		10 Туре		384 (UH		Propert	ty ID:		52	
	-Service (ev	rent):			on Binding						
	oReport		Timeou	t:		NO *	Min				
	-Service (po		Read W	/ildcard / R	esn Sniffe	r on Rindi	na Grau	o			
Re	Read – Response Read Wildcard / Resp Sniffer on Binding Group:										
Value	after Powe	r-up:		Default \	/alue ⊠					Stored Val	ue 🗌
	otion Handli							Save	e at Pov	verdown	
* NO	timeout due	to compa	tibility w	ith S-Mode	and exist	ing EIB pr	oducts.				
Speci	pecial Features:										
	ecial Features:										

3.5.6.11 Output TempRoomSetpHeatEff

Standard Mode:

DP Name:	TompPo	omSat	pHeatEff		Abb	r·			Manda	tory	
FB Name:	RSMTD		prieat⊑ii		ADD	1				interna	
	KOMID								Call be	HILEHIA	aı
Description		44	/afta	\4!\ l-				h !			II.a. This
			tive (after corr			setpo	int wnic	n is v	alia for the	contro	lier. This
		simple	applications (neating or	ııy).						
Datapoint Ty		, .	-								
DPT_Name:		/alue_ l	emp								
DPT Format:	10							_ID:	9.001		
Field	Descri	ption					Su	op.	Range	Unit	Default
									full	°C	CS
Access Type)										
◆ Output											
this \rightarrow M			this \rightarrow 1								
Spontane	ous 🛚	CO\	/: 🛛	Delta-Va	lue: ().2	MinRe	epTim	ne:	10 sec	
		Cyc	lic 🛛	Period:	1	15min	(recon	nmen	ded value)		
Request			<u>.</u>								
Communica	tion Type	•									
♦ Group Ol	oject Data	point							Mandatory	/: X	
Default G	oup Addr	ess:							<u></u>		
Dynamics											
Power do	wn: Sav	/e:									
Power up:	Val	ue:	No initialisa	tion:		Def	ault val	ue:			
•			Saved value	e:	1	Acti	ual valu	ıe:			
	Tra	nsmit o	n bus:								
Exception H											
		ee Fun	ctional Block o	diagram.							
Special Feat											
L											

FB:	RSMTD	LTE S		TempRo	omSetpHe	eatEff			N	/landator	
		Outpu	ıt Name:	_						Optiona	al 🔝
	ription:										
			effective (afte			ng setpo	oint w	hich is v	alid for th	ne contro	ller. This
inform			mple applicat		ting only).						
DPT:	Name	DPT_Te	mpHVACAbs	s_Z	DPT ID	205.10	00	Datatype	e format	$V_{16}Z_{8}$	
Field			Description			Sup.	Rang	ge	Unit	COV	Default
Temp	erature		Effective hea	ating setpo	oint		İ	full	°C	0.2	cs
STAT	US								Bitset	[]	
- all bi	ts		Not supporte	ed		NA					
Comr	nunicatio	า:				-				.	
Bind	ding Grou	p:									
Clas	S		Type					Defa	ult		
Ge	ographica		⊠ Apartmer	nt . Room	. SubZone			1.1.1			
Ap	plication S	pecific [
Pe	ripheral		Broadcas	st 🗌	Configu	rable 🗌					
DP A	Address:		IO Type(I		101 (RSM		Pr	operty II	D:	51	
LTE	-Services	(event):	COV 🖂		MinRepTin	ne:	10	sec	Hear	tbeat:	15 min
Inf	oReport	\boxtimes	Output pe	er default o	communica	ating [Bir	nding G	roup Wild	card allo	wed 🛚
			Tx Prio:		High 🗌			Normal		Lov	N \square
po sha	ΓE Read-R Illing of the all always pported)	output		ıfter Powe	r-up: Store	ed Valu	e 🗌	Act Va	alue 🛚	Default \	/alue □
	oerty-Serv ividual ac		Read only	у 🗆		Read	/Write	. [◁		
Excep	otion Hand	dling:	<u> </u>						Save	at Power	down
Suppo	ort of Data	ooint see	Functional E	Block diag	ram.						
Speci	al Feature	es:									

3.5.6.12 Output TempRoomSetpHeatEffNext

FB:	RSMID	LIES		TempRo	omSetpH	eatEffN	lext		IV	landator	
		Outpu	t Name:							Optiona	ai 🔀
	ription:										
	utput contai						setpoint w	vhich is	valid	for the c	ontroller.
This in	nformation is	used fo	or simple app	olications	(heating o	nly).					
DPT:	Name D	PT_Ter	npHVACAbs	Next	DPT ID	220.10		type forr	mat	$U_{16}V_{16}$	
Field		ı	Description			Sup.	Range	Unit		COV	Default
Time		-	Time to next	setpoint i	in		full	m	nin	15 ¹⁾	0
			minutes	·							
Temp	erature	I	Next heating	setpoint			full	0	O	0.2	CS
Comr	nunication:	-				-		-	•		
Bine	ding Group:	i i									
Clas	ss		Type				D	efault			
Ge	eographical	\triangleright	Apartmen	t . Room	. SubZone)	1	.1.1			
Ap	plication Spe	ecific [
Pe	ripheral		Broadcas	t 🔲	Configu	rable 🗌]				
DP A	Address:		IO Type(I	D):	101 (RSM	(DTD)	Proper			52	
LTE	-Services (e	event):	COV 🖂		MinRepTin	ne:	10 sec	2	Heart	tbeat:	15 min
Inf	oReport	\boxtimes	Output pe	r default	communic	ating [Binding	Group	Wildo	card allo	wed 🛚
			Tx Prio:		High 🗌		Norr	nal 🛚		Lov	ν <u> </u>
(L	ΓE Read-Re	sponse									
ро	lling of the o	utput	Transaction	Har Dawa	Cto	مما المارية	- Π Λ a	4 \ /ala		7 o f o lt \	/alua 🖂
sh	all always be)	i ransm a	iter Powe	r-up: Store	ea valu	е 🗀 Ас	t Value		Default \	/aiue □
	pported)										
Pro	perty-Servic	e	Read only	, \sqcap		Read	/Write	\boxtimes			
(ind	ividual acce	ess):	rtead only	<u></u>		- TCau	VVIIIC				
	otion Handli							S	Save a	at Power	down
1) CO	V value is id	entical t	o heart beat	time (15)	min)						
Speci	al Features	:									

3.5.6.13 Output TempRoomSetpCoolEff

Standard Mode:

DP Name:	Tomp	PoomSo	tpCoolEff		Abbr.			Manda	tory	
FB Name:	RSMT		theorem		ADDI.	.			interna	
	KOWI	U						Can be	HILEHIA	aı
Description		41 44 -	-ti (-ft		I'	-4				llan Thia
			ctive (after con			etpoint	wnich is v	alia for the	contro	lier. I nis
		or simple	applications (cooling on	ıy).					
Datapoint Ty			_							
DPT_Name:		_Value_	Temp							
DPT Format:	10						DPT_ID:			
Field	Des	cription					Supp.	Range	Unit	Default
								full	°C	cs
Access Type	•									
◆ Output										
this $\rightarrow M$			this \rightarrow 1							
Spontane	ous	⊠ co	V:	Delta-Va	lue: 0.:	2 [MinRepTin	ne:	10 sec	
		Сус	clic	Period:	15	min (ı	recommen	ded value)		
Request		\boxtimes								
Communica	tion Ty	ре								
♦ Group Ol	bject Da	atapoint						Mandatory	/: X	
Default Gr	roup Ac	dress:							•	
Dynamics	•									
Power dov	wn: S	Save:								
Power up:	: V	/alue:	No initialisa	ation:		Defau	ult value:			
•			Saved valu	e:		Actua	al value:			
	Т	ransmit	on bus:	, <u></u>						
Exception H										
			nctional Block	diagram.						
Special Feat										
L										

FB:	RSMTD	LTE S		TempRo	omSetpCo	oolEff				Mandator	
		Outpu	ut Name:							Optiona	al 🔝
	ription:										
			effective (aft			ig setpo	oint w	hich is v	alid for t	he contro	ller. This
inform			mple applica		ling only).						
DPT:	Name	DPT_Te	mpHVACAb	s_Z	DPT ID	205.10	00	Datatyp:	e format	$V_{16}Z_{8}$	
Field			Description			Sup.	Ran	ge	Unit	COV	Default
Temp	erature		Effective co	oling setpo	oint			full	°C	0.2	CS
STAT	US								Bitset		
- all bi	its		Not support	ed		NA					
Comr	nunicatio	n:				-			-	-	
Bind	ding Grou	p:									
Clas	SS		Type					Defa	ault		
Ge	ographica	ı		nt . Room	. SubZone			1.1.	1		
Ap	plication S	pecific [
Pe	ripheral		Broadcas	st 🗌	Configu	rable 🗌]				
DP A	Address:		IO Type(ID):	101 (RSN	1TD)	Pr	operty I	D:	53	
LTE	-Services	(event):	COV 🗵]	MinRepTin	ne:	1(sec	Hea	rtbeat:	15 min
Inf	oReport	\boxtimes	Output p	er default	communica	ating [Bi	nding G	roup Wild	dcard allo	wed 🛚
			Tx Prio:		High 🗌			Normal		Lo	w \square
`	ΓΕ Read-R		•		121						
	lling of the		Tropom	ofter Dowe	r-up: Store	بط //ماید		A of M	alue 🖂	Default \	/alua 🖂
sh	all always	be	Hansina	allel Powe	r-up. Store	u valu	□	ACI V	alue 🖂	Delault	/alue
su	pported)										
	perty-Serv		Read onl	lv 🗆		Read	/\//rita	۲ ح	${\overline{\wedge}}$		
(ind	<u>ividual ac</u>	cess):	rtcad on	'У Ш		T Cau	VVIII	<u> </u>			
	otion Hand								Save	at Power	rdown 🗌
Suppo	ort of Data	point see	Functional I	Block diag	ram.						
Speci	al Feature	es:									

3.5.6.14 Output TempRoomSetpCoolEffNext

FB: RSMTD LTE Ser		omSetpCo	oolEffN	lext		M	1andator	
Output	Name:						Optiona	al 🔀
Description:								
This output contains the eff				setpoint	which	is valid	for the co	ontroller.
This information is used for								
	pHVACAbsNext	DPT ID	220.10		atype	format	$U_{16}V_{16}$	
Field De	escription		Sup.	Range	I	Unit	COV	Default
Time Ti	ime to next setpoint	in		full		min	15 ¹⁾	0
	inutes							
Temperature N	ext cooling setpoint			full		°C	0.2	CS
Communication:							_	
Binding Group:								
Class	Туре				Defau	ılt		
Geographical 🛛	Apartment . Room	. SubZone			1.1.1			
Application Specific								
Peripheral 🔲	Broadcast	Configu	rable 🗌]				
DP Address:	IO Type(ID):	101 (RSM	1TD)	Prop	erty ID):	54	
LTE-Services (event):	COV 🛛	MinRepTin	ne:	10 s	ес	Hear	tbeat:	15 min
InfoReport 🛚 🖂	Output per default	communica	ating [Bindi	ng Gro	oup Wild	card allo	wed 🛛
	Tx Prio:	High 🗌		No	rmal [$\overline{\mathbb{X}}$	Lov	w 🔲
(LTE Read-Response								
polling of the output	Tuesday office Device			/	4 \ / - 1	🔽	D - 4 I4 \	/alua 🖂
shall always be	Transm after Powe	er-up: Store	ea valu	е 🗀 <i>Р</i>	ict vai	ue 🛚	Default \	/aiue ∐
supported)								
Property-Service	Read only	1	Read	/Write	\boxtimes	1		
(individual access):	Tread only	I	Neau	VVIILE		J		
Exception Handling:						Save	at Power	down
1) COV value is identical to	heart beat time (15	min)						
Special Features:								

${\bf 3.5.6.15~Output~StatusTempRoomSetpEff}$

Standard Mode:

DF	P Name:	StatusTempRoor 4 6 1	nSetpEff	Abbr.	:		Mandat	tory			
FB	B Name: RSMTD Can be internal										
De	escription										
Th	is output co	ntains the informa	ation about the setpo	int that is	effecti	vly in opei	ration.				
	tapoint Typ	<u>e</u>									
	PT_Name:	DPT_StatusRo	omSetp								
	PT Format:	N ₈				DPT_ID:	20.113				
Fie		Description				Supp.	Range	Unit	Default		
Sta	atus		HMI / supervisor			М	02	enum	CS		
			ernative setpoint			M					
			rotection setpoint			M					
		all other enume	rations			NA					
Ac	Access Type										
♦	Output										
	this \rightarrow M		nis \rightarrow 1								
	Spontaneo	us 🛛 COV:	□ Delta-V	/alue: 0.2	2 1	MinRepTin	ne:	10 sec			
		Cyclic	Period:	15	imin (ı	recommen	ided value)				
	Request	\boxtimes									
Co	ommunicati	on Type									
•	Group Obj	ect Datapoint					Mandatory	r: 🛛			
	Default Gro	oup Address: -	- -								
Dy	/namics										
	Power dow	n: Save:									
	Power up:	Value:	No initialisation:		Defau	ult value:					
			Saved value:		Actua	ıl value:					
		Transmit on	bus:								
Ex	ception Ha	ndling									
			ional Block diagram.								
Sp	ecial Featu	res									

FB:	RSMTI	D	LTE Se		StatusF	RoomSetpE	ff			N	landator Optiona	
Desci	ription:		Оисрии						<u> </u>			<u></u>
			ns the in	formation al	oout the	setpoint tha	t is effe	ctivly in c	perat	ion.		
DPT:	Nam	e D	PT_Stat	usRoomSe	tp	DPT ID	20.113		type f	ormat N	1 8	
Field			ription				Sup.	Range		Jnit	COV	Default
Status	3			m HMI / sup			M	02		enum	Υ	cs
				alternative			M					
		2 =	Building	Protection	setpoint		M					
		all oth	ner enur	nerations			NA					
Comr	nunicat	tion:										
Bind	ding Gr	oup:										
Clas	SS			Type				D	efault			
Ge	eograph	ical	\boxtimes	Apartment	. Room	. SubZone		1.	.1.1			
Ap	plication	n Spe	ecific 🗌									
Pe	ripheral			Broadcast		Configura	ble 🗌					
DP A	Addres	s:		IO Type(ID)):	101 (RSM)	TD)	Propert	ty ID:	5	5	
LTE	-Servic	es (e	vent):	cov 🖂	N	MinRepTime	e:	10 sec)	Hearth	eat:	15 min
Inf	oRepor	t	\boxtimes	Output per	default d	communicat	ing 🔲	Binding	Grou	ıp Wildca	ard allow	red 🛛
				Tx Prio:		High 🗌		Norm	nal 🛚		Low	
	ΓΕ Read											
	lling of t			Transm off	or Dowo	r up: Stored	Value	□ ∧ot	Value	. M D	efault Va	luo 🖂
sh	all alwa	ys be		TTAHSIII AIL	errowe	r-up: Stored	value	Act	value		ziauit va	iue 🗀
su	pported)										
	perty-S			Read only			Read/V	Vrito	\boxtimes			
(ind	ividual	acce	ss):	ixeau only	Ш		ixeau/v	VIILE				
	otion H									Save at	Powerd	lown
Suppo	ort of Da	atapoi	int see F	unctional B	lock diag	gram.						
Speci	al Feat	ures:										
					_					_		

3.5.6.16 Parameter Apartment_x

FB:	RSMTD Property Name (<u>Server</u>): Apartn					ent_x			Mandator Optiona	
Desci	ription:	<u> </u>			_					
	•	partmer	t z	one. (controller itself	f)					
DPT:	Name	DPT_U	CO	untValue8_Z	DPT ID	202.002	2 Data	type format	U ₈ Z ₈	
Field				Description		•	Sup.	Range	Unit	Default
Zone			١	Number of the Apartn	nent		-	(0) 1126		1
STAT	US		Ī						Bitset	
- OutofService zone active / inactive							0	true/false	Bit 0	false
- all other bits not supported, fixed to '0'							NA			false
COMI	COMMAND							enum		CS
	nalWrite						М	0		
- SetC	OSV & Res	setOSV	5	Set zone inactive / ac	tive		0	3 / 4		
- all of	ther comm	ands	r	ot supported			NA			
Comr	nunicatio	n:				-	•		-	
DP A	Address:			IO Type(ID):	101 (RSM	(DTD)	Proper	ty ID:	101	
(in t	he server)		Start-Index:	1		N° of e	lements	1	
Pro	perty acce	ess:		Read only		Read/W	/rite	\boxtimes		
Prot	ection			Read level	-		Write le	evel	-	
Exce	otion Han	dling:	\	/alue after Power-up	: Stored	Value 🛚	Act Va	lue 🔲 Def	ault Value	
	····									
Speci	al Feature	es:								
Zone	of the con	troller its	elf	•						
Zone	= 0 (wildca	ard): Ser	ds	s to all listeners						
The device is not LTE communicating in this zone if zone is 'OutOfService'.										
If Apa	Apartment x is 'OutOfService' Room y and SubZone z automatically are 'OutOfService' too.									

3.5.6.17 Parameter Room_y

FB:	RSMTD	Pr	ope	rty Name (<u>Server</u>):	Room_y				Mandator Optiona	
Desci	ription:	-			_				Ориона	<u> </u>
		room z	zone	. (controller itself)						
DPT:	Name	DPT	_Uc	ountValue8_Z	DPT ID	202.002	Data	type format	U ₈ Z ₈	
Field	•			Description				Range	Unit	Default
Zone				Number of the Room				(0) 163		1
STAT	US								Bitset	
- Outo	ofService			zone active / inactive			0	true/false	Bit 0	false
- all of	ther bits			not supported, fixed to	0 '0'		NA			false
COM	MAND							enum		CS
- Norr	nalWrite						M	0		
- SetC	SV & Re	setOS		Set zone inactive / ac	tive		0	3 / 4		
- all of	ther comr	<u>nands</u>		not supported			NA			
Comr	nunicatio	n:								
	Address:			. ,	101 (RSM	TD)	Propert		102	
(in t	he serve	r)		Start-Index:	1			lements	1	
	perty acc	ess:		Read only		Read/W		\boxtimes		
Prot	ection			Read level	-		Write le	evel	-	
Excep	otion Har	ndling	: '	Value after Power-up	: Stored \	/alue ⊠	Act Val	ue 🗌 Def	ault Value	
Speci	al Featui	es:								
Zone	of the cor	ntroller	itse	f.						
	ne = 0 (wildcard): Sends to all listeners									
				nmunicating in this so		is 'OutOf	Service'			
'OutO	fService'	is take	n ov	er from Apartment_x.						

$\bf 3.5.6.18\; Parameter\; SubZone_z$

FB:	RSMTD	, , ,,								Mandator Optiona	
Desci	ription:	<u> </u>								Орионе	<u>" </u>
	•	SubZone) . (controller itself)							
DPT:	Name	DPT_l	Jcc	ountValue8_Z	DPT ID	202.002	2	Data	type format	U_8Z_8	
Field			[Description			S	up.	Range	Unit	Default
Zone			1	Number of the SubZo	ne				(0) 115		1
STAT	US		Ī							Bitset	
- Outo	ofService		2	zone active / inactive				0	true/false	Bit 0	false
- all other bits not supported, fixed to '0'							1	NA			false
COMI	MAND								enum		CS
- Norr	nalWrite							M	0		
- SetC	OSV & Re	setOSV	3	Set zone inactive / ac	tive			0	3/4		
- all of	ther comr	nands	r	not supported			1	NΑ			
Comr	nunicatio	n:	-			-		-		_	
DP A	Address:			IO Type(ID):	101 (RSN	ITD)	Р	roper	ty ID:	103	
(in t	he serve	r)		Start-Index:	1		N	° of e	lements	1	
Pro	perty acc	ess:		Read only		Read/W	/rite)	\boxtimes		
Prot	ection			Read level	-		W	/rite le	evel	-	
Exce	otion Har	ndling:	١	Value after Power-up	: Stored	Value 🛚	Α	ct Va	lue 🔲 Def	ault Value	
Speci	al Featu	es:									
Zone	of the cor	ntroller it	sel	f.							
Zone	= 0 (wildo	ard): Se	nd	s to all listeners							
The device is not LTE communicating in this zone if zone is 'OutOfService'.											
'OutO	OutOfService is not LTE communicating in this zone if zone is OutOfService.										

3.5.6.19 Parameter Apartment_u

FB:	B: RSMTD Property Name (<u>Server</u>): Apartment_u									Mandator Option			
Descr	iption:		<u> </u>			-					<u> </u>		
		ap	artment	Z	one. (schedule)								
DPT:	Nam	e l	DPT_U	Ю	untValue8_Z	DF	PT ID	202.00	2	Data	type format	U ₈ Z ₈	
Field				С	escription				S	Sup.	Range	Unit	Default
Zone				١	lumber of the Apartn	ner	nt				(0) 1126		1
STATI	US								Ī ·			Bitset	
- OutofService zone active / inactive									0	true/false	Bit 0	false	
					ot supported, fixed to	o '0)'			NA			false
COMN	JAND										enum		CS
- Norm	nalWrite									M	0		
	SV & R			S	Set zone inactive / ac	tive	Э			0	3/4		
- all ot	her con	ıma	ınds	n	ot supported					NA			
Comn	nunicat	ion	:	_									
DP A	Address	S :			IO Type(ID):	10	1 (RSM	1TD)	Р	roper	ty ID:	104	
(in tl	he serv	er)			Start-Index:	1			Ν	l° of e	lements	1	
Prop	erty ac	ces	ss:		Read only			Read/V	Vrit	е	\boxtimes		
Prot	ection				Read level	-			٧	Vrite le	evel	-	
Excep	tion Ha	ınd	ling:	٧	alue after Power-up	: ;	Stored	Value 🗵] [ct Va	lue 🗌 De	fault Value	e 🗌
Speci	al Feati	ıres	s:										
Zone f	for the s	che	edule.										
					to all listeners								
The de	evice is	not	LTE co	m	municating in this zo	ne	if zone	is 'OutC)fSe	ervice	' .		
If Apai	Apartment u is 'OutOfService' Room v and SubZone w automatically are 'OutOfService' too.												

