

Application Description

Terminal Unit Functional Blocks

Controller

Summary:

This Working Document is a part of the HVAC Application Interworking Standard for HVAC applications. This chapter describes the Terminal Unit Controller Functional Blocks.

Version 02.03.01 is a KNX Approved Standard.

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

7

13

1

Document updates

Version	Date	Modifications	
001.18	2001.xx.xx	Excerpt from former document TU_FB_18B	
		Adapted to the Template	
001.19-20		Stepwise completion	
001.21	2002.04.19	Document completed and ready for TFI presentation (The detailed Specification of the Datapoints is not yet ready. Will be completed for the second revision by TFI)	
	2002.05.13	3.4.2 ChangeOver input mooved to DistrSegm3.5.43.3.4 HeatCoolMode added3.4.4	
001.22	2002.07.17	All Controller FB's MasterSalvel/O's deleted (as CS) StatusController deleted (as CS) 3.2, 3.5 Parameter ControlSequence added 3.2, 3.7 Supply Air (from primary air handler) and Discharge Air (air into the room) corrected 3.2.5, 3.3.5, 3.4.5, 3.5.5, 3.6.5, 3.7.5 HVACModeEff, HVACModeEffNext and Setpoints adapted to RSMHD 3.2.5, 3.5.5, 3.6.5, 3.7.5 EnergyDemXX corrected 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8 BUSActuator#xON/OFF specified 3.7 TempSupplyAir for ChangeOver added 3.8 Scheduling zone u.v.w added 3.8, 3.9 AirFlowDelta changed from m³/h to % 3.9 completed	
2.00	2002.11.29	Header and footer adapted Version adapted 3.9 Property ID's corrected	
2.01	2003.08.07	3.9.2.8 Source (LTE-Mode) of ContrMode adapted 3.7.4.1 Source of EmergMode corrected 3.8.4 3.2.5 Tables corrected 3.3.5 3.4.5 3.5.5 3.6.5 3.7.5	
	2003.09.16	3.2 Completed with FanManual 3.3, 3.4, 3.9	
	2003.09.18	 3.9 S-Mode timeout of FanManual and FanSpeedUser deleted (due to compatibility with simple EIB products) 3.9 ActPosSetpHeatStageA and ActPosSetpHeatStageB completed with 369 (EHEA) 	
2.02	2004.01.15	3.9.2.8 Completed with HVAC Optimiser 3.9.2.14 Timeout deleted 3.9.2.26	
2.03	2004.11.11	3.5 Input TempFloor added3.6 Input TempFloor added3.9 3.1, 3.2, 3.6, 3.7 POOC added	
2.3	2009.06.18	Update in view of publication in the KNX Specifications v2.0.	
02.03.01	2013.10.29	Editorial updates for the publication of KNX Specifications 2.1.	

References

[01]	Chapter 3/7/2	"Datapoint Types"
[02]	Chapter 7/10/1	"HVAC Sensor Functional Blocks"
[03]	Chapter 7/10/2	"HVAC HMI Functional Blocks"
[04]	Chapter 7/10/3	"HVAC Actuator Functional Blocks"
[05]	Chapter 7/10/4	"HVAC Common Functional Blocks"
[06]	Chapter 7/10/5	"HVAC Scheduler Functional Blocks"
[07]	Part 7/11	"Hot Water Heating - Introduction"
[08]	Part 7/12	"Direct Electric Heating"
[09]	Part 7/13	"Terminal Unit Functional Blocks"
[10]	Chapter 7/13/1	"Terminul Unit Controller"
[11]	Chapter 7/13/2	"Terminal Unit Transformer"
[12]	Part 7/14	"Ventilation & Air Conditioning and Cold Water"
[13]	Part 10/1	"Logical Tag Extended"

Filename: 07_13_01 TU FB Controller v02.03.01 AS.docx

Version: 02.03.01

Status: Approved Standard

Savedate: 2013.10.29

Number of pages: 236

Contents

1	Intr	oduction	5
	1.1	Scope	5
	1.2	Objectives	5
	1.3	Dependence on Configuration Modes	
	1.4	Glossary	
	1.5	Abbreviations	8
2	For	mal matters	11
	2.1	Introduction to Functional Blocks	11
	2.2	Description of Functional Blocks	11
3	Teri	minal Unit Controller Functional Blocks	15
	3.1	Introduction to TU Controller Functional Blocks	15
	3.2	Fancoil Control (FCC)	15
	3.3	Water Heat Pump Control for Ringwater (WHPC)	27
	3.4	Split Unit Control (SPUC)	36
	3.5	Radiator and Chilled Ceiling Room Control (RCCRC)	45
	3.6	Radiator Room Control TU (RRCTU)	54
	3.7	VAV Control Discharge Air (VAVCDA)	61
	3.8	VAV Control Extract Air (VAVCEA)	71
	3.9	Datapoints	74

1 Introduction

1.1 Scope

This document is part of the KNX HVAC Application Interworking Standard. It contains the Specification of the Terminal Unit Controller Functional Blocks used for HVAC applications.

Other general purpose Functional Blocks used for HVAC applications such as 'HVAC Sensors' [02], 'HVAC HMI' [03], 'HVAC Actuators' [04], 'HVAC Common Functions' [05] and 'HVAC Schedulers' [06] are described in separate documents.

The Functional Blocks of the 'TU Energy Demand Transformers' [11] are described in a separate document.

Functional Block specification for the applications 'Hot Water Heating' (HWH) [07], 'Direct Electric Heating' (DEH) [08] and 'Ventilation & Air Conditioning' (VAC) [12] are described in separate documents.

1.2 Objectives

This document includes the information necessary to build interoperable HVAC products using the KNX Bus. 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 'easy installation' system (LTE-HEE Mode [13]).

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, apart of some examples, 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 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

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
- for the implementation of mandatory objects used for runtime interworking in standard mode (Basic Functional Block)

1.3.1 Runtime Interworking

Mode dependent (S, LT-R, LT-S, Ctrl, PB, A) implementation of optional runtime interworking objects is not specified in this document, e.g. "easy channel" definitions.

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

			STANDARD MODE	Ехте	
		Basic FB	S-Mode	Standard Mode Interface	LTE-Mode
Inputs	Inp1	NA	NA	NA	M
	Inp2	NA	NA	NA	О
	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.

1.3.2 Parameters and Diagnostic Data

LTE implementation:

- Parameters and Diagnostic Data of a Functional Block shall be implemented as Properties of the corresponding Interface Object which are accessed using individual addressing.
- 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 individual addressing. This document does not lay down how to implement Parameters and Diagnostic Data in S, LT-R, LT-S, Ctrl, PB and A-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. Channel definition).
- In case of **Properties**, the implementation of HVAC specific DPT with extended features may be a problem (depending on the available microcontroller ressources). 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} + 10000d (e.g. BUC^{HVAC-LTE} = 128 => BUC^{standardDPT} = 10128)
 - ⇒ 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 Type^{standardDPT} and the remaining in IO Type^{HVAC-LTE}.

	Implementation of Parameter and Diagnostic Data			
	Proper LTE style	ty based 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	=> 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 [01] – HVAC Datapoint Types

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.
Supply Air	Preconditioned air from an air handler, delivered to a room
Discharge Air	Conditioned air from a room device (e.g. fan coil unit or VAV box) delivered into the room
XX	

1.5 Abbreviations

Functional Blocks:

as far as relevant in this document

Sensors [02], HMI [03], Actuators [04], Common Controller Functions [05]

Abbreviation	[Doc]	Description
ACOS	1	Air Change Over Status Sensor
ADA	3	Air Damper Actuator
BOS	4	Building- / Occ-Mode Source
CPA	3	Compressor Actuator
DATS	1	Discharge Air Temperature Sensor
DPS	1	Dew Point Status Sensor
FSA	3	Fan Speed Actuator
HVA	3	HVAC Valve Actuator
HVACEMS	4	HVAC Emergency Source
HVACOPT	4	HVAC Optimiser
OAQS	1	Outside Air Quality Sensor
OTS	1	Outside Temperature Sensor
PMC	4	Programme to HVAC Mode Conversion
PRD	1	Rresence Detector
RAQS	1	Room Air Quality Sensor
RNATS	1	Return Air Temperature Sensor
RSMHD	4	Room Setpoint Manager HVAC Mode Driven
RSMTD	4	Room Setpoint Manager Temperature Driven
RTS	1	Room Temperature Sensor
SATS	1	Supply Air Temperature Sensor
SMAQ	4	Setpoint Manager Air Quality
UFS	2	User Fan Speed Setting
WCOS	1	Water Change Over Status Sensor

Terminal Units (TU) [09]

as far as relevant in this document

Controllers [10], Transformers [11]

Abbreviation	[Doc]	Description
ACDTTU	132	Air Cooler Energy Demand Transformer Terminal Unit
AHDTTU	132	Air Heater Energy Demand Transformer Terminal Unit
CCDTTU	132	Chilled Ceiling Energy Demand Transformer TU
FCC	131	Fancoil Control
RCCRC	131	Radiator and Chilled Ceiling Room Control
RHDTTU	132	Radiator Heating Energy Demand Transformer TU
RRCTU	131	Radiator Room Control TU
SPUC	131	Split Unit Control
VAVCDA	131	VAV Control Discharge Air
VAVCEA	131	VAV Control Extract Air
VDTTU	132	Ventilation Demand Transformer
WHPC	131	Water Heat Pump Control for Ringwater

Hot Water Heating (HWH) [07]

as far as relevant in this document

Abbreviation	Description
HFDM	Heating Flow Demand Manager
HPM	Heat Production Manager

Ventilation, Air Conditioning and Cold Water (VAC) [12]

as far as relevant in this document

Abbreviation	Description
AHUC	Air Handling Unit Controller
CFDM	Cooling Flow Demand Manager
CPM	Cold Water Production Manager
SATC	Supply Air Temperature Controller

Other Documents

Abbreviation	Document	Description
HVACS	[06]	HVAC Scheduler

General

Abbreviation	Description
cs	Company Specific
GO	Group Object mandatory
(GO)	Group Object optional
M	Mandatory
NA	Not Allowed / Not Applicable
O	Optional
S	Has to be implemented in Standard Mode, if implemented in LTE-HEE Mode
HEE	HVAC Easy Extension
HVAC	Heating Ventilation Air Conditioning
LTE	Logical Tag Extended
IR	LTE-Service InfoReport
W	LTE-Service Write

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 a overview of the functionality of the Functional Block, as well as eventually 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 System 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 System Mode. These Inputs / Outputs have a white arrow with the letter S.

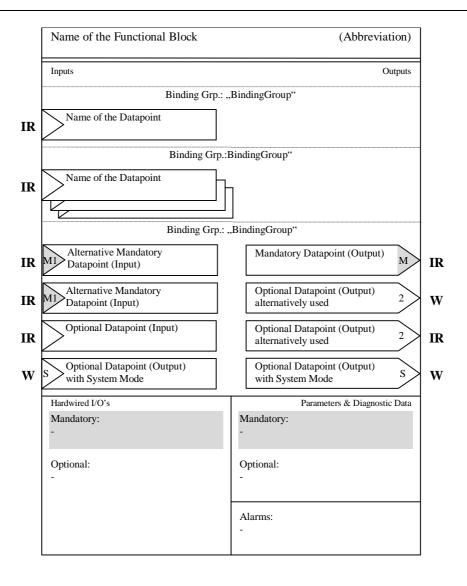
Some of the Inputs / Outputs only make sense in combination, others may be used either / or. Such Inputs / Outputs are grouped with numbers.

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

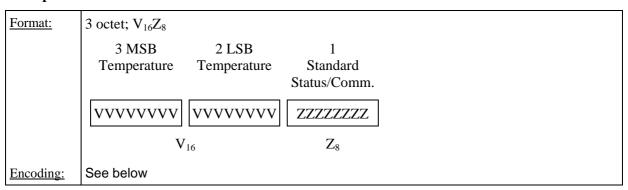
Detailed Specification of the Datapoints

Detailed description of the Datapoints is given in a separate document [01].

Notations:

Symbol	Field
A	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 [01].

3 Terminal Unit Controller Functional Blocks

3.1 Introduction to TU Controller Functional Blocks

This document contains the Terminal Unit Controller Functional Blocks.

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

3.2 Fancoil Control (FCC)

3.2.1 Aims and objectives

The Functional Block 'Fancoil Control' includes all important functionality for the fancoil applications.

The Functional Block 'Fancoil Control' takes the inputs from the 'Room Setpoint Manager' and different sensor and HMI Functional Blocks and eventually form a supervisor Functional Block.

Information needed for the actuators and for indication or in a supervisor is provided to the bus.

3.2.2 Functional specifications

The Functional Block is divided into four parts, the Basic Part, Additions for Air Quality, Additions for Integrated Optimiser and Additions for Status, Lock and Force Information of Energy Producers.

Detailed information about the different datapoints can be found in clause 3.9 Datapoints.

Inputs

 TempOutside TempRoom TempDischarg TempReturnAi AQOutside AQRoom 		These temperature values and the AQ values are delivered by the corresponding sensor Functional Blocks (either in separate devices or included in the same device as the controller block).
• PresenceStatus		The status of the presence detector is used e.g. for learning purposes in an optimiser.
•	f pSetHeatEff (4) pSetCoolEff (4)	The effective HVAC mode and the effective temperature setpoint values are delivered from the 'Room Setpoint Manager'.

TempRoomSetpSetHeatEff (4)
TempRoomSetpSetCoolEff (4)
TempRoomSetpHeatEff
TempRoomSetpCoolEff
AQSetpEff

The temperature setpoint values are delivered either in sets of 4 values (comfort, standby, economy and building protection for heating and for cooling) for normal applications or just one value for simple heating only or cooling only applications.

The effective AQ setpoint value is delivered from the 'Setpoint Manager Air Quality'.

• HVACModeEffNext TempRoomSetpHeatEffNext TempRoomSetpCoolEffNext

Next HVAC mode or next temperature setpoints needed for optimiser purposes.

HVACModeOptim
 TempRmSetpOptimHeatShift
 TempRmSetpOptimCoolShift

The optimised HVAC Mode and the optimiser shift values originate from an optimiser. The optimised mode overrides the mode from the RSM. The two shift values are used to shift the setpoints (heating and cooling) of the active HVACMode.

 ChangeOverStatusWater FanSpeedUser FanManual These information are delivered by the corresponding Functional Blocks, (either in separate devices or included in the same device as the controller block).

DisableDamper

This information is used to disable the damper. It has to be delivered from a supervisor (see also ContrMode).

 SplitHeat SplitCool EnableHeat EnableCool Fancoils may have two heating or cooling stages. In this case the splitting has t.b.d. Base is the 'ValueEnergyDem'. The split value defines at which value the stage B starts. The enable information defines which kind of

energy is available.

These four information have to be delivered from a "smart supervisor".

• Tariff TariffNext

This information is provided by a supervisor with e.g. tariff calculation.

 ForceSignHFDM LockSignHPM ForceSignHPM StatusHPM ForceSignCFDM LockSignCFDM ForceSignCPM LockSignCPM The forcing, locking and status information is delivered from the 'Heating Flow Demand Manager' and the 'Cooling Flow Demand Manager'.

ContrMode

StatusCPM

The controlling mode originates from a "supervisor" (see Functional Block

'Programme to HVAC-Mode Conversion' or

'HVAC Optimiser').

EmergMode

The EmergMode originates from a "supervisor" (see Functional Block 'HVAC Emergency Source'.

Outputs

 ActPosSetpHeatStageA ActPosSetpHeatStageB ActPosSetpCoolStageA ActPosSetpCoolStageB These information is used for the actuator Functional Blocks (valve, electrical power switch or damper). These blocks may be in separate devices or in the same device as the controller block.

• ActPosSetpFreshAir

This information is used for the actuator Functional Block (damper). This block may be in separate devices or in the same device as the controller block.

FanSpeedSetp

This information is used to control the fan

(fan actuator).

• EnergyDemAH EnergyDemAC This information contains the value used for energy demand co-ordination with the producer of e.g. hot and cold water and it can be used in a supervisor for general information. The LTE information is completed with an attribute containing information from the ContrMode.

Binding Groups (LTE)

The Functional Block (with additions) shows up to 7 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 represents the scheduling zone.
•	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'.
•	OutsideSensorZone_f	no special features
•	OutsideSensorZone_g	second zone if necessary for AQ
•	DistrSegmH_b	Distributions segment for heating water (air heater).
•	DistrSegmC_d	Distribution segment for cooling water (air cooler).

P

 OutsideSensorZone_g DistrSegmH_b DistrSegmH_b Distributions segment for heating water (air heater). DistrSegmC_d Distributions segment for cooling water (air cooler). Parameters ControlSequence This parameter defines whether the controller has to work in heating only, cooling only or in both. FanSpeed#x_ON FanSpeed#x_OFF FanSpeedJeadZone FanInDeadZone For return air applications FanInDeadZone defines whether the fan is running or not. If it is running, it runs at the above defined speed. In addition the run time and the dwell time can be defined. TempDischargeAirMin Value for the minimum discharge air temperature. TempFrostAlarm TempFrostAlarm SplitHeatDefValue SplitCoolDefValue BUSActuatorHSA_ON/OFF BUSActuatorHSB_ON/OFF ON/OFF for BUS information for heat stage A actuator in case of local actuator connection (reducing BUS load). BUSActuatorCSA_ON/OFF ON/OFF for BUS information for cool stage A actuator in case of local actuator connection (reducing BUS load). 			
 DistrSegmH_b Distributions segment for heating water (air heater). DistrSegmC_d Distribution segment for cooling water (air cooler). Parameters ControlSequence This parameter defines whether the controller has to work in heating only, cooling only or in both. FanSpeed#x_ON FanSpeed#x_OFF FanSpeedDeadZone FanInDeadZone FanInDeadZone FanRunTimeDeadZone FanDwellTimeDeadZone FanDwellTimeDeadZone For return air applications FanInDeadZone defines whether the fan is running or not. If it is running, it runs at the above defined speed. In addition the run time and the dwell time can be defined. TempDischargeAirMin Value for the minimum discharge air temperature. FreshAirMinValue Minimum fresh air value for applications with fresh air damper. TempFrostAlarm Temperature value at which the frost alarm is generated. SplitHeatDefValue SplitHeatDefValue SplitHeatDefValue SplitHeatDefValue SplitCoolDefValue BUSActuatorHSA_ON/OFF ON/OFF for BUS information for heat stage A actuator in case of local actuator connection (reducing BUS load). BUSActuatorCSA_ON/OFF ON/OFF for BUS information for cool stage A actuator in case of local actuator connection (reducing BUS load). 	•	OutsideSensorZone_f	no special features
 DistrSegmC_d Distribution segment for cooling water (air cooler). Parameters ControlSequence This parameter defines whether the controller has to work in heating only, cooling only or in both. FanSpeed#x_ON FanSpeed#x_OFF FanSpeedd#x_OFF FanSpeedDeadZone FanInDeadZone FanInDeadZone FanRunTimeDeadZone FanDwellTimeDeadZone FanDwellTimeDeadZone FreshAirMinValue TempDischargeAirMin FreshAirMinValue TempFrostAlarm TempFrostAlarm SplitHeatDefValue SplitHeatDefValue SplitCoolDefValue SplitCoolDefValue SplitCoolDefValue SplitCoolDefValue SulsactuatorHSA_ON/OFF BUSActuatorHSB_ON/OFF ON/OFF for BUS information for heat stage A actuator in case of local actuator connection (reducing BUS load). BUSActuatorCSA_ON/OFF ON/OFF for BUS information for cool stage A actuator in case of local actuator connection (reducing BUS load). BUSActuatorCSA_ON/OFF 	•	OutsideSensorZone_g	second zone if necessary for AQ
Parameters ControlSequence This parameter defines whether the controller has to work in heating only, cooling only or in both. PanSpeed#x_ON FanSpeed#x_OFF ON and OFF values for each fan step, taken from ValueEnergyDem. PanSpeedDeadZone FanSpeedDeadZone FanInDeadZone FanRunTimeDeadZone FanRunTimeDeadZone FanPwellTimeDeadZone TempDischargeAirMin FreshAirMinValue Minimum fresh air value for applications with fresh air damper. TempFrostAlarm Temperature value at which the frost alarm is generated. SplitHeatDefValue SplitCoolDefValue BUSActuatorHSA_ON/OFF ON/OFF for BUS information for heat stage A actuator in case of local actuator connection (reducing BUS load). BUSActuatorCSA_ON/OFF ON/OFF for BUS information for cool stage A actuator in case of local actuator connection (reducing BUS load).	•	DistrSegmH_b	Distributions segment for heating water (air heater).
 ControlSequence This parameter defines whether the controller has to work in heating only, cooling only or in both. FanSpeed#x_ON FanSpeed#x_OFF FanSpeedDeadZone FanInDeadZone For return air applications FanInDeadZone defines whether the fan is running or not. If it is running, it runs at the above defined speed. In addition the run time and the dwell time can be defined. TempDischargeAirMin Value for the minimum discharge air temperature. FreshAirMinValue Minimum fresh air value for applications with fresh air damper. TempFrostAlarm Temperature value at which the frost alarm is generated. SplitHeatDefValue SplitCoolDefValue BUSActuatorHSA_ON/OFF ON/OFF for BUS information for heat stage A actuator in case of local actuator connection (reducing BUS load). BUSActuatorCSA_ON/OFF ON/OFF for BUS information for cool stage A actuator in case of local actuator connection (reducing BUS load). 	•	DistrSegmC_d	Distribution segment for cooling water (air cooler).
work in heating only, cooling only or in both. FanSpeed#x_ON FanSpeed#x_OFF ValueEnergyDem. Definition of the fan speed in the dead zone. FanInDeadZone FanRunTimeDeadZone FanDwellTimeDeadZone TempDischargeAirMin TempDischargeAirMin FreshAirMinValue FreshAirMinValue TempFrostAlarm Temperature value at which the frost alarm is generated. SplitHeatDefValue SplitCoolDefValue BUSActuatorHSA_ON/OFF BUSActuatorHSB_ON/OFF ON/OFF for BUS information for heat stage A actuator in case of local actuator connection (reducing BUS load). BUSActuatorCSA_ON/OFF ON/OFF for BUS information for cool stage A actuator in case of local actuator connection (reducing BUS load). BUSActuatorCSA_ON/OFF ON/OFF for BUS information for cool stage A actuator in case of local actuator connection (reducing BUS load).	Pa	rameters	
FanSpeed#x_OFF ValueEnergyDem. PanSpeedDeadZone FanInDeadZone FanRunTimeDeadZone FanRunTimeDeadZone FanDwellTimeDeadZone FanInDeadZone defines Whether the fan is running or not. If it is running, it runs at the above defined speed. In addition the run time and the dwell time can be defined. Minimum fresh air value for applications with fresh air damper. Temperature value at which the frost alarm is generated. SplitHeatDefValue SplitCoolDefValue Default value for the percentage of ValueEnergyDem at which the split of stageA and stageB is defined. BUSActuatorHSA_ON/OFF ON/OFF for BUS information for heat stage A actuator in case of local actuator connection (reducing BUS load). BUSActuatorCSA_ON/OFF ON/OFF for BUS information for cool stage A actuator	•	ControlSequence	
 FanInDeadZone FanRunTimeDeadZone FanRunTimeDeadZone FanDwellTimeDeadZone FanDwellTimeDeadZone it runs at the above defined speed. In addition the run time and the dwell time can be defined. TempDischargeAirMin Value for the minimum discharge air temperature. FreshAirMinValue Minimum fresh air value for applications with fresh air damper. TempFrostAlarm Temperature value at which the frost alarm is generated. SplitHeatDefValue SplitCoolDefValue SplitCoolDefValue ON/OFF for BUS information for heat stage A actuator in case of local actuator connection (reducing BUS load). BUSActuatorHSB_ON/OFF ON/OFF for BUS information for cool stage A actuator in case of local actuator connection (reducing BUS load). BUSActuatorCSA_ON/OFF ON/OFF for BUS information for cool stage A actuator in case of local actuator connection (reducing BUS load). 	•	•	* '
FanRunTimeDeadZone FanDwellTimeDeadZone it runs at the above defined speed. In addition the run time and the dwell time can be defined. TempDischargeAirMin Value for the minimum discharge air temperature. Minimum fresh air value for applications with fresh air damper. TempFrostAlarm Temperature value at which the frost alarm is generated. SplitHeatDefValue SplitCoolDefValue Default value for the percentage of ValueEnergyDem at which the split of stageA and stageB is defined. BUSActuatorHSA_ON/OFF ON/OFF for BUS information for heat stage A actuator in case of local actuator connection (reducing BUS load). BUSActuatorCSA_ON/OFF ON/OFF for BUS information for cool stage A actuator in case of local actuator connection (reducing BUS load).	•	FanSpeedDeadZone	Definition of the fan speed in the dead zone.
 FreshAirMinValue Minimum fresh air value for applications with fresh air damper. TempFrostAlarm Temperature value at which the frost alarm is generated. SplitHeatDefValue Default value for the percentage of ValueEnergyDem at which the split of stageA and stageB is defined. BUSActuatorHSA_ON/OFF ON/OFF for BUS information for heat stage A actuator in case of local actuator connection (reducing BUS load). BUSActuatorCSA_ON/OFF ON/OFF for BUS information for cool stage A actuator in case of local actuator connection (reducing BUS load). BUSActuatorCSA_ON/OFF ON/OFF for BUS information for cool stage A actuator 	•	FanRunTimeDeadZone	whether the fan is running or not. If it is running, it runs at the above defined speed. In addition the
 air damper. TempFrostAlarm SplitHeatDefValue SplitCoolDefValue BUSActuatorHSA_ON/OFF BUSActuatorHSB_ON/OFF BUSActuatorHSB_ON/OFF ON/OFF for BUS information for heat stage A actuator in case of local actuator connection (reducing BUS load). BUSActuatorCSA_ON/OFF ON/OFF for BUS information for heat stage B actuator in case of local actuator connection (reducing BUS load). BUSActuatorCSA_ON/OFF ON/OFF for BUS information for cool stage A actuator 	•	TempDischargeAirMin	Value for the minimum discharge air temperature.
 SplitHeatDefValue SplitCoolDefValue Default value for the percentage of ValueEnergyDem at which the split of stageA and stageB is defined. BUSActuatorHSA_ON/OFF ON/OFF for BUS information for heat stage A actuator in case of local actuator connection (reducing BUS load). BUSActuatorHSB_ON/OFF ON/OFF for BUS information for heat stage B actuator in case of local actuator connection (reducing BUS load). BUSActuatorCSA_ON/OFF ON/OFF for BUS information for cool stage A actuator 	•	FreshAirMinValue	
 SplitCoolDefValue at which the split of stageA and stageB is defined. BUSActuatorHSA_ON/OFF ON/OFF for BUS information for heat stage A actuator in case of local actuator connection (reducing BUS load). BUSActuatorHSB_ON/OFF ON/OFF for BUS information for heat stage B actuator in case of local actuator connection (reducing BUS load). BUSActuatorCSA_ON/OFF ON/OFF for BUS information for cool stage A actuator 	•	TempFrostAlarm	Temperature value at which the frost alarm is generated.
 in case of local actuator connection (reducing BUS load). BUSActuatorHSB_ON/OFF ON/OFF for BUS information for heat stage B actuator in case of local actuator connection (reducing BUS load). BUSActuatorCSA_ON/OFF ON/OFF for BUS information for cool stage A actuator 	•		
 in case of local actuator connection (reducing BUS load). BUSActuatorCSA_ON/OFF ON/OFF for BUS information for cool stage A actuator 	•	BUSActuatorHSA_ON/OFF	
_	•	BUSActuatorHSB_ON/OFF	
	•	BUSActuatorCSA_ON/OFF	

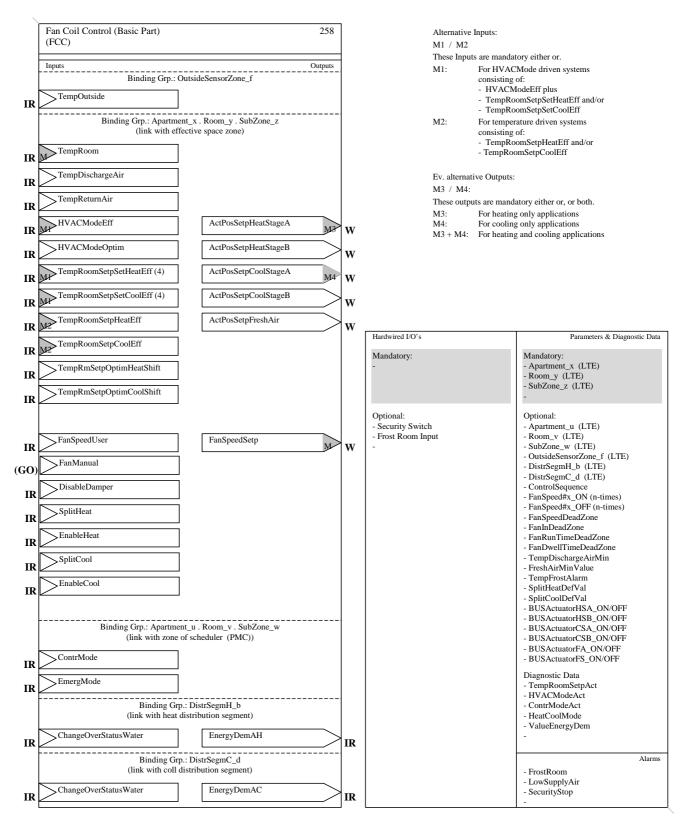
BUSActuatorCSB_ON/OFF ON/OFF for BUS information for cool stage B actuator in case of local actuator connection (reducing BUS load). ON/OFF for BUS information for fresh air actuator BUSActuatorFA_ON/OFF in case of local actuator connection (reducing BUS load). BUSActuatorFS_ON/OFF ON/OFF for BUS information for fan speed actuator in case of local actuator connection (reducing BUS load). **Diagnostic Data** • TempRoomSetpAct These information are used in a supervisor HVACModeAct or in a user HMI. ContrModeAct HeatCoolMode This information contains a theoretical overall value for • ValueEnergyDem the energy demand. It is company specific calculated and can be used for indication purposes. **Alarms** FrostRoom Alarm when the room temperature falls below TempFrostAlarm or if the frost room input is activated. LowDischargeAir Alarm when the discharge air temperature falls below TempDischargeAirMin. Alarm when the security switch is activated (e.g. cover SecurityStop of the fan coil open).

3.2.3 Constraints

None.

3.2.4 Functional Block Diagram

3.2.4.1 Fan Coil Control (Basic Part)



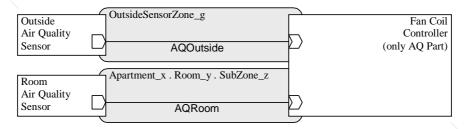
3.2.4.2 FCC, Additions for Air Quality

These additions allow air quality control with a fan coil.

The output ValueFreshAirDem is in the basic part of the FCC.

The 'Outside AQ Sensor' may be in the same or in a different zone (binding group) as the 'Outside Temperature Sensor'. Depending on this the zone parameters have to be implemented.

Principal Schematic



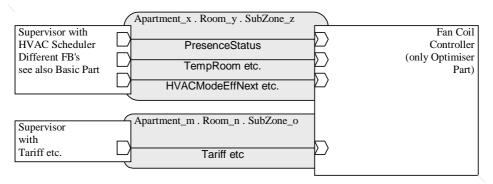
Functional Block Diagram



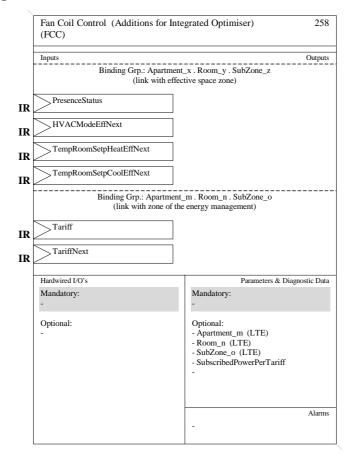
3.2.4.3 FCC, Additions for Integrated Optimiser

These additions allow the controller to determine optimised start an stop. For applications with electrical heating, also the tariff situation can be taken in consideration.

Principal Schematic



Functional Block Diagram



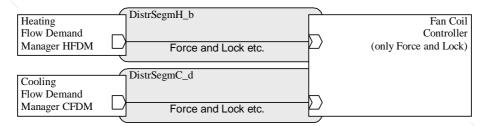
3.2.4.4 FCC, Additions for

Status, Lock and Force Information of the Energy Producers

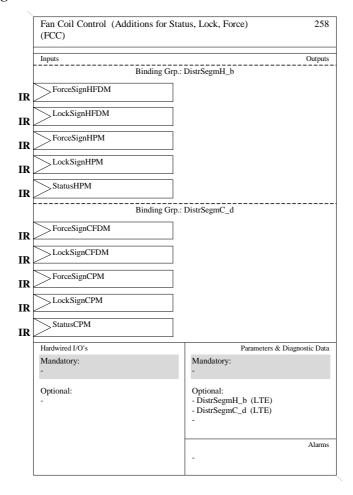
These additions allow tight interworking with the energy supply such as heat and cold producer/distributor.

For detailed information see [07] Heating Flow Demand Manager HFDM and [12] Cooling Flow Demand Manager CFDM.

Principal Schematic



Functional Block Diagram



3.2.5 Datapoint description

Overview

See clause 3.9.1.

FCC Runtime Interworking - Dependence on Configuration Modes

			STANDARD EXTE MODE MO		
		Basic FB	S-Mode	Standard Mode Interface	LTE-Mode
Inputs	TempOutside	(GO _b)		(GO)	0
	TempRoom	GO_b	GO	GO	M
	TempDischargeAir	(GO _b)		(GO)	O
	TempReturnAir	(GO _b)		(GO)	О
	HVACModeEff	NA _b	NA	NA	M1
	HVACModeOptim	NA _b	NA	NA	О
	TempRoomSetpSetHeatEff(4)	NA _b	NA	NA	M1
	TempRoomSetpSetCoolEff(4)	NA _b	NA	NA	M1
	TempRoomSetpHeatEff	(GO _b)		(GO)	M2
	TempRoomSetpCoolEff	(GO _b)		(GO)	M2
	TempRoomSetpOptimHeatShift	(GO _b)		(GO)	0
	TempRoomSetpOptimCoolShift	(GO _b)		(GO)	0
	ChangeOverStatusWater	(GO _b)		(GO)	O
	FanSpeedUser	(GO _b)		(GO)	0
	FanManual	(GO _b)		(GO)	NA
	DisableDamper	(GO _b)		(GO)	0
	SplitHeat	NA _b	NA	NA	0
	EnableHeat	NA _b	NA	NA	0
	SplitCool	NA _b	NA	NA	0
	EneableCool	NA _b	NA	NA	0
	ContrMode	(GO _b)		(GO)	0
	EmergMode	(GO _b)		(GO)	0
Cont					

			STANDARD MODE	Ехте	
		Basic FB	S-Mode	Standard Mode Interface	LTE-Mode
Inputs	AQOutside	(GO _b)		(GO)	0
Cont	AQRoom	(GO _b)		(GO)	0
	AQSetpEff	(GO _b)		(GO)	0
	PresenceStatus	(GO_b)		(GO)	0
	HVACModeEffNext	NA _b	NA	NA	0
	TempRoomSetpHeatEfNext	NA _b	NA	NA	0
	TempRoomSetpCoolEfNext	NA _b	NA	NA	0
	Tariff	(GO _b)		(GO)	0
	TariffNext	(GO_b)		(GO)	0
	ForceSignHFDM	NA _b	NA	NA	0
	LockSignHFDM	NA _b	NA	NA	0
	ForceSignHPM	NA _b	NA	NA	0
	LockSignHPM	NA _b	NA	NA	0
	StatusHPM	NA _b	NA	NA	0
	ForceSignCFDM	NA _b	NA	NA	0
	LockSignCFDM	NA _b	NA	NA	0
	ForceSignCPM	NA _b	NA	NA	0
	LockSignCPM	NA _b	NA	NA	0
	StatusCPM	NA _b	NA	NA	0

			STANDARD MODE	EXTE Mo	
		Basic FB	S-Mode	Standard Mode Interface	LTE-Mode
Outputs	ActPosSetpHeatStageA	(GO _b)	GO3	GO3	M3
	ActPosSetpHeatStageB	(GO _b)		(GO)	0
	ActPosSetpCoolStageA	(GO _b)	GO4	GO4	M4
	ActPosSetpCoolStageB	(GO _b)		(GO)	0
	ActPosSetpFreshAir	(GO _b)		(GO)	0
	FanSpeedSetp	GO _b	GO	GO	M
	EnergyDemAH	NA _b	NA	NA	0
	EnergyDemAC	NA _b	NA	NA	О

FCC LTE specific Properties

		Support
Parameter	Apartment_x	M
	Room_y	M
	SubZone_z	M
	Apartment_u	О
	Room_v	О
	SubZone_w	О
	OutsideSensorZone_f	О
	OutsideSensorZone_g	О
	DistrSegmH_b	О
	DistrSegmC_d	О
	Apartment_m	0
	Room_n	О
	SubZone_o	О

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

		Support
Parameter	ControlSequence	О
	FanSpeed#1_ON	0
	FanSpeed#1_OFF	0
	FanSpeed#2_ON	О
	FanSpeed#2_OFF	0
	FanSpeed#3_ON	0
	FanSpeed#3_OFF	0
	FanSpeed#4_ON	0
	FanSpeed#4_OFF	0
	FanSpeed#5_ON	0
	FanSpeed#5_OFF	0
	FanSpeedDeadZone	0
	FanInDeadZone	0
	FanRunTimeDeadZone	0
	FanDwellTimeDeadZone	0
	TempDischargeAirMin	0
	FreshAirMinValue	0
	TempFrostAlarm	0
	SplitHeatDefValue	0
	SplitCoolDefValue	0
	BUSActuatorHSA_ON/OFF	0
	BUSActuatorHSB_ON/OFF	0
	BUSActuatorCSA_ON/OFF	0
	BUSActuatorCSB_ON/OFF	0
	BUSActuatorFA_ON/OFF	0
	BUSActuatorFS_ON/OFF	0
DiagnosticData	TempRoomSetpAct	0
	HVACModeAct	0
	ContrModeAct	0
	HeatCoolMode	0
	ValueEnergyDem	0

3.2.6 Detailed Specification of the Datapoints

See 3.9.2.

3.3 Water Heat Pump Control for Ringwater (WHPC)

3.3.1 Aims and objectives

The Functional Block 'Water Heat Pump Control' includes all important functionality for the water heat pump (on ring water) applications.

The Functional Block 'Water Heat Pump Control' takes the inputs from the 'Room Setpoint Manager' and different sensor and HMI Functional Blocks and eventually from a supervisor Functional Block.

Information needed for the actuators and for indication or in a supervisor is provided to the bus.

3.3.2 Functional specifications

The Functional Block is divided into three parts, the Basic Part, Additions for Air Quality and Additions for Integrated Optimiser.

Detailed information about the different datapoints can be found in clause 3.9 Datapoints.

Inputs

TempOutside
 TempRoom
 AQOutside
 AQRoom
 TempReturnAir

 These temperature values and the AQ values are delivered by the corresponding sensor Functional Blocks (either in separate devices or included in the same device as the controller block).

• PresenceStatus The status of the presence detector is used e.g. for learning purposes in an optimiser.

HVACModeEff
 TempRoomSetpSetHeatEff (4)
 TempRoomSetpSetCoolEff (4)
 TempRoomSetpHeatEff
 TempRoomSetpCoolEff

AQSetpEff

'Room Setpoint Manager'.

The temperature setpoint values are delivered either in sets of 4 values (comfort, standby, economy and building protection for heating and for cooling) for normal applications or just one value for simple heating only or cooling

setpoint values are delivered from the

only applications.

The effective AQ setpoint value is delivered from the 'Setpoint Manager Air Quality'.

• HVACModeEffNext TempRoomSetpHeatEffNext TempRoomSetpCoolEffNext

Next HVAC mode or next temperature setpoints needed for optimiser purposes.

The effective HVAC mode and the effective temperature

HVACModeOptim
 TempRmSetpOptimHeatShift
 TempRmSetpOptimCoolShift

The optimised HVAC Mode and the optimiser shift values originate from an optimiser. The optimised mode overrides the mode from the RSM. The two shift values are used to shift the setpoints (heating and cooling) of the active HVACMode.

• FanSpeedUser This information is delivered by the FanManual corresponding Functional Block, (ei

corresponding Functional Block, (either in a separate device or included in the same device

as the controller block).

• DisableDamper This information is used to disable the damper. It has to be delivered by a supervisor (see also ContrMode).

• SplitHeat A water heat pump may have two heating stages. EnableHeat (stage A heat pump, stage B electrical register.)

In this case the splitting has t.b.d. Base is the 'ValueEnergyDem'. The split value defines at which value the stage B starts.

The enable information defines which kind of

energy is available.

These two informations have to be delivered from

a "supervisor".

• Tariff This information is provided by a supervisor with

TariffNext e.g. tariff calculation.

• ContrMode The controlling mode originates from a

"supervisor" (see Functional Block

'Programme to HVAC-Mode Conversion' or

'HVAC Optimiser).

• EmergMode originates from a "supervisor"

(see Functional Block 'HVAC Emergency Source'.

Outputs

CompressorPosSetp
 HeatCoolMode
 This information is used in the Functional Block
 'Compressor Actuator'. This block may be in the

'Compressor Actuator'. This block may be in the compressor device or in the controller device.

• ActPosSetpHeatStageB This information is used in the Functional Blocks

'Electrical Heat Element Control' or 'HVAC Valve'. These blocks may be in separate devices or in the

same device as the controller block.

• ActPosSetpFreshAir This information is used for the actuator

Functional Block (damper). This block may be

in separate devices or in the same device

as the controller block.

• FanSpeedSetp This information is used to control the fan

('Fan Actuator').

• EnergyDemAH This information contains the value used for energy

demand co-ordination with the producer of e.g. hot water and it can be used in a supervisor for general information.

The LTE information is completed with an attribute containing information from the ContrMode.

Binding Groups (LTE)

The Functional Block (with additions) shows up to 5 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 represents the scheduling zone.

• 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'.

• OutsideSensorZone_f no special features

• OutsideSensorZone_g second zone if necessary for AQ

DistrSegmH_b
 Distribution segment for heating water (air heater).

Parameters

• FanSpeed#x_ON ON and OFF values for each fan step, taken from ValueEnergyDem.

• FanSpeedDeadZone Definition of the fan speed in the dead zone.

FanInDeadZone For return air applications FanInDeadZone defines whether the fan is running or not. If it is running, it runs at the above defined speed. In addition the run time and the dwell time can be defined.

• FreshAirMinValue Minimum fresh air value for applications with fresh

air damper.

TempFrostAlarm Temperature value at which the frost alarm is generated.

• SplitHeatDefValue Default value for the percentage of ValueEnergyDem at which the split of stageA and stageB is defined.

• BUSActuatorCP_ON/OFF ON/OFF for BUS information for compressor actuator in case of local actuator connection (reducing BUS load).

BUSActuatorHSB ON/OFF ON/OFF for BUS information for heat stage B actuator

in case of local actuator connection (reducing BUS load).

BUSActuatorFA_ON/OFF
 ON/OFF for BUS information for fresh air actuator

in case of local actuator connection (reducing BUS load).

• BUSActuatorFS_ON/OFF ON/OFF for BUS information for fan speed actuator in case of local actuator connection (reducing BUS load).

Diagnostic Data

HeatCoolMode

TempRoomSetpAct These information are used in a supervisor HVACModeAct or in a user HMI.

ContrModeAct

• ValueEnergyDem This information contains the theoretical overall value for the energy demand. It is company specific calculated

and can be used for indication purposes.

Alarms

• FrostRoom Alarm when the room temperature falls below

TempFrostAlarm or if the frost room input is activated.

SecurityStop
 Alarm when the security switch is activated (e.g. cover

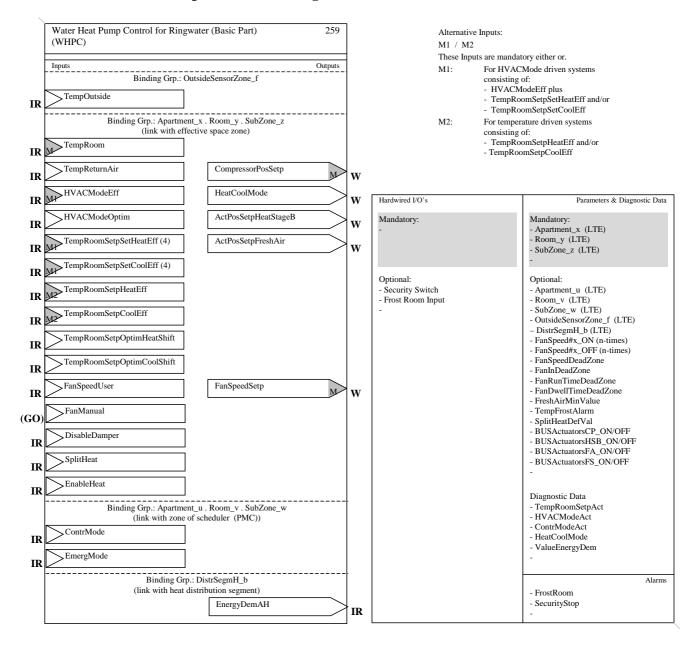
of the fan coil open).

3.3.3 Constraints

None.

3.3.4 Functional Block Diagram

3.3.4.1 Water Heat Pump Control for Ringwater (Basic Part)

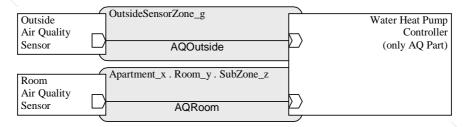


3.3.4.2 WHPC, Additions for Air Quality

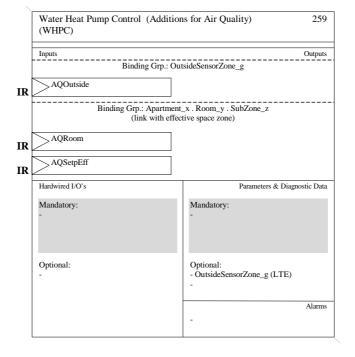
These additions allow air quality control with a water heat pump unit with a damper. The output ActPosSetpFreshAir is in the basic part of the WHPC.

The 'Outside AQ Sensor' may be in the same or in a different zone (binding group) as the 'Outside Temperature Sensor'. Depending on this the zone parameters have to be implemented.

Principal Schematic



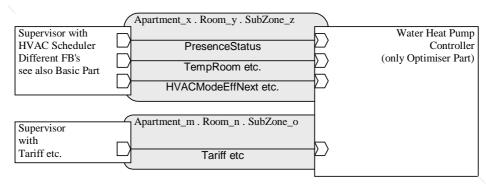
Functional Block Diagram



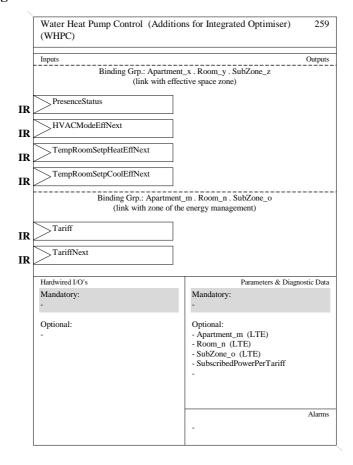
3.3.4.3 WHPC, Additions for Integrated Optimiser

These additions allow the controller to determine optimised start an stop. For applications with electrical heating, also the tariff situation can be taken in consideration.

Principal Schematic



Functional Block Diagram



3.3.5 Datapoint description

Overview

See clause 3.9.1.

WHPC Runtime Interworking - Dependence on Configuration Modes

			STANDARD MODE		
		Basic FB	S-Mode	Standard Mode Interface	LTE-Mode
Inputs	TempOutside	(GO _b)		(GO)	0
	TempRoom	GO_b	GO	GO	M
	TempReturnAir	(GO _b)		(GO)	O
	HVACModeEff	NA _b	NA	NA	M1
	HVACModeOptim	NA _b	NA	NA	0
	TempRoomSetpSetHeatEff(4)	NA _b	NA	NA	M1
	TempRoomSetpSetCoolEff(4)	NA _b	NA	NA	M1
	TempRoomSetpHeatEff	(GO _b)		(GO)	M2
	TempRoomSetpCoolEff	(GO _b)		(GO)	M2
	TempRoomSetpOptimHeatShift	(GO _b)		(GO)	O
	TempRoomSetpOptimCoolShift	(GO _b)		(GO)	0
	FanSpeedUser	(GO _b)		(GO)	0
	FanManual	(GO _b)		(GO)	NA
	DisableDamper	(GO _b)		(GO)	0
	SplitHeat	NA _b	NA	NA	0
	EnableHeat	NA _b	NA	NA	0
	ContrMode	(GO _b)		(GO)	0
	EmergMode	(GO _b)		(GO)	0
cont					

			STANDARD EXTENDED MODE MODE		
		Basic FB	S-Mode	Standard Mode Interface	LTE-Mode
Inputs	AQOutside	(GO _b)		(GO)	0
cont	AQRoom	(GO_b)		(GO)	O
	AQSetpEff	(GO_b)		(GO)	O
	PresenceStatus	(GO_b)		(GO)	O
	HVACModeEffNext	NA_b	NA	NA	O
	TempRoomSetpHeatEfNext	NA_b	NA	NA	O
	TempRoomSetpCoolEfNext	NA_b	NA	NA	O
	Tariff	(GO _b)		(GO)	O
	TariffNext	(GO _b)		(GO)	O
Outputs	CompressorPosSetp	GO_b	GO	GO	M
	HeatCoolMode	(GO_b)		(GO)	O
	ActPosSetpHeatStageB	(GO _b)		(GO)	0
	ActPosSetpFreshAir	(GO _b)		(GO)	0
	FanSpeedSetp	GO_b	GO	GO	M
	EnergyDemAH	NA _b	NA	NA	0

WHPC LTE specific Properties

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

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

		Support
Parameter	FanSpeed#1_ON	0
	FanSpeed#1_OFF	0
	FanSpeed#2_ON	0
	FanSpeed#2_OFF	0
	FanSpeed#3_ON	0
	FanSpeed#3_OFF	0
	FanSpeed#4_ON	0
	FanSpeed#4_OFF	0
	FanSpeed#5_ON	0
	FanSpeed#5_OFF	0
	FanSpeedDeadZone	0
	FanInDeadZone	0
	FanRunTimeDeadZone	0
	FanDwellTimeDeadZone	0
	FreshAirMinValue	0
	TempFrostAlarm	0
	SplitHeatDefValue	0
	BUSActuatorCP_ON/OFF	0
	BUSActuatorHSB_ON/OFF	0
	BUSActuatorFA_ON/OFF	0
	BUSActuatorFS_ON/OFF	0
DiagnosticData	TempRoomSetpAct	О
	HVACModeAct	О
	ContrModeAct	0
	HeatCoolMode	0
	ValueEnergyDem	0

3.3.6 Detailed Specification of the Datapoints

See 3.9.2.

3.4 **Split Unit Control (SPUC)**

3.4.1 Aims and objectives

The Functional Block 'Split Unit Control' includes all important functionality for the split unit applications.

The Functional Block 'Split Unit Control' takes the inputs from the 'Room Setpoint Manager' and different sensor and HMI Functional Blocks and eventually from a supervisor Functional Block.

Information needed for the actuators and for indication or in a supervisor is provided to the bus.

3.4.2 **Functional specifications**

The Functional Block is divided into three parts, the Basic Part, Additions for Air Quality and Additions for Integrated Optimiser.

Detailed information about the different datapoints can be found in clause 3.9 Datapoints.

Inputs

• TempOutside These temperature values and the AQ values TempRoom are delivered by the corresponding sensor **AQOutside** Functional Blocks (either in separate devices or included in the same device as the AORoom **TempReturnAir** controller block).

 PresenceStatus The status of the presence detector is used e.g. for learning purposes in an optimiser.

 HVACModeEff The effective HVAC mode and the effective temperature TempRoomSetpSetHeatEff (4) setpoint values are delivered from the

TempRoomSetpSetCoolEff (4) 'Room Setpoint Manager'.

TempRoomSetpHeatEff The temperature setpoint values are delivered either in sets of 4 values (comfort, standby, TempRoomSetpCoolEff **AQSetpEff** economy and building protection for heating and for cooling) for normal applications or just

one value for simple heating only or cooling only applications.

The effective AQ setpoint value is delivered from

the 'Setpoint Manager Air Quality'.

Next HVAC mode or next temperature setpoints needed HVACModeEffNext TempRoomSetpHeatEffNext for optimiser purposes.

TempRoomSetpCoolEffNext

• HVACModeOptim The optimised HVAC Mode and the optimiser TempRmSetpOptimHeatShift shift values originate from an optimiser.

TempRmSetpOptimCoolShift The optimised mode overrides the mode from

the RSM. The two shift values are used to shift the setpoints (heating and cooling) of the active

HVACMode.

 FanSpeedUser This information is delivered by the

> corresponding Functional Block, (either in a separate device or included in the same device

as the controller block).

This information is used to disable the damper. It has to DisableDamper

be delivered by a supervisor (see also ContrMode).

FanManual

• SplitHeat A water heat pump may have two heating stages. EnableHeat (stage A heat pump, stage B electrical register.)

In this case the splitting has t.b.d. Base is the 'ValueEnergyDem'. The split value defines at which value the stage B starts. The enable information defines which kind of

energy is available.

