Application Description

Ventilation, Air Conditioning and Cold Water

Property Identifiers

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Summary

This document is a part of the HVAC Application Interworking Standard. It specifies the standard Property Identifiers for each VAC specific Functional Block / Interface Object.

Version 01.02.01 is a KNX Approved Standard.

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

Document updates

Version	Date	Modifications
0.1	2001.08.16	A. Hurschler document creation for VAC
0.2	2002.02.08	A. Hurschler document correction
1.0	2002.03.28	A. Hurschler TFI approved
0.3	2002.04.03	A. Hurschler document release for TFI assessment
1.1	2002.12.17	A. Hurschler update for handbook v1.1
1.1	2009.06.19	Update in view of publication in the KNX Specifications v2.0.
1.2.00	2010.11.29	Removed Parameters TempSupplyAirSetpMin and TempSupplyAirSetpMax from SATC according conclusion of WGI topic [WGI00061].
01.02.01	2013.10.29	Editorial updates for the publication of KNX Specifications 2.1.

References

None.

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Contents

1 Introduction

1.1 Scope

This document specifies the Property Identifiers for LTE-HEE Process Data (runtime interworking) and Parameters / Diagnostic data used in the data-interfaces of HVAC Ventilation, Air Conditioning and Cold Water (VAC) Functional Blocks. This document is part of the KNX HVAC Application Interworking Standard.

The majority of these DPTs is usable in the LTE mode only. In the S-Mode interface the corresponding data information is either not available or mapped to standard DPTs.

2 Functional Block Auxiliary Heating Demand Percent (HDAUXER)

Object Name: **HDAUXPER**

Object Type: **146**

Property Identifier	Datapoint Name	Datapoint Type Name	Datapoint Type Identifier
LTE-HEE process data (runtime interworking, zone addressing and individual addressing)			
51	EnergyDemHeatHDAUXPER	DPT_ActPosDemAbs	207.104
52			
Parameters and Diagnostic Data (individual addressing only)			
101	DistrSegmH	DPT_UCountValue8_Z	202.002
102			
...			
110			
111			

3 Functional Block Heating Demand Transformer for air handling units (HDTAHU)

Object Name: **HDTAHU**

Object Type: **152**

Property Identifier	Datapoint Name	Datapoint Type Name	Datapoint Type Identifier
LTE-HEE process data (runtime interworking, zone addressing and individual addressing)			
51	TempFlowWaterDemAbsHDTAHU	DPT_TempFlowWaterDemAbs	210.100
52			
Parameters and Diagnostic Data (individual addressing only)			
101	DistrSegmH	DPT_UCountValue8_Z	202.002
102	OutsideSensorZone	DPT_UCountValue8_Z	202.002
103			
...			
110	ValueEnergyDemHeatAct	DPT_Percent_U8	5.004
111			

4 Functional Block Chiller Control (CC)

Object Name: **CC**

Object Type: **192**

Property Identifier	Datapoint Name	Datapoint Type Name	Datapoint Type Identifier
LTE-HEE process data (runtime interworking, zone addressing and individual addressing)			
51	StatusCC	DPT_StatusCC	215.101
52	OpHrsChiller	DPT_LongDeltaTimeSec	13.100
53	ForceSignCC	DPT_ForceSignCool	21.101
54	LockSignCC	DPT_LockSign	207.101
55			
Parameters and Diagnostic Data (individual addressing only)			
101	ProdSegmC	DPT_UCountValue8_Z	202.002
102	Producer	DPT_UCountValue8_Z	202.002
103			
...			
110	StatusChillerPump	DPT_RealValue_Z	202.001
111	StatusCondPump	DPT_RealValue_Z	202.001
112	TempFlowWaterChiller	DPT_TempHVACAbs_Z	205.100
113	TempReturnWaterChiller	DPT_TempHVACAbs_Z	205.100
114	TempFlowWaterCond	DPT_TempHVACAbs_Z	205.100
115	TempReturnWaterCond	DPT_TempHVACAbs_Z	205.100
116			

5 Functional Block Cold Water Production Manager (CPM)

Object Name: **CPM**

Object Type: **199**

Property Identifier	Datapoint Name	Datapoint Type Name	Datapoint Type Identifier
LTE-HEE process data (runtime interworking, zone addressing and individual addressing)			
51	StatusCPM	DPT_StatusCPM	209.102
52	PowerFlowWaterDemCPM	DPT_PowerFlowWaterDemCPM	214.101
53	ForceSignCPM	DPT_ForceSignCool	21.101
54	LockSignCPM	DPT_LockSign	207.101
55			
Parameters and Diagnostic Data (individual addressing only)			
101	ProdSegmC	DPT_UCountValue8_Z	202.002
102	DistrSegmC	DPT_UCountValue8_Z	202.002
103	Gen_PeripheralCRC	DPT_UCountValue16_Z	203.012
104	Gen_PeripheralPump	DPT_UCountValue16_Z	203.012
105			
...			
110	TempFlowWaterProdSegmC	DPT_TempHVACAbs_Z	205.100
111	TempReturnWaterProdSegmC	DPT_TempHVACAbs_Z	205.100
112	ChillersTotal	DPT_Value_1_UCount	5.010
113	ChillersActive	DPT_Value_1_UCount	5.010
114	PnomCPM	DPT_PowerKW_Z	203.014
115	PrelCPM	DPT_PowerKW_Z	203.014
116	OffPerm	DPT_Bool	1.002
117	NoCoolAvailable	DPT_Bool	1.002
118	StatusPumpCPM	DPT_RelValue_Z	202.001
119			