3.5.6.20 Parameter Room_v

FB:	RSMTD	Prop	er	ty Name (<u>Server</u>):	Server): Room_v					Mandator Optiona	
Desci	ription:				_					Орионе	<u> Ш</u>
	•	oom zon	e.	(schedule)							
DPT:	Name	DPT_U	СО	untValue8_Z	DPT ID	202.002	2	Data	type format	U ₈ Z ₈	
Field				Description	•	•	S	up.	Range	Unit	Default
Zone			١	Number of the Room					(0) 163		1
STAT	US		Ī							Bitset	
				one active / inactive				0	true/false	Bit 0	false
- all other bits not supported,					o '0'		1	NA			false
COMI	MAND								enum		CS
- Norr	nalWrite							M	0		
- SetC	OSV & Re	setOSV	5	Set zone inactive / ac	tive			0	3 / 4		
- all of	ther comn	nands	r	ot supported			1	NA			
Comr	nunicatio	n:				-		-		•	
DP A	Address:			IO Type(ID):	101 (RSM	(TD)	Р	roper	ty ID:	105	
(in t	he serve	r)		Start-Index:	1		Ν	° of e	lements	1	
Pro	perty acc	ess:		Read only		Read/W	/rite	9	\boxtimes		
Prot	ection			Read level	-		W	/rite le	evel	-	
Exce	otion Har	dling:	\	/alue after Power-up	: Stored	Value 🛚	Α	ct Va	lue 🔲 Def	ault Value	
Speci	al Featur	es:									
Zone	for the sc	hedule.									
Zone	= 0 (wildo	ard): Ser	ds	s to all listeners							
The device is not LTE communicating in this zone if zone is 'OutOfService'.											
'OutOfService' is taken over from Apartment_u.											

3.5.6.21 Parameter SubZone_w

FB:					SubZon	e_w			Mandator Optiona	
Desci	ription:								Орионе	<u> </u>
		Subz	Zone.	(schedule)						
DPT:	Name	DP	T_Uc	countValue8_Z	DPT ID	202.002	2 Data	type format	U ₈ Z ₈	
Field	•			Description		•	Sup.	Range	Unit	Default
Zone				Number of the SubZo	ne		•	(0) 115		1
STAT	US								Bitset	
- Outo	- OutofService zone active / inactive					0	true/false	Bit 0	false	
- all other bits not supported, fixed to '0'						NA			false	
COMMAND								enum		CS
- Norr	nalWrite						M	0		
- SetC	OSV & Re	setO	SV	Set zone inactive / ac	tive		0	3 / 4		
- all of	ther comi	mand	ls	not supported			NA			
Comr	nunicatio	on:								
DP /	Address			IO Type(ID):	101 (RSM	1TD)	Proper		106	
(in t	he serve	r)		Start-Index:	1			lements	1	
Pro	perty acc	ess:		Read only		Read/W	'rite	\boxtimes		
Prot	ection			Read level	-		Write le	evel	-	
Excep	otion Ha	ndlin	g:	Value after Power-up:	Stored	Value 🛚	Act Va	lue 🗌 Def	ault Value	
Speci	al Featu	res:								
Zone	for the so	hedu	ıle.							
				ds to all listeners						
The d	e device is not LTE communicating in this zone if zone is 'OutOfService'.									
'OutO	utOfService' is taken over from Apartment_u.									

3.5.6.22 Parameter Apartment_m

FB:	RSMTD	Prop	er	ty Name (<u>Server</u>):	Apartment_m				Mandator Optiona	
Desci	ription:				-				Optiona	ai 🔼
		nartmen	 t 7	one. (energy manag	iement)					
DPT:				untValue8_Z	DPT ID	202.002	Date	atype format	U ₈ Z ₈	
Field	INAITIE	ו אם [_		טר ו זט	202.002			Unit	Default
			_	Description			Sup.	Range	Offit	Delault
Zone			<u> </u>	lumber of the Apartn	nent			(0) 1126		
STATUS							_		Bitset	
				one active / inactive			0	true/false	Bit 0	false
- all other bits not supported, fixed to					o '0'		NA			false
COMMAND								enum		CS
- Norr	nalWrite						M	0		
- SetC	SV & Res	etOSV	S	Set zone inactive / ac	tive		0	3 / 4		
- all of	ther comm	ands	n	ot supported			NA			
Comr	nunicatio	n:				_				
DP A	Address:			IO Type(ID):	101 (RSN	/ITD)	Proper	ty ID:	107	
(in t	he server)		Start-Index:	1		N° of e	lements	1	
Pro	perty acce	ess:		Read only		Read/W	/rite	\boxtimes		
Prot	ection			Read level	-		Write I	evel	-	
Exce	otion Han	dling:	٧	/alue after Power-up	: Stored	Value 🛚	Act Va	lue 🔲 Def	ault Value	
Speci	al Feature	es:								
Zone	for 'energy	/ manage	m	ient'.						
Zone	= 0 (wildca	ard): Sen	ds	s to all listeners						
The d	The device is not LTE communicating in this zone if zone is '0						fService	'.		
	Apartment_m is 'OutOfService' Room_n and SubZone_o aut								vice' too.	

3.5.6.23 Parameter Room_n

FB:	3: RSMTD Property Name (<u>Server</u>): Room_n							Mandator Optiona		
Desci	ription:				-				Орионе	
		room	zone	e. (energy managemer	nt)					
DPT:				ountValue8_Z	DPT ID	202.002	Data	type format	U ₈ Z ₈	
Field	•			Description				Range	Unit	Default
Zone				Number of the Room				(0) 163		1
STAT	US								Bitset	
- OutofService zone active / inactive						0	true/false	Bit 0	false	
- all other bits not supported, fixed to '0'				o '0'		NA			false	
COMMAND								enum		CS
- Norr	nalWrite						M	0		
- SetC	SV & Re	setO	SV	Set zone inactive / ac	tive		0	3/4		
- all of	ther comr	nand	S	not supported			NA			
Comr	nunicatio	n:								
DP /	Address:			. ,	101 (RSM)	TD)	Proper		108	
(in t	he serve	r)		Start-Index:	1		N° of e	lements	1	
Pro	perty acc	ess:		Read only		Read/W	rite	\boxtimes		
Prot	ection			Read level	-		Write le	evel	-	
Excep	otion Har	ndling	g:	Value after Power-up	: Stored \	√alue 🗵	Act Va	lue 🗌 Def	ault Value	
Speci	al Featu	es:								
Zone	for 'energ	y ma	nage	ment'.						
				ds to all listeners						
	e device is not LTE communicating in this zone if zone is 'OutOfService'.									
'OutO	tOfService' is taken over from Apartment_m.									

3.5.6.24 Parameter SubZone_o

FB:	RSMTD	Prop	er	ty Name (<u>Server</u>):	lame (<u>Server</u>): SubZone_o					Mandator Optiona	
Desci	ription:									Орионе	<u> </u>
Numb	er of the	SubZone	(6	energy management)						
DPT:	Name	DPT_U	CO	untValue8_Z	DPT ID	202.002	2	Data	type format	U ₈ Z ₈	
Field				Description			S	Sup.	Range	Unit	Default
Zone			١	Number of the SubZo	ne				(0) 115		1
STATUS										Bitset	
				one active / inactive				0	true/false	Bit 0	false
- all other bits not supported, fixed to					o '0'		1	NA			false
COMI	COMMAND								enum		CS
- Norr	nalWrite							M	0		
- SetC	SV & Re	setOSV	S	Set zone inactive / ac	tive			0	3/4		
- all of	ther comn	nands	r	not supported			1	NA			
Comr	nunicatio	n:				-		-		_	
DP A	Address:			IO Type(ID):	101 (RSM	(TD)	Р	roper	ty ID:	109	
(in t	he servei	·)		Start-Index:	1		Ν	° of e	lements	1	
Pro	perty acc	ess:		Read only		Read/W	/rite	Э			
Prot	ection			Read level	-		W	/rite le	evel	-	
Exce	otion Han	dling:	\	/alue after Power-up	: Stored	Value 🛚	Α	ct Va	lue 🗌 Def	ault Value	
Speci	al Featur	es:									
Zone	for 'energ	y manag	em	nent'.							
Zone	= 0 (wildc	ard): Ser	ds	s to all listeners							
The d	The device is not LTE communicating in this zone if zone is 'OutOfService'.										
'OutOfService' is taken over from Apartment_m.											

${\bf 3.5.6.25\ Parameter\ TempRoomSetpHeatBuildProt}$

FB:	RSMTD	Prope	rty Name (<u>Server</u>):	TempRoomSetpHeat BuildProt				Mandatory ☐ Optional ⊠		
Desci	ription:	•		-			- '	<u> </u>		
Heatir	ng setpoint f	or buildir	ng protection.							
DPT:	Name [OPT_Ter	npHVACAbs_Z	DPT ID	205.100	Data	atype format	$V_{16}Z_{8}$		
Field			Description			Sup.	Range	Unit	Default	
Temp	erature						full	°C	12	
STAT	US	1	not supported			NA]		
COM	MAND	1	not supported			NA				
Comr	nunication						-	-		
DP A	Address:		IO Type(ID):	101 (RSM	ITD)	Proper	rty ID:	111		
(in t	he server)		Start-Index:	1		N° of e	elements	1		
Pro	perty acces	s:	Read only		Read/W	/rite	\boxtimes			
Prof	tection		Read level	-		Write I	evel	-		
Exce	otion Hand	ling: `	Value after Power-up	: Stored	Value 🛚	Act Va	lue 🔲 De	fault Value	э 🗌	
Speci	ial Features	s:								

3.5.6.26 Parameter TempRoomSetpCoolBuildProt

FB:	RSMTD	Prope	erty Name (<u>Server</u>):	omSetp	Cool		Mandator		
				BuildPro	t			Optiona	al 🛛
Desc	ription:	•		-			•		
Coolii	ng setpoint	for build	ing protection.						
DPT:	Name	DPT_Te	empHVACAbs_Z	DPT ID	205.100	Data	type format	$V_{16}Z_{8}$	
Field			Description			Sup.	Range	Unit	Default
Temp	erature						full	°C	40
STAT	US								
- all b	its		not supported, fixed t	o '0'		NA			false
COM	MAND								
- Norr	malWrite					M	0		
- all o	ther comma	ands	not supported			NA			
Comi	<u>munication</u>	1:							
DP	Address:		IO Type(ID):	101 (RSM	TD)	Proper	ty ID:	112	
(in t	he server)		Start-Index:	1		N° of e	lements	1	
Pro	perty acce	ss:	Read only		Read/W	/rite	\boxtimes		
Pro	tection		Read level	-		Write le	evel	-	
Exce	ption Hand	lling:	Value after Power-up	: Stored \	√alue 🛚	Act Va	lue 🗌 Def	ault Value	
								·	
Spec	pecial Features:							<u> </u>	
									<u> </u>

3.5.6.27 Parameter TempRoomSetpHeatAltAbs

							1		_
FB:	RSMTD	Prope	erty Name (<u>Server</u>):	TempRo	omSetpl	Heat		Mandator	у 📙
				AltAbs				Optiona	al 🛛
Desc	ription:			-			.		
Heati	ng value for a	alternat	ive setpoint.						
DPT:	Name D	PT_Te	mpHVACAbs_Z	DPT ID	205.100	Datat	type format	$V_{16}Z_{8}$	
Field			Description			Sup.	Range	Unit	Default
Temp	erature						full	°C	cs
STAT	US								
- all b	its		not supported, fixed to	o '0'		NA			false
COM	MAND								
- Norr	malWrite					M	0		
- all o	ther commar	nds	not supported			NA			
Comr	munication:				-	-			
DP .	Address:		IO Type(ID):	101 (RSM	TD)	Propert	y ID:	113	
(in t	he server)		Start-Index:	1		N° of el	ements	1	
Pro	perty access	s:	Read only		Read/W	'rite			
Pro	tection		Read level	-		Write le	vel	-	
Exce	ption Handli	ng:	Value after Power-up	: Stored \	/alue ⊠	Act Val	ue 🔲 Def	ault Value	
Spec	ial Features								

3.5.6.28 Parameter TempRoomSetpCoolAltAbs

FB:	RSMTD	Prop	erty Name (<u>Server</u>):	TempRo	omSetp	Cool		Mandator	
				AltAbs				Optiona	al 🛛
Desci	ription:	•		-			•		
Coolir	ng value for	alterna	tive setpoint.						
DPT:	Name	DPT_Te	empHVACAbs_Z	DPT ID	205.100	Data	type format	$V_{16}Z_{8}$	
Field			Description			Sup.	Range	Unit	Default
Temp	erature						full	°C	cs
STAT	US								
- all b	its		not supported, fixed to	o '0'		NA			false
COMI	MAND								
- Norr	nalWrite					M	0		
- all of	ther comma	ands	not supported			NA			
Comr	nunication	1:							
DP A	Address:		IO Type(ID):	101 (RSM	TD)	Proper	,	114	
(in t	he server)		Start-Index:	1		N° of e	lements	1	
Pro	perty acce	ss:	Read only		Read/W	'rite	\boxtimes		
Prot	ection		Read level	-		Write le	evel	-	
Exce	otion Hand	lling:	Value after Power-up	: Stored \	/alue ⊠	Act Va	lue 🗌 Def	ault Value	<u> </u>
Speci	al Feature	s:							
			_		•	•			•

3.5.6.29 Parameter TempRoomSetpAltOffset

FB:	RSMTD	Prope	erty Name (<u>Server</u>):	TempRoc	mSetp			Mandator	у 🗌
				AltOffset				Optiona	al 🛛
Desc	ription:			-					
Offse	t value for t	he alterr	native setpoint.						
DPT:	Name	DPT_Te	empHVACRel_Z	DPT ID	205.101	Data	type format	$V_{16}Z_{8}$	
Field			Description			Sup.	Range	Unit	Default
Temp	erature diff	erence					full	K	0
STAT	US								
- all b	its		not supported, fixed to	o '0'		NA			false
COM	MAND								
- Norr	malWrite					M	0		
- all o	ther comma	ands	not supported			NA			
Comi	<u>munication</u>):							
DP	Address:		IO Type(ID):	101 (RSMT	D)	Propert	y ID:	115	
(in t	he server)		Start-Index:	1		N° of el	lements	1	
Pro	perty acce	ss:	Read only		Read/W	rite	\boxtimes		
Pro	tection		Read level	-		Write le	evel	-	
Exce	ption Hand	lling:	Value after Power-up	: Stored V	alue 🛚	Act Val	ue 🔲 Def	ault Value	
Spec	ial Feature	s:							

3.5.6.30 Parameter TimeComfort

FB:				mfort			Mandator Optiona		
Desci	ription:	_		-					
Time	duration for	manual	comfort.						
DPT:	Name [OPT_Tim	nePeriodMin	DPT ID	7.006	Data	atype format	U ₁₆	
Field			Description			Sup.	Range	Unit	Default
Time							full	min	0
Comr	nunication:	-			_		-	-	
DP /	Address:		IO Type(ID):	101 (RSN	/ITD)	Proper	ty ID:	116	
(in t	he server)		Start-Index:	1		N° of e	elements	1	
Pro	perty acces	s:	Read only		Read/W	/rite	\boxtimes		
Prot	ection		Read level	-		Write I	evel	-	
Excep	otion Handl	ing:	Value after Power-u	p: Stored	Value 🛚	Act Va	lue 🗌 Def	ault Value	
Speci	al Features	s:		_	_	-	·		_

3.5.6.31 Parameter LimitLowerTempRoomSetp

FB:	RSMTD	Prope	erty Name (<u>Server</u>): LimitLower TempRoomSetp			Mandatory ☐ Optional ⊠			
Desc	Description:								
Lowe	Lower limit for internally calculated setpoint.								
DPT: Name DPT_Te		empHVACAbs_Z DPT ID 205.100		Data	atype format	V ₁₆ Z ₈			
Field			Description			Sup.	Range	Unit	Default
Temperature							full	°C	12
STATUS									
- all bits			not supported, fixed to '0'			NA			false
COMMAND									
- NormalWrite						M	0		
- all other commands			not supported			NA			
Comr	Communication:								
DP Address:		IO Type(ID):	101 (RSMTD)		Property ID:		117		
(in the server)		Start-Index:	1 N° of		N° of e	lements 1			
Property access:			Read only	☐ Read/Write ⊠			\boxtimes		
Protection			Read level	evel - Write			evel -		
Exce	Exception Handling: Value after Power-up: Stored Value ☐ Act Value ☐ Default Value ☐								
Special Features:									

${\bf 3.5.6.32\ Parameter\ Limit Upper Temp Room Setp}$

FB:	RSMTD	Prop	perty Name (<u>Server</u>): LimitUpper			Mandatory			
			TempRoomSetp			Optional 🛛			
Desci	Description:								
Upper limit for internally calculated setpoint.									
DPT:	Name	DPT_Te	empHVACAbs_Z	DPT ID	205.100	Data	type format	$V_{16}Z_{8}$	
Field			Description			Sup.	Range	Unit	Default
Temp	erature						full	°C	12
STATUS									
- all b	its		not supported, fixed to '0'			NA			false
COMI	MAND								
	nalWrite					M	0		
- all o	ther comma	ınds	not supported			NA			
Communication:									
DP A	Address:		IO Type(ID):	101 (RSM	TD)	Propert		118	
(in t	he server)		Start-Index:	1		N° of el	ements	1	
Pro	perty acces	ss:	Read only		Read/W	'rite	\boxtimes		
Prot	tection		Read level	-		Write le	evel	-	
Exce	otion Hand	ling:	Value after Power-up	: Stored \	Value 🛚	Act Val	ue 🗌 Def	ault Value	: 🗌
		·	<u>-</u>	<u>'</u>			·		<u>'</u>
Speci	ial Feature	s:							
					•	•			

Setpoint Manager Air Quality (SMAQ) 3.6

3.6.1 Aims and objectives

The Functional Block 'Setpoint Manager Air Quality' provides the HVAC facilities with the necessary AQ setpoint.

AQ control e.g. may be defined to be active in comfort and eventually in standby mode. In the other modes no AQ setpoint is definend (no AQ control).

Functional specifications

In the LTE-Mode the 'Setpoint Manager Air quality' supports the following LTE zoning:

- "Apartment . Room . SubZone"
- "General Peripheral Tag".

Inputs

 AQSetpUser One absolute AQ setpoint value from a HMI

e.g. to override the internal setpoint.

Outputs

 AQSetpEff The effective AQ setpoint

normally valid for 'Comfort'

It is delivered to various controller FB.

• AQSetpUserEff The effective air quality setpoint, as SMAQ's result of all

> AQSetpUser inputs to SMAQ. It is delivered to user HMI FBs

('User HVAC Display', 'User Air Quality Setpoint Setting')

Binding Groups (LTE)

Binding group x.y.z The setpoint manager air quality offers different binding GenPeripheral possibilities. When implementing, one of them or both

may be realised.

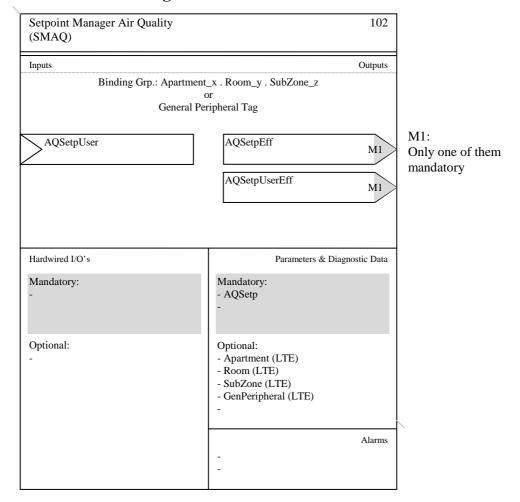
Parameters

 AQSetp AQ level for comfort

3.6.3 **Constraints**

None.

3.6.4 Functional Block diagram



3.6.5 Datapoint description

Overview

Datapoints	Description / Remarks	Datapoint Type	Additional info		
Inputs					
AQ Setp User	User air quality setpoint with: - COV and RepPer - Z ₈ STATUS supported from FB User Air Quality Setpoint Setting	LTE: 203.100 DPT_HVACAirQual $U_{16}Z_8$ S: 9.008 DPT_Value_AirQuality F_{16}	LTE: O S: (GO) ppm		
Outputs					
AQ Setp Eff	Air quality setpoint value with: - COV and RepPer - Z ₈ not supported to FB various controller	LTE: 203.100 DPT_HVACAirQual U ₁₆ Z ₈ S: 9.008 DPT_Value_AirQuality F ₁₆	LTE: M S: GO ppm		

Datapoints	Description / Remarks	Datapoint Type	Additional info		
AQ Setp User Eff	Effective air quality setpoint value value (result of all AQSetpUser inputs) with: - COV and RepPer - Z ₈ STATUS supported to FB User HVAC Display, User Air Quality Setpoint Setting	LTE: 203.100 DPT_HVACAirQual $U_{16}Z_8$ S: 9.008 DPT_Value_AirQuality F_{16}	LTE: M S: GO ppm		
Parameters					
Apartment	LTE zoning number for Apartment	202.002 DPT_UcountValue8_Z U ₈ Z ₈	0		
Room	LTE zoning number for Room	202.002 DPT_UcountValue8_Z U ₈ Z ₈	O 1		
SubZone	LTE zoning number for SubZone	202.002 DPT_UcountValue8_Z U ₈ Z ₈	O 1		
GenPeripheral	LTE zoning number for GenPeripheral	203.012 DPT_UcountValue16_Z U ₁₆ Z ₈	O 1		
AQ Setp	Air quality setpoint for AQ high level (low ppm value)	203.100 DPT_HVACAirQual U ₁₆ Z ₈	M cs		

SMAQ Runtime Interworking - Dependence on Configuration Modes

			STANDARD MODE		ENDED ODE	
		Basic FB	S-Mode	Standard Mode Interface	HEE	
Inputs	AQSetpUser	(GO) _b		(GO)	0	
Outputs	AQSetpEff	GO1 _b	GO1	GO1 M1		
	AQSetpUserEff	GO1 _b	GO1	GO1	M1	

SMAQ LTE specific Properties

		Support
Parameter	Apartment	0
	Room	0
	SubZone	0
	GenPeripheral	0

SMAQ Standard Properties of Interface Objects (or memory mapped DP)

		Support
Parameter	AQSetp	M

3.6.6 Detailed specification of the Datapoints

3.6.6.1 Input AQSetpUser

DF	P Name:	AQ:	SetpUser			Abbr.:			Manda	andatory		
FB	Name:	SM	AQ						Can be	internal		
De	scription											
					unctional Block ι		quality s	setpoint se	etting. This	value ov	errides/	
			setpoint va	alues (co	ompany specific)							
	tapoint Ty											
	PT_Name:	DI	PT_Value_	<u> AirQuali</u>	ty			T				
	DPT Format: F ₁₆ DPT_ID: 9.008											
Fie	eld	D	escription				Supp.	Range	Unit	Default		
								full	ppm	CS		
Ac	Access Type											
♦	Input		_									
	$N \rightarrow this$			$1 \rightarrow th$	is 🛛							
	Spontaneo	us			Cyclically:			Time-	out:	NO *		
	Request				Polling:			Perio	d:			
Co	mmunicati	ion i	Туре									
♦		•	Datapoint						Mandatory	<u>′</u> : ⊠		
	Default Gro	oup	Address:									
Dy	namics											
	Power dow	n:	Save:		<u>, </u>							
	Power up:		Value:	No ir	nitialisation:		Defau	ılt value:				
				Save	ed value:]						
							Read	from bus:				
	ception Ha											
				ibility wit	th existing EIB p	roducts.						
Sp	ecial Featu	ires										