These two information have to be delivered from

a "supervisor".

Tariff This information is provided by a supervisor with

TariffNext e.g. tariff calculation.

• ContrMode The controlling mode originates from a

"supervisor" (see Functional Block

'Programme to HVAC-Mode Conversion' or

'HVAC Optimiser).

• EmergMode The EmergMode originates from a "supervisor"

(see Functional Block 'HVAC Emergency Source'.

Outputs

CompressorPosSetp
 This information is used in the Functional Block
 HeatCoolMode
 'Compressor Actuator'. This block may be in the

'Compressor Actuator'. This block may be in the compressor device or in the controller device.

• ActPosSetpHeatStageB This information is used in the Functional Blocks

'Electrical Heat Element Control' or 'HVAC Valve'. These blocks may be in separate devices or in the

same device as the controller block.

• ActPosSetpFreshAir This information is used for the actuator

Functional Block (damper). This block may be in separate devices or in the same device

as the controller block.

• FanSpeedSetp This information is used to control the fan

('Fan Actuator').

• EnergyDemAH This information contains the value used for energy

demand co-ordination with the producer of e.g. hot water and it can be used in a supervisor for general information.

The LTE information is completed with an attribute

containing information from the ContrMode.

Binding Groups (LTE)

The Functional Block (with additions) shows up to 5 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 represents the scheduling zone.

• 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'.

• OutsideSensorZone f No special features

OutsideSensorZone_g
 Second zone if necessary for AQ

• Distribution segment for heating water (air heater).

Parameters

• FanSpeed#x_ON ON and OFF values for each fan step, taken from FanSpeed#x_OFF ValueEnergyDem.

• FanSpeedDeadZone Definition of the fan speed in the dead zone.

FanInDeadZone For return air applications FanInDeadZone defines whether the fan is running or not. If it is running, it runs at the above defined speed. In addition the run time and the dwell time can be defined.

• FreshAirMinValue Minimum fresh air value for applications with fresh

air damper.

• TempFrostAlarm Temperature value at which the frost alarm is generated.

Default value for the percentage of ValueEnergyDem at which the split of stageA and stageB is defined.

• BUSActuatorCP_ON/OFF ON/OFF for BUS information for compressor output in case of local actuator connection (reducing BUS load).

• BUSActuatorHSB_ON/OFF ON/OFF for BUS information for heat stage B output in case of local actuator connection (reducing BUS load).

• BUSActuatorFA_ON/OFF ON/OFF for BUS information for fresh air output in case of local actuator connection (reducing BUS load).

• BUSActuatorFS_ON/OFF ON/OFF for BUS information for fan speed output in case of local actuator connection (reducing BUS load).

Diagnostic Data

TempRoomSetpAct These information are used in a supervisor HVACModeAct or in a user HMI.
 ContrModeAct HeatCoolMode

ValueEnergyDem

This information contains the theoretical overall value for the energy demand. It is company specific calculated

and can be used for indication purposes.

Alarms

• FrostRoom Alarm when the room temperature falls below TempFrostAlarm or if the frost room input is activated.

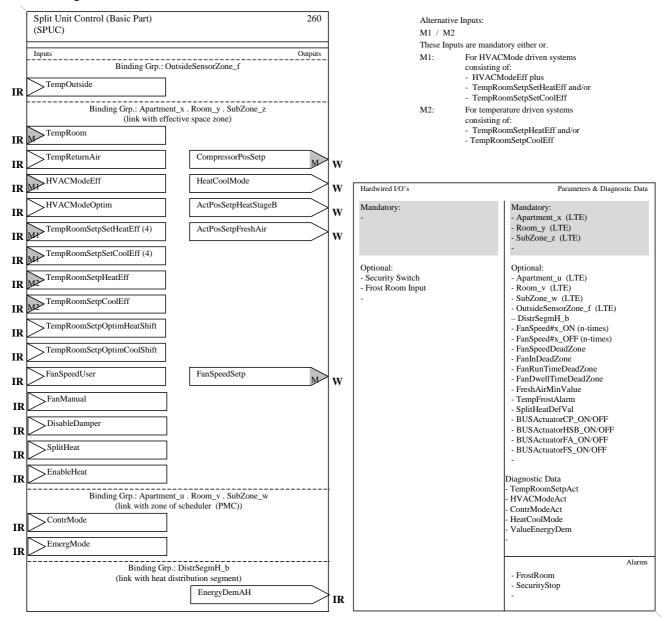
• SecurityStop Alarm when the security switch is activated (e.g. cover of the fan coil open).

3.4.3 Constraints

None.

3.4.4 Functional Block Diagram

3.4.4.1 Split Unit Control (Basic Part)



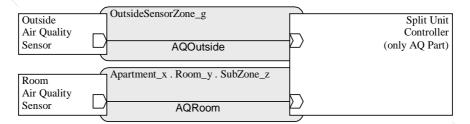
3.4.4.2 SPUC, Additions for Air Quality

These additions allow air quality control with a split unit with a damper.

The output ActPosSetpFreshAir is in the basic part of the SPUC.

The 'Outside AQ Sensor' may be in the same or in a different zone (binding group) as the 'Outside Temperature Sensor'. Depending on this the zone parameters have to be implemented.

Principal Schematic



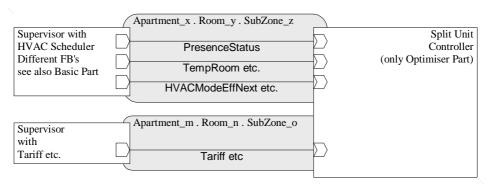
Functional Block Diagram



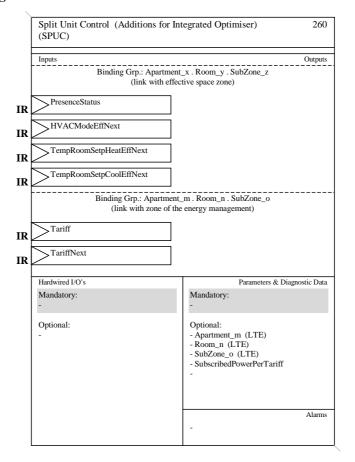
3.4.4.3 SPUC, Additions for Integrated Optimiser

These additions allow the controller to determine optimised start an stop. For applications with electrical heating, also the tariff situation can be taken in consideration.

Principal Schematic



Functional Block Diagram



3.4.5 Datapoint description

Overview

See clause 3.9.1.

SPUC Runtime Interworking - Dependence on Configuration Modes

			STANDARD MODE	Ехте	
		Basic FB	S-Mode	Standard Mode Interface	LTE-Mode
Inputs	TempOutside	(GO _b)		(GO)	0
	TempRoom	GO_b	GO	GO	M
	TempReturnAir	(GO_b)		(GO)	0
	HVACModeEff	NA _b	NA	NA	M1
	HVACModeOptim	NA _b	NA	NA	0
	TempRoomSetpSetHeatEff(4)	NA _b	NA	NA	M1
	TempRoomSetpSetCoolEff(4)	NA _b	NA	NA	M1
	TempRoomSetpHeatEff	(GO _b)		(GO)	M2
	TempRoomSetpCoolEff	(GO _b)		(GO)	M2
	TempRoomSetpOptimHeatShift	(GO _b)		(GO)	0
	TempRoomSetpOptimCoolShift	(GO _b)		(GO)	0
	FanSpeedUser	(GO_b)		(GO)	O
	FanManual	(GO _b)		(GO)	NA
	DisableDamper	(GO_b)		(GO)	O
	SplitHeat	NA _b	NA	NA	0
	EnableHeat	NA _b	NA	NA	0
	ContrMode	(GO _b)		(GO)	0
	EmergMode	(GO _b)		(GO)	0
Cont					

			STANDARD MODE	EXTE Mo	
		Basic FB	S-Mode	Standard Mode Interface	LTE-Mode
Inputs	AQOutside	(GO _b)		(GO)	0
Cont	AQRoom	(GO_b)		(GO)	0
	AQSetpEff	(GO_b)		(GO)	0
	PresenceStatus	(GO_b)		(GO)	O
	HVACModeEffNext	NA_b	NA	NA	0
	TempRoomSetpHeatEfNext	NA _b	NA	NA	0
	TempRoomSetpCoolEfNext	NA_b	NA	NA	O
	Tariff	(GO _b)		(GO)	O
	TariffNext	(GO _b)		(GO)	O
Outputs	CompressorPosSetp	GO_b	GO	GO	M
	HeatCoolMode	(GO_b)		(GO)	O
	ActPosSetpHeatStageB	(GO _b)		(GO)	0
	ActPosSetpFreshAir	(GO _b)		(GO)	0
	FanSpeedSetp	GO_b	GO	GO	M
	EnergyDemAH	NA _b	NA	NA	0

SPUC LTE specific Properties

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

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

		Support
Parameter	FanSpeed#1_ON	О
	FanSpeed#1_OFF	0
	FanSpeed#2_ON	0
	FanSpeed#2_OFF	0
	FanSpeed#3_ON	0
	FanSpeed#3_OFF	0
	FanSpeed#4_ON	0
	FanSpeed#4_OFF	0
	FanSpeed#5_ON	0
	FanSpeed#5_OFF	0
	FanSpeedDeadZone	0
	FanInDeadZone	0
	FanRunTimeDeadZone	0
	FanDwellTimeDeadZone	0
	FreshAirMinValue	0
	TempFrostAlarm	0
	SplitHeatDefValue	0
	BUSActuatorCP_ON/OFF	0
	BUSActuatorHSB_ON/OFF	0
	BUSActuatorFA_ON/OFF	0
	BUSActuatorFS_ON/OFF	0
DiagnosticData	TempRoomSetpAct	0
	HVACModeAct	0
	ContrModeAct	0
	HeatCoolMode	0
	ValueEnergyDem	0

3.4.6 Detailed Specification of the Datapoints

See 3.9.2.

3.5 Radiator and Chilled Ceiling Room Control (RCCRC)

3.5.1 Aims and objectives

The Functional Block 'Radiator and Chilled Ceiling Room Control' includes all important functionality for the radiator and chilled ceiling applications. It also is applicable for floor heating.

The Functional Block 'Radiator and Chilled Ceiling Room Control' takes the inputs from the 'Room Setpoint Manager' and different sensor and HMI Functional Blocks and eventually form a supervisor Functional Block..

Information needed for the actuators and for indication or in a supervisor is provided to the bus.

3.5.2 Functional specifications

The Functional Block is divided into three parts, the Basic Part, Additions for Integrated Optimiser and Additions for Status, Lock and Force Information of Energy Producers.

Detailed information about the different datapoints can be found in clause 3.9 Datapoints.

Inputs

• TempOutside TempRoom TempFloor	These temperature values are delivered by the corresponding sensor Functional Blocks (either in separate devices or included in the same device as the controller block).
• PresenceStatus	The status of the presence detector is used e.g. for learning purposes in an optimiser.
• HVACModeEff TempRoomSetpSetHeatEff (4) TempRoomSetpSetCoolEff (4) TempRoomSetpHeatEff TempRoomSetpCoolEff	The effective HVAC mode and the effective temperature setpoint values are delivered from the 'Room Setpoint Manager'. The temperature setpoint values are delivered either in sets of 4 values (comfort, standby, economy and building protection for heating and for cooling) for normal applications or just one value for simple heating only or cooling only applications.
• HVACModeEffNext TempRoomSetpHeatEffNext TempRoomSetpCoolEffNext	Next HVAC mode or next temperature setpoints needed for optimiser purposes.
• HVACModeOptim TempRmSetpOptimHeatShift TempRmSetpOptimCoolShift	The optimised HVAC Mode and the optimiser shift values originate from an optimiser. The optimised mode overrides the mode from

HVACMode.

 ChangeOverStatusWater DewPointStatus These information are delivered by the corresponding Functional Blocks, (either in separate devices or included in the same device as the controller block).

the RSM. The two shift values are used to shift the setpoints (heating and cooling) of the active **SplitHeat** SplitCool EnableHeat EnableCool Fancoils may have two heating or cooling stages. In this case the splitting has t.b.d. Base is the 'ValueEnergyDem'. The split value defines at which value the stage B starts. The enable information defines which kind of

energy is available.

These four information have to be delivered from

a "smart supervisor".

Tariff This information is provided by a supervisor with **TariffNext**

e.g. tariff calculation.

 ForceSignHFDM The forcing, locking and status information LockSignHFDM is delivered from the 'Heating Flow Demand Manager'

ForceSignHPM LockSignHPM StatusHPM ForceSignCFDM LockSignCFDM

ForceSignCPM LockSignCPM

StatusCPM ContrMode

The controlling mode originates from a

and the 'Cooling Flow Demand Manager'.

"supervisor" (see Functional Block

'Programme to HVAC-Mode Conversion' or

'HVAC Optimiser').

Outputs

 ActPosSetpHeatStageA ActPosSetpHeatStageB ActPosSetpCoolStageA ActPosSetpCoolStageB

These information is used for the actuator Functional Blocks (valve, electrical power switch or damper). These blocks may be in separate devices or in the same device as the controller block.

EnergyDemRD EnergyDemCC This information contains the value used for energy demand co-ordination with the producer

of e.g. hot and cold water and it can be used in a

supervisor for general information.

The LTE information is completed with an attribute containing information from the ContrMode.

Binding Groups (LTE)

The Functional Block (with Additions) shows 6 different binding groups.

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

to which the Functional Block effectively belongs.

Binding group u.v.w This binding group represents the scheduling zone.

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'.

OutsideSensorZone_f no special features

DistrSegmH_a Distributions segment for heating water (radiator).

DistrSegmC_c Distribution segment for cooling water (chilled ceiling).

Parameters

• ControlSequence This parameter defines whether the controller has to work in heating only, cooling only or in both.

• TempFrostAlarm Temperature value at which the frost alarm is generated.

SplitHeatDefValue
 SplitCoolDefValue
 Default value for the percentage of ValueEnergyDem at which the split of stageA and stageB is defined.

• BUSActuatorHSA_ON/OFF ON/OFF for BUS information for heat stage A output in case of local actuator connection (reducing BUS load).

• BUSActuatorHSB_ON/OFF ON/OFF for BUS information for heat stage B output in case of local actuator connection (reducing BUS load).

• BUSActuatorCSA_ON/OFF ON/OFF for BUS information for cool stage A output in case of local actuator connection (reducing BUS load).

• BUSActuatorCSB_ON/OFF ON/OFF for BUS information for cool stage B output in case of local actuator connection (reducing BUS load).

Diagnostic Data

 TempRoomSetpAct HVACModeAct ContrModeAct HeatCoolMode These information are used in a supervisor or in a user HMI.

• ValueEnergyDem This information contains a theoretical overall value for the energy demand. It is company specific calculated

and can be used for indication purposes.

Alarms

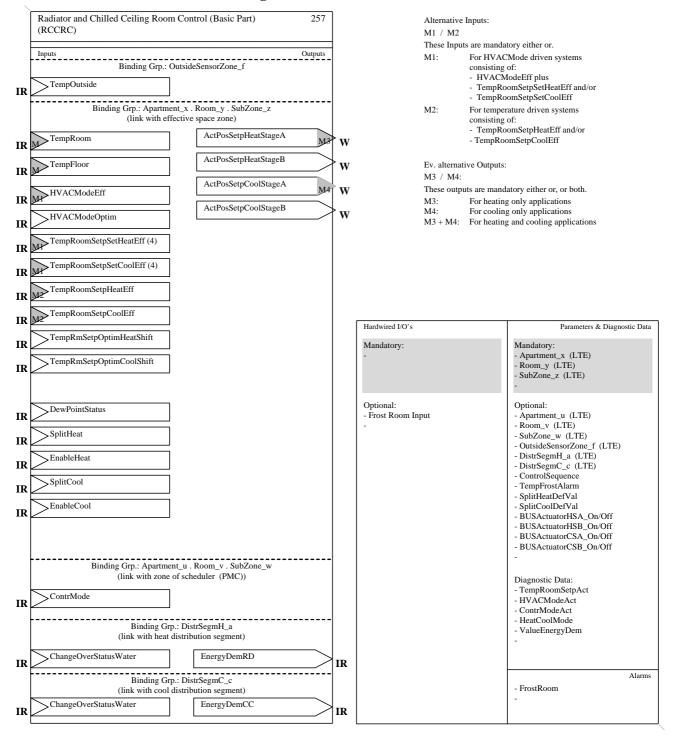
FrostRoom
 Alarm when the room temperature falls below
 TempFrostAlarm or if the frost room input is activated.

3.5.3 Constraints

None.

3.5.4 Functional Block Diagram

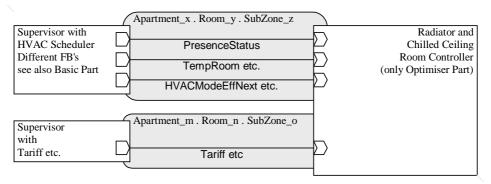
3.5.4.1 Radiator and Chilled Ceiling Room Control (Basic Part)



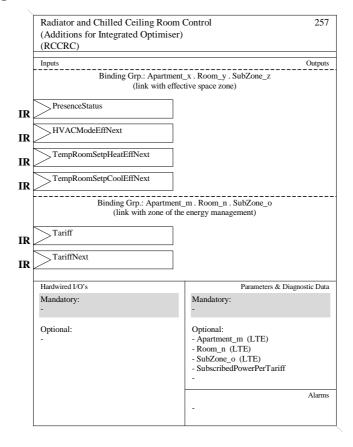
3.5.4.2 RCCRC, Additions for Integrated Optimiser

These additions allow the controller to determine optimised start an stop. For applications with electrical heating, also the tariff situation can be taken in consideration.

Principal Schematic



Functional Block Diagram



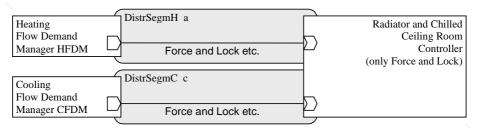
3.5.4.3 RCCRC, Additions for

Status, Lock and Force Information of the Energy Producers

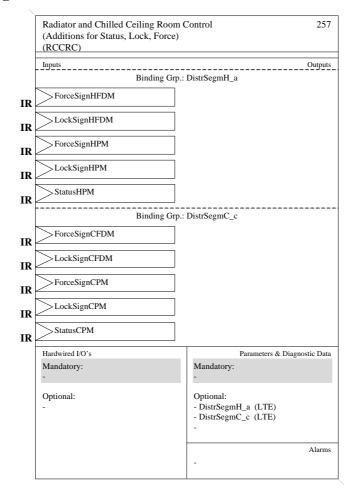
These additions allow tight interworking with the energy supply such as heat and cold producer/distributor.

For detailed information see [07] Heating Flow Demand Manager HFDM and [12] Cooling Flow Demand Manager CFDM.

Principal Schematic



Functional Block Diagram



3.5.5 Datapoint description

Overview

See clause 3.9.1.

RCCRC Runtime Interworking - Dependence on Configuration Modes

			STANDARD MODE	Ехте	
		Basic FB	S-Mode	Standard Mode Interface	LTE-Mode
Inputs	TempOutside	(GO _b)		(GO)	0
	TempRoom	GO_b	GO	GO	M
	TempFloor	GO_b	GO	GO	0
	HVACModeEff	NA _b	NA	NA	M1
	HVACModeOptim	NA _b	NA	NA	0
	TempRoomSetpSetHeatEff(4)	NA _b	NA	NA	M1
	TempRoomSetpSetCoolEff(4)	NA _b	NA	NA	M1
	TempRoomSetpHeatEff	(GO _b)		(GO)	M2
	TempRoomSetpCoolEff	(GO _b)		(GO)	M2
	TempRoomSetpOptimHeatShift	(GO _b)		(GO)	О
	TempRoomSetpOptimCoolShift	(GO _b)		(GO)	0
	ChangeOverStatusWater	(GO _b)		(GO)	0
	DewPointStatus	(GO _b)		(GO)	0
	SplitHeat	NA _b	NA	NA	О
	EnableHeat	NA _b	NA	NA	0
	SplitCool	NA _b	NA	NA	0
	EneableCool	NA _b	NA	NA	0
	ContrMode	(GO _b)		(GO)	0
Cont					

			STANDARD MODE	Ехте	
		Basic FB	S-Mode	Standard Mode Interface	LTE-Mode
Inputs	PresenceStatus	(GO _b)		(GO)	0
Cont	HVACModeEffNext	NA _b	NA	NA	0
	TempRoomSetpHeatEfNext	NA _b	NA	(GO)	0
	TempRoomSetpCoolEfNext	NA _b	NA	(GO)	0
	Tariff	(GO_b)		(GO)	О
	TariffNext	(GO _b)		(GO)	0
	ForceSignHFDM	NA _b	NA	(GO)	0
	LockSignHFDM	NA _b	NA	(GO)	0
	ForceSignHPM	NA _b	NA	(GO)	0
	LockSignHPM	NA _b	NA	(GO)	0
	StatusHPM	NA _b	NA	(GO)	О
	ForceSignCFDM	NA _b	NA	(GO)	0
	LockSignCFDM	NA _b	NA	(GO)	0
	ForceSignCPM	NA _b	NA	(GO)	О
	LockSignCPM	NA _b	NA	(GO)	0
	StatusCPM	NA _b	NA	(GO)	0
Outputs	ActPosSetpHeatStageA	(GO _b)	GO3	GO3	M3
	ActPosSetpHeatStageB	(GO _b)		(GO)	0
	ActPosSetpCoolStageA	(GO _b)	GO4	GO4	M4
	ActPosSetpCoolStageB	(GO _b)		(GO)	0
	EnergyDemRD	NA _b	NA	NA	0
	EnergyDemCC	NA _b	NA	NA	0

RCCRC LTE specific Properties

		Support
Parameter	Apartment_x	M
	Room_y	M
	SubZone_z	M
	Apartment_u	0
	Room_v	0
	SubZone_w	0
	OutsideSensorZone_f	0
	DistrSegmH_a	0
	DistrSegmC_c	0
	Apartment_m	0
	Room_n	0
	SubZone_o	0

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

		Support
Parameter	ControlSequence	0
	TempFrostAlarm	0
	SplitHeatDefValue	0
	SplitCoolDefValue	0
	BUSActuatorHSA_ON/OFF	0
	BUSActuatorHSB_ON/OFF	0
	BUSActuatorCSA_ON/OFF	0
	BUSActuatorCSB_ON/OFF	0
DiagnosticData	TempRoomSetpAct	0
	HVACModeAct	0
	ContrModeAct	0
	HeatCoolMode	0
	ValueEnergyDem	0

3.5.6 Detailed Specification of the Datapoints

See 3.9.2.

3.6 **Radiator Room Control TU (RRCTU)**

3.6.1 Aims and objectives

The Functional Block 'Radiator Room Control TU' includes all important functionality for the radiator application. It also is applicable for floor heating.

The Functional Block 'Radiator Room Control TU' is dedicated for commercial buildings. For residential buildings refer to the 'Heating Individual Room Controller' HIRC [07]. The RRCTU takes the inputs from the 'Room Setpoint Manager' and different sensor and HMI Functional Blocks and eventually form a supervisor Functional Block..

Information needed for the actuators and for indication or in a supervisor is provided to the bus.

3.6.2 **Functional specifications**

The Functional Block is divided into three parts, the Basic Part, Additions for Integrated Optimiser and Additions for Status, Lock and Force Information of Energy Producers.

Detailed information about the different datapoints can be found in clause 3.9 Datapoints.

Inputs	
• TempOutside TempRoom TempFloor	These temperature values are delivered by the corresponding sensor Functional Blocks (either in separate devices or included in the same device as the controller block).
• PresenceStatus	The status of the presence detector is used e.g. for learning purposes in an optimiser.
• HVACModeEff TempRoomSetpSetHeatEff (4) TempRoomSetpHeatEff	The effective HVAC mode and the effective temperature setpoint values are delivered from the 'Room Setpoint Manager'. The temperature setpoint values are delivered either in a set of 4 values (comfort, standby, economy and building protection) for normal applications or just one value for simple heating applications.
 HVACModeEffNext TempRoomSetpHeatEffNext 	Next HVAC mode or next temperature setpoint needed for optimiser purposes.
• HVACModeOptim TempRmSetpOptimHeatShift	The optimised HVAC Mode and the optimiser shift value originate from an optimiser. The optimised mode overrides the mode from the RSM. The shift value is used to shift the heating setpoint of the active HVACMode.
• Tariff TariffNext	This information is provided by a supervisor with e.g. tariff calculation.
 ForceSignHFDM LockSignHFDM ForceSignHPM 	The forcing, locking and status information is delivered from the 'Heating Flow Demand Manager' and the 'Cooling Flow Demand Manager'.

LockSignHPM **StatusHPM** ContrMode

'HVAC Optimiser').

The controlling mode originates from a "supervisor" (see Functional Block

'Programme to HVAC-Mode Conversion' or

Outputs

• ActPosSetpHeatStageA These information is used for the actuator

Functional Block (valve or electrical power switch). These block may be in a separate device or in the same

device as the controller block.

• EnergyDemRD This information contains the value used for energy

demand co-ordination with the producer of the hot water and it can be used in a supervisor for general information.

The LTE information is completed with an attribute containing information from the ContrMode.

Binding Groups (LTE)

The Functional Block (with Additions) shows 6 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 represents the scheduling zone.

• 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'.

OutsideSensorZone_f no special features

• DistrSegmH_a Distributions segment for heating water (radiator).

Parameters

• TempFrostAlarm Temperature value at which the frost alarm is generated.

• BUSActuatorHSA_ON/OFF ON/OFF for BUS information for heat stage A output

in case of local actuator connection (reducing BUS load).

Diagnostic Data

• TempRoomSetpAct HVACModeAct

ContrModeAct

These information are used in a supervisor

or in a user HMI.

• ValueEnergyDem This information contains a theoretical overall value for

the energy demand. It is company specific calculated

and can be used for indication purposes.

Alarms

• FrostRoom Alarm when the room temperature falls below

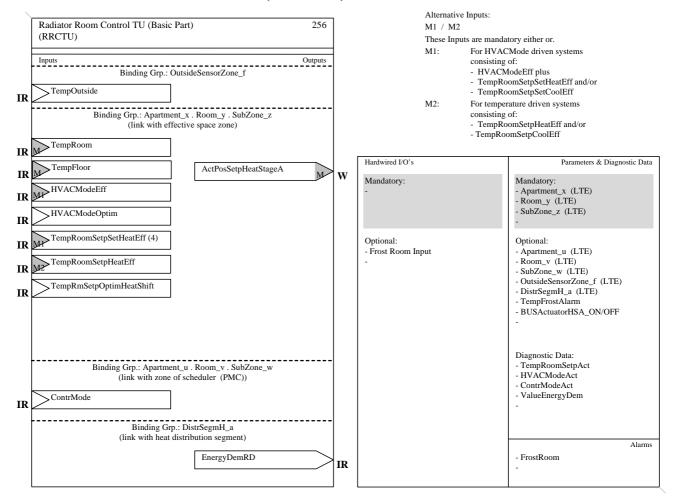
TempFrostAlarm or if the frost room input is activated.

3.6.3 Constraints

None.

3.6.4 Functional Block Diagram

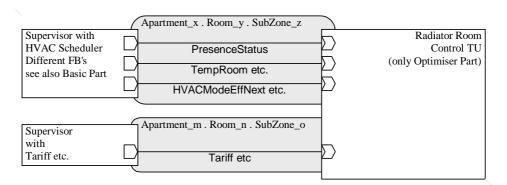
3.6.4.1 Radiator Room Control TU (Basic Part)



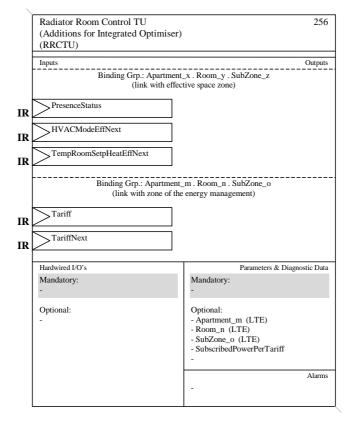
3.6.4.2 RRCTU, Additions for Integrated Optimiser

These additions allow the controller to determine optimised start an stop. For applications with electrical heating, also the tariff situation can be taken in consideration.

Principal Schematic



Functional Block Diagram

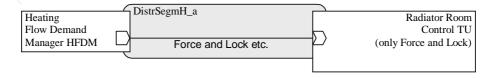


3.6.4.3 RRCTU, Additions for

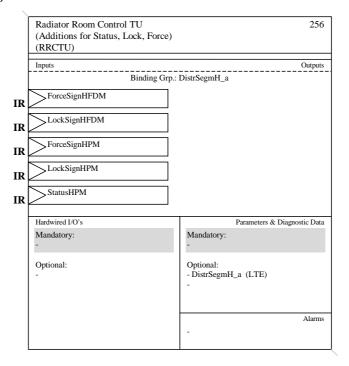
Status, Lock and Force Information of the Energy Producers

These additions allow tight interworking with the energy supply such as heat producer/distributor. For detailed information see [07] Heating Flow Demand Manager HFDM.

Principal Schematic



Functional Block Diagram



3.6.5 Datapoint description

Overview

See clause 3.9.1.

RRCTU Runtime Interworking - Dependence on Configuration Modes

			STANDARD MODE	EXTE Mo	
		Basic FB	S-Mode	Standard Mode Interface	LTE-Mode
Inputs	TempOutside	(GO _b)		(GO)	0
	TempRoom	GO_b	GO	GO	M
	TempFloor	GO_b	GO	GO	0
	HVACModeEff	NA _b	NA	NA	M1
	HVACModeOptim	NA _b	NA	NA	0
	TempRoomSetpSetHeatEff(4)	NA _b	NA	NA	M1
	TempRoomSetpHeatEff	(GO _b)		(GO)	M2
	TempRoomSetpOptimHeatShift	(GO _b)		(GO)	0
	ContrMode	(GO _b)		(GO)	0
	PresenceStatus	(GO _b)		(GO)	0
	HVACModeEffNext	NA _b	NA	NA	0
	TempRoomSetpHeatEfNext	NA _b	NA	NA	0
	Tariff	(GO _b)		(GO)	0
	TariffNext	(GO _b)		(GO)	0
	ForceSignHFDM	NA _b	NA	NA	0
	LockSignHFDM	NA _b	NA	NA	0
	ForceSignHPM	NA _b	NA	NA	0
	LockSignHPM	NA _b	NA	NA	0
	StatusHPM	NA _b	NA	NA	0
Outputs	ActPosSetpHeatStageA	(GO _b)	GO	GO	M
	EnergyDemRD	NA _b	NA	NA	0

RRCTU LTE specific Properties

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

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

		Support
Parameter	TempFrostAlarm	0
	BUSActuatorHSA_ON/OFF	0
DiagnosticData	TempRoomSetpAct	0
	HVACModeAct	0
	ContrModeAct	0
	ValueEnergyDem	0

3.6.6 Detailed Specification of the Datapoints

See 3.9.2.

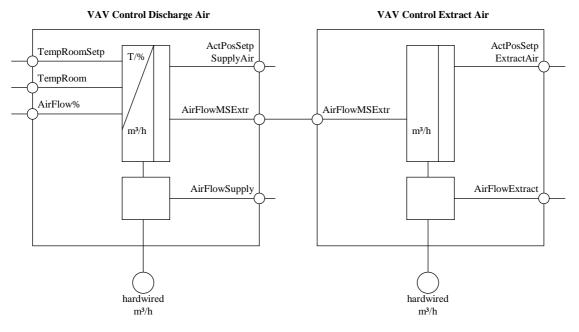
3.7 VAV Control Discharge Air (VAVCDA)

3.7.1 Aims and objectives

The Functional Block 'VAV Control Discharge Air' includes all important functionality for the VAV discharge air applications. See also 3.8 for extract air.

The Functional Block 'VAV Control Discharge Air' takes the inputs from the 'Room Setpoint Manager' and different sensor and HMI Functional Blocks and eventually form a supervisor Functional Block.

General block diagram:



The Functional Block 'VAV Control Extract Air' takes the air flow value form the discharge air block. Information needed for the actuators and for indication or in a supervisor is provided to the bus.

3.7.2 Functional specifications

The Functional Block is divided into two parts, the Basic Part and Additions for Integrated Optimiser. Detailed information about the different datapoints can be found in clause 3.9 Datapoints.

Inputs

• AirFlow%	This input is used for air flow control instead of temperature control and is delivered by a supervisor. This control only is active, if the input is valid (\mathbb{Z}_8). If the value is not valid or not available the controller works as temperature controller.
 TempRoom AQRoom TempDischargeAir 	These temperature values and the AQ value are delivered by the corresponding sensor Functional Blocks (either in separate devices or included in the same device as the controller block).
• PresenceStatus	The status of the presence detector is used e.g. for learning purposes in an optimiser.

• HVACModeEff TempRoomSetpSetHeatEff (4) TempRoomSetpSetCoolEff (4)

AQSetpEff

• HVACModeEffNext

HVACModeOptim
 TempRmSetpOptimHeatShift
 TempRmSetpOptimCoolShift

• ChangeOverStatusWater

 ChangeOverStatusAir TempSupplyAir

 SplitHeat SplitCool EnableHeat EnableCool

• Tariff
TariffNext

• StatusSATC

ContrMode

EmergMode

The effective HVAC mode and the effective temperature

setpoint values are delivered from the

'Room Setpoint Manager'.

The effective AQ setpoint value is delivered from

the 'Setpoint Manager Air Quality'.

Next HVAC mode needed for optimiser purposes.

The optimised HVAC Mode and the optimiser shift values originate from an optimiser. The optimised mode overrides the mode from the RSM. The two shift values are used to shift the setpoints (heating and cooling) of the active

HVACMode.

These information is delivered by the

corresponding Functional Block, (either in a separate device or included in the same device

as the controller block). The input is possible in either of the four distribution segments. Only one of them is

realised at a time.

These information is delivered by the corresponding Functional Block, (either in a separate device or included in the same device

as the controller block).

The Functional Block 'VAV Control Discharge Air' may control a VAV box as well as an additional radiator and

an additional chilled ceiling.

In this case the splitting has t.b.d. Base is the 'ValueEnergyDem'. The split value defines at which value the stage B starts. The enable information defines which kind of

energy is available.

These four information have to be delivered from

a "smart supervisor".

This information is provided by a supervisor with

e.g. tariff calculation.

The status information is delivered from the

Supply Air Temperature Controller.

The controlling mode originates from a

"supervisor" (see Functional Block

'Programme to HVAC-Mode Conversion' or

'HVAC Optimiser').

The EmergMode originates from a "supervisor"

(see Functional Block 'HVAC Emergency Source'.

Outputs

ActPosSetpDischargeAir
 ActPosSetpHeatStageA
 ActPosSetpHeatStageB
 ActPosSetpHeatStageB
 ActPosSetpCoolStageA
 ActPosSetpCoolStageA
 ActPosSetpCoolStageB

This information is used for the actuator Functional Blocks (valve, electrical power switch or damper). These blocks may be in separate devices or in the same device as the controller block.

EnergyDemAH
EnergyDemAC
EnergyDemRD
EnergyDemCC
EnergyDemCC

EnergyDemCC

This information contains the value used for energy demand co-ordination with the producer of e.g. hot and cold water and it can be used in a supervisor for general information.

EnergyDemAir The LTE information is completed with an attribute ValueFreshAirDem containing information from the ContrMode.

• AirFlowMSExtr This flow value is used to synchronise the extract

air controller

Binding Groups (LTE)

The Functional Block (with Additions) shows 8 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 represents the scheduling zone.

• 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'.

DistrSegmH_a Distributions segment for heating water (radiator).

• DistrSegmH_b Distributions segment for heating water (air heater).

DistrSegmC_c
 Distribution segment for cooling water (chilled ceiling).

• DistrSegmC d Distribution segment for cooling water (air cooler).

• Distribution segment for the ventilation air.

Parameters

NominalDischargeAirFlow
 Nominal value of the VAV box.

• ControlSequence This parameter defines whether the controller has to

work in heating only, cooling only or in both.

MinAirFlowHeat The minimum air flow in heating mode.

• MaxAirFlowHeat The maximum air flow in heating mode.

MinAirFlowCool
 The minimum air flow in cooling mode.

• MaxAirFlowCool The maximum air flow in cooling mode.

• MinAirFlowStandby The minimum air flow in standby operation.

• MinAirFlowEconomy The minimum air flow in economy operation.

• TempDischargeAirMin Minimum temperature limit for discharge air.

• SplitHeatDefValue Default value for the percentage of ValueEnergyDem

SplitCoolDefValue at which the split of stageA and stageB is defined.

•	TempFrostAlarm	Temperature value at which the frost alarm is generated.
•	BUSActuatorDA_ON/OFF	ON/OFF for BUS information for discharge air output in case of local actuator connection (reducing BUS load).
•	BUSActuatorHSA_ON/OFF	ON/OFF for BUS information for heat stage A output in case of local actuator connection (reducing BUS load).
•	BUSActuatorHSB_ON/OFF	ON/OFF for BUS information for heat stage B output in case of local actuator connection (reducing BUS load).
•	BUSActuatorCSA_ON/OFF	ON/OFF for BUS information for cool stage A output in case of local actuator connection (reducing BUS load).
•	BUSActuatorCSB_ON/OFF	ON/OFF for BUS information for cool stage B output in case of local actuator connection (reducing BUS load).
Dia	agnostic Data	

• TempRoomSetpAct HVACModeAct ContrModeAct HeatCoolMode AirFlowDischarge

These information are used in a supervisor or in a user HMI.

• ValueEnergyDem

This information contains a theoretical overall value for the energy demand. It is company specific calculated and can be used for indication purposes.

Alarms

FrostRoom

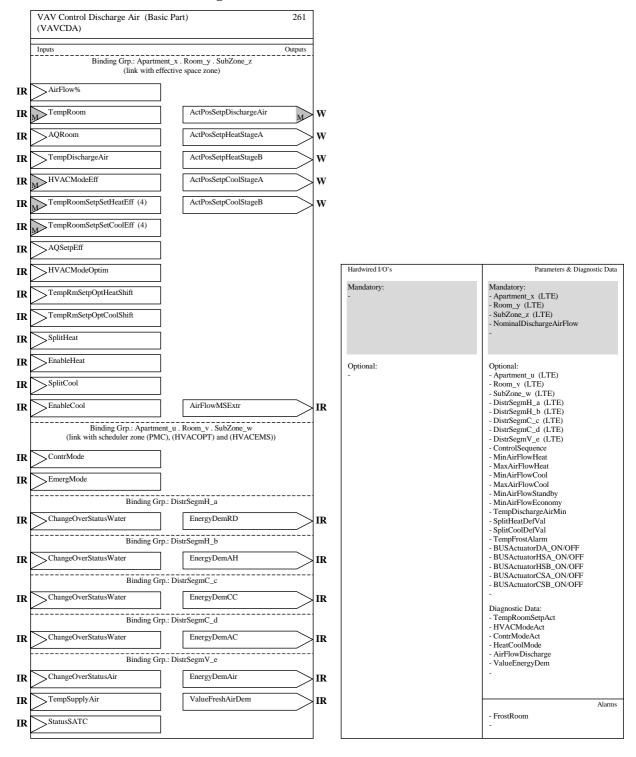
Alarm when the room temperature falls below TempFrostAlarm or if the frost room input is activated.

3.7.3 **Constraints**

None.

3.7.4 Functional Block Diagram

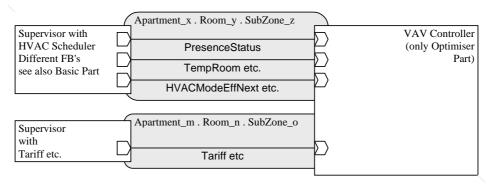
3.7.4.1 VAV Control Discharge Air (Basic Part)



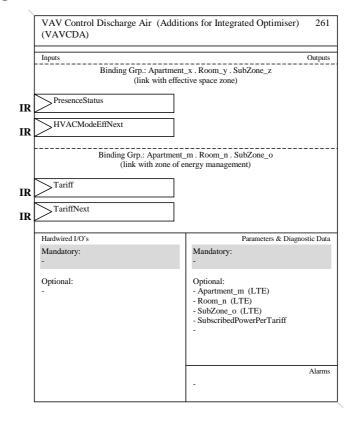
3.7.4.2 VAVCDA, Additions for Integrated Optimiser

These additions allow the controller to determine optimised start an stop. For applications with electrical heating, also the tariff situation can be taken in consideration.

Principal Schematic



Functional Block Diagram



3.7.5 Datapoint description

Overview

See clause 3.9.1.

VAVCDA Runtime Interworking - Dependence on Configuration Modes

			STANDARD MODE		
		Basic FB	S-Mode	Standard Mode Interface	LTE-Mode
Inputs	AirFlow%	(GO _b)		(GO)	0
	TempRoom	GO_b	GO	GO	M
	AQRoom	(GO _b)		(GO)	0
	TempDischargeAir	(GO_b)		(GO)	0
	PresenceStatus	(GO _b)		(GO)	0
	HVACModeEff	NA _b	NA	NA	M
	TempRoomSetpSetHeatEff(4)	NA _b	NA	NA	M
	TempRoomSetpSetCoolEff(4)	NA _b	NA	NA	M
	AQSetpEff	(GO _b)		(GO)	0
	HVACModeEffNext	NA _b	NA	NA	0
	HVACModeOptim	NA _b	NA	NA	0
	TempRoomSetpOptimHeatShift	(GO _b)		(GO)	0
	TempRoomSetpOptimCoolShift	(GO _b)		(GO)	0
	ChangeOverStatusWater	(GO _b)		(GO)	0
	ChangeOverStatusAir	(GO _b)		(GO)	0
	TempSupplyAir	(GO _b)		(GO)	0
	SplitHeat	NA _b	NA	NA	О
	EnableHeat	NA _b	NA	NA	О
	SplitCool	NA _b	NA	NA	0
	EnableCool	NA _b	NA	NA	О
	Tariff	(GO _b)		(GO)	О
	TariffNext	(GO _b)		(GO)	О
	StatusSATC	NA _b	NA	NA	О
Cont					

			STANDARD MODE	EXTENDED MODE	
		Basic FB	S-Mode	Standard Mode Interface	LTE-Mode
Inputs	ContrMode	(GO _b)		(GO)	0
Cont	EmergMode	(GO _b)		(GO)	0
Outputs	ActPosSetpDischargeAir	GO_b	GO	GO	M
	ActPosSetpHeatStageA	(GO_b)		(GO)	O
	ActPosSetpHeatStageB	(GO _b)		(GO)	0
	ActPosSetpCoolStageA	(GO_b)		(GO)	0
	ActPosSetpCoolStageB	(GO _b)		(GO)	0
	EnergyDemAH	NA _b	NA	NA	0
	EnergyDemAC	NA _b	NA	NA	0
	EnergyDemRD	NA _b	NA	NA	0
	EnergyDemCC	NA _b	NA	NA	0
	EnergyDemAir	NA _b	NA	NA	0
	ValueFreshAirDem	(GO _b)		(GO)	0
	AirFlowMSExtr	(GO _b)		(GO)	0

VAVCDA LTE specific Properties

		Support
Parameter	Apartment_x	M
	Room_y	M
	SubZone_z	M
	Apartment_u	0
	Room_v	0
	SubZone_w	0
	DistrSegmH_a	0
	DistrSegmH_b	0
	DistrSegmC_c	0
	DistrSegmC_d	0
	DistrSegmV_e	0
	Apartment_m	0
	Room_n	0
	SubZone_o	0

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

		Support
Parameter	NominalDischargeAirFlow	M
	ControlSequence	0
	MinAirFlowHeat	0
	MaxAirFlowHeat	0
	MinAirFlowCool	0
	MaxAirFlowCool	0
	MinAirFlowStandby	0
	MinAirFlowEconomy	0
	TempDischargeAirMin	0
	SplitHeatDefValue	0
	SplitCoolDefValue	0
	TempFrostAlarm	0
	BUSActuatorDA_ON/OFF	0
	BUSActuatorHSA_ON/OFF	0
	BUSActuatorHSB_ON/OFF	0
	BUSActuatorCSA_ON/OFF	0
	BUSActuatorCSB_ON/OFF	0

		Support
Diagnostic Data	TempRoomSetpAct	0
	HVACModeAct	0
	ContrModeAct	0
	HeatCoolMode	0
	AirFlowDischarge	0
	ValueEnergyDem	0

3.7.6 Detailed Specification of the Datapoints

See 3.9.2.

3.8 VAV Control Extract Air (VAVCEA)

3.8.1 Aims and objectives

The Functional Block 'VAV Control Extract Air' includes all important functionality for the VAV extract air applications. See also 3.7 for discharge air.

The Functional Block 'VAV Control Extract Air' takes the inputs from the 'VAV Control Discharge Air' and eventually form a supervisor Functional Block.

Information needed in a supervisor is provided to the system.

3.8.2 Functional specifications

Detailed information about the different datapoints can be found in clause 3.9 Datapoints.

Inputs

• AirFlowMSExtr This flow value is used to synchronise the extract

air controller with the discharge air controller.

• EmergMode The EmergMode originates from a "supervisor"

(see Functional Block 'HVAC Emergency Source'.

Outputs

• ActPosSetpExtractAir This information is used for the actuator functional

block. This block may be in a separate device or in the

same device as the controller block.

Binding Groups (LTE)

• 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 represents the scheduling zone.

Parameters

NominalExtractAirFlow
 Nominal value of the VAV box.

• Ratio ExtractDischarge Ratio to be used in case of multiple extract air

boxes together with a single discharge air box.

• AirFlowDelta Air flow delta to generate over- or under pressure.

(not for technical applications.)

• BUSActuatorEA_ON/OFF ON/OFF for BUS information for extract air output

in case of local actuator connection (reducing BUS load).

Diagnostic Data

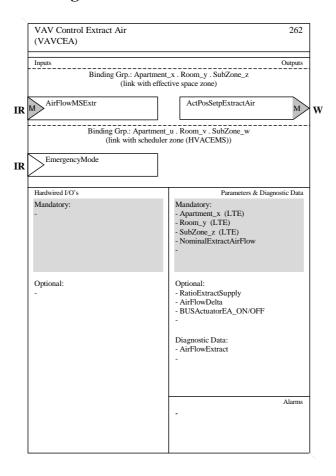
• AirFlowExtract This information is used in a supervisor or in

a user HMI.

3.8.3 Constraints

None.

3.8.4 Functional Block Diagram



3.8.5 Datapoint description

Overview

See clause 3.9.1.

VAVCEA Runtime Interworking - Dependence on Configuration Modes

			STANDARD MODE	EXTENDED MODE	
		Basic FB	S-Mode	Standard Mode Interface	LTE-Mode
Inputs	AirFlowMSExtr	GO_b	GO	GO	M
	EmergMode	(GO _b)		(GO)	0
Outputs	ActPosSetpExtractAir	GO_b	GO	GO	M

VAVCEA LTE specific Properties

		Support
Parameter	Apartment_x	M
	Room_y	M
	SupZone_z	M
	Apartment_u	0
	Room_v	0
	SupZone_w	0

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

		Support
Parameter	NominalExtractAirFlow	M
	RatioExtractDischarge	0
	AirFlowDelta	0
	BUSActuatorEA_ON/OFF	0
DiagnosticData	AirFlowExtract	0

3.8.6 Detailed Specification of the Datapoints

See 3.9.2.

