



Suntracer KNX pro

Weather Station

Item number 70900



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Installation, inspection, commissioning and troubleshooting of the device must only be carried out by a competent electrician.

This manual is amended periodically and will be brought into line with new software releases. The change status (software version and date) can be found in the contents footer. If you have a device with a later software version, please check **www.elsner-elektronik.de** in the menu area "Service" to find out whether a more up-to-date version of the manual is available.

Clarification of signs used in this manual



Safety advice.



Safety advice for working on electrical connections, components, etc.

DANGER!

... indicates an immediately hazardous situation which will lead to death or severe injuries if it is not avoided.

WARNING!

... indicates a potentially hazardous situation which may lead to death or severe injuries if it is not avoided.

CAUTION!

... indicates a potentially hazardous situation which may lead to trivial or minor injuries if it is not avoided.



ATTENTION! ... indicates a situation which may lead to damage to property if it is not avoided.

ETS

In the ETS tables, the parameter default settings are marked by underlining.

1. Description

The **Weather Station Suntracer KNX pro** for the KNX building bus system measures temperature, wind speed, wind direction, brightness air humidity and air pressure. It recognises precipitation and receives the GPS signal for time and location. In addition, using location coordinates and the time, it calculates the exact position of the sun (azimuth and elevation).

All values can be used for the control of limit dependent switching outputs. States can be linked via AND logic gates and OR logic gates. Multi-function modules change input data as required by means of calculations, querying a condition, or converting the data point type.

The integrated shade control system allows intelligent sun protection control of up to 12 façades.

Functions:

- **Brightness measurement** (current light strength). Measurement with 5 separate sensors, output of the current highest value (one maximum value). Separate limit values for night
- **GPS receiver**, outputting the current time and location coordinates. The **Weather Station Suntracer KNX pro** also computes the position of the sun (azimuth and elevation)
- **Shade control** for up to 12 façades with slat tracking and shadow edge tracking
- **Wind measurement**: Measurement of wind strength and wind direction (0°-360°) by ultrasound
- **Precipitation detection**: The sensor surface is heated, so that only drops and flakes are recognised as precipitation, but not mist or dew. When the rain or snow stops, the sensor is soon dry again and the precipitation warning ends
- **Temperature measurement. Calculation of the felt temperature (considering wind strength and air humidity)**
- Frost protection for shading systems
- **Air humidity measurement** (relative, absolute)
- Bus message, whether the values of temperature and humidity are within the **comfort field** (DIN 1946). Calculation of the **dew point**
- **Air pressure measurement**
- **Weekly and calendar time switch**: All time switching outputs can be used as communication objects.

The **weekly time switch** has 24 periods. Each period can be configured either as an output or as an input. If the period is an output, then the switching time is set per parameter or per communication object.

The **calendar time switch** has 4 periods. Two on/off switching operations, which are executed daily, can be set for each period

- **Switching outputs** for all measured and computed values. Threshold values can be adjusted per parameter or via communication objects
- **8 AND and 8 OR logic gates**, each with 4 inputs. All switching events as well as 16 logic inputs (in the form of communications objects) can be used as

inputs for the logic gates. The output of each gate can be configured optionally as 1-bit or 2 x 8-bit

- **8 multi-function modules** (computers) for changing the input data by calculations, by querying a condition or by converting the data point type
- **Summer compensation** for cooling systems. A characteristic curve matches the target temperature in the room to the external temperature and sets the minimum and maximum target temperature values.

Configuration is made using the KNX software ETS. The **product file** can be downloaded from the Elsner Elektronik website on **www.elsner-elektronik.de** in the "Service" menu.

1.0.1. Deliverables

- Weather station
- Pole extension 50 cm long, with 2 screw brackets for fixing
- 6x grub screw DIN 914 M4x10 mm stainless steel A2 with matching hex key
- Cable M8, 4 poles, 10 m
- Junction box mini 25-L and 4x 2-conductor splicing connector
- 24V DC power supply unit PS5000
- Telescope magnet for programming

1.1. Technical specification

Housing	Plastic
Colour	White / Translucent
Assembly	Surface mount
Protection category	IP 44
Dimensions weather station	approx. 255 × 140 × 274 (W × H × D, mm)
Dimensions pole extension	Length approx. 50 cm, pipe diameter approx. 50 mm, mounting for pole 40-60 mm (screw brackets), plate approx. 130 × 110 × 3 (W × H × D, mm)
Dimensions power supply unit	approx. 108 × 95 × 69 (W × H × D, mm), 6 modules
Weight weather station	approx. 600 g
Weight pole extension	approx. 1 kg (incl. screw brackets)
Weight power supply unit	approx. 350 g
Weight connection accessories	approx. 430 g
Ambient temperature	Operation -30...+50°C, storage -30...+70°C
Auxiliary supply	24 V DC ±10% (white + / yellow GND)
Power consumption	heating off (at temperature > 7,5°C): 6W heating on (at temperature ≤ 7,5°C): up to 40 W
Bus current	max. 10 mA
Data output	KNX +/-
BCU type	Integrated microcontroller

PEI type	0
Group addresses	max. 2000
Assignments	max. 2000
Communication objects	1,415
Temperature:	
Measurement range	-30°C ... +50°C
Resolution	0.1°C
Accuracy	±0.5°C at -30°C ... +25°C ±1.5°C at -30°C ... +45°C
Air humidity:	
Measurement range	0% rH ... 100% rH
Resolution	0.1 % rH
Accuracy	±7,5% at 0...10% rH ±4,5% at 10...90% rH ±7,5% at 90...100% rH
Pressure sensor:	
Measurement range	300 mbar ... 1100 mbar
Resolution	0.1 mbar
Accuracy	±4 mbar
Wind speed:	
Measurement range	0 m/s ... 35 m/s
Resolution	0.1 m/s
Accuracy	at wind speed $v < 5$ m/s: ±0,5 m/s at wind speed $v > 5$ m/s: ±10%
Wind direction:	
Measurement range	0...360° (from wind speed $v > 0,5$ m/s)
Resolution	0.1°
Accuracy	±5°
Brightness:	
Measurement range	0 lux ... 150,000 lux
Resolution	1 lux at 0...255 lux 4 lux at 256...2,645 lux 163 lux at 2,646...128,256 lux 762 lux at 128,257...150,000 lux
Accuracy	±15% of the measurement value at 35 lux ... 150,000 lux

The product conforms with the provisions of EU directives.

1.2. Notes on wind measurement

Due to very heavy rain, hail or snowfall, the ultrasonic signal can be attenuated to such an extent that no correct measured values can be output. In this case, a wind sensor

error is sent and the wind speed is set to the maximum value of 35 m/s for safety reasons.

2. Installation and start-up

2.1. Installation notes



Installation, testing, operational start-up and troubleshooting should only be performed by an electrician.



CAUTION!

Live voltage!

There are unprotected live components inside the device.

- National legal regulations are to be followed.
- Ensure that all lines to be assembled are free of voltage and take precautions against accidental switching on.
- Do not use the device if it is damaged.
- Take the device or system out of service and secure it against unintentional use, if it can be assumed, that risk-free operation is no longer guaranteed.

The device is only to be used for its intended purpose. Any improper modification or failure to follow the operating instructions voids any and all warranty and guarantee claims.

After unpacking the device, check it immediately for possible mechanical damage. If it has been damaged in transport, inform the supplier immediately.

The device may only be used as a fixed-site installation; that means only when assembled and after conclusion of all installation and operational start-up tasks and only in the surroundings designated for it.

Elsner Elektronik is not liable for any changes in norms and standards which may occur after publication of these operating instructions.

2.2. Installation location

Select an installation position on the building where the sensors can measure wind, rain and sunshine without hindrance. No structural elements should be mounted above the weather station, from which water could continue to drop on the precipitation sensor even after it has stopped raining or snowing. The weather station should not be shaded by structures or, for example, trees.

At least 60 cm of clearance must be left around the device. This facilitates correct wind speed measurement without eddies. At the same time, this prevents spray (raindrops hitting the device) or snow (snow penetration) from impairing the measurement.

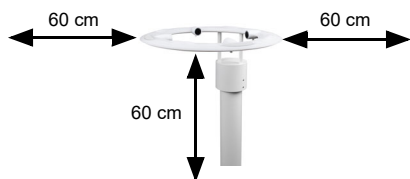


Fig. 1

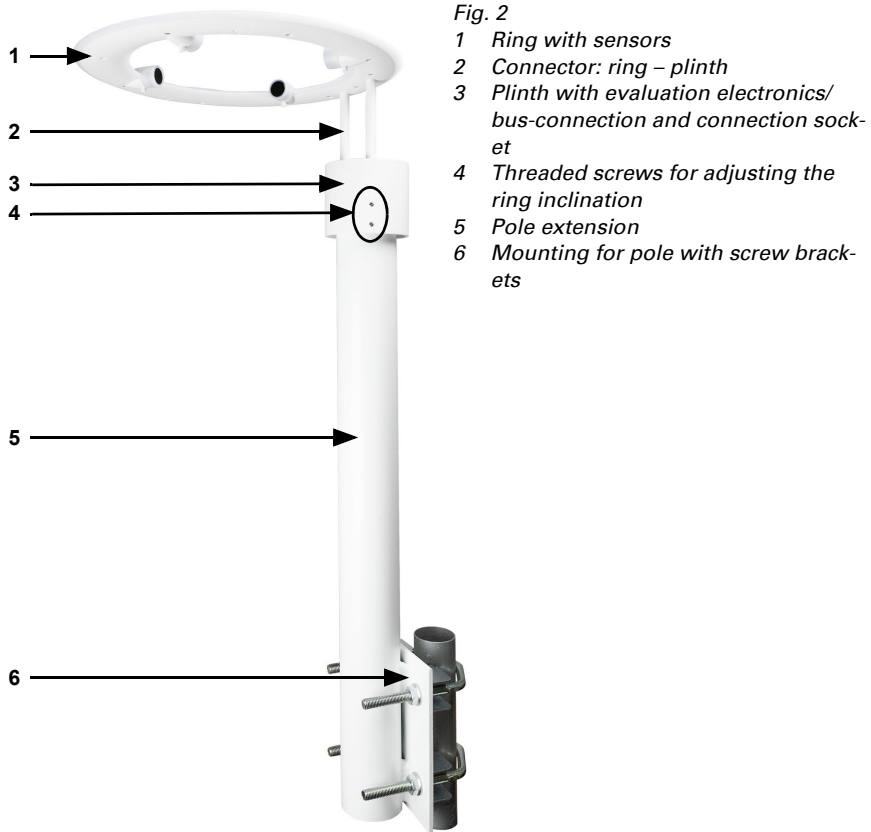
The ring must be at least 60 cm apart from other elements (building structure, structural parts, etc.)

Please ensure that the extended awning does not cast shade on the device, and does not protect the device against wind.

Temperature measurements can also be distorted by external influences such as warming or cooling of the building structure on which the sensor is mounted (sunlight, heating or cold water pipes). Temperature variations from such sources of interference must be corrected in the ETS in order to ensure the specified accuracy of the sensor (temperature offset).

Magnetic fields, transmitters and interference fields from electrical consumers (e.g. fluorescent lamps, neon signs, switch mode power supplies etc.) can block or interfere with the reception of the GPS signal.

2.3. Device design



2.4. Mounting



Attention! **Sensitive sensors**

- Only grasp the device at the plinth.
 - Do not mechanically load (bend) the ring and connector
- Caution: Leverage effect!

Use the pole extension to attach the device to a vertical pole, horizontal railing or wall.

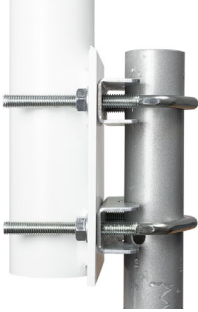
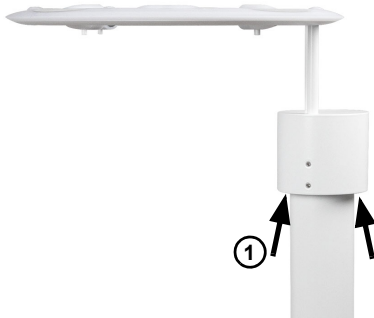


Fig. 3: Detail pole mounting with screw brackets

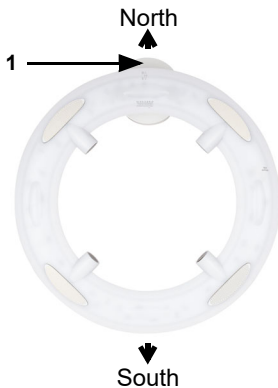
When screwing to the wall, use fixing material suitable for the underground (dowels, screws).

Always use the pole extension to allow air to circulate in the plinth of the device. The space between the plinth and the pole (Fig. 4, No. 1) must also be maintained. Ventilation of the plinth is necessary for correct temperature and humidity measurement (sensors are located in the plinth).



ce the weather station with the plinth on pole extension.

. 4: Weather station pole extension

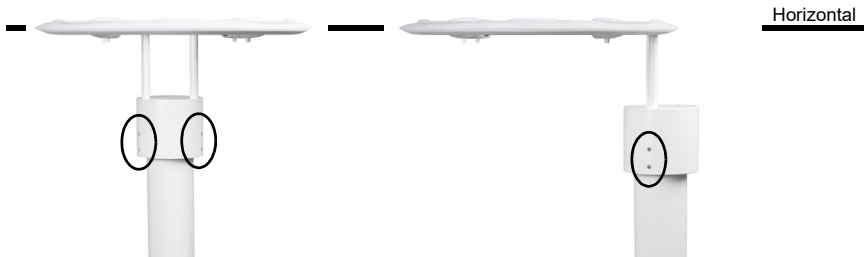


Align the device with the north-south axis. The plinth (Fig. 5, No. 1) must be in the north, the ring facing south.

Fig. 5: View from above

Place the ring horizontally. Adjust the inclination with the 6 grub screws in the plinth. Wind can only be detected correctly when the ring is in a horizontal position.

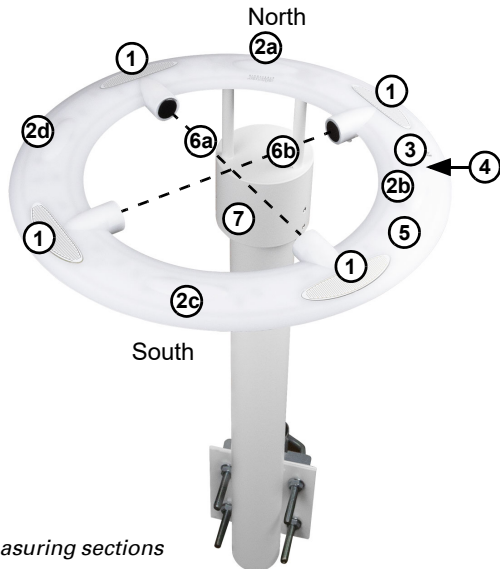
Fig. 6: Front and side view



2.4.1. Position of the sensors

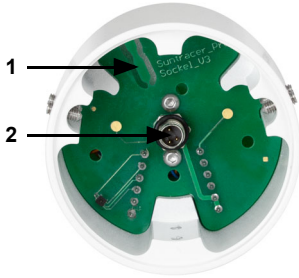
Fig. 7

- 1 Precipitation sensors (4 areas with conduction paths)
- 2 Brightness sensors under plastic domes, directed to
 - a - North
 - b - East
 - c - South
 - d - West and up (sky)
- 3 Pressure Sensor
- 4 Magnet-PRG-Button (magnetic switch) for addressing the device
- 5 GPS-module
- 6 Wind sensor with ultrasonic measuring sections
 - a - Northeast/Southwest
 - b - Southeast/Northwest
- 7 Temperature and air humidity sensor in plinth



2.5. Connection

The connection to the KNX bus and the auxiliary voltage is made via the socket in the plinth.



Screw the M8 connector of the connection cable to the connection socket

Fig. 8: View from below (plinth)

- 1 Groove for the cable feed-through (closed)
- 2 Connection socket

The cable can be routed in the pole extension or between the base and the pole out of the housing.

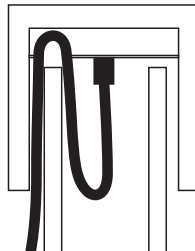


Fig. 9: Cable routing in pole extension



Fig. 10 a: cable routing between plinth and pole

Clamp the cable into the groove in the circuit board (Fig 8, No. 1) to lead it outwards. To do this, break the middle piece out of the groove.



*Fig. 10 b: Cross section of the plinth
Lead the cable between base and mast to the outside.*

Connect the loose end of the connection cable to KNX bus and auxiliary voltage. Use the connection sockets and clips included for this purpose.

<i>KNX bus:</i>	<i>Auxiliary voltage:</i>
+ red	+ yellow
- black	- white

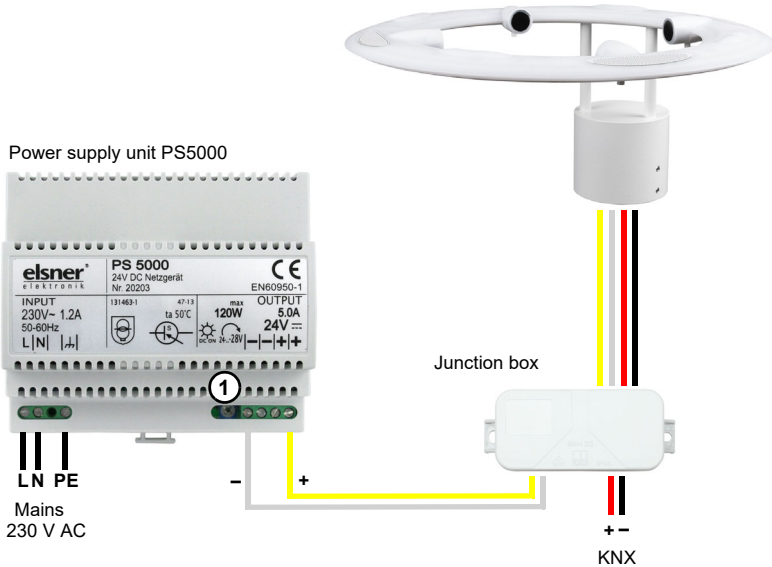
Adjust the voltage to 24 V DC by turning the adjusting screw on the power supply unit (Fig. 11, No. 1) all the way to the left.