FB:	SMAQ	Input N		AQSetpl	Jser			Mandatory ☐ Optional ⊠			
Desci	ription:	<u> </u>						-		•	
	nformation is					air qualit	y setpoint	t sett	ing. Th	is value o	verrides
one o	f the internal				pecific).						
DPT:	Name D	PT_HVA	ACAirQual	_Z	DPT ID	203.100	Datat	ype f	ormat	$U_{16}Z_{8}$	
Field			Description	on					Sup.	Unit	Default
Air gu			AQ value	!						ppm	cs
STAT										Bitset	
	tOfService		Function	out of Sei	rvice				0	t/f	false
- Fau	ult			on is corru					0	t/f	false
- Ov	erridden				orarily ove	rridden			0	t/f	false
- InA				on with ala					0	t/f	false
- Alar	mUnAck			edgement	of alarm				0	t/f	false
			all other l	oits					NA		
Comr	nunication:							_		-	
Bind	ding Group:										
Clas	ss		Type				Default				
Ge	eographical		Apartmer	nt . Room	. SubZone		1.1.1				
Ap	plication Spe	ecific 🗌									
Pe	ripheral	\boxtimes	Broadcas	st 🗌	Configura		1				
DP A	Address:		IO Type(387 (UAC		Property	y ID:		51	
LTE	-Service (ev	ent):	InfoRepo	rt Sniffer	on Binding						
	oReport	\boxtimes	Timeout:			NO *	Min				
	-Service (po		Pood Wil	deard / Pa	esp Sniffer	on Rindir	na Group.				
Re	ead – Respor	nse	ixeau vvii	ucaiu / ixe	esp Silliei	OH BIHUII	ig Group.				
Value	Value after Power-up: Default Value ∑ Stored Value □									ue 🗌	
	otion Handli							Sav	e at Po	werdown	
* NO	timeout due	to comp	atibility wi	th S-Mode	e and exist	ing EIB p	roducts.				
Speci	pecial Features:										
	-										

3.6.6.2 Output AQSetpEff

DP Name:	AQ	QSetpEff						Abbr.:				Mandatory		
FB Name:	SM	AQ									Can b	e interna	al	
Description														
This output co	ontai	ns the	effec	tive (afte	er corr	ections	s) AQ se	tpoir	nt whi	ch is valid	for the co	ontroller.		
Datapoint Ty	ре													
DPT_Name:	DI	PT_Va	lue_/	AirQualit	:y									
DPT Format:	10 =										9.008			
Field	De	Description Su									Range	Unit	Defa	ult
											full	ppm	cs	i
Access Type	Access Type													
♦ Output														
this \rightarrow M				this \rightarrow	1									
Spontaneous 🛛 COV: 🔻 Delta-Value: 10 MinRepTime: 10 sec														
			Cyc	lic	\boxtimes	Perio	d:	15m	nin (r	ecommen	ded value	e)		
Request														
Communicat	ion	Type												
♦ Group Ob	•										Mandato	ry: 🛛		
Default Gr	oup.	Addres	SS:											
Dynamics														
Power dov	vn:	Save:	:											
Power up:		Value) :	No in	itialisa	ition:		[Defau	ılt value:				
					d value	e:			Actua	ıl value:		\boxtimes		
			mit o	on bus:			\boxtimes							
Exception Ha	andli	ing												
Special Feat	ures													

FB: SMAQ LTE Sel			Mandatory ⊠ Optional □				
Description:	<u> </u>		<u> </u>				
This output contains the eff	fective (after corrections) A	Q setpoint which is	valid for the c	ontroller.			
DPT : Name DPT_HVA	CAirQual DPT	ID 203.100 Da	tatype format	$U_{16}Z_{8}$			
	escription	Sup. Range	Unit	COV	Default		
	Q value	M ful	l ppm	10	CS		
STATUS							
	lot supported	NA					
Communication:							
Binding Group:							
Class	Туре		Default				
Geographical 🗵	Apartment . Room . Sub	Zone	1.1.1				
Application Specific							
Peripheral 🖂	·	nfigurable 🛚	1				
DP Address:			erty ID:	51			
LTE-Services (event):							
InfoReport 🖂	Output per default comm		ing Group Wild	card allo	wed 🛚		
	Tx Prio: Hig	h 🗌 No	ormal 🛚	Low 🗌			
(LTE Read-Response polling of the output shall always be supported)	Transm after Power-up:	Stored Value 🗌 📝	Act Value ⊠	Default \	/alue □		
Property-Service (individual access):	Read only	Read/Write					
Exception Handling:			Save	at Power	rdown		
<u></u>							
Special Features:							
	·	·	·-				

3.6.6.3 Output AQSetpUserEff

DP Name:	AQSetpUserEff		A	obr.:		Manda	tory					
FB Name:	SMAQ					Can be	interna					
Description												
This output co SMAQ.	ntains the effective	e air quality s	setpoint, as S	MAQ's	result of all A	QSetpUse	r inputs	to				
Datapoint Ty	ре											
DPT_Name:	DPT_Value_Air	Quality										
DPT Format:	F ₁₆	DPT_ID: 9.008										
Field	Description				Supp.	Range	Unit	Default				
						full	ppm	CS				
Access Type												
♦ Output		-										
this \rightarrow M		his \rightarrow 1										
Spontaneo	Spontaneous 🛛 COV: 🔻 Delta-Value: 10 MinRepTime: 1)											
Cyclic Period: 15min (recommended value)												
Request												
Communicati	on Type											
	ject Datapoint					Mandatory	/:					
	oup Address: -											
Dynamics												
Power dow	n: Save:											
Power up:	Value:	No initialisation			fault value:							
		Saved value:			tual value:							
	Transmit on	bus:	\triangleright	1								
Exception Ha	ndling											
Special Featu												
	m repetition time					be caused	d by use	: r				
interaction	interaction on an HMI. HMI users expect immediate feedback.											

FB:	SMAQ	LTE S	erver	AQSetpUserI	Eff				Ma	ndatory	\boxtimes
		Outpu	t Name:	-					(Optional	
Desc	ription:	-						-			
This c	output contain	ns the e	effective air o	quality setpoint	, as S	MAQ's	result o	f all A	QSetpUs	er inputs	to
SMAC	Q. It is delive	red to ι	iser HMI FB:	s 'User HVAC I	Displa	ay', ' Us	er Air Q	uality	Setpoint	Setting'.	
DPT:	Name D	PT_HV	'ACAirQual	DPT	- ID	203.10	00 Dat	tatype	format	U ₁₆ Z ₈	
Field			Description				Range		Unit	COV	Default
Air gu	ality		AQ value	AQ value M full					ppm	10	cs
STAT											
- Ou	tOfService		Function Ou	inction Out of Service			true/fa	alse	bool.		false
			all other bits			NA					
Comr	Communication:										
Bine	ding Group:										
Clas	SS		Type					Defa			
	eographical	-	Apartmer	nt . Room . Sub	Zone			1.1.1			
Ap	plication Spe			<u></u>							
Pe	ripheral					rable 🗵]	1			
	Address:		IO Type(I		(SMA			erty II		52	
	-Services (e	<u> </u>	COV 🖂	MinR				ec		tbeat:	15 min
Inf	oReport	\boxtimes	Output pe	er default comr	nunic	ating [Bindi	ng Gr	oup Wild	card allo	wed 🛚
			Tx Prio:	Hiç	gh 🗌		No	ormal	\boxtimes	Lo	w \square
	TE Read-Res										
	lling of the o		Transm a	fter Power-up:	Store	ed Value	e 🗆 🔏	Act Va	lue 🖂	Default \	/alue □
	all always be)	Transin e	mor i ottor up.	0.0.0	ou ruiu	° .	.00		Doraun	- u.uo
	pported)	_									
	perty-Servic		Read onl	y 🛛		Read	/Write				
	ividual acce										. —
Exce	ption Handli	ing:							Save	at Power	rdown
	ial Features				-1						_
				mended, since				may	be cause	ed by use	er
ınt	eraction on a	an HIVII.	HIVII users	expect immedia	ate fe	edback.					

3.6.6.4 Parameter Apartment_x

FB:	SMAQ	Prop	er	ty Name (<u>Server</u>):	Apartm	ent_x			Mandator Optiona	
Desci	ription:	<u> </u>			_				<u> </u>	
Numb	er of the a	partmer	nt z	one.						
DPT:	Name	DPT_L	cc	ountValue8_Z	DPT ID	202.002	2 Data	type format	U_8Z_8	
Field		-		Description			Sup.	Range	Unit	Default
Zone			1	Number of the Apartn	nent			(0) 1126		1
STATUS									Bitset	
- OutofService				one active / inactive		0	true/false	Bit 0	false	
- all o	ther bits		r	not supported, fixed to	o '0'		NA			false
COMI	MAND							enum		CS
- Norr	nalWrite						M	0		
- SetC	OSV & Res	setOSV	5	Set zone inactive / ac	tive		0	3 / 4		
- all of	ther comm	ands	r	not supported			NA			
Comr	nunicatio	n:							_	
DP A	Address:			IO Type(ID):	102 (SM/	AQ)	Property ID: 101			
(in t	he server)		Start-Index:	1		N° of e	lements	1	
Pro	perty acce	ess:		Read only		Read/W	/rite	\boxtimes		
Prot	ection			Read level	-		Write le	evel	-	
Exce	otion Han	dling:	\	/alue after Power-up	: Stored	Value 🛚	Act Va	lue 🔲 Def	ault Value	<u> </u>
Speci	al Feature	es:								
Zone	of the con	troller its	elf							
Zone	= 0 (wildca	ard): Se	nds	s to all listeners						
The d	evice is no	ot LTE c	om	municating in this zo	ne if zone	e is 'OutO	fService'			
If Apa	Apartment x is 'OutOfService' Room y and SubZone z automatically are 'OutOfService' too.									

3.6.6.5 Parameter Room_y

FB:	SMAQ		Prope	ert	y Name (<u>Server</u>):	Room_y	/				Mandator Optiona	<i>'</i> =
Desc	ription:		<u> </u>			_				Ļ	<u> </u>	<u></u>
	er of the	roc	m zone	Э.								
DPT:					untValue8 Z	DPT ID	202.002	2 [Datat	ype format	U ₈ Z ₈	
Field				Description				Su		Range	Unit	Default
Zone				_	lumber of the Room					(0) 163		1
STATUS											Bitset	
- Outo	ofService	Э		z	one active / inactive			C)	true/false	Bit 0	false
- all other bits				n	ot supported, fixed to	o '0'		N.	Α			false
COMMAND										enum		CS
- NormalWrite				1						0		
- SetC	OSV & R	ese	tOSV	Set zone inactive / active)	3/4		
- all o	ther con	nmai	nds	n	ot supported			N.	Α			
Comr	nunicat	ion:					•				-	
DP	Addres	S :			IO Type(ID):	102 (SM/	AQ)	Property ID:			102	
(in t	he serv	er)			Start-Index:	1		N°	of ele	ements	1	
Pro	perty ac	ces	s:		Read only		Read/W	/rite		\boxtimes		
Prof	tection				Read level	-		Wr	ite le	vel	-	
Exce	ption Ha	andl	ing:	٧	alue after Power-up	: Stored	Value 🛚	Ac	t Valu	ue 🔲 Def	ault Value	
Speci	ial Feat	ıres	;:									
Zone	of the co	ontro	oller itse	elf.	•							
					to all listeners							
					municating in this zo		is 'OutO	fSer	vice'.			
'OutO	utOfService' is taken over from Apartment x.											

3.6.6.6 Parameter SubZone_z

FB:	SMAQ	Prope	erty Name (<u>Server</u>):		Mandator Optiona						
Desc	ription:			-							
Numb	er of the Sub	oZone.									
DPT:	Name D	PT_U	countValue8_Z	DPT ID	202.002	Data	type format	U_8Z_8			
Field			Description		Sup.	Range	Unit	Default			
Zone			Number of the SubZo	one			(0) 115		1		
STAT								Bitset			
	ofService		zone active / inactive			0	true/false	Bit 0	false		
- all o	ther bits		not supported, fixed to	o '0'		NA			false		
	MAND						enum		CS		
_	malWrite			M	0						
- SetC	OSV & Reset	OSV	Set zone inactive / ac	0	3 / 4						
- all o	ther commar	nds	not supported			NA					
Comr	munication:										
DP .	Address:		IO Type(ID):				ty ID:				
(in t	he server)		Start-Index:	1		N° of e	lements	1			
	perty access	s:	Read only		Read/W	rite	\boxtimes				
Pro	tection		Read level	-		Write le	evel	-			
Exce	ption Handli	ng:	Value after Power-up	: Stored V	alue 🛚	Act Va	lue 🗌 Def	ault Value	: 🗌		
Spec	ial Features										
Zone	of the contro	ller itse	elf.								
Zone	= 0 (wildcard	l): Sen	ds to all listeners								
			mmunicating in this zo		s 'OutOf	Service	' .				
'OutO	OutOfService' is taken over from Apartment_x.										

3.6.6.7 Parameter GenPeripheral

FB:	SMAQ	Prope	erty Name (<u>Server</u>):		Mandatory 🔲					
								Option	al 🛛	
Desc	ription:						-			
Numb	er of the ger	eral pe	eripheral tag.							
DPT:	Name D	PT_U	countValue16_Z	DPT ID	203.012	2 Data	atype format	$U_{16}Z_{8}$		
Field			Description			Sup.	Range	Unit	Default	
Zone			Number of the genera	al periphei	ral tag		full		1	
STAT	US							Bitset		
- Outo	ofService		zone active / inactive			0	true/false	Bit 0	false	
- all o	ther bits		not supported, fixed t	o '0'		NA			false	
COMI	MAND								CS	
	malWrite					М	0 3/4			
- SetC	DSV & Reset	OSV	Set zone inactive / ac							
- all o	ther commar	<u>ids</u>	not supported			NA				
	munication:									
DP A	Address:		IO Type(ID):	102 (SMA	NQ)	Prope		104		
(in t	he server)		Start-Index:	1		N° of e	elements	1		
Pro	perty access	s:	Read only		Read/W	/rite	\boxtimes			
Prof	tection		Read level	-		Write I	evel	-		
Exce	Exception Handling: Value after Power-up: Stored Value ☐ Act Value ☐ Default Value ☐									
	Special Features:									
The d	evice is not L	_TE co	mmunicating in this zo	one if zone	is 'OutO	fService	<u>)'.</u>			

3.6.6.8 Parameter AQSetp

FB:	SMAQ	Prop	erty Name (<u>Server</u>):	AQSetp				Mandator Optiona	
Desc	ription:	ż		-				•	
AQ se	etpoint valu	e.							
DPT:	DPT: Name DPT_HVACAirQual_Z DPT ID 203.100 Datatype format								
Field			Description		Sup.	Range	Unit	Default	
AQ va	alue						full	ppm	cs
STAT	US								
- all b	its		not supported, fixed t	o '0'		NA			false
COM	MAND								
- Norr	malWrite			0					
- all o	ther comm	ands	not supported			NA			
Com	<u>munication</u>	ո։			_	_			
DP .	Address:		IO Type(ID):	102 (SMA)	Q)	Propert	ty ID:	111	
(in t	he server))	Start-Index:	1		N° of e	lements	1	
Pro	perty acce	ss:	Read only		Read/W	'rite	\boxtimes		
Pro	tection		Read level	-		Write le	evel	-	
Exce	ption Hand	dling:	Value after Power-up	: Stored \	/alue 🛚	Act Val	lue 🔲 Def	ault Value	
Spec	ial Feature	s:							

3.7 Setpoint Manager Relative Humidity (SMRH)

3.7.1 Aims and objectives

The Functional Block 'Setpoint Manager Relative Humidity' provides the HVAC facilities with the necessary relative humidity setpoint.

3.7.2 Functional specifications

In the LTE-Mode the 'Setpoint Manager Relative Humidity' supports the following LTE zoning:

- "Apartment . Room . SubZone"
- "General Peripheral Tag".

Inputs

• HumRelSetpUser One absolute relative humidity setpoint value from

a HMI e.g. to override the internal setpoint.

It is company specific whether the value is used for humidification orm for dehumidification. If both functions are implemented, the delta between the setpoints shall remain (shift both values in parallel).

Outputs

• HumRelSetpHumEff The effective relative humidity setpoint for

humidification normally valid for 'Comfort'

• HumRelSetpDehumEff The effective relative humidity setpoint for

dehumidification normally valid for 'Comfort'

• HumRelSetpUserEff The effective relative humidity setpoint, as SMRH's result of

all HumRelSetpUser inputs to SMRH.

It is delivered to user HMI FBs

('User HVAC Display', 'User Rel. Humidity Setpoint Setting')

• HumDehumMode This output provides the information if the room is

in humidification or dehumification mode, or none of both.

It is delivered e.g. to FB 'User HVAC Display'.

Binding Groups (LTE)

• Binding group x.y.z The setpoint manager air quality offers different binding GenPeripheral possibilities. When implementing, one of them or both

may be realised.

Parameters

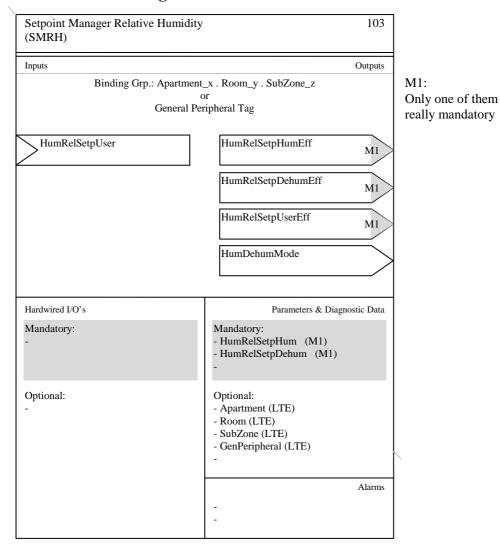
• HumRelSetpHum Relative humidity level for humidification for comfort.

• HumRelSetpDehum Relative humidity level for dehumidification for comfort.

3.7.3 Constraints

Humidifying / dehumidifying e.g. may be defined to be active in comfort and eventually in standby mode. In the other modes no relative humidity setpoint is defined (no humidity control).

3.7.4 Functional Block diagram



3.7.5 Datapoint description

Overview

Datapoints	Description / Remarks	Datapoint Type	Additional info
Inputs			
HumRel Setp User	User relative humidity setpoint with: - COV and RepPer - Z ₈ STATUS supported from FB User Relative Humidity Setpoint Setting	$LTE: 202.001\\ DPT_RelValue_Z\\ U_8Z_8\\ S: 9.007\\ DPT_Value_Humidity\\ F_{16}$	LTE: O S: (GO)
Outputs			
HumRel Setp Hum Eff	Relative humidity setpoint value for huidifying with: - COV and RepPer - Z ₈ not supported to FB various controller	$\begin{tabular}{lllllllllllllllllllllllllllllllllll$	LTE: M1 *) S: GO1 *) %
HumRel Setp Dehum Eff	Relative humidity setpoint value for dehuidifying with: - COV and RepPer - Z ₈ not supported to FB various controller	$ \begin{array}{llllllllllllllllllllllllllllllllllll$	LTE: M1 *) S: GO1 *) %
HumRel Setp Eff	Effective relative humidity setpoint value (result of all HumRelSetpUser inputs) with: - COV and RepPer - Z ₈ STATUS supported to FB User HVAC Display, User Rel. Humidity Setpoint Setting	$\begin{tabular}{lllllllllllllllllllllllllllllllllll$	LTE: O S: (GO)
Hum Dehum Mode	Information if the room is in humidification or dehumification mode, or none of both with: - COV and RepPer to FB User HVAC Display	$\begin{tabular}{llll} LTE: & 20.114 \\ DPT_HumDehumMode \\ N_8 \\ S: & 20.114 \\ DPT_HumDehumMode \\ N_8 \\ \end{tabular}$	LTE: O S: (GO) 0 = inactive 1 = humidification 2 = dehumidification

Datapoints	Description / Remarks	Datapoint Type	Additional info
Parameters			
Apartment	LTE zoning number for Apartment	202.002 DPT_UcountValue8_Z U ₈ Z ₈	O 1
Room	LTE zoning number for Room	202.002 DPT_UcountValue8_Z U ₈ Z ₈	O 1
SubZone	LTE zoning number for SubZone	202.002 DPT_UcountValue8_Z U ₈ Z ₈	O 1
GenPeripheral	LTE zoning number for GenPeripheral	203.012 DPT_UcountValue16_Z U ₁₆ Z ₈	O 1
HumRel Setp Hum	Relative humidity setpoint for humidifying	202.001 DPT_RelValue_Z U ₈ Z ₈	M1 *)
HumRel Setp Dehum	Relative humidity setpoint for dehumidifying	202.001 DPT_RelValue_Z U ₈ Z ₈	M1 *)

^{*)} see Functional Block 3.7.4

SMRH Runtime Interworking - Dependence on Configuration Modes

			STANDARD MODE		NDED ODE
		Basic FB	S-Mode	Standard Mode Interface	HEE
Inputs	HumRelSetpUser	(GO) _b		(GO)	О
Outputs	HumRelSetpHumEff	GO1 _b	GO1	GO1	M1
	HumRelSetpDehumEff	GO1 _b	GO1	GO1	M1
	HumRelSetpUserEff	GO1 _b	GO1	GO1	M1
	HumDehumMode	(GO) _b		(GO)	0

SMRH LTE specific Properties

		Support
Parameter	Apartment	0
	Room	0
	SubZone	0
	GenPeripheral	0

SMRH Standard Properties of Interface Objects (or memory mapped DP)

		Support
Parameter	HumRelSetpHum	M1
	HumRelSetpDehum	M1

3.7.6 Detailed specification of the Datapoints

3.7.6.1 Input HumRelSetpUser

DF	P Name:	Hum	nRelSetpUs	er				Abbr.:				1	Mandat	ory	
FB	3 Name:	SMF	MHR Can be internal												
De	escription														
Th	is information	on is	provided by	y the Fu	unctio	nal Block	us	er rela	tive hu	midi	ty setp	ooint	setting	j. This v	alue
ΟV	errides one	of th	e internal s	etpoint	value	es (compa	any	specif	ic).						
Da	tapoint Typ	ре													
DF	DPT_Name: DPT_Value_Humidity														
DF	PT Format:	F ₁₆	5							DP	T_ID:	9	9.007		
Fie	eld		scription							Su	ıpp.	Ra	ange	Unit	Default
												1	full	%	CS
Ac	cess Type														
♦	Input														
	$N \rightarrow this$			$1 \rightarrow th$	is										
	Spontaneous ⊠ Cyclically: ☐ Time-out: NO *														
	Request				Polli	ng:					Perio	d:			
Co	mmunicati	ion 1	уре												
♦	Group Ob	ject I	Datapoint									Mar	ndatory	: 🛛	
	Default Gro	oup A	Address:												
Dy	/namics														
	Power dow	n:	Save:												
	Power up:		Value:	No in	itialis	ation:			Defau	ılt va	lue:				
				Save	d val	ue:									
									Read	fron	า bus:				
Ex	Exception Handling														
*	* NO timeout due to compatibility to existing EIB products.														
Sp	ecial Featu	ıres													
				•	•	•			•	•	•	•		•	•
	•							•					•		•