3.9 Datapoints

3.9.1 Datapoint description

3.9.1.1 Overview Inputs (in alphabetic order)

Datapoints	Description / Remarks	Datapoint Type	Additional Info Description
Inputs			
Air Flow MSExtr	Air flow value for co-ordination of discharge and extract air with: - COV and RepPer - Z ₈ NOT supported from FB VAV Control Discharge Air	LTE: 203.104 DPT_HVACAirFlow_Z U ₁₆ Z ₈ S: 9.009 DPT_Value_AirFlow F ₁₆	m³/h
Air Flow%	Percentage of Max Flow with - COV and RepPer - Z ₈ STATUS supported from FB ""User Air Flow""	LTE: 202.001 DPT_RelValue_Z U_8Z_8 S: 5.004 DPT_Percent_U8 U_8	%
AQ Outside	Outside air quality actual value with: - COV and RepPer - Z ₈ STATUS supported from FB Outside Air Quality Sensor	LTE: 203.100 DPT_AVACAirQual_Z $U_{16}Z_8$ S: 9.008 DPT_Value_AirQuality F_{16}	ppm
AQ Room	Room air quality actual value with: - COV and RepPer - Z ₈ STATUS supported from FB Room Air Quality Sensor	LTE: 203.100 DPT_AVACAirQual_Z $U_{16}Z_8$ S: 9.008 DPT_Value_AirQuality F_{16}	ppm
AQ Setp Eff	Air quality setpoint value with: - COV and RepPer - Z ₈ NOT supported from FB Setpoint Manager Air Quality	LTE: 203.100 DPT_AVACAirQual_Z $U_{16}Z_8$ S: 9.008 DPT_Value_AirQuality F_{16}	ppm
Change Over Status Air	Change over status with: - COV and RepPer - Z ₈ STATUS supported from FB Air Change Over Status Sensor	LTE: 200.100 DPT_Heat/Cool_Z B ₁ Z ₈ S: 1.100 DPT_Heat/Cool B ₁	0 = cooling 1 = heating
Change Over Status Water	Change over status with: - COV and RepPer - Z ₈ STATUS supported from FB Water Change Over Status Sensor	LTE: 200.100 DPT_Heat/Cool_Z B ₁ Z ₈ S: 1.100 DPT_Heat/Cool B ₁	0 = cooling 1 = heating

Datapoints	Description / Remarks	Datapoint Type	Additional Info Description
Inputs			
Contr Mode	HVAC Controlling Mode with: - COV and RepPer - Z ₈ STATUS supported from FB Programme to HVAC-Mode Conversion or HVAC Optimiser	LTE: 201.104 DPT_HVACContrMode_Z N ₈ Z ₈ S: 20.105 DPT_HVACContrMode N ₈	enum. see detailed specification
Dew Point Status	Dew point status with: - COV and RepPer from FB Dew Point Status Sensor	LTE: 1.005 DPT_Alarm B ₁ S: 1.005 DPT_Alarm B ₁	0 = no alarm 1 = alarm
Disable Damper	Disable local damper with: - COV and RepPer from FB HVAC Optimiser	LTE: 1.003 DPT_Enable B ₁ S: 1.003 DPT_Enable B ₁	0 = disable 1 = enable
Emerg Mode	Input for emergency situations with: - COV and RepPer Z ₈ STATUS supported from FB HVAC Emergency Source	LTE: 201.109 DPT_HVACEmergencyMode_Z N ₈ Z ₈ S: 20.106 DPT_HVACEmergencyMode N ₈	enum. see detailed specification
Enable Cool	Control of the different cool stages with: - COV and RepPer - Z ₈ NOT supported from FB HVAC Optimiser	LTE: 201.105 DPT_EnableH/CStage_Z N ₈ Z ₈ S: NA	0 = disabled 1 = enable stage A 2 = enable stage B 3 = enable both stages
Enable Heat	Control of the different heat stages with: - COV and RepPer - Z ₈ NOT supported from FB HVAC Optimiser	LTE: 201.105 DPT_EnableH/CStage_Z N ₈ Z ₈ S: NA	0 = disabled 1 = enable stage A 2 = enable stage B 3 = enable both stages
Fan Manual	S-Mode status information for FanSpeedUser with: - COV and RepPer from FB User Fan speed Setting	LTE: NA S: 1.003 DPT_Enable B ₁	0 = HMI disabled => Auto 1 = HMI enabled => Manual
Fan Speed User	User fan speed with: - COV and RepPer - Z ₈ STATUS supported from FB User Fan speed Setting	LTE: 202.001 DPT_RelValue_Z U_8Z_8 S: 5.001 DPT_Scaling U_8	%
Force Sign CFDM	Force signal cool (CFDM) with: - COV and RepPer from FB Cool Flow Demand Manager	LTE: 21.101 DPT_ForceSignCool B ₈ S: NA	Bitset

Datapoints	Description / Remarks	Datapoint Type	Additional Info Description	
Inputs				
Force Sign CPM	Force signal cool (CPM) with - COV and RepPer from FB Cool Flow Demand Manager	LTE: 21.101 DPT_ForceSignCool B ₈ S: NA	Bitset	
Force Sign HFDM	Force signal heat (HFDM) with: - COV and RepPer from FB Heat Flow Demand Manager	LTE: 21.100 DPT_ForceSign B ₈ S: NA	Bitset	
Force Sign HPM	Force signal heat (HPM) with: - COV and RepPer from FB Heat Flow Demand Manager	LTE: 21.100 DPT_ForceSign B ₈ S: NA	Bitset	
HVAC Mode Eff	Effective HVAC Mode with: - COV and RepPer - Z ₈ STATUS supported from FB Room Setpoint Manager HVAC Mode Driven	$\begin{tabular}{lllllllllllllllllllllllllllllllllll$	0 = NA 1 = Comfort 2 = Standby 3 = Economy 4 = BuildingProtect	
HVAC Mode Eff Next	Next HVAC Mode plus time to next mode with: - COV and RepPer from FB Room Setpoint Manager HVAC Mode Driven	LTE: 206.100 DPT_HVACModeNext U ₁₆ N ₈ S: NA	min $0 = NA$ $1 = Comfort$ $2 = Standby$ $3 = Economy$ $4 = BuildingProtect$	
HVAC Mode Optim	Optimised HVAC Mode with: - COV and RepPer - Z ₈ STATUS supported from FB HVAC Optimiser	$\begin{tabular}{lllllllllllllllllllllllllllllllllll$	0 = NA 1 = Comfort 2 = Standby 3 = Economy 4 = BuildingProtect	
Lock Sign CFDM	Lock signal cool (CFDM) with reduction and attributes with: COV and RepPer from FB Cool Flow Demand Manager	LTE: 207.101 DPT_LockSign U ₈ B ₈ S: NA	Reduction % plus Bitset	
Lock Sign CPM	Lock signal cool (CPM) with reduction and attributes with: COV and RepPer from FB Cool Flow Demand Manager	LTE: 207.101 DPT_LockSign U ₈ B ₈ S: NA	Reduction % plus Bitset	
Lock Sign HFDM	Lock signal heat (HFDM) with reduction and attributes with: COV and RepPer from FB Heat Flow Demand Manager	LTE: 207.101 DPT_LockSign U ₈ B ₈ S: NA	Reduction % plus Bitset	
Lock Sign HPM	Lock signal heat (HPM) with reduction and attributes with: COV and RepPer from FB Heat Flow Demand Manager	LTE: 207.101 DPT_LockSign U ₈ B ₈ S: NA	Reduction % plus Bitset	

Datapoints	Description / Remarks	Datapoint Type	Additional Info Description
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	0 = not occupied 1 = occupied
Split Cool	Percentage of energy demand at which cooling stage B will start from FB HVAC Optimiser	LTE: 5.004 DPT_Percent_U8 U ₈ S: NA	%
Split Heat	Percentage of energy demand at which heating stage B will start from FB HVAC Optimiser	LTE: 5.004 DPT_Percent_U8 U ₈ S: NA	%
Status CPM	Flow water temperature of chilled water plus attributes with: - COV and RepPer from FB Cool Flow Demand Manager		°C plus attributes
Status HPM	Flow water temperature of hot water plus attributes with: - COV and RepPer from FB Heat Flow Demand Manager		°C plus attributes
Status SATC	Status of the SATC with: - COV and RepPer from FB Supply Air Temperature Controller	LTE: 21.106 DPT_StatusAHU B ₈ S: splitted details see [[12]	Bitset attributes
Tariff	T.b.d. by DEH		
Tariff Next	T.b.d. by DEH		
Temp Discharge Air	Discharge air temperature actual value with: - COV and RepPer - Z ₈ STATUS supported from FB Discharge Air Temperature Sensor	LTE: 205.100 DPT_TempHVACAbs_Z $V_{16}Z_8$ S: 9.001 DPT_Value_Temp F_{16}	°C
Temp Floor	Floor temperature actual value with: - COV and RepPer - Z ₈ STATUS supported from FB Floor Temperature Sensor	$ \begin{array}{c} LTE: & 205.100 \\ DPT_TempHVACAbs_Z \\ V_{16}Z_8 \\ S: & 9.001 \\ DPT_Value_Temp \\ F_{16} \end{array} $	°C
Temp Outside	Outside temperature actual value with: - COV and RepPer - Z ₈ STATUS supported from FB Outside Temperature Sensor	$LTE: 205.100\\ DPT_TempHVACAbs_Z\\ V_{16}Z_{8}\\ S: 9.001\\ DPT_Value_Temp\\ F_{16}$	°C

Datapoints	Description / Remarks	Datapoint Type	Additional Info Description	
Inputs				
Temp Return Air	Return air temperature actual value with: - COV and RepPer - Z ₈ STATUS supported from FB Return Air Temperature Sensor	$ \begin{array}{lll} LTE: & 205.100 \\ DPT_TempHVACAbs_Z \\ V_{16}Z_8 \\ S: & 9.001 \\ DPT_Value_Temp \\ F_{16} \end{array} $	°C	
Temp Room	Room temperature actual value with: - COV and RepPer - Z ₈ STATUS supported from FB Room Temperature Sensor		°C	
Temp Room Setp Cool Eff	1 temperature value for cooling for simple cooling only applications with: - COV and RepPer - Z ₈ NOT supported from FB Room Setpoint Manager HVAC Mode Driven or Room Setpoint Manager Temperature Driven	LTE: 205.100 DPT_TempHVACAbs_Z $V_{16}Z_8$ S: 9.001 DPT_Value_Temp F_{16}	°C	
Temp Room Setp Cool Eff Next	Next temperature value plus time to it for simple cooling only applications with optimiser with: - COV and RepPer from FB Absolute Room Temperature Scheduler	LTE: 220.100 DPT_TempHVACAbsNext U ₁₆ V ₁₆ S: NA	time °C	
Temp Room Setp Heat Eff	1 temperature value for heating for simple heating only applications with: - COV and RepPer - Z ₈ NOT supported from FB Room Setpoint Manager HVAC Mode Driven or Room Setpoint Manager Temperature Driven	LTE: 205.100 DPT_TempHVACAbs_Z V ₁₆ Z ₈ S: 9.001 DPT_Value_Temp F ₁₆	°C	
Temp Room Setp Heat Eff Next	Next temperature value plus time to it for simple heating only applications with optimiser with: - COV and RepPer from FB Absolute Room Temperature Scheduler	LTE: 220.100 DPT_TempHVACAbsNext U ₁₆ V ₁₆ S: NA	time °C	
Temp Room Setp Optim Cool Shift	Setpoint shift value cooling with: - COV and RepPer - Z ₈ NOT supported from FB HVAC Optimiser	LTE: 205.101 DPT_TempHVACRel_Z V ₁₆ Z ₈ S: 9.002 DPT_Value_Tempd F ₁₆	K	

Datapoints		Description / Remarks	Datapoint Type	Additional Info Description
Inputs				
Temp Room Setp Optim Heat Shift		Setpoint shift value heating with: - COV and RepPer - Z ₈ NOT supported from FB HVAC Optimiser	$ \begin{array}{lll} LTE: & 205.101 \\ DPT_TempHVACRel_Z \\ V_{16}Z_8 \\ S: & 9.002 \\ DPT_Value_Tempd \\ F_{16} \end{array} $	К
Temp Room SetpSet Cool Eff	(4)	4 temperature values for cooling for:	LTE: 213.100 DPT_TempRoomSetpSet[4] V ₁₆ V ₁₆ V ₁₆ V ₁₆ S: NA	4 x °C
Temp Room SetpSet Heat Eff	(4)	4 temperature values for heating for: 'Comfort' 'Standby' 'Economy' 'BuildingProtection' with: - COV and RepPer from FB Room Setpoint Manager HVAC Mode Driven	LTE: 213.100 DPT_TempRoomSetpSet[4] V ₁₆ V ₁₆ V ₁₆ V ₁₆ S: NA	4 x °C
Temp Supply Air		Supply air temperature actual value with: - COV and RepPer - Z ₈ STATUS supported from FB Supply Air Temperature Sensor	$ \begin{array}{ll} LTE: & 205.100 \\ DPT_TempHVACAbs_Z \\ V_{16}Z_8 \\ S: & 9.001 \\ DPT_Value_Temp \\ F_{16} \end{array} $	°C

3.9.1.2 Overview Outputs (in alphabetic order)

Datapoints	Description / Remarks	Datapoint Type	Additional Info Description	Used in
Outputs				
Act Pos Setp Cool StageA	Position value for the cooling actuator stage A with: - COV and RepPer Z ₈ STATUS supported to FB HVAC Valve Actuator	$ \begin{array}{llllllllllllllllllllllllllllllllllll$	%	
Act Pos Setp Cool StageB	Position value for the cooling actuator stage B with: - COV and RepPer - Z ₈ STATUS supported to FB HVAC Valve Actuator	LTE: 202.001 DPT_RelValue_Z U_8Z_8 S: 5.001 DPT_Scaling U_8	%	

Datapoints	Description / Remarks	Datapoint Type	Additional Info Description	Used in
Outputs				
Act Pos Setp Discharge Air	Position value for the discharge air actuator with: - COV and RepPer - Z ₈ STATUS supported to FB Air Damper Actuator	LTE: 202.001 DPT_RelValue_Z U ₈ Z ₈ S: 5.001 DPT_Scaling U ₈	%	
Act Pos Setp Extract Air	Position value for the extract air actuator with: - COV and RepPer - Z ₈ STATUS supported to FB Air Damper Actuator	LTE: 202.001 DPT_RelValue_Z U ₈ Z ₈ S: 5.001 DPT_Scaling U ₈	%	
Act Pos Setp Fresh Air	Position value for the fresh air actuator with: - COV and RepPer - Z ₈ STATUS supported to FB Air Damper Actuator	LTE: 202.001 DPT_RelValue_Z U_8Z_8 S: 5.001 DPT_Scaling U_8	%	
Act Pos Setp Heat StageA	Position value for the heating actuator stage A with: - COV and RepPer - Z ₈ STATUS supported to FB HVAC Valve Actuator	LTE: 202.001 DPT_RelValue_Z U ₈ Z ₈ S: 5.001 DPT_Scaling U ₈	%	
Act Pos Setp Heat StageB	Position value for the heating actuator stage B with: - COV and RepPer - Z ₈ STATUS supported to FB HVAC Valve Actuator	LTE: 202.001 DPT_RelValue_Z U ₈ Z ₈ S: 5.001 DPT_Scaling U ₈	%	
Air Flow MSExtr	Air flow value for co-ordination of discharge and extract air with: - COV and RepPer - Z ₈ NOT supported to FB VAV Control Extract Air	LTE: 203.104 DPT_HVACAirFlow_Z U ₁₆ Z ₈ S: 9.009 DPT_Value_AirFlow F ₁₆	m³/h	
Compressor Pos Setp	Setpoint value to control the compressor actuator with: - COV and RepPer - Z ₈ STATUS supported to FB Compressor Actuator	LTE: 202.001 DPT_RelValue_Z U ₈ Z ₈ S: 5.001 DPT_Scaling U ₈	%	
Energy Dem AC	Energy demand value for cold flow demand manager (water) (100% = full cooling) plus ContrMode with: COV and RepPer to FB Air Cooler Energy Demand Transformer TU	LTE: 211.100 DPT_EnergyDemWater U ₈ N ₈ S: NA	% plus ContrMode	

Datapoints	Description / Remarks	Datapoint Type	Additional Info Description	Used in
Outputs				
Energy Dem AH	Energy demand value for heat flow demand manager (water) (100% = full heating) plus ContrMode with: COV and RepPer to FB Air Heater Energy Demand Transformer TU	LTE: 211.100 DPT_EnergyDemWater U ₈ N ₈ S: NA	% plus ContrMode	
Energy Dem Air	Energy demand value for air handling unit (air) -100% = full heating +100% = full cooling plus modes with: - COV and RepPer to FB Ventilation Demand Transformer TU	LTE: 223.100 DPT_EnergyDemAir V ₈ N ₈ N ₈ S: NA	% plus ContrMode plus EmergMode	
Energy Dem CC	Energy demand value for cold flow demand manager (water) (100% = full cooling) plus ContrMode with: COV and RepPer to FB Chilled Ceiling Energy Demand Transformer TU	LTE: 211.100 DPT_EnergyDemWater U ₈ N ₈ S: NA	% plus ContrMode	
Energy Dem RD	Energy demand value for heat flow demand manager (water) (100% = full heating) plus ContrMode with: COV and RepPer to FB Radiator Heating Energy Demand Transformer TU	LTE: 211.100 DPT_EnergyDemWater U ₈ N ₈ S: NA	% plus ContrMode	
Fan Speed Setp	Setpoint value to control the fan actuator with: - COV and RepPer - Z ₈ STATUS supported to FB Fan Speed Actuator	LTE: 202.001 DPT_RelValue_Z U ₈ Z ₈ S: 5.001 DPT_Scaling U ₈	%	
Heat Cool Mode	Heat / cool information for the compressor actuator with: - COV and RepPer to FB Compressor Actuator	LTE: 1.100 DPT_Heat/Cool B ₁ S: 1.100 DPT_Heat/Cool B ₁	0 = cooling 1 = heating	
Value Fresh Air Dem	Value for primary fresh air demand with: - COV and RepoPer to FB Ventilation Demand Transformer TU	LTE: 202.001 DPT_RelValue_Z U_8Z_8 S: 5.004 DPT_Percent_U8 U_8		

3.9.1.3 Overview LTE Zone Parameters

Datapoints	Description / Remarks	Datapoint Type	Additional Info Description	Used in
Parameter (LTE)				
Apartment_x	LTE zoning parameter for Apartment Z_8 supported	202.00 DPT_UcountValue8_Z U ₈ Z ₈	Real apartment zone	
Room_y	LTE zoning parameter for Room Z ₈ supported	202.00 DPT_UcountValue8_Z U ₈ Z ₈	Real room zone	
SubZone_z	LTE zoning parameter for SubZone Z ₈ supported	202.00 DPT_UcountValue8_Z U ₈ Z ₈	Real sub zone	
Apartment_u	LTE zoning parameter for Apartment Z_8 supported	202.00 DPT_UcountValue8_Z U ₈ Z ₈	Scheduler zone	
Room_v	LTE zoning parameter for Room Z_8 supported	202.00 DPT_UcountValue8_Z U ₈ Z ₈	Scheduler zone	
SubZone_w	LTE zoning parameter for SubZone Z ₈ supported	202.00 DPT_UcountValue8_Z U ₈ Z ₈	Scheduler zone	
Apartment_m	LTE zoning parameter for Apartment Z_8 supported	202.00 DPT_UcountValue8_Z U ₈ Z ₈	Optimiser zone	
Room_n	LTE zoning parameter for Room Z_8 supported	202.00 DPT_UcountValue8_Z U ₈ Z ₈	Optimiser zone	
SubZone_o	LTE zoning parameter for SubZone Z ₈ supported	202.00 DPT_UcountValue8_Z U ₈ Z ₈	Optimiser zone	
Outside Sensor Zone_f	LTE zoning number for Outside Sensor Zone Z ₈ supported	202.00 DPT_UcountValue8_Z U ₈ Z ₈	First outside sensor zone	
Outside Sensor Zone_g	LTE zoning number for Outside Sensor Zone Z ₈ supported	202.00 DPT_UcountValue8_Z U ₈ Z ₈	Second outside sensor zone	
Distr SegmC_c	LTE zoning number for Distribution Segment Cooling Z_8 supported	202.00 DPT_UcountValue8_Z U ₈ Z ₈	Used for chilled ceiling	
Distr SegmC_d	LTE zoning number for Distribution Segment Cooling Z_8 supported	202.00 DPT_UcountValue8_Z U ₈ Z ₈	Used for air cooler	
Distr SegmH_a	LTE zoning number for Distribution Segment Heating Z_8 supported	202.00 DPT_UcountValue8_Z U ₈ Z ₈	Used for ratiators	
Distr SegmH_b	LTE zoning number for Distribution Segment Heating Z_8 supported	202.00 DPT_UcountValue8_Z U ₈ Z ₈	Used for air heater	
Distr SegmV_e	LTE zoning number for Distribution Segment Ventilation Z_8 supported	202.00 DPT_UcountValue8_Z U ₈ Z ₈	Used for air	

3.9.1.4 Overview Parameters (in alphabetic order)

Datapoints	Description / Remarks	Datapoint Type	Additional Info Description	Used in
Parameter				
Air Flow Delta	Delta value for generating over or under pressure	5.004 DPT_Percent_U8 U ₈	%	
BUS Actuator CP ON/OFF	Parameter for switching ON/OFF the bus information for compressor actuator	1.001 DPT_Switch B ₁	0 = OFF 1 = ON	
BUS Actuator CSA ON/OFF	Parameter for switching ON/OFF the bus information for cool stage A actuator	1.001 DPT_Switch B ₁	0 = OFF 1 = ON	
BUS Actuator CSB ON/OFF	Parameter for switching ON/OFF the bus information for cool stage B actuator	1.001 DPT_Switch B ₁	0 = OFF 1 = ON	
BUS Actuator DA ON/OFF	Parameter for switching ON/OFF the bus information for discharge air actuator	1.001 DPT_Switch B ₁	0 = OFF 1 = ON	
BUS Actuator EA ON/OFF	Parameter for switching ON/OFF the bus information for extract air actuator	1.001 DPT_Switch B ₁	0 = OFF 1 = ON	
BUS Actuator FA ON/OFF	Parameter for switching ON/OFF the bus information for fresh air actuator	1.001 DPT_Switch B ₁	0 = OFF 1 = ON	
BUS Actuator FS ON/OFF	Parameter for switching ON/OFF the bus information for fan speed actuator	1.001 DPT_Switch B ₁	0 = OFF 1 = ON	
BUS Actuator HSA ON/OFF	Parameter for switching ON/OFF the bus information for heat stage A actuator	1.001 DPT_Switch B ₁	0 = OFF 1 = ON	
BUS Actuator HSB ON/OFF	Parameter for switching ON/OFF the bus information for heat stage B actuator	1.001 DPT_Switch B ₁	0 = OFF 1 = ON	
Control Sequence	Definition for the used sequence	20.107 DPT_ChangeoverMode N ₈	0 = automatic 1 =Cooling only 2 = Heating only	
Fan Dwell Time Dead Zone	Stop period of fan in dead zone	7.006 DPT_TimePeriodMin U ₁₆	Min	
Fan In Dead Zone	Operation of fan in the dead zone	20.111 DPT_FanMode N ₈	0 = not running 1 = perm. Running 2 = running in interv	

Datapoints	Description / Remarks	Datapoint Type	Additional Info Description	Used in	
Parameter					
Fan Run Time Dead Zone	Run period of fan in dead zone	7.006 DPT_TimePeriodMin U ₁₆	Min		
Fan Speed #1 OFF	Percent level for step 1 OFF	5.004 DPT_Percent_U8 U ₈	%		
Fan Speed #1 ON	Percent level for step 1 ON	5.004 DPT_Percent_U8 U ₈	%		
Fan Speed #2 OFF	Percent level for step 2 OFF	5.004 DPT_Percent_U8 U ₈	%		
Fan Speed #2 ON	Percent level for step 2 ON	5.004 DPT_Percent_U8 U ₈	%		
Fan Speed #3 OFF	Percent level for step 3 OFF	5.004 DPT_Percent_U8 U ₈	%		
Fan Speed #3 ON	Percent level for step 3 ON	5.004 DPT_Percent_U8 U ₈	%		
Fan Speed #4 OFF	Percent level for step 4 OFF	5.004 DPT_Percent_U8 U ₈	%		
Fan Speed #4 ON	Percent level for step 4 ON	5.004 DPT_Percent_U8 U ₈	%		
Fan Speed #5 OFF	Percent level for step 5 OFF	5.004 DPT_Percent_U8 U ₈	%		
Fan Speed #5 ON	Percent level for step 5 ON	5.004 DPT_Percent_U8 U ₈	%		
Fan Speed Dead Zone	Fan speed for dead zone running	5.004 DPT_Percent_U8 U ₈	%		
Fresh Air Min Value	Minimum value for fresh air in percent for the damper	5.004 DPT_Percent_U8 U ₈	%		

Datapoints	Description / Remarks	Datapoint Type	Additional Info Description	Used in	
Parameter					
Max Air Flow Cool		203.104 DPT_HVACAirFlow_Z U ₁₆ Z ₈	m³/h		
Max Air Flow Heat		203.104 DPT_HVACAirFlow_Z U ₁₆ Z ₈	m ³ /h		
Min Air Flow Cool	$\begin{array}{c} \text{Minimum air flow in cooling mode} \\ \text{and comfort} \\ Z_8 \text{NOT supported} \end{array}$	203.104 DPT_HVACAirFlow_Z U ₁₆ Z ₈	m ³ /h		
Min Air Flow Economy	Minimum air flow in economy (heating and cooling) Z_8 NOT supported	203.104 DPT_HVACAirFlow_Z U ₁₆ Z ₈	m³/h		
Min Air Flow Heat	$\begin{array}{c} \text{Minimum air flow in heating mode} \\ \text{and comfort} \\ Z_8 \text{NOT supported} \end{array}$	203.104 DPT_HVACAirFlow_Z U ₁₆ Z ₈	m³/h		
Min Air Flow Standby	Minimum air flow in standby (heating and cooling) Z ₈ NOT supported	203.104 DPT_HVACAirFlow_Z U ₁₆ Z ₈	m³/h		
Nominal Discharge Air Flow	Nominal air flow of discharge air Z_8 NOT supported	203.104 DPT_HVACAirFlow_Z U ₁₆ Z ₈	m³/h		
Nominal Extract Air Flow	Nominal air flow of extract air Z_8 NOT supported	203.104 DPT_HVACAirFlow_Z U ₁₆ Z ₈	m³/h		
Ratio Extract Discharge	Ratio between extract air flow and discharge air flow (extract / discharge)	5.005 DPT_DecimalFactor U ₈	Factor		
Split Cool Def Value	Default value for percentage of ValueEnergyDem for splitting of cooling	5.004 DPT_Percent_U8 U ₈	%		
Split Heat Def Value	Default value for percentage of ValueEnergyDem for splitting of cooling	5.004 DPT_Percent_U8 U ₈	%		
Temp Discharge Air Min	Temperature value for discharge air temperature limitation Z_8 NOT supported	205.100 DPT_TempHVACAbs_Z V ₁₆ Z ₈	°C		
Temp Frost Alarm	Temperature value for frost alarm Z_8 NOT supported	205.100 DPT_TempHVACAbs_Z V ₁₆ Z ₈	°C		

3.9.1.5 Overview Diagnostic Data (in alphabetic order)

Datapoints	Description / Remarks	Datapoint Type	Additional Info Description	Used in
Diagnostic Data				
Air Flow Discharge	Air flow of discharge air box Z ₈ NOT supported	203.104 DPT_HVACAirFlow_Z U ₁₆ Z ₈	m ³ /h	
Air Flow Extract	Air flow of extract air box Z ₈ NOT supported	203.104 DPT_HVACAirFlow_Z U ₁₆ Z ₈	m ³ /h	
Contr Mode Act	Act ContrMode	20.105 DPT_HVACContrMode N ₈	enum. see detailed specification	
Heat Cool Mode	HeatCoolMode of the controller	1.100 DPT_Heat/Cool B ₁	0 = cooling 1 = heating	
HVAC Mode Act	Act HVACMode	20.102 DPT_HVACMode N ₈	0 = NA 1 = Comfort 2 = Standby 3 = Economy 4 = BuildingProtect	
Status Controller	Status of the controller	T.b.d.		
Temp Discharge Air Min	Min limit for the discharge air temperature Z_8 NOT supported	205.100 DPT_TempHVACAbs_Z V ₁₆ Z ₈	°C	
Temp Room Setp Act	Act room temperature setpoint Z ₈ NOT supported	205.100 DPT_TempHVACAbs_Z V ₁₆ Z ₈	°C	
Value Energy Dem	Value for the energy demand -100% = full heating demand +100% = full cooling demand	6.001 DPT_Percent_V8 V ₈	%	

3.9.1.6 Overview Alarms (in alphabetic order)

Alarms	Description / Remarks	Er. Code	ror Prio	Additional Info Description	Used in
Frost Room	Frost alarm	T.b.d.	T.b.d.	T.b.d.	
Low Discharge Air	Alarm for low discharge air	T.b.d.	T.b.d.	T.b.d.	
Security Stop	Alarm for security stop	T.b.d.	T.b.d.	T.b.d.	

3.9.2 Detailed Specification of the Datapoints (Inputs)

3.9.2.1 Input AirFlowMSExtr

Standard Mode

DF	Name:	AirF	AirFlowMSExtr Abbr.: Mandatory [
FΒ	Name:	See	table belov	W							Car	n be	internal	
De	scription													
Th	is information	on is	provided b	y the Fu	unctional Bloc	ck 'V	/AV Co	ntrol Di	ischa	arge A	۱ir'.			
Da	tapoint Ty	ре												
DF	T_Name:	DI	PT_Value_/	AirFlow										
DF	T Format:	F ₁	DPT_ID: 9.009											
Fie	eld	De	escription	Rang	ge	Unit	Default							
										0	full		m³/h	CS
Ac	cess Type													
•	Input													
	$N \rightarrow this$			$1 \rightarrow th$	is 🛛									
	Spontaneo	us			Cyclically:					Time-	-out:		31min (rec.)
	Request				Polling:					Perio	d:			
Co	mmunicati	ion [·]	Гуре											
•	Group Ob	ject	Datapoint								Manda	atory:		
	Default Gro	oup.	Address:											
Dy	namics													
	Power dow	n:	Save:											
	Power up:		Value:	No in	itialisation:			Defau	ult va	alue:				
				Save	d value:									
								Read	fron	n bus:	1			
Ex	ception Ha	ındli	ng											
Sp	ecial Featu	ıres												

List of Functional Blocks, **Input AirFlowMSExtr** is used in:

Name of FB	Abbreviation	Mandatory Optional
VAV Control Extract Air	VAVCEA	M

FB:	See table below	LTE Cli		AirFlowM	ISExtr						latory 🗌 tional 🗍	
Desci	ription:									<u> </u>		
	nformation is	provide	d by the F	unctional E	Block 'VAV	Control	Discha	arge Aii	'. The S	TATUS is	NOT	
suppo		•						3				
DPT:		PT HV	CAirFlow	' Z	DPT ID	203.104	1 Da	atatype	format	$V_{16}Z_{8}$		
Field		_	Description	on	l .		I.	, , , , , , , , , , , , , , , , , , ,	Sup.	Unit	Default	
AirFlo	W		Air flow v	alue					M	m ³ /h	CS	
STAT	US		Bitset						М			
- All E	Bits		ignore						NA	t/f	false	
Comr	nunication:										-	
Bind	ding Group:											
Clas	S		Туре				Defau	ılt				
Ge	ographical	\boxtimes	Apartmer	nt . Room .	SubZone		1.1.1					
Ар	plication Spe	ecific										
Un	assigned		Broadcas	st 🗌	Configural	ole 🗌						
DP /	Address:		IO Type(ID):	261 (VAV	CDA)	Prop	erty ID:	D: 56			
LTE	-Service (ev	ent):	InfoRepo	rt Sniffer	on Binding	Group:						
	oReport	\boxtimes	Timeout:			31	Min					
	-Service (po ad – Respor		Read Wil	dcard / Re	sp Sniffer	on Bindir	ng Gro	up:	•			
Value	after Power	r-up:		Default V	alue 🛚			•		Stored Va	lue 🗌	
Excep	otion Handli	ng:						Sa	ve at Po	werdown		
Speci	al Features:											

List of Functional Blocks, **Input AirFlowMSExtr** is used in:

Name of FB	Abbreviation	Mandatory Optional
VAV Control Extract Air	VAVCEA	M

3.9.2.2 Input AirFlow%

Standard Mode

DP	Name:	AirFl	irFlow% Abbr.:												Mandatory			
FB I	Name:	See	table be	low										C	an be	internal		
Des	cription																	
This	s information	on is	provided	d by t	he Fι	uncti	onal Blo	ck '	User Ai	ir Fl	ow'.							
Data	apoint Ty																	
	Γ_Name:																	
	Γ Format:	U ₈																
Field	d	Des	Description Supp.											Rai	nge	Unit	Defa	ult
			0												ıll	%	CS	
Acc	ess Type																	
•	Input																	
1	$N \rightarrow this$			1	\rightarrow th	is	$ \boxtimes $											
5	Spontaneo	us	\square			Сус	lically:		\square				Time-	-out:		31min (rec.)	
F	Request					Poll	ing:						Perio	d:				
Con	nmunicati	on T	уре															
♦	Group Ob	ject D	atapoin	ıt										Man	datory:			
	Default Gro	oup A	ddress:		-													
Dyn	namics																	
F	Power dow	'n:	Save:															
F	Power up:		Value:		No in	itialis	sation:])efau	ılt va	alue:					
					Save	d va	lue:]									
										R	Read	fror	n bus:					
Exc	eption Ha	ndlir	ng															
Spe	cial Featu	ires																

List of Functional Blocks, **Input AirFlow%** is used in:

Name of FB	Abbreviation	Mandatory Optional
VAV Control Discharge Air	VAVCDA	0

FB:	See table below	LTE Cli		AirFlow	%					Mandatory Optional		
Desci	ription:	in partic							<u> </u>			
		provide	d by the F	unctional	Block 'User	Air Flow	/' (T.b.d.).	The STATI	JS is supp	orted.		
DPT:	Name D	PT_Rel\	/alue_Z		DPT ID	202.001	Dataty	pe format	U_8Z_8			
Field			Description	on				Sup.	Unit	Default		
AirFlo	W		Air flow v	alue in pe	ercent of nom	ninal		M	%	cs		
STAT	US		Bitset					M				
- Out	OfService		Sensor o	ut of serv	ice			M	t/f	false		
- Fau			Sensor va	alue is co	rrupted			0	t/f	false		
- Ove	erridden		Sensor is	tempora	ry overridder	1		0	t/f	false		
- InAl	arm		Sensor is	in alarm				0	t/f	false		
- Alar	mUnAck		Acknowle	edgement	of alarm			0	t/f	false		
- All c	other Bits		reserved					NA	t/f	false		
Comr	nunication:	•						•	-	-		
Bind	ding Group:											
Clas			Type				Default					
Ge	ographical		Apartmer	nt . Room	. SubZone		1.1.1					
Ap	plication Spe	ecific										
Ur	assigned		Broadcas	st 🗌	Configurab	le 🗌						
DP A	Address:		IO Type(I	D):	T.b.d.		Property	ID:	T.b.d.			
LTE	-Service (ev	ent):	InfoRepo	rt Sniffer	on Binding	Group:						
	oReport	\boxtimes	Timeout:			31	Min					
	-Service (po		Pead Wil	deard / P	esp Sniffer o	n Rindir	og Group:					
Re	ad – Respor	nse 🗌	iteau vvii	ucaru / IX	esp Sillier o	ii Diiidii	ig Group.					
Value	after Powe	r-up:		Default '	Value 🛚			•	Stored Va	lue 🗌		
Exce	otion Handli	ng:					(Save at Po	werdown			
Speci	al Features:											

List of Functional Blocks, **Input AirFlow%** is used in:

Name of FB	Abbreviation	Mandatory Optional
VAV Control Discharge Air	VAVCDA	О

3.9.2.3 Input AQOutside

Standard Mode

DP Na	ame:	AQOutside							Abbr.:						andatory]
FB Na	ıme:	See t	able bel	ow										Can be	interna]
Descr	iption																	
This in	nformatio	n is p	provided	by t	he Fι	unctio	onal Blo	ck 'C	Outside	AQ S	enso	or'.						
Datap	oint Typ	е																
DPT_I	Name:	DP.	T_Value	_Air(Quali	ty												
DPT F	ormat:	F ₁₆									DI	PT_ID:		9.008				
Field Description Supp. R										ange	Unit	Def	aul	lt				
												0		full	ppm	С	s	
Acces	s Type																	
♦ Inj	put																	
N -	\rightarrow this			1	\rightarrow th	is												
Spontaneous Cyclically: Time-out: 31min (rec.)																		
Re	quest					Polli	ing:					Perio	d:					
Comn	nunicati	on Ty	уре															
♦ Gr	roup Obj	ect D	atapoin	t									Ma	ndatory	/:			
De	fault Gro	up A	ddress:		-													
Dynar	nics																	
Pov	wer dow	n: S	Save:															
Pov	wer up:	'	√alue:		No in	itialis	sation:			Defa	ault v	/alue:			\boxtimes			
					Save	d val	lue:											
										Rea	d fro	m bus	:					
Excep	tion Ha	ndlin	g															
Specia	al Featu	res																

List of Functional Blocks, **Input AQOutside** is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	O
Water Heat Pump Control	WHPC	O
Split Unit Control	SPUC	0

FB:	See table	LTE CI		AQOutsi	de	Mandatory				
	below	Input N	ame:						Ор	tional 🗌
	ription:									
This in	nformation is					1			is suppo	rted.
DPT:	Name D	PT_HVA	ACAirQual	_Z	DPT ID	203.100	Dataty	pe format	$U_{16}Z_{8}$	
Field			Description	on				Sup.	Unit	Default
AirQu	ality		Air quality	y value		M	ppm	cs		
STAT	US		Bitset					M		
	OfService			ut of servi				M	t/f	false
- Fau			Sensor va	alue is cor	rupted			0	t/f	false
- Ove	erridden		Sensor is	temporar	y overridde	en		0	t/f	false
- InAl	arm		Sensor is					0	t/f	false
- Alar	mUnAck		Acknowle	edgement	of alarm			0	t/f	false
- All c	other Bits		reserved					NA	t/f	false
Comr	nunication:	•						-	-	=
Bind	ding Group:									
Clas	ss		Type				Default			
Ge	ographical									
Ap	plication Spe	ecific⊠	OutsideS	ensorZon	e		1			
Ur	assigned		Broadcas	st 🗌	Configural	ole 🗌				
DP A	Address:		IO Type(I	D):	330 (OAC	(S)	Property	ID:	51	
LTE	-Service (ev	ent):	InfoRepo	rt Sniffer	on Binding	Group:				
Inf	oReport	\boxtimes	Timeout:			31	Min			
	-Service (po		Pead Wil	deard / De	esp Sniffer	on Rindin	og Group:			
Re	ad – Respor	nse 🗌	ixeau vvii	ucaiu / ixe	ssp Silliei	on bindi	ig Group.			
Value	after Power	r-up:		Default \	/alue ⊠				Stored Val	lue 🗌
Exce	otion Handli	ng:					(Save at Po	werdown	
Speci	al Features:									

List of Functional Blocks, **Input AQOutside** is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	О
Water Heat Pump Control	WHPC	О
Split Unit Control	SPUC	О

3.9.2.4 Input AQRoom

Standard Mode

DP Na	ame:	AQRoom							Abbr.:					Λ	/landat	ory		
FB Na	ime:	See t	able be	elow										0	Can be	interna		
Descr	iption																	
This in	nformatio	n is p	orovide	d by	the Fu	unctio	onal Blo	ck 'F	Room A	٩Q	Sens	sor'.						
Datap	oint Typ	е																
DPT_I	Name:	DP	T_Valu	e_Air	Quali	ty												
DPT F	ormat:	F ₁₆										DP	T_ID:	9	800.0			
Field	eld Description Supp.									upp.	Ra	inge	Unit	Defa	ault			
													0	f	ull	ppm	CS	3
Acces	s Type																	
♦ Inj	put																	
Ν -	→ this			1	\rightarrow th	is	\boxtimes											
Spontaneous 🛛 Cyclically: 🖂 Time-out: 31min (re										(rec.)								
Re	quest					Polli	ing:						Perio	d:				
Comn	nunication	on Ty	уре															
♦ Gr	roup Obj	ect D	atapoii	nt										Man	datory	: 🛛		
De	fault Gro	up A	ddress	: -														
Dynar	nics																	
Pov	wer dow	n: S	Save:															
Pov	wer up:	'	√alue:		No in	itialis	sation:)efau	ılt va	alue:					
					Save	d val	lue:											
										F	Read	fror	n bus:					
Excep	tion Ha	ndlin	g															
Specia	al Featu	res																

List of Functional Blocks, Input AQRoom is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	O
Water Heat Pump Control	WHPC	О
Split Unit Control	SPUC	О
VAV Control Discharge Air	VAVCDA	0

FB:	See table	LTE Cli		AQRoom	1		Mandatory Optional			
	below	Input N	ame:						Op	tional 🔝
	ription:									
	nformation is	•								ed.
DPT:	Name D	PT_HVA	ACAirQual		DPT ID	203.100) Dataty	pe format	$U_{16}Z_8$	
Field			Description	on				Sup.	Unit	Default
AirQu	ality		Air quality	/ value		M	ppm	cs		
STAT	US		Bitset					M		
- Out	OfService		Sensor o	ut of servi	ce			M	t/f	false
- Fau	lt		Sensor va	alue is cor	rupted			0	t/f	false
- Ove	rridden		Sensor is	temporar	y overridde	n		0	t/f	false
- InAl	arm		Sensor is	in alarm				0	t/f	false
- Alar	mUnAck		Acknowle	edgement	of alarm			0	t/f	false
- All c	ther Bits		reserved					NA	t/f	false
Comr	nunication:								-	
Bind	ding Group:									
Clas	S		Type				Default			
Ge	ographical	\boxtimes	Apartmer	nt . Room .	. SubZone		1.1.1			
Ap	plication Spe	ecific								
Ur	assigned		Broadcas	st 🗌	Configurat	ole 🗌				
DP A	Address:		IO Type(I	D):	331 (RAQ	S)	Property	ID:	51	
LTE	-Service (ev	ent):	InfoRepo	rt Sniffer	on Binding	Group:				
Inf	oReport		Timeout:			31	Min			
LTE	-Service (po	lling):	Dood Wil	doord / Do	sp Sniffer	on Dindin	a Croup:			
Re	ad – Respor	nse 🗌	Neau Wii	ucaiu / Ne	sp Sillier	on Bindii	ig Group.			
Value	after Power	r-up:		Default V	/alue ⊠				Stored Va	lue 🗌
Exce	otion Handli	ng:					[;	Save at Po	werdown	
Speci	al Features:									
				<u>-</u>	-			-		

List of Functional Blocks, Input AQRoom is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	O
Water Heat Pump Control	WHPC	О
Split Unit Control	SPUC	О
VAV Control Discharge Air	VAVCDA	O

3.9.2.5 Input AQSetpEff

Standard Mode

DP Nam	ne: /	AQSetpEff							Abbr.:	-				Manda	atory	1			
FB Nam	ne: S	See to	able bel	OW										Can b	e inte	ernal			
Descrip	otion																		
This info	ormatio	n is p	rovided	by th	e Fu	ınctic	onal Blo	ck 'S	Setpoin	t Man	nage	r Air	Qual	ity'.					
Datapo	int Typ	е																	
DPT_Na	ame:	DP1	Γ_Value	_AirQ	ualit	ty													
DPT Fo	rmat:	F ₁₆										DPT_	ID:	9.008					
Field	Field Description Supp.).	Range	U	Jnit	Def	aul	t		
												0		full	р	pm	С	s	
Access	Туре																		
♦ Inpu	ut																		
$N \rightarrow$	this			1 –	→ thi	is													
Spontaneous Cyclically: Time-out: 31min (rec.										rec.)									
Requ	uest					Polli	ing:					Pe	riod:						
Commu	unicatio	on Ty	/ре																
♦ Gro	up Obj	ect D	atapoint										Ν	1andator	y:	\boxtimes			
Defa	ult Gro	up A	ddress:																
Dynami	ics																		
Pow	er dowr	า: เร	Save:																
Pow	er up:	/	/alue:	Ν	lo in	itialis	sation:			Def	ault	valu	э:			\boxtimes			
				S	ave	d val	lue:												
										Rea	ad fr	rom b	us:						
Excepti	ion Hai	ndlin	g																
Special	Featu	res																	

List of Functional Blocks, **Input AQSetpEff** is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	О
Water Heat Pump Control	WHPC	О
Split Unit Control	SPUC	О
VAV Control Discharge Air	VAVCDA	O

FB:	See table below	LTE Cli										
Desci	ription:	<u> </u>							<u> </u>	otional 🗌		
This in	nformation is	provide	d by the F	unctional I	Block 'Set	oint Mar	nager Air C	Quality'. The	STATUS	is NOT		
suppo	rted.		•					•				
DPT:	Name D	PT_HVA	ACAirQual	_Z	DPT ID	203.100	0 Dataty	pe format	U ₁₆ Z ₈			
Field			Description	on				Sup.	Unit	Default		
AirQu	ality		Air quality	y value				M	ppm	cs		
STAT	US		Bitset					M				
- All E	Bits		ignore					NA	t/f	false		
Comr	nunication:								-	-		
Bind	Binding Group:											
Clas	SS		Туре				Default					
Ge	ographical	\boxtimes	Apartmer	nt . Room .	SubZone		1.1.1					
Ар	plication Spe	ecific 🗌										
Ur	assigned		Broadcas	st 🗌	Configura	ble 🗌						
DP A	Address:		IO Type(ID):	102 (SMA	AQ)	Property	ID:	51			
	-Service (ev	rent):	InfoRepo	rt Sniffer	on Binding	g Group:						
Inf	oReport	\boxtimes	Timeout:			31	Min					
	-Service (po ead – Respor		Read Wil	dcard / Re	sp Sniffer	on Bindi	ng Group:					
Value	after Powe	r-up:		Default V	′alue ⊠			;	Stored Va	lue 🗌		
Exce	otion Handli	ing:						Save at Po	werdown			
Speci	al Features	:										
										·		

List of Functional Blocks, **Input AQSetpEff** is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	0
Water Heat Pump Control	WHPC	0
Split Unit Control	SPUC	0
VAV Control Discharge Air	VAVCDA	O

3.9.2.6 Input ChangeOverStatusAir

Standard Mode

DP N	ame:	ChangeOverStatusAir Abbr.:										Manda	tory	
FB Na	ame:	See ta	See table below Can be internal											
Desc	Description													
	This information is provided by the Functional Block 'Air Change Over Status Sensor'.													
	point Typ													
	Name:	DPT	DPT_Heat/Cool											
	Format:	B ₁								DPT_		1.100		
Field		Desc	cription							Sup	p.	Range	Unit	Default
Statu	S		us of the a	air						0		0/1	Bit	cs
			cooling											
		1 =	heating											
Acce	Access Type													
♦ Ir	nput													
Ν	\rightarrow this			$1 \rightarrow th$	is									
Sp	ontaneou	JS	\boxtimes		Cycli	cally:				T	ime-o	ut:	31min ((rec.)
	equest				Pollin	ng:				Р	eriod:			
Com	municati	on Ty _l	pe											
	roup Obj										N	l andatory	<i>'</i> : 🛛	
De	efault Gro	up Ad	dress:											
Dyna														
Po	ower dow	n: S	ave:											
Po	ower up:	V	alue:	No in	itialisa	ation:			Defau	ılt valu	ıe:			
				Save	d valu	ie:								
									Read	from	bus:			
Exce	ption Ha	ndling												
Spec	ial Featu	res												

List of Functional Blocks, Input ChangeOverStatusAir is used in:

Name of FB	Abbreviation	Mandatory Optional
VAV Control Discharge Air	VAVCDA	0

below Input Name: Option	onai i i										
Description:	<u> </u>										
This information is provided by the Functional Block 'Air Change Over Status Sensor'. The supported.											
DPT: Name DPT_Heat/Cool_Z DPT ID 200.100 Datatype format B₁Z ₈											
Field Description Sup. Unit	Default										
Change Over Status Status of the air $0 = cooling$ M 0/1	cs										
1 = heating											
STATUS Bitset M											
- OutOfService Sensor out of service M t/f	false										
- Fault Sensor value is corrupted O t/f	false										
- Overridden Sensor is temporary overridden O t/f	false										
- InAlarm Sensor is in alarm O t/f	false										
- AlarmUnAck Acknowledgement of alarm O t/f	false										
- All other Bits reserved NA t/f	false										
Communication:											
Binding Group:											
Class Type Default											
Geographical 🔲											
Application Specific⊠ DistrSegmV 1											
Unassigned Broadcast Configurable											
DP Address: IO Type(ID): 341 (ACOS) Property ID: 51											
LTE-Service (event): InfoReport Sniffer on Binding Group:											
InfoReport											
LTE-Service (polling): Read – Response ☐ Read Wildcard / Resp Sniffer on Binding Group:											
Value after Power-up: Default Value □ Stored Value	е 🗌										
Exception Handling: Save at Powerdown											
Special Features:											

List of Functional Blocks, Input ChangeOverStatusAir is used in:

Name of FB	Abbreviation	Mandatory Optional
VAV Control Discharge Air	VAVCDA	О

3.9.2.7 Input ChangeOverStatusWater

Standard Mode

DP Na	ime:	ChangeOverS	StatusWa	ter	Abbr.:			Manda	Mandatory [
FB Na	me:	See table belo)W					Can be	internal			
Descri	Description											
This in	This information is provided by the Functional Block 'Water Change Over Status Sensor'.											
Datap	oint Typ	е										
DPT_N	Name:	DPT_Heat/C	Cool									
DPT F	ormat:	B ₁					DPT_ID:	1.100				
Field		Description					Supp.	Range	Unit	Default		
Status		Status of the 0 = cooling					Ο	0/1	Bit	cs		
		1 = heating	•									
Acces	Access Type											
♦ Inp	out											
N -	→ this		$1 \rightarrow th$	is 🛛								
Spo	ontaneou	ıs 🛛		Cyclically:	\boxtimes		Time-	out:	31min (rec.)		
Red	quest			Polling:			Perio	d:				
Comm	nunication	on Type										
♦ Gr	oup Obj	ect Datapoint						Mandatory	<i>r</i> : 🛛			
Def	fault Gro	up Address:										
Dynan	nics											
Pov	wer dow	n: Save:										
Pov	wer up:	Value:	No in	nitialisation:		Defau	ılt value:					
			Save	ed value:								
						Read	from bus:					
Excep	tion Ha	ndling										
Specia	al Featu	res										

List of Functional Blocks, Input ChangeOverStatusWater is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	О
Radiator and Chilled Ceiling Room Control	RCCRC	О
VAV Control Discharge Air	VAVCDA	0

FB:	See table	LTE CI	ient ChangeOverStatusWater N							Mano	latory 🗌
	below	Input N	ame:								tional 🗌
	ription:	=								•	
This information is provided by the Functional Block 'Water Change Over Status Sensor'. The ST										r'. The ST	ATUS is
supported.											
DPT:	DPT: Name DPT_Heat/Cool_Z DPT ID 200.100 Datatype format B									B_1Z_8	
Field			Description	on					Sup.	Unit	Default
Chan	ge Over Stat	us	Status of	the water					М	Bit	cs
	_		$0 = \cos \theta$	ling							
			1 = hea	iting							
STAT	US		Bitset						М		
- Out	OfService		Sensor o	ut of servic	ce				M	t/f	false
- Fau	lt			alue is corr					0	t/f	false
	erridden				y overridde	n			0	t/f	false
- InAl	arm		Sensor is						0	t/f	false
- Alaı	- AlarmUnAck Acknowledgement of alarm O							t/f	false		
- All c	other Bits		reserved						NA	t/f	false
Comr	nunication:										
Bine	ding Group:										
Clas	SS		Type				Def	fault			
Ge	eographical										
Ap	plication Spe	ecific	DistrSegr	mH or			1				
			DistrSegr	mC							
Ur	nassigned		Broadcas		Configurat						
DP	Address:		IO Type(I	ID):	342 (WCC	S)	Pr	operty II	D:	51	
LTE	-Service (ev	ent):	InfoRepo	rt Sniffer	on Binding						
Inf	oReport	\boxtimes	Timeout:			31	Min	1			
LTE	-Service (po	lling):	Dood Wil	doord / Do	sp Sniffer	on Dindir	ر م	roun			
Re	ead – Respor	nse	Reau Wii	ucaiu / Ke	sp Sillier	JII DIIIUII	ig G	oroup.			
Value	after Powe	r-up:	3	Default V	′alue 🛚				Ç	Stored Va	lue 🗌
Exce	otion Handli	ng:						S	Save at Po	werdown	
Speci	ial Features:										

List of Functional Blocks, Input ChangeOverStatusWater is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	О
Radiator and Chilled Ceiling Room Control	RCCRC	0
VAV Control Discharge Air	VAVCDA	0

3.9.2.8 Input ContrMode

Standard Mode

DP Name:	ContrMode	Abbr.:		Manda	Mandatory							
FB Name:	See table below	See table below										
Description												
This information is provided by the Functional Block 'Programme to HVAC-Mode Conversion' or												
'Building/Occ-Mode Source'.												
	Datapoint Type											
DPT_Name:	DPT_HVACContrMode											
DPT Format:	N ₈		DPT_ID:	20.10								
Field	Description		Supp.	Range	Unit	Default						
ContrMode			M	020	enum.	cs						
	0 = Auto		0									
		ng Wmup	0									
		htPurge	0									
	5 = Precool $6 = Off$		0									
		erg Heat	0									
	9 = Fan Only $10 = Free$		0									
		Demand	0									
	all other enumerations		NA									
Access Type												
◆ Input												
$N \rightarrow this$	\square 1 \rightarrow this \square											
Spontaneo		: 🛛	Time-		31min (rec.)						
Request	Polling:		Period	<u>:</u>								
Communicat	ion Type											
♦ Group Ob	ject Datapoint			Mandato	ry: 🛛							
Default Gr	oup Address:											
Dynamics												
Power dov	vn: Save:											
Power up:	Value: No initialisation	: [Default value:									
	Saved value:											
			Read from bus:									
Exception Ha	andling											
Special Feat	ures											
	· · · · · · · · · · · · · · · · · · ·											

List of Functional Blocks, **Input ContrMode** is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	О
Water Heat Pump Control	WHPC	О
Split Unit Control	SPUC	О
Radiator and Chilled Ceiling Room Control	RCCRC	0
Radiator Room Control TU	RRCTU	0
VAV Control Discharge Air	VAVCDA	0

FB:	See table below	LTE Cli		ContrMo	de					latory tional
Description:										tional <u> </u>
	nformation is	provide	d by the F	unctional	Block 'Pro	gramme t	o HVAC-Mo	ode Conve	ersion' or	
	ing/Occ Mod					grammo	01117101111	000	3101011 01	
DPT:			ACContrM		DPT ID	201.104	1 Datatyp	e format	N ₈ Z ₈	
Field			Descripti	_				Sup.	Unit	Default
Contr	Mode							M	020	cs
			0 = Auto	0				0		
			1 = Heat 2 = Mng Wrmup					0		
			3 = Coc	ol	4 =	Night Pui	rge	0		
			5 = Pre	cool	6 =			0		
			7 = Tes	t	8 =	Emerg H	eat	0		
			9 = Fan	Only		Free Coo		0		
			11 = Ice		_	No Dema	and	0		
			all other	enumeration	ons			NA		
STAT	US		Bitset					М		
- Out	OfService		Sensor o	ut of servi	ce			M	t/f	false
- Fau	lt		Sensor v	alue is cor	rupted			0	t/f	false
- Ove	erridden				y overridd	en		0	t/f	false
- InA	arm		Sensor is	s in alarm				0	t/f	false
- Alaı	mUnAck		Acknowle	edgement	of alarm			0	t/f	false
- All d	other Bits		reserved					NA	t/f	false
Com	nunication:		-					_		-
	ding Group:									
Clas	ss		Type				Default			
Ge	eographical		Apartme	nt . Room	. SubZone		1.1.1			
Ap	plication Spe	ecific								
Ur	assigned		Broadcas	st 🗌	Configura	ble 🗌				
DP.	Address:				104 (PMC	C)			54	
			IO Type(ID):	109 (BOS	S)	Property I	D:	55	
					115 (HVA	(COPT)			56	
LTE	-Service (ev	ent):			on Bindin	g Group:				
	oReport	\boxtimes	Timeout:			31	Min			
LTE	-Service (po	olling):	Dood Wi	Idoord / Do	esp Sniffer	on Dindir	og Croup:			
Re	ead – Respor	nse	Reau Wi	iucaiu / Ke	ssp Silliei	OH BIHUII	ig Group.			
	after Powe			Default \	/alue ⊠				Stored Va	lue 🗌
Exce	otion Handli	ng:					5	Save at Po	werdown	
Spec	ial Features									

List of Functional Blocks, **Input ContrMode** is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	0
Water Heat Pump Control	WHPC	0
Split Unit Control	SPUC	0
Radiator and Chilled Ceiling Room Control	RCCRC	0
Radiator Room Control TU	RRCTU	0
VAV Control Discharge Air	VAVCDA	О

3.9.2.9 Input DewPointStatus

Standard Mode

DP N	lame:	DewPointS	Status		Abbr.:		i	Manda	Mandatory	
FB N	lame:	See table b	oelow					Can be	internal	
Desc	cription									
This	informatic	n is provid	ed by the F	unctional Block	(Dew Poi	int Stat	us Sensor			
Data	point Typ	e								
DPT_	_Name:	DPT_Ala	rm							
DPT Format: B ₁								1.005		
Field		Description	on				Supp.	Range	Unit	Default
Statu	IS	Dew poin					0	0/1	Bit	cs
		0 = no a	alarm							
		1 = alar	rm							
Acce	ess Type									
♦ lı	♦ Input									
Ν	$N \rightarrow this$ \square $1 \rightarrow this$ \boxtimes									
S	pontaneo	us 🛛		Cyclically:			Time-	-out:	31min ((rec.)
	equest			Polling:			Perio	d:		
Com	municati	on Type								
♦ (Group Obj	ect Datapo	oint					Mandatory	r: 🛛	
D	efault Gro	up Addres	s:							
Dyna	amics									
Po	ower dow	n: Save:								
Po	ower up:	Value	: No ir	nitialisation:		Defau	ult value:			
			Save	ed value:						
						Read	from bus:			
Exce	eption Ha	ndling								
						·				
Spec	cial Featu	res								

List of Functional Blocks, Input DewPointStatus is used in:

Name of FB	Abbreviation	Mandatory Optional
Radiator and Chilled Ceiling Room Control	RCCRC	О