6 Functional Block Re-cooling Controller (CRC)

Object Name: **CRC**

Object Type: **200**

Property Identifier	Datapoint Name	Datapoint Type Name	Datapoint Type Identifier
LTE-HEE process data (runtime interworking, zone addressing and individual addressing)			
51	TempReturnWaterCondSetp	DPT_TempHVACAbs_Z	205.100
52	StatusCRC	DPT_StatusCRC	209.104
53			
Parameters and Diagnostic Data (individual addressing only)			
101	ProdSegmC	DPT_UCountValue8_Z	202.002
102	Producer	DPT_UCountValue8_Z	202.002
103	Gen_PeripheralCPM	DPT_UCountValue16_Z	203.012
104	OutsideSensorZone	DPT_UCountValue16_Z	203.012
105	Gen_PeripheralPump	DPT_UCountValue16_Z	203.012
106	Gen_PeripheralFan#1	DPT_UCountValue16_Z	203.012
107	Gen_PeripheralFan#2	DPT_UCountValue16_Z	203.012
108	Gen_PeripheralFan#3	DPT_UCountValue16_Z	203.012
109	Gen_PeripheralFan#4	DPT_UCountValue16_Z	203.012
110	Gen_PeripheralFan#5	DPT_UCountValue16_Z	203.012
111	Gen_PeripheralFan#6	DPT_UCountValue16_Z	203.012
112	and more		
113			
...			
120	TempFlowWaterCond	DPT_TempHVACAbs_Z	205.100
121	TempReturnWaterCond	DPT_TempHVACAbs_Z	205.100
122			

7 Functional Block Cooling Flow Demand Manager (CFDM)

Object Name: CFDM

Object Type: 208

Property Identifier	Datapoint Name	Datapoint Type Name	Datapoint Type Identifier
LTE-HEE process data (runtime interworking, zone addressing and individual addressing)			
51	TempFlowWaterDemAbsCFDM	DPT_TempFlowWaterDemAbs	210.100
52	ForceSignCFDM	DPT_ForceSignCool	21.101
53	LockSignCFDM	DPT_LockSign	207.101
54			
Parameters and Diagnostic Data (individual addressing only)			
101	DistrSegmC (d)	DPT_UCountValue8_Z	202.002
102	DistrSegmC (d – 1)	DPT_UCountValue8_Z	202.002
103	Gen_PeripheralLinkFTC	DPT_UCountValue16_Z	203.012
104	Gen_PeripheralPump	DPT_UCountValue16_Z	203.012
105			
...			
110	TempFlowWaterSetpAct	DPT_TempHVACAbs_Z	205.100
111			

8 Functional Block Auxiliary Cooling Demand (CDAUX)

Object Name: CDAUX

Object Type: 209

Property Identifier	Datapoint Name	Datapoint Type Name	Datapoint Type Identifier
LTE-HEE process data (runtime interworking, zone addressing and individual addressing)			
51	TempFlowWaterDemAbsCZC	DPT_TempFlowWaterDemAbs	210.100
52			
Parameters and Diagnostic Data (individual addressing only)			
101	DistrSegmC	DPT_UCountValue8_Z	202.002
102			
...			
110			
111			

9 Functional Block Auxiliary Cooling Demand Percent (CDAUXER)

Object Name: **CDAUXPER**

Object Type: **210**

Property Identifier	Datapoint Name	Datapoint Type Name	Datapoint Type Identifier
LTE-HEE process data (runtime interworking, zone addressing and individual addressing)			
51	--- 1)		
52	EnergyDemCoolCDAUXPER	DPT_ActPosDemAbs	207.104
53			
Parameters and Diagnostic Data (individual addressing only)			
101	DistrSegmC	DPT_UCountValue8_Z	202.002
102			
...			
110			
111			