FB:	SMHR	LTE Clie		HumRelS	/landatory						
	-	Input Na	me:							Optional	X
	ription:										
	nformation is						umidity s	setpo	int setti	ng. This v	alue
overri	des one of th			t values (c		pecific).					
DPT:	Name D	PT_RelV	alue_Z		DPT ID	202.001	Datat	type f	format	U_8Z_8	
Field			Descrip	tion					Sup.	Unit	Default
Relati	ve humidity		Relative	humidity	value					%	cs
STAT	US									Bitset	
	tOfService		Function	n out of Se	ervice				0	t/f	false
- Fau	ult			tion is corr					0	t/f	false
- Ov	erridden			tion is tem		erridden/			0	t/f	false
- InA				tion with a					0	t/f	false
- Alar	mUnAck			rledgemen	t of alarm				0	t/f	false
			all other	r bits					NA		
Comr	nunication:							_			-
Bind	ding Group:										
Clas			Type				Default				
Ge	ographical		Apartme	ent . Room	ı . SubZon	ie	1.1.1				
Ap	plication Spe										
Pe	ripheral		Broadca	ast 🗌	Configur		1				
DP A	Address:		IO Туре		388 (UR		Propert	ty ID:		51	
LTE	-Service (ev	rent):		ort Sniffer	on Bindin				•		
	oReport	\boxtimes	Timeou	t:		NO *	Min				
LTE	-Service (po	olling):	Pood M	/ildcard / R	oon Sniffe	or on Bindi	na Grau	n.			
Re	ad – Respor	nse 🗌	ixeau v	/ilucalu / IV	resh Sillie	on bindi	ng Group	ρ			
Value	after Powe	r-up:		Default \	/alue 🛚			·=	5	Stored Val	ue 🗌
	otion Handli							Save	e at Pov	verdown	
* NO	timeout due	to compa	tibility w	ith S-Mode	and exist	ing EIB pr	oducts.				
Speci	al Features	:									

3.7.6.2 Output HumRelSetpHumEff

DH	Name:	Hum	<u> iReiSe</u>	<u>etHum</u>	<u>Eff</u>			At	obr.:			Mand	latory		\boxtimes
FE	Name:	SMF	RH									Can b	oe interna	al	
De	scription														
	is output co			effecti	ve (afte	er corr	ections	s) relativ	e hun	nidity	setpoint	for humid	ifying wh	ich is	
va	lid for the co	ontro	ller.												
Da	Datapoint Type														
	DPT_Name: DPT_Value_Humidity														
DF	PT Format:	F ₁₆	3								DPT_ID:	9.007	•		
Fie	eld	De	scripti	ion							Supp.	Range	Unit	Defa	ault
												full	%	CS	3
Ac	cess Type														
•	Output														
	$this \to M$]	1	this \rightarrow '	1									
	Spontaneo	ous 🛛 COV: 🔻 Delta-Value: 10 MinRepTime: 10 sec													
	Cyclic Period: 15min (recommended value)														
	Request														
Co	mmunicati	on T	уре												
*	Group Ob	ject [Datapo	oint								Mandato	ry: 🛛		
	Default Gro	oup A	Addres	ss: ·											
Dy	namics														
	Power dow	'n:	Save	:											
	Power up:		Value) :	No ini	tialisa	tion:			efau	ılt value:				
					Saved	d valu	e:		Α	ctua	l value:		\boxtimes		
			Trans	smit or	n bus:			\boxtimes							
Ex	ception Ha	ndli	ng						•						
Sp	ecial Featu	ires													
-															

FB:	SMRH	LTE S		HumRel	SetpHumE	ff			Mandatory 🖂				
		Outpu	ıt Name:							Optional			
	ription:												
			effective (afte	er correcti	ons) relativ	e hum	idity	setpoint	for hum	nidifying wh	iich is		
	or the con												
DPT:	Name	DPT_Re	elValue_Z		DPT ID	202.00)1	Datatype	e forma	$\cup U_8Z_8$			
Field			Description	escription				ige	Unit	COV	Default		
Relati	ve humidit	у	RH value fo	r humidifyi	ing			full	%	5	cs		
STAT	US												
- all bi	ts		Not support	ed		NA							
Comr	nunicatio	n:				-	-		-	<u>-</u>	_		
Bind	ding Grou	p:											
Clas	S		Type					Defa	ult	lt			
Ge	ographica	l [nt . Room	. SubZone	!		1.1.1	l				
Ар	plication S	Specific											
Pe	ripheral		Broadcas	st 🗌	Configu	rable 🛭	3	1					
DP A	Address:		IO Type(ID):	103 (SMF	RH)	Р	D:	51				
LTE	-Services	(event):	COV 🗵	✓ MinRepTime: 10 sec						Heartbeat: 15 min			
Inf	oReport	\boxtimes	Output pe	er default	communic	ating [] B	inding G	roup W	oup Wildcard allowed 🛛			
			Tx Prio:		High 🗌			Normal	\boxtimes	Lo	w 🗌		
`	ΓE Read-R	•	•										
	lling of the		Transm	fter Dowe	r-up: Store	براد// امر	$^{\sim}$	Act \/	alue 🏻	Default \	ا میاد/		
	all always	be	Transin a	iller FOWE	irup. Store	u valu	е Ш	ACI VI	aiue 🖂	Delault	value		
	pported)												
	perty-Serv		Read onl	y 🛛		Read	/Writ	е Г	7				
	ividual ac		Trodd om	, –					<u> </u>				
Excep	otion Hand	dling:							Sav	e at Powe	rdown 🗌		
Speci	al Feature	es:											

3.7.6.3 Output HumRelSetpDehumEff

DH	Name:	Hum	<u> iReiSe</u>	etDehu	<u>umEff</u>			Ab	br.:			Mand	latory		\boxtimes
FE	Name:	SMF	RH									Can b	oe interna	al	
De	scription														
	is output co			effecti	ive (afte	er corr	ections) relativ	e hum	nidity	setpoint	for dehun	nidifying ¹	which	is
va	lid for the co	ontro	ller.												
Da	tapoint Ty	ре													
	PT_Name:	DP	T_Va	lue_H	umidity										
DF	PT Format:	F ₁₆	6								DPT_ID:	9.007	,		
Εiθ	eld	De	scripti	ion							Supp.	Range	Unit	Defa	ault
												full	%	CS	3
A	cess Type														
•	Output														
	$this \to M$]	1	this \rightarrow '	1									
	Spontaneo	us		COV	:	\boxtimes	Delta-	-Value:	10	Ν	/linRepTin	ne:	10 sec		
				Cycli	С	\boxtimes	Perio	d:	15mi	in (r	ecommen	ded value	e)		
	Request		\boxtimes				•								
Co	mmunicati	on T	уре												
*	Group Ob	ject [Datapo	oint								Mandato	ry: 🛛		
	Default Gro	oup A	Addres	ss:											
Dy	namics														
	Power dow	'n:	Save	:											
	Power up:		Value) :	No ini	tialisa	tion:		D	efau	ılt value:				
	-				Saved	d valu	e:		Α	ctua	l value:				
			Trans	smit or	า bus:										
Ex	ception Ha	ndlii	ng											•	
	-														
Sp	ecial Featu	ires													
-															

FB:	SMRH		Server	HumRe	ISetpDehu	mEff			Mandatory ⊠ Optional □			
		Outp	ut Name:						Op	otional L		
	ription:											
			effective (afte	er correctio	ns) relative	humidi	ty se	etpoint for	dehumidi	fying wh	ich is	
valid f	or the con											
DPT:	Name	DPT_Re	elValue_Z		DPT ID	202.00	1	Datatype	format	J_8Z_8		
Field			Description			Sup.	Ra	nge	Unit	COV	Default	
Relati	ve humidit	:y	RH value fo	r humidifyir	ng	М		full	%	5	cs	
STAT	US		not supporte	ed		NA						
- all bi	its		Not support	ed		NA						
Comr	nunicatio	n:	<u>-</u>			-				-	-	
Bind	ding Grou	p:										
Clas	SS		Type					Defau	lt			
Ge	ographica	ıl		nt . Room .	SubZone			1.1.1				
Ap	plication S	Specific										
Pe	ripheral		Broadcas	st 🗌	Configura	able 🛚		1				
DP A	Address:		IO Type(ID):	103 (SMR	H)	Pr	operty ID	: 5	2		
LTE	-Services	(event):	COV 🗵]	MinRepTim	e:) sec	Hearth		15 min	
Inf	oReport	\boxtimes	Output p	er default d	communica	ting 🔲	Bi	nding Gro	up Wildca	ard allow	red ⊠	
			Tx Prio:		High 🗌			Normal D		Low		
	ΓΕ Read-R)									
	lling of the		Transm	ofter Power	r-up: Stored	d Value	П	Act Valu	10 D	efault Va	□ مبيا	
	all always	be	Hallsill	allel FOWel	i-up. Storet	ı value	Ш	Act vait		siauit va		
	pported)											
	perty-Serv		Read on	ly 🖂		Read/V	Vrite	. \Box				
	ividual ac		Ttodd offi	·		- Ttoda, v	******	<u> </u>				
Exce	otion Han	dling:							Save a	t Powerd	lown 🗌	
Speci	al Feature	es:										

3.7.6.4 Output HumRelSetpUserEff

DP Name:	HumRelSetUser	Ξff	l A	\bbr.:		Manda	tory						
FB Name:	SMRH Can be internal												
Description													
This output co	ntains the effective	e relative hur	midity setpoi	nt, as S	MRH's resul	t of all Hum	nRelSet	pUser					
inputs to SMR	Н							,					
Datapoint Ty	ре												
DPT_Name:	DPT_Value_Hu	ımidity											
DPT Format:	F ₁₆				DPT_ID	9.007							
Field	Description				Supp.	Range	Unit	Default					
						full	%	CS					
Access Type													
♦ Output													
this \rightarrow M	⊠ t	his → 1											
Spontaneo	us 🛛 COV:		Delta-Value	: 10	MinRepT	ime:	¹⁾						
	Cyclic	oxedge	Period:	15mi	n (recomme	nded value)							
Request	\square												
Communicat	ion Type												
♦ Group Ob	ject Datapoint					Mandatory	/: \[\]						
Default Gr	oup Address: -												
Dynamics													
Power dov													
Power up:	Value:	No initialisati			efault value:								
		Saved value			ctual value:								
Transmit on bus:													
Exception Handling													
Special Featu													
	ım repetition time					y be caused	d by use	r					
interaction	interaction on an HMI. HMI users expect immediate feedback.												

FB:	SMRH	LTE S	erver t Name:						Mandatory ☐ Optional ⊠				
Desc	ription:							•		•			
	to SMRH. I			tive humidity set · HMI FBs ('Use									
DPT:	Name D	PT_Re	IValue_Z	DPT I	ID	202.00)1 Da	tatype	format	U ₈ Z ₈			
Field			Description			Sup.	Range		Unit	COV	Default		
	ve humidity		Resulting hu	midity setpoint			ful		%	5	CS		
STAT - Ou	US tOfService		Function Ou all other bits	t of Service		O NA	true/fa	alse	bool.		false		
Comr	nunication:	•			-					-			
	ding Group												
Clas	-	_	Туре					Defau	ult				
	eographical	-	Apartmer	it . Room . SubZ	one			1.1.1					
	plication Sp		╡╽╌╌╌	·· ··· ······	·	· 	ā						
	ripheral		Broadcas			able ∑		1		50			
	Address:		IO Type(I				41	erty ID		53	45		
	-Services (COV 🖂	MinRe	•		5	ec		tbeat:	15 min		
IIII	oReport		Tx Prio:	er default commu		ating L			oup Wild				
71	ΓΕ Read-Re	enonse	TX PIIO.	High	<u> Ш</u>		INC	ormal	Δ	Lo	w <u> </u>		
po sh su	lling of the o all always be pported)	eutput e	Transm a	fter Power-up: S	Store	d Valu	e 🗌 /	Act Va	lue 🛚	Default \	/alue 🗌		
	perty-Servion ividual accompany		Read only	y 🛛		Read	/Write]				
Exce	otion Handl	ing:							Save	at Power	rdown		
	ial Features												
				mended, since of				may l	oe cause	ed by use	er		
int	eraction on a	<u>an HMI.</u>	HMI users e	expect immediate	e fee	dback.	ı						

3.7.6.5 Output HumDehumMode

DP Name:	<u>HumDehumMode</u>	Э		Abbr.:			Manda	tory	
FB Name:	SMRH						Can be	interna	
Description									
This output pro	ovides the informa	ation if the ro	om is in hur	midificati	ion o	r dehumif	ication mod	de, or n	one of
both.									
Datapoint Type	oe								
DPT_Name:	DPT_HumDehu	ımMode							
DPT Format:	N ₈					DPT_ID:	20.114		
Field	Description					Supp.	Range	Unit	Default
	0 = inactive						[02]	ppm	CS
	1 = humidification								
	2 = dehumidifica	ation							
Access Type									
◆ Output									
this \rightarrow M		nis → 1							
Spontaneo	us 🛛 COV:		Delta-Value	e: 10	Ν	/linRepTin	ne:		
	Cyclic	igtimes	Period:	15m	in (r	ecommen	ded value)		
Request									
Communicati	on Type								
♦ Group Ob	ect Datapoint						Mandatory	<i>ı</i> : ⊠	
Default Gro	oup Address:								
Dynamics									
Power dow	n: Save:								
Power up:	Value:	No initialisat	ion:	D	efau	ılt value:			
		Saved value):	Α	ctua	l value:			
	Transmit on	bus:							
Exception Ha	ndling								
Special Featu	res								

FB:	SMRH	LTE S		HumDeh	umMode					ndatory	
	·	Outpu	ıt Name:							Optional	<u> </u>
	ription:										
	output provid					dification	n or	dehumiti	cation mo	ode, or n	one of
	It is deliver						Т				
DPT:	Name [DPT_Hu	mDehumM		DPT ID	20.114			format		
Field			Description			Sup.	Rang		Unit	COV	Default
Hum	DehumMode	Э	0 = inactive				[(02]	enum.	1	CS
			1 = humidi								
			2 = dehum	idification							
Comr	nunication	:									
Bine	ding Group):									
Clas	ss		Туре					Defa			
	eographical				. SubZone			1.1.1			
Ap	plication Sp	pecific [GenPer					1			
	ripheral		Broadca		Configu						
DP A	Address:		IO Type	(ID):	103 (SMF	RH)	Pr	operty II	D:	54	
	-Services (MinRepTin			- sec		tbeat:	15 min
Inf	oReport	\boxtimes	Output	oer default	communic	ating [Bi		oup Wild	card allo	wed 🛚
			Tx Prio:		High 🗌			Normal	\boxtimes	Lov	w 🗌
po sh su	TE Read-Realling of the call always because the proof the proof the second seco	output e		after Powe	er-up: Store	ed Valu	e 🗌	Act Va	alue 🛚	Default \	/alue □
	perty-Servi		Read or	nly 🖂	1	Read	/Write	э Г	7		
	ividual acc			··)							
Exce	otion Hand	ling:							Save	at Power	down
Speci	ial Features	s:									

3.7.6.6 Parameter Apartment_x

FB: SMRH Pro				rty Name (<u>Server</u>):	Apartme	ent_x			Mandator Optiona	
Desci	ription:	•			_			- 		
Numb	er of the a	partm	nent	zone.						
DPT:	Name	DPT	_Uc	ountValue8_Z	DPT ID	202.002	2 Data	type format	U_8Z_8	
Field				Description			Sup.	Range	Unit	Default
Zone				Number of the Apartn	nent			(0) 1126		1
STAT	STATUS								Bitset	
				zone active / inactive			0	true/false	Bit 0	false
- all of	ther bits			not supported, fixed t	o '0'		NA			false
COM	MAND							enum		cs
- Norr	nalWrite						M	0		
- SetC	SV & Res	etOS	V	Set zone inactive / ac	tive		0	3 / 4		
- all of	ther comm	ands		not supported			NA			
Comr	nunicatio	n:				-	-			-
DP /	Address:			IO Type(ID):	103 (SMR	RH)	Proper	ty ID:	101	
(in t	he server))		Start-Index:	1		N° of e	lements	1	
Pro	perty acce	ess:		Read only		Read/W	/rite	\boxtimes		
Prot	ection			Read level	-		Write le	evel	-	
Exception Handling: Value after Power-up: Stored Va					Value 🛚	Act Va	lue 🗌 Def	ault Value	-	
Speci	al Feature	es:								
Zone of the controller itself.										
Zone = 0 (wildcard): Sends to all listeners										
The d	evice is no	t LTE	cor	mmunicating in this zo	ne if zone	is 'OutO	fService'	•		
If Ana	rtment x is	s 'Out	tOfS	ervice' Room v and S	SubZone z	z automat	tically ar	e 'OutOfServ	rice' too.	

3.7.6.7 Parameter Room_y

FB:	SMRH	Prop	erty Name (<u>Server</u>):	Room_y	y			Mandator Optiona	· =
Descr	iption:			-					
Numb	er of the r	oom zon	е.						
DPT:	Name	DPT_U	countValue8_Z	DPT ID	202.002	2 Data	type format	U_8Z_8	
Field			Description			Sup.	Range	Unit	Default
Zone			Number of the Room				(0) 163		1
STAT	US							Bitset	
- Outo	fService		zone active / inactive			0	true/false	Bit 0	false
- all ot	her bits		not supported, fixed to	o '0'		NA			false
COM							enum		cs
- Norn	nalWrite					M	0		
- SetC	SV & Res	setOSV	Set zone inactive / ac	tive		0	3 / 4		
- all ot	her comm	nands	not supported			NA			
Comn	nunicatio	n:							
DP /	Address:			103 (SMF	RH)	Proper		102	
(in t	he server	·)	Start-Index:	1			lements	1	
Prop	perty acc	ess:	Read only		Read/W	/rite	\boxtimes		
Prot	ection		Read level	-		Write le	evel	-	
Excep	otion Han	dling:	Value after Power-up	: Stored	Value 🛚	Act Va	lue 🗌 Def	ault Value	: 🔲
Speci	al Featur	es:							
Zone	of the con	troller itse	elf.						
Zone = 0 (wildcard): Sends to all listeners									
			mmunicating in this zo	is 'OutO	fService	'-			
'OutO	fService' i	s taken o	ver from Apartment_x.						

3.7.6.8 Parameter SubZone_z

FB:	SMRH	Prope	erty Name (<u>Server</u>):	e_z			Mandator Optiona			
Desci	ription:	<u> </u>								
Numb	er of the Sub	Zone.								
DPT:	Name D	PT_U	countValue8_Z	DPT ID	202.002	2 Data	type format	U ₈ Z ₈		
Field			Description			Sup.	Range	Unit	Default	
Zone			Number of the SubZo	ne			(0) 115		1	
STAT	US							Bitset		
- OutofService zone active / inactive						0	true/false	Bit 0	false	
- all other bits not supported, fixed to '0'						NA			false	
COMMAND							enum		CS	
- Norr	nalWrite				М	0				
	OSV & Reset		Set zone inactive / ac	tive		0	3 / 4			
	ther commar	nds	not supported			NA				
Comr	munication:									
	Address:		IO Type(ID):	103 (SMR	(H)	Property ID: 103				
(in t	he server)		Start-Index:	1		N° of elements 1				
	perty access	s:	Read only		Read/W	/rite	\boxtimes			
Prof	tection		Read level	-		Write le	evel	-		
Exce	otion Handli	ng:	Value after Power-up	: Stored	Value 🛚	Act Va	lue 🗌 Def	ault Value	: 🔲	
Speci	ial Features									
Zone of the controller itself.										
Zone = 0 (wildcard): Sends to all listeners										
The device is not LTE communicating in this zone if zone is 'O						fService	' .			
'OutO	fService' is to	aken o	ver from Apartment_x.							

3.7.6.9 Parameter GenPeripheral

FB:	SMRH	Prope	erty Name (<u>Server</u>):	GenPer	pheral			Mandator	
								Option	al 🛛
Desc	ription:			_			-		
Numb	er of the ger	eral pe	eripheral tag.						
DPT:	Name D	PT_U	countValue16_Z	DPT ID	203.012	Data	atype format	U ₁₆ Z ₈	
Field			Description			Sup.	Range	Unit	Default
Zone			Number of the genera	al periphei	al tag		full		1
STAT	US							Bitset	
	ofService		zone active / inactive			0	true/false	Bit 0	false
- all o	ther bits		not supported, fixed t	o '0'		NA			false
	MAND						enum		cs
	malWrite					M	0		
- SetC	DSV & Reset	OSV	Set zone inactive / ac	tive		0	3/4		
- all o	ther commar	<u>ids</u>	not supported			NA			
	munication:								
DP A	Address:		IO Type(ID):	103 (SMF	RH)	Prope		104	
(in t	he server)		Start-Index:	1		N° of e	elements	1	
Pro	perty access	s:	Read only		Read/W	rite/	\boxtimes		
Prof	tection		Read level	-		Write I	evel	-	
Exce	ption Handli	ng:	Value after Power-up	: Stored	Value 🗵	Act Va	llue 🔲 Def	fault Value	e 🗌
	ial Features:								
The d	he device is not LTE communicating in this zone if zone is 'O						<u>'.</u>		

3.7.6.10 Parameter RelHumSetpHum

FB:	SMRH	Pro	pe	rty Name (<u>Server</u>):	SetpHum	1		Mandator Optiona	• =	
Desci	ription:	1			_					
Relati	ve humidit	y setpo	int	value for humidifying						
DPT:	Name	DPT_	Rel	Value_Z	DPT ID	202.001	Data	type format	U_8Z_8	
Field				Description			Sup.	Range	Unit	Default
AQ va	alue							full	ppm	cs
STAT	STATUS									
- all bits not supported, fixed to '0'							NA			false
	MAND									
	nalWrite						M	0		
- all o	ther comm	ands		not supported			NA			
Comr	nunicatio	n:		1						
	Address:			IO Type(ID):	103 (SMR	H)	Proper		111	
(in t	he server)		Start-Index:	1		N° of e	<u>lements</u>	1	
Pro	perty acce	ess:		Read only		Read/W	rite			
Prot	ection			Read level	-		Write le	evel	-	
Exce	otion Han	dling:	,	Value after Power-up	: Stored '	Value 🛚	Act Va	lue 🗌 🛮 Def	ault Value	: 🗌
Special Features:										

3.7.6.11 Parameter RelHumSetpDehum

	D. OMBU D. D. W. C.										
FB:	SMRH	Prope	erty Name (<u>Server</u>):	etpDeh	um		Mandator	· =			
								Optiona	al 🔛		
Desc	ription:	-		-			•				
Relat	ive humidity	setpoin	it value for dehumidifyi	ing.							
DPT:	Name	DPT_Re	elValue_Z	DPT ID	202.001	Data	type format	U_8Z_8			
Field			Description			Sup.	Range	Unit	Default		
AQ va	alue					full	ppm	cs			
STAT	US										
- all b	its		not supported, fixed to		NA			false			
COM	MAND										
- Nori	malWrite					M	0				
- all o	ther comma	ands	not supported			NA					
Com	munication	:			-	<u>.</u>					
DP	Address:		IO Type(ID):	103 (SMRH	1)	Proper	ty ID:	112			
(in t	he server)		Start-Index:	1		N° of e	lements	1			
Pro	perty acces	ss:	Read only		Read/W	'rite					
Pro	tection		Read level	-		Write le	evel	-			
Exce	ption Hand	ling:	Value after Power-up	: Stored V	′alue 🛚	Act Va	lue 🔲 Def	ault Value			
Spec	pecial Features:										
	Deciai reatures.										