FB:	See table below	LTE Cli		DewPoint	Status					datory 🗌	
Desci	ription:	Impacit	uiiic.	-					<u> </u>	tional	
	nformation is	provided	by the F	unctional E	Block 'Dew	Point St	atus Sens	or'.			
DPT:		PT Aları			DPT ID	1.005		pe format	B ₁		
Field		_	Description	on				Sup.	Unit	Default	
Dew Point Status									Bit	CS	
			0 = no	alarm							
			1 = ala	rm							
Comr	Communication:										
Bind	ding Group:										
Clas	S		Type				Default				
Ge	ographical	\square	Apartment . Room . SubZone 1.1.1								
Ap	plication Spe	ecific 🔲									
Ur	assigned		Broadca	ıst 🗌	Configura	able 🗌					
DP A	Address:		IO Type		344 (DPS		Property	ID:	51		
	-Service (ev	/ent <u>):</u>	InfoRep	ort Sniffer	on Bindin	g Group:	1				
	oReport	\square	Timeout	:		31	Min				
	- Service (po ad – Respor		Read W	ildcard / Re	esp Sniffer	on Bind	ing Group:				
Value	after Powe	r-up:		Default V	alue 🛚			,	Stored Va	lue 🗌	
Exception Handling:					Save at Po	Save at Powerdown					
Speci	al Features	:									

List of Functional Blocks, **Input DewPointStatus** is used in:

Name of FB	Abbreviation	Mandatory Optional
Radiator and Chilled Ceiling Room Control	RCCRC	О

3.9.2.10 Input DisableDamper

Standard Mode

DP Na	ame:	Disabl	ableDamper					Abbr.:			Manda	Mandatory		
FB Na	ame:	See ta	able below	1							Can be	internal		
Desci	ription													
This in	nformatic	n is p	rovided by	/ the Fu	unction	al Bloc	k 'H\	VAC O	ptimise	er'.				
Datap	oint Typ	ре												
DPT_	Name:	DPT	_Enable											
DPT F	DPT Format: B ₁ DPT_ID: 1.003													
Field		Desc	cription							Supp.	Range	Unit	Default	
Status	3									0	0/1	Bit	cs	
		0 =	= disable											
		1 =	= enable											
Acces	ss Type													
♦ In	put													
N -	\rightarrow this			$1 \rightarrow th$	is	\boxtimes								
Sp	ontaneo	us	\boxtimes		Cyclic	ally:		\boxtimes		Time	-out:	31min ((rec.)	
Re	equest				Polling	g:				Perio	d:			
Comr	nunicati	on Ty	ре											
♦ G	roup Obj	ect Da	atapoint								Mandatory	/:		
De	fault Gro	up Ad	ldress:											
Dyna	mics													
Po	wer dow	n: S	Save:											
Po	wer up:	V	'alue:	No in	itialisa	tion:			Defau	ılt value:				
				Save	d value	e:								
									Read	from bus				
Exce	otion Ha	ndling	3											
Speci	ial Featu	res												
			•		•	•				•				

List of Functional Blocks, Input DisableDamper is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	О
Water Heat Pump Control	WHPC	О
Split Unit Control	SPUC	0

FB:	See table below	LTE Clie		DisableDa				Mandatory Coptional				
Desci	ription:	Impacia								<u> </u>		
		is provided	bv the F	unctional B	lock 'HVA	C Optimi	ser'.					
DPT:		DPT Enab	_		DPT ID	1.003		atvpe	format	B ₁		
Field		_	Descrip	tion					Sup.	Unit	Default	
Status	3									Bit	CS	
			0 = di	sable								
			1 = er	nable								
Comr	nunication	:	-					-		-	-	
Bine	ding Group):										
Clas	SS		Type				Defaul	t				
Ge	eographical	\boxtimes	Apartment . Room . SubZone 1.1.1									
Ap	plication Sp	pecific 🗌										
	nassigned		Broadca	Broadcast Configurable								
	Address:		ІО Турє		115 (HVA		Prope	rty ID:		61		
	-Service (e	event):	InfoRep	ort Sniffer	on Bindin	g Group:			-			
	oReport	\square	Timeou	t:		31	Min					
	: -Service (p ead – Respo		Read W	/ildcard / Re	esp Sniffer	on Bindi	ng Gro	up:	-			
Value	after Pow	er-up:	•	Default Va	alue 🛚				Ç	Stored Val	ue 🗌	
Exce	otion Hand	lling:	Save a					e at Pov	at Powerdown 🗌			
Speci	ial Feature	s:						·				

List of Functional Blocks, **Input DisableDamper** is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	0
Water Heat Pump Control	WHPC	О
Split Unit Control	SPUC	0

3.9.2.11 Input EmergMode

Standard Mode

DF	Name:	EmergMode		Abbr.:			Mand	Mandatory		
FB	Name:	See table below	I				Can b	e interna		
	scription									
Th	is information	on is provided by	the Functional	Block ' HVAC-I	Emerge	ency Sour	ce'.			
Da	tapoint Typ	ре								
DF	PT_Name:	DPT_HVACE	mergencyMode							
DF	T Format:	N ₈				DPT_ID:	20.10	6		
Fie	eld	Description				Supp.	Range	Unit	Default	
En	nergMode		epressure $3 =$ nutdown $5 = E$			M 0 0 0 NA	05	enum.	cs	
۸۵	cess Type	Tall Other enum	lerations			INA				
<u> </u>	Input									
_	$N \rightarrow this$		1 → this	7						
	Spontaneo	us 🏻	T → triis ∠			Time	-Out:	31min	(roc)	
	Request	us 🖂	Polling:	iy.		Perio		31min (rec.)		
Co	mmunicati	on Type	i omig.			11 0110	<u>. </u>			
•		ject Datapoint					Mandato	ry: 🛛		
		oup Address:						· / · <u> </u>		
Dv	namics	, ap , ta a. ccc.								
	Power dow	n: Save:	П							
	Power up:	Value:	No initialisation	on:	Defau	ılt value:				
	·		Saved value:							
			•		Read	from bus:	1			
Ex	ception Ha	ndling								
		-								
Sp	ecial Featu	ires								
				•						

List of Functional Blocks, **Input EmergMode** is used in:

Name of FB	Abbreviation	Mandatory Optional		
Fan Coil Control	FCC	0		
Water Heat Pump Control	WHPC	О		
Split Unit Control	SPUC	O		
VAV Control Discharge Air	VAVCDA	O		
VAV Control Extract Air	VAVCEA	О		

FB:	See table	LTE Clie		EmergMo	de					Mandatory Optional		
D	below	Input Na	ıme:	_						Ор	lionai 🔝	
	ription:	ام ما ما ما ما	hu tha F			C [anav Ca		The C	TATUC:		
	nformation is	provided	by the F	unctional E	SIOCK HVA	C Emerg	ency Soi	urce.	rne S	IAIUS IS		
suppo		DT IIV/A	25	Mada 7	DDT ID	004 400	Datat	· f-		NI 7		
DPT:	Name D	PT_HVA			DPT ID	201.109	Datat	type fo		N ₈ Z ₈	D-414	
Field			Descrip	tion					Sup.	Unit	Default	
Emer	gMode		0 N						M	05	CS	
			0 = Nc			EmergPi			0			
				nergDepres		EmergPi			0			
				nergShutdo		EmergFi	ire		0			
<u> </u>				r enumerati	ons				NA			
STATUS Bitset									M	. 16		
	OfService			out of servi					M	t/f	false	
- Fault Sensor value is corrupted								0	t/f	false		
	erridden	Sensor is temporary overridden							0	t/f	false	
- InAl				is in alarm					0	t/f	false	
	mUnAck			rledgement	of alarm				0	t/f	false	
	other Bits		reserve	<u>d</u>					NA	t/f	false	
	nunication:											
	ding Group:											
Clas	-		Туре				Default					
	ographical	<u>Ø</u> .	Apartm	ent . Room	. SubZone)	1.1.1					
	plication Spe	ecific 🔲		<u></u>		<u></u>						
	assigned		Broadca		Configura							
	Address:		Ю Туре		108 (HVA		Propert	ty ID:		51		
	-Service (ev	<u> </u>		ort Sniffer	on Bindin							
	oReport	\boxtimes	Timeou	t:		31	Min					
	-Service (po ad – Respor		Read W	/ildcard / R	esp Sniffer	on Bindi	ng Grou	p:				
Value after Power-up: Default Value ⊠								-	(Stored Val	ue 🗌	
							at Pov	verdown				
Speci	al Features											

List of Functional Blocks, **Input EmergMode** is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	0
Water Heat Pump Control	WHPC	O
Split Unit Control	SPUC	O
VAV Control Discharge Air	VAVCDA	0

3.9.2.12 Input EnableCool

Standard Mode

Not applicable

LTE-HEE Mode

FB:	See table	LTE Clie	ent	EnableC	ool					Mand	atory 🗌
	below	Input Na	ıme:							Opt	tional 🗌
Desc	ription:	=		=						-	
This i	nformation is	provided	by the F	unctional	Block 'HVA	C Optimi	ser'. The	STAT	TUS is	NOT supp	oorted.
DPT:	Name D	PT_Enab	leH/CSt	age_Z	DPT ID	201.105	Datat	type fo	rmat	N_8Z_8	
Field			Descrip	tion					Sup.	Unit	Default
Status	3								М	03	CS
			0 = di	sabled					М		
			1 = er	nable stag	e A				М		
			2 = er	nable stag	e B				M		
			3 = er	nable both	stages				М		
			all other	r enumera	tions				NA		
STAT	US		Bitset						М		
- All I	Bits		ignore						NA	t/f	false
Com	nunication:										
Bine	ding Group:										
Clas	ss		Type				Default				
Ge	eographical		Apartm	ent . Roon	n . SubZone)	1.1.1				
	plication Spe	ecific 🔲									
	nassigned		Broadca	ast 🗌	Configura						
	Address:		10 Туре		115 (HVA		Propert	ty ID:		59	
	-Service (ev		InfoRep	ort Sniffe	r on Bindin						
	oReport	\boxtimes	Timeou	t:		31	Min				
	-Service (po		Read M	/ildcard / F	Resp Sniffer	on Rindi	ina Graur	n·			
Re	ead – Respor	nse 🗌	iteau vi	/ilucalu / I	vesp offiller	OH DIHUI	ing Group	ρ			
Value	after Powe	r-up:		Default \	Value 🛚			- -	5	Stored Val	ue 🗌
Exce	otion Handli	ing:						Save	at Pov	verdown	
Spec	ial Features	:									
				-				•	_		

List of Functional Blocks, Input EnableCool is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	О
Radiator and Chilled Ceiling Room Control	RCCRC	0
VAV Control Discharge Air	VAVCDA	0

3.9.2.13 Input EnableHeat

Standard Mode

Not applicable

LTE-HEE Mode

FB:	See table	LTE CI	ient	Enable	leat				Mano	latory 🗌
	below	Input N	lame:						Ор	tional 🗌
Desc	ription:								-	
This i	nformation is	provide	d by the F	unctional	Block 'HVA	AC Optim	iser'. The S	STATUS is	NOT sup	ported.
DPT:	Name D	PT_Ena	bleH/CSta	age_Z	DPT ID	201.10	5 Dataty	pe format	N_8Z_8	
Field			Description	on				Sup.	Unit	Default
Status	5							M	03	cs
			0 = disa	abled				M		
				able stage				M		
				able stage				M		
			3 = ena	able both	stages			M		
			all other	enumerat	ions			NA		
STAT			Bitset					M		
- All I			ignore					NA	t/f	false
Comr	nunication:									
Bine	ding Group:									
Clas	-		Туре				Default			
	eographical		Apartmer	nt . Room	. SubZone		1.1.1			
	plication Spe	ecific								
	nassigned		Broadcas	st 🗌	Configura					
	Address:		IO Type(115 (HVA		Property	ID:	57	
	-Service (ev	<u> </u>	InfoRepo	rt Sniffer	on Binding	g Group:				
	oReport	\boxtimes	Timeout:			31	Min			
	-Service (po		Read Wil	ldcard / R	esp Sniffer	on Rindii	na Group:			
Re	ead – Respor	nse	itcaa vvii			On Dinai	ing Group.			
Value	after Powe	r-up:		Default	Value 🛚			(Stored Va	lue 🗌
Exce	otion Handli	ng:						Save at Po	werdown	
Spec	ial Features									
							- 	·		

List of Functional Blocks, Input EnableHeat is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	O
Water Heat Pump Control	WHPC	O
Split Unit Control	SPUC	O
Radiator and Chilled Ceiling Room Control	RCCRC	O
VAV Control Discharge Air	VAVCDA	O

3.9.2.14 Input FanManual

LTE-HEE Mode

Not applicable

Standard Mode

DP Name:	Fan	Manual			Abbr.:			Mandat	ory	
FB Name:	See	table below						Can be	internal	
Description										
This informati		provided by	the Funct	tional Block 'l	Jser Fan	Spee	d Setting'.			
Datapoint Ty										
DPT_Name:	DI	PT_Enable								
DPT Format:	B ₁						DPT_ID:	1.003		
Field	De	escription					Supp.	Range	Unit	Default
Bit							0	0 / 1	Bit	cs
		= disabled →								
	_	= enabled →	manual =	= HMI Value is	s valid					
Access Type	<u> </u>									
◆ Input										
$N \rightarrow this$			$1 \rightarrow \text{this}$							
Spontaneo	ous			clically:			Time-		NO *	
Request			Po	olling:			Perio	d:		
Communicat										
	•	Datapoint						Mandatory	·: 🛛	
Default Gr	oup .	Address:								
Dynamics										
Power dov	vn:	Save:								
Power up:		Value:	No initia	lisation:		Defau	ılt value:			
			Saved va	alue:						
						Read	from bus:			
Exception Ha										
* NO timeout			ility with ex	xisting EIB pr	oducts.					
Special Feat	ures									

List of Functional Blocks, Input FanManual is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	O
Water Heat Pump Control	WHPC	0
Split Unit Control	SPUC	О

3.9.2.15 Input FanSpeedUser

Standard Mode

DP Name:	F	anSp	SpeedUser Abbr.: Mandatory \Box														
FB Name:	S	ee ta	able belo	W								C	an be	internal			
Description	n																
This inform	nation	is p	rovided l	by the	uncti	onal Block	k 'U	ser Fa	n Spee	ed S	etting'.						
Datapoint	Туре)															
DPT_Name	e:	DPT	_Scaling)													
DPT Forma	at:	F_{16}								DP	T_ID:	5.	.001				
Field			cription							S	upp.	Rar	nge	Unit	Defa	aul	t
											0	fu	ıll	%	Ö	s	
Access Ty	/ре																
♦ Input																	
$N \rightarrow thi$	s			$1 \rightarrow 1$	his												
Spontar	neous	3	\boxtimes		Сус	clically:					Time-	-out:		NO *			
Reques	st				Pol	ling:					Perio	d:					
Communi	catio	n Ty	ре														
♦ Group	Obje	ct Da	atapoint									Mano	datory	: 🛛			
Default	Grou	p Ad	ldress:														
Dynamics																	
Power of	down:	: S	Save:														
Power u	ıp:	V	/alue:	No	initiali	sation:			Defa	ult va	alue:			\boxtimes			
				Sav	ed va	ılue:											
									Read	l fror	n bus:						
Exception	Han	dling	g														
* NO time	out du	ue to	compat	ibility w	ith ex	isting EIB	pro	ducts.									
Special Fe	ature	es															
				·				·	·							_	

List of Functional Blocks, **Input FanSpeedUser** is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	O
Water Heat Pump Control	WHPC	O
Split Unit Control	SPUC	0

LTE-HEE Mode

FB:	See table	LTE Clie		FanSpeed	dUser					Mand	
	below	Input Na	ıme:							Op:	tional 🗌
	ription:										
This i	nformation is		_	unctional E	Block 'User	Fan Spe	ed Setti	ng'. Tl	he STA	ATUS is su	ipported.
DPT:	Name D	PT_RelV	alue_Z		DPT ID	202.001	Data	type fo	ormat	U_8Z_8	
Field			Descrip	tion					Sup.	Unit	Default
Fan S	speed		Fan spe	ed value ir	n percent				М	%	CS
STAT	US		Bitset						M		
- Out	OfService		Sensor	out of serv	ice				M	t/f	false
- Fau	lt		Sensor	value is co	rrupted				0	t/f	false
- Ove	erridden		Sensor	is tempora	ry overridd	en			0	t/f	false
- InA	arm		Sensor	is in alarm					0	t/f	false
- Ala	mUnAck		Acknow	ledgement	of alarm				0	t/f	false
- All d	other Bits		reserve	d					NA	t/f	false
Comi	nunication:		-					-		-	_
Bin	ding Group:										
Clas	SS		Type				Default				
Ge	eographical	\boxtimes	Apartme	ent . Room	. SubZone)	1.1.1				
Ap	plication Spe	ecific									
Ur	nassigned		Broadca	ast 🗌	Configura	ıble 🗌					
DP	Address:		ІО Турє	e(ID):	393 (UFS	5)	Proper	ty ID:		51	
LTE	-Service (ev	vent):	InfoRep	ort Sniffer	on Bindin	g Group:					
	oReport	\boxtimes	Timeou	t:		NO *	Min				
	-Service (po		Pood M	/ildcard / R	oen Sniffor	on Rindi	na Grou	n·			
Re	ead – Respor	nse	iteau vi	riiucaiu / IX	esh Silliei	OH BIHUI	ng Grou	ρ			
Value	after Powe	r-up:	=	Default V	′alue 🛚			-	5	Stored Val	ue 🗌
	otion Handli							Save	at Pov	werdown	
* NO	timeout due	to compa	tibility w	ith S-Mode	and existing	ng EIB pr	oducts.				
Spec	ial Features	:									

List of Functional Blocks, **Input FanSpeedUser** is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	0
Water Heat Pump Control	WHPC	0
Split Unit Control	SPUC	О

3.9.2.16 Input ForceSignCFDM

Standard Mode

Not applicable

LTE-HEE Mode

FB:	See table	LTE CI	ient	ForceSig	nCFDM					Mand	atory
	below	Input N	lame:							Op:	tional 🗌
Desci	ription:	-								-	
This in	nformation	is provide	d by the F	unctional E	Block 'Cool	Flow De	emand M	anage	er'.		
DPT:	Name	DPT_For	ceSignCod	ol	DPT ID	21.101	Data	type f	ormat	B ₈	
Field			Description	on					Sup.	Unit	Default
Bitset									М		
				ForceRequ	uest				M	t/f	false
			all othe	r bits					NA		false
Comr	nunicatior	า :									
Bind	ding Grou	p:									
Clas	S		Туре				Default				
	ographical										
	plication S	pecific⊠	DistrSegr				1				
	assigned		Broadcas		Configurat						
DP /	Address:		IO Type(208 (CFD		Propert	y ID:		52	
	-Service (event):	InfoRepo	rt Sniffer	on Binding						
	oReport	\square	Timeout:			31	Min				
	-Service (Read Wil	dcard / Ra	sp Sniffer	on Rindir	na Groun	·			
Re	ad – Resp	onse	iteau vvii	ucaru / ixe	sp offilier	on bindii	ig Group	, <u> </u>			
Value	after Pow	/er-up:		Default V	′alue 🛚				(Stored Val	ue 🗌
Excep	otion Hand	dling:						Sav	e at Po	werdown	
Speci	al Feature	s:									
	<u> </u>			<u> </u>							

List of Functional Blocks, **Input ForceSignCFDM** is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	О
Radiator and Chilled Ceiling Room Control	RCCRC	О

3.9.2.17 Input ForceSignCPM

Standard Mode

Not applicable

LTE-HEE Mode

FB:	See table	LTE CI	ient	ForceSig	nCPM					Mand	atory	
	below	Input N	lame:							Op:	tional 🗌	
Desci	ription:	-		-						-		
This in	nformation	is provide	d by the F	unctional E	Block 'Cool	Flow De	emand M	anage	er'.			
DPT:	Name	DPT_For	ceSignCod	ol	DPT ID	21.101	Data	type f	ormat	B ₈		
Field Descrip			Description	on					Sup.	Unit	Default	
Bitset									M			
			Bit 0 =	ForceRequ	uest				M	t/f	false	
			all othe	r bits					NA		false	
Communication:								-			-	
Bind	Binding Group:											
Class			Туре				Default					
Ge	eographical	<u> </u>										
	plication S	pecific⊠	DistrSegr				1					
Ur	assigned		Broadcas	st 🗌	Configurat	ole 🗌						
DP A	Address:		IO Type(199 (CPM	,	Propert	y ID:		53		
	-Service (event):	InfoRepo	rt Sniffer	on Binding							
	oReport	\square	Timeout:			31	Min					
	-Service (Read Wil	deard / Re	sp Sniffer	on Rindir	na Groun	·				
Re	ad – Resp	onse	ixeau vvii	ucaiu / ive	sp offilier	on bindii	ig Group	, <u> </u>				
Value after Power-up:				Default V	′alue 🛚					Stored Val	ue 🗌	
Exception Handling:								Sav	e at Po	werdown		
Speci	al Feature	s:										
				<u> </u>								

List of Functional Blocks, Input ForceSignCPM is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	О
Radiator and Chilled Ceiling Room Control	RCCRC	О

3.9.2.18 Input ForceSignHFDM

Standard Mode

Not applicable

LTE-HEE Mode

FB:	See table	LTE C	ient	ForceSign	hHFDM					Mand	atory 🗌	
	below	Input I	lame:							Opt	tional 🗌	
Desci	ription:	•		•						=		
This in	nformation	is provide	ed by the l	Functional E	Block 'Hea	t Flow Der	mand Ma	anager'.				
DPT:	Name	DPT_For	ceSign		DPT ID	21.100	Datat	ype forn	nat	B ₈		
Field			Descrip	otion				Sı	up.	Unit	Default	
Bitset								1	M		CS	
			Bit 0	= ForceReq	uest			(0	t/f		
			Bit 1	Protection)			(0	t/f		
			Bit 2	= Oversupp	ly			(0	t/f		
				= Overrun					0	t/f		
				= DHWNorr					NA t/f NA t/f			
				= DHWLegi				N				
				= RoomHC				(0	t/f		
			Bit 7	= RoomHMa	ax			(0	t/f		
Comr	nunication											
Bind	ding Group	o:										
Clas	SS		Type				Default					
	eographical]									
Ap	plication S	pecific 🛭	DistrSe	gmH			1					
Ur	assigned		Broado	ast 🗌	Configura	able 🗌						
	Address:		ІО Тур	e(ID):	144 (HFD	OM)	Propert	y ID:		52		
	-Service (e	event):	InfoRe	oort Sniffer	on Bindir							
Inf	oReport	\boxtimes	Timeou	ıt:		31	Min					
LTE	-Service (polling):	Pood V	Vildcard / Re	oco Sniffo	r on Bindir	a Grour	· ·				
Re	ad - Resp	onse	Reau v	viiucaiu / Ke	esp Sillie	OH BIHUII	ig Group	J				
Value after Power-up:				Default V	alue 🛚			-	Stored Value			
Exce	Exception Handling:							Save at	t Pov	verdown		
Speci	al Feature	:s:							_			

List of Functional Blocks, **Input ForceSignHFDM** is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	О
Radiator and Chilled Ceiling Room Control	RCCRC	О
Radiator Room Control TU	RRCTU	О

3.9.2.19 Input ForceSignHPM

Standard Mode

Not applicable

LTE-HEE Mode

FB:	See table	LTE Clie	ent	ForceSign	HPM					Mand	atory 🗌		
	below	Input Na	me:							Opt	tional 🗌		
Desc	ription:	-		-						-			
This is	nformation is	s provided	by the F	Functional E	Block 'Hea	Flow De	mand Ma	anage	∍r'.				
DPT:	Name [PT_Force	Sign		DPT ID	21.100	Datat	type fo	ormat	B ₈			
Field			Descrip	tion					Sup.	Unit	Default		
Bitset									М		CS		
			Bit 0 :	= ForceReq	uest				0	t/f			
				= Protection					0	t/f			
			Bit 2 :	= Oversupp	ly				0	t/f			
			Bit 3 :	= Overrun					0	t/f			
			-	= DHWNorn					NA	NA t/f			
				= DHWLegi									
				= RoomHC					0	t/f			
			Bit 7 :	= RoomHMa	ax				0	t/f			
Comr	nunication:							-					
Bine	ding Group	:											
Clas	ss		Type	Default									
	eographical												
Ap	plication Sp	ecific 🛚	DistrSe	gmH			1						
Ur	assigned		Broadc	ast 🗌	Configura	able 🗌							
	Address:		IO Туре	e(ID):	136 (HPN	/ I)	Propert	ty ID:		53			
LTE	-Service (e	vent):	InfoRep	ort Sniffer	on Bindin	g Group:							
Inf	oReport	\boxtimes	Timeou	t:		31	Min						
LTE	-Service (p	olling):	Dood M	/ildcard / Re	oon Cniffor	on Dindi	na Crau	n:					
Re	ad – Respo	nse	Reau v	viidcaid / Ke	esp Sillie	OH BIHUII	ng Group	p					
Value after Power-up:				Default V	alue 🛚					Stored Val	ue 🗌		
Exception Handling:								Save	at Pov	werdown			
Speci	al Features	s:											

List of Functional Blocks, **Input ForceSignHPM** is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	0
Radiator and Chilled Ceiling Room Control	RCCRC	0
Radiator Room Control TU	RRCTU	0

3.9.2.20 Input HVACModeEff

Standard Mode

DP	Name:	HVACModeEff	VACModeEff					Mand	Mandatory 1)		
FΒ	Name:	See table below	V					Can b	e internal		
De	scription										
Τh	is information	n is provided by	y the Functiona	al Block 'Ro	om Set	point	Manager	HVAC Mo	de Driver	า'.	
Da	Datapoint Type										
DP	T_Name:	DPT_HVACM	ode								
DP	T Format:	N ₈					DPT_ID:	20.10	2		
Fie		Description					Supp.	Range	Unit	Default	
Н۷	AC Mode						M	14	enum.	cs	
		0 = Auto					NA				
		1 = Comfort					M				
		2 = Standby					M				
		3 = Economy									
	4 = Building Protection						M				
	all other enumerations NA										
Ac	Access Type										
♦	Input		T-								
	$N \rightarrow this$		$1 \rightarrow \text{this}$								
	Spontaneo	us 🛛	Cyclica	ally:	\boxtimes		Time-	out:	31min (rec.)	
	Request		Polling	: [Perio	d:			
Co	mmunicati	on Type									
♦		ect Datapoint						Mandato	ry: 🛛		
		oup Address:									
Dy	namics										
	Power dow	n: Save:									
	Power up: Value: No initialisation: Default value:										
			Saved value	:							
		Read from bus:									
Ex	ception Ha	ndling									
Sp	Special Features										
	see Functional Block diagram										

List of Functional Blocks, Input HVACModeEff is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	M1
Water Heat Pump Control	WHPC	M1
Split Unit Control	SPUC	M1
Radiator and Chilled Ceiling Room Control	RCCRC	M1
Radiator Room Control TU	RRCTU	M1
VAV Control Discharge Air	VAVCDA	M1

LTE-HEE Mode

FB:	See table	LTE Clie	ent Input Name:	HVACModeEff					Mandatory 1) Optional		
	below			_					Op	tional <u></u>	
	ription:										
			by the Functional	Block 'Roor	n Setpoir	nt Manag	ger HVA	AC Mo	ode Drive	n'. The	
	US is suppo										
DPT:	Name D	PT_HVA	_	DPT ID	201.100	Datat	ype for		N_8Z_8		
Field			Description				S	Sup.	Unit	Default	
HVAC	CMode							M	14	cs	
			0 = Auto					NA			
			1 = Comfort					M			
			2 = Standby					M			
			3 = Economy					M			
			4 = Building Prote					M			
			All other enumera	ation			1	NA			
STAT			Bitset					M			
 OutOfService 								M	t/f	false	
- Fault			Sensor value is c					M	t/f	false	
	erridden		Sensor is tempora		den			0	t/f	false	
- InAl			Sensor is in alarm					0	t/f	false	
- Alaı	rmUnAck		Acknowledgemen	nt of alarm				0	t/f	false	
	munication:										
Bine	ding Group:										
Clas	SS		Type			Default					
Ge	eographical		Apartment . Roon	n . SubZone		1.1.1					
Ap	plication Spe	ecific 🔲									
Ur	nassigned		Broadcast	Configura	ble 🗌						
DP	Address:		IO Type(ID):	100 (RSM	1HD)	Propert	y ID:		51		
LTE	-Service (ev	rent):	InfoReport Sniffe	r on Bindin	g Group:						
Inf	oReport	\boxtimes	Timeout:		31	Min					
	-Service (po		Read Wildcard / F	Poen Sniffer	on Bindi	oa Grour	٠.				
Re	ead – Respor	nse 🗌	ixeau villucatu / i	resp Sillie	OH BIHUII	ig Group	J				
Value	after Powe	r-up:	Default '	Value ⊠			-	5	Stored Val	lue 🗌	
Exce	ption Handli	ng:					Save a	t Pov	verdown		
									<u>-</u>	-	
Speci	ial Features										
	Functional		gram								

List of Functional Blocks, Input HVACModeEff is used in:

Name of FB	Abbreviation	Mandatory Optional		
Fan Coil Control	FCC	M1		
Water Heat Pump Control	WHPC	M1		
Split Unit Control	SPUC	M1		
Radiator and Chilled Ceiling Room Control	RCCRC	M1		
Radiator Room Control TU	RRCTU	M1		
VAV Control Discharge Air	VAVCDA	M1		

3.9.2.21 Input HVACModeEffNext

Standard Mode

Not applicable

LTE-HEE Mode

FB:	See table	LTE Clie	ent Input Name:	HVACModeEffNex	t		Mand	
	below						Op:	tional 🗌
Desc	ription:							
This i	nformation is	provided	by the Functional	Block 'Room Setpoi	nt Manage	er HVAC Mo	ode Drive	n'.
DPT:	Name D	PT_HVA	CModeNext	DPT ID 206.100	Dataty	pe format	$U_{16}N_8$	
Field			Description			Sup.	Unit	Default
Time			Time to next HVA 0 = no next mode	C Mode in minutes,		М	min	0
Next HVACMode			0 = Mode undefin	ned 1)		M M M	14	CS
			3 = Economy All other enumera	2 = Standby 4 = Building F ation				
All other enumeration NA Communication:								
Bine	Binding Group:							
Clas			Туре		Default			
Ge	eographical	\boxtimes	Apartment . Roor	. Room . SubZone 1.1.1				
Ap	plication Spe	ecific 🗌						
Ur	nassigned		Broadcast	Configurable 🗌				
	Address:		IO Type(ID):	100 (RSMHD)	Property	/ ID:	52	
	-Service (ev	ent):	InfoReport Sniffe	er on Binding Group:	•			
	oReport	\boxtimes	Timeout:	31	Min			
	: -Service (po ead – Respor							
Value after Power-up: Default Value ⊠							Stored Val	ue 🗌
Exception Handling:					(3)	Save at Pov	verdown	
Spec	ial Features							
1) end	coding of spe	cial cond	itions, see table be	elow	 		· · · · · · · · · · · · · · · · · · ·	·

Interpretation of Time and HVACMode fields

Time	HVACMode				
= 0 (Undefined)	= 0 (Undefined)	the content of the datapoint is void / undefined			
	,	=> no next HVAC Mode available for an undefined time period			
= 0 (Undefined)	= {14}	efined and valid next HVACMode but the delay time is undefined (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			

List of Functional Blocks, **Input HVACModeEffNext** is used in:

Name of FB	Abbreviation	Mandatory Optional		
Fan Coil Control	FCC	M1		
Water Heat Pump Control	WHPC	M1		
Split Unit Control	SPUC	M1		
Radiator and Chilled Ceiling Room Control	RCCRC	M1		
Radiator Room Control TU	RRCTU	M1		
VAV Control Discharge Air	VAVCDA	M1		

3.9.2.22 Input HVACModeOptim

Standard Mode

DP Name:	HVA	ACModeOpti	m		Abbr.:		- Mandatory			
FB Name:	See	table below						Can b	e internal	
Description										
		provided by	the Fu	unctional Block '	HVAC O	ptimise	er'.			
Datapoint Ty	уре									
DPT_Name:	DPT_HVACMode									
DPT Format:							DPT_ID:	20.10	2	
Field		escription					Supp.	Range	Unit	Default
HVAC Mode							M	14	enum.	cs
	0 :	= Auto					NA			
	1 -	= Comfort					M			
		= Standby					M			
		= Economy					M			
4 = Building Protection							M			
all other enumerations NA										
Access Type	е									
♦ Input										
$N \rightarrow this$			$1 \rightarrow th$	is 🛛						
Spontane	ous			Cyclically:			Time	-out:	31min (rec.)
Request				Polling:			Perio	od:		
Communica	tion ⁻	Туре								
		Datapoint						Mandato	ry: 🛛	
Default G	roup .	Address: -								
Dynamics										
Power do	wn:	Save:								
Power up	:	Value:	No in	nitialisation:		Defau	It value:			
			Save	ed value:						
						Read	from bus	:		
Exception H	landli	ing								
Special Feat	tures									

List of Functional Blocks, **Input HVACModeOptim** is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	M1
Water Heat Pump Control	WHPC	M1
Split Unit Control	SPUC	M1
Radiator and Chilled Ceiling Room Control	RCCRC	M1
Radiator Room Control TU	RRCTU	M1
VAV Control Discharge Air	VAVCDA	M1

LTE-HEE Mode

FB:	See table below	LTE Clie	ent Input Name:	HVACMod	eOptim				Mandatory Optional		
Desc	ription:	<u></u>		-							
	This information is provided by the Functional Block ' HVAC Optimiser'. The STATUS is supported.										
DPT:	Name D	PT_HVA	CMode_Z	DPT ID	201.100	Datat	ype for	mat	N_8Z_8		
Field			Description					Sup.	Unit	Default	
HVAC	Mode		•					M	14	CS	
			0 = Auto					NA			
			1 = Comfort								
			2 = Standby					M			
			3 = Economy					M			
			4 = Building Prote	ection				M			
			All other enumera	ation				NA			
STAT	US		Bitset					М			
- Out	OfService		Sensor out of ser	vice				M	t/f	false	
- Fau	lt		Sensor value is c	orrupted				0	t/f	false	
- Ove	erridden		Sensor is tempora	arily override	den			0	t/f	false	
- InAl	arm		Sensor is in alarm	า				0	t/f	false	
- Alaı	rmUnAck		Acknowledgemen	nt of alarm				0	t/f	false	
Comr	nunication:		-				÷				
Bine	ding Group:										
Clas	SS		Туре			Default					
Ge	eographical		Apartment . Roon	n . SubZone)	1.1.1					
Ap	plication Spe	ecific 🔲									
Ur	assigned		Broadcast	Configura	able 🗌						
DP A	Address:		IO Type(ID):	115 (HVA	(COPT)	Propert	ty ID:		51		
LTE	-Service (ev	rent):	InfoReport Sniffe	r on Bindin	g Group:						
	oReport	\boxtimes	Timeout:		31	Min					
	-Service (po		Read Wildcard / F	Resp Sniffer	on Bindi	ina Grour	o				
	ead – Respor				On Bina						
Value after Power-up: Default Value ∑								5	Stored Val	ue 🗌	
Exception Handling:							Save a	Save at Powerdown			
Speci	ial Features	:									

List of Functional Blocks, **Input HVACModeOptim** is used in:

Name of FB	Abbreviation	Mandatory Optional		
Fan Coil Control	FCC	M1		
Water Heat Pump Control	WHPC	M1		
Split Unit Control	SPUC	M1		
Radiator and Chilled Ceiling Room Control	RCCRC	M1		
Radiator Room Control TU	RRCTU	M1		
VAV Control Discharge Air	VAVCDA	M1		

3.9.2.23 Input LockSignCFDM

Standard Mode

Not applicable

LTE-HEE Mode

FB:	See table	LTE CI		LockSig	nCFDM					latory 🗌
	below	Input N	lame:						Ор	tional 🗌
Desc	ription:								_	
This i	nformation is			unctional	Block 'Cool	Flow De	emand Man	ager'.		
DPT:	Name D	PT_Loc	kSign		DPT ID	207.101	1 Dataty	oe format	U_8B_8	
Field			Description					Sup.	Unit	Default
Powe	rReduction		Reductio	n in % (09	% = no redu	ction)		M	%	0
Bitset	•							M		
			Bit 0 =	LockRequ	uest			0	t/f	false
			Bit 1 =	Туре				0	0/1	0
				0 = ur	ncritical					
				1 = cr	itical					
			all othe	r bits				NAO		false
Comi	munication:		-					-	-	-
Bin	ding Group:									
Clas	SS		Туре				Default			
Ge	eographical									
Ap	plication Spe	ecific⊠	DistrSegi				1			
Ur	nassigned		Broadcas	st 🗌	Configurat	ole 🗌				
	Address:		IO Type(ID):	208 (CFDI	M)	Property	ID:	53	
	-Service (ev	ent):	InfoRepo	rt Sniffer	on Binding	Group:				
	oReport	\boxtimes	Timeout:			31	Min			
	:- <mark>Service (po</mark> ead – Respor		Read Wil	dcard / R	esp Sniffer o	on Bindir	ng Group:			
Value after Power-up: Default Value ∑						Stored Va	lue 🗌			
Exception Handling: Save at Po					werdown					
Spec	ial Features:									

List of Functional Blocks, Input LockSignCFDM is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	О
Radiator and Chilled Ceiling Room Control	RCCRC	0

3.9.2.24 Input LockSignCPM

Standard Mode

Not applicable

LTE-HEE Mode

FB:	See table	LTE CI	ient	LockSig	nCPM					latory 🗌
	below	Input N	lame:						Ор	tional 🗌
Desc	ription:	-							-	
This i	nformation is	provide	d by the F	unctional	Block 'Cool	Flow De	emand Mar	nager'.		
DPT:	Name D	PT_Loc	kSign		DPT ID	207.10	1 Dataty	pe format	U_8B_8	
Field Descripti								Sup.	Unit	Default
Powe	rReduction		Reductio	n in % (09	% = no redu	ction)		M	%	0
Bitset			Bit 0 = Bit 1 =					M O O	t/f 0/1	false 0
0 = uncritical 1 = critical all other bits NAO						NAO		false		
Comi	nunication:									
	ding Group:									
Clas			Туре				Default			
Ge	eographical									
Ap	plication Spe	ecific⊠	DistrSegr	пC			1			
Ur	nassigned		Broadcas	st 🗌	Configurat	ole 🗌				
DP	Address:		IO Type(D):	199 (CPM)	Property	ID:	54	
	-Service (ev	ent):	InfoRepo	rt Sniffer	on Binding	Group:				
	oReport	\boxtimes	Timeout:			31	Min			
	: -Service (po ead – Respor		Read Wil		esp Sniffer	on Bindiı	ng Group:			
Value after Power-up: Default Value ⊠						Stored Va	lue 🗌			
Exception Handling:							[;	Save at Po	werdown	
Spec	ial Features									

List of Functional Blocks, Input LockSignCPM is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	О
Radiator and Chilled Ceiling Room Control	RCCRC	0

3.9.2.25 Input LockSignHFDM

Standard Mode

Not applicable

LTE-HEE Mode

FB:	See table	LTE CI		LockSig	nHFDM					latory 🗌
	below	Input N	lame:						Ор	tional 🗌
Desc	ription:	-							•	
This i	nformation is	provide	d by the F	unctional	Block 'Heat	Flow De	emand Mar	nager'.		
DPT:	Name D	PT_Loc	kSign		DPT ID	207.10	1 Dataty	oe format	U_8B_8	
Field Descript								Sup.	Unit	Default
Powe	rReduction		Reductio	n in % (09	% = no redu	ction)		M	%	0
Bitset			Bit 0 = Bit 1 =					M O O	t/f 0/1	false 0
0 = uncritical 1 = critical all other bits NAO							false			
Comi	nunication:		<u> </u>					1 1 11 10		14.00
	ding Group:									
Clas			Туре				Default			
Ge	eographical									
	plication Spe	ecific	DistrSegr	nΗ			1			
Ur	nassigned		Broadcas	st 🗌	Configurat	ole 🗌				
DP	Address:		IO Type(144 (HFDI		Property	ID:	53	
	-Service (ev	ent):	InfoRepo	rt Sniffer	on Binding	Group:				
	oReport	\boxtimes	Timeout:			31	Min			
	:-Service (po ead – Respor		Read Wil	Read Wildcard / Resp Sniffer on Binding Group:						
Value	after Powe	r-up:		Default '	Value 🛚				Stored Va	lue 🗌
Exception Handling:							[9	Save at Po	werdown	
-										
Spec	ial Features									
				· · · · · · · · · · · · · · · · · · ·			·			

List of Functional Blocks, **Input LockSignHFDM** is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	О
Radiator and Chilled Ceiling Room Control	RCCRC	О
Radiator Room Control TU	RRCTU	0

3.9.2.26 Input LockSignHPM

Standard Mode

Not applicable

LTE-HEE Mode

FB:	See table	LTE Clie		LockSignH	PM					latory 🔲	
	below	Input Na	ıme:						Op	tional 🗌	
Desci	ription:								-		
This in	nformation is	provided	by the F	unctional Bl	ock 'Heat	Flow De	mand Ma	anager'.			
DPT:	Name D	PT_Lock	Sign		DPT ID	207.101	Dataty	ype format	U_8B_8	U_8B_8	
Field			Descrip					Sup.	Unit	Default	
Powe	rReduction		Reducti	on in % (0%	= no redu	uction)		M	%	0	
Bitset								M			
	Bit 0 = LockRequest					0	t/f	false			
			Bit 1 =	: Type				0	0/1	0	
				0 = und	ritical						
				1 = criti	cal						
			all oth	er bits				NAO		false	
Comr	nunication:		-					<u> </u>	-	-	
Bind	ding Group:										
Clas	SS		Type				Default				
Ge	eographical										
Ap	plication Spe	ecific 🛚	DistrSe	gmH			1				
Ur	assigned		Broadca	ast 🗌	Configura	ble 🗌					
DP A	Address:		IO Type	(ID):	136 (HPN	1)	Property	y ID:	54		
LTE	-Service (ev	ent):	InfoRep	ort Sniffer	on Bindin	g Group:					
Inf	oReport	\boxtimes	Timeout	:		31	Min				
	- Service (po ead – Respor		Read W	ildcard / Re	sp Sniffer	on Bindi	ng Group	o:			
	after Powe			Default Va	lue 🖂			_	Stored Val	lue 🗌	
	otion Handli							Save at Po			
		J-									
Speci	al Features										

List of Functional Blocks, **Input LockSignHPM** is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	О
Radiator and Chilled Ceiling Room Control	RCCRC	О
Radiator Room Control TU	RRCTU	0

3.9.2.27 Input PresenceStatus

Standard Mode

DP Name:	PresenceStatus	3		Abbr.:			Manda	Mandatory	
FB Name:	See table below	/					Can be	internal	
Description									
This information	on is provided by	y the Func	tional Block	Presence	e Dete	ctor' or 'Us	ser Presend	ce Switc	h'.
Datapoint Type									
DPT_Name:	DPT_Occupar	ncy							
DPT Format:	B ₁					DPT_ID:	1.018		
Field	Description					Supp.	Range	Unit	Default
Status	Presence stat					0	0/1	Bit	CS
	0 = not occu	•							
	1 = occupied	<u>b</u>							
Access Type	Access Type								
♦ Input									
$N \rightarrow this$		$1 \rightarrow \text{this}$	\boxtimes						
Spontaneo	us 🛛	Су	/clically:			Time-	out:	NO *	
Request		Po	olling:			Perio	d:		
Communicat	ion Type								
♦ Group Ob	ject Datapoint						Mandatory	': X	
Default Gro	oup Address:								
Dynamics									
Power dow	n: Save:								
Power up:	Value:	No initia	lisation:		Defau	ılt value:			
		Saved v	alue:						
					Read	from bus:			
Exception Ha									
* NO timeout	due to compatib	ility with e	xisting EIB p	roducts.					
Special Featu									

List of Functional Blocks, **Input PresenceStatus** is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	О
Water Heat Pump Control	WHPC	О
Split Unit Control	SPUC	О
Radiator and Chilled Ceiling Room Control	RCCRC	О
Radiator Room Control TU	RRCTU	О
VAV Control Discharge Air	VAVCDA	О

LTE-HEE Mode

FB:	See table below	LTE Clie		Presences	Status					Mand	atory 🗌	
Desci	ription:	Imputite								<u> </u>		
	nformation is	provided	by the F	unctional B	lock 'Pres	ence Det	ector' c	or 'Use	er Prese	nce Switc	h'.	
DPT:		PT_Occu			DPT ID	1.018			format	B ₁		
Field			Descrip	tion				,,,	Sup.	Unit Default		
Dew F	Point Status		•							Bit	CS	
			0 = nc	t occupied								
			1 = 00	cupied								
Comr	nunication:			•						<u>:</u>		
Bine	ding Group:											
Clas	S		Туре				Defaul	lt				
Ge	ographical	\boxtimes	Apartme	ent . Room	. SubZone)	1.1.1					
Ap	plication Sp	ecific 🗌										
Ur	assigned		Broadca	Broadcast Configurable								
DP	Address:		IO Туре		345 (PRD			erty ID	:	51		
LTE	-Service (ev	vent):	InfoRep	ort Sniffer	on Bindin	g Group:			-			
Inf	oReport	\boxtimes	Timeou	t:		NO *	Min					
	-Service (pe ad – Respo		Read W	/ildcard / Re	esp Sniffer	on Bindi	ng Gro	up: -	-			
Value	after Powe	er-up:		Default Va	alue 🛚			_		Stored Val	ue 🗌	
Exception Handling:				Save				e at Powerdown				
* NO timeout due to compat			tibility w	ith S-Mode	and existir	ng EIB pr	oducts					
Speci	al Features	;:										
	•				•					•		

List of Functional Blocks, **Input PresenceStatus** is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	0
Water Heat Pump Control	WHPC	0
Split Unit Control	SPUC	0
Radiator and Chilled Ceiling Room Control	RCCRC	O
Radiator Room Control TU	RRCTU	O
VAV Control Discharge Air	VAVCDA	О

3.9.2.28 Input SplitCool

Standard Mode

Not applicable

LTE-HEE Mode

FB:	See table below	LTE Clie		SplitCool						Mand Opt	atory 🗌 tional 🗍	
Desci	ription:	par : te		-								
	nformation is	provided	by the F	unctional B	lock 'HVA	C Optimi	ser'.					
DPT:	Name D	PT_Perc	ent_U8		DPT ID	5.004	Dat	atype	format	U ₈		
Field			Descrip	tion					Sup.	Unit	Default	
Value			Deman	Demand level for splitting M				%	cs			
Comr	nunication:											
Bind	ding Group:											
Clas	ss		Type				Defau	lt				
	eographical		apartme	ent . Room .	SubZone	<u> </u>	1.1.1					
Ap	plication Spe	ecific 🔲										
Un	assigned		Broadca	ast 🗌	Configura							
DP A	Address:		10 Туре		115 (HV			erty ID	:	60		
	-Service (ev	/ent <u>):</u>	InfoRep	ort Sniffer	on Bindir	<u> </u>		-	-			
	oReport	\boxtimes	Timeou	t:		31	Min					
	-Service (po ead – Respor		Read W	/ildcard / Re	esp Sniffe	r on Bindi	ng Gro	up: -	-			
Value	after Powe	r-up:	=	Default Va	alue 🛚			-	9	Stored Val	ue 🗌	
Exception Handling:								Sav	e at Pov	verdown		
Speci	al Features	:										
	·										·	

List of Functional Blocks, Input SplitCool is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	0
Radiator and Chilled Ceiling Room Control	RCCRC	0
VAV Control Discharge Air	VAVCDA	О

3.9.2.29 Input SplitHeat

Standard Mode

Not applicable

LTE-HEE Mode

FB:	See table	LTE Clie		SplitHeat					Mandatory	
	below	Input Na	ame:						Op:	tional 🗌
Desci	ription:									
This in	nformation i	s provided	by the F	unctional B	lock 'HVA	C Optimi	ser'.			
DPT:	Name [OPT_Perce	ent_U8		DPT ID	5.004	Dataty	ype format	U ₈	
Field			Descrip	tion				Sup.	Unit	Default
Value			Deman	d level for sp	olitting			М	%	cs
Comr	nunication	:								
Bind	ding Group):								
Clas	Class Type Default									
Geographical 🗵			apartment . Room . SubZone 1.1.1							
Ap	plication Sp	ecific 🗌								
Ur	assigned		Broadca	ast 🗍	Configura	ıble 🗌				
DP A	Address:		ІО Турє	e(ID):	115 (HVA	(COPT)	Property	y ID:	58	
LTE	-Service (e	vent):	InfoRep	ort Sniffer	on Bindin	g Group:				
Inf	oReport	\boxtimes	Timeou	t:		31	Min			
	-Service (p		Read W	/ildcard / Re	sn Sniffer	on Rindi	ing Group	·		
Re	ad – Respo	nse	rtcad vi	riideala / Tee	Jop Orinici	On Dina	ing Croup	,		
Value	after Powe	er-up:		Default Va	alue 🛚				Stored Val	lue 🗌
Exce	otion Hand	ling:					,	Save at Pov	verdown	
Speci	al Features	s:								
	•		•			•			•	

List of Functional Blocks, Input SplitHeat is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	О
Water Heat Pump Control	WHPC	0
Split Unit Control	SPUC	О
Radiator and Chilled Ceiling Room Control	RCCRC	О
VAV Control Discharge Air	VAVCDA	O

3.9.2.30 Input StatusCPM

Standard Mode

Splitted. See below.

LTE-HEE Mode

FB:	See table	LTE Clie		StatusCP	M					datory 🔲
	below	Input Na	me:						Ор	tional 🗌
	ription:									
This i	nformation is			unctional	Block 'Cool	Flow De	mand Ma	anager'.		
DPT:	Name D	PT_Statu	sCPM		DPT ID	209.102	Datat	ype format	V ₁₆ B ₈	
Field			Descrip	Description				Sup.	Unit	Default
Temp	erature		Flow wa	iter tempe	rature			M	°C	CS
Bitset								M		
			Bit 0 =	= TempFlo	wValid			0	t/f	false
			Bit 1 =	⊧ Fault				0	t/f	false
			Bit 2 =	OffPerm				0	t/f	false
			Bit 3 =	NoCoolA	vailable			0	t/f	false
			all oth	er bits				NA		false
Comi	munication:		=					-	-	-
Bin	ding Group:									
Clas	SS		Type				Default			
Ge	eographical									
Ap	plication Spe	ecific 🛚	DistrSe				1			
Ur	nassigned		Broadca	ast 🗌	Configura	ble 🗌				
	Address:		ІО Турє		199 (CPN		Propert	ty ID:	51	
	-Service (ev		InfoRep	ort Sniffer	on Bindin	g Group:				
	oReport	\boxtimes	Timeou	:		31	Min			
	: -Service (po ead – Respor		Read W	/ildcard / R	esp Sniffer	on Bindi	ng Grou	p:		
Value	after Powe	r-up:		Default \	/alue ⊠			_	Stored Va	lue 🗌
Exception Handling:								Save at Po	werdown	
Spec	ial Features		•			•		-	-	

List of Functional Blocks, Input StatusCPM is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	О
Radiator and Chilled Ceiling Room Control	RCCRC	0

Standard M	ode (Temperatu	ıre)						
DP Name:	TempFlowWate		Abbr.:			Mandatory		
FB Name:	See table abov	е			Can be	internal		
Description								
		y the Functional Block	k 'Cold Water	Production N	/lanager'.			
Datapoint T								
DPT_Name:		Гетр						
DPT Format:	10			DPT_ID:	9.001			
Field	Description			Supp.	Range	Unit	Default	
				0	full	°C	CS	
Access Typ	e							
♦ Input								
$N \rightarrow this$		$1 \rightarrow \text{this}$						
Spontane	ous 🛚	\boxtimes	Time	-out:	31min	(rec.)		
Request		Polling:		Perio	d:			
Communica	tion Type							
♦ Group O	bject Datapoint				Mandatory	/:		
Default G	roup Address:							
Dynamics								
Power do	wn: Save:							
Power up	: Value:	No initialisation:	□ De	efault value:		\square		
		Saved value:						
			Re	ead from bus	• •			
Exception H	landling							
Special Feat	tures							
Standard M	ode (Fault)							
DP Name:	Fault		Abbr.:		Manda	tory		
FB Name:	See table abov	e			Can be	internal		
Description								
		y the Functional Block	k 'Cold Water	Production M	lanager'.			
Datapoint T								
DPT Name:	DPT Bool	·					·	

DF	Name:	Fau	lt				Abbr.:				Manda	atory	
FB	Name:	See	table abo	ve							Can b	e interna	
De	scription												
Th	is informati	on is	provided	by the Fu	unctional Blo	ck 'C	old Wa	ter Pro	oduct	ion M	lanager'.		
	tapoint Ty	ре											
	PT_Name:	_	PT_Bool										
	PT Format:	B ₁								T_ID:	1.002		
Fie		De	escription						Su	ıpp.	Range	Unit	Default
	atus									0	t/f	bool	CS
Ac	cess Type												
♦	Input												
	$N \rightarrow this$			$1 \rightarrow th$	is 🛛								
	Spontaneo	us			Cyclically:		$ \boxtimes $			Time-	out:	31min	(rec.)
	Request				Polling:					Perio	d:		
Co	mmunicat	ion [·]	Гуре										
♦	Group Ob										Mandator	y: 🛛	
	Default Gro	oup .	Address:										
Dy	namics												
	Power dow	n:	Save:										
	Power up:		Value:	No ir	itialisation:			Defau	ult va	lue:			
				Save	d value:								
								Read	fron	n bus:			
Ex	ception Ha	ındli	ng										
Sp	ecial Featu	ıres											

Standard Mode (OffPerm)

DP Name:	Of	fPerm				Abbr.:			Manda	tory	
FB Name:	Se	e table abov	/e							internal	
Description											
		is provided b	ov the F	unctional Blo	ck 'C	old Wate	er Pro	duction M	lanager'.		
Datapoint T		. о р. о г. о о о	.,c .	<u></u>	<u> </u>				.ca.ge		
DPT Name:		DPT Bool									
DPT Format		3 ₁						DPT ID:	1.002		
Field		Description						Supp.	Range	Unit	Default
Status	- -	ococription						О	t/f	bool	CS
Access Typ	10								(/1	0001	03
◆ Input											
$N \rightarrow \text{this}$			4 . 41-	nis 🛛							
			$1 \rightarrow tr$			<u> </u>		Time	A	24 main /	(===)
Spontane				Cyclically:				Time-		31min ((rec.)
Request		<u> </u>		Polling:		Ш		Perio	a :		
Communica									Manadatan		
		t Datapoint							Mandatory	<i>ı</i> : ⊠	
	roup	Address:									
Dynamics		T =									
Power do		Save:								1	
Power up):	Value:		nitialisation:	Щ		Defau	ılt value:			
			Save	ed value:							
							Read	from bus:			
Exception H	Hand	lling									
Special Fea	iture	s									
Standard M	Iode	(NoCoolAv	ailable))							
DD Marra	NI.	· · · · · · · · · · · · · · · · · · ·	.1			Λ I= I=			N4	.	
DP Name:		CoolAvailab				Abbr.:			Manda		
FB Name:	_	e table abov	/e						Can be	internal	
Description			=			1 1 1 1 1 1		1 4 8			
		is provided b	by the F	unctional Blo	ck 'C	old Wate	er Pro	duction IV	lanager'.		
Datapoint T											
DPT_Name:		PT_Bool							1		
DPT Format		31						DPT_ID:	1.002	T	1
Field	L	Description						Supp.	Range	Unit	Default
Status								0	t/f	bool	CS
Access Typ	е										
♦ Input											
N. 1. 1. 1.											
$N \rightarrow this$			$1 \rightarrow th$	is 🛛							
N → this Spontane			$1 \rightarrow th$	is ⊠ Cyclically:		\boxtimes		Time-	out:	31min ((rec.)
	eous		1 → th					Time- Perio		31min ((rec.)
Spontane	eous		1 → th	Cyclically:						31min ((rec.)
Spontane Request Communica	eous ation	Type	1 → th	Cyclically:							(rec.)
Spontane Request Communica Group C	eous ation Objec	Type t Datapoint	1 → th	Cyclically:					d:		(rec.)
Spontane Request Communica Group C Default C	eous ation Objec	Type		Cyclically:					d:		(rec.)
Spontane Request Communica Group C	atior Objec	Type t Datapoint		Cyclically:					d:		(rec.)