Overvoltage protection installed on site is recommended.

2.5.1. Connection scheme

Fig. 11

Weather Station Suntracer KNX pro



3. Transfer protocol

Units:

Temperatures in degrees Celsius

Brightness in Lux

Wind in metres per second

Air pressure in Pascal

Azimuth and elevation in degrees

3.1. List of all communications objects

Abbreviation flags:

C Communication

R Read

W Write

T Transmit

U Update

No.	Text	Function	Flags	DPT type	Size
1	Software version	Output	R-CT	[217.1] DPT_Version	2 Bytes
15	Brightness East	Bright- ness East	R-CT	[9.4] DPT_Value_Lux	2 Bytes
16	Brightness South	Bright- ness South	R-CT	[9.4] DPT_Value_Lux	2 Bytes
17	Brightness West	Bright- ness West	R-CT	[9.4] DPT_Value_Lux	2 Bytes
21	Brightness North	Bright- ness North	R-CT	[9.4] DPT_Value_Lux	2 Bytes
22	Brightness Sky	Bright- ness Sky	R-CT	[9.4] DPT_Value_Lux	2 Bytes
24	Heating output percentage	Heating output percent- age	R-CT	[5.4] DPT_Per- cent_U8	1 Byte
25	Plate temperature [°C]	Plate tempera- ture [°C]	R-CT	[9.1] DPT_Val- ue_Temp	2 Bytes
28	Wind measurement, number of faults	Wind meas- ure- ment, number of faults	R-CT	[5.5] DPT_Decimal- Factor	1 Byte

No.	Text	Function	Flags	DPT type	Size
31	Ultrasound temperature	Ultra-sound temperature	R-CT	[9.1] DPT_Val-ue_Temp	2 Bytes
101	Signal LED object 1s cycle	Input	-WC-	[1.1] DPT_Switch	1 Bit
102	Signal LED object 4s cycle	Input	-WC-	[1.1] DPT_Switch	1 Bit
104	GPS malfunction (0: OK 1: NOK)	Output	R-CT	[1.2] DPT_Bool	1 Bit
105	Date / time	Output	RWC T	[19.1] DPT_Date-Time	8 Bytes
106	Date	Output	RWC T	[11.1] DPT_Date	3 Bytes
107	Time	Output	RWC T	[10.1] DPT_TimeOf-Day	3 Bytes
108	Date and time query	Input	-WC-	[1.17] DPT_Trigger	1 Bit
110	Location: Northern latitude [°]	Output	R-CT	[14.7] DPT_Val-ue_AngleDeg	4 Bytes
111	Location: Eastern longitude [°]	Output	R-CT	[14.7] DPT_Val-ue_AngleDeg	4 Bytes
112	Location: Height above NN [m]	Output	R-CT	[14.39] DPT_Val-ue_Length	4 Bytes
114	Rain: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit
115	Rain: Switching output with fixed delays	Output	R-CT	[1.1] DPT_Switch	1 Bit
116	Rain: Switch delay to rain	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
117	Rain: Switch delay to no rain	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
121	Temperature sensor: Malfunction	Output	R-CT	[1.1] DPT_Switch	1 Bit
122	Temperature sensor: External measured value	Input	-SKÜ	[9.1] DPT_Val-ue_Temp	2 Bytes
123	Temperature sensor: Measured value	Output	R-CT	[9.1] DPT_Val-ue_Temp	2 Bytes
124	Temperature sensor: Switching output, total	Output	R-CT	[9.1] DPT_Val-ue_Temp	2 Bytes
125	Temperature sensor: Min./max. measurement query	Input	-WC-	[1.17] DPT_Trigger	1 Bit
126	Temperature sensor: Minimum measurement	Output	R-CT	[9.1] DPT_Val-ue_Temp	2 Bytes
127	Temperature sensor: Maximum measurement	Output	R-CT	[9.1] DPT_Val-ue_Temp	2 Bytes
128	Temperature sensor: Min./max. reading reset	Input	-WC-	[1.17] DPT_Trigger	1 Bit
129	Temp. sensed: Measured value	Output	R-CT	[9.1] DPT_Val-ue_Temp	2 Bytes

No.	Text	Function	Flags	DPT type	Size
131	Temp. threshold value 1: Absolute value	Input / Output	RWC T	[9.1] DPT_Value_Temp	2 Bytes
132	Temp. threshold value 1: (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
133	Temp. threshold value 1: Switching delay from 0 to 1	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
134	Temp. threshold value 1: Switching delay from 1 to 0	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
135	Temp. threshold value 1: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit
136	Temp. threshold value 1: Switching output block	Input	-WC-	[1.1] DPT_Switch	1 Bit
138	Temp. threshold value 2: Absolute value	Input / Output	RWC T	[9.1] DPT_Value_Temp	2 Bytes
139	Temp. threshold value 2: (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
140	Temp. threshold value 2: Switching delay from 0 to 1	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
141	Temp. threshold value 2: Switching delay from 1 to 0	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
142	Temp. threshold value 2: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit
143	Temp. threshold value 2: Switching output block	Input	-WC-	[1.1] DPT_Switch	1 Bit
145	Temp. threshold value 3: Absolute value	Input / Output	RWC T	[9.1] DPT_Value_Temp	2 Bytes
146	Temp. threshold value 3: (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
147	Temp. threshold value 3: Switching delay from 0 to 1	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
148	Temp. threshold value 3: Switching delay from 1 to 0	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
149	Temp. threshold value 3: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit
150	Temp. threshold value 3: Switching output block	Input	-WC-	[1.1] DPT_Switch	1 Bit
152	Temp. threshold value 4: Absolute value	Input / Output	RWC T	[9.1] DPT_Value_Temp	2 Bytes
153	Temp. threshold value 4: (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
154	Temp. threshold value 4: Switching delay from 0 to 1	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
155	Temp. threshold value 4: Switching delay from 1 to 0	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
156	Temp. threshold value 4: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit
157	Temp. threshold value 4: Switching output block	Input	-WC-	[1.1] DPT_Switch	1 Bit

No.	Text	Function	Flags	DPT type	Size
161	Frost alarm	Output	R-CT	[1.1] DPT_Switch	1 Bit
175	Brightness sensor measured value	Output	R-CT	[9.4] DPT_Value_Lux	2 Bytes
181	Bright. threshold value 1: Absolute value	Input / Output	RWC T	[9.4] DPT_Value_Lux	2 Bytes
182	Bright. threshold value 1: (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
183	Bright. threshold value 1: Delay from 0 to 1	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
184	Bright. threshold value 1: Delay from 1 to 0	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
185	Bright. threshold value 1: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit
186	Bright. threshold value 1: Switching output block	Input	-WC-	[1.1] DPT_Switch	1 Bit
188	Bright. threshold value 2: Absolute value	Input / Output	RWC T	[9.4] DPT_Value_Lux	2 Bytes
189	Bright. threshold value 2: (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
190	Bright. threshold value 2: Delay from 0 to 1	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
191	Bright. threshold value 2: Delay from 1 to 0	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
192	Bright. threshold value 2: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit
193	Bright. threshold value 2: Switching output block	Input	-WC-	[1.1] DPT_Switch	1 Bit
195	Bright. threshold value 3: Absolute value	Input / Output	RWC T	[9.4] DPT_Value_Lux	2 Bytes
196	Bright. threshold value 3: (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
197	Bright. threshold value 3: Delay from 0 to 1	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
198	Bright. threshold value 3: Delay from 1 to 0	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
199	Bright. threshold value 3: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit
200	Bright. threshold value 3: Switching output block	Input	-WC-	[1.1] DPT_Switch	1 Bit
202	Bright. threshold value 4: Absolute value	Input / Output	RWC T	[9.4] DPT_Value_Lux	2 Bytes
203	Bright. threshold value 4: (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
204	Bright. threshold value 4: Delay from 0 to 1	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
205	Bright. threshold value 4: Delay from 1 to 0	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
206	Bright. threshold value 4: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit

No.	Text	Function	Flags	DPT type	Size
207	Bright. threshold value 4: Switching output block	Input	-WC-	[1.1] DPT_Switch	1 Bit
209	Bright. threshold value 5: Absolute value	Input / Output	RWC T	[9.4] DPT_Value_Lux	2 Bytes
210	Bright. threshold value 5: (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
211	Bright. threshold value 5: Delay from 0 to 1	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
212	Bright. threshold value 5: Delay from 1 to 0	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
213	Bright. threshold value 5: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit
214	Bright. threshold value 5: Switching output block	Input	-WC-	[1.1] DPT_Switch	1 Bit
216	Bright. threshold value 6: Absolute value	Input / Output	RWC T	[9.4] DPT_Value_Lux	2 Bytes
217	Bright. threshold value 6: (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
218	Bright. threshold value 6: Delay from 0 to 1	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
219	Bright. threshold value 6: Delay from 1 to 0	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
220	Bright. threshold value 6: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit
221	Bright. threshold value 6: Switching output block	Input	-WC-	[1.1] DPT_Switch	1 Bit
223	Bright. threshold value 7: Absolute value	Input / Output	RWC T	[9.4] DPT_Value_Lux	2 Bytes
224	Bright. threshold value 7: (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
225	Bright. threshold value 7: Delay from 0 to 1	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
226	Bright. threshold value 7: Delay from 1 to 0	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
227	Bright. threshold value 7: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit
228	Bright. threshold value 7: Switching output block	Input	-WC-	[1.1] DPT_Switch	1 Bit
230	Bright. threshold value 8: Absolute value	Input / Output	RWC T	[9.4] DPT_Value_Lux	2 Bytes
231	Bright. threshold value 8: (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
232	Bright. threshold value 8: Delay from 0 to 1	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
233	Bright. threshold value 8: Delay from 1 to 0	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
234	Bright. threshold value 8: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit

No.	Text	Function	Flags	DPT type	Size
235	Bright. threshold value 8: Switching output block	Input	-WC-	[1.1] DPT_Switch	1 Bit
293	Twilight brightness threshold value 1: Absolute value	Input / Output	RWC T	[9.4] DPT_Value_Lux	2 Bytes
294	Twilight brightness threshold 1: (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
295	Twilight brightness threshold 1: delay from 0 to 1	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
296	Twilight brightness threshold 1: delay from 1 to 0	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
297	Twilight brightness threshold value 1: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit
298	Twilight brightness threshold value 1: Switching output block	Input	-WC-	[1.1] DPT_Switch	1 Bit
300	Twilight brightness threshold value 2: Absolute value	Input / Output	RWC T	[9.4] DPT_Value_Lux	2 Bytes
301	Bright. twilight threshold value 2: (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
302	Twilight brightness threshold 2: delay from 0 to 1	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
303	Twilight brightness threshold 2: delay from 1 to 0	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
304	Twilight brightness threshold value 2: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit
305	Twilight brightness threshold value 2: Switching output block	Input	-WC-	[1.1] DPT_Switch	1 Bit
307	Twilight brightness threshold 3: Absolute value	Input / Output	RWC T	[9.4] DPT_Value_Lux	2 Bytes
308	Twilight brightness threshold 3: (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
309	Twilight brightness threshold 3: delay from 0 to 1	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
310	Twilight brightness threshold 3: delay from 1 to 0	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
311	Twilight brightness threshold 3: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit
312	Twilight brightness threshold 3: Switching output block	Input	-WC-	[1.1] DPT_Switch	1 Bit
314	Twilight brightness threshold 4: Absolute value	Input / Output	RWC T	[9.4] DPT_Value_Lux	2 Bytes
315	Twilight brightness threshold 4: (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
316	Twilight brightness threshold 4: delay from 0 to 1	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes

No.	Text	Function	Flags	DPT type	Size
317	Twilight brightness threshold 4: delay from 1 to 0	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
318	Twilight brightness threshold 4: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit
319	Twilight brightness threshold 4: Switching output block	Input	-WC-	[1.1] DPT_Switch	1 Bit
331	Night: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit
332	Night: Switching delay on night	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
333	Night: Switching delay on day	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
341	Sun position: Azimuth	Output	R-CT	[14.7] DPT_ValueAngleDeg	4 Bytes
342	Sun position: Elevation	Output	R-CT	[14.7] DPT_ValueAngleDeg	4 Bytes
343	Sun position: Azimuth	Output	R-CT	[9] 9.xxx	2 Bytes
344	Sun position: Elevation	Output	R-CT	[9] 9.xxx	2 Bytes
351	Wind sensor: Malfunction	Setting	R-CT	[1.1] DPT_Switch	1 Bit
352	Wind sensor: Measurement [m/s]	Output	R-CT	[9.5] DPT_ValueWsp	2 Bytes
353	Wind sensor: Measurement [Beaufort]	Output	R-CT	[20.14] DPT_Beaufort_Wind_Force_Scale	1 Byte
354	Wind sensor: Measurement, max. query	Input	-WC-	[1] 1.xxx, [1.17] DPT_Trigger	1 Bit
355	Wind sensor: Maximum measurement [m/s]	Output	R-CT	[9.5] DPT_ValueWsp	2 Bytes
356	Wind sensor: Maximum measurement [Beaufort]	Output	R-CT	[20.14] DPT_Beaufort_Wind_Force_Scale	1 Byte
357	Wind sensor: Measured value max. reset	Input	-WC-	[1.17] DPT_Trigger	1 Bit
361	Wind threshold value 1: Absolute value	Input / Output	RWCT	[9.5] DPT_ValueWsp, [9.28] DPT_ValueWsp_kmh	2 Bytes
362	Wind threshold value 1: (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
363	Wind threshold value 1: Delay from 0 to 1	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
364	Wind threshold value 1: Delay from 1 to 0	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
365	Wind threshold value 1: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit

No.	Text	Function	Flags	DPT type	Size
366	Wind threshold value 1: Switching output block	Input	-WC-	[1.1] DPT_Switch	1 Bit
367	Wind threshold value 2: Absolute value	Input / Output	RWC T	[9.5] DPT_Value_Wsp, [9.28] DPT_Value_Wsp_kmh	2 Bytes
368	Wind threshold value 2: (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
369	Wind threshold value 2: Delay from 0 to 1	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
370	Wind threshold value 2: Delay from 1 to 0	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
371	Wind threshold value 2: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit
372	Wind threshold value 2: Switching output block	Input	-WC-	[1.1] DPT_Switch	1 Bit
373	Wind threshold value 3: Absolute value	Input / Output	RWC T	[9.5] DPT_Value_Wsp, [9.28] DPT_Value_Wsp_kmh	2 Bytes
374	Wind threshold value 3: (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
375	Wind threshold value 3: Delay from 0 to 1	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
376	Wind threshold value 3: Delay from 1 to 0	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
377	Wind threshold value 3: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit
378	Wind threshold value 3: Switching output block	Input	-WC-	[1.1] DPT_Switch	1 Bit
379	Wind threshold value 4: Absolute value	Input / Output	RWC T	[9.5] DPT_Value_Wsp, [9.28] DPT_Value_Wsp_kmh	2 Bytes
380	Wind threshold value 4: (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
381	Wind threshold value 4: Delay from 0 to 1	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
382	Wind threshold value 4: Delay from 1 to 0	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
383	Wind threshold value 4: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit
384	Wind threshold value 4: Switching output block	Input	-WC-	[1.1] DPT_Switch	1 Bit
391	Humidity sensor: Malfunction	Output	R-CT	[1.1] DPT_Switch	1 Bit
394	Humidity sensor: External measured value	Input	-SKÜ	[9.7] DPT_Value_Humidity	2 Bytes

No.	Text	Function	Flags	DPT type	Size
395	Humidity sensor: Measured value	Output	R-CT	[9.7] DPT_Value_Humidity	2 Bytes
396	Humidity sensor: Switching output, total	Output	R-CT	[9.7] DPT_Value_Humidity	2 Bytes
397	Humidity sensor: Min./max. measurement query	Input	-WC-	[1.17] DPT_Trigger	1 Bit
398	Humidity sensor: Minimum measurement	Output	R-CT	[9.7] DPT_Value_Humidity	2 Bytes
399	Humidity sensor: Maximum measurement	Output	R-CT	[9.7] DPT_Value_Humidity	2 Bytes
400	Humidity sensor: Min./max. reading reset	Input	-WC-	[1.17] DPT_Trigger	1 Bit
411	Humidity threshold value 1: Absolute value	Input / Output	RWC T	[9.7] DPT_Value_Humidity	2 Bytes
412	Humidity threshold value 1: (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
413	Humidity threshold value 1: Delay from 0 to 1	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
414	Humidity threshold value 1: Delay from 1 to 0	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
415	Humidity threshold value 1: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit
416	Humidity threshold value 1: Switching output block	Input	-WC-	[1.1] DPT_Switch	1 Bit
417	Humidity threshold value 2: Absolute value	Input / Output	RWC T	[9.7] DPT_Value_Humidity	2 Bytes
418	Humidity threshold value 2: (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
419	Humidity threshold value 2: Delay from 0 to 1	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
420	Humidity threshold value 2: Delay from 1 to 0	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
421	Humidity threshold value 2: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit
422	Humidity threshold value 2: Switching output block	Input	-WC-	[1.1] DPT_Switch	1 Bit
423	Humidity threshold value 3: Absolute value	Input / Output	RWC T	[9.7] DPT_Value_Humidity	2 Bytes
424	Humidity threshold value 3: (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
425	Humidity threshold value 3: Delay from 0 to 1	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
426	Humidity threshold value 3: Delay from 1 to 0	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
427	Humidity threshold value 3: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit

No.	Text	Function	Flags	DPT type	Size
428	Humidity threshold value 3: Switching output block	Input	-WC-	[1.1] DPT_Switch	1 Bit
429	Humidity threshold value 4: Absolute value	Input / Output	RWC T	[9.7] DPT_Value_Humidity	2 Bytes
430	Humidity threshold value 4: (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
431	Humidity threshold value 4: Delay from 0 to 1	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
432	Humidity threshold value 4: Delay from 1 to 0	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
433	Humidity threshold value 4: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit
434	Humidity threshold value 4: Switching output block	Input	-WC-	[1.1] DPT_Switch	1 Bit
461	Dewpoint: Measured value	Output	R-CT	[9.1] DPT_Value_Temp	2 Bytes
462	Coolant temp.: Threshold value	Output	R-CT	[9.1] DPT_Value_Temp	2 Bytes
463	Coolant temp.: Actual value	Input	RWC T	[9.1] DPT_Value_Temp	2 Bytes
464	Coolant temp.: Offset change (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
465	Coolant temp.: Offset current	Output	R-CT	[9.1] DPT_Value_Temp	2 Bytes
466	Coolant temp.: Switching delay from 0 to 1	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
467	Coolant temp.: Switching delay from 1 to 0	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
468	Coolant temp.: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit
469	Coolant temp.: Switching output block	Input	-WC-	[1.1] DPT_Switch	1 Bit
471	Absolute humidity [g/kg]	Output	R-CT	[14.5] DPT_Value_Amplitude	4 Bytes
472	Absolute humidity [g/m³]	Output	R-CT	[9] 9.xxx	2 Bytes
474	Ambient climate status: 1 = comfortable 0 = uncomfortable	Output	R-CT	[1.1] DPT_Switch	1 Bit
475	Ambient climate status: Text	Output	R-CT	[16.0] DPT_String_ASCII	14 Bytes
481	Air pressure sensor: Malfunction	Output	R-CT	[1.1] DPT_Switch	1 Bit
482	Air pressure sensor: Normal measurement [Pa]	Output	R-CT	[14.58] DPT_Value_Pressure	4 Bytes
483	Air pressure sensor: Barometric measurement [Pa]	Output	R-CT	[14.58] DPT_Value_Pressure	4 Bytes
484	Air pressure sensor: Min./max. measurement query	Input	-WC-	[1.17] DPT_Trigger	1 Bit

No.	Text	Function	Flags	DPT type	Size
485	Air pressure sensor: Min. normal measurement [Pa]	Output	R-CT	[14.58] DPT_Value_-Pressure	4 Bytes
486	Air pressure sensor: Min. barometric measurement [Pa]	Output	R-CT	[14.58] DPT_Value_-Pressure	4 Bytes
487	Air pressure sensor: Max. normal measurement [Pa]	Output	R-CT	[14.58] DPT_Value_-Pressure	4 Bytes
488	Air pressure sensor: Max. barometric measurement [Pa]	Output	R-CT	[14.58] DPT_Value_-Pressure	4 Bytes
489	Air pressure sensor: Min./max. reading reset	Input	-WC-	[1.17] DPT_Trigger	1 Bit
490	Air pressure sensor: Pressure range text	Output	R-CT	[16.0] DPT_String_ASCII	14 Bytes
491	Air pressure threshold value 1: Absolute value	Input / Output	RWC T	[14.58] DPT_Value_-Pressure	4 Bytes
492	Air pressure threshold value 1: (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
493	Air pressure threshold value 1: Delay from 0 to 1	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
494	Air pressure threshold value 1: Delay from 1 to 0	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
495	Air pressure threshold value 1: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit
496	Air pressure threshold value 1: Switching output block	Input	-WC-	[1.1] DPT_Switch	1 Bit
497	Air pressure threshold value 2: Absolute value	Input / Output	RWC T	[14.58] DPT_Value_-Pressure	4 Bytes
498	Air pressure threshold value 2: (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
499	Air pressure threshold value 2: Delay from 0 to 1	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
500	Air pressure threshold value 2: Delay from 1 to 0	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
501	Air pressure threshold value 2: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit
502	Air pressure threshold value 2: Switching output block	Input	-WC-	[1.1] DPT_Switch	1 Bit
503	Air pressure threshold value 3: Absolute value	Input / Output	RWC T	[14.58] DPT_Value_-Pressure	4 Bytes
504	Air pressure threshold value 3: (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
505	Air pressure threshold value 3: Delay from 0 to 1	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
506	Air pressure threshold value 3: Delay from 1 to 0	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes

No.	Text	Function	Flags	DPT type	Size
507	Air pressure threshold value 3: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit
508	Air pressure threshold value 3: Switching output block	Input	-WC-	[1.1] DPT_Switch	1 Bit
509	Air pressure threshold value 4: Absolute value	Input / Output	RWC T	[14.58] DPT_Value_Pressure	4 Bytes
510	Air pressure threshold value 4: (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
511	Air pressure threshold value 4: Delay from 0 to 1	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
512	Air pressure threshold value 4: Delay from 1 to 0	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
513	Air pressure threshold value 4: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit
514	Air pressure threshold value 4: Switching output block	Input	-WC-	[1.1] DPT_Switch	1 Bit
595	Summer compensation: Outdoor temperature	Input	-SKÜ	[9.1] DPT_Value_Temp	2 Bytes
596	Summer compensation: Setpoint	Output	R-CT	[9.1] DPT_Value_Temp	2 Bytes
597	Summer compensation: Block (1 = Block)	Input	-WC-	[1.1] DPT_Switch	1 Bit
609	Fac. Wind measurement 1 in m/s	Input	-SKÜ	[9.5] DPT_Value_Wsp	2 Bytes
610	Fac. Wind measurement 2 in m/s	Input	-SKÜ	[9.5] DPT_Value_Wsp	2 Bytes
611	Fac. Wind measurement 3 in m/s	Input	-SKÜ	[9.5] DPT_Value_Wsp	2 Bytes
612	Fac. Wind measurement 4 in m/s	Input	-SKÜ	[9.5] DPT_Value_Wsp	2 Bytes
613	Fac. Wind measurement 5 in m/s	Input	-SKÜ	[9.5] DPT_Value_Wsp	2 Bytes
614	Fac. Wind measurement 6 in m/s	Input	-SKÜ	[9.5] DPT_Value_Wsp	2 Bytes
615	Fac. Wind measurement 7 in m/s	Input	-SKÜ	[9.5] DPT_Value_Wsp	2 Bytes
616	Fac. Wind measurement 8 in m/s	Input	-SKÜ	[9.5] DPT_Value_Wsp	2 Bytes
617	Fac. Wind measurement 9 in m/s	Input	-SKÜ	[9.5] DPT_Value_Wsp	2 Bytes
618	Fac. Wind measurement 10 in m/s	Input	-SKÜ	[9.5] DPT_Value_Wsp	2 Bytes
619	Fac. Wind measurement 11 in m/s	Input	-SKÜ	[9.5] DPT_Value_Wsp	2 Bytes

No.	Text	Function	Flags	DPT type	Size
620	Fac. Wind measurement 12 in m/s	Input	-SKÜ	[9.5] DPT_Val-ue_Wsp	2 Bytes
621	Fac. Wind automation blocking duration in min.	Input/Output	RWC T	[7.6] DPT_TimePeriodMin	2 Bytes
622	Fac. Wind automation blocking duration in min. (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
623	Fac. Rain auto. Delay in minutes	Input/Output	RWC T	[7.6] DPT_TimePeriodMin	2 Bytes
624	Fac. Rain auto. Delay in minutes (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
625	Fac. Twilight threshold value in kLux	Input/Output	RWC T	[9.4] DPT_Value_Lux	2 Bytes
626	Fac. Twilight threshold value in Lux (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
627	Fac. Outside temperature (°C)	Input	-SKÜ	[9.1] DPT_Val-ue_Temp	2 Bytes
628	Fac. Heat protection threshold value in °C	Input/Output	RWC T	[9.1] DPT_Val-ue_Temp	2 Bytes
629	Fac. Frost alarm threshold value in °C (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
630	Fac. Frost alarm start temperature in °C	Input/Output	RWC T	[9.1] DPT_Val-ue_Temp	2 Bytes
631	Fac. Frost alarm start temperature in °C (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
632	Fac. Frost alarm start delay in hours	Input/Output	RWC T	[7.7] DPT_TimePeriodHrs	2 Bytes
633	Fac. Frost alarm start temperature in hours (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
634	Fac. Frost alarm stop temperature in °C	Input/Output	RWC T	[9.1] DPT_Val-ue_Temp	2 Bytes
635	Fac. Frost alarm stop temperature in °C (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
636	Fac. Frost alarm stop delay in hours	Input/Output	RWC T	[7.7] DPT_TimePeriodHrs	2 Bytes
637	Fac. Frost alarm stop delay in hours (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
638	Fac. Pyranometer measured value 1 in W/m ²	Input	-SKÜ	[9.22] DPT_Pow-erDensity	2 Bytes
639	Fac. Pyranometer measured value 1 in W/m ²	Input	-SKÜ	[14.5] DPT_Val-ue_Amplitude	4 Bytes
640	Fac. Pyranometer measured value 2 in W/m ²	Input	-SKÜ	[9.22] DPT_Pow-erDensity	2 Bytes
641	Fac. Pyranometer measured value 2 in W/m ²	Input	-SKÜ	[14.5] DPT_Val-ue_Amplitude	4 Bytes

No.	Text	Function	Flags	DPT type	Size
642	Fac. Pyranometer measured value 3 in W/m ²	Input	-SKÜ	[9.22] DPT_PowerDensity	2 Bytes
643	Fac. Pyranometer measured value 3 in W/m ²	Input	-SKÜ	[14.5] DPT_ValueAmplitude	4 Bytes
644	Fac. Pyranometer measured value 4 in W/m ²	Input	-SKÜ	[9.22] DPT_PowerDensity	2 Bytes
645	Fac. Pyranometer measured value 4 in W/m ²	Input	-SKÜ	[14.5] DPT_ValueAmplitude	4 Bytes
648	Fac. X channel status output (1: activate)	Input	RWC-	[1.1] DPT_Switch	1 Bit
649	Fac. X channel name	Output	R-CT	[16.0] DPT_String_ASCII	14 Bytes
650	Fac. X channel (1:+ 0:-)	Input	-WC-	[1.1] DPT_Switch	1 Bit
651	Fac. X channel state text	Output	R-CT	[16.0] DPT_String_ASCII	14 Bytes
652	Fac. X channel status bit text	Output	R-CT	[16.0] DPT_String_ASCII	14 Bytes
653	Fac. X channel status bit state	Output	R-CT	[1.1] DPT_Switch	1 Bit
654	Fac. X channel delay	Output	R-CT	[7.5] DPT_TimePeriodSec	2 Bytes
655	Fac. X channel status bit selection (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
656	Fac. Wind simulation in m/s	Input	RWC-	[9.5] DPT_ValueWsp	2 Bytes
657	Fac. Wind extension blocking simulation (1: active)	Input	RWC-	[1.1] DPT_Switch	1 Bit
658	Fac. Wind alarm simulation (1: active)	Input	RWC-	[1.1] DPT_Switch	1 Bit
659	Fac. Rain simulation (1: active)	Input	RWC-	[1.1] DPT_Switch	1 Bit
660	Fac. External temperature in °C simulation	Input	RWC-	[9.1] DPT_ValueTemp	2 Bytes
661	Fac. Internal temperature in °C simulation	Input	RWC-	[9.1] DPT_ValueTemp	2 Bytes
662	Fac. Brightness in Lux simulation	Input	RWC-	[9.4] DPT_ValueLux	2 Bytes
663	Fac. Sun intensity simulation in watts/m ²	Input	RWC-	[9.22] DPT_PowerDensity	2 Bytes
664	Fac. Date simulation	Input	RWC-	[11.1] DPT_Date	3 Bytes
665	Fac. Time simulation	Input	RWC-	[10.1] DPT_TimeOfDay	3 Bytes
666	Fac. Sun direction simulation in °, with date & time	Output	R-CT	[14.7] DPT_ValueAngleDeg	4 Bytes
667	Fac. Sun height simulation in °, with date & time	Output	R-CT	[14.7] DPT_ValueAngleDeg	4 Bytes

No.	Text	Function	Flags	DPT type	Size
668	Fac. Sun direction simulation in °	Input	RWC-	[14.7] DPT_Value_AngleDeg	4 Bytes
669	Fac. Sun height simulation in °	Input	RWC-	[14.7] DPT_Value_AngleDeg	4 Bytes
670	Fac. Reset simulation (1: reset)	Input	-WC-	[1.1] DPT_Switch	1 Bit
671	Fac. Sun angle mode simulation (1: On 0: Off)	Input	RWC-	[1.1] DPT_Switch	1 Bit
672	Façade 1 simulation (1: On 0: Off)	Input	RWC-	[1.1] DPT_Switch	1 Bit
673	Fac.1 block	Input	RWC-	[1.1] DPT_Switch	1 Bit
674	Façade 1 safety (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
675	Façade 1 wind extension block (1: On 0: Off)	Input	-WC-	[1.1] DPT_Switch	1 Bit
676	Façade 1 wind extension block threshold value in m/s	Input	RWC T	[9.5] DPT_Value_Wsp	2 Bytes
677	Façade 1 wind extension block threshold value (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
678	Façade 1 wind extension block status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
679	Façade 1 wind alarm (1: On 0: Off)	Input	-WC-	[1.1] DPT_Switch	1 Bit
680	Façade 1 wind alarm threshold value in m/s	Input	RWC T	[9.5] DPT_Value_Wsp	2 Bytes
681	Façade 1 wind alarm threshold value (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
682	Façade 1 wind alarm status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
683	Façade 1 frost alarm status (1: On 0: Off)	Output	RWC T	[1.1] DPT_Switch	1 Bit
684	Fac.1 release/block rain automatic	Input	RWC-	[1.1] DPT_Switch	1 Bit
685	Façade 1 rain alarm status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
686	Fac.1 release/block timed opening	Input	RWC-	[1.1] DPT_Switch	1 Bit
687	Façade 1 timed opening status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
688	Fac.1 outside temp. Release/block block	Input	RWC-	[1.1] DPT_Switch	1 Bit
689	Fac.1 outside temp. Block in °C	Input/ Output	RWC T	[9.1] DPT_Value_Temp	2 Bytes
690	Fac.1 outside temp. Block in °C (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
691	Fac.1 outside temp. Block status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
692	Fac.1 release/block timed closure	Input	RWC-	[1.1] DPT_Switch	1 Bit
693	Façade 1 timed closure status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit

No.	Text	Function	Flags	DPT type	Size
694	Fac.1 release/block night closure	Input	RWC-	[1.1] DPT_Switch	1 Bit
695	Façade 1 night closure status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
696	Fac.1 release/block heat protection	Input	RWC-	[1.1] DPT_Switch	1 Bit
697	Façade 1 heating protection status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
698	Fac.1 release/block pyranometer	Input	RWC-	[1.1] DPT_Switch	1 Bit
699	Façade 1 pyranometer in W/m ²	Input/ Output	RWC T	[9.22] DPT_Pow- erDensity	2 Bytes
700	Façade 1 pyranometer in W/m ² (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
701	Façade 1 pyranometer status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
702	Façade 1 internal temperature in °C	Input	-SKÜ	[9.1] DPT_Val- ue_Temp	2 Bytes
703	Fac.1 release/block inside temp. block	Input	RWC-	[1.1] DPT_Switch	1 Bit
704	Fac.1 inside temp. Block in °C	Input/ Output	RWC T	[9.1] DPT_Val- ue_Temp	2 Bytes
705	Fac.1 inside temp. Block in °C (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
706	Fac.1 inside temp. Block status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
707	Façade 1 internal temperature block release/block via bit object	Input	RWC-	[1.1] DPT_Switch	1 Bit
708	Fac.1 release/block sun auto.	Input	RWC-	[1.1] DPT_Switch	1 Bit
709	Fac.1 Sun auto. Azimuth from (in °)	Input	RWC T	[14.7] DPT_Val- ue_AngleDeg	4 Bytes
710	Fac.1 Sun auto. Azimuth from (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
711	Fac.1 Sun auto. Azimuth up to (in °)	Input	RWC T	[14.7] DPT_Val- ue_AngleDeg	4 Bytes
712	Fac.1 Sun auto. Azimuth up to (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
713	Fac.1 Sun auto. Elevation from (in °)	Input	RWC T	[14.7] DPT_Val- ue_AngleDeg	4 Bytes
714	Fac.1 Sun auto. Elevation from (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
715	Fac.1 Sun auto. Elevation up to (in °)	Input	RWC T	[14.7] DPT_Val- ue_AngleDeg	4 Bytes
716	Fac.1 Sun auto. Elevation up to (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
717	Fac.1 Sun auto. AziEle status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit

No.	Text	Function	Flags	DPT type	Size
718	Fac.1 Sun auto. Brightness measurement in lux	Input	-SKÜ	[9.4] DPT_Value_Lux	2 Bytes
719	Fac.1 Sun auto. Brightness threshold value in lux	Input	RWC T	[9.4] DPT_Value_Lux	2 Bytes
720	Fac.1 Sun auto. Brightness threshold (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
721	Fac.1 Sun auto. Bright. Short status (1: On)	Output	R-CT	[1.1] DPT_Switch	1 Bit
722	Fac.1 Sun auto. Bright. Long status (1: On)	Output	R-CT	[1.1] DPT_Switch	1 Bit
723	Façade 1 extension delay in min.	Input/ Output	RWC T	[7.6] DPT_TimePeriodMin	2 Bytes
724	Façade 1 extension delay in min. (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
725	Façade 1 short delay in seconds	Input/ Output	RWC T	[7.5] DPT_TimePeriodSec	2 Bytes
726	Façade 1 short delay in seconds (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
727	Façade 1 retraction delay in min.	Input/ Output	RWC T	[7.6] DPT_TimePeriodMin	2 Bytes
728	Façade 1 retraction delay in min. (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
729	Façade 1 movement position	Output	R-CT	[5.1] DPT_Scaling	1 Byte
730	Fac.1 blind position	Output	R-CT	[5.1] DPT_Scaling	1 Byte
731	Façade 1 channel status output (1: On 0: Off)	Input	RWC-	[1.1] DPT_Switch	1 Bit
732	Façade 1 channel state text	Output	R-CT	[16.0] DPT_String_ASCII	14 Bytes
733	Façade 1 channel status bit text	Output	R-CT	[16.0] DPT_String_ASCII	14 Bytes
734	Façade 1 channel status bit state	Output	R-CT	[1.1] DPT_Switch	1 Bit
735	Façade 1 channel delay	Output	R-CT	[7.5] DPT_TimePeriodSec	2 Bytes
736	Façade 1 channel status bit selection (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
741	Façade 2 simulation (1: On 0: Off)	Input	RWC-	[1.1] DPT_Switch	1 Bit
742	Fac.2 block	Input	RWC-	[1.1] DPT_Switch	1 Bit
743	Façade 2 safety (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
744	Façade 2 wind extension block (1: On 0: Off)	Input	RWC-	[1.1] DPT_Switch	1 Bit
745	Façade 2 wind extension block threshold value in m/s	Input	RWC T	[9.5] DPT_Value_Wsp	2 Bytes
746	Façade 2 wind extension block threshold value (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit

No.	Text	Function	Flags	DPT type	Size
747	Façade 2 wind extension block status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
748	Façade 2 wind alarm (1: On 0: Off)	Input	RWC-	[1.1] DPT_Switch	1 Bit
749	Façade 2 wind alarm threshold value in m/s	Input	RWC T	[9.5] DPT_Value_Wsp	2 Bytes
750	Façade 2 wind alarm threshold value (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
751	Façade 2 wind alarm status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
752	Façade 2 frost alarm status (1: On 0: Off)	Output	RWC T	[1.1] DPT_Switch	1 Bit
753	Fac.2 release/block rain automatic	Input	RWC-	[1.1] DPT_Switch	1 Bit
754	Façade 2 rain alarm status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
755	Fac.2 release/block timed opening	Input	RWC-	[1.1] DPT_Switch	1 Bit
756	Façade 2 timed opening status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
757	Fac.2 outside temp. Release/block block	Input	RWC-	[1.1] DPT_Switch	1 Bit
758	Fac.2 outside temp. Block in °C	Input/ Output	RWC T	[9.1] DPT_Value_Temp	2 Bytes
759	Fac.2 outside temp. Block in °C (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
760	Fac.2 outside temp. Block status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
761	Fac.2 release/block timed closure	Input	RWC-	[1.1] DPT_Switch	1 Bit
762	Façade 2 timed closure status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
763	Fac.2 release/block night closure	Input	RWC-	[1.1] DPT_Switch	1 Bit
764	Façade 2 night closure status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
765	Fac.2 release/block heat protection	Input	RWC-	[1.1] DPT_Switch	1 Bit
766	Façade 2 heating protection status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
767	Fac.2 release/block pyranometer	Input	RWC-	[1.1] DPT_Switch	1 Bit
768	Façade 2 pyranometer in W/m ²	Input/ Output	RWC T	[9.22] DPT_PowerDensity	2 Bytes
769	Façade 2 pyranometer in W/m ² (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
770	Façade 2 pyranometer status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
771	Façade 2 internal temperature in °C	Input	-SKÜ	[9.1] DPT_Value_Temp	2 Bytes

No.	Text	Function	Flags	DPT type	Size
772	Fac.2 release/block inside temp. block	Input	RWC-	[1.1] DPT_Switch	1 Bit
773	Fac.2 inside temp. Block in °C	Input/ Output	RWC T	[9.1] DPT_Val- ue_Temp	2 Bytes
774	Fac.2 inside temp. Block in °C (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
775	Fac.2 inside temp. Block status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
776	Façade 2 internal temperature block release/block via bit object	Input	RWC-	[1.1] DPT_Switch	1 Bit
777	Fac.2 release/block sun auto.	Input	RWC-	[1.1] DPT_Switch	1 Bit
778	Fac.2 Sun auto. Azimuth from (in °)	Input	RWC T	[14.7] DPT_Val- ue_AngleDeg	4 Bytes
779	Fac.2 Sun auto. Azimuth from (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
780	Fac.2 Sun auto. Azimuth up to (in °)	Input	RWC T	[14.7] DPT_Val- ue_AngleDeg	4 Bytes
781	Fac.2 Sun auto. Azimuth up to (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
782	Fac.2 Sun auto. Elevation from (in °)	Input	RWC T	[14.7] DPT_Val- ue_AngleDeg	4 Bytes
783	Fac.2 Sun auto. Elevation from (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
784	Fac.2 Sun auto. Elevation up to (in °)	Input	RWC T	[14.7] DPT_Val- ue_AngleDeg	4 Bytes
785	Fac.2 Sun auto. Elevation up to (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
786	Fac.2 Sun auto. AziEle status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
787	Fac.2 Sun auto. Brightness measurement in lux	Input	-SKÜ	[9.4] DPT_Value_Lux	2 Bytes
788	Fac.2 Sun auto. Brightness threshold value in lux	Input	RWC T	[9.4] DPT_Value_Lux	2 Bytes
789	Fac.2 Sun auto. Brightness threshold (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
790	Fac.2 Sun auto. Bright. Short status (1: On)	Output	R-CT	[1.1] DPT_Switch	1 Bit
791	Fac.2 Sun auto. Bright. Long status (1: On)	Output	R-CT	[1.1] DPT_Switch	1 Bit
792	Façade 2 extension delay in min.	Input/ Output	RWC T	[7.6] DPT_TimePeri- odMin	2 Bytes
793	Façade 2 extension delay in min. (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit

No.	Text	Function	Flags	DPT type	Size
794	Façade 2 short delay in seconds	Input/ Output	RWC T	[7.5] DPT_TimePeri- odSec	2 Bytes
795	Façade 2 short delay in seconds (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
796	Façade 2 retraction delay in min.	Input/ Output	RWC T	[7.6] DPT_TimePeri- odMin	2 Bytes
797	Façade 2 retraction delay in min. (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
798	Façade 2 movement position	Output	R-CT	[5.1] DPT_Scaling	1 Byte
799	Fac.2 blind position	Output	R-CT	[5.1] DPT_Scaling	1 Byte
800	Façade 2 channel status output (1: On 0: Off)	Input	RWC-	[1.1] DPT_Switch	1 Bit
801	Façade 2 channel state text	Output	R-CT	[16.0] DPT_String_ASCII	14 Bytes
802	Façade 2 channel status bit text	Output	R-CT	[16.0] DPT_String_ASCII	14 Bytes
803	Façade 2 channel status bit state	Output	R-CT	[1.1] DPT_Switch	1 Bit
804	Façade 2 channel delay	Output	R-CT	[7.5] DPT_TimePeri- odSec	2 Bytes
805	Façade 2 channel status bit selection (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
810	Façade 3 simulation (1: On 0: Off)	Input	RWC-	[1.1] DPT_Switch	1 Bit
811	Fac.3 block	Input	RWC-	[1.1] DPT_Switch	1 Bit
812	Façade 3 safety (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
813	Façade 3 wind extension block (1: On 0: Off)	Input	RWC-	[1.1] DPT_Switch	1 Bit
814	Façade 3 wind extension block threshold value in m/s	Input	RWC T	[9.5] DPT_Val- ue_Wsp	2 Bytes
815	Façade 3 wind extension block threshold value (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
816	Façade 3 wind extension block status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
817	Façade 3 wind alarm (1: On 0: Off)	Input	RWC-	[1.1] DPT_Switch	1 Bit
818	Façade 3 wind alarm threshold value in m/s	Input	RWC T	[9.5] DPT_Val- ue_Wsp	2 Bytes
819	Façade 3 wind alarm threshold value (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
820	Façade 3 wind alarm status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
821	Façade 3 frost alarm status (1: On 0: Off)	Output	RWC T	[1.1] DPT_Switch	1 Bit
822	Fac.3 release/block rain automatic	Input	RWC-	[1.1] DPT_Switch	1 Bit
823	Façade 3 rain alarm status (1: On 0: Off)	Output	R-CT	[1] 1.xxx, [1.1] DPT_Switch	1 Bit

No.	Text	Function	Flags	DPT type	Size
824	Fac.3 release/block timed opening	Input	RWC-	[1.1] DPT_Switch	1 Bit
825	Façade 3 timed opening status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
826	Fac.3 outside temp. Release/block block	Input	RWC-	[1.1] DPT_Switch	1 Bit
827	Fac.3 outside temp. Block in °C	Input/ Output	RWC T	[9.1] DPT_Val- ue_Temp	2 Bytes
828	Fac.3 outside temp. Block in °C (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
829	Fac.3 outside temp. Block status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
830	Fac.3 release/block timed closure	Input	RWC-	[1.1] DPT_Switch	1 Bit
831	Façade 3 timed closure status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
832	Fac.3 release/block night closure	Input	RWC-	[1.1] DPT_Switch	1 Bit
833	Façade 3 night closure status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
834	Fac.3 release/block heat protection	Input	RWC-	[1.1] DPT_Switch	1 Bit
835	Façade 3 heating protection status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
836	Fac.3 release/block pyranometer	Input	RWC-	[1.1] DPT_Switch	1 Bit
837	Façade 3 pyranometer in W/m ²	Input/ Output	RWC T	[9.22] DPT_Pow- erDensity	2 Bytes
838	Façade 3 pyranometer in W/m ² (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
839	Façade 3 pyranometer status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
840	Façade 3 internal temperature in °C	Input	-SKÜ	[9.1] DPT_Val- ue_Temp	2 Bytes
841	Fac.3 release/block inside temp. block	Input	RWC-	[1.1] DPT_Switch	1 Bit
842	Fac.3 inside temp. Block in °C	Input/ Output	RWC T	[9.1] DPT_Val- ue_Temp	2 Bytes
843	Fac.3 inside temp. Block in °C (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
844	Fac.3 inside temp. Block status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
845	Façade 3 internal temperature block release/block via bit object	Input	RWC-	[1.1] DPT_Switch	1 Bit
846	Fac.3 release/block sun auto.	Input	RWC-	[1.1] DPT_Switch	1 Bit
847	Fac.3 Sun auto. Azimuth from (in °)	Input	RWC T	[14.7] DPT_Val- ue_AngleDeg	4 Bytes
848	Fac.3 Sun auto. Azimuth from (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit

No.	Text	Function	Flags	DPT type	Size
849	Fac.3 Sun auto. Azimuth up to (in °)	Input	RWC T	[14.7] DPT_Val- ue_AngleDeg	4 Bytes
850	Fac.3 Sun auto. Azimuth up to (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
851	Fac.3 Sun auto. Elevation from (in °)	Input	RWC T	[14.7] DPT_Val- ue_AngleDeg	4 Bytes
852	Fac.3 Sun auto. Elevation from (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
853	Fac.3 Sun auto. Elevation up to (in °)	Input	RWC T	[14.7] DPT_Val- ue_AngleDeg	4 Bytes
854	Fac.3 Sun auto. Elevation up to (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
855	Fac.3 Sun auto. AziEle status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
856	Fac.3 Sun auto. Brightness measure- ment in lux	Input	-SKÜ	[9.4] DPT_Value_Lux	2 Bytes
857	Fac.3 Sun auto. Brightness threshold value in lux	Input	RWC T	[9.4] DPT_Value_Lux	2 Bytes
858	Fac.3 Sun auto. Brightness threshold (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
859	Fac.3 Sun auto. Bright. Short status (1: On)	Output	R-CT	[1.1] DPT_Switch	1 Bit
860	Fac.3 Sun auto. Bright. Long status (1: On)	Output	R-CT	[1.1] DPT_Switch	1 Bit
861	Façade 3 extension delay in min.	Input/ Output	RWC T	[7.6] DPT_TimePeri- odMin	2 Bytes
862	Façade 3 extension delay in min. (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
863	Façade 3 short delay in seconds	Input/ Output	RWC T	[7.5] DPT_TimePeri- odSec	2 Bytes
864	Façade 3 short delay in seconds (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
865	Façade 3 retraction delay in min.	Input/ Output	RWC T	[7.6] DPT_TimePeri- odMin	2 Bytes
866	Façade 3 retraction delay in min. (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
867	Façade 3 movement position	Output	R-CT	[5.1] DPT_Scaling	1 Byte
868	Fac.3 blind position	Output	R-CT	[5.1] DPT_Scaling	1 Byte
869	Façade 3 channel status output (1: On 0: Off)	Input	RWC-	[1.1] DPT_Switch	1 Bit
870	Façade 3 channel state text	Output	R-CT	[16.0] DPT_String_ASCII	14 Bytes
871	Façade 3 channel status bit text	Output	R-CT	[16.0] DPT_String_ASCII	14 Bytes

No.	Text	Function	Flags	DPT type	Size
872	Façade 3 channel status bit state	Output	R-CT	[1.1] DPT_Switch	1 Bit
873	Façade 3 channel delay	Output	R-CT	[7.5] DPT_TimePeriodSec	2 Bytes
874	Façade 3 channel status bit selection (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
879	Façade 4 simulation (1: On 0: Off)	Input	RWC-	[1.1] DPT_Switch	1 Bit
880	Fac.4 block	Input	RWC-	[1.1] DPT_Switch	1 Bit
881	Façade 4 safety (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
882	Façade 4 wind extension block (1: On 0: Off)	Input	RWC-	[1.1] DPT_Switch	1 Bit
883	Façade 4 wind extension block threshold value in m/s	Input	RWC T	[9.5] DPT_Value_Wsp	2 Bytes
884	Façade 4 wind extension block threshold value (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
885	Façade 4 wind extension block status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
886	Façade 4 wind alarm (1: On 0: Off)	Input	RWC-	[1.1] DPT_Switch	1 Bit
887	Façade 4 wind alarm threshold value in m/s	Input	RWC T	[9.5] DPT_Value_Wsp	2 Bytes
888	Façade 4 wind alarm threshold value (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
889	Façade 4 wind alarm status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
890	Façade 4 frost alarm status (1: On 0: Off)	Output	RWC T	[1.1] DPT_Switch	1 Bit
891	Fac.4 release/block rain automatic	Input	RWC-	[1.1] DPT_Switch	1 Bit
892	Façade 4 rain alarm status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
893	Fac.4 release/block timed opening	Input	RWC-	[1.1] DPT_Switch	1 Bit
894	Façade 4 timed opening status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
895	Fac.4 outside temp. Release/block block	Input	RWC-	[1.1] DPT_Switch	1 Bit
896	Fac.4 outside temp. Block in °C	Input/ Output	RWC T	[9.1] DPT_Value_Temp	2 Bytes
897	Fac.4 outside temp. Block in °C (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
898	Fac.4 outside temp. Block status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
899	Fac.4 release/block timed closure	Input	RWC-	[1.1] DPT_Switch	1 Bit
900	Façade 4 timed closure status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
901	Fac.4 release/block night closure	Input	RWC-	[1.1] DPT_Switch	1 Bit

No.	Text	Function	Flags	DPT type	Size
902	Façade 4 night closure status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
903	Fac.4 release/block heat protection	Input	RWC-	[1.1] DPT_Switch	1 Bit
904	Façade 4 heating protection status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
905	Fac.4 release/block pyranometer	Input	RWC-	[1.1] DPT_Switch	1 Bit
906	Façade 4 pyranometer in W/m ²	Input/ Output	RWC T	[9.22] DPT_Pow- erDensity	2 Bytes
907	Façade 4 pyranometer in W/m ² (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
908	Façade 4 pyranometer status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
909	Façade 4 internal temperature in °C	Input	-SKÜ	[9.1] DPT_Val- ue_Temp	2 Bytes
910	Fac.4 release/block inside temp. block	Input	RWC-	[1.1] DPT_Switch	1 Bit
911	Fac.4 inside temp. Block in °C	Input/ Output	RWC T	[9.1] DPT_Val- ue_Temp	2 Bytes
912	Fac.4 inside temp. Block in °C (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
913	Fac.4 inside temp. Block status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
914	Façade 4 internal temperature block release/block via bit object	Input	RWC-	[1.1] DPT_Switch	1 Bit
915	Fac.4 release/block sun auto.	Input	RWC-	[1.1] DPT_Switch	1 Bit
916	Fac.4 Sun auto. Azimuth from (in °)	Input	RWC T	[14.7] DPT_Val- ue_AngleDeg	4 Bytes
917	Fac.4 Sun auto. Azimuth from (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
918	Fac.4 Sun auto. Azimuth up to (in °)	Input	RWC T	[14.7] DPT_Val- ue_AngleDeg	4 Bytes
919	Fac.4 Sun auto. Azimuth up to (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
920	Fac.4 Sun auto. Elevation from (in °)	Input	RWC T	[14.7] DPT_Val- ue_AngleDeg	4 Bytes
921	Fac.4 Sun auto. Elevation from (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
922	Fac.4 Sun auto. Elevation up to (in °)	Input	RWC T	[14.7] DPT_Val- ue_AngleDeg	4 Bytes
923	Fac.4 Sun auto. Elevation up to (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
924	Fac.4 Sun auto. AziEle status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit

No.	Text	Function	Flags	DPT type	Size
925	Fac.4 Sun auto. Brightness measurement in lux	Input	-SKÜ	[9.4] DPT_Value_Lux	2 Bytes
926	Fac.4 Sun auto. Brightness threshold value in lux	Input	RWC T	[9.4] DPT_Value_Lux	2 Bytes
927	Fac.4 Sun auto. Brightness threshold (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
928	Fac.4 Sun auto. Bright. Short status (1: On)	Output	R-CT	[1.1] DPT_Switch	1 Bit
929	Fac.4 Sun auto. Bright. Long status (1: On)	Output	R-CT	[1.1] DPT_Switch	1 Bit
930	Façade 4 extension delay in min.	Input/ Output	RWC T	[7.6] DPT_TimePeriodMin	2 Bytes
931	Façade 4 extension delay in min. (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
932	Façade 4 short delay in seconds	Input/ Output	RWC T	[7.5] DPT_TimePeriodSec	2 Bytes
933	Façade 4 short delay in seconds (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
934	Façade 4 retraction delay in min.	Input/ Output	RWC T	[7.6] DPT_TimePeriodMin	2 Bytes
935	Façade 4 retraction delay in min. (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
936	Façade 4 movement position	Output	R-CT	[5.1] DPT_Scaling	1 Byte
937	Fac.4 blind position	Output	R-CT	[5.1] DPT_Scaling	1 Byte
938	Façade 4 channel status output (1: On 0: Off)	Input	RWC-	[1.1] DPT_Switch	1 Bit
939	Façade 4 channel state text	Output	R-CT	[16.0] DPT_String_ASCII	14 Bytes
940	Façade 4 channel status bit text	Output	R-CT	[16.0] DPT_String_ASCII	14 Bytes
941	Façade 4 channel status bit state	Output	R-CT	[1.1] DPT_Switch	1 Bit
942	Façade 4 channel delay	Output	R-CT	[7.5] DPT_TimePeriodSec	2 Bytes
943	Façade 4 channel status bit selection (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
948	Façade 5 simulation (1: On 0: Off)	Input	RWC-	[1.1] DPT_Switch	1 Bit
949	Fac.5 block	Input	RWC-	[1.1] DPT_Switch	1 Bit
950	Façade 5 safety (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
951	Façade 5 wind extension block (1: On 0: Off)	Input	RWC-	[1.1] DPT_Switch	1 Bit
952	Façade 5 wind extension block threshold value in m/s	Input	RWC T	[9.5] DPT_Value_Wsp	2 Bytes
953	Façade 5 wind extension block threshold value (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit

No.	Text	Function	Flags	DPT type	Size
954	Façade 5 wind extension block status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
955	Façade 5 wind alarm (1: On 0: Off)	Input	RWC-	[1.1] DPT_Switch	1 Bit
956	Façade 5 wind alarm threshold value in m/s	Input	RWC T	[9.5] DPT_Val- ue_Wsp	2 Bytes
957	Façade 5 wind alarm threshold value (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
958	Façade 5 wind alarm status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
959	Façade 5 frost alarm status (1: On 0: Off)	Output	RWC T	[1.1] DPT_Switch	1 Bit
960	Fac.5 release/block rain automatic	Input	RWC-	[1.1] DPT_Switch	1 Bit
961	Façade 5 rain alarm status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
962	Fac.5 release/block timed opening	Input	RWC-	[1.1] DPT_Switch	1 Bit
963	Façade 5 timed opening status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
964	Fac.5 outside temp. Release/block block	Input	RWC-	[1.1] DPT_Switch	1 Bit
965	Fac.5 outside temp. Block in °C	Input/ Output	RWC T	[9.1] DPT_Val- ue_Temp	2 Bytes
966	Fac.5 outside temp. Block in °C (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
967	Fac.5 outside temp. Block status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
968	Fac.5 release/block timed closure	Input	RWC-	[1.1] DPT_Switch	1 Bit
969	Façade 5 timed closure status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
970	Fac.5 release/block night closure	Input	RWC-	[1.1] DPT_Switch	1 Bit
971	Façade 5 night closure status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
972	Fac.5 release/block heat protection	Input	RWC-	[1.1] DPT_Switch	1 Bit
973	Façade 5 heating protection status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
974	Fac.5 release/block pyranometer	Input	RWC-	[1.1] DPT_Switch	1 Bit
975	Façade 5 pyranometer in W/m ²	Input/ Output	RWC T	[9.22] DPT_Pow- erDensity	2 Bytes
976	Façade 5 pyranometer in W/m ² (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
977	Façade 5 pyranometer status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
978	Façade 5 internal temperature in °C	Input	-SKÜ	[9.1] DPT_Val- ue_Temp	2 Bytes

No.	Text	Function	Flags	DPT type	Size
979	Fac.5 release/block inside temp. block	Input	RWC-	[1.1] DPT_Switch	1 Bit
980	Fac.5 inside temp. Block in °C	Input/ Output	RWC T	[9.1] DPT_Val- ue_Temp	2 Bytes
981	Fac.5 inside temp. Block in °C (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
982	Fac.5 inside temp. Block status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
983	Façade 5 internal temperature block release/block via bit object	Input	RWC-	[1.1] DPT_Switch	1 Bit
984	Fac.5 release/block sun auto.	Input	RWC-	[1.1] DPT_Switch	1 Bit
985	Fac.5 Sun auto. Azimuth from (in °)	Input	RWC T	[14.7] DPT_Val- ue_AngleDeg	4 Bytes
986	Fac.5 Sun auto. Azimuth from (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
987	Fac.5 Sun auto. Azimuth up to (in °)	Input	RWC T	[14.7] DPT_Val- ue_AngleDeg	4 Bytes
988	Fac.5 Sun auto. Azimuth up to (1:+ 0:-)	Input	-WC-	[1.1] DPT_Switch	1 Bit
989	Fac.5 Sun auto. Elevation from (in °)	Input	RWC T	[14.7] DPT_Val- ue_AngleDeg	4 Bytes
990	Fac.5 Sun auto. Elevation from (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
991	Fac.5 Sun auto. Elevation up to (in °)	Input	RWC T	[14.7] DPT_Val- ue_AngleDeg	4 Bytes
992	Fac.5 Sun auto. Elevation up to (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
993	Fac.5 Sun auto. AziEle status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
994	Fac.5 Sun auto. Brightness measurement in lux	Input	-SKÜ	[9.4] DPT_Value_Lux	2 Bytes
995	Fac.5 Sun auto. Brightness threshold value in lux	Input	RWC T	[9.4] DPT_Value_Lux	2 Bytes
996	Fac.5 Sun auto. Brightness threshold (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
997	Fac.5 Sun auto. Bright. Short status (1: On)	Output	R-CT	[1.1] DPT_Switch	1 Bit
998	Fac.5 Sun auto. Bright. Long status (1: On)	Output	R-CT	[1.1] DPT_Switch	1 Bit
999	Façade 5 extension delay in min.	Input/ Output	RWC T	[7.6] DPT_TimePeri- odMin	2 Bytes
1000	Façade 5 extension delay in min. (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit

No.	Text	Function	Flags	DPT type	Size
1001	Façade 5 short delay in seconds	Input/ Output	RWC T	[7.5] DPT_TimePeri- odSec	2 Bytes
1002	Façade 5 short delay in seconds (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1003	Façade 5 retraction delay in min.	Input/ Output	RWC T	[7.6] DPT_TimePeri- odMin	2 Bytes
1004	Façade 5 retraction delay in min. (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1005	Façade 5 movement position	Output	R-CT	[5.1] DPT_Scaling	1 Byte
1006	Fac.5 blind position	Output	R-CT	[5.1] DPT_Scaling	1 Byte
1007	Façade 5 channel status output (1: On 0: Off)	Input	RWC-	[1.1] DPT_Switch	1 Bit
1008	Façade 5 channel state text	Output	R-CT	[16.0] DPT_String_ASCII	14 Bytes
1009	Façade 5 channel status bit text	Output	R-CT	[16.0] DPT_String_ASCII	14 Bytes
1010	Façade 5 channel status bit state	Output	R-CT	[1.1] DPT_Switch	1 Bit
1011	Façade 5 channel delay	Output	R-CT	[7.5] DPT_TimePeri- odSec	2 Bytes
1012	Façade 5 channel status bit selection (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1017	Façade 6 simulation (1: On 0: Off)	Input	RWC-	[1.1] DPT_Switch	1 Bit
1018	Fac.6 block	Input	RWC-	[1.1] DPT_Switch	1 Bit
1019	Façade 6 safety (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1020	Façade 6 wind extension block (1: On 0: Off)	Input	RWC-	[1.1] DPT_Switch	1 Bit
1021	Façade 6 wind extension block threshold value in m/s	Input	RWC T	[9.5] DPT_Val- ue_Wsp	2 Bytes
1022	Façade 6 wind extension block threshold value (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1023	Façade 6 wind extension block status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1024	Façade 6 wind alarm (1: On 0: Off)	Input	RWC-	[1.1] DPT_Switch	1 Bit
1025	Façade 6 wind alarm threshold value in m/s	Input	RWC T	[9.5] DPT_Val- ue_Wsp	2 Bytes
1026	Façade 6 wind alarm threshold value (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1027	Façade 6 wind alarm status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1028	Façade 6 frost alarm status (1: On 0: Off)	Output	RWC T	[1.1] DPT_Switch	1 Bit
1029	Fac.6 release/block rain automatic	Input	RWC-	[1.1] DPT_Switch	1 Bit
1030	Façade 6 rain alarm status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit

No.	Text	Function	Flags	DPT type	Size
1031	Fac.6 release/block timed opening	Input	RWC-	[1.1] DPT_Switch	1 Bit
1032	Façade 6 timed opening status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1033	Fac.6 outside temp. Release/block block	Input	RWC-	[1.1] DPT_Switch	1 Bit
1034	Fac.6 outside temp. Block in °C	Input/ Output	RWC T	[9.1] DPT_Val- ue_Temp	2 Bytes
1035	Fac.6 outside temp. Block in °C (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1036	Fac.6 outside temp. Block status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1037	Fac.6 release/block timed closure	Input	RWC-	[1.1] DPT_Switch	1 Bit
1038	Façade 6 timed closure status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1039	Fac.6 release/block night closure	Input	RWC-	[1.1] DPT_Switch	1 Bit
1040	Façade 6 night closure status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1041	Fac.6 release/block heat protection	Input	RWC-	[1.1] DPT_Switch	1 Bit
1042	Façade 6 heating protection status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1043	Fac.6 release/block pyranometer	Input	RWC-	[1.1] DPT_Switch	1 Bit
1044	Façade 6 pyranometer in W/m ²	Input/ Output	RWC T	[9.22] DPT_Pow- erDensity	2 Bytes
1045	Façade 6 pyranometer in W/m ² (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1046	Façade 6 pyranometer status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1047	Façade 6 internal temperature in °C	Input	-SKÜ	[9.1] DPT_Val- ue_Temp	2 Bytes
1048	Fac.6 release/block inside temp. block	Input	RWC-	[1.1] DPT_Switch	1 Bit
1049	Fac.6 inside temp. Block in °C	Input/ Output	RWC T	[9.1] DPT_Val- ue_Temp	2 Bytes
1050	Fac.6 inside temp. Block in °C (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1051	Fac.6 inside temp. Block status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1052	Façade 6 internal temperature block release/block via bit object	Input	RWC-	[1.1] DPT_Switch	1 Bit
1053	Fac.6 release/block sun auto.	Input	RWC-	[1.1] DPT_Switch	1 Bit
1054	Fac.6 Sun auto. Azimuth from (in °)	Input	RWC T	[14.7] DPT_Val- ue_AngleDeg	4 Bytes
1055	Fac.6 Sun auto. Azimuth from (1:+ 0:-)	Input	-WC-	[1.1] DPT_Switch	1 Bit

No.	Text	Function	Flags	DPT type	Size
1056	Fac.6 Sun auto. Azimuth up to (in °)	Input	RWC T	[14.7] DPT_Val- ue_AngleDeg	4 Bytes
1057	Fac.6 Sun auto. Azimuth up to (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1058	Fac.6 Sun auto. Elevation from (in °)	Input	RWC T	[14.7] DPT_Val- ue_AngleDeg	4 Bytes
1059	Fac.6 Sun auto. Elevation from (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1060	Fac.6 Sun auto. Elevation up to (in °)	Input	RWC T	[14.7] DPT_Val- ue_AngleDeg	4 Bytes
1061	Fac.6 Sun auto. Elevation up to (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1062	Fac.6 Sun auto. AziEle status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1063	Fac.6 Sun auto. Brightness measure- ment in lux	Input	-SKÜ	[9.4] DPT_Value_Lux	2 Bytes
1064	Fac.6 Sun auto. Brightness threshold value in lux	Input	RWC T	[9.4] DPT_Value_Lux	2 Bytes
1065	Fac.6 Sun auto. Brightness threshold (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1066	Fac.6 Sun auto. Bright. Short status (1: On)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1067	Fac.6 Sun auto. Bright. Long status (1: On)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1068	Façade 6 extension delay in min.	Input/ Output	RWC T	[7.6] DPT_TimePeri- odMin	2 Bytes
1069	Façade 6 extension delay in min. (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1070	Façade 6 short delay in seconds	Input/ Output	RWC T	[7.5] DPT_TimePeri- odSec	2 Bytes
1071	Façade 6 short delay in seconds (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1072	Façade 6 retraction delay in min.	Input/ Output	RWC T	[7.6] DPT_TimePeri- odMin	2 Bytes
1073	Façade 6 retraction delay in min. (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1074	Façade 6 movement position	Output	R-CT	[5.1] DPT_Scaling	1 Byte
1075	Fac.6 blind position	Output	R-CT	[5.1] DPT_Scaling	1 Byte
1076	Façade 6 channel status output (1: On 0: Off)	Input	RWC-	[1.1] DPT_Switch	1 Bit
1077	Façade 6 channel state text	Output	R-CT	[16.0] DPT_String_ASCII	14 Bytes
1078	Façade 6 channel status bit text	Output	R-CT	[16.0] DPT_String_ASCII	14 Bytes

No.	Text	Function	Flags	DPT type	Size
1079	Façade 6 channel status bit state	Output	R-CT	[1.1] DPT_Switch	1 Bit
1080	Façade 6 channel delay	Output	R-CT	[7.5] DPT_TimePeriodSec	2 Bytes
1081	Façade 6 channel status bit selection (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1086	Façade 7 simulation (1: On 0: Off)	Input	RWC-	[1.1] DPT_Switch	1 Bit
1087	Fac.7 block	Input	RWC-	[1.1] DPT_Switch	1 Bit
1088	Façade 7 safety (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1089	Façade 7 wind extension block (1: On 0: Off)	Input	RWC-	[1.1] DPT_Switch	1 Bit
1090	Façade 7 wind extension block threshold value in m/s	Input	RWC T	[9.5] DPT_Value_Wsp	2 Bytes
1091	Façade 7 wind extension block threshold value (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1092	Façade 7 wind extension block status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1093	Façade 7 wind alarm (1: On 0: Off)	Input	RWC-	[1.1] DPT_Switch	1 Bit
1094	Façade 7 wind alarm threshold value in m/s	Input	RWC T	[9.5] DPT_Value_Wsp	2 Bytes
1095	Façade 7 wind alarm threshold value (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1096	Façade 7 wind alarm status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1097	Façade 7 frost alarm status (1: On 0: Off)	Output	RWC T	[1.1] DPT_Switch	1 Bit
1098	Fac.7 release/block rain automatic	Input	RWC-	[1.1] DPT_Switch	1 Bit
1099	Façade 7 rain alarm status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1100	Fac.6 release/block timed opening	Input	RWC-	[1.1] DPT_Switch	1 Bit
1101	Façade 7 timed opening status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1102	Fac.7 outside temp. Release/block block	Input	RWC-	[1.1] DPT_Switch	1 Bit
1103	Fac.7 outside temp. Block in °C	Input/ Output	RWC T	[9.1] DPT_Value_Temp	2 Bytes
1104	Fac.7 outside temp. Block in °C (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1105	Fac.7 outside temp. Block status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1106	Fac.7 release/block timed closure	Input	RWC-	[1.1] DPT_Switch	1 Bit
1107	Façade 7 timed closure status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1108	Fac.7 release/block night closure	Input	RWC-	[1.1] DPT_Switch	1 Bit

No.	Text	Function	Flags	DPT type	Size
1109	Façade 7 night closure status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1110	Fac.7 release/block heat protection	Input	RWC-	[1.1] DPT_Switch	1 Bit
1111	Façade 7 heating protection status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1112	Fac.7 release/block pyranometer	Input	RWC-	[1.1] DPT_Switch	1 Bit
1113	Façade 7 pyranometer in W/m ²	Input/ Output	RWC T	[9.22] DPT_Pow- erDensity	2 Bytes
1114	Façade 7 pyranometer in W/m ² (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1115	Façade 7 pyranometer status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1116	Façade 7 internal temperature in °C	Input	-SKÜ	[9.1] DPT_Val- ue_Temp	2 Bytes
1117	Fac.7 release/block inside temp. block	Input	RWC-	[1.1] DPT_Switch	1 Bit
1118	Fac.7 inside temp. Block in °C	Input/ Output	RWC T	[9.1] DPT_Val- ue_Temp	2 Bytes
1119	Fac.7 inside temp. Block in °C (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1120	Fac.7 inside temp. Block status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1121	Façade 7 internal temperature block release/block via bit object	Input	RWC-	[1.1] DPT_Switch	1 Bit
1122	Fac.7 release/block sun auto.	Input	RWC-	[1.1] DPT_Switch	1 Bit
1123	Fac.7 Sun auto. Azimuth from (in °)	Input	RWC T	[14.7] DPT_Val- ue_AngleDeg	4 Bytes
1124	Fac.7 Sun auto. Azimuth from (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1125	Fac.7 Sun auto. Azimuth up to (in °)	Input	RWC T	[14.7] DPT_Val- ue_AngleDeg	4 Bytes
1126	Fac.7 Sun auto. Azimuth up to (1:+ 0:-)	Input	-WC-	[1.1] DPT_Switch	1 Bit
1127	Fac.7 Sun auto. Elevation from (in °)	Input	RWC T	[14.7] DPT_Val- ue_AngleDeg	4 Bytes
1128	Fac.7 Sun auto. Elevation from (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1129	Fac.7 Sun auto. Elevation up to (in °)	Input	RWC T	[14.7] DPT_Val- ue_AngleDeg	4 Bytes
1130	Fac.7 Sun auto. Elevation up to (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1131	Fac.7 Sun auto. AziEle status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit

No.	Text	Function	Flags	DPT type	Size
1132	Fac.7 Sun auto. Brightness measurement in lux	Input	-SKÜ	[9.4] DPT_Value_Lux	2 Bytes
1133	Fac.7 Sun auto. Brightness threshold value in lux	Input	RWC T	[9.4] DPT_Value_Lux	2 Bytes
1134	Fac.7 Sun auto. Brightness threshold (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1135	Fac.7 Sun auto. Bright. Short status (1: On)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1136	Fac.7 Sun auto. Bright. Long status (1: On)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1137	Façade 7 extension delay in min.	Input/ Output	RWC T	[7.6] DPT_TimePeriodMin	2 Bytes
1138	Façade 7 extension delay in min. (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1139	Façade 7 short delay in seconds	Input/ Output	RWC T	[7.5] DPT_TimePeriodSec	2 Bytes
1140	Façade 7 short delay in seconds (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1141	Façade 7 retraction delay in min.	Input/ Output	RWC T	[7.6] DPT_TimePeriodMin	2 Bytes
1142	Façade 7 retraction delay in min. (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1143	Façade 7 movement position	Output	R-CT	[5.1] DPT_Scaling	1 Byte
1144	Fac.7 blind position	Output	R-CT	[5.1] DPT_Scaling	1 Byte
1145	Façade 7 channel status output (1: On 0: Off)	Input	RWC-	[1.1] DPT_Switch	1 Bit
1146	Façade 7 channel state text	Output	R-CT	[16.0] DPT_String_ASCII	14 Bytes
1147	Façade 7 channel status bit text	Output	R-CT	[16.0] DPT_String_ASCII	14 Bytes
1148	Façade 7 channel status bit state	Output	R-CT	[1.1] DPT_Switch	1 Bit
1149	Façade 7 channel delay	Output	R-CT	[7.5] DPT_TimePeriodSec	2 Bytes
1150	Façade 7 channel status bit selection (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1155	Façade 8 simulation (1: On 0: Off)	Input	RWC-	[1.1] DPT_Switch	1 Bit
1156	Fac.8 block	Input	RWC-	[1.1] DPT_Switch	1 Bit
1157	Façade 8 safety (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1158	Façade 8 wind extension block (1: On 0: Off)	Input	RWC-	[1.1] DPT_Switch	1 Bit
1159	Façade 8 wind extension block threshold value in m/s	Input	RWC T	[9.5] DPT_Value_Wsp	2 Bytes
1160	Façade 8 wind extension block threshold value (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit

No.	Text	Function	Flags	DPT type	Size
1161	Façade 8 wind extension block status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1162	Façade 8 wind alarm (1: On 0: Off)	Input	RWC-	[1.1] DPT_Switch	1 Bit
1163	Façade 8 wind alarm threshold value in m/s	Input	RWC T	[9.5] DPT_Value_Wsp	2 Bytes
1164	Façade 8 wind alarm threshold value (1:+ 0:-)	Input	-WC-	[1.1] DPT_Switch	1 Bit
1165	Façade 8 wind alarm status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1166	Façade 8 frost alarm status (1: On 0: Off)	Output	RWC T	[1.1] DPT_Switch	1 Bit
1167	Fac.8 release/block rain automatic	Input	RWC-	[1.1] DPT_Switch	1 Bit
1168	Façade 8 rain alarm status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1169	Fac.8 release/block timed opening	Input	RWC-	[1.1] DPT_Switch	1 Bit
1170	Façade 8 timed opening status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1171	Fac.8 outside temp. Release/block block	Input	RWC-	[1.1] DPT_Switch	1 Bit
1172	Fac.8 outside temp. Block in °C	Input/ Output	RWC T	[9.1] DPT_Value_Temp	2 Bytes
1173	Fac.8 outside temp. Block in °C (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1174	Fac.8 outside temp. Block status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1175	Fac.8 release/block timed closure	Input	RWC-	[1.1] DPT_Switch	1 Bit
1176	Façade 8 timed closure status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1177	Fac.8 release/block night closure	Input	RWC-	[1.1] DPT_Switch	1 Bit
1178	Façade 8 night closure status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1179	Fac.8 release/block heat protection	Input	RWC-	[1.1] DPT_Switch	1 Bit
1180	Façade 8 heating protection status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1181	Fac.8 release/block pyranometer	Input	RWC-	[1.1] DPT_Switch	1 Bit
1182	Façade 8 pyranometer in W/m ²	Input/ Output	RWC T	[9.22] DPT_PowerDensity	2 Bytes
1183	Façade 8 pyranometer in W/m ² (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1184	Façade 8 pyranometer status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1185	Façade 8 internal temperature in °C	Input	-SKÜ	[9.1] DPT_Value_Temp	2 Bytes

No.	Text	Function	Flags	DPT type	Size
1186	Fac.8 release/block inside temp. block	Input	RWC-	[1.1] DPT_Switch	1 Bit
1187	Fac.8 inside temp. Block in °C	Input/ Output	RWC T	[9.1] DPT_Val- ue_Temp	2 Bytes
1188	Fac.8 inside temp. Block in °C (1:+ 0:-)	Input	-WC-	[1.1] DPT_Switch	1 Bit
1189	Fac.8 inside temp. Block status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1190	Façade 8 internal temperature block release/block via bit object	Input	RWC-	[1.1] DPT_Switch	1 Bit
1191	Fac.8 release/block sun auto.	Input	RWC-	[1.1] DPT_Switch	1 Bit
1192	Fac.8 Sun auto. Azimuth from (in °)	Input	RWC T	[14.7] DPT_Val- ue_AngleDeg	4 Bytes
1193	Fac.8 Sun auto. Azimuth from (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1194	Fac.8 Sun auto. Azimuth up to (in °)	Input	RWC T	[14.7] DPT_Val- ue_AngleDeg	4 Bytes
1195	Fac.8 Sun auto. Azimuth up to (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1196	Fac.8 Sun auto. Elevation from (in °)	Input	RWC T	[14.7] DPT_Val- ue_AngleDeg	4 Bytes
1197	Fac.8 Sun auto. Elevation from (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1198	Fac.8 Sun auto. Elevation up to (in °)	Input	RWC T	[14.7] DPT_Val- ue_AngleDeg	4 Bytes
1199	Fac.8 Sun auto. Elevation up to (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1200	Fac.8 Sun auto. AziEle status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1201	Fac.8 Sun auto. Brightness measurement in lux	Input	-SKÜ	[9.4] DPT_Value_Lux	2 Bytes
1202	Fac.8 Sun auto. Brightness threshold value in lux	Input	RWC T	[9.4] DPT_Value_Lux	2 Bytes
1203	Fac.8 Sun auto. Brightness threshold (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1204	Fac.8 Sun auto. Bright. Short status (1: On)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1205	Fac.8 Sun auto. Bright. Long status (1: On)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1206	Façade 8 extension delay in min.	Input/ Output	RWC T	[7.6] DPT_TimePeri- odMin	2 Bytes
1207	Façade 8 extension delay in min. (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit

No.	Text	Function	Flags	DPT type	Size
1208	Façade 8 short delay in seconds	Input/ Output	RWC T	[7.5] DPT_TimePeri- odSec	2 Bytes
1209	Façade 8 short delay in seconds (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1210	Façade 8 retraction delay in min.	Input/ Output	RWC T	[7.6] DPT_TimePeri- odMin	2 Bytes
1211	Façade 8 retraction delay in min. (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1212	Façade 8 movement position	Output	R-CT	[5.1] DPT_Scaling	1 Byte
1213	Fac.8 blind position	Output	R-CT	[5.1] DPT_Scaling	1 Byte
1214	Façade 8 channel status output (1: On 0: Off)	Input	RWC-	[1.1] DPT_Switch	1 Bit
1215	Façade 8 channel state text	Output	R-CT	[16.0] DPT_String_ASCII	14 Bytes
1216	Façade 8 channel status bit text	Output	R-CT	[16.0] DPT_String_ASCII	14 Bytes
1217	Façade 8 channel status bit state	Output	R-CT	[1.1] DPT_Switch	1 Bit
1218	Façade 8 channel delay	Output	R-CT	[7.5] DPT_TimePeri- odSec	2 Bytes
1219	Façade 8 channel status bit selection (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1224	Façade 9 simulation (1: On 0: Off)	Input	RWC-	[1.1] DPT_Switch	1 Bit
1225	Fac.9 block	Input	RWC-	[1.1] DPT_Switch	1 Bit
1226	Façade 9 safety (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1227	Façade 9 wind extension block (1: On 0: Off)	Input	-WC-	[1.1] DPT_Switch	1 Bit
1228	Façade 9 wind extension block threshold value in m/s	Input	RWC T	[9.5] DPT_Val- ue_Wsp	2 Bytes
1229	Façade 9 wind extension block threshold value (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1230	Façade 9 wind extension block status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1231	Façade 9 wind alarm (1: On 0: Off)	Input	-WC-	[1.1] DPT_Switch	1 Bit
1232	Façade 9 wind alarm threshold value in m/s	Input	RWC T	[9.5] DPT_Val- ue_Wsp	2 Bytes
1233	Façade 9 wind alarm threshold value (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1234	Façade 9 wind alarm status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1235	Façade 9 frost alarm status (1: On 0: Off)	Output	RWC T	[1.1] DPT_Switch	1 Bit
1236	Fac.9 release/block rain automatic	Input	RWC-	[1.1] DPT_Switch	1 Bit
1237	Façade 9 rain alarm status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit

No.	Text	Function	Flags	DPT type	Size
1238	Fac.9 release/block timed opening	Input	RWC-	[1.1] DPT_Switch	1 Bit
1239	Façade 9 timed opening status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1240	Fac.9 outside temp. Release/block block	Input	RWC-	[1.1] DPT_Switch	1 Bit
1241	Fac.9 outside temp. Block in °C	Input/ Output	RWC T	[9.1] DPT_Val- ue_Temp	2 Bytes
1242	Fac.9 outside temp. Block in °C (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1243	Fac.9 outside temp. Block status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1244	Fac.9 release/block timed closure	Input	RWC-	[1.1] DPT_Switch	1 Bit
1245	Façade 9 timed closure status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1246	Fac.9 release/block night closure	Input	RWC-	[1.1] DPT_Switch	1 Bit
1247	Façade 9 night closure status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1248	Fac.9 release/block heat protection	Input	RWC-	[1.1] DPT_Switch	1 Bit
1249	Façade 9 heating protection status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1250	Fac.9 release/block pyranometer	Input	RWC-	[1.1] DPT_Switch	1 Bit
1251	Façade 9 pyranometer in W/m ²	Input/ Output	RWC T	[9.22] DPT_Pow- erDensity	2 Bytes
1252	Façade 9 pyranometer in W/m ² (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1253	Façade 9 pyranometer status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1254	Façade 9 internal temperature in °C	Input	-SKÜ	[9.1] DPT_Val- ue_Temp	2 Bytes
1255	Fac.9 release/block inside temp. block	Input	RWC-	[1.1] DPT_Switch	1 Bit
1256	Fac.9 inside temp. Block in °C	Input/ Output	RWC T	[9.1] DPT_Val- ue_Temp	2 Bytes
1257	Fac.9 inside temp. Block in °C (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1258	Fac.9 inside temp. Block status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1259	Façade 9 internal temperature block release/block via bit object	Input	RWC-	[1.1] DPT_Switch	1 Bit
1260	Fac.9 release/block sun auto.	Input	RWC-	[1.1] DPT_Switch	1 Bit
1261	Fac.9 Sun auto. Azimuth from (in °)	Input	RWC T	[14.7] DPT_Val- ue_AngleDeg	4 Bytes
1262	Fac.9 Sun auto. Azimuth from (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit

No.	Text	Function	Flags	DPT type	Size
1263	Fac.9 Sun auto. Azimuth up to (in °)	Input	RWC T	[14.7] DPT_Val- ue_AngleDeg	4 Bytes
1264	Fac.9 Sun auto. Azimuth up to (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1265	Fac.9 Sun auto. Elevation from (in °)	Input	RWC T	[14.7] DPT_Val- ue_AngleDeg	4 Bytes
1266	Fac.9 Sun auto. Elevation from (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1267	Fac.9 Sun auto. Elevation up to (in °)	Input	RWC T	[14.7] DPT_Val- ue_AngleDeg	4 Bytes
1268	Fac.9 Sun auto. Elevation up to (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1269	Fac.9 Sun auto. AziEle status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1270	Fac.9 Sun auto. Brightness measurement in lux	Input	-SKÜ	[9.4] DPT_Value_Lux	2 Bytes
1271	Fac.9 Sun auto. Brightness threshold value in Lux	Input	RWC T	[9.4] DPT_Value_Lux	2 Bytes
1272	Fac.9 Sun auto. Brightness threshold (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1273	Fac.9 Sun auto. Bright. Short status (1: On)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1274	Fac.9 Sun auto. Bright. Long status (1: On)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1275	Façade 9 extension delay in min.	Input/ Output	RWC T	[7.6] DPT_TimePeri- odMin	2 Bytes
1276	Façade 9 extension delay in min. (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1277	Façade 9 short delay in seconds	Input/ Output	RWC T	[7.5] DPT_TimePeri- odSec	2 Bytes
1278	Façade 9 short delay in seconds (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1279	Façade 9 retraction delay in min.	Input/ Output	RWC T	[7.6] DPT_TimePeri- odMin	2 Bytes
1280	Façade 9 retraction delay in min. (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1281	Façade 9 movement position	Output	R-CT	[5.1] DPT_Scaling	1 Byte
1282	Fac.9 blind position	Output	R-CT	[5.1] DPT_Scaling	1 Byte
1283	Façade 9 channel status output (1: On 0: Off)	Input	RWC-	[1.1] DPT_Switch	1 Bit
1284	Façade 9 channel state text	Output	R-CT	[16.0] DPT_String_ASCII	14 Bytes
1285	Façade 9 channel status bit text	Output	R-CT	[16.0] DPT_String_ASCII	14 Bytes

No.	Text	Function	Flags	DPT type	Size
1286	Façade 9 channel status bit state	Output	R-CT	[1.1] DPT_Switch	1 Bit
1287	Façade 9 channel delay	Output	R-CT	[7.5] DPT_TimePeriodSec	2 Bytes
1288	Façade 9 channel status bit selection (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1293	Façade 10 simulation (1: On 0: Off)	Input	RWC-	[1.1] DPT_Switch	1 Bit
1294	Fac.10 block	Input	RWC-	[1.1] DPT_Switch	1 Bit
1295	Façade 10 safety (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1296	Façade 10 wind extension block (1: On 0: Off)	Input	-WC-	[1.1] DPT_Switch	1 Bit
1297	Façade 10 wind extension block threshold value in m/s	Input	RWC T	[9.5] DPT_Value_Wsp	2 Bytes
1298	Façade 10 wind extension block threshold value (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1299	Façade 10 wind extension block status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1300	Façade 10 wind alarm (1: On 0: Off)	Input	-WC-	[1.1] DPT_Switch	1 Bit
1301	Façade 10 wind alarm threshold value in m/s	Input	RWC T	[9.5] DPT_Value_Wsp	2 Bytes
1302	Façade 10 wind alarm threshold value (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1303	Façade 10 wind alarm status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1304	Façade 10 frost alarm status (1: On 0: Off)	Output	RWC T	[1.1] DPT_Switch	1 Bit
1305	Fac.10 release/block rain automatic	Input	RWC-	[1.1] DPT_Switch	1 Bit
1306	Façade 10 rain alarm status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1307	Fac.10 release/block timed opening	Input	RWC-	[1.1] DPT_Switch	1 Bit
1308	Façade 10 timed opening status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1309	Fac.10 outside temp. Release/block block	Input	RWC-	[1.1] DPT_Switch	1 Bit
1310	Fac.10 outside temp. Block in °C	Input/ Output	RWC T	[9.1] DPT_Value_Temp	2 Bytes
1311	Fac.10 outside temp. Block in °C (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1312	Fac.10 outside temp. Block status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1313	Fac.10 release/block timed closure	Input	RWC-	[1.1] DPT_Switch	1 Bit
1314	Façade 10 timed closure status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1315	Fac.10 release/block night closure	Input	RWC-	[1.1] DPT_Switch	1 Bit

No.	Text	Function	Flags	DPT type	Size
1316	Façade 10 night closure status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1317	Fac.10 release/block heat protection	Input	RWC-	[1.1] DPT_Switch	1 Bit
1318	Façade 10 heating protection status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1319	Fac.10 release/block pyranometer	Input	RWC-	[1.1] DPT_Switch	1 Bit
1320	Façade 10 pyranometer in W/m ²	Input/ Output	RWC T	[9.22] DPT_Pow- erDensity	2 Bytes
1321	Façade 10 pyranometer in W/m ² (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1322	Façade 10 pyranometer status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1323	Façade 10 internal temperature in °C	Input	-SKÜ	[9.1] DPT_Val- ue_Temp	2 Bytes
1324	Fac.10 release/block inside temp. block	Input	RWC-	[1.1] DPT_Switch	1 Bit
1325	Fac.10 inside temp. Block in °C	Input/ Output	RWC T	[9.1] DPT_Val- ue_Temp	2 Bytes
1326	Fac.10 inside temp. Block in °C (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1327	Fac.10 inside temp. Block status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1328	Façade 10 internal temperature block release/block via bit object	Input	RWC-	[1.1] DPT_Switch	1 Bit
1329	Fac.10 release/block sun auto.	Input	RWC-	[1.1] DPT_Switch	1 Bit
1330	Fac.10 Sun auto. Azimuth from (in °)	Input	RWC T	[14.7] DPT_Val- ue_AngleDeg	4 Bytes
1331	Fac.10 Sun auto. Azimuth from (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1332	Fac.10 Sun auto. Azimuth up to (in °)	Input	RWC T	[14.7] DPT_Val- ue_AngleDeg	4 Bytes
1333	Fac.10 Sun auto. Azimuth up to (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1334	Fac.10 Sun auto. Elevation from (in °)	Input	RWC T	[14.7] DPT_Val- ue_AngleDeg	4 Bytes
1335	Fac.10 Sun auto. Elevation from (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1336	Fac.10 Sun auto. Elevation up to (in °)	Input	RWC T	[14.7] DPT_Val- ue_AngleDeg	4 Bytes
1337	Fac.10 Sun auto. Elevation up to (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1338	Fac.10 Sun auto. AziEle status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit

No.	Text	Function	Flags	DPT type	Size
1339	Fac.10 Sun auto. Brightness measurement in lux	Input	-SKÜ	[9.4] DPT_Value_Lux	2 Bytes
1340	Fac.10 Sun auto. Brightness threshold value in Lux	Input	RWC T	[9.4] DPT_Value_Lux	2 Bytes
1341	Fac.10 Sun auto. Brightness threshold (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1342	Fac.10 Sun auto. Bright. Short status (1: On)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1343	Fac.10 Sun auto. Bright. Long status (1: On)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1344	Façade 10 extension delay in min.	Input/ Output	RWC T	[7.6] DPT_TimePeriodMin	2 Bytes
1345	Façade 10 extension delay in min. (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1346	Façade 10 short delay in seconds	Input/ Output	RWC T	[7.5] DPT_TimePeriodSec	2 Bytes
1347	Façade 10 short delay in seconds (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1348	Façade 10 retraction delay in min.	Input/ Output	RWC T	[7.6] DPT_TimePeriodMin	2 Bytes
1349	Façade 10 retraction delay in min. (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1350	Façade 10 movement position	Output	R-CT	[5.1] DPT_Scaling	1 Byte
1351	Fac.10 blind position	Output	R-CT	[5.1] DPT_Scaling	1 Byte
1352	Façade 10 channel status output (1: On 0: Off)	Input	RWC-	[1.1] DPT_Switch	1 Bit
1353	Façade 10 channel state text	Output	R-CT	[16.0] DPT_String_ASCII	14 Bytes
1354	Façade 10 channel status bit text	Output	R-CT	[16.0] DPT_String_ASCII	14 Bytes
1355	Façade 10 channel status bit state	Output	R-CT	[1.1] DPT_Switch	1 Bit
1356	Façade 10 channel delay	Output	R-CT	[7.5] DPT_TimePeriodSec	2 Bytes
1357	Façade 10 channel status bit selection (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1362	Façade 11 simulation (1: On 0: Off)	Input	RWC-	[1.1] DPT_Switch	1 Bit
1363	Fac.11 block	Input	RWC-	[1.1] DPT_Switch	1 Bit
1364	Façade 11 safety (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1365	Façade 11 wind extension block (1: On 0: Off)	Input	-WC-	[1.1] DPT_Switch	1 Bit
1366	Façade 11 wind extension block threshold value in m/s	Input	RWC T	[9.5] DPT_Value_Wsp	2 Bytes
1367	Façade 11 wind extension block threshold value (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit

No.	Text	Function	Flags	DPT type	Size
1368	Façade 11 wind extension block status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1369	Façade 11 wind alarm (1: On 0: Off)	Input	-WC-	[1.1] DPT_Switch	1 Bit
1370	Façade 11 wind alarm threshold value in m/s	Input	RWC T	[9.5] DPT_Value_Wsp	2 Bytes
1371	Façade 11 wind alarm threshold value (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1372	Façade 11 wind alarm status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1373	Façade 11 frost alarm status (1: On 0: Off)	Output	RWC T	[1.1] DPT_Switch	1 Bit
1374	Fac.11 release/block rain automatic	Input	RWC-	[1.1] DPT_Switch	1 Bit
1375	Façade 11 rain alarm status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1376	Fac.11 release/block timed opening	Input	RWC-	[1.1] DPT_Switch	1 Bit
1377	Façade 11 timed opening status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1378	Fac.11 outside temp. Release/block block	Input	RWC-	[1.1] DPT_Switch	1 Bit
1379	Fac.11 outside temp. Block in °C	Input/ Output	RWC T	[9.1] DPT_Value_Temp	2 Bytes
1380	Fac.11 outside temp. Block in °C (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1381	Fac.11 outside temp. Block status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1382	Fac.11 release/block timed closure	Input	RWC-	[1.1] DPT_Switch	1 Bit
1383	Façade 11 timed closure status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1384	Fac.11 release/block night closure	Input	RWC-	[1.1] DPT_Switch	1 Bit
1385	Façade 11 night closure status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1386	Fac.11 release/block heat protection	Input	RWC-	[1.1] DPT_Switch	1 Bit
1387	Façade 11 heating protection status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1388	Fac.11 release/block pyranometer	Input	RWC-	[1.1] DPT_Switch	1 Bit
1389	Façade 11 pyranometer in W/m²	Input/ Output	RWC T	[9.22] DPT_PowerDensity	2 Bytes
1390	Façade 11 pyranometer in W/m² (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1391	Façade 11 pyranometer status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1392	Façade 11 internal temperature in °C	Input	-SKÜ	[9.1] DPT_Value_Temp	2 Bytes

No.	Text	Function	Flags	DPT type	Size
1393	Fac.11 release/block inside temp. block	Input	RWC-	[1.1] DPT_Switch	1 Bit
1394	Fac.11 inside temp. Block in °C	Input/ Output	RWC T	[9.1] DPT_Val- ue_Temp	2 Bytes
1395	Fac.11 inside temp. Block in °C (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1396	Fac.11 inside temp. Block status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1397	Façade 11 internal temperature block release/block via bit object	Input	RWC-	[1.1] DPT_Switch	1 Bit
1398	Fac.11 release/block sun auto.	Input	RWC-	[1.1] DPT_Switch	1 Bit
1399	Fac.11 Sun auto. Azimuth from (in °)	Input	RWC T	[14.7] DPT_Val- ue_AngleDeg	4 Bytes
1400	Fac.11 Sun auto. Azimuth from (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1401	Fac.11 Sun auto. Azimuth up to (in °)	Input	RWC T	[14.7] DPT_Val- ue_AngleDeg	4 Bytes
1402	Fac.11 Sun auto. Azimuth up to (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1403	Fac.11 Sun auto. Elevation from (in °)	Input	RWC T	[14.7] DPT_Val- ue_AngleDeg	4 Bytes
1404	Fac.11 Sun auto. Elevation from (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1405	Fac.11 Sun auto. Elevation up to (in °)	Input	RWC T	[14.7] DPT_Val- ue_AngleDeg	4 Bytes
1406	Fac.11 Sun auto. Elevation up to (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1407	Fac.11 Sun auto. AziEle status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1408	Fac.11 Sun auto. Brightness measurement in lux	Input	-SKÜ	[9.4] DPT_Value_Lux	2 Bytes
1409	Fac.11 Sun auto. Brightness threshold value in Lux	Input	RWC T	[9.4] DPT_Value_Lux	2 Bytes
1410	Fac.11 Sun auto. Brightness threshold (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1411	Fac.11 Sun auto. Bright. Short status (1: On)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1412	Fac.11 Sun auto. Bright. Long status (1: On)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1413	Façade 11 extension delay in min.	Input/ Output	RWC T	[7.6] DPT_TimePeri- odMin	2 Bytes
1414	Façade 11 extension delay in min. (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit

No.	Text	Function	Flags	DPT type	Size
1415	Façade 11 short delay in seconds	Input/ Output	RWC T	[7.5] DPT_TimePeriodSec	2 Bytes
1416	Façade 11 short delay in seconds (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1417	Façade 11 retraction delay in min.	Input/ Output	RWC T	[7.6] DPT_TimePeriodMin	2 Bytes
1418	Façade 11 retraction delay in min. (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1419	Façade 11 movement position	Output	R-CT	[5.1] DPT_Scaling	1 Byte
1420	Fac.11 blind position	Output	R-CT	[5.1] DPT_Scaling	1 Byte
1421	Façade 11 channel status output (1: On 0: Off)	Input	RWC-	[1.1] DPT_Switch	1 Bit
1422	Façade 11 channel state text	Output	R-CT	[16.0] DPT_String_ASCII	14 Bytes
1423	Façade 11 channel status bit text	Output	R-CT	[16.0] DPT_String_ASCII	14 Bytes
1424	Façade 11 channel status bit state	Output	R-CT	[1.1] DPT_Switch	1 Bit
1425	Façade 11 channel delay	Output	R-CT	[7.5] DPT_TimePeriodSec	2 Bytes
1426	Façade 11 channel status bit selection (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1431	Façade 12 simulation (1: On 0: Off)	Input	RWC-	[1.1] DPT_Switch	1 Bit
1432	Fac.12 block	Input	RWC-	[1.1] DPT_Switch	1 Bit
1433	Façade 12 safety (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1434	Façade 12 wind extension block (1: On 0: Off)	Input	-WC-	[1.1] DPT_Switch	1 Bit
1435	Façade 12 wind extension block threshold value in m/s	Input	RWC T	[9.5] DPT_Value_Wsp	2 Bytes
1436	Façade 12 wind extension block threshold value (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1437	Façade 12 wind extension block status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1438	Façade 12 wind alarm (1: On 0: Off)	Input	-WC-	[1.1] DPT_Switch	1 Bit
1439	Façade 12 wind alarm threshold value in m/s	Input	RWC T	[9.5] DPT_Value_Wsp	2 Bytes
1440	Façade 12 wind alarm threshold value (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1441	Façade 12 wind alarm status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1442	Façade 12 frost alarm status (1: On 0: Off)	Output	RWC T	[1.1] DPT_Switch	1 Bit
1443	Fac.12 release/block rain automatic	Input	RWC-	[1.1] DPT_Switch	1 Bit
1444	Façade 12 rain alarm status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit

No.	Text	Function	Flags	DPT type	Size
1445	Fac.12 release/block timed opening	Input	RWC-	[1.1] DPT_Switch	1 Bit
1446	Façade 12 timed opening status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1447	Fac.12 outside temp. Release/block block	Input	RWC-	[1.1] DPT_Switch	1 Bit
1448	Fac.12 outside temp. Block in °C	Input/ Output	RWC T	[9.1] DPT_Val- ue_Temp	2 Bytes
1449	Fac.12 outside temp. Block in °C (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1450	Fac.12 outside temp. Block status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1451	Fac.12 release/block timed closure	Input	RWC-	[1.1] DPT_Switch	1 Bit
1452	Façade 12 timed closure status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1453	Fac.12 release/block night closure	Input	RWC-	[1.1] DPT_Switch	1 Bit
1454	Façade 12 night closure status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1455	Fac.12 release/block heat protection	Input	RWC-	[1.1] DPT_Switch	1 Bit
1456	Façade 12 heating protection status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1457	Fac.12 release/block pyranometer	Input	RWC-	[1.1] DPT_Switch	1 Bit
1458	Façade 12 pyranometer in W/m²	Input/ Output	RWC T	[9.22] DPT_Pow- erDensity	2 Bytes
1459	Façade 12 pyranometer in W/m² (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1460	Façade 12 pyranometer status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1461	Façade 12 internal temperature in °C	Input	-SKÜ	[9.1] DPT_Val- ue_Temp	2 Bytes
1462	Fac.12 release/block inside temp. block	Input	RWC-	[1.1] DPT_Switch	1 Bit
1463	Fac.12 inside temp. Block in °C	Input/ Output	RWC T	[9.1] DPT_Val- ue_Temp	2 Bytes
1464	Fac.12 inside temp. Block in °C (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1465	Fac.12 inside temp. Block status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1466	Façade 12 internal temperature block release/block via bit object	Input	RWC-	[1.1] DPT_Switch	1 Bit
1467	Fac.12 release/block sun auto.	Input	RWC-	[1.1] DPT_Switch	1 Bit
1468	Fac.12 Sun auto. Azimuth from (in °)	Input	RWC T	[14.7] DPT_Val- ue_AngleDeg	4 Bytes
1469	Fac.12 Sun auto. Azimuth from (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit

No.	Text	Function	Flags	DPT type	Size
1470	Fac.12 Sun auto. Azimuth up to (in °)	Input	RWC T	[14.7] DPT_Val- ue_AngleDeg	4 Bytes
1471	Fac.12 Sun auto. Azimuth up to (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1472	Fac.12 Sun auto. Elevation from (in °)	Input	RWC T	[14.7] DPT_Val- ue_AngleDeg	4 Bytes
1473	Fac.12 Sun auto. Elevation from (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1474	Fac.12 Sun auto. Elevation up to (in °)	Input	RWC T	[14.7] DPT_Val- ue_AngleDeg	4 Bytes
1475	Fac.12 Sun auto. Elevation up to (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1476	Fac.12 Sun auto. AziEle status (1: On 0: Off)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1477	Fac.12 Sun auto. Brightness measurement in lux	Input	-SKÜ	[9.4] DPT_Value_Lux	2 Bytes
1478	Fac.12 Sun auto. Brightness threshold value in Lux	Input	RWC T	[9.4] DPT_Value_Lux	2 Bytes
1479	Fac.12 Sun auto. Brightness threshold (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1480	Fac.12 Sun auto. Bright. Short status (1: On)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1481	Fac.12 Sun auto. Bright. Long status (1: On)	Output	R-CT	[1.1] DPT_Switch	1 Bit
1482	Façade 12 extension delay in min.	Input/ Output	RWC T	[7.6] DPT_TimePeri- odMin	2 Bytes
1483	Façade 12 extension delay in min. (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1484	Façade 12 short delay in seconds	Input/ Output	RWC T	[7.5] DPT_TimePeri- odSec	2 Bytes
1485	Façade 12 short delay in seconds (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1486	Façade 12 retraction delay in min.	Input/ Output	RWC T	[7.6] DPT_TimePeri- odMin	2 Bytes
1487	Façade 12 retraction delay in min. (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1488	Façade 12 movement position	Output	R-CT	[5.1] DPT_Scaling	1 Byte
1489	Fac.12 blind position	Output	R-CT	[5.1] DPT_Scaling	1 Byte
1490	Façade 12 channel status output (1: On 0: Off)	Input	RWC-	[1.1] DPT_Switch	1 Bit
1491	Façade 12 channel state text	Output	R-CT	[16.0] DPT_String_ASCII	14 Bytes
1492	Façade 12 channel status bit text	Output	R-CT	[16.0] DPT_String_ASCII	14 Bytes

No.	Text	Function	Flags	DPT type	Size
1493	Façade 12 channel status bit state	Output	R-CT	[1.1] DPT_Switch	1 Bit
1494	Façade 12 channel delay	Output	R-CT	[7.5] DPT_TimePeriodSec	2 Bytes
1495	Façade 12 channel status bit selection (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1530	Calculator 1: Input I1	Input	RWC T	Depending on setting	4 Bytes
1531	Calculator 1: Input I2	Input	RWC T	Depending on setting	4 Bytes
1532	Calculator 1: Input I3	Input	RWC T	Depending on setting	4 Bytes
1533	Calculator 1: Output O1	Output	R-CT	Depending on setting	4 Bytes
1534	Calculator 1: Output O2	Output	R-CT	Depending on setting	4 Bytes
1535	Calculator 1: Condition text	Output	R-CT	[16.0] DPT_String_ASCII	14 Bytes
1536	Calculator 1: Monitoring status	Output	R-CT	[1.1] DPT_Switch	1 Bit
1537	Calculator 1: Block (1: Block)	Input	-WC-	[1.1] DPT_Switch	1 Bit
1538	Calculator 2: Input I1	Input	RWC T	Depending on setting	4 Bytes
1539	Calculator 2: Input I2	Input	RWC T	Depending on setting	4 Bytes
1540	Calculator 2: Input I3	Input	RWC T	Depending on setting	4 Bytes
1541	Calculator 2: Output O1	Output	R-CT	Depending on setting	4 Bytes
1542	Calculator 2: Output O2	Output	R-CT	Depending on setting	4 Bytes
1543	Calculator 2: Condition text	Output	R-CT	[16.0] DPT_String_ASCII	14 Bytes
1544	Calculator 2: Monitoring status	Output	R-CT	[1.1] DPT_Switch	1 Bit
1545	Calculator 2: Block (1: Block)	Input	-WC-	[1.1] DPT_Switch	1 Bit
1546	Calculator 3: Input I1	Input	RWC T	Depending on setting	4 Bytes
1547	Calculator 3: Input I2	Input	RWC T	Depending on setting	4 Bytes
1548	Calculator 3: Input I3	Input	RWC T	Depending on setting	4 Bytes
1549	Calculator 3: Output O1	Output	R-CT	Depending on setting	4 Bytes
1550	Calculator 3: Output O2	Output	R-CT	Depending on setting	4 Bytes

No.	Text	Function	Flags	DPT type	Size
1551	Calculator 3: Condition text	Output	R-CT	[16.0] DPT_String_ASCII	14 Bytes
1552	Calculator 3: Monitoring status	Output	R-CT	[1.1] DPT_Switch	1 Bit
1553	Calculator 3: Block (1: Block)	Input	-WC-	[1.1] DPT_Switch	1 Bit
1554	Calculator 4: Input I1	Input	RWC T	Depending on setting	4 Bytes
1555	Calculator 4: Input I2	Input	RWC T	Depending on setting	4 Bytes
1556	Calculator 4: Input I3	Input	RWC T	Depending on setting	4 Bytes
1557	Calculator 4: Output O1	Output	R-CT	Depending on setting	4 Bytes
1558	Calculator 4: Output O2	Output	R-CT	Depending on setting	4 Bytes
1559	Calculator 4: Condition text	Output	R-CT	[16.0] DPT_String_ASCII	14 Bytes
1560	Calculator 4: Monitoring status	Output	R-CT	[1.1] DPT_Switch	1 Bit
1561	Calculator 4: Block (1: Block)	Input	-WC-	[1.1] DPT_Switch	1 Bit
1562	Calculator 5: Input I1	Input	RWC T	Depending on setting	4 Bytes
1563	Calculator 5: Input I2	Input	RWC T	Depending on setting	4 Bytes
1564	Calculator 5: Input I3	Input	RWC T	Depending on setting	4 Bytes
1565	Calculator 5: Output O1	Output	R-CT	Depending on setting	4 Bytes
1566	Calculator 5: Output O2	Output	R-CT	Depending on setting	4 Bytes
1567	Calculator 5: Condition text	Output	R-CT	[16.0] DPT_String_ASCII	14 Bytes
1568	Calculator 5: Monitoring status	Output	R-CT	[1.1] DPT_Switch	1 Bit
1569	Calculator 5: Block (1: Block)	Input	-WC-	[1.1] DPT_Switch	1 Bit
1570	Calculator 6: Input I1	Input	RWC T	Depending on setting	4 Bytes
1571	Calculator 6: Input I2	Input	RWC T	Depending on setting	4 Bytes
1572	Calculator 6: Input I3	Input	RWC T	Depending on setting	4 Bytes
1573	Calculator 6: Output O1	Output	R-CT	Depending on setting	4 Bytes
1574	Calculator 6: Output O2	Output	R-CT	Depending on setting	4 Bytes
1575	Calculator 6: Condition text	Output	R-CT	[16.0] DPT_String_ASCII	14 Bytes