3.8	Setpoint Shift Load Shedding & Tariff (SSLSTA) (to be defined by
	DEH)

3.9 Building/Occ-Mode Source (BOS)

3.9.1 Aims and objectives

The purpose of the Functional Block 'Building/Occ-Mode Source' is to provide the BuildingMode and the OccMode from a 'supervisor' to known Datapoints, in order to guarantee interworking.

This Functional Block only has standardised outputs. All other features are company specific.

3.9.2 Functional specification

In the LTE-Mode the outputs support the LTE zoning "Apartment . Room . SubZone".

Inputs

• Inputs company specific

Outputs

• BuildingMode Actual/present building mode (Used, Not Used, Protection)

being provided by a "supervisor".

• BuildingModeNext Next mode (Used, Not Used, Protection) and the delay to it

being provided by a "supervisor".

OccMode Actual/present occupancy mode (Occupied, Standby,

Not Occupied) being provided by a "supervisor".

OccModeNext
 Next mode (Occupied, Standby, Not Occupied)

and the delay to it being provided by a "supervisor".

• ContrModeBO The Controlling mode defines all special HVAC functions

and is provided by a "supervisor".

Binding Groups (LTE)

• Binding group i.j.k This binding group is used for the BuildingMode and

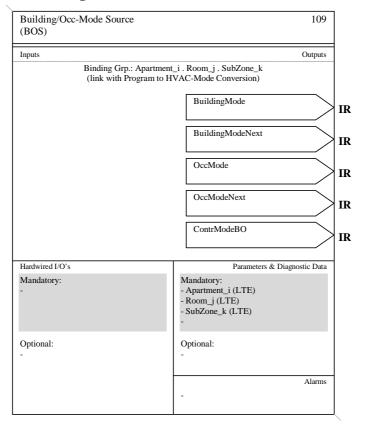
the OccMode.

(see 'Program to HVAC-Mode Conversion')

3.9.3 Constraints

None.

3.9.4 Functional Block diagram



3.9.5 Datapoint description

Overview

Datapoints	Description / Remarks	Datapoint Type	Additional info
Outputs			
Building Mode	Present Building Mode with: - COV and RepPer - Z ₈ STATUS supported to FB Program to HVAC-Mode Conversion	LTE: 201.107 DPT_BuildingMode_Z N ₈ Z ₈ S: 20.002 DPT_BuildingMode N ₈	LTE: O S: (GO) 0 = Building in Use 1 = Building not Used 2 = Building Protection
Building Mode Next	Next Building Mode plus time to next mode with: - COV and RepPer to FB Program to HVAC-Mode Conversion Time = 0: Next mode undefined (as e.g. not valid)	LTE: 206.105 DPT_BuildingModeNext U ₁₆ N ₈ S: NA	LTE: O S: NA 0 = Building in Use 1 = Building not Used 2 = Building Protection time = min
Occ Mode	Present Occupancy Mode with: - COV and RepPer - Z ₈ STATUS supported to FB Program to HVAC-Mode Conversion	LTE: 201.108 DPT_OccMode_Z N ₈ Z ₈ S: 20.003 DPT_OccMode N ₈	LTE: O S: (GO) 0 = Building Occupied 1 = Building Standby 2 = Building not Occupied
Occ Mode Next	Next Occupancy Mode plus time to next mode with: - COV and RepPer to FB Program to HVAC-Mode Conversion Time = 0: Next mode undefined (as e.g. not valid)	LTE: 206.104 DPT_OccModeNext U ₁₆ N ₈ S: NA	LTE: O S: NA 0 = Building Occupied 1 = Building Standby 2 = Building not Occupied time = min
Contr ModeBO	HVAC Controlling Mode with: - COV and RepPer - Z ₈ STATUS supported to FB Program to HVAC-Mode Conversion	LTE: 201.104 DPT_HVACContrMode_Z N ₈ S: 20.105 DPT_HVACContrMode N ₈	LTE: O S: (GO) see DP description
Parameter			
Apartment_i	LTE zoning number for Apartment	202.002 DPT_UcountValue8_Z U ₈ Z ₈	M Programme zone
Room_j	LTE zoning number for Room	202.002 DPT_UcountValue8_Z U ₈ Z ₈	M Programme zone
SubZone_k	LTE zoning number for SubZone	202.002 DPT_UcountValue8_Z U ₈ Z ₈	M Programme zone

BOS Runtime Interworking - Dependence on Configuration Modes

			STANDARD MODE		NDED DDE
		Basic FB	S-Mode	Standard Mode Interface	HEE
Inputs					
Outputs	BuildingMode	(GO _b)		(GO)	0
	BuildingModeNext	NA _b	NA	NA	0
	OccMode	(GO _b)		(GO)	0
	OccModeNext	NA _b	NA	NA	0
	ContrModeBO	(GO _b)		(GO)	0

BOS LTE specific Properties

		Support
Parameter	Apartment_i	M
	Room_j	M
	SubZone_k	M

BOS Standard Properties of Interface Objects (or memory mapped DP)

	Support
Parameter	

3.9.6 Detailed specification of the Datapoints

3.9.6.1 Output BuildingMode

DF	Name: I	me: BuildingMode					Mand	atory	
FΒ	Name:	BOS					Can b	e interna	ıl 🔲
	scription								
		ntains the buildir	ng mode.						
	tapoint Typ								
	PT_Name:	DPT_BuildingN	/lode						
	T Format:	N ₈				DPT_ID:			
Fie		Description				Supp.	Range	Unit	Default
Mc	ode						02	enum.	CS
		0 = Building in				M			
		1 = Building n				M			
		2 = BuildingP				M			
		all other enume	eration			NA			
Ac	cess Type								
♦	Output								
	this $\rightarrow M$		this \rightarrow 1						
	Spontaneou	us 🛛 COV		llue:	Ν	/linRepTir	ne:	10 sec	
		Cycli	c 🛛 Period:	15m	in (r	ecommer	ided value	e)	
	Request								
ပိ	mmunication	on Type							
♦	Group Obj	ect Datapoint					Mandato	ry: 🛛	
	Default Gro	up Address:							
Dy	namics								
	Power down	n: Save:							
	Power up:	Value:	No initialisation:)efau	ılt value:			
			Saved value:] A	ctua	l value:			
		Transmit or	bus:						
Ex	ception Hai	ndling							
	-								
Sp	ecial Featu	res							

FB:	BOS	LTE S	erver It Name:	BuildingMode				N	landator Optiona	
Desci	ription:	-		-			<u> </u>			
This c	utput contai	ns the b	ouilding mod	e.						
DPT:	Name D	PT_Bu	ildingMode_	Z DPT ID	201.1	07 Data	atype f	ormat	N_8Z_8	
Field			Description		Sup.	Range	U	nit	COV	Default
Buildi	ngMode					02		enum.	yes	CS
			0 = Building	g in Use	M					
				g not Used	M					
				gProtection	M					
			all other enu		NA					
STAT	US			rvice InfoReport				Bitset		
			and Property							
			Response o							
	OfService		RSM out of:		0	true/fals			Υ	false
- Faul			Value is cor		0	true/fals			Υ	false
	rridden			porarily overridde		true/fals			Υ	false
- InAla			RSM is in al		0	true/fals			Υ	false
	mUnAck		Acknowledg	ement of alarm	0	true/fals	se		Y	false
- all of	ther bits				NA					
Comr	nunication:									
	ding Group:									
Clas	ss		Type				Defaul	t		
Ge	ographical		Apartmer	nt . Room . SubZo	ne		1.1.1			
Ap	plication Sp	ecific [
Pe	ripheral		Broadcas	st 🗌 Confi	gurable [•
	Address:		IO Type(I	ID): 109 (B	OS)	Prope	rty ID:		51	
LTE	-Services (e	event):	COV 🛚	MinRep	Time:	10 se	C	Hear	tbeat:	15 min
Inf	oReport	\boxtimes	Output pe	er default commui	nicating [Bindin	g Gro	up Wild	card allo	wed 🛚
			Tx Prio:	High			mal 🗵		Lov	
	ΓΕ Read-Re									
	lling of the o		Transm	ofter Device up. Ct	orod Valu		ct Valu	🖂	Default \	/alua 🖂
shall always be		Transm a	after Power-up: St	ored valu	ie 🗀 🛚 Ad	Ji valu	ie 🖂	Delault \	/alue 🗀	
	pported)									
	perty-Service		Read onl	v \square	Poor	l/Write	\boxtimes			
(ind	ividual acce	ess):	Tread offi	у Ц	Neac	/ VVIIIC				
Exce	otion Handl	ing:						Save	at Power	rdown
Speci	al Features	s:								

3.9.6.2 Output BuildingModeNext

Standard Mode: NA LTE-HEE Mode:

FB:	BOS	LTE Se	erver t Name:						N	landator Optiona	
	ription:										
This c	output contain zero.	ns the n	ext building	mode an	d the time t	to it. If t	he next	mode i	s not av	ailable th	ne time is
DPT:	Name D	PT_Bui	ldingModeN	lext	DPT ID	206.10)5 Da	tatype	format	U ₁₆ N ₈	
Field			Description			Sup.	Range	l	Jnit	COV	Default
Time			Time to next				full		min	15 ¹⁾	0
		r	minutes, 0 =	no next i	mode						
Next I	Building Mod	le					02	2	enum.	yes	CS
			0 = Building			M					
			1 = Building			M					
			2 = Building		on	M					
		í	all other enu	ımeration		NA					
	munication:										
	ding Group:										
Clas			Туре					Defau	lt		
	eographical		Apartmer	nt . Room	. SubZone			1.1.1			
	plication Spe	ecific]	<u></u>		<u></u>					
	ripheral		Broadcas		Configu						
	Address:		IO Type(I		109 (BOS			erty ID:		52	
	-Services (e		COV 🖂		MinRepTin		10 s			tbeat:	15 min
Inf	oReport	\boxtimes		er default	communic	ating [card allo	wed 🛛
			Tx Prio:		High 🗌		No	ormal 🛭	<u> </u>	Lov	<i>N</i>
	TE Read-Res										
	lling of the o		Transm a	Transm after Power-up: Stored Value ☐ Act Value ☑ Default Value ☐						/alue □	
	all always be)	Transin e		л ар. С того	o raia	° .	tot van	ло <u>Г</u> Д	Doraur.	. a.ao
	pported)										
	perty-Servic		Read only	v Γ	1	Read	/Write	\boxtimes			
(individual access):								T		. —	
Exce	ption Handli	ing:							Save	at Power	down 🔝
	ial Features										
'' CO	COV value is identical to heart beat time (15 min).										

3.9.6.3 Output OccMode

DP	Name:	OccMode	Abbr.:			Mand	atory			
B	Name:	BOS					Can b	e interna	d	
De	scription									
Thi	is output co	ntains the occupa	ancy mode.							
	tapoint Typ									
	PT_Name:	DPT_OccMode	!							
	T Format:	N ₈				DPT_ID:	20.00	3		
Fie		Description				Supp.	Range	Unit	Defa	ult
Mo	de						02	enum.	cs	;
		0 = Building O				M				
		1 = Building S				M				
		2 = Building n				M				
		all other enume	eration			NA				
Ac	cess Type									
♦	Output									
	this \rightarrow M	⊠ t	his \rightarrow 1							
	Spontaneo	us 🛛 COV:	□ Delta-Va	alue:	Ν	/linRepTin	ne:	10 sec		
		Cyclic	Period:	15m	nin (r	ecommen	ded value)		
	Request									
Co	mmunicati	on Type								
♦	Group Obj	ect Datapoint					Mandato	ry: 🛛		
	Default Gro	oup Address: -								
Dy	namics									
	Power dow	n: Save:								
	Power up:	Value:	No initialisation:		Defau	ılt value:				
	·		Saved value:		Actua	l value:				
		Transmit on	bus:							
Ex	ception Ha	ndling								
		<u> </u>								
Sp	ecial Featu	res								

FB:	BOS	LTE Se	erver t Name:						Mandatory ☐ Optional ⊠			
Desci	ription:	-		-				<u>-</u>		•		
This c	utput contai	ins the o	ccupancy m	node.								
DPT:	Name D	PT_Oco	:Mode_Z		PT ID	201.10	08 Da	atyp	e format	N_8Z_8		
Field]	Description			Sup.	Range		Unit	COV	Default	
Buildi	ngMode						02	2	enum.	yes	CS	
			0 = Building Occupied			M						
			1 = Building Standby			M						
				g not Occup	ied	M						
			all other enu			NA						
				rvice InfoRe	port				Bitset			
			and Property									
			Response o			_				.,		
	OfService		RSM out of			0	true/fa			Y	false	
- Faul			/alue is cor			0	true/fa			Y	false	
	rridden			porarily over	ridden	0	true/fa			Y	false	
- InAla			RSM is in al			0	true/false			Y	false	
- Aları	mUnAck	/	Acknowleag	ement of ala	arm	0	true/fa	ise		Y	false	
- 11 - 1	(l l. 't .											
Comr	nunication:					NA						
Comr	nunication: ding Group:		1-			NA		D (
Comr Bind Clas	munication: ding Group:	:	Type					Defa				
Comr Bind Class Ge	munication: ding Group: ss eographical	:		nt . Room . S	SubZone			Defa				
Comr Bind Class Ge Ap	munication: ding Group: ss eographical eplication Spe	:	Apartmer									
Comr Bind Class Ge Ap	munication: ding Group: ss eographical plication Speripheral	:	Apartmer Broadcas	st 🗌	Configu	rable [1.1.	<u> </u> 			
Comr Bind Class Ge Ap Pe	munication: ding Group: ss eographical eplication Speripheral Address:	ecific	Apartmer Broadcas IO Type(st 🗍 ID): 1	Configu 09 (BOS	rable [Prop	1.1.	D:	53		
Comr Bind Class Ge Ap Pe DP A	munication: ding Group: ss eographical eplication Specipheral Address: -Services (6	ecific	Apartmer Broadcas IO Type(I	st	Configu 09 (BOS nRepTin	rable [10 s	1.1. erty I ec	D: Hear	tbeat:	15 min	
Comr Bind Class Ge Ap Pe DP A	munication: ding Group: ss eographical eplication Speripheral Address:	ecific	Apartmer Broadcas IO Type(I COV Output pe	st ID): 1 Mi er default co	Configu 09 (BOS nRepTin mmunic	rable [10 s	1.1. erty I ec ng G	D: Hear	tbeat: card allo	wed 🗵	
Comr Bind Class Ge Ap Pe DP A LTE	munication: ding Group: ss eographical plication Speripheral Address: -Services (6 oReport	ecific event):	Apartmer Broadcas IO Type(I	st ID): 1 Mi er default co	Configu 09 (BOS nRepTin	rable [10 s	1.1. erty I ec	D: Hear	tbeat:	wed 🗵	
Comr Bind Clas Ge Ap Pe DP A LTE	munication: ding Group: ss eographical plication Specification Specifica	ecificevent):	Apartmer Broadcas IO Type(I COV Output pe	st ID): 1 Mi er default co	Configu 09 (BOS nRepTin mmunic	rable [10 s	1.1. erty I ec ng G	D: Hear	tbeat: card allo	wed 🗵	
Comr Bino Clas Ge Ap Pe DP A LTE Inf	munication: ding Group: ss eographical eplication Specification Specific	ecific ==================================	Apartmer Broadcas IO Type(I COV Output pe Tx Prio:	st ID): 1 Mi er default co	Configu 09 (BOS nRepTin mmunic High	rable (S) ne: ating (10 s Bindi	erty I ec ng G	D: Hear roup Wild	tbeat: card allo	wed 🛚	
Comr Bino Clas Ge Ap Pe DP A LTE Inf	munication: ding Group: as eographical eplication Specipheral Address: -Services (eoReport TE Read-Read-Read all always be	ecific ==================================	Apartmer Broadcas IO Type(I COV Output pe Tx Prio:	st ID): 1 Mi er default co	Configu 09 (BOS nRepTin mmunic High	rable (S) ne: ating (10 s Bindi	erty I ec ng G	D: Hear roup Wild	tbeat: card allo Lo	wed 🗵 w 🗌	
Comr Bino Clas Ge Ap Pe DP A LTE Inf	munication: ding Group: as eographical eplication Specification Specific	ecific cevent): sponse output	Apartmer Broadcas IO Type(I COV Output pe Tx Prio:	st ID): 1 Mi er default co	Configu 09 (BOS nRepTin mmunic High	rable (S) ne: ating (10 s Bindi	erty I ec ng G	D: Hear roup Wild	tbeat: card allo Lo	wed 🛚	
Commercial Class Geometric Cla	munication: ding Group: ss eographical eplication Speripheral Address: -Services (eoReport TE Read-Real lling of the oall always be epported) perty-Service	ecific Eevent): sponse output ee	Apartmer Broadcas IO Type(I COV Output pe Tx Prio:	st	Configu 09 (BOS nRepTin mmunic High	rable [S) ne: ating [10 s Bindi	erty I ec ng G ormal	D: Hear roup Wild	tbeat: card allo Lo	wed 🛚	
Comr Bind Clas Ge Ap Pe DP / LTE Inf (L ⁻ po sh su Proj (ind	munication: ding Group: ss eographical eplication Specipheral Address: -Services (eoReport TE Read-Real lling of the oall always be pported) perty-Service ividual acces	ecific ceess):	Apartmer Broadcas IO Type(I COV Output pe Tx Prio: Transm a	st	Configu 09 (BOS nRepTin mmunic High	rable [S) ne: ating [10 s	erty I ec ng G ormal	D: Hear roup Wild	tbeat: card allo Lo Default \	wed 🗵 w 🗌 /alue 🗌	
Comr Bind Clas Ge Ap Pe DP / LTE Inf (L ⁻ po sh su Proj (ind	munication: ding Group: ss eographical eplication Speripheral Address: -Services (eoReport TE Read-Real lling of the oall always be epported) perty-Service	ecific ceess):	Apartmer Broadcas IO Type(I COV Output pe Tx Prio: Transm a	st	Configu 09 (BOS nRepTin mmunic High	rable [S) ne: ating [10 s	erty I ec ng G ormal	D: Hear roup Wild	tbeat: card allo Lo	wed 🗵 w 🗌 /alue 🗌	
Comr Bind Clas Ap Pe DP A LTE Inf (L po sh su Proj (ind Excej	munication: ding Group: ss eographical eplication Specipheral Address: -Services (eoReport TE Read-Real lling of the oall always be pported) perty-Service ividual acces	ecific ceess):	Apartmer Broadcas IO Type(I COV Output pe Tx Prio: Transm a	st	Configu 09 (BOS nRepTin mmunic High	rable [S) ne: ating [10 s	erty I ec ng G ormal	D: Hear roup Wild	tbeat: card allo Lo Default \	wed 🗵 w 🗌 /alue 🗌	

3.9.6.4 Output OccModeNext

Standard Mode: NA LTE-HEE Mode:

FB:	BOS	LTE Ser	ver	OccMod	eNext				N	1andator	у 🗌
		Output	Name:							Optiona	al 🛛
Desc	ription:										
This o	output contain	ns the ne	xt occupan	cy mode	and the tin	ne to it.	If the	next m	ode is not	availabl	e the time
is set	to zero.										
DPT:	Name D	PT_Occl	ModeNext		DPT ID	206.10)4 D	atatyp	e format	U ₁₆ N ₈	
Field		D	escription			Sup.	Range	е	Unit	COV	Default
Time		Ti	me to next	building	mode in		fu	ıll	min	15 ¹⁾	0
		m	inutes, 0 =	no next r	node						
Next	Building Mod	е			_	[0.	2	enum.	yes	cs
_) = Building			M					
			1 = Building	g Standby	/	M					
			2 = Building		upied	M					
		al	l other enu	meration		NA					
Comr	munication:	-							-	-	
Bine	ding Group:										
Clas	SS		Туре					Defa	ault		
Ge	eographical	\boxtimes	Apartmen	t . Room	. SubZone	1		1.1.	1		
Ap	plication Spe	ecific 🗌									
Pe	ripheral		Broadcas	t 🔲	Configu	rable 🗌]				
DP .	Address:		IO Type(I	D):	109 (BOS	5)	Pro	perty I	D:	54	
LTE	-Services (e	vent):	COV 🛚		MinRepTin	ne:	10	sec	Hear	tbeat:	15 min
Inf	oReport	\boxtimes	Output pe	er default	communic	ating [Bin	ding G	roup Wild	card allo	wed 🛚
			Tx Prio:		High 🗌		1	Vorma		Lo	w 🔲
	TE Read-Res										
	lling of the o		Tranem a	fter Dowe	er-up: Store	براد// مر	\sim \Box	Act \/	alue 🖂	Dofault \	/alue □
	all always be	•	Transin a	iterrowe	ar-up. Store	u valu	- Ш	ACI V	alue 🖂	Delault	value [
	pported)										
	perty-Servic		Read only	, \Box	1	Read	/Write	ľ	\boxtimes		
	ividual acce		ixeau only	,		i (Cau	VVIIIC	k			
Exce	ption Handli	ng:							Save	at Power	rdown
	pecial Features:										
1) CC	COV value is identical to heart beat time (15 min).										