Value:

Power up:

Exception Handling

Special Features

Default value:

Read from bus:

No initialisation:

Saved value:

3.9.2.31 Input StatusHPM

Standard Mode

Splitted. See below.

LTE-HEE Mode

FB:	See table	LTE CI		StatusH	PM					Mandatory	
	below	Input N	lame:						Ор	tional 🗌	
	ription:										
This in	nformation is	provide	d by the F	unctional	Block 'Cool	Flow De	emand Mar	nager'.			
DPT:	Name D	PT_Stat	usHPM		DPT ID	209.100	Dataty	pe format	$V_{16}B_{8}$		
Field			Description	on				Sup.	Unit	Default	
Temp	erature		Flow wat	er temper	rature			M	°C	CS	
Bitset						M					
				TempFlov	wValid			0	t/f	false	
			Bit 1 =	Fault				0	t/f	false	
			Bit 2 =	SummerN	√lode			0	t/f	false	
			Bit 3 =	OffPerm				0	t/f	false	
			Bit 4 =	NoHeatA	vailable			0	t/f	false	
			all othe	r bits				NA		false	
Comr	nunication:										
	ding Group:										
Clas			Type				Default				
	eographical										
	plication Spe	ecific⊠	DistrSegr				1				
	assigned		Broadcas	st 🗌	Configurat						
	Address:		IO Type(136 (HPM	,	Property	ID:	51		
	-Service (ev	rent):	InfoRepo	rt Sniffer	on Binding						
	oReport	\boxtimes	Timeout:			31	Min				
	-Service (po		Read Wil	dcard / R	esp Sniffer	on Rindir	og Group:				
	ad – Respor		ig Group.								
Value after Power-up: Default Value ∑										lue 🗌	
Exce	otion Handli	ng:					;	Save at Po	werdown		
Speci	al Features:										

List of Functional Blocks, **Input StatusHPM** is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	О
Radiator and Chilled Ceiling Room Control	RCCRC	О
Radiator Room Control TU	RRCTU	0

Standard Mo	ode (Temperature)							
DP Name:	TempFlowWaterProdS	SegmH	Abbr.:			Mandat	ory	
FB Name:	See table above					Can be	internal	
Description								
This informati	on is provided by the F	unctional Block	'Hot Water F	Produ	ction Mar	nager'.		
Datapoint Ty	pe							
DPT_Name:	DPT_Value_Temp							
DPT Format:	F ₁₆				PT_ID:	9.001		
Field	Description				Supp.	Range	Unit	Default
					0	full	°C	CS
Access Type	<u> </u>							
♦ Input								
$N \rightarrow this$	\square 1 \rightarrow th	nis 🛛						
Spontaneo	ous 🛛	Cyclically:	\boxtimes		Time-c	out:	31min (rec.)
Request		Polling:			Period			
Communicat	ion Type							
♦ Group Ob	ject Datapoint				1	Mandatory	: 🛛	
Default Gr	oup Address:							
Dynamics								
Power dov	vn: Save:							
Power up:	Value: No ir	nitialisation:	D	efault	value:		\boxtimes	
	Save	ed value:						
			R	ead fr	om bus:			
Exception Ha	andling							
Special Feat	ures							
Standard Mo	ode (Fault)							
DP Name:	Fault		Abbr.:			Mandat	ory	
FB Name:	See table above					Can be	internal	
Description								
This informati	on is provided by the F	unctional Block	'Hot Water F	Produ	ction Mar	nager'.		
D-1								

DP Name:	Fa	ult			4	Abbr.:				Manda	tory	
FB Name:	Se	e table abo	ve							Can be	internal	
Description)											
This informa	tion	is provided l	by the Fu	unctional Bloc	ck 'H	ot Wate	er Prod	duction	Ma	nager'.		
Datapoint T												
DPT_Name:		PT_Bool										
DPT Format		3 ₁						DPT_		1.002		
Field		Description						Supp	э.	Range	Unit	Default
Status								0		t/f	bool	cs
Access Typ	е											
♦ Input												
$N \rightarrow this$			$1 \rightarrow th$	is 🛛								
Spontane	eous	\square		Cyclically:		\boxtimes		Ti	me-	out:	31min ((rec.)
Request				Polling:				Pe	erioc	d:		
Communica	ation	Туре										
♦ Group C)bjec	t Datapoint								Mandatory	/ : ⊠	
Default G	roup	Address:										
Dynamics												
Power do	own:	Save:										
Power up):	Value:	No in	itialisation:			Defau	ılt valu	e:			
			Save	d value:								
							Read	from b	us:			
Exception I	land	lling										
Special Fea	ture	S										

Abbr.:

Standard Mode (SummerMode)

DP Name: SummerMode

DF	Name: S	SummerMod	е		Abbr.:			Manda	tory	
FΒ	Name: S	See table ab	ove		•	•			internal	
De	scription									
Th	is informatio	n is provided	by the Fi	unctional Blo	ck 'Hot Wa	ter Prod	luction Ma	nager'.		
	tapoint Typ									
DF	PT_Name:	DPT_Bool								
DF	PT Format:	B ₁					DPT_ID:	1.002		
Fie	eld	Description					Supp.	Range	Unit	Default
Sta	atus						Ó	t/f	bool	cs
Ac	cess Type									
*	Input									
	$N \rightarrow this$		$1 \rightarrow th$	is 🛛						
	Spontaneou	ıs 🛛	l e e e e e e e e e e e e e e e e e e e	Cyclically:			Time-	out:	31min	(rec.)
	Request			Polling:			Period		,	<u> </u>
Co	mmunication	on Type		, - 3						
*		ect Datapoin	t					Mandatory	/: X	
	Default Gro									
Dv	namics									
	Power down	n: Save:								
	Power up:	Value:	No ir	nitialisation:		Defau	ılt value:			
	. 5.75. 45.	7 3.13.5		ed value:	Ħ	20.00				
			100.0			Read	from bus:			
Ex	ception Har	ndlina								
		J								
Sp	ecial Featur	es								
•										
		_								
St:	andard Mod	le (OffPerm)							
	andard Mod		u)							
DF	P Name:	OffPerm			Abbr.:			Manda		
DF FB	Name: 0				Abbr.:				tory internal	
DF FB De	Name: 0	OffPerm See table ab	ove					Can be		
DF FB De Th	Name: 0 Name: 5 Secription is information	OffPerm See table abo	ove	unctional Blo				Can be		
DF FB De Th	Name: (8 Name: 8 Secription is information tapoint Type	OffPerm See table about the provided of the pr	ove	unctional Blo				Can be		
DF FB De Th Da	P Name: 08 Name: 8 Name: 8 Name: 8 Name: 9 Nam	OffPerm See table about the provided of the pr	ove	unctional Blo			duction M	Can be		
DF FB De Th Da DF	P Name: 08 Name: 8 Name: 8 Name: 9 Nam	OffPerm See table about 1 is provided 1 is p	ove	unctional Blo			duction M	Can be anager'.	internal	
DF FB De Th Da DF DF	P Name: 08 Name: 8 Name: 8 Name: 9 Nam	OffPerm See table about the provided of the pr	ove	unctional Blo			DPT_ID:	Can be anager'. 1.002 Range	unit	Default
DF FB De Th Da DF DF Sta	Name: 08 Name: 8 Name: 8 Name: 9 Name:	OffPerm See table about 1 is provided 1 is p	ove	unctional Blo			duction M	Can be anager'.	internal	
DF FB De Th Da DF DF Sta	P Name: 08 Name: 8 Name: 8 Name: 9 Nam	OffPerm See table about 1 is provided 1 is p	ove	unctional Blo			DPT_ID:	Can be anager'. 1.002 Range	unit	Default
DF FB De Th Da DF DF Sta	Name: 08 Name: 8 Name: 8 Name: 9 Name:	OffPerm See table about 1 is provided 1 is p	ove				DPT_ID:	Can be anager'. 1.002 Range	unit	Default
DF FB Th Da DF DF Sta Ac	P Name: 08 Name: 8 Name: 8 Name: 9 Nam	OffPerm See table about 1 is provided 1 is p	ove				DPT_ID:	Can be anager'. 1.002 Range	unit	Default
DF FB Th Da DF DF Sta Ac	P Name: B Name: B Name: Secription is information itapoint Typ PT_Name: PT Format: eld atus ccess Type Input	DffPerm See table about is provided e DPT_Bool B ₁ Description	ove				DPT_ID:	Can be anager'. 1.002 Range t/f	unit	Default cs
DF FB Th Da DF DF Sta Ac	P Name: B Name: B Name: B Scription is information itapoint Typ PT_Name: PT Format: eld atus ccess Type Input N → this	DffPerm See table about is provided e DPT_Bool B ₁ Description	ove	is 🛛	ck 'Cold W		DPT_ID: Supp.	Can be anager'. 1.002 Range t/f out:	Unit bool	Default cs
DF FB De Th Da DF Fie Sta Ac	P Name: B Name: B Name: Secription is information itapoint Typ PT_Name: PT Format: eld atus cess Type Input N → this Spontaneou	DffPerm See table about 1 is provided 1 is p	ove	is 🖂	ck 'Cold W		DPT_ID: Supp. O	Can be anager'. 1.002 Range t/f out:	Unit bool	Default cs
DF FB De Th Da DF Fie Sta Ac	P Name: B Name: B Name: B Name: B Scription Is information Itapoint Typ PT_Name: PT Format: Italian I	DffPerm See table about 1 is provided 1 is p	ove I by the Fu	is 🖂	ck 'Cold W		DPT_ID: Supp. O	Can be anager'. 1.002 Range t/f out:	Unit bool	Default cs
DF FB De Th DF Fie Sta Ac	P Name: B Name: B Name: B Name: B Scription Is information Itapoint Typ PT_Name: PT Format: Italian I	DffPerm See table about 1 is provided 1 is p	ove I by the Fu	is 🖂	ck 'Cold W		DPT_ID: Supp. O	Can be anager'. 1.002 Range t/f out:	Unit bool	Default cs
DF FB De Th Da DF Fie Sta Ac Cc	P Name: B Name: B Name: B Name: B Scription Is information Is information Itapoint Typ PT_Name: PT Format: Italian Ita	DffPerm See table about 1 is provided 1 is p	ove I by the Fu	is 🖂	ck 'Cold W		DPT_ID: Supp. O	Can be anager'. 1.002 Range t/f out:	Unit bool	Default cs
DF FB De Th Da DF Fie Sta Ac Cc	P Name: B Name: B Name: B Name: B Scription is information itapoint Typ PT_Name: PT Format: eld atus ccess Type Input N → this Spontaneou Request mmunication Group Obje Default Group	DffPerm See table about 1 is provided 1 is p	ove I by the Fu	is 🖂	ck 'Cold W		DPT_ID: Supp. O	Can be anager'. 1.002 Range t/f out:	Unit bool	Default cs
DF FB De Th Da DF Fie Sta Ac Cc	P Name: B Name: B Name: B Name: B Scription Its information Itapoint Type T_Name: PT Format: Italian Itapoint Type Input In	DffPerm See table about 1 is provided 1 is p	ove d by the Fu	is 🖂	ck 'Cold W	ater Pro	DPT_ID: Supp. O	Can be anager'. 1.002 Range t/f out:	Unit bool	Default cs
DF FB De Th Da DF Fie Sta Ac Cc	P Name: B Name: B Name: B Name: B Scription Is information Itapoint Type T_Name: PT Format: Indicatus Input In	DffPerm See table about 1 is provided 1 is p	ove d by the Fu	is	ck 'Cold W	ater Pro	DPT_ID: Supp. O Time- Period	Can be anager'. 1.002 Range t/f out:	Unit bool	Default cs

Exception Handling

Special Features

Standard Mode (NoHeatAvailable)

DP Name:	Nol	- HeatAvailab	le			Abbr.					Manda	torv	
FB Name:	_	table abov										internal	
Description													
This informat	ion is	provided b	v the Fu	ınction	al Block	c 'Cold W	ater l	Pro	duction	Man	ager'.		
Datapoint Ty											- U		
DPT_Name:		PT_Bool											
DPT Format:	В	1							DPT_I	D:	1.002		
Field	D	escription							Supp	. F	Range	Unit	Default
Status		-							Ö		t/f	bool	CS
♦ Input													
$N \rightarrow this$			$1 \rightarrow th$	is	\boxtimes								
Spontaneo	ous			Cyclic	ally:				Tin	ne-ou	t:	31min (rec.)
Request				Polling	g:				Pe	riod:			
Communicat	tion	Туре											
♦ Group Ob	oject	Datapoint								M	andatory	<i>'</i> : 🛛	
Default Gr	oup	Address:											
Dynamics													
Power dov	wn:	Save:											
Power up:		Value:	No in	itialisat	tion:		De	fau	lt value) :		\boxtimes	
			Save	d value	e:								
							Re	ad 1	from b	us:			
Exception H	andl	ing											
Special Feat	ures												

3.9.2.32 Input StatusSATC

Standard Mode

Splitted, see below

LTE-HEE Mode

FB:	See table	LTE CI		Status S/	ATC		·			datory 🔲
	below	Input N	lame:						Ор	tional 🗌
Desc	ription:									
This i	nformation is	provide	d by the F	unctional	Block 'Supp	oly Air Te	emperature	Controller	·.	
DPT:	Name D	PT_Stat	usAHU		DPT ID	21.106	Dataty	pe format	B ₈	
Field			Description	on				Sup.	Unit	Default
Bitset								М		
			Bit 0 =					0	t/f	false
			Bit 1 =	FanActive	:			0	t/f	false
			Bit 2 =	Heat				0	t/f	false
			Bit 3 =	Cool				0	t/f	false
			all othe	r bits				NA		false
Com	munication:							_		
Bine	ding Group:									
Clas	SS		Type				Default			
	eographical									
Ap	plication Spe	ecific⊠	DistrSeg	ηV			1			
Ur	nassigned		Broadcas	st 🗌	Configural	ole 🗌				
DP	Address:		IO Type(D):	240 (AHU	C)	Property	ID:	53	
LTE	-Service (ev	ent):	InfoRepo	rt Sniffer	on Binding	Group:				
Inf	oReport	\boxtimes	Timeout:			31	Min			
	- Service (po ead – Respor		Read Wil	dcard / Re	esp Sniffer	on Bindir	ng Group:			
Value	after Powe	r-up:	-	Default \	/alue ⊠				Stored Va	lue 🗌
Exce	ption Handli	ng:						Save at Po	werdown	
-							•			
Spec	ial Features		-	•	_	•	_	•	•	•

List of Functional Blocks, **Input StatusSATC** is used in:

Name of FB	Abbreviation	Mandatory Optional
VAV Control Discharge Air	VAVCDA	O

Standard Mo	ode (Fault)							
DP Name:	Fault		Abbr.:			Manda	tory	
FB Name:	See table abov	e				Can be	internal	
Description								
		y the Functional Block	c'Air Handlin	g Un	it Control	ler'.		
Datapoint Ty								
DPT_Name:	DPT_Bool							
DPT Format:	B ₁				DPT_ID:	1.002		
Field	Description				Supp.	Range	Unit	Default
Status					0	t/f	bool	CS
Access Type	!							
♦ Input								
$N \rightarrow this$		$1 \rightarrow \text{this}$						
Spontaneo	ous 🛛	Cyclically:	\boxtimes		Time-	out:	31min	(rec.)
Request		Polling:			Perio	d:		
Communicat	ion Type							
♦ Group Ob	ject Datapoint					Mandatory	/:	
Default Gr	oup Address:							
Dynamics								
Power dov	vn: Save:							
Power up:	Value:	No initialisation:	□ D	efau	It value:		\square	
		Saved value:						
				ead	from bus:			
Exception Ha	andling							
Special Feat	ures							
Standard Mo	ode (FanActive))						
DP Name:	FanActive		Abbr.:			Manda	tory	
FB Name:	See table above	е				Can be	internal	
Description								
This informati	on is provided b	y the Functional Block	c 'Air Handlin	g Un	it Control	ler'.		
Datapoint Ty								
DDT Namo:								

DP N	Name: I	an/	Active				Abbr.:		-		Mano	dato	ry		
FB N	lame:	See	table abov	/e							Can I	be ir	nternal		bracket
Desc	cription														
This	informatio	n is	provided b	y the Fu	unctional Blo	ck 'A	ir Hanc	lling L	Jnit C	Control	ler'.				
	point Typ														
-	_Name:	DP	T_Bool												
	Format:	B ₁							_	T_ID:	1.002				
Field		De	scription						S	upp.	Range		Unit	Defau	ılt
Statu										0	t/f		bool	CS	
Acce	ess Type														
♦ 1	nput														
Ν	\rightarrow this			$1 \rightarrow th$	is 🛛										
S	pontaneou	ıs			Cyclically:		\boxtimes			Time-	out:	3	31min (rec.)	
	equest				Polling:					Perio	d:				
Com	munication	on T	уре												
	Group Obje										Mandato	ory:			
	efault Gro	up A	ddress:												
	amics														
Р	ower dowr	า:	Save:												
Р	ower up:		Value:	No in	itialisation:			Defa	ult v	alue:					
				Save	d value:										
								Read	d froi	m bus:					
Exce	eption Hai	ndlir	ng												
Spec	cial Featu	res													

Standard Mo	ode (Heat)								
DP Name:	Heat		Abbr.:			Mandat	tory		1
FB Name:	See table above	9				Can be	internal		
Description									
		y the Functional Block '	Air Handling	J Unit (Controll	er'.			
Datapoint Ty									
DPT_Name:	DPT_Bool								
DPT Format:	B ₁			DF	PT_ID:	1.002			
Field	Description			S	upp.	Range	Unit	Defau	ılt
Status					0	t/f	bool	cs	
Access Type									
♦ Input									
$N \rightarrow this$		$1 \rightarrow \text{this}$							
Spontaneo	ous 🛚	Cyclically:	\boxtimes		Time-	out:	31min ((rec.)	
Request		Polling:			Period	d:			
Communicat	ion Type								
♦ Group Ob	ject Datapoint					Mandatory	r: 🛛		
Default Gro	oup Address:								
Dynamics									
Power dow	vn: Save:								
Power up:	Value:	No initialisation:] De	efault v	alue:				
		Saved value:							
				ead fro	m bus:				
Exception Ha	andling								
Special Featu	ıres								
Standard Mo	ode (Cool)								
DP Name:	Cool		Abbr.:			Mandat	tory		
FB Name:	See table above	e				Can be	internal		<u> </u>
Description									
This information	on is provided by	the Functional Block '	Air Handling	ı Unit (Controll	er'			

DP	Name:	Coc	ol				Abbr.:		-		Mand	atory		
FB I	Name:	See	table abo	ve							Can b	e inte	rnal	
Des	cription													
This	s information	on is	provided	by the Fu	unctional Blo	ck 'A	ir Hand	lling U	nit C	ontrol	ler'.			
	apoint Ty	ре												
	Γ_Name:	_	PT_Bool											
	Γ Format:	B ₁												
Field		De	escription						Sı	Jpp.	Range	Ur	nit	Default
Stat	tus		0 1								t/f	bo	ol	cs
Acc	ess Type													
♦	Input													
1	$N \rightarrow this$			$1 \rightarrow th$	is 🛛									
Spontaneous					Cyclically:		\boxtimes			Time-	out:	31min (rec.)		
F	Request				Polling:					Perio	d:			
Con	nmunicat	ion ⁻	Гуре											
*	Group Ob	ject	Datapoint								Mandato	ry:	\boxtimes	
	Default Gro	oup .	Address:											
Dyn	namics													
F	Power dow	n:	Save:											
F	Power up:		Value:	No ir	itialisation:			Defa	ult va	alue:			X	
				Save	d value:									
								Read	d fror	n bus:				
Exc	eption Ha	ndli	ng											
Spe	cial Featu	ıres												

3.9.2.33 Input Tariff

T.b.d.

List of Functional Blocks, **Input Tariff** is used in:

Name of FB	Abbreviation	Mandatory Optional
FanCoil Control	FCC	О
Water Heat Pump Control	WHPC	0
Split Unit Control	SPUC	0
Radiator and Chilled Ceiling Room Control	RCCRC	0
Radiator Room Control TU	RRCTU	0
VAV Control Discharge Air	VAVCDA	О

3.9.2.34 Input Tariff Next

T.b.d.

List of Functional Blocks, **Input TariffNext** is used in:

Name of FB	Abbreviation	Mandatory Optional
FanCoil Control	FCC	O
Water Heat Pump Control	WHPC	О
Split Unit Control	SPUC	O
Radiator and Chilled Ceiling Room Control	RCCRC	O
Radiator Room Control TU	RRCTU	O
VAV Control Discharge Air	VAVCDA	О

3.9.2.35 Input TempDischargeAir

Standard Mode

DP Name:	Ter	npDischar	geAir			Abbr.:		-		Mand	atory			
FB Name:	Sec	e table belo)W							Can b	e intern	al		Γ
Description														
This informa	tion is	s provided	by the Fu	unction	al Block	k 'Dischar	ge Air	Tem	peratu	re Sensor	r'.			
Datapoint T	уре													
DPT_Name:	D	PT_Value_	_Temp											
DPT Format	: F	DPT_ID: 9.001												
Field	D	escription						S	upp.	Range	Unit	Def	aul	t
	O full									°C	С	s		
Access Typ	е													
♦ Input														
$N \rightarrow this$			$1 \rightarrow th$	nis	\boxtimes									
Spontane	ous			Cyclic	ally:				Time-	out: 31min (rec.)				
Request				Polling	g:				Perio	d:				
Communica	ation	Туре												
♦ Group O	bject	Datapoint								Mandato	ry: 🛛			
Default G	roup	Address:												
Dynamics														
Power do	wn:	Save:												
Power up):	Value:	No ir	nitialisat	tion:		Defa	ult va	alue:		\boxtimes			
			Save	ed value	e:									
							Read	d fror	n bus:					
Exception H	land	ing												
				·										
Special Fea	tures	3												

List of Functional Blocks, **Input TempDischargeAir** is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	0
VAV Control Discharge Air	VAVCDA	0

LTE-HEE Mode

FB:	See table		Client	TempDisc	chargeAir						latory 🔲
_	below	Input	Name:							Op	tional 🗌
	ription:										
			led by the F	Functional E	Block 'Disc	harge Ai	r Temp	eratur	e Sensc	r' and incl	udes the
	US of the				<u> </u>						
DPT:	Name	DPT_Te	empHVACA		DPT ID	205.100	Dat	tatype	format	$V_{16}Z_{8}$	
Field			Descripti	on					Sup.	Unit	Default
Temperature Discha				e air tempe	erature val	ue			M	°C.	cs
STAT	US		Bitset						М		
- Out	OfService		Sensor of	out of service	e				М	t/f	false
- Fault Sensor value is corrupted								0	t/f	false	
- Ove	- Overridden Sensor is temporary overridden								0	t/f	false
- InA	- InAlarm Sensor is in alarm							0	t/f	false	
- Alaı	mUnAck	nAck Acknowledgement of alarm							0	t/f	false
Com	nunicatio	n:								-	
Bine	ding Grou	p:									
Clas	S		Type				Defaul	lt			
Ge	ographica	I 🛛	Apartme	nt . Room .	SubZone		1.1.1				
Ap	plication S	specific[] [
Ur	assigned		Broadca	st 🗌	Configural	ole 🗌					•
DP.	Address:		IO Type(ID):	328 (DAT	S)	Prope	erty ID		51	
LTE	-Service (event):	InfoRepo	ort Sniffer	on Binding	Group:			-		
Inf	oReport	\boxtimes	Timeout:			31	Min				
LTE	-Service (polling)	Bood Wi	ldcard / Re	on Sniffor	on Dindi	oa Croi	ın.			
Re	ad – Resp	onse	Neau Wi	iucaiu / Ke	sp Silliei	on bindi	ig Giot	ър	-		
Value	after Pov	ver-up:	_	Default V	alue 🛚				;	Stored Val	lue 🗌
Exce	otion Hand	dling:						Sa	ve at Po	werdown	
	·				·				·		
Spec	al Feature	es:									

List of Functional Blocks, **Input TempDischargeAir** is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	О
VAV Control Discharge Air	VAVCDA	O

3.9.2.36 Input TempOutside

Standard Mode

DP N	ame:	Temp	empOutside Abbr.: Mandatory \square														
FB Na	ame:	See t	table bel	OW								Ca	an be	internal			
Desc	ription																
This in	nformatio	n is p	orovided	by the I	unct	ional Bloc	k 'C	Outside '	Temp	eratu	ıre Se	nsor'.					
Datap	ooint Typ	ре															
DPT_	Name:	DP.	T_Value	_Temp													
DPT F	Format:	F ₁₆								DP	T_ID:	9.0	001				
Field	eld Description									S	upp.	Ran	nge	Unit	Defa	aul	t
											0	fu	III	°C	CS	S	
Acces	ss Type																
♦ In	put																
N -	\rightarrow this			$1 \rightarrow t$	his												
Sp	ontaneo	us	\boxtimes		Су	clically:		\boxtimes			Time-	-out:	out: 31min (rec.)				
Re	equest				Pol	lling:					Perio	d:					
Comr	nunicati	on T	уре														
♦ G	roup Obj	ect D	atapoint									Mand	datory:				
De	efault Gro	oup A	ddress:														
Dyna	mics																
Po	wer dow	n:	Save:														
Po	wer up:	,	Value:	No	initiali	isation:			Defa	ult va	alue:			\boxtimes			
				Sav	ed va	alue:											
									Read	d fror	n bus:						
Exce	ption Ha	ndlin	ıg														
Speci	ial Featu	res															
											·						

List of Functional Blocks, **Input TempOutside** is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	O
Water Heat Pump Control for Ringwater	WHPC	0
Split Unit Control	SPUC	О
Radiator and Chilled Ceiling Room Control	RCCRC	0
Radiator Room Control TU	RRCTU	О

FB:	See table			TempOu	tside					Mand	
	below	Input I	Name:							Op	tional 🗌
	iption:										
				unctional l	Block 'Outs	ide Tem	perature	Sens	or' and	includes t	:he
STAT	US of the i	nformatio	٦.								
DPT:	Name	DPT_Ter	npHVACA	bs_Z	DPT ID	205.100	Datat	type f	ormat	$V_{16}Z_{8}$	
Field			Descripti	on					Sup.	Unit	Default
Temp	erature		Outside t	emperatur	e value				M	°C.	cs
STAT	US		Bitset						М		
- Out	OfService		Sensor o	ut of servi	ce				M	t/f	false
- Fau	lt		Sensor v	alue is cor	rupted				0	t/f	false
- Ove	rridden		Sensor is	s temporar	y overridde	n			0	t/f	false
- InAlarm Sensor is in alarm									0	t/f	false
- Alar	mUnAck		Acknowle	edgement				0	t/f	false	
Comr	nunication	า:								-	
Bind	ding Grou	p:									
Clas	S		Type				Default				
Ge	ographica	<u> </u>									
Ap	plication S	pecific	OutsideS	ensorZon	е		1				
Un	assigned		Broadcas	st 🗌	Configurat	ole 🗌					
DP A	Address:		IO Type(ID):	320 (OTS))	Property	y ID:		51	
LTE	-Service (event):	InfoRepo	rt Sniffer	on Binding	Group:					
	oReport	\boxtimes	Timeout:			31	Min				
	-Service (Dood Wil	ldoord / Do	esp Sniffer	on Bindir	a Group				
Re	ad – Resp	onse	Reau Wii	lucaiu / Ne	sp Sillier	on bindii	ig Group.	• -			
Value	after Pow	/er-up:	-	Default \	/alue ⊠			-	Ç	Stored Val	ue 🗌
Excep	otion Hand	dling:						Sav	e at Po	werdown	
			-	-			<u>-</u>			·	<u>-</u>
Speci	al Feature	es:									

List of Functional Blocks, **Input TempOutside** is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	О
Water Heat Pump Control for Ringwater	WHPC	О
Split Unit Control	SPUC	О
Radiator and Chilled Ceiling Room Control	RCCRC	О
Radiator Room Control TU	RRCTU	О

3.9.2.37 Input TempFloor

Standard Mode

DP N	ame:	Temp	oFloor						Abbr.	:				Ν	/landat	ory		
FB Na	ame:	See 1	table b	elow										C	an be	internal		
Desc	ription																	
This i	nformatic	n is p	provide	ed by	the Fι	unctio	onal Blo	ck 'F	Floor T	emp	oerat	ture	Sense	or'.				
Datap	oint Typ	ре																
DPT_	Name:	DP	T_Valu	ıe_Te	mp													
DPT I	Format:	F ₁₆										DP	T_ID:	9	.001			
Field			scriptio	n								Sı	upp.	Ra	nge	Unit	Defa	ault
													0	fı	ull	°C	CS	3
Acce	ss Type																	
♦ In	put																	
N	\rightarrow this			1	\rightarrow th	is												
Sp	ontaneo	us	\boxtimes			Сус	lically:		\boxtimes				Time-	out:		31min (rec.)		
Re	equest					Polli	ing:						Perio	d:				
Comr	municati	on T	уре															
♦ G	roup Obj	ect D	atapoi	nt										Man	datory:	$ \square $		
De	efault Gro	up A	ddress	s:														
Dyna	mics																	
Po	wer dow	n:	Save:															
Po	wer up:	,	Value:		No in	itialis	sation:			D	efau	ılt va	alue:			\square		
					Save	d val	ue:											
										R	ead	fror	n bus:					
Exce	ption Ha	ndlin	ıg															
Spec	ial Featu	res																

List of Functional Blocks, **Input TempFloor** is used in:

Name of FB	Abbreviation	Mandatory Optional
Radiator and Chilled Ceiling Room Control	RCCRC	О
Radiator Room Control TU	RRCTU	О

FB:	See table	LTE CI	ient	TempFlo	or					Mano	latory 🗌
	below	Input N	lame:							Ор	tional 🗌
	iption:	_		-						_	
				unctional	Block 'Floo	r Tempei	rature Se	ensor	' and in	cludes the	!
STAT	US of the i	nformation	າ.								
DPT:	Name	DPT_Ten	npHVACA	bs_Z	DPT ID	205.100) Data	type	format	$V_{16}Z_{8}$	
Field			Description	on					Sup.	Unit	Default
Temp	erature		Floor tem	perature	value				M	°C.	cs
STAT	US		Bitset						M		
- Out	OfService			ut of servi					M	t/f	false
- Fau	lt		Sensor v	alue is coi	rrupted				0	t/f	false
	rridden				y overridde	n			0	t/f	false
- InAl	arm			in alarm					0	t/f	false
- Alar	mUnAck		Acknowle	edgement	of alarm				0	t/f	false
Comr	nunicatio	<u> 1:</u>									
Bind	ding Grou	p:									
Clas	S		Туре				Default				
Ge	ographica	<u> </u>									
Ap	plication S	pecific⊠	Apartmer	nt . Room	. SubZone		1.1.1				
Un	assigned		Broadcas	st 🗌	Configurat	ole 🗌					
DP /	Address:		IO Type(329 (FTS)		Propert	ty ID:		51	
	-Service (event):	InfoRepo	rt Sniffer	on Binding	Group:					
	oReport	\boxtimes	Timeout:			31	Min				
	-Service (Poad Wil	deard / Pa	esp Sniffer	on Rindir	a Group				
Re	ad – Resp	onse	INEau WII	ucaiu / ixe	ssp Sillier	on bindii	ig Group)			
Value	after Pow	/er-up:		Default \	/alue ⊠				Ç	Stored Va	lue 🗌
Excep	otion Hand	dling:						Sa	ve at Po	werdown	
Speci	al Feature	es:									

List of Functional Blocks, **Input TempFloor** is used in:

Name of FB	Abbreviation	Mandatory Optional
Radiator and Chilled Ceiling Room Control	RCCRC	0
Radiator Room Control TU	RRCTU	О

3.9.2.38 Input TempReturnAir

Standard Mode

DP 1	Name:	Tem	oReturr	ηAir					Abbr.	:				Λ	/landat	ory		
FB N	Name:	See	table be	elow										0	Can be	interna		
Des	cription																	
This	information	n is	provide	d by t	the Fu	unctio	onal Blo	ck '	Return	Aiı	r Tem	pera	ature S	Sens	or'.			
	apoint Typ	oe 💮																
	_Name:		T_Valu	e_Te	mp													
	Format:	F ₁₆										DP	T_ID:	9	.001			
Field	<u> </u>	Des	scription	n								S	upp.	Ra	inge	Unit	Def	ault
													M	f	ull	°C	С	S
Acc	ess Type																	
♦	Input																	
N	$I \rightarrow this$			1	\rightarrow th	is												
S	Spontaneo	us	S 🛛 Cyclically: 🖂 Time-									-out:		31min (rec.)				
R	Request					Poll	ing:						Perio	d:				
Con	nmunicati	on T	ype															
• (Group Obj	ect D	atapoii	nt										Man	datory	: 🛛		
	efault Gro	oup A	ddress	:	-													
Dyn	amics																	
Р	ower dow	n:	Save:															
P	ower up:		Value:		No in	itialis	sation:	L			Defau	ılt va	alue:					
					Save	d val	lue:]									
											Read	fror	n bus:					
Exc	eption Ha	ndlir	ıg															
Spe	cial Featu	res																

List of Functional Blocks, **Input TempReturnAir** is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	0
Water Heat Pump Control for Ringwater	WHPC	0
Split Unit Control	SPUC	0

FB:	See table	LTE C	lient	TempRet	urnAir					Mano	latory 🗌
	below	Input	Name:							Ор	tional 🗌
	iption:	_								-	
				unctional E	Block 'Retu	rn Air Te	mperatur	re Se	nsor' a	nd include	s the
STAT	US of the i	informatio	n.								
DPT:	Name	DPT_Te	mpHVACA	bs_Z	DPT ID	205.100	Datat	type f	ormat	$V_{16}Z_{8}$	
Field			Descripti	on					Sup.	Unit	Default
Temp	erature		Return a	ir temperati	ure value				M	°C.	cs
STAT	US		Bitset						M		
- Out	OfService			ut of servic	-				M	t/f	false
- Fau	lt		Sensor v	alue is corr	upted				0	t/f	false
- Ove	rridden		Sensor is	s temporary	overridde	n			0	t/f	false
- InAl	arm		Sensor is	s in alarm					0	t/f	false
- Alar	mUnAck		Acknowle	edgement o	of alarm				0	t/f	false
Comr	nunicatio	n:									
Bind	ding Grou	p:									
Clas	S		Туре				Default				
Ge	ographica	I 🔲	Apartme	nt . Room .	SubZone		1.1.1				
Ap	plication S	pecific									
Un	assigned		Broadcas	st 🗌	Configurat	ole 🗌					
DP A	Address:		IO Type(ID):	323 (RNA	TS)	Property	y ID:		51	
LTE	-Service (event):	InfoRepo	rt Sniffer	on Binding	Group:					
Inf	oReport	\boxtimes	Timeout:			31	Min				
	-Service (Poad Wil	ldcard / Re	en Sniffer	on Rindir	a Group				
Re	ad – Resp	onse	INGAU WII	iucaiu / ixe	sp Sillier	JII DIIIUII	ig Group.	•			
Value	after Pov	ver-up:		Default V	alue 🛚				(Stored Va	lue 🗌
Excep	otion Hand	dling:						Sav	e at Po	werdown	
Speci	al Feature	es:									
								-			

List of Functional Blocks, **Input TempReturnAir** is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	0
Water Heat Pump Control for Ringwater	WHPC	О
Split Unit Control	SPUC	О

3.9.2.39 Input TempRoom

Standard Mode

DP 1	Name:	Tem	Room						Abbr.	:				M	1andate	ory		
FB N	Name:	See 1	table be	elow										C	an be	internal		
Des	cription																	
This	information	n is	provide	d by t	the Fu	unctio	onal Blo	ck '	Room	Ter	mpera	ature	Sens	sor'.				
Data	apoint Typ	эе																
	_Name:		T_Valu	e_Te	mp													
	Format:	F ₁₆										DP	T_ID:	9	.001			
Field	b	Des	scription	n								S	upp.	Ra	nge	Unit	Defa	ault
													M	fu	ull	°C	CS	3
Acc	ess Type																	
♦	Input																	
Ν	$I \rightarrow this$			1	\rightarrow th													
S	Spontaneo	us	\square				lically:						Time-	-out:		31min (rec.)		
	Request					Poll	ing:						Perio	d:				
Con	nmunicati	on T	ype															
• (Group Obj	ject D	atapoii	nt										Man	datory:			
	Default Gro	oup A	ddress	:	· -													
Dyn	amics																	
Р	Power dow	n:	Save:															
Р	Power up:		Value:				sation:			I	Defau	ılt va	alue:					
					Save	d val	lue:		<u> </u>									
											Read	fror	n bus:					
Exc	eption Ha	ndlin	ıg															
Spe	cial Featu	res																

List of Functional Blocks, **TempRoom** is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	M
Water Heat Pump Control for Ringwater	WHPC	M
Split Unit Control	SPUC	M
Radiator and Chilled Ceiling Room Control	RCCRC	M
Radiator Room Control TU	RRCTU	M
VAV Control Discharge Air	VAVCDA	M

FB:	See table			TempRod	om					Mandatory		
	below	Input I	Name:							Op	tional 🛚	
	ription:											
				unctional E	Block 'Roo	m Tempe	eratu	ire Sens	or' and ir	ncludes th	е	
STAT	US of the i											
DPT:	Name	DPT_Ter	npHVACA	.bs_Z	DPT ID	205.100) C	Datatype	format	$V_{16}Z_{8}$		
Field Descrip				on					Sup.	Unit	Default	
Temp	erature		Room te	mperature	value				M	°C.	cs	
STATUS Bitset									M			
- Out	OfService		Sensor o	out of service	e				M	t/f	false	
- Fau	lt		Sensor v	alue is corr	rupted				0	t/f	false	
- Ove	rridden		Sensor is	s temporary	overridde	n			0	t/f	false	
- InAlarm Senso				is in alarm					0	t/f	false	
- Alaı	mUnAck		Acknowle	edgement d	of alarm				0	t/f	false	
Comr	nunicatio	า:	•						-	-	=	
Bine	ding Grou	p:										
Clas	S		Туре				Defa	ault				
G€	ographica	I 🛛	Apartme	nt . Room .	SubZone		1.1.	1				
Ap	plication S	pecific										
Ur	assigned		Broadcas	st 🗌	Configurat	ole 🗌						
DP A	Address:		IO Type(ID):	321 (RTS))	Pro	perty ID):	51		
LTE	-Service (event):	InfoRepo	ort Sniffer	on Binding	Group:		-				
	oReport	\boxtimes	Timeout:			31	Min					
	-Service (Pood Wi	Ideard / Pe	en Sniffer	on Rindi	na G	roun:				
Re	Read – Response Read Wildcard / Resp Sniffer on Binding Group:											
Value	after Pov	/er-up:	_	Default V	alue 🛚			_	;	Stored Va	lue 🗌	
Exce	otion Hand	dling:						Sa	ave at Po	werdown		
Speci	al Feature	es:										

List of Functional Blocks, **TempRoom** is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	M
Water Heat Pump Control for Ringwater	WHPC	M
Split Unit Control	SPUC	M
Radiator and Chilled Ceiling Room Control	RCCRC	M
Radiator Room Control TU	RRCTU	M
VAV Control Discharge Air	VAVCDA	M

3.9.2.40 Input TempRoomSetpCoolEff

Standard Mode

DF	Name:	Tem	pRoomSetp	CoolE	ff	Abbr.:			Mandat	tory		
FΒ	Name:	See	table below	•					Can be	internal		
De	scription											
					unctional Block '				HVAC Mod	de Drivei	n' or	
			anager Tem	peratur	re Driven' Z ₈ is N	NOT supp	orted.					
Da	tapoint Typ	ре										
DF	PT_Name:											
DF	PT Format:	F ₁₆	5					DPT_ID:	9.001			
Fie	eld	De	scription					Supp.	Range	Unit	Default	
								М	full	°C	CS	
Ac	cess Type											
•	Input											
	$N \rightarrow this$			$1 \rightarrow th$	is 🛛							
	Spontaneo	us			Cyclically:			Time-	out:	31min (rec.)	
	Request				Polling:			Period:				
Co	mmunicati	on 1	уре									
♦	Group Ob	ject l	Datapoint						Mandatory	': X		
	Default Gro	oup A	Address:									
Dy	namics		<u>.</u>									
	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	ires		•			•					

List of Functional Blocks, Input TempRoomSetpCoolEff is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	0
Water Heat Pump Control for Ringwater	WHPC	О
Split Unit Control	SPUC	О
Radiator and Chilled Ceiling Room Control	RCCRC	O

FB:	See table below	LTE Cli		TempRoomSetpCoolEff							Mandatory Optional	
Desci	ription:											
	nformation is	provide	d by the F	unctional	Block 'Roo	m Setpoi	nt N	lanager	HVAC M	ode Drive	n' or	
'Roon	Setpoint Ma	nager T	emperatu	re Driven'	Z ₈ is NOT	supporte	d					
DPT:	Name D	PT_Tem	pHVACAI	bs_Z	DPT ID	205.100)	Datatyp	e format	$V_{16}Z_{8}$		
Field			Description	on					Sup.	Unit	Default	
	erature		Room temperature setpoint value cooling						М	°C.	CS	
STAT			Bitset						M			
- All E			not suppo	orted					NA	f	false	
	nunication:											
	ding Group:											
Class			Type					ault				
	ographical	<u>\</u>	Apartmer	partment . Room . SubZone 1.1.1								
	plication Spe	ecific		<u></u>								
	assigned		Broadcas	st 🔝	Configural							
DP A	Address:		IO Type(I	D):	100 (RSM 101 (RSM		Pro	operty I	D:	56 53		
LTE	-Service (ev	ent):	InfoRepo	rt Sniffer	on Binding	Group:						
Inf	oReport	\boxtimes	Timeout:			31	Min	1				
	-Service (po ad – Respor		Read Wil	dcard / Re	esp Sniffer	on Bindir	ng G	roup:				
Value	lue after Power-up: Default Value 🖂						;	Stored Val	lue 🗌			
Exce	otion Handli	ng:						S	Save at Po	werdown		
Speci	al Features:											
			· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·					· · · · · · · · · · · · · · · · · · ·		

List of Functional Blocks, Input TempRoomSetpCoolEff is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	O
Water Heat Pump Control for Ringwater	WHPC	О
Split Unit Control	SPUC	О
Radiator and Chilled Ceiling Room Control	RCCRC	О

3.9.2.41 Input TempRoomSetpCoolEffNext

Standard Mode

Not applicable

LTE-HEE Mode

FB:	See table	LTE CI		TempRoomSetpCoolEffNext					Mandatory 🔲		
	below	Input N	ame:						Op	tional 🗌	
Desci	iption:	-							-		
This in	nformation is	provide	d by the F	unctional E	Block 'Roo	m Setpoi	nt Manage	er Tempera	ture Drive	n'.	
DPT:	Name D	PT_Tem	pHVACA	osNext	DPT ID	220.100	Dataty	pe format	U ₁₆ V ₁₆		
Field			Description	on				Sup.	Unit	Default	
Time			Time to n	ext setpoi	nt in minut	es		M	min.	0	
Temp	erature		Next coo	ing setpoi	nt			M	°C.	CS	
Comr	nunication:										
Bind	ding Group:										
Clas	S		Туре				Default				
Ge	ographical	\boxtimes	Apartmer	nt . Room .	SubZone		1.1.1				
Ар	plication Spe	ecific									
Un	assigned		Broadcas	it 🗌	Configural	ole 🗌					
DP A	Address:		IO Type(I	D):	101 (RSM	ITD)	Property	ID:	54		
LTE	-Service (ev	/ent):	InfoRepo	rt Sniffer	on Binding	Group:					
	oReport	\boxtimes	Timeout:			31	Min				
	- Service (po ad – Respor		Read Wil	dcard / Re	sp Sniffer	on Bindir	ng Group:				
Value	after Powe	r-up:		Default V	′alue 🛚				Stored Val	lue 🗌	
Excep	otion Handli	ing:						Save at Po	werdown		
Speci	al Features	:				•					

List of Functional Blocks, Input TempRoomSetpCoolEffNext is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	0
Water Heat Pump Control for Ringwater	WHPC	О
Split Unit Control	SPUC	О
Radiator and Chilled Ceiling Room Control	RCCRC	О

3.9.2.42 Input TempRoomSetpHeatEff

Standard Mode

DP	Name:		<u> pRoomSet</u>		<u>fff</u>	Abbr.:			Manda	Mandatory		
FΒ	Name:	See	e table below Can be internal									
De	Description											
	This information is provided by the Functional Block 'Room Setpoint Manager HVAC Mode Driven' or											
'Ro	om Setpoir	nt Ma	anager Tem	peratui	re Driven' Z ₈ is N	IOT supp	orted.					
Da	Datapoint Type											
	T_Name:	_Name: DPT_Value_Temp										
	T Format:	F ₁₆						DPT_ID:	9.001			
Fie	eld	De	escription				Supp.	Range	Unit	Default		
			M full °C								CS	
Ac	cess Type											
♦	Input											
	$N \rightarrow this$]	$1 \rightarrow th$	is 🛛							
	Spontaneo	us	\boxtimes		Cyclically:			Time-	out:	31min (rec.)	
	Request				Polling:			Perio	d:			
ဝိ	mmunicati	ion 1	Гуре									
•	Group Ob	ject l	Datapoint						Mandatory	/: X		
	Default Gro	oup A	Address:									
Dy	namics											
	Power dow	'n:	Save:									
	Power up:		Value:	No in	nitialisation:		Defau	It value:				
				Save	ed value:							
							Read	from bus:				
Ex	ception Ha	ndli	ng									
Sp	ecial Featu	ıres										

List of Functional Blocks, Input TempRoomSetpHeatEff is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	O
Water Heat Pump Control for Ringwater	WHPC	O
Split Unit Control	SPUC	О
Radiator and Chilled Ceiling Room Control	RCCRC	О
Radiator Room Control TU	RRCTU	O

FB:	See table	LTE CI	ient	TempRoomSetpHeatEff						Mandatory		
	below	Input N	lame:							Ор	tional 🗌	
Desci	ription:	-								-		
This in	nformation is	s provide	d by the F	unctional I	Block 'Roo	m Setpoi	nt N	/lanager	HVAC M	ode Drive	n' or	
'Roon	n Setpoint M	lanager T	emperatu	re Driven'	Z ₈ is NOT	supporte	d					
DPT:	Name [OPT_Ten	npHVACA	bs_Z	DPT ID	205.100)	Datatyp	e format	$V_{16}Z_{8}$		
Field			Description	on					Sup.	Unit	Default	
Temp	erature		Room ter	nperature	setpoint va	alue heat	ing		M	°C.	CS	
STAT			Bitset						M			
- All E	Bits		not suppo	orted					NA	f	false	
	nunication:								-			
Bind	ding Group	:										
Class			Type				De	fault				
Ge	eographical		Apartmer	nt . Room	. SubZone		1.1	.1				
	plication Sp	ecific										
Un	assigned		Broadcas	st 🗌	Configural							
DP A	Address:		IO Type(I	D).	100 (RSN	,	Pr	operty I	D.	55		
			• • •	·	101 (RSN			opo.ty .		51		
	-Service (e	<u> </u>		rt Sniffer	on Binding							
	oReport		Timeout:			31	Mir	า				
	-Service (pe ad – Respo		Read Wil	dcard / Re	esp Sniffer	on Bindir	ng G	Group:				
Value	after Powe	er-up:		Default \	/alue ⊠					Stored Va	lue 🗌	
Exce	otion Handl	ing:						S	Save at Po	owerdown		
											·	
Speci	al Features											

List of Functional Blocks, Input TempRoomSetpHeatEff is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	0
Water Heat Pump Control for Ringwater	WHPC	О
Split Unit Control	SPUC	0
Radiator and Chilled Ceiling Room Control	RCCRC	0
Radiator Room Control TU	RRCTU	O

3.9.2.43 Input TempRoomSetpHeatEffNext

Standard Mode

Not applicable

LTE-HEE Mode

FB:	See table	LTE CI		TempRo	omSetpHe	atEffNe	ĸt			Mand	• •
	below	Input N	ame:							Op:	tional 🗌
Desci	iption:	-								-	
This in	nformation is	provide	d by the F	unctional I	Block 'Roo	m Setpoi	nt Manag	ger Te	mpera	ture Drive	n'.
DPT:	Name D	PT_Tem	pHVACA	osNext	DPT ID	220.100	Datat	type fo	ormat	U ₁₆ V ₁₆	
Field			Description	on					Sup.	Unit	Default
Time			Time to n	ext setpoi	nt in minut	es			М	min.	0
Temp	erature		Next hea	ting setpoi	nt				M	°C.	CS
Comr	nunication:										
Bind	ling Group:										
Clas	S		Туре				Default				
Ge	ographical	\boxtimes	Apartmer	t . Room .	SubZone		1.1.1				
Ap	plication Sp	ecific									
Un	assigned		Broadcas	it 🗌	Configural	ole 🗌					
DP /	Address:		IO Type(I	D):	101 (RSN	ITD)	Propert	y ID:		52	
	-Service (ev	/ent <u>):</u>	InfoRepo	rt Sniffer	on Binding	g Group:					
	oReport	\boxtimes	Timeout:			31	Min				
	-Service (po ad – Respo		Read Wil	dcard / Re	sp Sniffer	on Bindiı	ng Group	:			
Value	after Powe	r-up:		Default V	′alue ⊠				;	Stored Val	ue 🗌
Excep	tion Handl	ing:						Sav	e at Po	werdown	
Speci	al Features	:									

List of Functional Blocks, Input TempRoomSetpHeatEffNext is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	О
Water Heat Pump Control for Ringwater	WHPC	0
Split Unit Control	SPUC	О
Radiator and Chilled Ceiling Room Control	RCCRC	0
Radiator Room Control TU	RRCTU	O

3.9.2.44 Input TempRoomSetpOptimCoolShift

Standard Mode

1 9D	Name:	Tem	oRoomSe	tpOptim	CoolSh	nift	Abbr.:				Mand	latory	/			
FB N	Name:	See 1	table belo	W							Can b	oe int	ernal			
Des	cription															
This	information	n is p	orovided b	by the Fu	unction	al Block '	HVAC C)ptimise	er'.							
Data	apoint Typ	эе														
DPT	_Name:	DP	T_Value_	Tempd												
DPT	Format:	F ₁₆							DP.	T_ID:	9.002	2				
Field	d	Des	scription						Su	ıpp.	Range	L	Jnit	Defa	aul	t
										M	full		K	CS	S	
Acc	ess Type															
♦	Input															
Ν	$I \rightarrow this$			$1 \rightarrow th$	is	\boxtimes										
S	Spontaneo	us			Cyclic	ally:				Time-	out:	31	min (rec.)		
F	Request				Polling	g:				Perio	d:					
Con	nmunicati	on T	уре													
♦	Group Obj	ject D	atapoint								Mandato	ry:	\boxtimes			
	Default Gro	oup A	ddress:													
Dyn	amics															
F	Power dow	n:	Save:													
F	Power up:	,	Value:	No in	itialisat	tion:		Defau	ult va	alue:			\boxtimes			
				Save	d value	e: [
								Read	fron	n bus:						
Exc	eption Ha	ndlin	ıg													
Spe	cial Featu	ires														
					•			•								