1) Consistensy to all EnergyDemCool… signals as Property Identifier 52

10 Functional Block Cooling Demand Transformer for air handling units (CDTAHU)

Object Name: CDTAHU

Object Type: 215

Property Identifier	Datapoint Name	Datapoint Type Name	Datapoint Type Identifier
LTE-HEE process data (runtime interworking, zone addressing and individual addressing)			
51	TempFlowWaterDemAbsCDTAHU	DPT_TempFlowWaterDemAbs	210.100
52			
Parameters and Diagnostic Data (individual addressing only)			
101	DistrSegmC	DPT_UCountValue8_Z	202.002
102	OutsideSensorZone	DPT_UCountValue8_Z	202.002
103			
...			
110	ValueEnergyDemCoolAct	DPT_Percent_U8	5.004
111			

11 Functional Block Cooling Zone Controller (CZC)

Object Name: **CZC**

Object Type: **224**

Property Identifier	Datapoint Name	Datapoint Type Name	Datapoint Type Identifier
LTE-HEE process data (runtime interworking, zone addressing and individual addressing)			
51	TempFlowWaterDemAbsCZC	DPT_TempFlowWaterDemAbs	210.100
52	StatusCZC	DPT_StatusRCC.	21.105
53	TempRoomSetpCoolAct	DPT_TempHVACAbs_Z	205.100
54	HVACModeAct	DPT_HVACMode_Z	201.100
55	TempFlowWaterCZC	DPT_TempHVACAbs_Z	205.100
56			
Parameters and Diagnostic Data (individual addressing only)			
101	Apartment	DPT_UCountValue8_Z	202.002
102	Room	DPT_UCountValue8_Z	202.002
103	Subzone	DPT_UCountValue8_Z	202.002
104	DistrSegmC	DPT_UCountValue8_Z	202.002
105	OutsideSensorZone	DPT_UCountValue8_Z	202.002
106			
...			
110	TempFlowWaterMin	DPT_TempHVACAbs_Z	205.100
111	TempFlowWaterSetpCZC	DPT_TempHVACAbs_Z	205.100
112	TempRoomAct	DPT_TempHVACAbs_Z	205.100
113	TempOutsideAct	DPT_TempHVACAbs_Z	205.100
114	Fault	DPT_Bool	1.002
115	StatusPumpCZC	DPT_RelValue_Z	202.001
116			

12 Functional Block Air Handling Unit Controller (AHUC)

Object Name: AHUC

Object Type: 240

Property Identifier	Datapoint Name	Datapoint Type Name	Datapoint Type Identifier
LTE-HEE process data (runtime interworking, zone addressing and individual addressing)			
51	EnergyDemHeatAHUC	DPT_ActPosDemAbs	207.104
52	EnergyDemCoolAHUC	DPT_ActPosDemAbs	207.104
53	StatusAHUC	DPT_StatusAHUC	21.106
54	HVACModeAct	DPT_HVACMode_Z	201.100
55	TempRoomSetpAct	DPT_TempHVACAbs_Z	205.100
56			
Parameters and Diagnostic Data (individual addressing only)			
101	Apartment	DPT_UCountValue8_Z	202.002
102	DistrSegmH	DPT_UCountValue8_Z	202.002
103	DistrSegmC	DPT_UCountValue8_Z	202.002
104	OutsideSensorZone	DPT_UCountValue8_Z	202.002
105			
...			
110	TempSupplyAirSetpMin	DPT_TempHVACAbs_Z	205.100
111	TempSupplyAirSetpMax	DPT_TempHVACAbs_Z	205.100
112	TempRoomAct	DPT_TempHVACAbs_Z	205.100
113	TempOutsideAct	DPT_TempHVACAbs_Z	205.100
114	TempSupplyAirSetpHeat	DPT_TempHVACAbs_Z	205.100
115	TempSupplyAirSetpCool	DPT_TempHVACAbs_Z	205.100
116	Fault	DPT_Bool	1.002
117	FanActive	DPT_Bool	1.002
118			

13 Functional Block Supply Air Temperature Controller (SATC)

Object Name: **SATC**

Object Type: **241**

Property Identifier	Datapoint Name	Datapoint Type Name	Datapoint Type Identifier
LTE-HEE process data (runtime interworking, zone addressing and individual addressing)			
51	EnergyDemHeatSATC	DPT_ActPosDemAbs	207.104
52	EnergyDemCoolSATC	DPT_ActPosDemAbs	207.104
53	StatusSATC	DPT_StatusAHU	21.106
54	TempSupplyAirSATC	DPT_TempHVACAbs_Z	205.100
55			
Parameters and Diagnostic Data (individual addressing only)			
101	DistrSegmV	DPT_UCountValue8_Z	202.002
102	DistrSegmH	DPT_UCountValue8_Z	202.002
103	DistrSegmC	DPT_UCountValue8_Z	202.002
104	OutsideSensorZone	DPT_UCountValue8_Z	202.002
105	Gen_Peripheral	DPT_UCountValue16_Z	203.012
106			
…			
112	TempOutsideAct	DPT_TempHVACAbs_Z	205.100
113	Fault	DPT_Bool	1.002
114	FanActive	DPT_Bool	1.002
115			