3.9.6.5 Output ContrModeBO

DP Name	e: (ContrModeBO	ntrModeBO Abbr.:				Mand	Mandatory		
FB Name	: E	BOS					Can b	e interna		
Descripti	ion									
This outp	ut cor	tains the controlling mod	e.							
Datapoin		e								
DPT_Nar	ne:	DPT_HVACContrMode								
DPT Forn	nat:	N_8				DPT_ID:	20.10	5		
Field		Description				Supp.	Range	Unit	Default	
ContrMod	de					020	enum.	CS		
		0 = Auto				0				
		1 = Heat	2 = Mrng Wm	up		0				
		3 = Cool	4 = Night Purg	ge		0				
		5 = Precool								
		7 = Test		0						
		9 = Fan Only	10 = Free Cool			0				
		11 = Ice	12 = Max. Hea	ting Mo	de	0				
		13 = Eco. H/C Mode		0						
		15 = Calibration Mode	16= Emerg Co	ol Mode	е	0				
		17 = Emerg Steam	20 = No Dema			0				
		all other enumeration				NA				
Access 1	Гуре									
♦ Outpu	ut									
this →	M	\boxtimes this \rightarrow 1								
Sponta	aneou	s 🛛 COV:	Delta-Valu	e:	Λ	/linRepTin	ne:	10 sec		
		Cyclic	Period:	15m	nin (r	(recommended value)				
Reque	est									
Commun	icatio	on Type								
♦ Grou	p Obje	ect Datapoint					Mandato	ry: 🛛		
Defau	It Gro	up Address:								
Dynamic	S									
Power	dowr	: Save:								
Power	up:	Value: No initia	lisation:	[Defau	ılt value:				
		Saved v	alue:	1	Actua	l value:		\boxtimes		
		Transmit on bus:								
Exceptio	Exception Handling									
Special F	eatu	es								
	-									

FB: BOS LTE Ser							Mandatory					
		Output I	Name:						Ор	tional [\boxtimes	
Desc	ription:	_										
This o	output cont	ains the Co	ntrolling m	node.								
DPT:	Name	DPT_HVA	CContrMo	de_Z	DPT ID	201.1	04 E	Datatype for	mat N	I_8Z_8		
Field		Description	1				Sup.	Range	Unit	COV	Default	
Contr	Mode							020	enum.	yes	CS	
		0 = Auto					0				i	
		1 = Heat			И Wmup		0				i	
		3 = Cool	5 5								i	
		5 = Precc	ol	6 = 0			0				İ	
		7 = Test			EmgHeat		0				i	
		9 = Fan o	nly		ree Cool		0				İ	
		11 = Ice			Max. Heating		0				İ	
		13 = Eco. I			Dehumidifica		0				İ	
					Emerg Cool N	/loae	0				i	
		17 = Emergall other en			No Demand		O NA				l	
STAT	US				nd Property-				Bitset			
		Service Re									İ	
- Out	OfService	RSM out o		,			0	true/false	Bit 0	Υ	false	
- Faul		Value is co	rrupted				0	true/false	Bit 1	Υ	false	
- Ove	rridden	RSM is ten		verridde	n		0	true/false	Bit 2	Υ	false	
- InAla	arm	RSM is in a	alarm				0	true/false	Bit 3	Υ	false	
- Alar	mUnAck	Acknowled	gement of	alarm			0	true/false	Bit 4	Υ	false	
- all o	ther bits		NA NA						Bit 5-7		ı	
	nunicatio										ï	
	ding Grou	p:										
Clas	SS		Type					Default	Default			
Ge	eographica	I 🖂	Apartmer	nt . Room	n . SubZone			1.1.1				
Ap	plication S	pecific 🗌										
Pe	ripheral		Broadcas	t 🗌	Configura	able 🗌						
	Address:		IO Type(I	D):	109 (BOS)		Prop	erty ID:	55			
	-Services	· <u> </u>	COV 🛚		MinRepTim		10 s		leartbea		5 min	
Inf	oReport	\boxtimes		er defaul	t communica	ting 🗌		ing Group \	Wildcard	allowe	ed 🛚	
			Tx Prio:		High 🗌		N	ormal 🛚		Low		
	TE Read-R											
	lling of the		Transm a	fter Pow	er-up: Stored	d Value		Act Value D	Defa	ault Val	lue 🖂	
	all always	be			o. ap. 0.0.0.							
	supported)											
	Property-Service Read only Read					Read/\	Vrite					
	(individual access):								ave at P	owerdo	own 🗆	
	puon nam	umy.						30	ave at F	OWEIUC	/VVII	
Spac	pecial Features:											
Spec	iai reature	;5.										

3.9.6.6 Parameter Apartment

FB:	BOS	Proper	ty	Name (<u>Server</u>):	Α	partment					Mandator Optiona	• =
Desc	ription:	- ' -								<u>'</u>	•	
Numb	er of the a	apartmen ^a	t z	one.								
DPT:	Name	DPT_U	co	ountValue8_Z DPT ID 202.00			202.002	2	Data	atype format	U_8Z_8	
Field				Description				S	up.	Range	Unit	Default
Zone			N	lumber of the apa	rtn	nent zone				(0) 1126		1
STAT	US										Bitset	
	ofService		Z	one active / inactive	ve				0	true/false	Bit 0	false
- all other bits			n	ot supported, fixed	d t	o '0'			۱A			false
COMI	MAND									enum		CS
- Norr	nalWrite								M	0		
	OSV & Re		Set zone inactive / active				0	3 / 4				
- all o	ther comn	nands	n	ot supported					۱A			
Comr	nunicatio	n:										
DP	Address:			IO Type(ID):		109 (BOS	5)	P	roper	ty ID:	101	
(in t	he servei	·)		Start-Index:		1		N	° of e	lements	1	
Pro	perty acc	ess:		Read only			Read/W	/rite	9	\boxtimes		
Prof	tection			Read level		-		W	/rite le	evel	-	
Exce	otion Han	dling:	٧	alue after Power-	up	: Stored	Value 🛚	Α	ct Va	lue 🗌 Def	fault Value	
Speci	ial Featur	es:										
Zone	one = 0 (wildcard): Sends to all listeners											
The d	ne device is not LTE communicating in this zone if zone is 'OutOfService'											
If Apa	Apartment is 'OutOfService' Room and SubZone automatically are 'OutOfService'											

3.9.6.7 Parameter Room

FB:	BOS	Proper	ty Name (<u>Server</u>):	R	oom					Mandator Optiona		
Desc	ription:	<u> </u>							<u> </u>	<u> </u>		
Numb	er of the ro	om zone	Э.									
DPT:	Name	DPT_U	countValue8_Z		DPT ID	202.002	2	Data	atype format	U_8Z_8		
Field	Field Description				S	up.	Range	Unit	Default			
Zone			Number of the roor	n z	zone				(0) 163		1	
STAT	US									Bitset		
	ofService		zone active / inacti					0	true/false	Bit 0	false	
	ther bits		not supported, fixe	d t	o '0'			IA			false	
	MAND						_		enum		CS	
	malWrite	.001	M O				0					
	OSV & Res		Set zone inactive / active				0	3 / 4				
_	ther comm		not supported				_ N	1A				
	nunicatior	1:	1.5 - (5)		(5.0.0							
	Address: 、		IO Type(ID):		109 (BOS)		•	ty ID:	102		
	he server)		Start-Index:	_	1				lements	1		
	perty acce	SS:	Read only [Read/W			\boxtimes			
	tection		Read level		-			rite l		-		
Exce	ption Hand	lling:	Value after Power-	up	: Stored	Value 🛚	A	ct Va	lue 💹 Def	ault Value	<u> </u>	
	ial Feature											
			ds to all listeners									
			mmunicating in this	ZC	ne if zone	is 'OutO	fSe	rvice				
'OutOfService' is taken over from Apartment												

3.9.6.8 Parameter SubZone

FB:	BOS	Proper	ty Name (<u>Server</u>):	SubZone				Mandator Optiona		
Descri	ption:			=				•		
Numbe	er of the su	ıb zone.								
DPT:	Name	DPT_U	countValue8_Z	DPT ID	202.002	2 Data	atype format	U_8Z_8		
Field Description					Sup.	Range	Unit	Default		
Zone			Number of the Sub	Zone			(0) 115		1	
STATU	JS							Bitset		
- Outof	Service		zone active / inacti	ve		0	true/false	Bit 0	false	
- all oth	ner bits		not supported, fixe	d to '0'		NA			false	
COMM	1AND						enum		CS	
	alWrite					М	0			
	SV & Rese		Set zone inactive / active			0	3/4			
- all oth	ner comma	ands	not supported NA							
Comm	unication	:								
DP A	ddress:		IO Type(ID):	109 (BO	S)	Prope	rty ID:	103		
(in th	ne server)		Start-Index:	1		N° of e	elements	1		
Prop	erty acce	ss:	Read only		Read/W	/rite	\boxtimes			
Prote	ection		Read level	-		Write I	evel	-		
Excep	tion Hand	lling:	Value after Power-	up: Store	d Value 🛚	Act Va	alue 🔲 🛮 Def	fault Value		
Specia	al Feature	s:								
	Zone = 0 (wildcard): Sends to all listeners								_	
			mmunicating in this		e is 'OutO	fService	, '			
'OutOfService' is taken over from Apartment										

3.10 HVAC Emergency Source (HVACEMS)

3.10.1 Aims and objectives

The Functional Block 'HVAC Emergency Source' is typically part of a supervisor. It is responsible to transmit the HVAC Emergency Mode for air treatment (pressure, depressure, purge, shutdown, fire) to the zone controllers (TU- or VAC-controllers).

This Functional Block provides the information for these purposes. The inputs and the algorithms are company specific.

3.10.2 Functional specification

The information of this Functional Block is delivered to the TU controller FB's [9] and/or to the VAC controller's [10].

In the LTE-Mode the output for TU or VAC supports the LTE zoning "Apartment . Room . SubZone" or "Ventilation Distribution Segment".

Inputs

• Inputs Company specific

Outputs

• EmergMode This output defines all HVAC Emergency functions,

which may be demanded by a supervisor. It is delivered to

the TU and/or VAC air controllers.

Binding Groups (LTE)

This Functional Block can be used in different applications with different binding groups. It is possible to implement one or both posibilities into a device. One of them is mandatory.

• Binding group x.y.z This binding group corresponds with the room / zone to

which the TU controller belongs.

(see TU controller Functional Blocks [9])

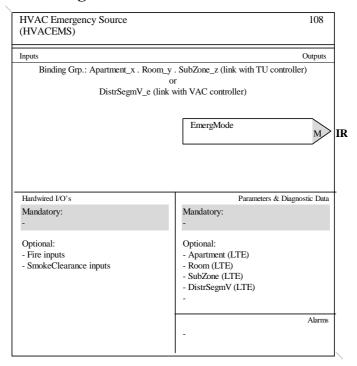
• DistrSegmV This binding group defines the distribution segment

ventilation. (see Ventilation, air Conditioning [10])

3.10.3 Constraints

None.

3.10.4 Functional Block diagram



3.10.5 Datapoint description

Overview

Datapoints	Description / Remarks	Datapoint Type	Additional info
Outputs			
Emerg Mode	HVAC Emergency Mode Source with: - COV and RepPer - Z ₈ STATUS supported to FB various controllers	LTE: 201.109 DPT_HVACEmergMode_Z N ₈ S: 20.106 DPT_HVACEmergMode N ₈	LTE: M S: GO
Parameter			
Apartment_x	LTE zoning number for Apartment	202.002 DPT_UcountValue8_Z U ₈ Z ₈	O *) Controller zone
Room_y	LTE zoning number for Room	202.002 DPT_UcountValue8_Z U ₈ Z ₈	O *) Controller zone
SubZone_z	LTE zoning number for SubZone	202.002 DPT_UcountValue8_Z U ₈ Z ₈	O *) Controller zone
Distr SegmV	LTE zoning number for Distribution Segment Ventilation	202.002 DPT_UcountValue8_Z U ₈ Z ₈	O *) 1

^{*)} see Functional specification 3.10.2.

HVACEMS Runtime Interworking - Dependence on Configuration Modes

			STANDARD MODE		NDED ODE
		Basic FB	S-Mode	Standard Mode Interface	HEE
Inputs					
Outputs	EmergMode	GO_b	GO	GO	M

HVACEMS LTE specific Properties

		Support
Parameter	Apartment_x	0
	Room_y	0
	SubZone_z	0
	DistrSegmV	0

HVACEMS Standard Properties of Interface Objects (or memory mapped DP)

	Support
Parameter	

3.10.6 Detailed specification of the Datapoints

3.10.6.1 Output EmergMode

DF		EmergMode		Abbr.:	br.:			Mandatory		
FΒ	Name:	HVACEMS					Can b	e interna	ıl 🔲	
De	scription									
			Emergency Mode.							
	tapoint Typ	oe								
DF	PT_Name:	DPT_HVACEm	ergMode							
DF	PT Format:	N ₈				DPT_ID:				
Fie		Description				Supp.	Range	Unit	Default	
En	nergMode	0 = Normal	1 = EmergPre	ssure		0	05	enum.	CS	
			pressure 3 = EmergPt			Ö				
			utdown 5 = EmergFire			Ö				
		all other enume				NA				
Ac	cess Type	•								П
♦										
	this \rightarrow M \boxtimes this \rightarrow 1 \square									
	Spontaneo	us 🛛 COV:	Delta-Val	ue:	N	/linRepTir	ne:	10 sec		
		Cyclic	Period:	15n	nin (re	ecommen	ded value)		
	Request									
Ö	mmunicati	on Type								
•	Group Obj	ect Datapoint					Mandato	ry: 🛛		
	Default Gro	oup Address: -								
Dy	namics									
	Power dow	n: Save:								
	Power up:	Value:	No initialisation:	I	Defau	ılt value:				
			Saved value:	1	Actua	l value:		\boxtimes		
	Transmit on bus:									
Ex	Exception Handling									
Sp	ecial Featu	res								
	•									

FB:	HVACEM			Server ut Name:						Mandatory ⊠ Optional □		
Desc	ription:		<u> </u>		-				•			
		ains	the F	IVAC Emer	gency Mo	de.						
DPT:	Name	DPT	Γ_HV	ACEmergM	ode_Z	DPT ID	201.10)9	Dataty	pe format	N_8Z_8	
Field			[Description			Sup.	Rar	nge	Unit	COV	Default
Emer	gMode								05	enum.	Υ	CS
				0 = Norma			0					
					Pressure		0					
				2 = Emerg		ıre	0					
				3 = Emerg			0					
					Shutdowi	n	0					
				5 = Emerg			0					
				all other enu			NA					
STAT	US			For LTE-Sei						Bitset		
				and Property								
				Response o								
	OfService		I	HVACEMS	out of ser	vice	0	tru	e/false		Υ	false
- all o	ther bits						NA					
Comr	nunication	n:	_				=	_		-	-	-
Bine	ding Grou	p:										
Clas				Type						fault		
Ge	eographica	l	\triangleright	Apartmer	nt . Room	. SubZone	!		1.1	.1		
Ap	plication S	peci	fic 🛭	DistrSegr	ηV				1			
	ripheral			Broadcas	st 🔲	Configu	rable []				
DP A	Address:			IO Type(I	D):	108 (HVA	CEMS) P	roperty	· ID:	51	
LTE	-Services	(eve	ent):	COV	,	MinRepTin			0 sec		tbeat:	15 min
Inf	oReport	•	Ø	Output pe	er default	communic	ating [_ B	inding	Group Wild	card allo	wed 🛛
	·			Tx Prio:		High 🛚			Norma		Lo	
(L	ΓΕ Read-R	espo	onse			<u> </u>						
ро	lling of the	outp	out	T	D				۸ - 4 ۱	V-1 \	D = f = t \	/ala 🖂
sh	all always l	be [·]		i ransm a	itter Powe	er-up: Store	ea valu	е 🗀	ACI	Value ⊠	Default \	/aiue 🔛
su	pported)											
Pro	perty-Serv	rice		Pood onl	v Γ	1	Read	/\		\boxtimes		
(ind	ividual ac	cess	s):	Read onl	у	J	Reau	/ ۷ ۷ 1 1 1	.e			
Exce	otion Hand	dling	<u></u>	-						Save	at Power	rdown 🗌
Speci	al Feature	es:										

3.10.6.2 Parameter Apartment_x

FB:	HVACEN	IS P	rop	erty Name (<u>Server</u>):	Apa	Apartment_x			Mandatory ☐ Optional ⊠			
Desci	ription:				<u>-</u>					<u> </u>		
Numb	er of the a	partm	ent z	zone.								
DPT:	Name	DPT_	_Ucc	ountValue8_Z	DPT II) 20	2.002	2 [atat	ype format	U ₈ Z ₈	
Field]	Description				Sup	o. F	Range	Unit	Default
Zone			1	Number of the Apartn	nent					(0) 1126		1
STAT	US										Bitset	
- Outo	ofService 1		7	zone active / inactive				0		true/false	Bit 0	false
- all other bits			r	not supported, fixed t	o '0'			N/	١ .			false
COMMAND										enum		CS
- NormalWrite								M		0		
- SetOSV & ResetOSV				Set zone inactive / active				0		3 / 4		
	ther comm		1	not supported				N/	١ .			
Comr	nunicatio	n:										
	Address:			IO Type(ID):	108 (H	VACE	MS)			y ID:	101	
(in t	he server)		Start-Index:	1				of ele	ements	1	
	perty acce	ess:		Read only		Re	ead/W			\boxtimes		
Prot	ection			Read level	-			Wri	te le	vel	-	
Excep	otion Han	dling:	'	√alue after Power-up	: Store	ed Val	ue 🛚	Act	Valu	ue 🗌 🛮 Def	fault Value	e 🗌
Special Features:												
Zone = 0 (wildcard): Sends to all listeners												
	The device is not LTE communicating in this zone if zone is 'OutOfService'.											
If Apa	f Apartment_x is 'OutOfService' Room_y and SubZone_z automatically are 'OutOfService' too.											

3.10.6.3 Parameter Room_y

FB:	HVACEN	1S	Prop	perty Name (<u>Serv</u>	<u>'er</u>):	Room	Room_y			Mandatory ∐ Optional ⊠		
Desci	iption:					_					<u> </u>	
Numb	er of the r	oom	zone	Э.								
DPT:	Name	DPT	Γ_Uc	countValue8_Z DPT ID 202.002		2	Datat	ype format	U_8Z_8			
Field				Description				Su	ıp. I	Range	Unit	Default
Zone				Number of the Ro	om]_	(0) 163		1
STAT	US										Bitset	
	fService			zone active / inactive				C		true/false	Bit 0	false
	her bits			not supported, fix	ed to	'0'		<u>N</u>	Α			false
COMMAND								_	_	enum		CS
- NormalWrite			Cat -and indution / active				V	-	0			
- SetOSV & ResetOSV			Set zone inactive / active			(3 / 4				
	her comm		3	not supported				N.	A		<u> </u>	
	<u>nunicatio</u>	n:		(ID)		00 (11) (4	05110)	_			100	
	Address:			IO Type(ID):	1	08 (HVA	CEMS)		perty		102	
_ `	he server	•		Start-Index:	1		D 104		of ele	ements	1	
	perty acco	ess:		Read only	Ш		Read/W			\boxtimes		
	ection			Read level	-			_	ite le		<u>.</u>	
Exce	otion Han	dling	J:	Value after Powe	r-up:	Stored	Value 🛚	Ac	t Valı	ue 💹 Det	fault Value	
_	al Feature											
Zone = 0 (wildcard): Sends to all listeners												
The device is not LTE communicating in this zone if zone is 'OutOfService'.												
'OutO	fService' i	s take	en o	ver from Apartmen	nt_x.							

3.10.6.4 Parameter SubZone_z

FB:	HVACEN	IS Pi	rope	erty Name (<u>Server</u>):	SubZ	SubZone_z				Mandatory ☐ Optional ⊠		
Desci	ription:				-							
Numb	er of the S	SubZon	e.									
DPT:	Name	DPT_	Ucc	countValue8_Z DPT ID 202.002		2	Data	type format	U_8Z_8			
Field				Description			Ø	лр.	Range	Unit	Default	
Zone			1	Number of the SubZo	ne] .	(0) 115]	1	
STAT	US									Bitset		
- Outo	ofService 1		Z	zone active / inactive			(С	true/false	Bit 0	false	
- all of	ther bits		r	not supported, fixed to '0'			N	IA			false	
COMMAND									enum		CS	
- NormalWrite						I	M	0				
- SetOSV & ResetOSV				Set zone inactive / active				C	3 / 4			
	ther comm		r	not supported			١	IA				
Comr	nunicatio	n:										
	Address:			IO Type(ID):	108 (HV	ACEMS)		opert		103		
(in t	he server)		Start-Index:	1				ements	1		
	perty acce	ess:		Read only		Read/W	/rite		\boxtimes			
Prot	ection			Read level	-		W	rite le	vel	-		
Excep	otion Han	dling:	\	/alue after Power-up	: Stored	l Value 🛚	A	ct Val	ue 🗌 🛮 Def	fault Value	-	
Special Features:												
Zone = 0 (wildcard): Sends to all listeners												
The device is not LTE communicating in this zone if zone is 'OutOfService'.												
'OutO	OutOfService' is taken over from Apartment_x.											

3.10.6.5 Parameter DistrSegmV

FB: HVAC Pr	operty Name (<u>Server</u>):	DistrSegmV			Mandator Optiona				
Description:	Description:								
Number of the ventilation distribution segment.									
DPT : Name DPT	_UcountValue8_Z	DPT ID 202.002	2 Data	atype format	U_8Z_8				
Field	Description		Sup.	Range	Unit	Default			
Zone	Number of the Ventila	tion Segment		(0) 131		1			
STATUS					Bitset				
- OutofService	zone active / inactive		0	true/false	Bit 0	false			
- all other bits	not supported, fixed to	o '0'	NA			false			
COMMAND				enum		CS			
- NormalWrite			M	0					
- SetOSV & ResetOS	V Set zone inactive / act	Set zone inactive / active							
- all other commands	not supported	not supported							
Communication:			-		-				
DP Address:	IO Type(ID):	108 (HAVCEMS)	Proper	ty ID:	y ID: 104				
(in the server)	Start-Index:	1	N° of e	lements	1				
Property access:	Read only	Read/W	/rite	\boxtimes					
Protection	Read level	-	Write le	evel	-				
Exception Handling:	: Value after Power-up:	Stored Value 🛛	Act Va	lue Def	ault Value	<u> </u>			
Special Features:									
The device is not LTE	communicating in this zo	ne if zone is 'OutO	fService	'.					

3.11 Position to ON/OFF Converter (POOC)

3.11.1 Aims and objectives

The Functional Block 'Position to ON/OFF Converter' is needed to convert the percent valve position information to an ON/OFF information for a corresponding valve actuator.

It contains the functionality for the following "valves":

- Heating Stage A
- Heating Stage B
- Cooling Stage A
- Cooling Stage B
- Heating / Cooling for changeover applications

This Functional Block normally is used in a controller device, but also may be used in a valve actuator device.

It is possible to implement only part of this functionality.

3.11.2 Functional specifications

As the distribution of the setpoint information in the system is event-driven (COV-condition, change of value) and in addition repeated periodically, the input has a timeout.

The 'Position to ON/OFF Converter' supports the following LTE zoning:

- "Apartment . Room . SubZone"
- "General Peripheral Tag".

Optional function:

- The ActPosSetpHeatStageA etc. may temporary be overridden by means of a tool for service purpose.

The 'Overridden' condition must be reported.

Behaviour of the converter if no valid position setpoint is available (company specific):

- close the valve
- open the valve
- leave position unchanged

Inputs

 ActPosSetpHeatStageA This is the actuator position setpoint given be 	by a controller	•
---	-----------------	---

ActPosSetpHeatStageB ditto
 ActPosSetpCoolStageA ditto
 ActPosSetpCoolStageB ditto

Outputs

• ActStatHeatStageA This is the effective position of the valve, in LTE

together with attributes to define special situations.