List of Functional Blocks, Input TempRoomSetpOptimCoolShift is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	О
Water Heat Pump Control for Ringwater	WHPC	О
Split Unit Control	SPUC	О
Radiator and Chilled Ceiling Room Control	RCCRC	О
VAV Control Discharge Air	VAVCDA	О

FB:	See table below	LTE Cli		TempRod	omSetpOp	timCool	Shift			latory 🗌 tional 🗍
<u> </u>		Input N	ame:						Ор	lionai 🔝
	iption:									
	nformation i								rted	
DPT:	Name	DPT_Tem	pHVACR	el_Z	DPT ID	205.101	Dataty	pe format	$V_{16}Z_{8}$	
Field			Description	on				Sup.	Unit	Default
Temp	erature		Room ter	mperature	setpoint sl	nift value	cooling	M	K	cs
STAT	US		Bitset					M		
- All E	Bits		not suppo	orted				NA	f	false
Comr	nunication							÷	÷	-
Bind	ding Group	:								
Clas	S		Туре				Default			
Ge	ographical	\boxtimes	Apartmer	nt . Room .	SubZone		1.1.1			
Ap	plication Sp	ecific								
Un	assigned		Broadcas	st 🗌	Configura	ble 🗌				
DP A	Address:		IO Type(I	ID):	115 (HVA	COPT)	Property	ID:	55	
LTE	-Service (e	vent):	InfoRepo	rt Sniffer	on Binding	Group:				
Inf	oReport	\boxtimes	Timeout:			31	Min			
LTE	-Service (p	olling):	Dood Wil	dcard / Re	on Sniffor	on Dindir	og Croup:			
Re	ad – Respo	nse	Reau Wii	ucaiu / Ke	sp Silliei	on bindii	ig Group.			
Value	after Powe	er-up:	=	Default V	alue 🛚			,	Stored Va	lue 🗌
Excep	otion Hand	ling:						Save at Po	werdown	
Speci	al Features	S:								
	•		•					•		•

List of Functional Blocks, Input TempRoomSetpOptimCoolShift is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	О
Water Heat Pump Control for Ringwater	WHPC	О
Split Unit Control	SPUC	О
Radiator and Chilled Ceiling Room Control	RCCRC	0
VAV Control Discharge Air	VAVCDA	О

3.9.2.45 Input TempRoomSetpOptimHeatShift

Standard Mode

DP Nam	ne: T	emp	Rooms	SetpC	<u>Optim</u>	Heat:	Shift		Abbr.:	-				Man	<u>idate</u>	ory			
FB Nam	ie: S	See ta	able be	low										Can	be	internal			
Descrip	tion																		
This info	ormatio	า is p	rovide	d by t	he Fu	unctio	onal Blo	ck 'l	IVAC (Optimi	iser	' .							
Datapoi	int Typ	е																	
DPT_Na	ame:	DPT	_Value	e_Te	mpd														
DPT Fo	rmat:	F ₁₆										DPT_	ID:	9.00)2				
Field			cription	1								Sup	o.	Range	е	Unit	Def	aul	t
												М		full		K	C	S	
Access	Туре																		
♦ Inpu	ıt																		
$N \rightarrow$	this			1	\rightarrow th	is	\boxtimes												
Spor	ntaneou	S	\boxtimes			Сус	lically:					Ti	me-c	out:		31min (rec.)		
Requ	ıest					Polli	ing:					Pe	eriod	:					
Commu	ınicatio	n Ty	ре																
♦ Gro	up Obje	ect Da	atapoir	nt										Mandat	tory:	\boxtimes			
Defa	ult Gro	лр Ас	dress:		-														
Dynami	cs																		
Powe	er dowr	n: S	Save:																
Powe	er up:	٧	/alue:		No in	itialis	sation:			Def	ault	valu	e:			\boxtimes			
					Save	d val	ue:												
										Rea	ad fr	rom b	ous:						
Excepti	on Har	dling	g																
Special	Featur	es																	
		•	•	•															

List of Functional Blocks, Input TempRoomSetpOptimHeatShift is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	О
Water Heat Pump Control for Ringwater	WHPC	О
Split Unit Control	SPUC	О
Radiator and Chilled Ceiling Room Control	RCCRC	О
Radiator Room Control TU	RRCTU	0
VAV Control Discharge Air	VAVCDA	О

FB:	See table	LTE CI		TempRod	mSetpOp	timHeat	Shift			datory 🗌
	below	Input N	iame:	-					<u> </u>	tional 🗌
	ription:									
This in	nformation i	s provide	d by the F	unctional E	Block 'HVA	.C Optim	iser'.Z ₈ is I	NOT suppo	orted	
DPT:	Name I	DPT_Tem	pHVACR	el_Z	DPT ID	205.10	Dataty	pe format	$V_{16}Z_{8}$	
Field			Description	on				Sup.	Unit	Default
Temp	erature		Room ter	nperature	setpoint sh	nift value	cooling	M	K	CS
STAT	US		Bitset					M		
- All E	Bits		not suppo	orted				NA	f	false
Comr	nunication	:							-	-
Bind	ding Group	:								
Clas	s		Туре				Default			
Ge	ographical	\boxtimes	Apartmer	nt . Room .	SubZone		1.1.1			
Ар	plication Sp	ecific								
Un	assigned		Broadcas	st 🗌	Configural	ole 🗌				
DP A	Address:		IO Type(I	ID):	115 (HVA	COPT)	Property	ID:	62	
LTE	-Service (e	vent):	InfoRepo	rt Sniffer	on Binding	Group:				
Inf	oReport	\boxtimes	Timeout:			31	Min			
	-Service (p ad – Respo	<u></u>	Read Wil	dcard / Re	sp Sniffer	on Bindir	ng Group:			
Value	after Powe	er-up:		Default V	alue 🛚				Stored Va	lue 🗌
Excep	otion Hand	ling:	_	_				Save at Po	owerdown	
Speci	al Features	s:								

List of Functional Blocks, Input TempRoomSetpOptimHeatShift is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	О
Water Heat Pump Control for Ringwater	WHPC	О
Split Unit Control	SPUC	О
Radiator and Chilled Ceiling Room Control	RCCRC	О
Radiator Room Control TU	RRCTU	0
VAV Control Discharge Air	VAVCDA	О

3.9.2.46 Input TempRoomSetpSetCoolEff

Standard Mode

Not applicable

LTE-HEE Mode

FB:	See table	LTE CI		TempRo	omSetpSe	tCoolEff				latory 🔲
	below	Input N	lame:						Ор	tional 🗌
Desci	iption:									
This in	nformation is	provide	d by the F	unctional	Block 'Roo	m Setpoi	nt Manage	er HVAC-M	ode Drive	n'.
DPT:	Name D	PT_Ten	npRoomSe	etpSet	DPT ID	213.100	Dataty	pe format	V ₁₆ V ₁₆ V ₁₆	₅ V ₁₆
Field			Description	on				Sup.	Unit	Default
Temp	erature		Comfort s	setpoint co	ooling			M	°C	CS
Temp	erature		Standby	setpoint c	ooling			M	°C	CS
Temp	erature		Economy	setpoint	cooling			M	°C	CS
Temp	erature		Building p	orotection	setpoint co	oling		M	°C	CS
Comr	nunication:									
Bind	ding Group:									
Clas	s		Туре				Default			
Ge	ographical		Apartmer	nt . Room	. SubZone		1.1.1			
Ap	plication Spe	ecific								
Un	assigned		Broadcas	st 🗌	Configural	ble 🗌				
DP A	Address:		IO Type(I	ID):	100 (RSM	IHD)	Property	ID:	54	
LTE	-Service (ev	ent):	InfoRepo	rt Sniffer	on Binding	Group:				
Inf	oReport	\boxtimes	Timeout:			31	Min			
	-Service (po		Read Wil	deard / Re	esp Sniffer	on Rindir	oa Group:			
Re	ad – Respor	nse	iteau vvii	ucaiu / ixi	esp offilier	on bindii	ig Group.			
Value	after Power	r-up:	-	Default \	Value ⊠				Stored Va	lue 🗌
Excep	otion Handli	ng:						Save at Po	werdown	
Speci	al Features:									
		•	•	•						•

List of Functional Blocks, Input TempRoomSetpSetCoolEff is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	0
Water Heat Pump Control for Ringwater	WHPC	O
Split Unit Control	SPUC	O
Radiator and Chilled Ceiling Room Control	RCCRC	O
VAV Control Discharge Air	VAVCDA	O

3.9.2.47 Input TempRoomSetpSetHeatEff

Standard Mode

Not applicable

LTE-HEE Mode

FB:	See table	LTE CI		TempRo	omSetpSe	tHeatEff	i			latory 🔲
	below	Input N	lame:						Ор	tional 🗌
Desci	iption:									
This in	nformation is	provide	d by the F	unctional	Block 'Roo	m Setpoi	nt Manage	er HVAC-M	lode Drive	n'.
DPT:	Name D	PT_Ten	npRoomSe	etpSet	DPT ID	213.100	Dataty	pe format	V ₁₆ V ₁₆ V ₁₆	₅ V ₁₆
Field			Description	on				Sup.	Unit	Default
Temp	erature		Comfort s	setpoint h	eating			M	°C	cs
Temp	erature		Standby :	setpoint h	eating			M	°C	cs
Temp	erature		Economy	setpoint	heating			M	°C	cs
Temp	erature		Building p	orotection	setpoint he	eating		M	°C	cs
Comr	nunication:									
Bind	ding Group:									
Clas	s		Туре				Default			
Ge	ographical		Apartmer	nt . Room	. SubZone		1.1.1			
Ap	plication Spe	ecific								
Un	assigned		Broadcas	st 🗌	Configura	ble 🗌				
DP /	Address:		IO Type(I	ID):	100 (RSM	1HD)	Property	ID:	53	
LTE	-Service (ev	ent):	InfoRepo	rt Sniffer	on Binding	g Group:				
	oReport	\boxtimes	Timeout:			31	Min			
	-Service (po		Read Wil	dcard / R	esp Sniffer	on Rindir	od Gronn.			
Re	ad – Respor	nse	TCGGG VVII	dodia / To	cop Crimer	on bindii	ig Croup.			
Value	after Powe	r-up:		Default '	Value ⊠			,	Stored Va	lue 🗌
Excep	otion Handli	ng:						Save at Po	owerdown	
Speci	al Features:									
	·									

List of Functional Blocks, Input TempRoomSetpSetHeatEff is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	0
Water Heat Pump Control for Ringwater	WHPC	0
Split Unit Control	SPUC	0
Radiator and Chilled Ceiling Room Control	RCCRC	0
Radiator Room Control TU	RRCTU	0
VAV Control Discharge Air	VAVCDA	O

3.9.2.48 Input TempSupplyAir

Standard Mode

DP Na	me:	Temp	Supply	Air					Abbr	::					Manda	tory			
FB Na	me:	See t	able be	low											Can be	inter	nal		
Descri	ption																		
This in	formatio	n is p	provided	d by the	Fu	ınctio	nal Blo	ck '	Supply	γА	ir Tem	per	ature :	Sen	sor'.				
Datap	oint Typ	е																	
DPT_N			Γ_Value	_Temp)														
DPT F	ormat:	F ₁₆											T_ID:		9.001				
Field		Des	cription	1								S	upp.	R	ange	Uni	t	Defa	ult
													0		full	°C	\perp	CS	<u> </u>
Acces	s Type																		
♦ Inp	out																		
N -	→ this			1 →	thi	s													
Spo	ontaneou	ıs	\boxtimes			Cycli	ically:		\boxtimes				Time	-out:		31mi	n (r	ec.)	
Red	quest					Pollir	ng:						Perio	d:					
Comm	unication	on Ty	/pe																
♦ Gr	oup Obje	ect D	atapoin	t										Ма	ndatory	/: <u> </u>	1		
Def	ault Gro	up Ad	ddress:																
Dynan	nics																		
Pov	ver dowr	า: เร	Save:																
Pov	ver up:	١	/alue:	No	o in	itialis	ation:	L			Defau	ılt v	alue:			\triangleright	<u>] </u>		
				Sa	ave	d valu	ue:]		
											Read	fror	n bus:						
Excep	tion Har	ndlin	g																
Specia	al Featu	res																	

List of Functional Blocks, **Input TempSupplyAir** is used in:

Name of FB	Abbreviation	Mandatory Optional
VAV Control Discharge Air	VAVCDA	0

FB:	See table	LTE CI		TempSup	plyAir					latory 🔲 tional 🔲			
	below	Input N	lame:	e:									
	iption:												
				unctional E	Block 'Supp	oly Air Te	emperatur	e Sensor' a	and include	es the			
STAT	US of the i												
DPT:	Name	DPT_Ter	npHVACA	bs_Z	DPT ID	205.100	Dataty	ype format	$V_{16}Z_{8}$				
Field			Description	on				Sup.	Unit	Default			
Temp	erature		Supply a	ir temperat	ure value			M	°C.	cs			
STAT	US		Bitset					M					
- Out	OfService		Sensor o	ut of service	e			M	t/f	false			
- Fau	lt		Sensor v	alue is cor	rupted			0	t/f	false			
- Ove	rridden			s temporary	y overridde	n		0	t/f	false			
- InAlarm Sensor is in alarm O								t/f	false				
- AlarmUnAck Acknowledgement of alarm O t/f								false					
Comr	nunicatior	า:	•						-	=			
Bind	ding Group	p:											
Clas	S		Type				Default						
Ge	ographical		Apartmer	nt . Room .	SubZone		1.1.1						
Ap	plication S	pecific											
Un	assigned		Broadcas	st 🗌	Configurat	ole 🗌							
DP A	Address:		IO Type(ID):	322 (SAT	S)	Property	/ ID:	51				
LTE	-Service (event):	InfoRepo	rt Sniffer	on Binding	Group:							
Inf	oReport	\boxtimes	Timeout:			31	Min						
LTE	-Service (polling):	Dood Wil	ldoord / Do	on Sniffor	on Dindir	a Croup.						
Re	ad – Resp	onse	Read Wil	ldcard / Re	sp Sillier	on bindii	ig Group.						
Value	after Pow	er-up:		Default V	alue 🛚			·	Stored Va	lue 🗌			
Excep	otion Hand	dling:						Save at Po	owerdown				
Speci	al Feature	:s:											

List of Functional Blocks, **Input TempSupplyAir** is used in:

Name of FB	Abbreviation	Mandatory Optional
VAV Control Discharge Air	VAVCDA	О

3.9.3 Detailed Specification of the Datapoints (Outputs)

See following pages

3.9.3.1 Output ActPosSetpCoolStageA

Standard Mode

DP Name:	ActF	PosSet	:pCools	StageA	1	Abbr.:	-			Mand	atory 1)		Ī
FB Name:	See	table l	below							Can b	e intern	al 🛚 🗀	3
Description													
This datapoin	t con	tains tl	he perd	cent setpoi	nt v	/alue for	the c	ool stage	A actuato	or position	•		
Datapoint Ty	ре												
DPT_Name:	DF	PT_Sca	aling										
DPT Format:	U ₈	3							DPT_ID:	5.001			
Field	De	escripti	on						Supp.	Range	Unit	Default	
										0100	%	CS	
Access Type													
♦ Output													
this $\rightarrow M$		3 ²⁾	th	nis → 1									
Spontaneo	us	\boxtimes	COV:	\boxtimes	[Delta-Va	lue:	5%	MinRepT	īme:	10s		
			Cyclic		F	Period:		15min (re	ecommen	ded value)		
Request		\boxtimes											
Communicat	ion 1	Гуре											
♦ Group Ob	ject	Datapo	oint							Mandato	ry: 🛛 🖂		
Default Gr	oup /	Addres	s:	•									
Dynamics													
Power dov	n:	Save:											
Power up:		Value	:	No initialis					ılt value:				
				Saved val				Actua	ıl value (n	ot for inpu	t): 🛛		
			mit on	bus (only f	for o	output):		Read	from bus	(only for i	nput):		
Exception Ha	ındli	ng											
Special Featu													
see Function			_										
2) one or mult	iple י	valves	can be	controlled	l in	parallel							

List of Functional Blocks, **Output ActPosSetpCoolStageA** is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	О
Radiator and Chilled Ceiling Room Control	RCCRC	О
VAV Control Discharge Air	VAVCDA	О

FB:	See table below	LTE Clie	ent Output Name:	ActPosSetpCoolStageA						Mandatory 1) Optional	
Desc	ription:								÷		
	latapoint co		e percent setpoint va	alue for the	cools	stage	e A a	ctuator p	osition	with a	
DPT:		DPT_Rel	Value_Z	DPT ID	202.	001	Da	atatype fo	ormat	J_8Z_8	
Field		Descrip	otion			Su	p.	Range	Unit	COV	Default
Actua	tor position	Percen	t value of the actuate	or position		N	1	0100	%	5	CS
COMI	MAND		ration for commands	3				enum			
			rmalWrite			M	- 1				0
			r commands			N/	A L				
	nunication										
	ding Group):	1								
Clas	-		Туре					Default			
	eographical		Apartment.Room.S	ub_Zone				1.1.1			
	plication Sp	oecific			<u>-</u>	<u></u>					
	nassigned		Broadcast	Configur							
DP .	Address:		IO Type(ID):	352 (HVA 116 (POC			Prop	erty ID:		53 53	
LTE	-Services	(event):	COV 🛛 I	MinRepTim	ne:		10 s	sec	Heart	beat:	15 min
Wı	rite		Output per default	communica	ating		Bind	ing Grou	p Wildc	ard allow	red 🖂
			Tx Prio:	High 🗌			No	rmal 🛚		Low	
			Transm after Powe	r-up: Store	d Valu	ue 🗌	_ A	ct Value	\square D	efault Va	lue 🗌
Exce	otion Hand	ling:	-						Save a	t Powerd	lown 🗌
	ial Feature										
1) see	Functiona	l Block dia	agram	<u> </u>							

List of Functional Blocks, **Output ActPosSetpCoolStageA** is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	О
Radiator and Chilled Ceiling Room Control	RCCRC	О
VAV Control Discharge Air	VAVCDA	О

3.9.3.2 Output ActPosSetpCoolStageB

Standard Mode

DP Name:	ActPos	Setp	CoolS	StageB	P	Abbr.:				Manda	atory 1)	
FB Name:	See tab	ole b	elow							Can b	e intern	al 🛛
Description												
This datapoin	t contair	าร th	e perc	ent setpoir	nt v	alue for	the c	ool stage	B actuato	r position.		
Datapoint Ty	ре											
DPT_Name:	DPT_	Sca	ling									
DPT Format:	U ₈								DPT_ID:	5.001		
Field	Desci	iptio	n						Supp.	Range	Unit	Default
										0100	%	CS
Access Type												
♦ Output												
$this \to M$				$iis \rightarrow 1$								
Spontaneo	ous	IJ L	COV:	\boxtimes		Delta-Va	lue:	5%	MinRepT	ime:	10s	
			Cyclic		F	Period:		15min (re	ecommen	ded value)		
Request												
Communicat	ion Typ	е										
♦ Group Ob	ject Dat	apoi	int							Mandator	y: 🛛	
Default Gr	oup Add	lress	s:									
Dynamics												
Power dov	ın: Sa	ve:										
Power up:	Va	ılue:		No initialis		on:			ılt value:			
				Saved value						ot for input		
		ansr	nit on l	bus (only f	or c	output):		Read	from bus	(only for ir	nput):	
Exception Ha	ndling											
Special Feat												
see Function												
2) one or mult	iple valv	es c	can be	controlled	in i	parallel						

List of Functional Blocks, $Output\ ActPosSetpCoolStageB$ is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	О
Radiator and Chilled Ceiling Room Control	RCCRC	О
VAV Control Discharge Air	VAVCDA	О

FB:	See table below	LTE Clie	ent Output Name:	ActPosSetp	Сос	olSta	geB			Manda Op	atory ¹⁾ [] itional []
Desci	ription:	=		-					•		
			e percent setpoint	value for the co	ool s	stage	B ac	tuator p	osition	with a	
COMI	MAND infor										
DPT:	Name	DPT_Rel	Value_Z	DPT ID 2	202.0	001	Dat	tatype fo	ormat	U_8Z_8	
Field		Descrip	otion			Sup). F	Range	Unit	COV	Default
	tor position	Percen	t value of the actua	ator position		М	C)100	%	5	CS
COMI	MAND	Enume	ration for comman	ds				enum			
		0 = No	rmalWrite			М					0
		all othe	er commands			NA	١				
Comr	nunication	1:									
Bind	ding Group) :									
Clas			Туре					Default			
Ge	ographical		Apartment.Room.	.Sub_Zone				1.1.1			
Ap	plication Sp	pecific									
	assigned		Broadcast	Configurat	ole [
DP A	Address:		IO Type(ID):	352 (HVA) 116 (POOC)	F	Prope	erty ID:		54 54	
LTE	-Services	(event):	COV 🛛	MinRepTime		•	10 s	ec	Heart	beat:	15 min
Wı	rite		Output per defaul	t communicatii	ng	E	Bindir	ng Grou	p Wildo	ard allow	/ed ⊠
			Tx Prio:	High 🗌			Nor	mal 🛚		Low	
			Transm after Pow	er-up: Stored	Valu	ле 🗌	A	ct Value	\square D	efault Va	lue 🗌
Exce	otion Hand	lling:	-						Save a	t Powerd	down
	al Feature	s:									
1) see	Functiona	l Block dia	agram								

List of Functional Blocks, **Output ActPosSetpCoolStageB** is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	О
Radiator and Chilled Ceiling Room Control	RCCRC	О
VAV Control Discharge Air	VAVCDA	O

3.9.3.3 Output ActPosSetpDischargeAir

Standard Mode

DF	P Name:	ActP	osSet	pDisch	nargeAir		Abbr.:				Manda	tory 1)]
FB	Name:	See	table l	below							Can be	interna	al 🛚	3
De	escription													
	is datapoint		ains tl	he per	cent set	ooint	value for	the c	lischarge	air actuate	or position.			
	tapoint Ty													
	PT_Name:	DP	T_Sca	aling										
	PT Format:	U ₈								DPT_ID:				
Fie	eld	De	scripti	on						Supp.	Range	Unit	Default	
											0100	%	CS	
Ac	cess Type													
♦	Output		- 0)											
	this \rightarrow M] 2)		his $\rightarrow 1$									
	Spontaneo	us		COV:		\leq	Delta-Va	lue:	5%	MinRepT		10s		
				Cyclic		\leq	Period:		15min (re	ecommen	ded value)			
	Request													
Cc	mmunicati	on T	уре											
•	Group Ob										Mandatory	/: \times		
	Default Gro	oup A	ddres	ss: -	-									
Dy	namics													
	Power dow	'n:	Save:											
	Power up:		Value):	No initia					ult value:				
					Saved						ot for input)			
				mit on	bus (on	ly fo	r output):		Read	from bus	(only for in	put):		
Ex	ception Ha	ndlir	าg											
	ecial Featu													
	see Functio													
2)	one or mult	iple v	alves	can be	e control	led i	n parallel							

List of Functional Blocks, **Output ActPosSetpDischargeAir** is used in:

Name of FB	Abbreviation	Mandatory Optional
VAV Control Discharge Air	VAVCDA	О

FB:	See table below	LTE Clie	ent Output Name:	ActPosSet	tpDis	charg	eAir		Mandatory 1) Optional	
Desci	ription:			-						
			e percent setpoint va	alue for the	disch	arge a	ir actuator p	osition	with a	
COM	MAND infor	mation.								
DPT:	Name	DPT_Rel	Value_Z	DPT ID	202.	001	Datatype for	ormat L	J_8Z_8	
Field		Descrip	otion			Sup.	Range	Unit	COV	Default
Actua	tor position		t value of the actuat			M	0100	%	5	CS
COM	MAND		ration for command	S			enum			
		0 = No	rmalWrite			M				0
		all othe	er commands			NA				
Comr	nunication	:					-	-		-
Bind	ding Group):								
Clas	ss		Туре				Default			
Ge	ographical	\boxtimes	Apartment.Room.S	Sub_Zone			1.1.1			
Ар	plication Sp	oecific 🗌								
Un	assigned		Broadcast	Configura	able [
DP A	Address:		IO Type(ID):	362 (ADA)		Pr	operty ID:	5	7	
LTE	-Services	(event):	COV 🛛	MinRepTime	e:	10	sec	Hearth	eat:	15 min
Wr	rite		Output per default	communica	ting	Bi	nding Grou	p Wildca	ard allow	red ⊠
			Tx Prio:	High 🗌			Normal 🖂		Low	
			Transm after Powe	er-up: Stored	d Valu	ue 🗌	Act Value	∑ De	efault Va	ılue 🗌
Excep	otion Hand	ling:						Save at	Powerd	down
	al Feature	s:								
1) see	Functiona	l Block dia	agram							

List of Functional Blocks, **Output ActPosSetpDischargeAir** is used in:

Name of FB	Abbreviation	Mandatory Optional
VAV Control Discharge Air	VAVCDA	O

3.9.3.4 Output ActPosSetpExtractAir

Standard Mode

DF	P Name:	ActP	osSet	pExtra	ctAir		Abbr.:				Manda	tory 1)		
FB	Name:	See	table l	below							Can be	e interna	al 🛛	
De	escription													
	is datapoint		ains tl	he per	cent setpo	oint	value for	the e	extract ai	r actuator p	osition.			
	tapoint Ty													
	PT_Name:	DP	T_Sca	aling										
	PT Format:	U ₈								DPT_ID:			T	
Fie	eld	De	scripti	on						Supp.	Range	Unit	Default	
											0100	%	CS	
Ac	cess Type													
♦	Output		- 60											
	this \rightarrow M] 2)		his \rightarrow 1									
	Spontaneo	us		COV:			Delta-Va	lue:	5%	MinRep1		10s		
				Cyclic	igtriangle		Period:		15min (recommen	ded value)			
	Request													
Co	ommunicati	on T	уре											
•	Group Ob										Mandatory	y: 🛛		
	Default Gro	oup A	ddres	ss: -	-									
Dy	namics													
	Power dow		Save:											
	Power up:		Value):	No initial					ult value:				
					Saved va						ot for input)			
				mit on	bus (only	fo!	r output):		Read	d from bus	(only for in	put):		
Ex	ception Ha	ndlir	าg											
	ecial Featu													
	see Function													
۷)	one or mult	iple v	alves	can be	e controlle	ed i	n parallel							

List of Functional Blocks, **Output ActPosSetpExtractAir** is used in:

Name of FB	Abbreviation	Mandatory Optional
VAV Control Extract Air	VAVCEA	О

FB:	See table below	LTE Cli	ent Output Name:	ActPosSe	tpExt	tractAi	r			tory ¹⁾ [] tional []
Desci	ription:			-						
		ntains th	e percent setpoint va	alue for the	extra	ct air a	ctuator pos	ition with	n a COM	IMAND
inform	ation.									
DPT:	Name	DPT_Re	IValue_Z	DPT ID	202.	001	Datatype for	ormat L	J_8Z_8	
Field		Descri	ption			Sup.	Range	Unit	COV	Default
Actua	tor position	Percer	nt value of the actuat	or position		М	0100	%	5	CS
COM	MAND	Enume	eration for command	S			enum			
		0 = Nc	rmalWrite			M				0
		all othe	er commands			NA				
Comr	nunication	:					_			
Bind	ding Group):								
Clas	s		Туре				Default			
Ge	ographical		Apartment.Room.S	Sub_Zone			1.1.1			
Ap	plication Sp	oecific 🗌								
Un	assigned		Broadcast	Configura	able [
DP A	Address:		IO Type(ID):	362 (ADA)		Pr	operty ID:	5	8	
LTE	-Services	(event):	COV 🛛	MinRepTime	e:	10	sec	Hearth	eat:	15 min
Wr	rite	\boxtimes	Output per default	communica	ting		nding Grou	p Wildca	ard allow	red 🛚
			Tx Prio:	High 🗌			Normal 🔀		Low	
			Transm after Powe	er-up: Stored	d Valu	ue 🗌	Act Value	· ⊠ De	efault Va	lue 🗌
Excep	otion Hand	ling:						Save at	Powerd	lown
			·	<u> </u>						
Speci	al Feature	s:								
1) see	Functiona	l Block di	agram	•	·					

List of Functional Blocks, **Output ActPosSetpExtractAir** is used in:

Name of FB	Abbreviation	Mandatory Optional
VAV Control Extract Air	VAVCEA	0

3.9.3.5 Output ActPosSetpFreshAir

Standard Mode

DF	Name:	ActP	<u>osSet</u>	pFres	hAir	Ab	br.:	-			Manda	tory '	
FB	Name:	See	table l	below							Can be	interna	al 🛛
De	scription												
Th	is datapoint	cont	ains th	he per	cent setpoi	nt val	ue for th	e fr	esh air a	ctuator po	sition.		
Da	tapoint Ty	эе											
DF	PT_Name:	DP	T_Sca	aling									
DF	PT Format:	U ₈								DPT_ID:	5.001		
Fie	eld	Des	scripti	on						Supp.	Range	Unit	Default
											0100	%	CS
Ac	cess Type												
•	Output												
	$\text{this} \to M$		2)		his \rightarrow 1								
	Spontaneo	us	$ \boxtimes $	COV:		De	lta-Valu	e:	5%	MinRepT	īme:	10s	
				Cyclic		Pe	riod:		15min (re	ecommen	ded value)		
	Request												
Co	mmunicati	on T	уре										
•	Group Ob	ject D	atapo	oint							Mandatory	/: <u> </u>	
	Default Gro	oup A	ddres	ss: -	-								
Dy	namics												
	Power dow	n:	Save:										
	Power up:		Value	:	No initialis	sation:			Defau	ılt value:			
					Saved val	ue:			Actua	ıl value (no	ot for input)): 🛛	
			Trans	mit on	bus (only	for ou	:put):		Read	from bus	(only for in	put):	
Ex	ception Ha	ndlin	ng										
	ecial Featu												
	see Functio												
2)	one or multi	ple v	alves	can be	e controlled	d in pa	rallel						

List of Functional Blocks, **Output ActPosSetpFreshAir** is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	O
Water Heat Pump Control	WHPC	О
Split Unit Control	SPUC	О

FB:	See table below	LTE Clie	ent Output Name:	ActPosSetpFreshAir					Mandatory 1) Optional	
Desci	ription:			_					-	
		ntains the	e percent setpoint va	alue for the t	fresh	air act	uator positi	on with a	a COMN	1AND
inform	ation.									
DPT:	Name	DPT_Rel	Value_Z	DPT ID	202.	001	Datatype for	ormat L	J_8Z_8	
Field		Descrip	otion			Sup.	Range	Unit	COV	Default
Actua	tor position		t value of the actuat			M	0100	%	5	CS
COM	MAND		ration for command	s			enum			
		0 = No	rmalWrite			M				0
		all othe	er commands			NA				
Comr	nunication	:								
Bind	ding Group):								
Clas	ss		Туре				Default			
Ge	eographical	\square	Apartment.Room.S	Sub_Zone			1.1.1			
Ap	plication Sp	oecific 🗌								
Un	assigned		Broadcast	Configura						
DP /	Address:		IO Type(ID):	362 (ADA)		Pı	operty ID:	5	5	
LTE	-Services ((event):	COV 🛛	MinRepTime	e:	1(sec	Hearth	eat:	15 min
Wr	rite		Output per default	communica	ting		nding Grou	p Wildca	ard allow	red 🛚
			Tx Prio:	High 🗌			Normal 🖂		Low	
			Transm after Powe	er-up: Stored	d Valu	ue 🗌	Act Value	∑ De	efault Va	lue 🗌
Excep	otion Hand	ling:						Save at	Powerd	lown 🗌
	al Feature	s:								
1) see	Functiona	Block dia	agram							•

List of Functional Blocks, **Output ActPosSetpFreshAir** is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	О
Water Heat Pump Control	WHPC	О
Split Unit Control	SPUC	0

3.9.3.6 Output ActPosSetpHeatStageA

Standard Mode

DP Name:	Acti	PosSet	pHeat	StageA	1	Abbr.:	-			Manda	atory 1)	
FB Name:	See	table l	below							Can b	e intern	al \square
Description												
This datapoin	t con	tains tl	he perd	cent setpoi	nt v	/alue for	the h	eat stage	A actuate	or position	•	
Datapoint Ty	ре											
DPT_Name:	DF	PT_Sca	aling									
DPT Format:	Uε	3							DPT_ID:	5.001		
Field	De	escripti	on						Supp.	Range	Unit	Default
										0100	%	CS
Access Type												
♦ Output												
this $\rightarrow M$		$3^{2)}$	th	nis → 1								
Spontaneo	us		COV:	\boxtimes	[Delta-Va	lue:	5%	MinRepT	īme:	10s	
			Cyclic		F	Period:		15min (re	ecommen	ded value)		
Request		\square										
Communicat	ion ⁻	Туре										
♦ Group Ob	ject	Datapo	oint							Mandator	'y: 🛛 🖂	
Default Gr	oup /	Addres	s:	•								
Dynamics												
Power dov	vn:	Save:										
Power up:		Value	:	No initialis					ılt value:			
				Saved val				Actua	ıl value (n	ot for inpu	t): 🛛	
			mit on	bus (only t	for o	output):		Read	from bus	(only for in	nput):	
Exception Ha	andli	ing										
Special Feat												
see Function			_									
2) one or mult	iple '	valves	can be	controlled	l in	parallel						

List of Functional Blocks, Output ActPosSetpHeatStageA is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	О
Radiator and Chilled Ceiling Room Control	RCCRC	О
Radiator Room Control TU	RRCTU	О
VAV Control Discharge Air	VAVCDA	O

FB:	See table below	LTE Cli	ent Output Name:	nt Output Name: ActPosSetpHeatStageA							Mandatory 1) Optional	
Desci	ription:									<u> </u>		
	•	ntains th	e percent setpoint v	alue for the	heat	stage	A ac	tuator p	osition v	with a		
COM	MAND infor	mation.										
DPT:	Name	DPT_Re	IValue_Z	DPT ID	202.			tatype fo	ormat L	J_8Z_8		
Field		Descri				Sup). F	Range	Unit	COV	Default	
	tor position		nt value of the actua			М	C)100	%	5	CS	
COM	MAND		eration for command	ls			(enum				
			rmalWrite			M					0	
		all other	er commands			NA	١					
	nunication											
	ding Group):										
Clas	s		Type					Default				
	ographical		Apartment.Room.	Sub_Zone				1.1.1				
	plication Sp	oecific										
Un	assigned		Broadcast	Configura								
DP /	Address:			352 (HVA)					5			
			IO Type(ID):	116 (POO		F	Prope	erty ID:	5			
				369 (EHE					5			
	-Services		COV 🛛	MinRepTim			10 se	ec	Hearth	eat:	15 min	
Wr	rite		Output per default	communica	ting	E			p Wildca	ard allow	red 🛚	
			Tx Prio:	High 🗌			Nor	mal 🛚		Low		
			Transm after Powe	er-up: Store	d Valu	ue 🗌	Ad	ct Value	⊠ Dε	efault Va	lue 🗌	
Excep	otion Hand	ling:	-						Save at	Powerd	lown 🗌	
											·	
	al Feature	s:										
1) see	Functiona	l Block d	agram		•	•	•		•		•	

List of Functional Blocks, **Output ActPosSetpHeatStageA** is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	О
Radiator and Chilled Ceiling Room Control	RCCRC	0
Radiator Room Control TU	RRCTU	О
VAV Control Discharge Air	VAVCDA	О

3.9.3.7 Output ActPosSetpHeatStageB

Standard Mode

DF	Name:	ActP	osSet	pHeat	StageB	Ab	br.:				Manda	tory ''		J
FB	Name:	See t	table I	below							Can be	interna	al 🛛	
De	scription													
Th	is datapoint	cont	ains th	he per	cent setpoi	int val	ue for	the h	eat stage	B actuate	or position.			
Da	tapoint Ty	эе												
DF	PT_Name:	DP	T_Sca	aling										
DF	PT Format:	U ₈								DPT_ID:	5.001			
Fie	eld	Des	scripti	on						Supp.	Range	Unit	Default	
											0100	%	cs	
Ac	cess Type													
♦	Output													
	$this \to M$		2)	t	his → 1									
	Spontaneo	us		COV:		De	lta-Va	lue:	5%	MinRepT	ime:	10s		
				Cyclic		Pe	riod:		15min (r	ecommen	ded value)			
	Request													
Co	mmunicati	on T	уре											
♦	Group Ob	ject D	atapo	oint							Mandatory	<i>y</i> : 🛛		
	Default Gro	oup A	ddres	ss: -	-									
Dy	namics													
	Power dow	n:	Save:											
	Power up:	,	Value	:	No initialis	sation	: [Defa	ult value:				
					Saved va	lue:			Actua	al value (n	ot for input): 🛛		
		•	Trans	mit on	bus (only	for ou	tput):		Read	I from bus	(only for in	put):		
Ex	ception Ha	ndlin	ıg											
	ecial Featu													
	see Functio													
2)	one or multi	ple v	alves	can be	e controlled	d in pa	arallel							

List of Functional Blocks, **Output ActPosSetpHeatStageB** is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	О
Water Heat Pump Control	WHPC	О
Split Unit Control	SPUC	О
Radiator and Chilled Ceiling Room Control	RCCRC	О
VAV Control Discharge Air	VAVCDA	O

FB:	See table below	LTE CI	LTE Client Output Name: ActPosSetpHeatStageB						
Desci	ription:			<u>-</u>				-	
	latapoint co MAND infor		he percent setpoin	t value for the haet	stage	B actuator բ	oosition v	with a	
DPT:	Name	DPT_R	elValue_Z	DPT ID 202.	.001	Datatype f	ormat (J_8Z_8	
Field Descri					Sup.	Range	Unit	COV	Default
	tor position		ent value of the act		М	0100	%	5	cs
COMI	MAND		eration for comma	nds		enum			
			ormalWrite		М				0
			er commands		NA				
Comr	nunication	:							
Bind	ding Group):							
Clas	ss		Туре			Default			
Ge	eographical	\square	Apartment.Roor	n.Sub_Zone		1.1.1			
Ap	plication Sp	oecific_] [
Ur	assigned		Broadcast	Configurable [
DP A	Address:			352 (HVA)		52			
			IO Type(ID):	116 (POOC)	Р	roperty ID:		2	
				369 (EHEA)			5		
	-Services (MinRepTime:	1	0 sec	Hearth	eat:	15 min
Wı	rite	\boxtimes	Output per defa	ult communicating	В	inding Grou	p Wildca	ard allow	red 🖂
			Tx Prio:	High 🗌		Normal 🖂		Low	
			Transm after Po	wer-up: Stored Val	ue 🗌	Act Value	e⊠ De	efault Va	lue 🗌
Exce	otion Hand	ling:					Save at	Powerd	lown 🗌
Speci	al Feature	s:							
1) see	Functiona	l Block o	diagram						

List of Functional Blocks, **Output ActPosSetpHeatStageB** is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	О
Water Heat Pump Control	WHPC	О
Split Unit Control	SPUC	O
Radiator and Chilled Ceiling Room Control	RCCRC	0
VAV Control Discharge Air	VAVCDA	О

3.9.3.8 Output AirFlowMSExtr

Standard Mode:

DP I	Name:	Airl	FlowMS	SExtr				Mand	Mandatory					
FB I	Name:	see	table b	oelow							Can b	e interna	al	
Des	cription													
This	output co	ntai	ins the	air flov	w value for	co-ordinat	tion of o	discha	arge	air and ex	ktract air.			
Data	apoint Ty	ре												
DPT	_Name:	D	PT_Val	lue_Ai	irFlow									
DPT	Format:	F	16							DPT_ID:	9.009)		
Field Description										Supp.	Range	Unit	Defa	ult
										Full	m ³ /h	cs	;	
Acc	ess Type													
♦	Output													
t	$his \to M$		\boxtimes	1	this \rightarrow 1									
									10sec					
				Cycli	c 🛛	Period:		15mi	in (r	ecommen	ded value	e)		
F	Request													
Con	nmunicati	ion	Туре											
♦	Group Ob	ject	Datapo	oint							Mandato	ry: 🛛		
	Default Gro	oup	Addres	ss: ·								•		
Dyn	amics													
F	Power dow	n:	Save:											
F	Power up:		Value):	No initialis	sation:		D	efau	ılt value:				
					Saved val	ue:		Α	ctua	ıl value:				
			Trans	mit or	n bus:		\boxtimes							
Exc	eption Ha	ndl	ing											
Spe	cial Featu	ıres	3											

List of Functional Blocks, **Output AirFlowMSExtr** is used in:

Name of FB	Abbreviation	Mandatory Optional
VAV Control Discharge Air	VAVCDA	0

LTE-HEE Mode

FB:	see table below	LTE Se Output		A	irFlowMSE	xtr				Mand Opt	atory 🗌
Desci	ription:	-								-	
			air flow value for co-	-or	dination of	dischar	ge air	and ext	ract air. T	he STAT	US and
			s NOT supported.								
DPT:	Name	DPT_H\	/ACAirFlow_Z		DPT ID	203.104			format		
Field			Description			_	Rang		Unit	COV	Default
Air Flo			Actual air flow valu	ıe		M	Full	Range	m³/h	1	CS
STAT									Bitset		
all b	its					NA					false
									Sup.	Range	
	MAND									enum	
	commands								NA		
	nunication										
	ding Group	o:						1			
Clas			Туре					Defau	ılt		
	eographical		Apartment. Room	n . :	SubZone			1.1.1			
	plication S	pecific_	-			·					
	assigned		Broadcast		Configura						
	Address:		IO Type(ID):		see table b			perty ID		ee table	
	-Services	` —	COV 🛛		/linRepTime		10	sec	Hearth	oeat:	15 min
	oReport		Output per defau	lt c	ommunicat	ing	Bine	ding Gro	oup Wildca	ard allow	ed 🗌
	ΓΕ Read-R		Tx Prio:		High 🗌		N	ormal 🛭		Low	
sh	lling of the all always t pported)		Transm after Pov	ver	-up: Stored	l Value		Act Valu	ue ⊠ De	efault Va	lue 🗌
	perty-Serv		Read only [_		Read/W	/rita				
	ividual acc		INEad Only			ixeau/v	/IIIC				
Excep	otion Hand	lling:							Save a	t Powerd	own
Speci	al Feature	s:									

List of Functional Blocks, **Output AirFlowMSExtr** is used in:

Name of FB	Abbreviation	IO Type ID / Property ID	Mandatory Optional
VAV Control Discharge Air	VAVCDA	261 / 56	0

3.9.3.9 Output CompressorPosSetp

Standard Mode

DF	Name:	Con	npress	orPos	Setp		Abbr.:						Mandat	tory		
FB	Name:	See	table	below									Can be	interna	al	\boxtimes
De	scription															
Th	is datapoint	con	ntains t	he per	cent se	tpoint	t value for	the c	com	presso	or actuato	r pos	sition.			
Da	tapoint Ty	ре														
DF	PT_Name:	DI	PT_Sc	aling												
DF	PT Format:	U	3								DPT_ID:		5.001			
Fie	eld	De	escripti	on							Supp.	Rar	nge	Unit	Defau	ılt
												0.	.100	%	CS	3
Ac	cess Type															
♦	Output															
	this \rightarrow M			1	this \rightarrow 1		\boxtimes									
	Spontaneo	us		COV		\boxtimes	Delta-Va	lue:	5%)	MinRep1	Time		10s		
				Cyclic	С	\boxtimes	Period:		15ı	min (re	ecommen	ded	value)			
	Request															
Co	mmunicat	ion ⁻	Туре													
♦	Group Ob	ject	Datapo	oint								Mai	ndatory	<i>'</i> : 🛛		
	Default Gro	oup .	Addres	ss: -	-								-			
Dy	namics															
	Power dow	/n:	Save:													
	Power up:		Value	:	No init	ialisa	tion:			Defau	ılt value:					
					Saved	value	e:			Actua	l value (n	ot fo	r input)	: 🛛		
			Trans	mit on	bus (or	nly fo	r output):			Read	from bus	(onl	y for in	put):		
Ex	ception Ha	ındli	ing													
			•	•	•	•				•		•	•			•
Sp	ecial Featu	ıres				·										

List of Functional Blocks, **Output CompressorPosSetp** is used in:

Name of FB	Abbreviation	Mandatory Optional
Water Heat Pump Control	WHPC	M
Split Unit Control	SPUC	M

LTE-HEE Mode

FB:	See table				Compress	sorPo	sSet	9				atory 🔲
	below	Output I	Name:								Op	tional 🗌
Desc	ription:											
This c	latapoint co	ntains the	e percent setpo	int val	ue for the	comp	resso	r act	uator po	osition w	ith a CC	MMAND
inform	nation.											
DPT:	Name	DPT_Rel	Value_Z		DPT ID	202.	001	Dat	tatype fo	ormat L	J_8Z_8	
Field		Descrip	otion				Sup	. F	Range	Unit	COV	Default
Actua	tor position	Percen	t value of the a	ctuato	r position		М	C)100	%	5	CS
COMI			ration for comn	nands				•	enum			
		0 = No	rmalWrite				М					0
		all othe	er commands				NA					
Comr	nunication	:						-			-	-
Bine	ding Group) :										
Clas	SS		Туре						Default			
Ge	eographical	\boxtimes	Apartment.Ro	om.St	ub_Zone				1.1.1			
Аp	plication Sp	oecific 🗌										
Ur	nassigned		Broadcast		Configur	able [
DP	Address:		IO Type(ID):		373 (CPA)	Р	rope	rty ID:	5	1	
LTE	-Services	(event):	COV 🛛	N	1inRepTim	ne:	1	0 se	ec	Hearth	eat:	15 min
Wı	rite	\boxtimes	Output per de	fault c	ommunica	ating	В	Bindir	ng Grou	p Wildca	ard allow	ed 🖂
			Tx Prio:		High 🗌			Nor	mal 🛛		Low	
			Transm after I	Power		d Valı			ct Value	M De	efault Va	
Evac	otion Hand	ling	Transm alter i	OWEI	-up. Otore	u van	ue	Λ(Ji Value		Powerd	
Exce	otion Hand	iiig:								Save at	rowerd	
	-1 = -1											
Spec	ial Feature	S:										

List of Functional Blocks, **Output CompressorPosSetp** is used in:

Name of FB	Abbreviation	Mandatory Optional
Water Heat Pump Control	WHPC	M
Split Unit Control	SPUC	M

3.9.3.10 Output EnergyDemAC

Standard Mode

Not applicable

LTE-HEE Mode

FB:	see belo		LTE Serv		EnergyDen	nAC					latory 🗌 tional 🔲
Desc	riptio	on:									
				nergy demand valu	ie and the C	ontrMod	e (for	air cooli	ing device	s) for the	e energy
		ansforr									
DPT:	N	lame		rgyDemWater	DPT ID	211.10				J_8N_8	
Field			Description			Sup.	Ran		Unit	COV	Default
Energ			Actual de	emand value		М	Full	Range	%	1	CS
Dema						—	ļ .				
Mode			0 4	_		M	1	20	enum.	Y	CS
			0 = Auto			M					
			1 = Hea 3 = Coo		nngWmup	0					
			5 = C00		ghtPurge f	0					
			7 = Test		nergHeat	Ö					
			9 = Fan			ő					
			11 = Ice	- ,	Demand	Ŏ					
			all other			NA					
Comr	nuni	ication	:			_ <u></u>	1				
Bine	ding	Group):								
Clas				Type				Defau	ılt		
		aphical									
			oecific⊠	DistrSegmC		<u></u> -		1			
		gned		Broadcast	Configu						
		ress:		IO Type(ID):	see table			perty ID		ee table	
			(event):	cov ⊠	MinRepTin		10	sec	Hearth	eat:	15 min
	oRep			Output per defaul	t communica	ating	Bin	ding Gro	oup Wildca	ard allow	red 🗌
			esponse	Tx Prio:	High 🗌		Ν	lormal 🛭		Low	
		of the							_		_
		ways b	e	Transm after Pow	er-up: Store	d Value	Ш	Act Valu	ue 🖂 De	efault Va	lue 🔛
	ppor										
		y-Servi ual acc		Read only		Read/V	Vrite				
Exce	ption	n Hand	ling:						Save at	Powerd	lown 🗌
Speci	ial Fe	eature	s:								

List of Functional Blocks, **Output EnergyDemAC** is used in:

Name of FB	Abbreviation	IO Type ID / Property ID	Mandatory Optional
Fan Coil Control	FCC	258 / 74	О
VAV Control Discharge Air	VAVCDA	261 / 74	0

3.9.3.11 Output EnergyDemAH

Standard Mode

Not applicable

LTE-HEE Mode

FB:	see belo		LTE Serv		EnergyDer	nAH					latory 🗌 tional 🔲
Desci	riptio	on:									
				nergy demand valu	ie and the C	ontrMod	e (for	air heat	ing device	s) for th	e energy
		ansforr									
DPT:	N	ame		rgyDemWater	DPT ID	211.10				J_8N_8	
Field			Description			Sup.	Rang		Unit	COV	Default
Energ			Actual de	emand value		М	Full	Range	%	1	CS
Dema											
Mode			0 4	_		M	1	20	enum.	Y	CS
			0 = Auto			M					
			1 = Hea 3 = Coo		nngWmup	0					
			5 = C00		ghtPurge f	0					
			7 = Test		nergHeat	l ŏ					
			9 = Fan			ŏ					
			11 = Ice	- ,	Demand	Ŏ					
			all other			NA					
Comr	nuni	cation	:			<u> </u>	2				
Bind	ding	Group):								
Clas				Type				Defau	ılt		
		phical									
			ecific⊠	DistrSegmH		<u></u> -		1			
		gned		Broadcast	Configu						
		ess:		IO Type(ID):	see table			perty ID		ee table	
			(event):	cov ⊠	MinRepTin		10	sec	Hearth	eat:	15 min
	oRep			Output per defaul	t communic	ating	Bind	ding Gro	oup Wildca	ard allow	red 🗌
			esponse	Tx Prio:	High 🗌		N	ormal 🛭		Low	
		of the					_		_		_
		ways b	е	Transm after Pow	er-up: Store	ed Value		Act Valu	ue 🖂 De	efault Va	lue 🔛
	pport										
		/-Servi ual acc		Read only		Read/V	Vrite				
Exce	ption	Hand	ling:						Save at	Powerd	lown
Speci	ial Fe	eature	s:								

List of Functional Blocks, **Output EnergyDemAH** is used in:

Name of FB	Abbreviation	IO Type ID	Mandatory
		/	Optional
		Property ID	
Fan Coil Control	FCC	258 / 73	0
Water Heat Pump Control	WHPC	259 / 73	0
Split Unit Control	SPUC	260 / 73	0
VAV Control Discharge Air	VAVCDA	261 / 73	O

3.9.3.12 Output EnergyDemAir

Standard Mode

Not applicable

LTE-HEE Mode

FB:	see table	LTE Ser	ver	EnergyDem	Air			Mano	latory 🗌
	below	Output N	Name:					Ор	tional 🗌
Desc	ription:	<u>-</u>	-					<u>-</u>	
			nergy demand valu	e, the Contrl	√lode an	nd the Emergl	Mode (VA)	V device	s) for the
energ	y demand t	ransforme	er.						
DPT:	Name	DPT_Ene	ergyDemAir	DPT ID	223.10	0 Datatype	format \	$I_8N_8N_8$	
Field		Descripti	on		Sup.	Range	Unit	COV	Default
Energ	ıy	Actual de	emand value		M	Full Range	%	1	CS
Dema	ind								
Mode					M	120	enum.	Υ	cs
		0 = Auto			M				
		1 = Hea		nngWmup	0				
		3 = Coc	,	ghtPurge	0				
		5 = Pre			0				
		7 = Tes	t $8 = Em$	nergHeat	0				
		9 = Fan	Only $10 = Free$	eeCool	0				
		11 = Ice	20 = No	Demand	0				
		all other	enums.		NA				
Emer	gMode				M	15	enum	Υ	CS
		0 = Nor	mal		M				
		1 = Eme	ergPressure 2	=	0				
		EmergDe	epress		0				
		3 = Eme	ergPurge 4 = Em	nergShutDn	0				
		5 = Eme	ergFire		NA				
		all other	enums.						
Comr	nunication	:			-	•		-	-
Bine	ding Group) :							
Clas	SS		Туре			Defau	lt		
Ge	eographical								
Ap	plication S	oecific⊠	DistrSegmV			1			
	assigned		Broadcast	Configura	able 🔲				
DP .	Address:		IO Type(ID):	see table b	elow	Property ID	: s	ee table	below
LTE	-Services	(event):	COV 🛛	MinRepTime	e:	10 sec	Hearth	eat:	15 min
Inf	oReport		Output per defaul	t communica	ting	Binding Gro	un Wilde	ard allow	(od 🗆
						· ·	•	aru allow	red 📙
	TE Read-Re		Tx Prio:	High 🗌		Normal 🛭		Low	
	lling of the								
	all always b	e	Transm after Pow	er-up: Stored	d Value	Act Value	ue 🛛 De	efault Va	lue 🗌
	pported)								
	perty-Servi		Read only	7	Read/V	Vrite 🖂			
	ividual acc		Trodd Offiy		Ttodd, v	viite 🔼			
Exce	otion Hand	lling:					Save at	Powerd	lown
Speci	ial Feature	s:							
					<u> </u>			· <u> </u>	