• ActStatHeatStageB ditto

ActStatCoolStageA ditto

ActStatCoolStageB ditto

ActStatHeatCool ditto

• Fault indication in S-Mode

• Overridden Overridden indication in S-Mode

CalibrationMode Not usedValveKick Not used

Binding Group (LTE)

• Apartment . Room . SubZone This converter can be used in different applications.

General Peripheral For this reason different binding possibilities are offered.

The binding group that shall not be active has to be set

to out of service.

It is possible to realise only one of the possibilities.

Parameters

CycleTime This parameter is used to define the ON/OFF period of the

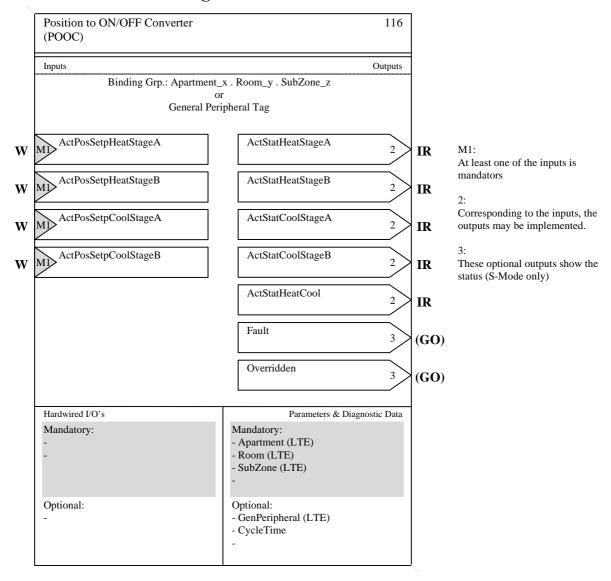
ON/OFF actuator. The position percentage is translated to

a duty cycle.

3.11.3 Constraints

None.

3.11.4 Functional Block diagram



3.11.5 Datapoint description

Overview

Datapoints	Description / Remarks	Datapoint Type	Additional info
Inputs			
Act Pos Setp Heat StageA	Position value for the heating actuator stage A with: - COV and RepPer - Z ₈ STATUS and - Z ₈ COMMAND supported from FB various controller	LTE: 202.001 DPT_RelValue_Z U_8Z_8 S: 5.001 DPT_Scaling U_8	LTE: M1 1) S: GO %
Act Pos Setp Heat StageB	Position value for the heating actuator stage B with: - COV and RepPer - Z ₈ STATUS and - Z ₈ COMMAND supported from FB various controller	LTE: 202.001 DPT_RelValue_Z U_8Z_8 S: 5.001 DPT_Scaling U_8	LTE: M1 1) S: GO %
Act Pos Setp Cool StageA	Position value for the cooling actuator stage A with: - COV and RepPer - Z ₈ STATUS and - Z ₈ COMMAND supported from FB various controller	LTE: 202.001 DPT_RelValue_Z U_8Z_8 S: 5.001 DPT_Scaling U_8	LTE: M1 1) S: GO %
Act Pos Setp Cool StageB	Position value for the cooling actuator stage B with: - COV and RepPer - Z ₈ STATUS and - Z ₈ COMMAND supported from FB various controller	LTE: 202.001 DPT_RelValue_Z U_8Z_8 S: 5.001 DPT_Scaling U_8	LTE: M1 1) S: GO %

See Aims and objectives in 3.11.1.

Datapoints	Description / Remarks	Datapoint Type	Additional info
Outputs			
Act Stat Heat StageA	Status value of heating valve stage A with - COV and RepPer mainly to FB 'HVAC ON/OFF Actuator'	LTE: 1.001 DPT_Switch B ₁ S: 1.001 DPT_Switch B ₁	LTE: O2 1) S: (GO)
Act Stat Heat StageB	Status value of heating valve stage A with - COV and RepPer mainly to FB 'HVAC ON/OFF Actuator'	LTE: 1.001 DPT_Switch B ₁ S: 1.001 DPT_Switch B ₁	LTE: O2 1) S: (GO)
Act Stat Cool StageA	Status value of heating valve stage A with - COV and RepPer mainly to FB 'HVAC ON/OFF Actuator'	LTE: 1.001 DPT_Switch B ₁ S: 1.001 DPT_Switch B ₁	LTE: O2 1) S: (GO)
Act Stat Cool StageB	Status value of heating valve stage A with - COV and RepPer mainly to FB 'HVAC ON/OFF Actuator'	LTE: 1.001 DPT_Switch B ₁ S: 1.001 DPT_Switch B ₁	LTE: O2 1) S: (GO)
Act Stat Heat Cool	Status value of heat/cool valve (ChangeOver) with - COV and RepPer mainly to FB 'HVAC ON/OFF Actuator'	LTE: 1.001 DPT_Switch B ₁ S: 1.001 DPT_Switch B ₁	LTE: O2 1) S: (GO)
Fault	The actuator has a fault detected	LTE: NA S: 1.002 DPT_Bool B ₁	LTE: NA 1) S: (GO) true/false
Overridden	The converter is overridden (manually)	LTE: NA S: 1.002 DPT_Bool B ₁	LTE: NA 1) S: (GO) true/false

See Aims and objectives in 3.11.1.

Datapoints	Description / Remarks	Datapoint Type	Additional info
Parameters			
Apartment	LTE zoning number for Apartment	202.002 DPT_UcountValue8_Z U ₈ Z ₈	M 1
Room	LTE zoning number for Room	202.002 DPT_UcountValue8_Z U ₈ Z ₈	M 1
SubZone	LTE zoning number for SubZone	202.002 DPT_UcountValue8_Z U ₈ Z ₈	M 1
Gen Peripheral	LTE zoning number for general peripheral	203.012 DPT_UcountValue16_Z U ₁₆ Z ₈	O 1

²⁾ Implementation of Properties using standard DPT see chapter 1.3.3

POOC Runtime Interworking - Dependence on Configuration Modes

			STANDARD MODE	EXTENDED MODE		
		Basic FB	S-Mode	Standard Mode Interface	HEE	
Inputs	ActPosSetpHeatStageA	$GO_b^{-1)}$	GO 1)	GO 1)	M 1)	
	ActPosSetpHeatStageB	GO _b 1)	GO 1)	GO 1)	M 1)	
	ActPosSetpCoolStageA	GO _b 1)	GO 1)	GO 1)	M 1)	
	ActPosSetpCoolStageA	GO _b 1)	GO 1)	GO 1)	M 1)	
Outputs	ActStatHeatStageA	(GO) _b		(GO)	0	
	ActStatHeatStageB	$(GO)_b$		(GO)	0	
	ActStatCoolStageA	(GO) _b		(GO)	0	
	ActStatCoolStageB	(GO) _b		(GO)	0	
	ActStatHeatCool	(GO) _b		(GO)	0	
	Fault	(GO) _b		(GO)	NA	
_	Overridden	(GO) _b		(GO)	NA	

¹⁾ See Aims and objectives 3.11.1

POOC LTE specific Properties

		Support
Parameter	Apartment	M
	Room	M
	SubZone	M
	GenPeripheral	0

POOC Standard Properties of Interface Objects (or memory mapped DP)

		Support
Parameter	CycleTime	M

3.11.6 Detailed specification of the Datapoints

3.11.6.1 Input ActPosSetpHeatStageA

DP	Name:	ActF	PosSetpHea	atStageA	ı	Α	.bbr.:				Man	dat	ory		
FB I	Name:	POC	OC .								Can	be	interna		
Des	cription														
This	input sigr	nal c	ontains the	percents	setpoint valu	ue for	the va	lve po	sitio	n (He	atStage.	A).			
Data	apoint Ty														
DPT	Γ_Name:	DF	PT_Scaling												
DPT	Γ Format:	U ₈	i						DP	T_ID:	5.00	1			
Field	d	De	escription						Sı	лрр.	Range	е	Unit	Default	:
											0100) ^{*)}	%	CS	
Acc	ess Type														
•	Input														
١	$N \rightarrow this$			$1 \rightarrow \text{this}$	\boxtimes										
5	Spontaneo	us		(Cyclically:		\boxtimes			Time-	out:		31 mir	(rec.)	
F	Request			F	Polling:					Perio	d:				
Con	nmunicat	ion 1	Гуре												
*	Group Ob	ject l	Datapoint								Mandat	ory	: 🛛		
	Default Gro	oup /	Address:												
Dyn	amics														
F	Power dow	n:	Save:												
F	Power up:		Value:	No init	ialisation:			Defau	ılt va	alue:			\boxtimes		
				Saved	value:										
								Read	fron	n bus:					
Exc	eption Ha	ndli	ng												
Spe	cial Featu	ıres													
^{^)} Th	ne coding o	of the	e actuator s	etpoint v	alue is: 0%	\rightarrow 0	100%	$\rightarrow 25$	55						

FB:	POOC	LTE Server	Input Name:	Ac	ctPosSetpHe	eatStage	Α		N	/landatory Optional	
	iption:										
			ent setpoint va					tage/	A) with a	STATUS	3
inform			be overridden b	oy r		MMAND) <u>. </u>				
DPT:	Name	DPT_RelV	alue_Z		DPT ID	202.001	Data	type	format	U_8Z_8	
Field			Description						Sup.	Unit	Default
Actuat	tor positio	n	Percent value	of t	the actuator	position]		%	0
STAT	US		For Read Serv	/ice	e only					Bitset	
- OutC	OfService		Input out of se						0	Bit 0	false
- Over	ridden		Input is tempo	rari	ily overridder	n			0	Bit 2	false
- all ot	her bits		fixed to '0']	NA		false
COM	MAND		For Write Serv							enum.	
- Norn	nalWrite		Used for norm	al r	runtime comi	munication	on		M	0	
			(LTE Write Se								
- Over	ride / Rel	ease	Used for temp						0	1/2	
			(mainly by a to				access v	with			
			point-to-point	con	nmunication	mode)					
- all ot	her comn	nands							NA		
Comn	nunicatio	n:									
	ling Grou	ıp:									
Clas			Type				Default				
Ge	ographic	al 🖂	Apartment . R	oor	m . SubZone		1.1.1				
Ар	plication										
Pe	ripheral		Broadcast		Configura	ble 🛛	1				
DP A	Address:		IO Type(ID):		116 (POC	OC)	Proper	ty ID		51	
LTE: Wr	-Service	(event):	Timeout:			31	Min				
	erty-Ser				_						
	ividual a		Read only	L		Read/V	Vrite	\boxtimes			
Value	after Po	wer-up:	Defa	ult	Value 🛚				5	Stored Val	ue 🗌
Excep	otion Han	dling:						Sav	e at Pov	ver-down	
Speci	al Featur	es:									

${\bf 3.11.6.2\; Input\; ActPosSetpHeatStageB}$

DP	Name:	ActP	osSetpHea	tStage	В		Abbr.:		•		M	1andat	tory		\boxtimes
FΒ	Name:	POC	C								C	an be	interna	al	
De	scription														
Thi	s input sigr	nal co	ntains the p	percent	t setpoint val	ue fo	or the va	alve po	ositic	n (He	atSta	geB).			
Da	tapoint Ty	ре													
	T_Name:	DP	T_Scaling												
DP	T Format:	U ₈							DP	T_ID:	5	.001			
Fie	ld	De	scription						Sı	upp.		nge	Unit	Def	ault
											0′	100 ^{*)}	%	С	S
Ac	cess Type														
♦	Input In this I I I I I I I I I I I I I I I I I I I														
	$N o this$ \square $1 o this$ \boxtimes														
	Spontaneo	us			Cyclically:		\boxtimes			Time-	out:		31 mir	ı (rec	.)
	Request				Polling:					Perio	d:				
Co	mmunicati	ion T	уре												
♦	Group Ob	ject [Datapoint								Man	datory	': X		
	Default Gro	oup A	ddress:												
Dy	namics														
	Power dow	n:	Save:												
	Power up:		Value:	No in	itialisation:			Defa	ult va	alue:			\boxtimes		
				Save	d value:										
								Read	l fror	n bus:					
Ex	ception Ha	ındliı	ng												
	ecial Featu														
⁻) T	he coding of	of the	actuator se	etpoint	value is: 0%	$b \rightarrow 0$	100%	$6 \rightarrow 25$	55						

FB:	POOC	LTE Server	Input Name:	Ac	ctPosSetpHe	eatStage	·B		N	/landatory Optional	
Desc	ription:										
			ent setpoint va					tagel	3) with a	STATUS	3
inform	nation. Th	e input may	be overridden b	oy r	means of CC	DMMAND).				
DPT:	Name	DPT_RelV	alue_Z		DPT ID	202.001	Datat	type	format	U_8Z_8	
Field			Description						Sup.	Unit	Default
Actua	tor position	n	Percent value	of t	the actuator	position				%	0
STAT			For Read Serv							Bitset	
- Out	OfService		Input out of se						0	Bit 0	false
- Ove	rridden		Input is tempo	rari	ily overridde	n			0	Bit 2	false
	ther bits		fixed to '0'						NA		false
	MAND		For Write Serv							enum.	
- Norr	nalWrite		Used for norm			munication	on		M	0	
			(LTE Write Se		,						
- Ove	rride / Rel	ease	put	0	1/2						
			(mainly by a to				access v	with			
		_	point-to-point	con	nmunication	mode)					
	ther comn		-						NA		
	nunicatio										
	ding Grou	ıp:									
Clas	_		Type				Default				
	ographic		Apartment . R	oor	m . SubZone		1.1.1				
	plication					<u></u>					
	ripheral	\boxtimes	Broadcast		Configura		1				
	Address:		IO Type(ID):		116 (POC)C)	Proper	ty ID		52	
	-Service rite	(event): ⊠	Timeout:			31	Min				
	perty-Ser ividual a		Read only			Read/V	Vrite	\boxtimes			
	after Po		Defa	ult	Value 🛚				5	Stored Val	ue 🗌
Exce	otion Har	dling:						Sav	e at Pov	ver-down	
Spec	ial Featur	es:									

${\bf 3.11.6.3\; Input\; ActPosSetpCoolStage A}$

DF	P Name:	ActF	PosSetpCoo	IStage/	A	Abb	r.:			Ν	1andat	ory		\boxtimes
FB	Name:	POC	C							C	an be	interna	al	
De	scription													
Th	is input sigr	nal c	ontains the j	percent	t setpoint val	ue for the	valve	position	on (Co	olSta	geA).			
Da	tapoint Ty	ре												
DF	PT_Name:	DF	PT_Scaling											
DF	PT Format:	U ₈						DF	PT_ID:	5	.001			
Fie	eld	De	scription					S	upp.	Ra	nge	Unit	Defa	ault
										0	100 ^{*)}	%	C	S
Ac	cess Type													
♦	Input													
	$N \rightarrow this$]	$1 \rightarrow th$	is 🛛									
	Spontaneo	us			Cyclically:				Time-	out:		31 mir	ı (rec.)
	Request				Polling:				Perio	d:				
Cc	mmunicati	ion 1	уре											
♦	Group Ob	ject l	Datapoint							Man	datory	·: 🖂		
	Default Gro	oup /	Address:											
Dy	namics													
	Power dow	n:	Save:											
	Power up:		Value:	No in	itialisation:		De	efault v	alue:			\boxtimes		
				Save	d value:									
							Re	ead fro	m bus:					
Ex	ception Ha	ndli	ng											
	ecial Featu													
^{*)} T	The coding of	of the	actuator se	etpoint	value is: 0%	$\rightarrow 0$ 10)0% -	255						

FB:	POOC	LTE Server	Input Name:	Ac	ctPosSetpCo	oolStage	A		N	/landatory Optional	
Desc	ription:							<u> </u>			
			ent setpoint va					tage/	A) with a	STATUS	3
inform	nation. Th	e input may	be overridden b	oy r	means of CC	MMAND).				
DPT:	Name	DPT_RelV	alue_Z		DPT ID	202.001	Data	type	format	U_8Z_8	
Field			Description						Sup.	Unit	Default
Actua	tor position	n	Percent value	of 1	the actuator	position				%	0
STAT	US		For Read Serv	/ice	only					Bitset	
- Out	OfService		Input out of se	rvio	ce				0	Bit 0	false
- Ove	rridden		Input is tempo	rari	ily overridde	n			0	Bit 2	false
- all o	ther bits		fixed to '0'						NA		false
COMI	MAND		For Write Serv							enum.	
- Norr	nalWrite		Used for norm			munication	on		M	0	
			(LTE Write Se		,						
- Ove	rride / Rel	ease	put	0	1/2						
			(mainly by a to				access v	with			
			point-to-point	con	nmunication	mode)					
	ther comn								NA		
	nunicatio										
	ding Grou	ıp:									
Clas	_		Туре				Default				
	eographic		Apartment . R	oor	m . SubZone		1.1.1				
	plication					<u></u>					
	ripheral	\boxtimes	Broadcast		Configura		1				
	Address:		IO Type(ID):		116 (POC)C)	Proper	ty ID		53	
	-Service rite	(event): ⊠	Timeout:			31	Min				
	perty-Ser ividual a		Read only			Read/V	Vrite	\boxtimes			
	after Po		Defa	ult	Value 🛚				5	Stored Val	ue 🗌
Exce	otion Har	dling:						Sav	e at Pov	ver-down	
Speci	ial Featur	es:									

${\bf 3.11.6.4\ Input\ ActPosSetpCoolStageB}$

DF	Name:	Actl	PosSetpCod	olStage	В	Abbr	:			Manda	atory		\boxtimes
B	Name:	PO	C							Can b	e interna	al	
De	scription												
Th	is input sigr	nal c	ontains the	percent	t setpoint valu	ue for the	valve	positi	on (Co	olStageB)			
	tapoint Ty												
	PT_Name:	DI	PT_Scaling										
DF	T Format:	U						DF	PT_ID:	5.001			
Fie	eld	De	escription					S	Supp.	Range	Unit	Defa	ault
										0100 ^{^)}	%	CS	3
Ac	cess Type												
♦	Input												
	$N \rightarrow this$			$1 \rightarrow th$	is 🛛								
	Spontaneo	us	\boxtimes		Cyclically:	\boxtimes			Time-	out:	31 mir	n (rec.))
	Request				Polling:				Perio	d:			
Co	mmunicat	ion [·]	Гуре										
♦	Group Ob	ject	Datapoint							Mandato	ry: 🛛		
	Default Gro	oup.	Address:										
Dy	namics												
	Power dow	n:	Save:										
	Power up:		Value:	No in	itialisation:		De	efault v	alue:				
				Save	d value:								
							Re	ead fro	m bus:				
Ex	ception Ha	ndli	ng										
	ecial Featu												
<i>'</i> T	he coding	of th	e actuator s	etpoint	value is: 0%	$\rightarrow 0$ 10	0% →	255					

FB:	POOC	LTE Server	Input Name:	Ac	ctPosSetpCo	oolStage	eB		N	/landatory Optional	
	iption:										
			ent setpoint va					tagel	3) with a	STATUS	}
inform			be overridden b	oy r		MMAND) <u>. </u>				
DPT:	Name	DPT_RelV	alue_Z		DPT ID	202.001	Data	type	format	U_8Z_8	
Field			Description						Sup.	Unit	Default
Actuat	tor position	n	Percent value	of t	the actuator	position]		%	0
STATI	US		For Read Serv	/ice	only					Bitset	
- OutC	OfService 1 4 1		Input out of se						0	Bit 0	false
- Over	ridden		Input is tempo	rari	ily overriddei	n			0	Bit 2	false
- all ot	her bits		fixed to '0']	NA		false
COMN	/AND		For Write Serv							enum.	
- Norn	nalWrite		Used for norm	al r	runtime comi	munication	on		M	0	
			(LTE Write Se								
- Over	ride / Rel	ease	Used for temp						0	1/2	
			(mainly by a to				access v	with			
			point-to-point	con	nmunication	mode)					
- all ot	her comn	nands							NA		
Comn	nunicatio	n:									
	ling Grou	ıp:									
Clas			Type				Default				
Ge	ographic	al 🖂	Apartment . R	oor	n . SubZone		1.1.1				
Ар	plication										
Pe	ripheral		Broadcast		Configura	ble 🛛	1				
DP A	Address:		IO Type(ID):		116 (POC	OC)	Proper	ty ID		54	
LTE- Wr	-Service	(event):	Timeout:			31	Min				
	erty-Ser				_						
	ividual a		Read only	L		Read/V	Vrite				
Value	after Po	wer-up:	Defa	ult	Value 🛚				5	Stored Val	ue 🗌
Excep	tion Han	dling:						Sav	e at Pov	ver-down	
Speci	al Featur	es:									

3.11.6.5 Output ActStatHeatStageA

DP Name:	Acts	StatHe	atSta	ageA			Abl	or.:			Ma	ındat	ory		
FB Name:	PO	C									Ca	n be	interna	tl	
Description															
This Datapoir	nt cor	ntains t	the st	tatus val	ue for	the Of	N/OFF a	actu	ator (F	leatStage/	۹).				
Datapoint Ty	ре														
DPT_Name:	DI	PT_Sw	itch												
DPT Format:	B ₁									DPT_ID:	1.0	01			
Field	De	escripti	on							Supp.	Ran	ge	Unit	Defa	ıult
											ON/C)FF		CS	;
Access Type)														
♦ Output															
this \rightarrow M		₫		this \rightarrow	1										
Spontaneo	ous		CO,	V:	\boxtimes	Delta	-Value:	1	I	MinRepTir	ne:		10 sec		
			Cyc	lic	$ \boxtimes$	Perio	d:	15	imin (recommer	ided va	alue)			
Request															
Communicat	ion	Туре													
♦ Group Ob	•										Manda	atory	: [
Default Gr	oup .	Addres	ss:												
Dynamics															
Power dov	vn:	Save:													
Power up:		Value	: :	No in	itialisa	ition:			Defa	ult value:					
					d value	e:			Actua	al value:					
			mit c	on bus:			\triangleright	<u> </u>							
Exception Ha	andli	ing													
Special Feat	ures														

FB:	POOC	LTE Serv	/er	Output Name:	Act	StatHeat	StageA	\			N	landator Optiona	
	ription:	-			-				-				
This o	output cor	tains the s	stat	us value for the	ON/	OFF actu	ator (H	eatS	tageA).				
DPT:	Name	DPT_Sw	vitch	h	[DPT ID	1.001		Datatyp	e fo	rmat	B ₁	
Field			De	scription			Sup.	Ran	ige	Ur	nit	COV	Default
ActPo	os		Act	tual actuator pos	sitior)		Ol	N/OFF			Υ	CS
Comr	nunicatio	n:				,							
Bine	ding Gro	up:											
Clas	SS			Туре					Defa	ault			
Ge	eographic	al [\boxtimes	Apartment . Roo	om .	SubZone	!		1.1.	1			
Ap	plication	Specific [
Pe	ripheral		XI.	Broadcast		Configu	rable 🗵]	1				
DP .	Address:			IO Type(ID):	(353 (HOC	DA)	Р	roperty I	D:		51	
LTE	-Services	s (event):		COV 🛛	N	linRepTin	ne:	1	0 sec		Hear	tbeat:	15 min
Inf	oReport	\boxtimes		Output per defa	ult c	ommunic	ating [В	inding G	irou	p Wild	card allo	wed 🗌
				Tx Prio:		High 🗌			Norma			Lo	w 🗌
po sh	TE Read- illing of the all always pported)			Transm after Po	ower-	-up: Store	ed Valu	e 🗌	Act V	alue	e 🖂	Default \	/alue □
	perty-Ser lividual a			Read only			Read	/Writ	е [
Exce	ption Har	ndling:									Save	at Powei	rdown 🗌
Spec	ial Featui	es:											

3.11.6.6 Output ActStatHeatStageB

DP Name:	ActStatHeatStag	geB	Abb	r.:	=	Mandat	ory	
FB Name:	POOC					Can be	interna	al 🔲
Description								
This Datapoin	t contains the sta	atus value for t	the ON/OFF a	ctuator (F	leatStagel	B).		
Datapoint Ty	pe							
DPT_Name:	DPT_Switch							
DPT Format:	B ₁				DPT_ID:	1.001		
Field	Description				Supp.	Range	Unit	Default
						ON/OFF		CS
Access Type								
♦ Output								
this \rightarrow M		this \rightarrow 1						
Spontaneo	ous 🛛 COV	′: ⊠	Delta-Value:	1 I	MinRepTir	ne:	10 sec	
	Cycli	ic 🛛	Period:	15min (recommer	nded value)		
Request	\boxtimes							
Communicat	ion Type							
♦ Group Ob	ject Datapoint					Mandatory	': <u></u>	
	oup Address:							
Dynamics								
Power dov	/n: Save:							
Power up:	Value:	No initialisat			ult value:			
		Saved value			al value:		\boxtimes	
	Transmit or	n bus:	\boxtimes					
Exception Ha	ndling							
Special Feat	ıres							

FB:	POOC	LTE Serv	/er	Output Name:	Act	StatHeat	StageB	3			M	landator Optiona	
Desc	ription:								-				
This o	output con	tains the	stat	tus value for the	ON/	OFF actu	ator (H	eatS	tageB).				
DPT:	Name	DPT_Sw	vith			OPT ID	1.001		Datatyp	e fo	rmat	B ₁	
Field			De	escription			Sup.	Ran	ige	Ur	nit	COV	Default
ActPo	os		Ac	tual actuator pos	sition			10	N/OFF			Υ	CS
Comi	municatio	n:				,							
Bin	ding Grou	лр:											
Clas	SS			Туре					Defa	ault			
Ge	eographic	al [\boxtimes	Apartment . Roo	om .	SubZone	!		1.1.	1			
Ap	plication	Specific [
Pe	eripheral		\boxtimes	Broadcast		Configu	rable 🗵		1				
	Address:			IO Type(ID):		353 (HOC		Р	roperty	ID:		52	
		s (event):		COV 🛛		inRepTin		1	0 sec		Hear	tbeat:	15 min
Inf	foReport	\boxtimes		Output per defa	ult co	ommunic	ating [] B	inding G	rou	p Wild	card allo	wed 🗌
				Tx Prio:		High 🗌			Norma	\square		Lo	w 🗌
po sh	TE Read-lolling of the all always ported)		!	Transm after Po	wer-	·up: Store	ed Valu	e 🗌	Act V	'alue	e 🖂	Default \	/alue □
	perty-Ser lividual a			Read only			Read	/Writ	e l				
Exce	ption Har	ndling:									Save	at Powei	rdown 🗌
Spec	ial Featur	es:											

3.11.6.7 Output ActStatCoolStageA

DF	Name:	Acts	StatCoolStag	eA	Abbr.:			Mandat	ory		
Ë	3 Name:	PO	OC					Can be	interna	ıl	
De	escription										
Th	is Datapoint	t cor	ntains the sta	tus value for the ON/0	OFF actuato	r (Co	oolStageA	۸).			
Da	tapoint Typ	эе									
DF	PT_Name:	DI	PT_Switch								
DF	PT Format:	B ₁					DPT_ID:	1.001			
Fie	eld	De	escription				Supp.	Range	Unit	Defa	ult
								ON/OFF		CS	6
Ac	cess Type										
♦	Output										
	this \rightarrow M			his \rightarrow 1							
	Spontaneo	us		□ Delta-V	alue: 1	M	linRepTim	ne:	10 sec		
			Cyclic	Period:	15mir	n (re	ecommen	ded value)			
	Request		\boxtimes								
ŭ	mmunicati	on ⁻	Туре								
♦	Group Obj	ject	Datapoint					Mandatory	: 🔲		
	Default Gro	oup .	Address: -								
Dy	namics										
	Power dow	n:	Save:								
	Power up:		Value:	No initialisation:			lt value:				
				Saved value:		ctual	value:		\square		
			Transmit on	bus:							
Ex	ception Ha	ndli	ing								
Sp	ecial Featu	ires									

FB:	POOC	LTE Serv	/er	Output Name:	ActS	tatCool	Stage A	١			N	landator Optiona	
	ription:	-							-				
This o	output cor	tains the	sta	tus value for the	ON/O	FF actu	ator (C	oolS	tageA).				
DPT:	Name	DPT_Sta	atu	sAct	D	PT ID	207.10	5	Datatyp	e fo	rmat	U_8B_8	
Field			De	escription			Sup.	Rar	nge	Ur	nit	COV	Default
ActPo	os		Ac	tual actuator pos	ition			O	N/OFF			Υ	CS
Comr	municatio	n:					-					-	
Bin	ding Gro	up:											
Clas				Туре					Defa	ault			
Ge	eographic	al [\boxtimes	Apartment . Roo	m . S	ubZone			1.1.	1			
Ap	plication	Specific [
Pe	eripheral		\boxtimes	Broadcast	(Configu	rable 🗵]	1				
DP .	Address:			IO Type(ID):	35	53 (HOC	DA)	Р	roperty I	D:		53	
LTE	-Services	s (event):		COV 🛛	Mir	nRepTin	ne:	1	0 sec		Hear	tbeat:	15 min
Inf	foReport		Ī	Output per defau	ılt cor	mmunic	ating [] B	inding G	rou	p Wild	card allo	wed 🗌
			Ī	Tx Prio:		High 🔲			Norma			Lov	w \square
po sh	TE Read- olling of the all always pported)			Transm after Po	wer-u	ıp: Store	ed Valu	e 🗌	Act V	alue	e 🛛	Default \	/alue □
	perty-Ser lividual a			Read only			Read	/Writ	е [
Exce	ption Har	ndling:									Save	at Power	rdown
Spec	ial Featui	res:											
							_						

3.11.6.8 Output ActStatCoolStageB

DP Name:	Act	StatCoolSta	igeB	A	Abbr.:			Manda	tory	
FB Name:	PO	OC						Can be	interna	
Description										
This Datapoir	nt cor	ntains the s	tatus value for the C	N/OF	F actua	ator (C	oolStage	3).		
Datapoint Ty	ре									
DPT_Name:	DI	PT_Switch								
DPT Format:	B ₁						DPT_ID:	1.001		
Field	De	escription					Supp.	Range	Unit	Default
								ON/OFF		CS
Access Type)									
♦ Output										
this \rightarrow M			this \rightarrow 1							
Spontaneo	ous	⊠ CO'		a-Valu	ıe: 1		/linRepTin		10 sec	
		Сус	elic 🛛 Perio	od:	15mir	n (reco	mmende	d value)		
Request										
Communicat	ion	Туре								
♦ Group Ob	oject	Datapoint						Mandatory	' :	
Default Gr	oup.	Address:								
Dynamics										
Power dov	vn:	Save:								
Power up:		Value:	No initialisation:			Defau	ılt value:			
			Saved value:			Actua	l value:			
		Transmit of	on bus:		\boxtimes					
Exception Ha	andli	ing								
Special Feat	ures									

FB:	POOC	LTE Serv	/er	Output Name:	Act	StatCool	StageE	3			N	landator Optiona	
Desc	ription:								=				
This o	output cor	tains the	sta	tus value for the	ON	OFF actu	ator (C	oolS	tageB).				
DPT:	Name	DPT_Sv	vitc	h		DPT ID	1.001		Datatyp	e fo	rmat	B ₁	
Field			De	escription			Sup.	Ran	ige	Ur	nit	COV	Default
ActPo	os		Ac	tual actuator pos	sitior	1		10	N/OFF			Υ	CS
Comr	nunicatio	n:				,						-	
Bine	ding Gro	up:											
Clas	SS			Туре					Defa	ault			
Ge	eographic	al [\boxtimes	Apartment . Roo	om .	SubZone			1.1.1	1			
Ap	plication	Specific [
Pe	ripheral		\boxtimes	Broadcast		Configui	rable 🗵]	1				
DP .	Address:			IO Type(ID):		353 (HOC	DA)	Р	roperty I	D:		54	
LTE	-Services	s (event):		COV 🛛	N	1inRepTin	ne:	1	0 sec		Hear	tbeat:	15 min
Inf	oReport	\boxtimes		Output per defa	ult c	ommunica	ating [В	inding G	rou	p Wild	card allo	wed 🗌
				Tx Prio:		High 🗌			Normal	\boxtimes		Lov	ν <u> </u>
po sh	TE Read- illing of the all always pported)		!	Transm after Po	wer	-up: Store	ed Valu	e 🗌	Act V	alue	e 🖂	Default \	/alue □
	perty-Ser lividual a			Read only	\boxtimes		Read	/Writ	е [
Exce	ption Har	ndling:									Save	at Power	down
					•			•					
Spec	ial Featui	res:											

3.11.6.9 Output ActStatHeatCool

DP Name:	<u>ActStatHeatCool</u>		Abb	r.:	•	Mandat	ory	
FB Name:	POOC					Can be	interna	al 🔲
Description								
This Datapoin	t contains the stat	tus value for t	he ON/OFF a	ctuator (F	leatCool).			
Datapoint Ty	pe							
DPT_Name:	DPT_Switch							
DPT Format:	B ₁				DPT_ID:	1.001		
Field	Description				Supp.	Range	Unit	Default
						ON/OFF		CS
Access Type								
♦ Output								
this $\rightarrow M$	⊠ tl	his \rightarrow 1						
Spontaneo	us 🛛 COV:	\boxtimes	Delta-Value:	1 1	MinRepTin	ne:	10 sec	
	Cyclic		Period:	15min (recommen	ided value)		
Request								
Communicat	on Type							
♦ Group Ob	ject Datapoint					Mandatory	':	
Default Gro	oup Address:							
Dynamics								
Power dow	n: Save:							
Power up:	Value:	No initialisati		Defa	ult value:			
		Saved value			al value:		\boxtimes	
	Transmit on	bus:	\boxtimes					
Exception Ha	ndling							
Special Featu	ires							

FB:	POOC	LTE Serv	/er	Output Name:	Act	tStatHeat	Cool				N	fandator Optiona	
	ription:	=							<u>-</u>				
This o	output cor	tains the	sta	tus value for the	ON.	/OFF actu	ator (H	eatC	Cool).				
DPT:	Name	DPT_Sv	vitc	h		DPT ID	1.001		Datatype	e for	mat	B ₁	
Field			De	escription			Sup.	Ran	nge	Uni	t	COV	Default
ActPo	S		Ac	tual actuator pos	sitio	n		O	N/OFF			Υ	CS
Comr	nunicatio	on:								-		<u>-</u>	
Bine	ding Gro	up:											
Clas	SS			Туре					Defa	ult			
Ge	eographic	al	\boxtimes	Apartment . Roo	om .	SubZone			1.1.1	l			
Ap	plication	Specific [
Pe	ripheral		\boxtimes	Broadcast		Configu	rable 🗵]	1				
DP .	Address:	i I		IO Type(ID):		353 (HOC	DA)	Р	roperty II	D:		55	
LTE	-Services	s (event):		COV 🛛	N	//inRepTin	ne:	1	0 sec		Hear	tbeat:	15 min
Inf	oReport	\boxtimes		Output per defa	ult c	communic	ating [] B	inding G	roup	Wild	card allo	wed 🗌
				Tx Prio:		High 🗌			Normal	\boxtimes		Lov	v 🗌
po sh	TE Read- lling of the all always pported)		!	Transm after Po	wer	r-up: Store	ed Valu	e 🗌	Act Va	alue		Default \	/alue □
	perty-Ser ividual a			Read only	\boxtimes		Read	/Writ	e [
Exce	ption Har	ndling:								•	Save	at Power	down
Spec	ial Featui	res:											

3.11.6.10 Output Fault

LTE-HEE Mode: NA

1 PD	Name:	Fau	lt					Ab	br.:			Manda	tory	
FB N	Name:	POO	C									Can be	interna	al 🗌
Des	cription													
	Datapoin		y indic	ate a	fault in t	the co	nverte	r (S-M	ode	only).				
	apoint Ty	ре												
DPT	_Name:	DF	PT_Bo	ol										
DPT	Format:	B ₁									DPT_ID:			
Field	<u></u>	De	escripti	on							Supp.	Range	Unit	Default
												true/false	bool	0
Acc	ess Type													
♦	Output													
tl	$his \rightarrow M$				this \rightarrow 1									
S	Spontaneo	us	$ \boxtimes$	CO/		\boxtimes	Delta	-Value	_		MinRepTir		10 sec	
				Сус	lic	\boxtimes	Perio	d:	15	ōmin (r	ecommer	nded value)		
	Request													
Con	nmunicat	ion T	Гуре											
	Group Ob											Mandatory	/:	
	Default Gro	oup /	Addres	s:										
	amics													
F	Power dow	n:	Save:											
F	Power up:		Value	:	No init						ılt value:			
					Saved	lvalu	e:			Actua	ıl value:			
				mit c	n bus:				\boxtimes					
Exc	eption Ha	ındli	ng											
Spe	cial Featu	ires												

3.11.6.11 Output Overridden

LTE-HEE Mode: NA

DF	P Name:		erridder	n			Abb	r.:			Manda	tory	
FB	Name:	PO	OC								Can be	e interna	al 🔲
	scription												
Th	is Datapoin	t ma	ay indic	ate th	nat the conv	erter is ove	erridde	n (S-N	1ode	e only).			
	tapoint Ty												
	PT_Name:	D	PT_Bo	ol									
	PT Format:	B ₂								DPT_ID:			
Fie	eld	D	escripti	on						Supp.	Range	Unit	Default
											true/false	bool	0
Ac	cess Type												
♦	Output		_										
	this \rightarrow M				this $\rightarrow 1$								
	Spontaneo	us		CO/		Delta-V	'alue:			/linRepTir		10 sec	
				Cyc	lic 🖂	Period:		15mir	า (r	ecommer	nded value)		
	Request												
Co	mmunicati										T		
♦	Group Ob	•	•								Mandator	y: 📙	
	Default Gro	oup	Addres	ss:									
Dy	namics												
	Power dow	n:	Save:										
	Power up:		Value) :	No initialis		_			ılt value:			
					Saved va	lue:			tua	l value:			
				mit o	n bus:								
Ex	ception Ha	ındl	ing										
Sp	ecial Featu	ıres											

3.11.6.12 Parameter Apartment

FB:	POOC	Proper	ty	Name (<u>Server</u>):	A	partment					Mandator Optiona	
Desc	ription:	<u> </u>								<u> </u>	Ориона	<u> </u>
	er of the a	partment	z	one.								
DPT:	Name	DPT_U	co	untValue8_Z		DPT ID	202.002	2	Data	atype format	U ₈ Z ₈	
Field				Description				S	up.	Range	Unit	Default
Zone			١	lumber of the apa	rtm	nent zone				(0) 1126		1
STAT	US										Bitset	
- Outo	ofService			one active / inactive					0	true/false	Bit 0	false
- all o	ther bits		n	ot supported, fixed		1	۱A			false		
	MAND								enum		CS	
	nalWrite								M	0		
	OSV & Res		_	Set zone inactive /	ac	tive			0	3 / 4		
- all o	ther comm	ands	n	ot supported					۱A			
Comr	nunicatio	n:										
	Address:			IO Type(ID):		116 (POC)C)		•	ty ID:	101	
(in t	he server)		Start-Index:		1				lements	1	
	perty acce	ess:		Read only			Read/W	/rite)	\boxtimes		
Prof	tection			Read level		-		W	rite le	evel	-	
Exce	otion Han	dling:	٧	alue after Power-	up	: Stored	Value 🛚	Α	ct Va	lue 🗌 🛮 Def	ault Value	
Speci	ial Feature	es:										
Zone	= 0 (wildca	ard): Sen	ds	to all listeners								
				municating in this								
If Apa	rtment is '	OutOfSe	νi	ce' Room and Sub	oΖ	one autom	natically a	ire	'OutC	OfService'		

3.11.6.13 Parameter Room

FB:	POOC		Proper	tγ	Name (Server):	R	oom					Mandator	v 🛛
			•		\ ,							Optiona	· =
Desc	ription:												
Numb	er of the	e ro	om zone	Э.									
DPT:	Nam	е	DPT_U	co	untValue8_Z		DPT ID	202.002	2	Data	type format	U_8Z_8	
Field					escription				9)	Sup.	Range	Unit	Default
Zone				Ν	lumber of the roor	n z	zone		l		(0) 163]	1
STAT	US											Bitset	
- Outo	ofService	Э		z	one active / inacti	ve				0	true/false	Bit 0	false
- all o	ther bits			n	ot supported, fixe	d to	0 '0'			NA			false
COMI	MAND										enum		CS
- Norr	nalWrite)								M	0		
- SetC	OSV & R	ese	etOSV	S	et zone inactive /	ac	tive			0	3 / 4		
- all o	ther con	nma	ands	n	ot supported					NA			
Comr	nunicat	ion	:										
DP A	Address	S :			IO Type(ID):		116 (POC	OC)	F	roper	ty ID:	102	
(in t	he serv	er)			Start-Index:		1		١	√of e	lements	1	
Pro	perty ac	ces	ss:		Read only [Read/W	/rit	te	\boxtimes		
Prot	tection				Read level		-		٧	Vrite le	evel	-	
Exce	ption Ha	and	ling:	٧	alue after Power-	up	: Stored	Value 🛚	/	Act Va	lue 🗌 Det	fault Value	
Speci	ial Feat	ure	s:			_			_				
					to all listeners								
The d	evice is	not	LTE co	m	municating in this	ZO	ne if it is '	OutOfSe	rvi	ce'			
'OutO	fService	e' is	taken o	ve	r from Apartment								

3.11.6.14 Parameter SubZone

FB:	POOC	Proper	ty	Name (<u>Server</u>):	S	ubZone					Mandator Optiona	• =
Desci	ription:	<u> </u>			-						Орион	<u> </u>
	er of the su	ub zone.										
DPT:	Name	DPT_U	co	untValue8_Z		DPT ID	202.002	<u> </u>	Data	type format	U ₈ Z ₈	
Field				escription				S	up.	Range	Unit	Default
Zone			١	lumber of the Sub	Zo	ne]	(0) 115		1
STAT	US										Bitset	
- Outo	ofService		z	one active / inacti	ve				0	true/false	Bit 0	false
- all of	ther bits		n	ot supported, fixe	d t	o '0'		1	۱A			false
COM	MAND									enum		CS
- Norr	nalWrite								M	0		
	OSV & Res		S	Set zone inactive /	ac	tive			0	3 / 4		
	ther comma		n	ot supported				1	۱A			
Comr	nunicatior	۱:										
DP /	Address:			IO Type(ID):		116 (POC)C)			ty ID:	103	
(in t	he server)			Start-Index:		1		Ν	° of e	lements	1	
	perty acce	ss:		Read only			Read/W	rite)	\boxtimes		
Prot	ection			Read level		-		W	rite le	evel	-	
Excep	otion Hand	lling:	٧	'alue after Power-	up	: Stored	Value 🛚	Α	ct Va	lue 🗌 🛮 Def	fault Value	: 🗌
Speci	al Feature	s:										
Zone	= 0 (wildca	rd): Sen	ds	to all listeners								
				municating in this		ne if it is '	OutOfSer	vic	e'			
'OutO	fService' is	taken o	ve	er from Apartment								

3.11.6.15 Parameter GenPeripheral

FB:	PO	ос	Pr	oper	ty	Name (<u>Server</u>):	G	enPeripho	eral				Mandator Optiona	
Desc	riptio	on:	-									.	•	
Numb	er of	f the g	ene	ral pe	eri	oheral tag.								
DPT:	N	ame	DP	T_Uc	cou	untValue16_Z		DPT ID	203.012	2	Data	type format	$U_{16}Z_{8}$	
Field					ם	escription				S	up.	Range	Unit	Default
Zone					N	umber of the Sub	Zc	ne]	full]	11
STAT	US												Bitset	
- Outo	ofSer	vice			Z	one active / inacti	ve				0	true/false	Bit 0	false
	all other bits not supported, fixed to '0'													false
COMI	OMMAND											enum		CS
- Norr											M	0		
- SetC	DSV	& Res	etO	SV	_	et zone inactive /	ac	tive			0	3 / 4		
- all o	ther	comm	and	S	n	ot supported				1	NA			
Comr	nuni	cation	า:											
DP A	Addı	ress:				IO Type(ID):		116 (POC	OC)	Р	roper	ty ID:	104	
(in t	he s	erver))			Start-Index:		1		Ν	° of e	lements	1	
Pro	perty	, acce	ess:			Read only [Read/W	/rite)	\boxtimes		
Prot	tecti	on				Read level		-		W	/rite le	evel	-	
Exce	ptior	1 Hand	dling	g:	٧	alue after Power-	up	: Stored	Value 🛚	Α	ct Va	lue 🗌 Def	ault Value	
Speci	ial F	eature	es:											
			,			to all listeners								
The d	evice	e is no	t LT	E co	mı	municating in this	ZC	ne if it is '	OutOfSer	vic	e'			

3.11.6.16 Parameter CycleTime

FB:	POOC	Property	y Name (<u>Server</u>):	Cy	ycleTime					Mandator Optiona	
Desci	ription:	<u> </u>		-						Орионе	<u> </u>
Selection of the valve function.											
DPT:	Name	DPT_TimePeriodMin			DPT ID	7.006		Data	type format	U ₁₆	
Field			Description			Sı	лр.	Range	Unit	Default	
			Period						full	Min	CS
Communication:											
DP Address:			IO Type(ID):		116 (POOC)		Property ID:			111	
(in the server)			Start-Index:	t-Index: 1			N° of elements			1	
Property access:			Read only	Read/Write					\boxtimes		
Protection			Read level -				Write level			-	
Excep	otion Hand	dling:	Value after Power-	up:	Stored	Value 🛚	Ac	t Va	lue 🔲 Def	ault Value	
Special Features:											