List of Functional Blocks, **Output EnergyDemAir** is used in:

Name of FB	Abbreviation	IO Type ID	Mandatory Optional
		Property ID	
VAV Control Discharge Air	VAVCDA	261 / 75	О

3.9.3.13 Output EnergyDemCC

Standard Mode

Not applicable

LTE-HEE Mode

FB:	see table	LTE Ser	ver	EnergyDem	CC				Mand	
	below		Optional							
	ription:	-							_	
This c	output con	tains the e	nergy demand valu	ie and the Co	ontrMod	e (for ch	illed o	ceiling dev	vices) for	the
		transforme	er.							
DPT:	Name	DPT_Ene	ergyDemWater	DPT ID	211.10		atype		J_8N_8	
Field		Descripti			Sup.	Range		Unit	COV	Default
Energ		Actual de	emand value		М	Full Ra	inge	%	1	CS
Dema										
Mode					М	12	0	enum.	Υ	CS
		0 = Aut	~		М					
		1 = Hea		nngWmup	0					
		3 = Coo		ghtPurge	0					
		5 = Pre			0					
		7 = Tes		nergHeat	0					
		9 = Fan			0					
		11 = Ice		Demand	0					
		all other	enums		NA					
	nunicatio									
	ding Grou	p:	 			1.	.	14		
Clas		. —	Туре			L	Defau	lit		
	eographica		D:-4-0							
	plication S	pecific	DistrSegmC	0			<u> </u>			
	assigned		Broadcast	Configura		D	-4 ID		4-1-1-	la alla
	Address:	/avam4\-	IO Type(ID):	see table b		Prope 10 se		: s Hearth	ee table	
	-Services oReport	(event):		MinRepTim		10 Se	C	пеапи	beat:	15 min
1111	окероп		Output per defaul	t communica	ung	Bindin	g Gro	oup Wildca	ard allow	ed 🗌
<i>(</i> 1 -	ΓΕ Read-F	Resnonse	Tx Prio:	High 🗌		Non	mal D	7	Low	
	lling of the		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ı iigii 🗀		14011	nai <u>/</u>	<u> </u>	LOW	
	all always		Transm after Pow	er-up: Stored	d Value	П Ас	t Valı	ue 🖂 De	efault Va	lue 🖂
	pported)		Transmit and Fow	or up. Otorot	a valuo		van		Jiaait Va	.40 🗀
	perty-Serv	/ice	Dandards	7	D = = = 1/4	\/	<u> </u>			
	ividual ac		Read only		Read/V	vrite	\boxtimes			
Exce	otion Han	dling:	_					Save at	Powerd	lown 🗌
Speci	ial Featur	es:								

List of Functional Blocks, **Output EnergyDemCC** is used in:

Name of FB	Abbreviation	IO Type ID / Property ID	Mandatory Optional
Radiator and Chilled Ceiling Room Control	RCCRC	257 / 72	О
VAV Control Discharge Air	VAVCDA	261 / 72	0

3.9.3.14 Output EnergyDemRD

Standard Mode

Not applicable

LTE-HEE Mode

FB:	see belo		LTE Serv		Energ	yDem	RD				Mand Op	latory latory
Desci	riptio	on:			-							
This c	utpu	ıt conta	ins the er	nergy demand valu	ie and t	the Co	ntrMod	e (fo	or radiator	devices)	for the e	nergy
dema	nd tr	ansforr										
DPT:	N	ame		rgyDemWater	DPT	ΓID	211.10		Datatype		J_8N_8	
Field			Description				Sup.		nge	Unit	COV	Default
Energ			Actual de	emand value			M	Fu	ıll Range	%	1	CS
Dema												
Mode							M		120	enum.	Υ	CS
			0 = Auto				M					
			1 = Hea		nngWn		0					
			3 = Coo 5 = Pred		ghtPurg	je	0					
			7 = Test		ı nergHe	at	0					
			9 = Fance				0					
			11 = lce	20 = No			Ŏ					
			all other				NA					
Comr	nuni	cation	:				L.				4	
Bind	ding	Group):									
Clas				Type					Defau	lt		
		aphical										
			oecific⊠	DistrSegmH			<u></u> -		1			
		gned		Broadcast		nfigura						
		ress:		IO Type(ID):		table b			roperty ID		ee table	
			(event):	COV 🛛		epTime		1(0 sec	Hearth	eat:	15 min
Int	oRe	port		Output per defaul	t comm	nunicat	ting	Bi	inding Gro	oup Wildca	ard allow	ed 🗌
			esponse	Tx Prio:	Hig	h 🗌			Normal [>		Low	
		of the										
		ways b	e	Transm after Pow	/er-up:	Stored	l Value	Ш	Act Valu	ie 🖂 De	efault Va	lue
	ppor											
		/-Servi ual acc		Read only			Read/V	Vrite				
Exce	ption	n Hand	ling:							Save at	Powerd	lown
Speci	ial F	eature	s:									

List of Functional Blocks, **Output EnergyDemRD** is used in:

Name of FB	Abbreviation	IO Type ID / Property ID	Mandatory Optional
		Property ID	
Radiator and Chilled Ceiling Room Control	RCCRC	257 / 71	O
Radiator Room Control TU	RRCTU	256 / 71	O
VAV Control Discharge Air	VAVCDA	261 / 71	O

3.9.3.15 Output FanSpeedSetp

Standard Mode

DF	Name:	Fan	Speed	Setp			Abbr.:					Ma	anda	tory		
FB	Name:	See	table	below								Ca	ın be	interna	al	\boxtimes
De	scription															
Th	is datapoint	cor	ntains t	he per	cent setp	oint	value for	the f	an p	ositio	n.					
Da	tapoint Ty	ре														
DF	PT_Name:	DI	PT_Sc	aling												
DF	T Format:	U	3								DPT_ID:	5.0	001			
Εie	eld	De	escripti	ion							Supp.	Range	е	Unit	Defau	ult
												01	00	%	CS	3
AC	cess Type															
*	Output															
	this \rightarrow M			t	his \rightarrow 1		\boxtimes									
	Spontaneo	us		COV:			Delta-Va	lue:	5%)	MinRep1	Γime:		10s		
				Cyclic			Period:		15r	nin (re	ecommen	ded va	lue)			
	Request															
Co	mmunicat	ion ⁻	Туре													
♦	Group Ob	ject	Datapo	oint								Mand	atory	<i>ı</i> : 🛛		
	Default Gro	oup.	Addres	ss: -	-											
Dy	namics															
	Power dow	/n:	Save:	:												
	Power up:		Value) :	No initia	lisati	ion:			Defau	ılt value:					
					Saved v	alue	: [Actua	l value (n	ot for ir	nput)	: 🛛		
			Trans	mit on	bus (only	y for	output):			Read	from bus	(only f	or in	put):		
Ex	ception Ha	ındli	ing													
ł																
Sp	ecial Featu	ıres														
			·											·		

List of Functional Blocks, **Output FanSpeedSetp** is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	M
Water Heat Pump Control	WHPC	M
Split Unit Control	SPUC	M

LTE-HEE Mode

FB:	See table below		ient Name:	FanSpeedSetp	1		Mandatory Optional		
Desci	ription:	-							
This c	latapoint co	ntains t	ne percent setpoin	nt value for the fan p	osition v	with a CON	MMAND	informa	tion.
DPT:	Name	DPT_R	elValue_Z	DPT ID 202.	.001 I	Datatype fo	ormat l	J_8Z_8	
Field		Desci	ription		Sup.	Range	Unit	COV	Default
Fan p	osition	Perce	nt value of the fan	position	M	0100	%	5	cs
COMI	MAND	Enum	eration for comma	ands		enum			
		0 = N	ormalWrite		M				0
		all oth	er commands		NA				
Comr	nunication	1:			-		-		-
Bind	ding Group) :							
Clas	SS		Туре			Default			
Ge	eographical	\boxtimes	Apartment.Roo	m.Sub_Zone		1.1.1			
Ap	plication Sp	oecific_							
Ur	assigned		Broadcast	Configurable [
DP A	Address:		IO Type(ID):	372 (FSA)	Pro	perty ID:	5	1	
	-Services	(event):		MinRepTime:	10	sec	Hearth	peat:	15 min
Wı	rite		Output per defa	ult communicating	Bir	iding Grou	p Wildca	ard allow	red 🖂
			Tx Prio:	High 🗌	1	Normal 🛚		Low	
			Transm after Po	ower-up: Stored Val	ue 🗌	Act Value	De	efault Va	lue 🗌
Exce	otion Hand	lling:					Save at	t Powerd	lown 🗌
Speci	al Feature	s:							

List of Functional Blocks, ${\bf Output\ FanSpeedSetp}$ is used in:

Name of FB	Abbreviation	Mandatory Optional
Fan Coil Control	FCC	M
Water Heat Pump Control	WHPC	M
Split Unit Control	SPUC	M

3.9.3.16 Output HeatCoolMode

Standard Mode

DP	Name:	Hea	tCoolN	∕lode		Abbr.:				Manda	tory		
FΒ	Name:	See	table l	below						Can be	intern	al 🛛	
De	scription												
Th	This datapoint contains the heat/cool information (for a compressor).												
Da	tapoint Ty	эе											
	PT_Name:	DF	PT_He	at/Coo									
DP	T Format:	B ₁							DPT_ID:	1.100			
Fie	eld	De	escripti	on					Supp.	Range	Unit	Default	
			= coo	_						0/1	Bit	cs	
		1	= hea	ting									
Ac	cess Type												
♦	Output			_									
	$\text{this} \to M$				his \rightarrow 1								
	Spontaneo	us		COV:	\boxtimes	Delta-\	/alue:	5%	MinRepT	īme:	10s		
				Cyclic	; 🛛	Period	:	15min (re	ecommen	ded value)			
	Request												
Co	mmunicati	on 1	Гуре										
♦	Group Ob									Mandatory	<i>r</i> : 🛛		
	Default Gro	oup /	Addres	ss:	-								
Dy	namics												
	Power dow	n:	Save:										
	Power up:		Value	:	No initialis	ation:		Defau	ılt value:				
					Saved val				,	ot for input)			
				mit on	bus (only f	or output):	Read	from bus	(only for in	put):		
Ex	ception Ha	ndli	ng										
Sp	ecial Featu	ires											

List of Functional Blocks, **Output HeatCoolMode** is used in:

Name of FB	Abbreviation	Mandatory Optional
Water Heat Pump Control	WHPC	M
Split Unit Control	SPUC	M

LTE-HEE Mode

FB:	See table				HeatCool	Mode	ļ				latory 🔲
	below	Outp	<u>ut N</u>	lame:						Ор	tional 🗌
Desci	ription:	=								-	
This c	latapoint co	ntains	the	heat/cool info	rmation (for a co	mpre	essor).				
DPT:	Name	DPT_I	lea	t/Cool	DPT ID	1.10	0	Datatype f	ormat E	3 ₁	
Field		Des	crip	tion			Sup.	Range	Unit	COV	Default
		0 =	: co	oling			М	0/1	Bit	yes	CS
		1 =	: he	ating							
Comr	nunication	1:							-		-
Bind	ding Group) :									
Clas	SS			Туре				Default			
Ge	eographical	\triangleright		Apartment.Ro	om.Sub_Zone			1.1.1			
Ap	plication S	pecific									
Ur	assigned			Broadcast	Configur	able [
DP A	Address:			IO Type(ID):	373 (CPA)	Pro	operty ID:	5	2	
LTE	-Services	(event) :	COV 🛛	MinRepTim	ie:	10	sec	Hearth	peat:	15 min
Wı	rite	\boxtimes		Output per de	fault communica	ating	Bir	nding Grou	p Wildca	ard allow	∕ed ⊠
				Tx Prio:	High 🗌			Normal 🛚		Low	
				Transm after	Power-up: Store	d Val	ue 🗌	Act Value	De 🖂	efault Va	ılue 🗌
Exce	otion Hand	lling:		-					Save a	t Powerd	down
Speci	al Feature	s:									

List of Functional Blocks, **Output HeatCoolMode** is used in:

Name of FB	Abbreviation	Mandatory Optional
Water Heat Pump Control	WHPC	M
Split Unit Control	SPUC	M

3.9.3.17 Output ValueFreshAirDem

Standard Mode

DF	Name:	Falu	ueFres	hAirDe	em		Abbr.:				Man	datory	
FB	Name:	See	table	below							Can	be intern	al 🛚
De	scription												
Th	is datapoint	t cor	ntains t	he per	cent va	lue fo	or the frest	n air d	demand				
	tapoint Ty	ре											
DF	PT_Name:	DI	PT_Pe	rcent_	U8								
DF	PT Format:	U ₈	3							DPT_ID	5.00	4	
Fie	eld	De	escripti	on						Supp.	Range	Unit	Default
											0100	%	CS
Ac	cess Type												
♦	Output												
	this $\rightarrow M$			1	this \rightarrow 1		\boxtimes						
	Spontaneo	us	\boxtimes	COV	:	\boxtimes	Delta-Va	lue:	5%	MinRep	Time:	10s	
				Cycli	С	\boxtimes	Period:		15min	(recommer	nded value	e)	
	Request		\boxtimes										
Co	mmunicat	ion ⁻	Туре										
♦	Group Ob	ject	Datapo	oint							Mandate	ory: 🛛	
	Default Gro	oup.	Addres	ss:									
Dy	namics												
	Power dow	n:	Save:										
	Power up:		Value	:	No init	ialisa	ition:		Def	ault value:			
					Saved				Act	ual value (r	not for inp	ut):	
			Trans	mit or	bus (o	nly fo	r output):		Rea	ad from bus	(only for	input):	
Ex	ception Ha	ndli	ing										
Sp	ecial Featu	ıres											

List of Functional Blocks, **Output ValueFreshAirDem** is used in:

Name of FB	Abbreviation	Mandatory Optional
VAV Control Discharge Air	VAVCDA	0

LTE-HEE Mode

FB:	See table				ValueFres	shAirl	Dem					latory 🔲
	below	Outp	ut N	ame:							Ор	tional 🗌
Desci	ription:	-			-						-	
This c	latapoint co	ontains	s the	percent value f	or the fresh air	dema	and.					
DPT:	Name	DPT_	Rel\	/alue_Z	DPT ID	202.	001	Data	type f	ormat	J_8Z_8	
Field		Des	scrip	tion			Sup		ange	Unit	COV	Default
Fan p	osition	Per	cent	value for the fre	esh air demand	b	М		100	%	5	CS
COMI	MAND	Enu	ımer	ation for comma	ands			е	num			
				malWrite			М					0
		all d	othei	commands			NΑ	\				
Comr	nunication	1:						<u> </u>		<u> </u>	<u>.</u>	
Bind	ding Group) :										
Clas				Туре				Г	efault			
Ge	ographical		\times	Apartment.Roo	m.Sub_Zone			1	.1.1			
Ар	plication S	pecific										
Ur	assigned			Broadcast	Configur	able [
DP A	Address:			IO Type(ID):	261 (VAV	CDA)	F	Proper	ty ID:	5	57	
LTE	-Services	(even	t):	COV 🖂	MinRepTim	ne:		10 sec		Heart	beat:	15 min
Wı	rite		$oxed{ }$	Output per defa	ault communica	ating	E	Binding	g Grou	ıp Wildc	ard allow	red 🖂
			-	Tx Prio:	High 🗌			Norn	nal 🖂		Low	
			•	Transm after P		d Vali	ue 🗀		Value	D N	efault Va	
Exce	otion Hand	llina:	<u> </u>	Transm arter i	ower up: etere	, a van	<u></u>	, ,,,,,,	raide		t Powero	
	JJ Halla	g.								100.00		
Speci	al Feature	s:										

List of Functional Blocks, **Output ValueFreshAirDem** is used in:

Name of FB	Abbreviation	Mandatory Optional
VAV Control Discharge Air	VAVCDA	0

3.9.4 Detailed Specification of the Zone Parameters (LTE)

See following pages

3.9.4.1 Parameter Apartment_x

FB:	see table	Proper	ty	Name (Server):	1	Apartmen	t					Mand	atory 🗌
	below											Opt	tional 🗌
Desc	ription:	.										-	
Numb	er of the	apartmen	t z	one (effective space	е	zone).							
DPT:	Name	DPT_U	CO	untValue8_Z		DPT ID	202.002	<u>)</u>	Data	atype forma	t T	U_8Z_8	
Field				Description				S	up.	Range	Į	Unit	Default
Zone			N	lumber of the apartr	m	nent zone			M	(0) 1126	3		1
STAT	US											Bitset	
- Outo	ofService		Z	one active / inactive	9				Ο	true/false			false
- all o	ther bits		n	ot supported, fixed	to	0 '0'		1	۱A			bool	false
	MAND									enum			CS
_	nalWrite								M				
	SV & Re			Set zone inactive / a	C	tive			0				
- all o	ther comr	nands	n	ot supported				1	NΑ		ᆚ		
Com	nunicatio	n:											
	Address:			IO Type(ID):	:	see table	below			ty ID:	1	01	
•	he serve	,		Start-Index:		1		Ν	° of e	lements	1	I	
	perty acc	ess:		Read only			Read/W	rite)	\boxtimes			
Pro	ection			Read level		-		W	/rite l	evel			
Exce	otion Har	dling:	V	alue after Power-up	0:	: Stored	Value 🛚	Α	ct Va	lue 🔲 D	efa	ult Value	
Spec	ial Featur	es:											
Zone	= 0 (wildo	ard): Sen	ds	to all listeners									
The d	evice is n	ot LTE co	m	municating in this zo	0	ne if zone	is 'OutOt	fSe	rvice	.'			
If Apa	rtment is	OutOfSe	rvi	ce' Room and Sub7	7	one autom	atically a	re	'OutC	OfService'			

List of Functional Blocks, **Zone** Apartment_x is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional
			Орионаі
Fan Coil Control	FCC	258	M
Water Heat Pump control	WHPC	259	M
Split Unit Control	SPUC	260	M
Radiator and Chilled Ceiling Room Control	RCCRC	257	M
Radiator Room Control TU	RRCTU	256	M
VAV Control Discharge Air	VAVCDA	261	M
VAV Control Extract Air	VAVCEA	262	M

3.9.4.2 Parameter Room_y

FB:	see table	Proper	ty Name (<u>Server</u>):	Room					latory 🔲
	below							Op	tional 🗌
Desc	ription:								
Numb	er of the ro	om zone	e (effective space zoi	ne).					
DPT:	Name	DPT_U	countValue8_Z	DPT ID	202.002	Data	atype format	U_8Z_8	
Field			Description			Sup.	Range	Unit	Default
Zone			Number of the room	zone		М	(0) 163		1
STAT	US							Bitset	
- Outo	ofService		zone active / inactiv	е		0	true/false		false
- all o	ther bits		not supported, fixed	to '0'		NA		bool	false
COMI	MAND						enum		cs
- Norr	nalWrite					M			
- SetC	OSV & Res	etOSV	Set zone inactive / a	active		0			
- all o	ther comm	ands	not supported			NA			
Comr	nunicatio	า:							
DP A	Address:		IO Type(ID):	see table	below	Proper	ty ID:	102	
(in t	he server)		Start-Index:	1		N° of e	elements	1	
Pro	perty acce	ess:	Read only		Read/W	'rite	\boxtimes		
Prof	tection		Read level	-		Write I	evel	-	
Exce	otion Hand	dling:	Value after Power-u	p: Stored	Value 🛚	Act Va	lue 🗌 Def	fault Value	
Speci	ial Feature	es:							
Zone	= 0 (wildca	ard): Sen	ds to all listeners						
The d	evice is no	t LTE co	mmunicating in this z	zone if zone	e is 'OutOf	fService	·'		
'OutO	fService' is	s taken o	ver from Apartment						

List of Functional Blocks, **Zone Room_y** is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional
Fan Coil Control	FCC	258	M
Water Heat Pump control	WHPC	259	M
Split Unit Control	SPUC	260	M
Radiator and Chilled Ceiling Room Control	RCCRC	257	M
Radiator Room Control TU	RRCTU	256	M
VAV Control Discharge Air	VAVCDA	261	M
VAV Control Extract Air	VAVCEA	262	M

3.9.4.3 Parameter SubZone_z

FB:		Proper	ty	Name (Server):	S	SubZone						latory 🔲
	below										Ор	tional 🗌
Desc	ription:	-									-	
Numb	er of the s	ub zone	(e	ffective space zone)).	ı						
DPT:	Name	DPT_U	co	untValue8_Z	T	DPT ID	202.002	2	Data	atype format	U ₈ Z ₈	
Field			С	escription				S	Sup.	Range	Unit	Default
Zone			Ν	lumber of the SubZo	or	ne			М	(0) 115		1
STAT	US		Ī								Bitset	
- Outo	ofService		z	one active / inactive)				0	true/false		false
- all o	ther bits		n	ot supported, fixed	to	o '0'			NA		bool	false
COM	MAND									enum		cs
- Norr	nalWrite								M			
- SetC	OSV & Res	setOSV	_	Set zone inactive / ad	ct	tive			0			
- all o	ther comm	ands	n	ot supported					NA			
Com	nunicatio	n:								-		
DP.	Address:			IO Type(ID):	5	see table b	oelow	Р	roper	ty ID:	103	
(in t	he server)		Start-Index:	•	1		Ν	l° of e	elements	1	
Pro	perty acce	ess:		Read only			Read/W	/rite	е	\boxtimes		
Pro	tection			Read level	-	-		٧	Vrite l	evel	-	
Exce	otion Han	dling:	٧	alue after Power-up	o:	Stored \	Value ⊠	Α	ct Va	lue 🔲 De	fault Value	
Spec	ial Feature	es:										
Zone	= 0 (wildca	ard): Sen	ds	to all listeners								
The d	evice is no	ot LTE co	m	municating in this zo	or	ne if zone	is 'OutO	fSe	ervice	·'		
'OutO	fService' is	s taken o	ve	er from Apartment								

List of Functional Blocks, **Zone SubZone_z** is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional
Fan Coil Control	FCC	258	M
Water Heat Pump control	WHPC	259	M
Split Unit Control	SPUC	260	M
Radiator and Chilled Ceiling Room Control	RCCRC	257	M
Radiator Room Control TU	RRCTU	256	M
VAV Control Discharge Air	VAVCDA	261	M
VAV Control Extract Air	VAVCEA	262	M

3.9.4.4 Parameter Apartment_u

FB:	see table	Proper	ty l	Name (<u>Server</u>):	1	Apartmen	t					Mand	atory 🔲
	below											Opt	tional 🗌
Desc	ription:											-	
Numb	er of the a	apartmen	t zc	one (scheduler zon	ie	e).							
DPT:	Name	DPT_U	cou	ıntValue8_Z		DPT ID	202.002	2	Data	atype forma	at	U_8Z_8	
Field				escription				S	up.	Range		Unit	Default
Zone			Νι	umber of the aparti	m	nent zone			M	(0) 112	6		1
STAT	US											Bitset	
- Outo	ofService		ZC	one active / inactive	Э				Ο	true/false	÷		false
- all o	ther bits		nc	ot supported, fixed	tc	o '0'		1	۱A			bool	false
COM	MAND									enum			CS
- Norr	nalWrite								M				
	OSV & Re			et zone inactive / a	C	tive			O				
- all o	ther comn	nands	nc	ot supported				1	۱A				
Com	nunicatio	n:											
	Address:			IO Type(ID):	:	see table l	below			ty ID:	1	104	
•	he servei	•	,	Start-Index:		1		Ν	° of e	lements	1	1	
	perty acc	ess:	F	Read only			Read/W	rite)	\boxtimes			
Pro	tection		F	Read level		-		W	/rite l	evel		•	
Exce	otion Han	dling:	Va	alue after Power-up	p:	: Stored '	Value 🛚	Α	ct Va	lue 🔲 D)efa	ault Value	
Spec	ial Featur	es:											
Zone	= 0 (wildc	ard): Sen	ds	to all listeners									
The d	evice is n	ot LTE co	mn	nunicating in this z	0	ne if zone	is 'OutOt	fSe	rvice	'			
If Apa	rtment is	OutOfSe	rvic	e' Room and Sub	70	one autom	atically a	re	'OutC	OfService'			

List of Functional Blocks, **Zone** Apartment_u is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional
Fan Coil Control	FCC	258	O
Water Heat Pump control	WHPC	259	O
Split Unit Control	SPUC	260	O
Radiator and Chilled Ceiling Room Control	RCCRC	257	O
Radiator Room Control TU	RRCTU	256	O
VAV Control Discharge Air	VAVCDA	261	O

3.9.4.5 Parameter Room_v

FB:	see table below	Proper	ty Name (<u>Server</u>):	Room						latory 🗌 tional 🔲
Desci	ription:								Ор	tional <u></u>
	•	nom zone	e (scheduler zone).							
DPT:			countValue8_Z	DPT II	202	2.002	Data	atype format	U ₈ Z ₈	
Field	Ivaille	DF 1_00	Description	וויאטן	7 202	1.002			Unit	Default
· ·					Sup.	Range	Offic			
Zone					M	(0) 163		1		
STATUS					_		Bitset			
- OutofService zone active / inactive				0	true/false		false			
- all o	all other bits not supported, fixed to '0'				NA		bool	false		
COMMAND					enum		cs			
- Norr	nalWrite						M			
- SetC	SV & Res	etOSV	Set zone inactive / a	ctive			0			
- all of	ther comma	ands	not supported				NA			
Comr	nunicatior	1 :							-	-
DP A	Address:		IO Type(ID):	see tab	le belov	W	Proper	ty ID:	105	
(in t	he server))	Start-Index:	1			N° of e	lements	1	
Pro	perty acce	ss:	Read only		Rea	ad/W	rite	\boxtimes		
Prof	ection		Read level	-			Write I	evel	-	
Exce	otion Hand	dling:	Value after Power-u	p: Store	ed Valu	e 🛛	Act Va	lue 🔲 De	fault Value	
Speci	al Feature	s:								
Zone	= 0 (wildca	ırd): Send	ds to all listeners							
The d	evice is no	t LTE co	mmunicating in this z	one if zo	ne is 'C	OutOf	Service	.'		
			ver from Apartment							

List of Functional Blocks, **Zone Room_v** is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional
Fan Coil Control	FCC	258	O
Water Heat Pump control	WHPC	259	O
Split Unit Control	SPUC	260	О
Radiator and Chilled Ceiling Room Control	RCCRC	257	O
Radiator Room Control TU	RRCTU	256	O
VAV Control Discharge Air	VAVCDA	261	O

3.9.4.6 Parameter SubZone_w

FB:	see table	Proper	ty	Name (<u>Server</u>):	5	SubZone					Mand	• =
	below										Op	tional 🗌
Desc	ription:											
Numb	er of the s	ub zone	(sc	cheduler zone).								
DPT:	Name	DPT_U	cou	ıntValue8_Z		DPT ID	202.002		Data	atype format	U_8Z_8	
Field		D	escription				S	up.	Range	Unit	Default	
Zone			Ν	umber of the SubZ	<u>.</u> OI	ne			M	(0) 115		1
STAT	US										Bitset	
- Outo	ofService		zc	one active / inactive	Э				0	true/false		false
- all other bits not su			ot supported, fixed	tc	o '0'		1	NΑ		bool	false	
COMMAND								enum		CS		
- Norr	nalWrite								M			
- SetC	OSV & Res	etOSV	Set zone inactive / active				0					
- all o	ther comm	ands	nc	ot supported				1	NA			
Comr	nunicatio	n:					_					
DP A	Address:			IO Type(ID):	5	see table l	below	Р	roper	ty ID:	106	
(in t	he server			Start-Index:	•	1		N	° of e	lements	1	
Pro	perty acce	ess:		Read only			Read/W	rite	9	\boxtimes		
Prof	ection			Read level	-	-		W	/rite le	evel	-	
Exce	otion Han	dling:	٧	alue after Power-up	p:	Stored \	Value 🛚	Α	ct Va	lue 🗌 Det	ault Value	<u> </u>
Speci	al Feature	es:										
Zone	Zone = 0 (wildcard): Sends to all listeners											
The d	evice is no	t LTE co	mn	nunicating in this z	102	ne if zone	is 'OutOf	Se	ervice	.'		
'OutO	fService' is	s taken o	ver	r from Apartment								

List of Functional Blocks, **Zone SubZone_w** is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional
Fan Coil Control	FCC	258	O
Water Heat Pump control	WHPC	259	O
Split Unit Control	SPUC	260	O
Radiator and Chilled Ceiling Room Control	RCCRC	257	O
Radiator Room Control TU	RRCTU	256	O
VAV Control Discharge Air	VAVCDA	261	O

3.9.4.7 Parameter Apartment_m

FB:		Proper	ty Name (<u>Server</u>):	Apartme	nt				latory 🔲
	below							Ор	tional 📙
Desc	ription:								
Numb	er of the a	partment	t zone (management	zone).					
DPT:	Name	DPT_U	countValue8_Z	DPT ID	202.002	2 D	atatype format	U ₈ Z ₈	
Field			Description			Sup	. Range	Unit	Default
Zone Number of the apartn			ment zone)	М	(0) 1126		1	
STAT	US							Bitset	
- Outo	ofService		zone active / inactive	Э		0	true/false		false
- all other bits not supported, fixed to			to '0'		NA		bool	false	
COMMAND						enum		cs	
- Norr	nalWrite					М			
- SetC	OSV & Res	etOSV	Set zone inactive / active			0			
- all o	ther comm	ands	not supported			NA			
Comr	nunicatio	า:							
DP A	Address:		IO Type(ID):	see table	e below	Prop	erty ID:	107	
(in t	he server)		Start-Index:	1		N° o	f elements	1	
Pro	perty acce	ess:	Read only		Read/W	/rite	\boxtimes		
Prof	ection		Read level	-		Write	e level	-	
Exce	otion Hand	dling:	Value after Power-u	p: Stored	l Value 🛚	Act	Value 🗌 🛮 De	fault Value	
Speci	al Feature	es:			<u> </u>				
Zone	= 0 (wildca	ard): Sen	ds to all listeners						
The d	evice is no	t LTE co	mmunicating in this z	one if zon	e is 'OutO	fServi	ce'		
If Apa	rtment is '0	OutOfSer	rvice' Room and Sub	Zone autoi	matically a	re 'O	utOfService'		

List of Functional Blocks, **Zone Apartment_m** is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional
Fan Coil Control	FCC	258	M
Water Heat Pump control	WHPC	259	M
Split Unit Control	SPUC	260	M
Radiator and Chilled Ceiling Room Control	RCCRC	257	M
Radiator Room Control TU	RRCTU	256	M
VAV Control Discharge Air	VAVCDA	261	M

3.9.4.8 Parameter Room_n

FB:	see table below	Proper	ty Name (<u>Server</u>):	Room				Mand	latory 🗌 tional 🔲
Dagas								ј Ор	lionai 🔲
	ription:								
			e (management zone)	_	-				
DPT:	Name	DPT_Uc	countValue8_Z	DPT ID	202.002	Data	atype format	U_8Z_8	
Field			Description			Sup.	Range	Unit	Default
Zone	Zone Number of the room zone				М	(0) 163		1	
STAT	US							Bitset	
- Outo	ofService		zone active / inactive	е		0	true/false		false
- all o	- all other bits not supported, fixed to '0'			NA		bool	false		
COMI	COMMAND				enum		CS		
- Norr	nalWrite					M			
- SetC	SV & Res	etOSV	Set zone inactive / a	ctive		0			
- all o	ther comma	ands	not supported			NA			
Comr	nunicatior	1 :			"		-	=	
DP /	Address:		IO Type(ID):	see table	below	Proper	ty ID:	108	
(in t	he server))	Start-Index:	1		N° of e	elements	1	
Pro	perty acce	ss:	Read only]	Read/W	rite	\boxtimes		
Prof	ection		Read level	-		Write I	evel	-	
Exce	otion Hand	lling:	Value after Power-up	p: Stored	Value 🛚	Act Va	lue 🔲 Def	ault Value	: 🗌
Speci	al Feature	s:							
Zone	= 0 (wildca	ırd): Sen	ds to all listeners						
The d	evice is no	t LTE co	mmunicating in this z	one if zone	is 'OutOf	Service	·'		
			ver from Apartment						

List of Functional Blocks, **Zone Room_n** is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional
Fan Coil Control	FCC	258	M
Water Heat Pump control	WHPC	259	M
Split Unit Control	SPUC	260	M
Radiator and Chilled Ceiling Room Control	RCCRC	257	M
Radiator Room Control TU	RRCTU	256	M
VAV Control Discharge Air	VAVCDA	261	M

3.9.4.9 Parameter SubZone_o

FB:	see table below	Proper	ty Name (<u>Server</u>):	SubZon	е			Mano	latory 🗌 tional 🔲
Desci	ription:							<u> </u>	tional
	•	ub zone ((management zone).						
DPT:			countValue8 Z	DPT ID	202.002	Data	atype format	U ₈ Z ₈	
Field	ITTUITIO	D1 1_00	Description	101 1 10	202.002	Sup.	Range	Unit	Default
Zone Number of the SubZone			one.		M	(0) 115	O T III C	1	
STAT	US						1 102 11111	Bitset	
	fService		zone active / inactive	е		0	true/false		false
- all other bits not supported, fixed to '0'			NA		bool	false			
COMI	COMMAND				enum		CS		
- Norr	nalWrite					M			
- SetC	OSV & Res	etOSV	Set zone inactive / a	ctive		0			
- all o	ther comma	ands	not supported			NA			
Comr	nunicatior	า :	•		-		-	-	
DP .	Address:		IO Type(ID):	see tabl	e below	Prope	rty ID:	109	
(in t	he server)	1	Start-Index:	1		N° of e	elements	1	
Pro	perty acce	ss:	Read only		Read/W	rite /	\boxtimes		
Prof	tection		Read level	-		Write I	evel	-	
Exce	otion Hand	lling:	Value after Power-up	p: Store	d Value 🛚	Act Va	alue 🔲 🛮 Dei	ault Value	: 🗌
Speci	al Feature	s:							
			ds to all listeners	•	•			•	
			mmunicating in this z	one if zor	e is 'OutO	fService	e '		
'OutO	fService' is	taken o	ver from Apartment						

List of Functional Blocks, **Zone** Sub**Zone_o** is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional
Fan Coil Control	FCC	258	M
Water Heat Pump control	WHPC	259	M
Split Unit Control	SPUC	260	M
Radiator and Chilled Ceiling Room Control	RCCRC	257	M
Radiator Room Control TU	RRCTU	256	M
VAV Control Discharge Air	VAVCDA	261	M

3.9.4.10 Parameter OutsideSensorZone_f

FB:	see table	Prope	erty Name (<u>Server</u>): OutsideSensorZone					Mandatory	
	below							Ор	tional 🗌
Desc	ription:	_	•					-	
Numb	er of the out	side se	ensor zone.						
DPT:	Name D	PT_U	countValue8_Z	DPT ID	202.002	Dat	atype format	U ₈ Z ₈	
Field					Sup.	Range	Unit	Default	
Sens	or Zone		Number of the senso	r zone		М	131		1
STAT	US]	Bitset	
- Outo	- OutofService zone active / inactive			0	true/false		false		
- all o	- all other bits not supported, fixed to '0'			NA		bool	false		
COM	MAND						enum		CS
- Nori	malWrite					M			
	DSV & Reset		Set zone inactive / ad	ctive		0			
- all o	ther commar	nds	not supported			NA			
Com	munication:								
DP	Address:		IO Type(ID):	see table	below	Prope	rty ID:	110	
(in t	he server)		Start-Index:	1		N° of	elements	1	
Pro	perty access	s:	Read only		Read/W	'rite	\boxtimes		
Pro	tection		Read level	-		Write	level	-	
Exce	ption Handli	ng:	Value after Power-up	: Stored	Value 🛚	Act Va	alue 🔲 De	fault Value	
Zone	= 0 (wildcard	I) NOT	allowed						
	Special Features:								
The c	levice is not l	_TE co	mmunicating in this zo	one if zone	is 'OutO	fService	e'		

List of Functional Blocks, **Zone OutsideSensorZone_f** is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional
Fan Coil Control	FCC	258	O
Water Heat Pump control	WHPC	259	O
Split Unit Control	SPUC	260	O
Radiator and Chilled Ceiling Room Control	RCCRC	257	O
Radiator Room Control TU	RRCTU	256	O

3.9.4.11 Parameter OutsideSensorZone_g

FB:	see table	Prope	erty Name (Server):	erver): OutsideSensorZone				Mandatory		
	below							Ор	Optional	
Desc	ription:	- -		-				-		
Numb	Number of the outside sensor zone.									
DPT: Name DPT UcountValue8 Z DPT ID 202.002				2 Data	atype format	U ₈ Z ₈				
Field Description				Sup.	Range	Unit	Default			
Sens	or Zone		Number of the senso	r zone		M	131		1	
STAT	US							Bitset		
- Out	ofService		zone active / inactive)		0	true/false		false	
- all o	ther bits		not supported, fixed	to '0'		NA		bool	false	
COMMAND							enum		CS	
- Nori	malWrite					M				
- Set0	OSV & Reset	OSV	Set zone inactive / a	ctive		0				
- all o	ther commar	nds	not supported			NA				
Com	munication:	•			-		-	-		
DP	Address:		IO Type(ID):	see table	below	Proper	rty ID:	111		
(in t	the server)		Start-Index:	1		N° of e	elements	1		
Pro	perty acces	s:	Read only		Read/W	rite/	\boxtimes			
Pro	Protection Read level -				Write I	evel	-			
Exce	Exception Handling: Value after Power-up: Stored Value Act Value Default Value									
Zone	= 0 (wildcard	TON (b	allowed							
Spec	ial Features	:								
The c	levice is not l	LTE co	mmunicating in this z	one if zone	is 'OutO	fService	e'			

List of Functional Blocks, **Zone OutsideSensorZone_g** is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional
Fan Coil Control	FCC	258	О
Water Heat Pump Control	WHPC	259	O
Split Unit Control	SPUC	260	O

3.9.4.12 Parameter DistrSegmC_c

FB:	see table	Prope	rty Name (<u>Server</u>):	DistrSeg	jmC			Mano	latory 🗌	
	below							Ор	tional 🗌	
Desc	ription:	•		- -				-		
Numb	er of the coc	ling dis	tribution segment (chi	lled ceiling	g).					
DPT:	DPT: Name DPT_UcountValue8_Z DPT ID 202.002 Datatype format U							U ₈ Z ₈		
Field	<u> </u>		Description			Sup.	Range	Unit	Default	
Zone			Number of the Coolin	g Segmen	t	М	(0) 131		1	
STAT	US			•				Bitset		
- Outo	ofService		zone active / inactive			0	true/false		false	
- all o	ther bits		not supported, fixed to	o '0'		NA		bool	false	
COM	MAND						enum		CS	
- Nori	malWrite					М				
- Set0	DSV & Reset	OSV	Set zone inactive / ac	tive		0				
- all o	ther commar	nds	not supported			NA				
Com	munication:	•			-		-	-		
DP	Address:		IO Type(ID):	see table	below	Proper	rty ID:	112		
(in t	he server)		Start-Index:	1		N° of e	elements	1		
Pro	perty access	s:	Read only		Read/W	/rite	\boxtimes			
Pro	Protection Read level -				Write I	evel	-			
Exce	Exception Handling: Value after Power-up: Stored Value ☐ Act Value ☐ Default Value ☐									
Spec	ial Features									
The c	levice is not l	_TE co	mmunicating in this zo	ne if zone	is 'OutO	fService	e'.			

List of Functional Blocks, **Zone DistrSegm**C_c is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional
Radiator and Chilled Ceiling Room Control	RCCRC	257	O
VAV Control Discharge Air	VAVCDA	261	O

3.9.4.13 Parameter DistrSegmC_d

FB:	see table	Prope	rty Name (<u>Server</u>):	DistrSeg	ımC				latory 🔲	
	below	ļ						Ор	tional 🗌	
Desc	ription:									
Numb	Number of the cooling distribution segment (air cooler).									
DPT: Name DPT_UcountValue8_Z DPT ID 202.002 Datatype format							U ₈ Z ₈			
Field Description					Sup.	Range	Unit	Default		
Zone			Number of the Coolin	g Segmen	t	М	(0) 131		1	
STAT	US							Bitset		
- Outo	ofService		zone active / inactive			0	true/false		false	
- all o	ther bits		not supported, fixed t	o '0'		NA		bool	false	
COMMAND							enum		CS	
- NormalWrite						M				
- SetC	OSV & Reset	OSV	Set zone inactive / ac	ctive		0				
- all o	ther commar	nds	not supported			NA				
Comr	nunication:							-	-	
DP.	Address:		IO Type(ID):	see table l	pelow	Prope	rty ID:	113		
(in t	he server)		Start-Index:	1		N° of e	elements	1		
Pro	perty access	s:	Read only		Read/W	/rite				
Pro	tection		Read level	-		Write	level	-		
Exce	otion Handli	ng:	Value after Power-up	: Stored \	√alue 🗵	Act Va	alue 🔲 🏻 De	fault Value	;	
Spec	ial Features	:								
The d	evice is not l	_TE co	mmunicating in this zo	one if zone	is 'OutO	fService	e'.	<u>'</u>		

List of Functional Blocks, **Zone DistrSegmC_d** is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional
Fan Coil Control	FCC	258	О
VAV Control Discharge Air	VAVCDA	261	O

3.9.4.14 Parameter DistrSegmH_a

FB:	see table	Prope	erty Name (<u>Server</u>):	DistrSeg	jmΗ				latory 🔲
	below							Ор	tional 🗌
Desc	ription:	-		_					
Numb	er of the hea	ting di	stribution segment (ra	diator).					
DPT:	Name D	PT_Uc	ountValue8_Z	DPT ID	202.002	2 Data	atype format	U ₈ Z ₈	
Field			Description			Sup.	Range	Unit	Default
Zone			Number of the Heatin	ng Segmen	t	М	(0) 131		1
STAT	US							Bitset	
- Outo	ofService		zone active / inactive			0	true/false		false
- all o	ther bits		not supported, fixed t	o '0'		NA		bool	false
COMMAND							enum		CS
- Nori	malWrite					M			
- Set0	DSV & Reset	OSV	Set zone inactive / ac	ctive		0			
- all o	ther comman	ıds	not supported			NA			
Com	munication:								
DP	Address:		IO Type(ID):	see table b	below	Proper	rty ID:	114	
(in t	he server)		Start-Index:	1		N° of e	elements	1	
Pro	perty access	s:	Read only		Read/W	/rite	\boxtimes		
Pro	Protection Read level -				Write I	evel	-		
Exce	Exception Handling: Value after Power-up: Stored Value ☐ Act Value ☐ Default Value ☐								
Spec	Special Features:								
The c	levice is not L	TE co	mmunicating in this zo	ne if zone	is 'OutO	fService	<u>'</u> '.		

List of Functional Blocks, **Zone DistrSegmH_a** is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional
Radiator and Chilled Ceiling Room Control	RCCRC	257	О
Radiator Room Control TU	RRCTU	256	O
VAV Control Discharge Air	VAVCDA	261	O

3.9.4.15 Parameter DistrSegmH_b

FB:	see table	Prope	erty Name (<u>Server</u>):	DistrSeg	ımΗ			Mano	datory 🔲
	below							Ор	tional 🗌
Desci	ription:	-		-				_	
Numb	er of the hea	ting di	stribution segment (air	r heater).					
DPT:	Name D	PT_Uc	countValue8_Z	DPT ID	202.002	2 Da	atype format	U ₈ Z ₈	
Field			Description	•		Sup.	Range	Unit	Default
Zone			Number of the Heatir	ng Segmen	t	M	(0) 131		1
STAT	US							Bitset	
- Outo	ofService		zone active / inactive			0	true/false		false
- all other bits			not supported, fixed t	o '0'		NA		bool	false
COMMAND						enum		CS	
- Norr	nalWrite					М			
- SetC	SV & Reset	OSV	Set zone inactive / ad	ctive		0			
- all of	ther comman	ıds	not supported			NA			
Comr	nunication:								
DP A	Address:		IO Type(ID):	see table l	pelow	Prope	erty ID:	115	
(in t	he server)		Start-Index:	1		N° of	elements	1	
Pro	perty access	S :	Read only		Read/W	/rite	\boxtimes		
Prof	ection		Read level	-		Write	level	-	
Exce	otion Handli	ng:	Value after Power-up	: Stored \	√alue 🛚	Act V	alue 🗌 🏻 Def	fault Value	
Speci	al Features:								
The d	evice is not L	TE co	mmunicating in this zo	one if zone	is 'OutO	fServic	e'.		

List of Functional Blocks, **Zone DistrSegmH_b** is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional
Fan Coil Control	FCC	258	О
VAV Control Discharge Air	VAVCDA	261	O

3.9.4.16 Parameter DistrSegmV_e

FB:	see table	Prope	erty Name (<u>Server</u>):	DistrSe	gmV				latory 🔲
	below							Ор	tional 🔲
Desc	ription:	-							
Numb	er of the ven	tilation	distribution segment.						
DPT:	Name D	PT_U	countValue8_Z	DPT ID	202.002	Data	atype format	U ₈ Z ₈	
Field			Description	•		Sup.	Range	Unit	Default
Zone			Number of the Ventila	ation Segn	nent	M	131		1
STAT	US							Bitset	
- OutofService			zone active / inactive			Ο	true/false		false
- all other bits			not supported, fixed t	o '0'		NA			false
COMMAND							enum		cs
- Nori	malWrite					M			
- Set0	DSV & Reset	OSV	Set zone inactive / ac	ctive		0			
- all o	ther comman	ıds	not supported			NA			
Com	munication:								
DP	Address:		IO Type(ID):	see table	below	Proper	rty ID:	116	
(in t	he server)		Start-Index:	1		N° of e	elements	1	
Pro	perty access	S:	Read only		Read/W	rite	\boxtimes		
Pro	Protection Read level -					Write I	evel	-	
Exce	Exception Handling: Value after Power-up: Stored Value ☐ Act Value ☐ Default Value ☐								
	Special Features:								
The c	levice is not L	TE co	mmunicating in this zo	one if zone	is 'OutOt	Service) '.		

List of Functional Blocks, **Zone DistrSegmV_e** is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional
VAV Control Discharge Air	VAVCDA	261	O

3.9.5 Detailed Specification of the Parameters

3.9.5.1 Parameter AirFlowDelta

FB:	see table below	Prope	erty Name (<u>Server</u>):	AirFlow	Delta			Mand Op	atory [
Desci	ription:	-			-					
Delta	value in pe	rcent for	generating over o	r un	derpressi	ıre.				
DPT:	Name	DPT_Pe	rcent_U8		DPT ID	5.004	Data	atype format	U ₈	
Field			Description				Sup.	Range	Unit	Default
Value			Delta value				М	full	%	CS
Comr	Communication:									
DP /	Address:		IO Type(ID):		see table below		Property ID:		see table below	
(in t	he server)		Start-Index:		1		N° of elements		1	
Pro	perty acce	ss:	Read only			Read/W	/rite	\boxtimes		
Prot	ection		Read level		-		Write I	evel	-	
Excep	otion Hand	lling:	Value after Power	-up:	Stored	Value 🖂	Act Va	lue 🗌 Dei	fault Value	
Speci	al Feature	s:			•	•	•			•
	•				•	•	•		•	•

List of Functional Blocks, Parameter AirFlowDelta is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional	Property ID
VAV Control Extract Air	VAVCEA	262	O	145

3.9.5.2 Parameter BUSActuatorCP_ON/OFF

FB:	see table below	Prope	erty Name (<u>Server</u>):	BUSActu	atorCP_0	ON/OFF		Mand Op	latory 🗌 tional 🔲
Desci	ription:	•							
Paran	neter for sv	vitching (ON/OFF the bus infor	mation for	the comp	ressor a	actuator.		
DPT:	Name	DPT_Sw	vitch	DPT ID	1.001	Data	atype format	B ₁	
Field			Description			Sup.	Range	Unit	Default
			0 = OFF			М	0/1	Bit	CS
			1 = ON						
Comr	nunicatior) :							
DP A	Address:		IO Type(ID):	see table	below	Proper	ty ID:	see table	below
(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	-	
Excep	otion Hand	lling:	Value after Power-up	: Stored	Value 🛚	Act Va	lue 🗌 Def	fault Value	
Speci	al Feature	s:							

List of Functional Blocks, Parameter BUSActuatorCP_ON/OFF is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional	Property ID
Water Heat Pump Control	WHPC	259	O	122
Split Unit Control	SPUC	260	O	122

3.9.5.3 Parameter BUSActuatorCSA_ON/OFF

FB:	see table	Propert	y Name (<u>Server</u>):	BUSActuat	orCSA_	ON/OFF		Mano	datory 🗌
	below							Op	tional 🗌
Desc	ription:	•							
Paran	neter for sv	vitching C	N/OFF the bus info	rmation for	the cool	stage A	actuator.		
DPT: NameDPT SwitchDPT ID1.001Datatype for					atype format	B ₁			
Field			Description			Sup.	Range	Unit	Default
			0 = OFF			M	0/1	Bit	cs
			1 = ON						
Comr	munication):				-	-	<u>-</u>	-
DP A	Address:		IO Type(ID):	see table	see table below Property ID:			see table below	
(in t	he server)		Start-Index:	1		N° of e	elements	1	
Pro	perty acce	ss:	Read only		Read/V	Vrite	\boxtimes		
Prot	tection		Read level	-		Write I	evel	-	
Exce	ption Hand	lling:	Value after Power-u	up: Stored	Value 🗵	Act Va	lue 🗌 De	fault Value	- 🗌
Speci	ial Feature	s:							

List of Functional Blocks, Parameter BUSActuatorCSA_ON/OFF is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional	Property ID
Fan Coil Control	FCC	258	О	121
Radiator and Chilled Ceiling Room Control	RCCRC	257	О	121
VAV Control Discharge Air	VAVCDA	261	О	121

3.9.5.4 Parameter BUSActuatorCSB_ON/OFF

FB:	see table below	Propert	y Name (<u>Server</u>):	Вι	JSActuate	orCSB_	ON/OFF		Mand Op	latory 🗌 tional 🔲
Desci	ription:	-							=	
Paran	neter for sw	vitching C	N/OFF the bus info	orm	ation for t	he cool	stage B	actuator.		
DPT:	Name	DPT_Sw	vitch		DPT ID	1.001	Data	atype format	B ₁	
Field			Description				Sup.	Range	Unit	Default
			0 = OFF				M	0/1	Bit	CS
			1 = ON							
Comr	nunication) :								
DP A	Address:		IO Type(ID):	5	see table l	oelow	Proper	ty ID:	see table	below
(in t	he server)		Start-Index:		1		N° of e	elements	1	
Pro	perty acce	ss:	Read only			Read/V	Vrite	\boxtimes		
Prot	ection		Read level		-		Write I	evel	-	
Excep	otion Hand	lling:	Value after Power-	up:	Stored \	√alue 🗵	Act Va	lue 🔲 Det	ault Value	.
Speci	al Feature	s:			-	•	•	-	-	•

List of Functional Blocks, Parameter BUSActuatorCSB_ON/OFF is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional	Property ID
Fan Coil Control	FCC	258	О	122
Radiator and Chilled Ceiling Room Control	RCCRC	257	О	122
VAV Control Discharge Air	VAVCDA	261	О	122

3.9.5.5 Parameter BUSActuatorDA_ON/OFF

FB:	see table	Property	y Name (<u>Server</u>):	BUSActua	torDA_O	N/OFF		Mano	datory 🗌
	below							Ор	tional 🗌
Desc	ription:	-		-				<u>-</u>	
Parar	neter for sv	vitching C	N/OFF the bus info	ormation for	the disch	narge air	actuator.		
DPT:	Name	DPT_Sw	itch	DPT ID	1.001	Data	atype format	B ₁	
Field			Description			Sup.	Range	Unit	Default
			0 = OFF			М	0/1	Bit	CS
			1 = ON						
Comi	munication	n:				-	•	•	•
DP	Address:		IO Type(ID):	see table	below	Prope	rty ID:	see table below	
(in t	the server)		Start-Index:	1	1 N° of elements 1			1	
Pro	perty acce	ss:	Read only		Read/V	Vrite	\boxtimes		
Pro	tection		Read level	-		Write I	evel	-	
Exce	ption Hand	lling:	Value after Power-	up: Stored	Value 🗵	Act Va	alue 🔲 De	fault Value	- 🗌
Spec	ial Feature	s:							

List of Functional Blocks, Parameter BUSActuatorDA_ON/OFF is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional	Property ID
VAV Control Discharge Air	VAVCDA	261	O	123

3.9.5.6 Parameter BUSActuatorEA_ON/OFF

FB:	see table below	Propert	y Name (<u>Server</u>):	BU	BUSActuatorEA_ON/OFF				Mand Op	latory lional
Desci	ription:	-							-	
Paran	neter for sv	vitching C	N/OFF the bus info	orm	ation for t	he extrac	ct air act	tuator.		
DPT:	Name	DPT_Sw	vitch		DPT ID	1.001	Data	atype format	B ₁	
Field			Description				Sup.	Range	Unit	Default
			0 = OFF				M	0/1	Bit	CS
			1 = ON							
Comr	nunication):				_				
DP /	Address:		IO Type(ID):	5	see table	below	Proper	ty ID:	see table	below
(in t	he server)		Start-Index:	1	1		N° of e	lements	1	
Pro	perty acce	ss:	Read only			Read/W	rite	\boxtimes		
Prot	ection		Read level	-	•		Write I	evel	-	
Excep	otion Hand	lling:	Value after Power-	up:	Stored	Value 🛚	Act Va	lue 🗌 Def	ault Value	
Speci	al Feature	s:								

List of Functional Blocks, Parameter BUSActuatorEA_ON/OFF is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional	Property ID
VAV Control Extract Air	VAVCEA	262	O	124

3.9.5.7 Parameter BUSActuatorFA_ON/OFF

FB:						Mandatory _				
	below							Op	tional 🗌	
Desc	ription:									
Parar	neter for sv	vitching O	N/OFF the bus info	ormation for	the fresh	air actu	ator.			
DPT:	Name	DPT_Sw	itch	DPT ID	1.001	Data	atype format	B ₁		
Field			Description			Sup.	Range	Unit	Default	
			0 = OFF			M	0/1	Bit	CS	
			1 = ON							
Com	munication):				-	•	-	-	
DP	Address:		IO Type(ID):	see table	below	Proper	rty ID:	see table below		
(in t	the server)		Start-Index:	1		N° of e	elements	1		
Pro	perty acce	ss:	Read only		Read/W	Vrite	\boxtimes			
Pro	tection		Read level	-		Write I	evel	-		
Exce	Exception Handling: Value after Power-up: Stored Value ☐ Act Value ☐ Default Value ☐									
Spec	ial Feature	s:								

List of Functional Blocks, Parameter BUSActuatorFA_ON/OFF is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional	Property ID
Fan Coil Control	FCC	258	О	123
Water Heat Pump Control	WHPC	259	О	123
Split Unit Control	SPUC	260	О	123

3.9.5.8 Parameter BUSActuatorFS_ON/OFF

FB:	see table below	Propert	y Name (<u>Server</u>):	BUSActuatorFS_ON/OFF					Mand Op	latory 🗌 tional 🔲
Desci	ription:									
Paran	neter for sv	vitching C	ON/OFF the bus info	orm	nation for t	he fan sp	peed act	tuator.		
DPT:	Name	DPT_Sw	vitch		DPT ID	1.001	Data	atype format	B ₁	
Field			Description				Sup.	Range	Unit	Default
			0 = OFF				M	0/1	Bit	CS
			1 = ON							
Comr	nunication) :								
DP /	Address:		IO Type(ID):	;	see table	below	Proper	ty ID:	see table	below
(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 I	evel	-	
Excep	otion Hand	lling:	Value after Power-	up:	Stored '	Value 🛚	Act Va	lue 🔲 Def	ault Value	
Speci	al Feature	s:								

List of Functional Blocks, **Parameter BUSActuatorFS_ON/OFF** is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional	Property ID
Fan Coil Control	FCC	258	О	124
Water Heat Pump Control	WHPC	259	О	124
Split Unit Control	SPUC	260	О	124

3.9.5.9 Parameter BUSActuatorHSA_ON/OFF

FB:	see table	ble Property Name (Server): BUSActuatorHSA_ON/OFF				Mandatory [
	below							Ор	tional 🗌
Desc	ription:	-	-					•	
Paran	neter for sv	vitching C	N/OFF the bus info	rmation for	the heat	stage A	actuator.		
DPT: Name DPT_Switch			itch	DPT ID	1.001	Data	atype format	B ₁	
Field			Description			Sup.	Range	Unit	Default
			0 = OFF			М	0/1	Bit	CS
			1 = ON						
Comr	nunication	1:				_			
DP A	Address:		IO Type(ID):	see table	below	Proper		see table	below
(in t	he server)		Start-Index:	1		N° of e	elements	1	
Pro	perty acce	ss:	Read only		Read/W	/rite	\boxtimes		
Prof	tection		Read level	-		Write I	evel	-	
Exce	ption Hand	lling:	Value after Power-u	ıp: Stored	Value 🛚	Act Va	alue 🔲 De	fault Value	e 🗌
Speci	ial Feature	s:				•			

List of Functional Blocks, Parameter BUSActuatorHSA_ON/OFF is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional	Property ID
Fan Coil Control	FCC	258	О	125
Radiator and Chilled Ceiling Room Control	RCCRC	257	О	125
Radiator Room Control TU	RRCTU	256	О	125
VAV Control Discharge Air	VAVCDA	261	О	125

3.9.5.10 Parameter BUSActuatorHSB_ON/OFF

FB: see table Property Name (Server): BUSActuatorHSB_ON/OFF					•	Mandatory			
	below	•	,		_				otional 🗌
Desc	ription:	-							
Paran	neter for sv	vitching C	N/OFF the bus info	ormation for	the heat	stage B	actuator.		
DPT: Name DPT_Switch DPT ID 1.001 Datatype form				atype format	B ₁				
Field			Description			Sup.	Range	Unit	Default
			0 = OFF			M	0/1	Bit	cs
			1 = ON						
Comr	nunication) :							
DP A	Address:		IO Type(ID):	see table	below	Proper		see table	below
(in t	he server)		Start-Index:	1		N° of e	elements	1	
Pro	perty acce	ss:	Read only		Read/W	Vrite	\boxtimes		
Prof	tection		Read level	-		Write I	evel	-	
Exce	ption Hand	lling:	Value after Power-	up: Stored	Value 🗵	Act Va	alue 🔲 🛮 De	fault Value	e 🗌
Speci	ial Feature	s:							
		•							

List of Functional Blocks, Parameter BUSActuatorHSB_ON/OFF is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional	Property ID
Fan Coil Control	FCC	258	О	126
Water Heat Pump Control	WHPC	259	O	126
Split Unit Control	SPUC	260	O	126
Radiator and Chilled Ceiling Room Control	RCCRC	257	О	126
VAV Control Discharge Air	VAVCDA	261	O	126

3.9.5.11 Parameter ControlSequence

FB:	see table below	Property	y Name (<u>Server</u>):	С	ontrolSeq	luence			Mand Op	latory 🗌 tional 🗌
Descr	iption:	-							-	
Paran	neter for de	fining the	possible sequence	es	(heating, o	cooling, b	oth).			
DPT:	Name	DPT_Cha	angeoverMode		DPT ID	20.107	Data	type format	N ₈	
Field			Description				Sup.	Range	Unit	Default
			0 = automatic (heat 1 = cooling only 2 = heating only	atir	ng or cooli	ing)	Μ	0 2	enum.	cs
Comr	nunication	1:							-	
DP /	Address:		IO Type(ID):		see table	below	Proper	ty ID:	see table	below
(in t	he server)		Start-Index:		1		N° of e	lements	1	
Prop	perty acce	ss:	Read only			Read/W	/rite	\boxtimes		
Prot	ection		Read level		-		Write le	evel	-	
Excep	otion Hand	lling:	Value after Power-	up:	: Stored	Value 🛚	Act Va	lue 🔲 Def	fault Value	
Speci	al Feature	s:								·

List of Functional Blocks, **Parameter ControlSequence** is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional	Property ID
Fan Coil Control	FCC	258	О	127
Radiator and Chilled Ceiling Room Control	RCCRC	257	О	127
VAV Control Discharge Air	VAVCDA	261	О	127

3.9.5.12 Parameter FanDwellTimeDeadZone

FB:	see table below	Property	y Name (<u>Server</u>):	Fa	nDwellT	imeDead	Zone		Mand Opt	atory 🗌 tional 🔲	
Desci	ription:	-							-		
Paran	neter for the	e fan dwe	Il time in the dead	zon	e in case	of return	air cont	rol.			
DPT:	Name	DPT_Tim	nePeriodMin		DPT ID	7.006	Data	atype format	U ₁₆		
Field			Description				Sup.	Range	Unit	Default	
			Period				М	full	Min	CS	
Comr	Communication:										
DP /	Address:		IO Type(ID):	5	see table	below	Proper	ty ID:	see table	below	
(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	-		
Excep	otion Hand	lling:	Value after Power-	up:	Stored	Value 🛚	Act Va	lue 🗌 Def	ault Value		
Speci	al Feature	s:			-	-				_	
			_				•		•	•	

List of Functional Blocks, Parameter FanDwellTimeDeadZone is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional	Property ID
Fan Coil Control	FCC	258	О	133
Water Heat Pump Control	WHPC	259	О	133
Split Unit Control	SPUC	260	О	133

3.9.5.13 Parameter FanInDeadZone

FB:	see table	Property	y Name (<u>Server</u>):	Fa	anInDead	Zone			Mano	
	below								Ор	tional 🗌
Desci	ription:	-							-	
Paran	neter for de	efining the	fan behaviour in c	as	e of returr	n air contr	ol.			
DPT:	Name	DPT_Far	nMode		DPT ID	20.111	Data	atype format	N ₈	
Field			Description				Sup.	Range	Unit	Default
			0 = nor running				M	0 2	enum.	cs
1 = permanently running										
			2 = running in inte	erva	alls					
Comr	nunicatior	1:				-		-		=
DP A	Address:		IO Type(ID):		see table	below	Proper		see table	below
(in t	he server)		Start-Index:		1		N° of e	elements	1	
Pro	perty acce	ss:	Read only			Read/W	/rite	\boxtimes		
Prot	tection		Read level		-		Write I	evel	-	
Exce	otion Hand	lling:	Value after Power-	up:	: Stored	Value 🛚	Act Va	lue 🗌 De	fault Value	<u> </u>
Speci	ial Feature	s:			-	_			_	_

List of Functional Blocks, Parameter FanInDeadZone is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional	Property ID
Fan Coil Control	FCC	258	О	134
Water Heat Pump Control	WHPC	259	О	134
Split Unit Control	SPUC	260	О	134

3.9.5.14 Parameter FanRunTimeDeadZone

FB:	see table below	Propert	y Name (<u>Server</u>):	Fa	nRunTim	neDeadZ	one		Mand	atory tional
Desci	ription:			-					<u> </u>	
Paran	neter for the	e fan run	time in the deadzo	ne i	in case of	return ai	ir contro	l.		
DPT:	Name	DPT_Tim	nePeriodMin		DPT ID	7.006	Data	atype format	U ₁₆	
Field			Description				Sup.	Range	Unit	Default
			Period				M	full	Min	CS
Comr	Communication:									
DP /	Address:		IO Type(ID):	5	see table	below	Proper	Property ID: see table be		
(in t	he server)		Start-Index:	1 N° of elements 1		1				
Pro	perty acce	ss:	Read only [Read/W	/rite	\boxtimes		
Prot	ection		Read level	-	•		Write I	evel	-	
Excep	otion Hand	lling:	Value after Power-	up:	Stored	Value 🛚	Act Va	lue 🗌 Def	ault Value	
Speci	al Feature	s:								
										•

List of Functional Blocks, Parameter FanRunTimeDeadZone is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional	Property ID
Fan Coil Control	FCC	258	О	135
Water Heat Pump Control	WHPC	259	О	135
Split Unit Control	SPUC	260	O	135

3.9.5.15 Parameter FanSpeed#10FF

FB:	see table below	Propert	y Name (<u>Server</u>):	FanS	peed#	10FF			Mand Op	latory lional
Desc	ription:	<u> </u>		-						
Parar	neter for the	e fan spe	ed 1 to switch off.							
DPT:	Name	DPT_Per	rcent_U8	DP.	T ID	5.004	Data	atype format	U ₈	
Field			Description	-			Sup.	Range	Unit	Default
			Switch off level for	fan spo	eed 1		М	full	%	CS
Comi	municatior):					<u>-</u>	-	-	3
DP.	Address:		IO Type(ID):	see	table	below	Proper	ty ID:	see table	below
(in t	he server)		Start-Index: 1 N° of elements 1				1			
Pro	perty acce	ss:	Read only			Read/W	/rite	\boxtimes		
Pro	tection		Read level	-			Write I	evel	-	
Exce	ption Hand	lling:	Value after Power-	up: S	tored	Value 🛚	Act Va	lue 🗌 Def	ault Value	
Spec	ial Feature	:S:				•	•	-	-	

List of Functional Blocks, Parameter FanSpeed#10FF is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional	Property ID
Fan Coil Control	FCC	258	О	136
Water Heat Pump Control	WHPC	259	О	136
Split Unit Control	SPUC	260	О	136

3.9.5.16 Parameter FanSpeed#1ON

FB:	see table below	Proper	ty Name (<u>Server</u>):	Fa	ınSpeed#	10N				latory 🗌 tional 🔲
Desc	ription:								-	
Paran	neter for the	e fan spe	eed 1 to switch on.							
DPT:	Name	DPT_Pe	ercent_U8		DPT ID	5.004	Data	atype format	U_8	
Field			Description				Sup.	Range	Unit	Default
			Switch on level for	fan	speed 1		M	full	%	cs
Comr	nunication	n:						-		-
DP A	Address:		IO Type(ID):	;	see table l	below	Proper	ty ID:	see table	below
(in t	he server)		Start-Index:	•	1		N° of e	elements	1	
Pro	perty acce	ss:	Read only			Read/W	/rite	\boxtimes		
Prof	tection		Read level		-		Write I	evel	-	
Exce	otion Hand	lling:	Value after Power-	up:	Stored '	Value 🛚	Act Va	lue 🔲 De	fault Value	-
Speci	ial Feature	s:								
	•					•	•		•	

List of Functional Blocks, Parameter FanSpeed#10N is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional	Property ID
Fan Coil Control	FCC	258	О	137
Water Heat Pump Control	WHPC	259	О	137
Split Unit Control	SPUC	260	O	137

3.9.5.17 Parameter FanSpeed#2OFF

FB:	see table below	Propert	y Name (<u>Server</u>):	FanS	peed#	20FF			Mano Op	latory tional
Desc	ription:	' -							<u> </u>	
Parar	neter for the	e fan spe	ed 2 to switch off.							
DPT:	Name	DPT_Per	rcent_U8	DP	T ID	5.004	Data	atype format	U ₈	
Field			Description				Sup.	Range	Unit	Default
			Switch off level for	fan sp	eed 2		М	full	%	CS
Comr	munication):					<u>-</u>	-	-	=
DP.	Address:		IO Type(ID):	see table below Property ID:			see table	below		
(in t	he server)		Start-Index:	1			N° of e	elements	1	
Pro	perty acce	ss:	Read only [Read/W	/rite	\boxtimes		
Pro	tection		Read level	-			Write I	evel	-	
Exce	ption Hand	lling:	Value after Power-	up: S	Stored	Value 🛚	Act Va	lue 🗌 De	fault Value	-
Spec	ial Feature	:S:			•				-	

List of Functional Blocks, Parameter FanSpeed#2OFF is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional	Property ID
Fan Coil Control	FCC	258	О	138
Water Heat Pump Control	WHPC	259	О	138
Split Unit Control	SPUC	260	О	138

3.9.5.18 Parameter FanSpeed#2ON

FB:	see table below	Proper	ty Name (<u>Server</u>):	Fa	anSpeed#	20N				datory 🗌 otional 🗀
Desc	ription:			-						
Parar	meter for the	e fan spe	eed 2 to switch on.							
							U_8			
Field			Description				Sup.	Range	Unit	Default
Switch on level for fan speed 2 M full							%	CS		
Com	municatior	1:					-	-	-	-
DP	Address:		IO Type(ID):		see table below Property		rty ID:	see table	below	
(in t	the server)		Start-Index:		1 N° of elements 1		1			
Pro	perty acce	ss:	Read only			Read/W	/rite	\boxtimes		
Pro	tection		Read level		-		Write I	evel	-	
Exce	ption Hand	lling:	Value after Power-	up:	: Stored	Value 🛚	Act Va	alue 🔲 De	fault Value	e 🗌
Spec	ial Feature	s:								

List of Functional Blocks, Parameter FanSpeed#2ON is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional	Property ID
Fan Coil Control	FCC	258	О	139
Water Heat Pump Control	WHPC	259	О	139
Split Unit Control	SPUC	260	O	139

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3.9.5.19 Parameter FanSpeed#3OFF

FB:	see table below	Proper	ty Name (<u>Server</u>):	Fa	nSpeed	#30FF				latory 🗌 tional 🗍
Desc	ription:	<u>L</u>								
Paran	neter for th	e fan spe	ed 3 to switch off.							
DPT:	DPT: Name DPT_Percent_U8 DPT ID 5.004 Datatype format U							U ₈		
Field			Description	Description			Sup.	Range	Unit	Default
			Switch off level for	tch off level for fan speed 3				full	%	CS
Comr	nunicatior):					-	-	-	-
DP A	Address:		IO Type(ID):		see table below Pro		Proper	rty ID:	see table	below
(in t	he server)		Start-Index:		1 N° of elements		1			
Pro	perty acce	ss:	Read only [Read/W	√rite	\boxtimes		
Prof	tection		Read level		-		Write I	evel	-	
Exce	ption Hand	lling:	Value after Power-	up:	Stored	Value 🛚	Act Va	lue 🗌 Def	fault Value	
Speci	ial Feature	s:			•	•	•		•	•

List of Functional Blocks, Parameter FanSpeed#3OFF is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional	Property ID
Fan Coil Control	FCC	258	О	140
Water Heat Pump Control	WHPC	259	О	140
Split Unit Control	SPUC	260	О	140

3.9.5.20 Parameter FanSpeed#3ON

FB:	see table below	Proper	ty Name (<u>Server</u>):	Fa	anSpeed#	30N				datory 🗌 otional 🗀
Desc	ription:			-						
Parar	meter for the	e fan spe	ed 3 to switch on.							
								U ₈		
Field			Description				Sup.	Range	Unit	Default
Switch on level for fan speed 3 M full							%	CS		
Com	municatior	1:					-	-	-	-
DP	Address:		IO Type(ID):	see table below Propert		rty ID:	see table	below		
(in t	the server)		Start-Index:		1 N° of elements 1			1		
Pro	perty acce	ss:	Read only [Read/W	/rite	\boxtimes		
Pro	tection		Read level		-		Write I	evel	-	
Exce	ption Hand	lling:	Value after Power-	up:	: Stored	Value 🛚	Act Va	alue 🔲 De	fault Value	e 🗌
Spec	ial Feature	s:								

List of Functional Blocks, Parameter FanSpeed#3ON is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional	Property ID
Fan Coil Control	FCC	258	О	141
Water Heat Pump Control	WHPC	259	О	141
Split Unit Control	SPUC	260	О	141

3.9.5.21 Parameter FanSpeed#4OFF

FB:	see table below	Proper	y Name (<u>Server</u>):	Fa	anSpeed	#40FF				latory 🔲 tional 🔲
				_					Op	lionai 🔲
	ription:									
Paran	neter for the	e fan spe	ed 4 to switch off.							
DPT:								U ₈		
Field			Description				Sup.	Range	Unit	Default
			Switch off level for	far	speed 4		М	full	%	cs
Comr	nunication	1:					-		-	
DP A	Address:		IO Type(ID):		see table below		Proper	rty ID:	see table	below
(in t	he server)		Start-Index:		1		N° of elements		1	
Pro	perty acces	ss:	Read only			Read/W	/rite	\boxtimes		
Prot	tection		Read level		-		Write I	evel	-	
Excep	otion Hand	lling:	Value after Power-	up:	Stored	Value 🛚	Act Va	alue 🔲 Def	fault Value	
Speci	ial Feature	s:								
			_			•				

List of Functional Blocks, Parameter FanSpeed#4OFF is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional	Property ID
Fan Coil Control	FCC	258	О	142
Water Heat Pump Control	WHPC	259	О	142
Split Unit Control	SPUC	260	О	142

3.9.5.22 Parameter FanSpeed#4ON

FB:	see table below	Proper	ty Name (<u>Server</u>):	Fa	anSpeed#	40N				datory 🗌 otional 🗀
Doco		<u>. </u>		-						
	ription:									
Parar	meter for the	e fan spe	eed 4 to switch on.							
DPT:								U ₈		
Field			Description				Sup.	Range	Unit	Default
Switch on level for fan speed 4 M full							%	CS		
Com	municatior	1:					-	-	-	-
DP	Address:		IO Type(ID):		see table below Prop		Prope	rty ID:	see table	below
(in t	the server)		Start-Index:		1 N° of elements 1			1		
Pro	perty acce	ss:	Read only			Read/W	/rite			
Pro	tection		Read level		-		Write I	evel	-	
Exce	ption Hand	lling:	Value after Power-	up:	: Stored	Value 🛚	Act Va	alue 🔲 De	fault Value	e 🗌
Spec	ial Feature	s:								

List of Functional Blocks, Parameter FanSpeed#4ON is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional	Property ID
Fan Coil Control	FCC	258	О	143
Water Heat Pump Control	WHPC	259	О	143
Split Unit Control	SPUC	260	O	143

3.9.5.23 Parameter FanSpeed#5OFF

FB:	see table below	Proper	ty Name (<u>Server</u>):	Fa	nSpeed	#5OFF				latory 🗌 tional 🗍
Desc	ription:	<u> </u>								
Paran	neter for th	e fan spe	ed 5 to switch off.							
DPT:	Name	DPT_Pe	ercent_U8		DPT ID	5.004	Data	atype format	U ₈	
Field			Description				Sup.	Range	Unit	Default
			Switch off level for fan speed 5			М	full	%	CS	
Comr	municatior	1:					-	-	-	-
DP A	Address:		IO Type(ID):		see table below		Proper	rty ID:	see table	below
(in t	he server)		Start-Index:		1 N° of elements			1		
Pro	perty acce	ss:	Read only [Read/W	√rite	\boxtimes		
Prof	tection		Read level		-		Write I	evel	-	
Exce	ption Hand	lling:	Value after Power-	up:	Stored	Value 🛚	Act Va	lue 🗌 Def	fault Value	
Speci	ial Feature	s:			•	•	•		•	

List of Functional Blocks, Parameter FanSpeed#50FF is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional	Property ID
Fan Coil Control	FCC	258	О	144
Water Heat Pump Control	WHPC	259	О	144
Split Unit Control	SPUC	260	О	144

3.9.5.24 Parameter FanSpeed#5ON

FB:	see table below	Proper	ty Name (<u>Server</u>):	Fa	inSpeed#	5ON				datory 🗌 tional 🗍
Desc	ription:	<u>. </u>		•						
Parar	neter for the	e fan spe	ed 5 to switch on.							
DPT:	Name	DPT_Pe	rcent_U8		DPT ID	5.004	Data	atype format	U ₈	
Field			Description				Sup.	Range	Unit	Default
			Switch on level for	fan	speed 5		M	full	%	cs
Comr	nunication	n:				-		-		
DP.	Address:		IO Type(ID):	;	see table l	below	Proper	ty ID:	see table	below
(in t	he server)		Start-Index:	•	1 N° of elements 1			1		
Pro	perty acce	ss:	Read only			Read/W	/rite	\boxtimes		
Pro	tection		Read level		-		Write I	evel	-	
Exce	ption Hand	lling:	Value after Power-	up:	Stored '	Value ⊠	Act Va	lue 🗌 De	fault Value	
Spec	ial Feature	s:								
	<u> </u>		<u> </u>							

List of Functional Blocks, Parameter FanSpeed#5ON is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional	Property ID
Fan Coil Control	FCC	258	О	145
Water Heat Pump Control	WHPC	259	О	145
Split Unit Control	SPUC	260	O	145

3.9.5.25 Parameter FanSpeedDeadZone

FB:	see table below	Property	/ Name (<u>Server</u>):	FanSpeed	DeadZon	e			latory 🗌 tional 🗍
Desc	ription:								
Parar	neter for the	e fan spe	ed running in dead	zone in cas	se of retur	n air cor	ntrol.		
DPT:	Name	DPT_Per	cent_U8	DPT ID	5.004	Data	atype format	U ₈	
Field]	Description			Sup.	Range	Unit	Default
		F	an speed level			M	full	%	CS
Communication:									-
DP.	Address:		IO Type(ID):	see table	e below	Proper	rty ID:	see table	below
(in t	he server)		Start-Index:	1 N° of elements 1			1		
Pro	perty acce	ss:	Read only		Read/V	Vrite	\boxtimes		
Pro	tection		Read level	-		Write I	evel	-	
Exce	ption Hand	lling: \	Value after Power-	up: Stored	d Value ⊠	Act Va	lue 🔲 De	fault Value	-
		-		•					
Spec	ial Feature	s:							

List of Functional Blocks, Parameter FanSpeedDeadZone is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional	Property ID
Fan Coil Control	FCC	258	О	146
Water Heat Pump Control	WHPC	259	О	146
Split Unit Control	SPUC	260	О	146

3.9.5.26 Parameter FreshAirMinValue

FB:	see table below	Proper	ty Name (<u>Server</u>):	Fre	eshAirMi	nValue				latory 🗌 tional 🔲
Desc	ription:								<u>-</u>	
Paran	neter for the	e value f	or the minumum fre	sh a	air.					
DPT:	Name	DPT_Pe	ercent_U8		DPT ID	5.004	Data	atype format	U_8	
Field			Description				Sup.	Range	Unit	Default
			Minumum fresh air	per	rcentage		M	full	%	cs
Comr	nunication	n:				-		-	-	-
DP A	Address:		IO Type(ID):	S	see table	below	Proper	ty ID:	see table	below
(in t	he server)		Start-Index:	1	1		N° of e	elements	1	
Pro	perty acce	ss:	Read only			Read/W	/rite	\boxtimes		
Prof	tection		Read level	-	•		Write I	evel	-	
Exce	otion Hand	lling:	Value after Power-	up:	Stored '	Value 🛚	Act Va	lue 🔲 De	fault Value	-
Speci	ial Feature	s:								
	•									

List of Functional Blocks, Parameter FreshAirMinValue is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional	Property ID
Fan Coil Control	FCC	258	О	128
Water Heat Pump Control	WHPC	259	О	128
Split Unit Control	SPUC	260	О	128

3.9.5.27 Parameter MaxAirFlowCool

FB:	see table	Propert	y Name (<u>Server</u>):	Ма	xAirFlo	wCool					latory	
	below									Ор	tional 🗌	
Desci	ription:											
Parameter for the maximum air flow in cooling mode (comfort).												
DPT:									U ₁₆ Z ₈			
Field			Description				Sup		Range	Unit	Default	
Value			Air flow level for co	olin	ıg		М		full	m ³ /h	CS	
Z ₈ not supported NA												
Comr	nunication	:					=		-	-	=	
DP A	Address:		IO Type(ID):	see table below		Property ID:		see table	below			
(in t	he server)		Start-Index:	1	1		N° o	f e	lements	1		
Pro	perty acces	ss:	Read only			Read/V	/rite		\boxtimes			
Prot	tection		Read level	-	i		Write	e le	evel	-		
Exce	ption Hand	lling:	Value after Power-	up:	Stored	l Value ⊠	Act	Va	lue 🗌 Def	ault Value		
Speci	ial Feature	s:										

List of Functional Blocks, Parameter MaxAirFlowCool is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional	Property ID
VAV Control Discharge Air	VAVCDA	261	O	136

3.9.5.28 Parameter MaxAirFlowHeat

FB:	see table below	Propert	y Name (<u>Server</u>):	Ма	axAirFlov	vHeat				Mand Op	latory 🔲 tional 🔲
Desci	ription:										
Paran	neter for th	e maxim	um air flow in heatir	ng r	mode (cor	mfort).					
DPT:	Name	DPT_H\	/ACAirFlow_Z		DPT ID	203.104] [Data	atype format	$U_{16}Z_{8}$	
Field			Description				Su	ıp.	Range	Unit	Default
Value			Air flow level for he	eatir	ng		N	1	full	m ³ /h	CS
Z_8			not supported				N.	A			
Comr	nunication	1:				-				-	
DP A	Address:		IO Type(ID):	;	see table	below			ty ID:	see table	below
(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		-		Wr	ite I	evel	-	
Exce	otion Hand	lling:	Value after Power-	up:	Stored	Value 🛚	Ac	t Va	lue 🗌 Def	ault Value	
Speci	ial Feature	s:				•					
			_			•					

List of Functional Blocks, Parameter MaxAirFlowHeat is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional	Property ID
VAV Control Discharge Air	VAVCDA	261	O	137

3.9.5.29 Parameter MinAirFlowCool

FB:	see table below	Proper	ty Name (<u>Server</u>):	M	linAirFlow	/Cool				Mand Op	atory 🗌
Desci	ription:	-		-						<u> </u>	
Paran	neter for the	e minimu	ım air flow in coolin	g n	node (con	nfort).					
DPT:	Name	DPT_H\	/ACAirFlow_Z		DPT ID	203.104	4	Data	atype format	U ₁₆ Z ₈	
Field			Description					Sup.	Range	Unit	Default
Value			Air flow level for co	ooli	ing			М	full	m ³ /h	CS
Z ₈ not supported NA											
Comr	nunication):	-			•				=	
DP A	Address:		IO Type(ID):		see table	below	F	Proper	ty ID:	see table	below
(in t	he server)		Start-Index:		1 N° of elements 1			1			
Pro	perty acce	ss:	Read only			Read/W	۷ri	te	\boxtimes		
Prot	ection		Read level		-		١	Write I	evel	-	
Exce	otion Hand	lling:	Value after Power-	·up	: Stored	Value 🛚] /	Act Va	lue 🔲 Def	ault Value	
Speci	al Feature	s:							·	_	_

List of Functional Blocks, **Parameter MinAirFlowCool** is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional	Property ID
VAV Control Discharge Air	VAVCDA	261	О	138

3.9.5.30 Parameter MinAirFlowEconomy

FB:	see table below	Propert	ty Name (<u>Server</u>):	Mi	nAirFlow	/Econom	ıy		Mandatory Optional		
Descr	ription:										
Paran	neter for the	e minimu	ım air flow in econo	my	mode.						
DPT:	Name	DPT_H\	/ACAirFlow_Z		DPT ID	203.104	Dat	atype format	$U_{16}Z_{8}$		
Field			Description				Sup.	Range	Unit	Default	
Value			Air flow level for ed	onc	omy mode	е	М	full	m ³ /h	CS	
Z_8			not supported				NA				
Comr	nunication	1:						-	-		
DP /	Address:		IO Type(ID):	5	see table	below	Prope	rty ID:	see table	below	
(in t	he server)		Start-Index:	1	1		N° of	elements	1		
Prop	perty acce	ss:	Read only			Read/W	/rite	\boxtimes			
Prot	ection		Read level	-	-		Write	level	-		
Excep	otion Hand	lling:	Value after Power-	up:	Stored	Value 🛚	Act V	alue 🔲 Def	fault Value	: 🔲	
Speci	al Feature	s:			•	•	•			•	
					•	•	•				

List of Functional Blocks, Parameter MinAirFlowEconomy is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional	Property ID
VAV Control Discharge Air	VAVCDA	261	О	139

3.9.5.31 Parameter MinAirFlowHeat

FB:	see table below	Proper	ty Name (<u>Server</u>):	M	linAirFlov	/Heat				Mand Op	latory 🔲 tional 🔲
Desci	ription:	-		-						•	
Paran	neter for the	e minimu	ım air flow in heatin	g r	node (con	nfort).					
DPT:	Name	DPT_H\	/ACAirFlow_Z		DPT ID	203.104	4	Data	atype format	U ₁₆ Z ₈	
Field			Description					Sup.	Range	Unit	Default
Value			Air flow level for he	eati	ing mode			M	full	m ³ /h	CS
Z_8			not supported					NA			
Comr	nunication):				-		•		-	-
DP A	Address:		IO Type(ID):		see table	below	I	Proper	ty ID:	see table	below
(in t	he server)		Start-Index:		1		ı	√° of e	lements	1	
Pro	perty acce	ss:	Read only [Read/W	۷ri	te	\boxtimes		
Prot	ection		Read level		-		١	Write le	evel	-	
Excep	otion Hand	lling:	Value after Power-	up	: Stored	Value 🛚] ,	Act Va	lue 🗌 Def	ault Value	
Speci	al Feature	s:									
		•						•			

List of Functional Blocks, Parameter MinAirFlowHeat is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional	Property ID
VAV Control Discharge Air	VAVCDA	261	O	140

3.9.5.32 Parameter MinAirFlowStandby

FB:	see table below	Proper	ty Name (<u>Server</u>):	MinAirFlov	wStandby	1		Mand Op	latory 🗌 tional 🗌
Desci	ription:								
Paran	neter for the	e minimu	ım air flow in standb	y mode.					
DPT:	Name	DPT_H\	/ACAirFlow_Z	DPT ID	203.104	1 Data	atype format	$U_{16}Z_{8}$	
Field			Description			Sup.	Range	Unit	Default
Value			Air flow level for sta	andby mode)	М	full	m ³ /h	CS
Z ₈ not supported NA									
Comr	nunication	1:			-		-	-	
DP A	Address:		IO Type(ID):	see table	below	Proper	ty ID:	see table	below
(in t	he server)		Start-Index:	1		N° of e	elements	1	
Pro	perty acce	ss:	Read only [Read/W	/rite	\boxtimes		
Prof	tection		Read level	-		Write I	evel	-	
Exce	ption Hand	lling:	Value after Power-	up: Stored	l Value 🛚	Act Va	lue 🗌 Def	ault Value	-
Speci	ial Feature	s:							
		•			•			•	

List of Functional Blocks, Parameter MinAirFlowStandby is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional	Property ID
VAV Control Discharge Air	VAVCDA	261	O	141

3.9.5.33 Parameter NominalDischargeAirFlow

FB:	see table	Proper	y Name (<u>Server</u>):	NominalDis	scharge	AirFlow	1	Mano	datory 🗌		
	below							Op	otional 🗌		
Desc	ription:	-						-			
Parar	neter for the	e nomina	I value of discharge	air flow.							
DPT:	Name	DPT_H\	/ACAirFlow_Z	DPT ID	203.104	4 Dat	atype format	$U_{16}Z_{8}$			
Field			Description			Sup.	Range	Unit	Default		
Value			Nominal discharge	air flow M full			m ³ /h	CS			
Z_8			not supported			NA					
Comi	Communication:										
DP	Address:		IO Type(ID):	see table	below	Prope	erty ID:	see table	below		
(in t	he server)		Start-Index:	1		N° of	elements	1			
Pro	perty acce	ss:	Read only		Read/W	√rite	\boxtimes				
Pro	tection		Read level	-		Write	level	-			
Exce	ption Hand	lling:	Value after Power-u	ip: Stored	Value 🗵	Act V	alue 🔲 🏻 De	fault Value	∋ 🗌		
Spec	ial Feature	s:									

List of Functional Blocks, Parameter NominalDischargeAirFlow is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional	Property ID
VAV Control Discharge Air	VAVCDA	261	M	142

3.9.5.34 Parameter NominalExtractAirFlow

FB:	see table below	Propert	y Name (<u>Server</u>):	No	minalEx	tractAirF	Flov	N		Mandatory [Optional [
Desci	ription:										
Paran	neter for th	e nomina	I value of extract ai	r flo	W.						
DPT:	Name	DPT_H\	/ACAirFlow_Z		DPT ID	203.104	1	Data	atype format	$U_{16}Z_{8}$	
Field			Description				S	up.	Range	Unit	Default
Value Nominal extract air flow M full							m ³ /h	CS			
Z ₈ not supported NA											
Comr	Communication:										
DP A	Address:		IO Type(ID):	S	ee table	below	Р	roper	ty ID:	see table	below
(in t	he server)		Start-Index:	1			N	° of e	lements	1	
Pro	perty acce	ss:	Read only			Read/W	/rite	9	\boxtimes		
Prof	tection		Read level	-			W	/rite l	evel	-	
Exce	otion Hand	lling:	Value after Power-	up:	Stored	Value 🛚	Α	ct Va	lue 🗌 Def	ault Value	
Speci	ial Feature	s:		•	•			•			
			_		•			<u> </u>		•	

List of Functional Blocks, Parameter NominalExtractAirFlow is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional	Property ID
VAV Control Extract Air	VAVCEA	262	M	143

3.9.5.35 Parameter RatioExtractDischarge

FB:	see table	Prope	erty Name (Server):	Ra	atioExtract	Discha	rge		Mano	latory 🔲
	below		-						Optional	
Desci	ription:	_								
Paran	neter for the	e ratio	between extract and	dis	charge air.					
DPT:	DPT: Name DPT_DecimalFactor DPT ID 5.005 Datatype format U							U ₈		
Field			Description		<u>.</u>		Sup.	Range	Unit	Default
Value	!		Ratio, extract air divi	de	d by discha	rge air	М	full	ratio	CS
Comr	nunication	1:	-			-		-	-	
DP A	Address:		IO Type(ID):	see table below		elow	Proper	ty ID:	see table	below
(in t	he server)		Start-Index:		1 N° of elements			1		
Pro	perty acce	ss:	Read only [Read/W	rite /	\boxtimes		
Prot	tection		Read level		-		Write I	evel	-	
Exce	otion Hand	lling:	Value after Power-	up:	: Stored V	alue 🛚	Act Va	lue 🗌 Def	ault Value	
Speci	ial Feature	s:								
		•				•				

List of Functional Blocks, Parameter RatioExtractDischarge is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional	Property ID
VAV Control Extract Air	VAVCEA	262	О	144

3.9.5.36 Parameter SplitCoolDefValue

FB:	see table below	Proper	ty Name (<u>Server</u>):	Spl	itCoolD	efValue			Mand Op	latory 🗌 tional 🔲
Desci	ription:									
Paran	neter for the	e split va	lue of the cooling e	nerg	ıy demar	nd for sta	ge A and	d stage B.		
DPT:	Name	DPT_Pe	ercent_U8		OPT ID	5.004	Data	atype format	U ₈	
Field			Description				Sup.	Range	Unit	Default
			Percentage of ener	rgy c	demand	for	М	full	%	CS
			splitting							
Comr	nunication	ո ։								
DP A	Address:		IO Type(ID):	S	ee table	below	Proper	ty ID:	see table	below
(in t	he server)		Start-Index:	1			N° of e	lements	1	
Pro	perty acce	ss:	Read only			Read/W	/rite			
Prot	ection		Read level	-			Write I	evel	-	
Excep	otion Hand	lling:	Value after Power-	up:	Stored	Value 🛚	Act Va	lue 🔲 Det	ault Value	: 🗌
Speci	al Feature	s:								

List of Functional Blocks, Parameter SplitCoolDefValue is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional	Property ID
Fan Coil Control	FCC	258	О	129
Radiator and Chilled Ceiling Room Control	RCCRC	257	О	129
VAV Control Discharge Air	VAVCDA	261	О	129

3.9.5.37 Parameter SplitHeatDefValue

FB:	see table	Propert	y Name (<u>Server</u>):	Sp	plitHeatDe	efValue			Mano	datory 🗌
	below								Ор	tional 🗌
Desc	ription:	-							-	
Parar	neter for the	e split val	ue of the heating e	ene	rgy demar	nd for sta	ige A an	d stage B.		
DPT:	Name	DPT_Pe	rcent_U8		DPT ID	5.004	Data	atype format	U ₈	
Field			Description				Sup.	Range	Unit	Default
			Percentage of ene	rgy	demand t	for	М	full	%	CS
splitting										
Com	munication):				•	-	-	-	-
DP	Address:		IO Type(ID):		see table	below	Proper	ty ID:	see table	below
(in t	the server)		Start-Index:		1		N° of e	elements	1	
Pro	perty acce	ss:	Read only			Read/W	/rite	\boxtimes		
Pro	tection		Read level		-		Write I	evel	-	
Exce	ption Hand	lling:	Value after Power-	·up:	: Stored	Value 🛚	Act Va	lue 🗌 De	fault Value	- 🗌
Spec	ial Feature	s:								

List of Functional Blocks, Parameter SplitHeatDefValue is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional	Property ID
Fan Coil Control	FCC	258	O	130
Water Heat Pump Control	WHPC	259	О	130
Split Unit Control	SPUC	260	О	130
Radiator and Chilled Ceiling Room Control	RCCRC	257	О	130
VAV Control Discharge Air	VAVCDA	261	О	130

3.9.5.38 Parameter TempDischargeAirMin

FB:	see table below	Proper	ty Name (<u>Server</u>):	Tem	npDisch	argeAirl	Min		Mand Op	latory 🗌 tional 🗌
Desci	ription:									
Paran	neter for th	e minimu	ım temperature of tl	ne dis	scharge	air.				
DPT:	Name	DPT_Te	mpHVACAbs_Z	D	PT ID	205.100	Data	atype format	$V_{16}Z_{8}$	
Field			Description				Sup.	Range	Unit	Default
Value	!		Minimum temperat	ure o	of discha	rge air	М	full	°C	CS
Z ₈ not supported NA										
Comr	nunication	1:						-	-	
DP A	Address:		IO Type(ID):	see table below		Property ID:		see table	below	
(in t	he server)		Start-Index:	1			N° of e	elements	1	
Pro	perty acce	ss:	Read only			Read/W	/rite	\boxtimes		
Prof	tection		Read level	-			Write I	evel	-	
Exce	ption Hand	lling:	Value after Power-	up:	Stored	Value 🛚	Act Va	lue 🗌 Det	ault Value	
Speci	ial Feature	s:		•		•				•
		•		·		•			•	•

List of Functional Blocks, Parameter TempDischargeAirMin is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional	Property ID
Fan Coil Control	FCC	258	О	132
VAV Control Discharge Air	VAVCDA	261	О	132

3.9.5.39 Parameter TempFrostAlarm

FB:	see table below	Propert	y Name (<u>Server</u>):	Те	mpFrost	Alarm			Mand	latory 🗌 tional 🗍
Desci	ription:								<u> </u>	tional
	neter for the	e frost te	mperature.							
DPT:	Name	DPT_Te	mpHVACAbs_Z		DPT ID	205.100) Dat	atype format	$V_{16}Z_{8}$	
Field			Description				Sup.	Range	Unit	Default
Value			Frost temperature				М	full	°C	CS
Z_8			not supported				NA			
Comr	nunication):				•	='	-	-	=
DP A	Address:		IO Type(ID):	5	see table	below	Prope	rty ID:	see table	below
(in t	he server)		Start-Index:	•	1		N° of	elements	1	
Pro	perty acce	ss:	Read only			Read/W	/rite	\boxtimes		
Prot	ection		Read level	-	-		Write	level	-	
Excep	otion Hand	lling:	Value after Power-	up:	Stored	Value 🛚	Act V	alue 🔲 De	fault Value	<u> </u>
Speci	al Feature	s:								

List of Functional Blocks, **Parameter TempFrostAlarm** is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional	Property ID
Fan Coil Control	FCC	258	О	131
Water Heat Pump Control	WHPC	259	О	131
Split Unit Control	SPUC	260	О	131
Radiator and Chilled Ceiling Room Control	RCCRC	257	О	131
Radiator Room Control TU	RRCTU	256	О	131
VAV Control Discharge Air	VAVCDA	261	О	131

3.9.6 Detailed Specification of the Diagnostic Data

3.9.6.1 Diagnostic Data AirFlowDischarge

FB:	see table below	Propert	y Name (<u>Server</u>):	Α	irFlowDis	scharge					datory 🗌
Desci	ription:									i Ob	tional
	Value of dischage air volume.										
DPT:											
Field			Description		•	_	S	Sup.	Range	Unit	Default
Value)		Air flow level of dis	sch	arge air			M	full	m ³ /h	CS
Z ₈			not supported					NA			
Comr	nunication) :					-		-	-	-
DP A	Address:		IO Type(ID):		see table	below	Р	rope	rty ID:	see table	below
(in t	he server)		Start-Index:		1		N	N° of elements		1	
Pro	perty acce	ss:	Read only	\boxtimes		Read/W	√rite	Э			
Prof	tection		Read level		-		V	/rite I	evel	-	
Exce	ption Hand	lling:	Value after Power	-up	: Stored	Value 🗵] A	ct Va	alue 🔲 De	fault Value	
		-									
Speci	ial Feature	s:									

List of Functional Blocks, **Diagnostic Data** AirFlowDischarge is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional	Property ID
VAV Control Discharge Air	VAVCDA	261	O	148

3.9.6.2 Diagnostic Data AirFlowExtract

FB:	see table	Proper	ty Name (<u>Server</u>):	AirFlowExt	ract			Mand	• =
	below							Op	tional 🔲
Desc	ription:								
Value	of extract	air volum	ie.						
DPT:	Name	DPT_H\	/ACAirFlow_Z	DPT ID	203.104	1 Data	atype format	$U_{16}Z_{8}$	
Field			Description			Sup.	Range	Unit	Default
Value			Air flow level of extr	act air		М	full	m³/h	CS
Z_8			not supported			NA			
Comr	nunication	n:			-		-	•	
DP A	Address:		IO Type(ID):	see table	below	Proper	rty ID:	see table	below
(in t	he server)		Start-Index:	1		N° of e	elements	1	
Pro	perty acce	ss:	Read only		Read/W	/rite			
Prof	tection		Read level	-		Write I	evel	-	
Exce	otion Hand	lling:	Value after Power-u	ıp: Stored	Value 🛚	Act Va	lue 🗌 De	fault Value	
Speci	ial Feature	s:							

List of Functional Blocks, **Diagnostic Data** AirFlowExtract is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional	Property ID
VAV Control Extract Air	VAVCEA	262	O	149

3.9.6.3 Diagnostic Data ContrModeAct

FB:	see table	Proper	ty Name (<u>Server</u>):	C	ontrMode	Act			Mand	atory
	below								Op:	tional 🔲
Desc	ription:	'		-					-	
Active	value of the	ne Contr	Mode.							
DPT:	Name	DPT_H\	/ACContrMode		DPT ID	20.105	Data	atype format	N ₈	
Field			Description				Sup.	Range	Unit	Default
Contr	Mode						М	020	enum.	CS
			0 = Auto				0			
			1 = Heat	2	2 = Mng V	Vrmup	0			
			3 = Cool	4	4 = Night	Purge	0			
			5 = Precool	(6 = Off		0			
			7 = Test	8	B = Emerg	y Heat	0			
			9 = Fan Only	10	0 = Free C	Cool	0			
			11 = Ice	20	0 = No De	mand	0			
			all other enumerati	on	S		NA			
Comr	nunicatior	າ:	-			_		-	_	
DP .	Address:		IO Type(ID):		see table	below	Proper	ty ID:	see table	below
(in t	he server))	Start-Index:		1		N° of e	lements	1	
Pro	perty acce	ss:	Read only	X		Read/W	′rite			
Prof	ection		Read level		-		Write I	evel	-	
Exce	otion Hand	dling:	Value after Power-	up	: Stored	Value 🖂	Act Va	lue 🗌 Def	ault Value	
Speci	al Feature	s:								
	<u></u>						·		<u>-</u>	

List of Functional Blocks, **Diagnostic Data** ContrModeAct is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional	Property ID
Fan Coil Control	FCC	258	О	150
Water Heat Pump Control	WHPC	259	О	150
Split Unit Control	SPUC	260	О	150
Radiator and Chilled Ceiling Room Control	RCCRC	257	О	150
Radiator Room Control TU	RRCTU	256	O	150
VAV Control Discharge Air	VAVCDA	261	O	150

3.9.6.4 Diagnostic Data HeatCoolMode

FB:	see table	Propert	y Name (<u>Server</u>):	Не	eatCoolN	lode			Mand	atory 🗌
	below								Op	tional 🔲
Desc	ription:	-		_					-	
Active	HeatCooll	Mode.								
DPT:	Name	DPT_He	at/Cool		DPT ID	1.100	Data	atype format	B ₁	
Field			Description				Sup.	Range	Unit	Default
			0 = cooling				M	0/1	Bit	cs
			1 = heating							
Comr	nunication	n:					-	-	•	
DP A	Address:		IO Type(ID):		see table	below	Proper	rty ID:	see table	below
(in t	he server)		Start-Index:		1		N° of e	elements	1	
Pro	perty acce	ss:	Read only	\overline{X}		Read/V	Vrite			
Prof	tection		Read level		=		Write I	evel	-	
Exce	ption Hand	lling:	Value after Power-	up:	Stored	Value 🗵	Act Va	lue 🗌 De	fault Value	: 🔲
Speci	ial Feature	s:								

List of Functional Blocks, **Diagnostic Data** HeatCoolMode is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional	Property ID
Fan Coil Control	FCC	258	O	151
Water Heat Pump Control	WHPC	259	O	151
Split Unit Control	SPUC	260	O	151
Radiator and Chilled Ceiling Room Control	RCCRC	257	O	151
VAV Control Discharge Air	VAVCDA	261	O	151

3.9.6.5 Diagnostic Data HVACModeAct

FB:	see table	Proper	ty Name (<u>Server</u>):	Н	VACMod	eAct			Mand	
	below								Op	tional 🗌
Desci	ription:									
Active	value of th	ne HVAC	Mode.							
DPT:	Name	DPT_H\	/ACMode		DPT ID	20.102	Data	atype format	N_8	
Field			Description				Sup.	Range	Unit	Default
HVAC	Mode						M	14	enum.	CS
			0 = NA				NA			
			1 = Comfort	2	2 = Stand	by	M			
			3 = Economy	4	4 = BuildF	Prot	M			
			all other enumerati	ons	S		NA			
Comr	nunication):								
DP A	Address:		IO Type(ID):		see table	below	Proper	ty ID:	see table	below
(in t	he server)		Start-Index:		1		N° of e	elements	1	
Pro	perty acce	ss:	Read only	X		Read/W	/rite			
Prot	ection		Read level		-		Write I	evel	-	
Excep	otion Hand	lling:	Value after Power-	up:	Stored	Value 🛚	Act Va	lue 🗌 De	fault Value	
						•				
Speci	al Feature	s:			_	_	-			-

List of Functional Blocks, **Diagnostic Data** HVACModeAct is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional	Property ID
Fan Coil Control	FCC	258	О	152
Water Heat Pump Control	WHPC	259	O	152
Split Unit Control	SPUC	260	O	152
Radiator and Chilled Ceiling Room Control	RCCRC	257	O	152
Radiator Room Control TU	RRCTU	256	О	152
VAV Control Discharge Air	VAVCDA	261	О	152

3.9.6.6 Diagnostic Data TempRoomSetpAct

FB:	see table	Proper	ty Name (<u>Server</u>):	Te	mpRoom	nSetpAct	;		Mano	latory 🔲
	below								Ор	tional 🗌
Desci	ription:	-							-	
Active	e room tem	perature	setpoint.							
DPT:	Name	DPT_Te	mpHVACAbs_Z		DPT ID	205.100) Dat	atype format	$V_{16}Z_{8}$	
Field			Description				Sup.	Range	Unit	Default
Value	!		Room temperature	set	tpoint		M	full	°C	CS
Z_8			not supported				NA			
Comr	nunicatior	ո։	-			-			-	-
DP A	Address:		IO Type(ID):	S	see table	below	Prope	rty ID:	see table	below
(in t	he server))	Start-Index:	1			N° of	elements	1	
Pro	perty acce	ss:	Read only	\boxtimes		Read/W	/rite			
Prof	tection		Read level	-	i		Write	level	-	
Exce	ption Hand	dling:	Value after Power-	up:	Stored	Value 🛚	Act Va	alue 🔲 Def	ault Value	; 🗌
Speci	ial Feature	s:								

List of Functional Blocks, Diagnostic Data TempRoomSetpAct is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional	Property ID
Fan Coil Control	FCC	258	O	153
Water Heat Pump Control	WHPC	259	О	153
Split Unit Control	SPUC	260	О	153
Radiator and Chilled Ceiling Room Control	RCCRC	257	О	153
Radiator Room Control TU	RRCTU	256	О	153
VAV Control Discharge Air	VAVCDA	261	O	153

3.9.6.7 Diagnostic Data ValueEnergyDem

FB:	see table	Propert	y Name (<u>Server</u>):	Va	alueEner	gyDem			Mano	datory 🗌
	below								Ор	tional 🗌
Desc	ription:	=							-	
Active	e room temp	perature	setpoint.							
DPT:	Name	DPT_Pe	rcent_V8		DPT ID	6.001	Data	atype format	V ₈	
Field			Description				Sup.	Range	Unit	Default
Value	;		Energy demand in				M	full	%	cs
			-100% = full heatii							
			+100% = full coolir	ng d	demand					
Com	munication):					=	-	<u>-</u>	
DP.	Address:		IO Type(ID):		see table	below	Proper	rty ID:	see table	below
(in t	he server)		Start-Index:		1		N° of e	elements	1	
Pro	perty acce	ss:	Read only	\boxtimes		Read/W	√rite			
Pro	tection		Read level		-		Write I	evel	-	
Exce	ption Hand	lling:	Value after Power-	·up:	: Stored	Value 🛚	Act Va	lue 🗌 De	fault Value	
Spec	ial Feature	s:								

List of Functional Blocks, **Diagnostic Data** ValueEnergyDem is used in:

Name of FB	Abbreviation	IO Type (ID)	Mandatory Optional	Property ID
Fan Coil Control	FCC	258	О	154
Water Heat Pump Control	WHPC	259	О	154
Split Unit Control	SPUC	260	О	154
Radiator and Chilled Ceiling Room Control	RCCRC	257	O	154
Radiator Room Control TU	RRCTU	256	O	154
VAV Control Discharge Air	VAVCDA	261	O	154

3.9.7 Detailed Specification of the Alarms

3.9.7.1 Alarm FrostRoom

To be defined.

3.9.7.2 Alarm LowDischargeAir

To be defined.

3.9.7.3 Alarm SecurityStop

To be defined.