No.	Text	Function	Flags	DPT type	Size
1576	Calculator 6: Monitoring status	Output	R-CT	[1.1] DPT_Switch	1 Bit
1577	Calculator 6: Block (1: Block)	Input	-WC-	[1.1] DPT_Switch	1 Bit
1578	Calculator 7: Input I1	Input	RWC T	Depending on setting	4 Bytes
1579	Calculator 7: Input I2	Input	RWC T	Depending on setting	4 Bytes
1580	Calculator 7: Input I3	Input	RWC T	Depending on setting	4 Bytes
1581	Calculator 7: Output O1	Output	R-CT	Depending on setting	4 Bytes
1582	Calculator 7: Output O2	Output	R-CT	Depending on setting	4 Bytes
1583	Calculator 7: Condition text	Output	R-CT	[16.0] DPT_String_ASCII	14 Bytes
1584	Calculator 7: Monitoring status	Output	R-CT	[1.1] DPT_Switch	1 Bit
1585	Calculator 7: Block (1: Block)	Input	-WC-	[1.1] DPT_Switch	1 Bit
1586	Calculator 8: Input I1	Input	RWC T	Depending on setting	4 Bytes
1587	Calculator 8: Input I2	Input	RWC T	Depending on setting	4 Bytes
1588	Calculator 8: Input I3	Input	RWC T	Depending on setting	4 Bytes
1589	Calculator 8: Output O1	Output	R-CT	Depending on setting	4 Bytes
1590	Calculator 8: Output O2	Output	R-CT	Depending on setting	4 Bytes
1591	Calculator 8: Condition text	Output	R-CT	[16.0] DPT_String_ASCII	14 Bytes
1592	Calculator 8: Monitoring status	Output	R-CT	[1.1] DPT_Switch	1 Bit
1593	Calculator 8: Block (1: Block)	Input	-WC-	[1.1] DPT_Switch	1 Bit
1600	Weekly timer period 1: Switch-on time	Input	RWC T	[10.1] DPT_TimeOf-Day	3 Bytes
1601	Weekly timer period 1: Off time	Input	RWC T	[10.1] DPT_TimeOf-Day	3 Bytes
1602	Weekly timer period 1: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit
1603	Weekly timer period 1: 8-bit output	Output	R-CT	[5.10] DPT_Value_1_Ucount	1 Byte
1604	Weekly timer period 2: Switch-on time	Input	RWC T	[10.1] DPT_TimeOf-Day	3 Bytes
1605	Weekly timer period 2: Off time	Input	RWC T	[10.1] DPT_TimeOf-Day	3 Bytes
1606	Weekly timer period 2: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit

No.	Text	Function	Flags	DPT type	Size
1607	Weekly timer period 2: 8-bit output	Output	R-CT	[5.10] DPT_Val-ue_1_Ucount	1 Byte
1608	Weekly timer period 3: Switch-on time	Input	RWC T	[10.1] DPT_TimeOf-Day	3 Bytes
1609	Weekly timer period 3: Off time	Input	RWC T	[10.1] DPT_TimeOf-Day	3 Bytes
1610	Weekly timer period 3: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit
1611	Weekly timer period 3: 8-bit output	Output	R-CT	[5.10] DPT_Val-ue_1_Ucount	1 Byte
1612	Weekly timer period 4: Switch-on time	Input	RWC T	[10.1] DPT_TimeOf-Day	3 Bytes
1613	Weekly timer period 4: Off time	Input	RWC T	[10.1] DPT_TimeOf-Day	3 Bytes
1614	Weekly timer period 4: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit
1615	Weekly timer period 4: 8-bit output	Output	R-CT	[5.10] DPT_Val-ue_1_Ucount	1 Byte
1616	Weekly timer period 5: Switch-on time	Input	RWC T	[10.1] DPT_TimeOf-Day	3 Bytes
1617	Weekly timer period 5: Off time	Input	RWC T	[10.1] DPT_TimeOf-Day	3 Bytes
1618	Weekly timer period 5: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit
1619	Weekly timer period 5: 8-bit output	Output	R-CT	[5.10] DPT_Val-ue_1_Ucount	1 Byte
1620	Weekly timer period 6: Switch-on time	Input	RWC T	[10.1] DPT_TimeOf-Day	3 Bytes
1621	Weekly timer period 6: Off time	Input	RWC T	[10.1] DPT_TimeOf-Day	3 Bytes
1622	Weekly timer period 6: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit
1623	Weekly timer period 6: 8-bit output	Output	R-CT	[5.10] DPT_Val-ue_1_Ucount	1 Byte
1624	Weekly timer period 7: Switch-on time	Input	RWC T	[10.1] DPT_TimeOf-Day	3 Bytes
1625	Weekly timer period 7: Off time	Input	RWC T	[10.1] DPT_TimeOf-Day	3 Bytes
1626	Weekly timer period 7: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit
1627	Weekly timer period 7: 8-bit output	Output	R-CT	[5.10] DPT_Val-ue_1_Ucount	1 Byte
1628	Weekly timer period 8: Switch-on time	Input	RWC T	[10.1] DPT_TimeOf-Day	3 Bytes

No.	Text	Function	Flags	DPT type	Size
1629	Weekly timer period 8: Off time	Input	RWC T	[10.1] DPT_TimeOf- Day	3 Bytes
1630	Weekly timer period 8: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit
1631	Weekly timer period 8: 8-bit output	Output	R-CT	[5.10] DPT_Val- ue_1_Ucount	1 Byte
1632	Weekly timer period 9: Switch-on time	Input	RWC T	[10.1] DPT_TimeOf- Day	3 Bytes
1633	Weekly timer period 9: Off time	Input	RWC T	[10.1] DPT_TimeOf- Day	3 Bytes
1634	Weekly timer period 9: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit
1635	Weekly timer period 9: 8-bit output	Output	R-CT	[5.10] DPT_Val- ue_1_Ucount	1 Byte
1636	Weekly timer period 10: Switch-on time	Input	RWC T	[10.1] DPT_TimeOf- Day	3 Bytes
1637	Weekly timer period 10: Off time	Input	RWC T	[10.1] DPT_TimeOf- Day	3 Bytes
1638	Weekly timer period 10: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit
1639	Weekly timer period 10: 8-bit output	Output	R-CT	[5.10] DPT_Val- ue_1_Ucount	1 Byte
1640	Weekly timer period 11: Switch-on time	Input	RWC T	[10.1] DPT_TimeOf- Day	3 Bytes
1641	Weekly timer period 11: Off time	Input	RWC T	[10.1] DPT_TimeOf- Day	3 Bytes
1642	Weekly timer period 11: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit
1643	Weekly timer period 11: 8-bit output	Output	R-CT	[5.10] DPT_Val- ue_1_Ucount	1 Byte
1644	Weekly timer period 12: Switch-on time	Input	RWC T	[10.1] DPT_TimeOf- Day	3 Bytes
1645	Weekly timer period 12: Off time	Input	RWC T	[10.1] DPT_TimeOf- Day	3 Bytes
1646	Weekly timer period 12: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit
1647	Weekly timer period 12: 8-bit output	Output	R-CT	[5.10] DPT_Val- ue_1_Ucount	1 Byte
1648	Weekly timer period 13: Switch-on time	Input	RWC T	[10.1] DPT_TimeOf- Day	3 Bytes
1649	Weekly timer period 13: Off time	Input	RWC T	[10.1] DPT_TimeOf- Day	3 Bytes
1650	Weekly timer period 13: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit

No.	Text	Function	Flags	DPT type	Size
1651	Weekly timer period 13: 8-bit output	Output	R-CT	[5.10] DPT_Val-ue_1_Ucount	1 Byte
1652	Weekly timer period 14: Switch-on time	Input	RWC T	[10.1] DPT_TimeOf-Day	3 Bytes
1653	Weekly timer period 14: Off time	Input	RWC T	[10.1] DPT_TimeOf-Day	3 Bytes
1654	Weekly timer period 14: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit
1655	Weekly timer period 14: 8-bit output	Output	R-CT	[5.10] DPT_Val-ue_1_Ucount	1 Byte
1656	Weekly timer period 15: Switch-on time	Input	RWC T	[10.1] DPT_TimeOf-Day	3 Bytes
1657	Weekly timer period 15: Off time	Input	RWC T	[10.1] DPT_TimeOf-Day	3 Bytes
1658	Weekly timer period 15: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit
1659	Weekly timer period 15: 8-bit output	Output	R-CT	[5.10] DPT_Val-ue_1_Ucount	1 Byte
1660	Weekly timer period 16: Switch-on time	Input	RWC T	[10.1] DPT_TimeOf-Day	3 Bytes
1661	Weekly timer period 16: Off time	Input	RWC T	[10.1] DPT_TimeOf-Day	3 Bytes
1662	Weekly timer period 16: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit
1663	Weekly timer period 16: 8-bit output	Output	R-CT	[5.10] DPT_Val-ue_1_Ucount	1 Byte
1664	Weekly timer period 17: Switch-on time	Input	RWC T	[10.1] DPT_TimeOf-Day	3 Bytes
1665	Weekly timer period 17: Off time	Input	RWC T	[10.1] DPT_TimeOf-Day	3 Bytes
1666	Weekly timer period 17: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit
1667	Weekly timer period 17: 8-bit output	Output	R-CT	[5.10] DPT_Val-ue_1_Ucount	1 Byte
1668	Weekly timer period 18: Switch-on time	Input	RWC T	[10.1] DPT_TimeOf-Day	3 Bytes
1669	Weekly timer period 18: Off time	Input	RWC T	[10.1] DPT_TimeOf-Day	3 Bytes
1670	Weekly timer period 18: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit
1671	Weekly timer period 18: 8-bit output	Output	R-CT	[5.10] DPT_Val-ue_1_Ucount	1 Byte
1672	Weekly timer period 19: Switch-on time	Input	RWC T	[10.1] DPT_TimeOf-Day	3 Bytes

No.	Text	Function	Flags	DPT type	Size
1673	Weekly timer period 19: Off time	Input	RWC T	[10.1] DPT_TimeOf- Day	3 Bytes
1674	Weekly timer period 19: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit
1675	Weekly timer period 19: 8-bit output	Output	R-CT	[5.10] DPT_Val- ue_1_Ucount	1 Byte
1676	Weekly timer period 20: Switch-on time	Input	RWC T	[10.1] DPT_TimeOf- Day	3 Bytes
1677	Weekly timer period 20: Off time	Input	RWC T	[10.1] DPT_TimeOf- Day	3 Bytes
1678	Weekly timer period 20: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit
1679	Weekly timer period 20: 8-bit output	Output	R-CT	[5.10] DPT_Val- ue_1_Ucount	1 Byte
1680	Weekly timer period 21: Switch-on time	Input	RWC T	[10.1] DPT_TimeOf- Day	3 Bytes
1681	Weekly timer period 21: Off time	Input	RWC T	[10.1] DPT_TimeOf- Day	3 Bytes
1682	Weekly timer period 21: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit
1683	Weekly timer period 21: 8-bit output	Output	R-CT	[5.10] DPT_Val- ue_1_Ucount	1 Byte
1684	Weekly timer period 22: Switch-on time	Input	RWC T	[10.1] DPT_TimeOf- Day	3 Bytes
1685	Weekly timer period 22: Off time	Input	RWC T	[10.1] DPT_TimeOf- Day	3 Bytes
1686	Weekly timer period 22: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit
1687	Weekly timer period 22: 8-bit output	Output	R-CT	[5.10] DPT_Val- ue_1_Ucount	1 Byte
1688	Weekly timer period 23: Switch-on time	Input	RWC T	[10.1] DPT_TimeOf- Day	3 Bytes
1689	Weekly timer period 23: Off time	Input	RWC T	[10.1] DPT_TimeOf- Day	3 Bytes
1690	Weekly timer period 23: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit
1691	Weekly timer period 23: 8-bit output	Output	R-CT	[5.10] DPT_Val- ue_1_Ucount	1 Byte
1692	Weekly timer period 24: Switch-on time	Input	RWC T	[10.1] DPT_TimeOf- Day	3 Bytes
1693	Weekly timer period 24: Off time	Input	RWC T	[10.1] DPT_TimeOf- Day	3 Bytes
1694	Weekly timer period 24: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit

No.	Text	Function	Flags	DPT type	Size
1695	Weekly timer period 24: 8-bit output	Output	R-CT	[5.10] DPT_Value_1_Ucount	1 Byte
1720	Calendar timer period 1: Start date	Input	RWC T	[11.1] DPT_Date	3 Bytes
1721	Calendar timer period 1: End date	Input	RWC T	[11.1] DPT_Date	3 Bytes
1722	Calendar timer period 1 sequence 1: Switch-on time	Input	RWC T	[10.1] DPT_TimeOf-Day	3 Bytes
1723	Calendar timer period 1 sequence 1: Off time	Input	RWC T	[10.1] DPT_TimeOf-Day	3 Bytes
1724	Calendar timer period 1 sequence 1: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit
1725	Calendar timer period 1 sequence 1: 8-bit output	Output	R-CT	[5.10] DPT_Value_1_Ucount	1 Byte
1726	Calendar timer period 2 sequence 1: Switch-on time	Input	RWC T	[10.1] DPT_TimeOf-Day	3 Bytes
1727	Calendar timer period 2 sequence 1: Off time	Input	RWC T	[10.1] DPT_TimeOf-Day	3 Bytes
1728	Calendar timer period 2 sequence 1: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit
1729	Calendar timer period 2 sequence 1: 8-bit output	Output	R-CT	[5.10] DPT_Value_1_Ucount	1 Byte
1730	Calendar timer period 2: Start date	Input	RWC T	[11.1] DPT_Date	3 Bytes
1731	Calendar timer period 2: End date	Input	RWC T	[11.1] DPT_Date	3 Bytes
1732	Calendar timer period 2 sequence 1: Switch-on time	Input	RWC T	[10.1] DPT_TimeOf-Day	3 Bytes
1733	Calendar timer period 2 sequence 1: Off time	Input	RWC T	[10.1] DPT_TimeOf-Day	3 Bytes
1734	Calendar timer period 2 sequence 1: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit
1735	Calendar timer period 2 sequence 1: 8-bit output	Output	R-CT	[5.10] DPT_Value_1_Ucount	1 Byte
1736	Calendar timer period 2 sequence 2: Switch-on time	Input	RWC T	[10.1] DPT_TimeOf-Day	3 Bytes
1737	Calendar timer period 2 sequence 2: Off time	Input	RWC T	[10.1] DPT_TimeOf-Day	3 Bytes
1738	Calendar timer period 2 sequence 2: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit
1739	Calendar timer period 2 sequence 2: 8-bit output	Output	R-CT	[5.10] DPT_Value_1_Ucount	1 Byte
1740	Calendar timer period 3: Start date	Input	RWC T	[11.1] DPT_Date	3 Bytes

No.	Text	Function	Flags	DPT type	Size
1741	Calendar timer period 3: End date	Input	RWC T	[11.1] DPT_Date	3 Bytes
1742	Calendar timer period 3 sequence 1: Switch-on time	Input	RWC T	[10.1] DPT_TimeOf-Day	3 Bytes
1743	Calendar timer period 3 sequence 1: Off time	Input	RWC T	[10.1] DPT_TimeOf-Day	3 Bytes
1744	Calendar timer period 3 sequence 1: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit
1745	Calendar timer period 3 sequence 1: 8-bit output	Output	R-CT	[5.10] DPT_Value_1_Ucount	1 Byte
1746	Calendar timer period 3 sequence 2: Switch-on time	Input	RWC T	[10.1] DPT_TimeOf-Day	3 Bytes
1747	Calendar timer period 3 sequence 2: Off time	Input	RWC T	[10.1] DPT_TimeOf-Day	3 Bytes
1748	Calendar timer period 3 sequence 2: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit
1749	Calendar timer period 3 sequence 2: 8-bit output	Output	R-CT	[5.10] DPT_Value_1_Ucount	1 Byte
1750	Calendar timer period 4: Start date	Input	RWC T	[11.1] DPT_Date	3 Bytes
1751	Calendar timer period 4: End date	Input	RWC T	[11.1] DPT_Date	3 Bytes
1752	Calendar timer period 4 sequence 1: Switch-on time	Input	RWC T	[10.1] DPT_TimeOf-Day	3 Bytes
1753	Calendar timer period 4 sequence 1: Off time	Input	RWC T	[10.1] DPT_TimeOf-Day	3 Bytes
1754	Calendar timer period 4 sequence 1: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit
1755	Calendar timer period 4 sequence 1: 8-bit output	Output	R-CT	[5.10] DPT_Value_1_Ucount	1 Byte
1756	Calendar timer period 4 sequence 2: Switch-on time	Input	RWC T	[10.1] DPT_TimeOf-Day	3 Bytes
1757	Calendar timer period 4 sequence 2: Off time	Input	RWC T	[10.1] DPT_TimeOf-Day	3 Bytes
1758	Calendar timer period 4 sequence 2: Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit
1759	Calendar timer period 4 sequence 2: 8-bit output	Output	R-CT	[5.10] DPT_Value_1_Ucount	1 Byte
1780	Logic input 1	Input	-WC-	[1.2] DPT_Bool	1 Bit
1781	Logic input 2	Input	-WC-	[1.2] DPT_Bool	1 Bit
1782	Logic input 3	Input	-WC-	[1.2] DPT_Bool	1 Bit
1783	Logic input 4	Input	-WC-	[1.2] DPT_Bool	1 Bit
1784	Logic input 5	Input	-WC-	[1.2] DPT_Bool	1 Bit
1785	Logic input 6	Input	-WC-	[1.2] DPT_Bool	1 Bit

No.	Text	Function	Flags	DPT type	Size
1786	Logic input 7	Input	-WC-	[1.2] DPT_Bool	1 Bit
1787	Logic input 8	Input	-WC-	[1.2] DPT_Bool	1 Bit
1788	Logic input 9	Input	-WC-	[1.2] DPT_Bool	1 Bit
1789	Logic input 10	Input	-WC-	[1.2] DPT_Bool	1 Bit
1790	Logic input 11	Input	-WC-	[1.2] DPT_Bool	1 Bit
1791	Logic input 12	Input	-WC-	[1.2] DPT_Bool	1 Bit
1792	Logic input 13	Input	-WC-	[1.2] DPT_Bool	1 Bit
1793	Logic input 14	Input	-WC-	[1.2] DPT_Bool	1 Bit
1794	Logic input 15	Input	-WC-	[1.2] DPT_Bool	1 Bit
1795	Logic input 16	Input	-WC-	[1.2] DPT_Bool	1 Bit
1800	AND logic 1: 1-bit switching output	Output	R-CT	[1.2] DPT_Bool	1 Bit
1801	AND logic 1: 8-bit output A	Output	R-CT	[5.1] DPT_Scaling	1 Byte
1802	AND logic 1: 8-bit output B	Output	R-CT	[5.1] DPT_Scaling	1 Byte
1803	AND logic 1: Block	Input	-WC-	[1.1] DPT_Switch	1 Bit
1804	AND logic 2: 1-bit switching output	Output	R-CT	[1.2] DPT_Bool	1 Bit
1805	AND logic 2: 8-bit output A	Output	R-CT	[5.1] DPT_Scaling	1 Byte
1806	AND logic 2: 8-bit output B	Output	R-CT	[5.1] DPT_Scaling	1 Byte
1807	AND logic 2: Block	Input	-WC-	[1.1] DPT_Switch	1 Bit
1808	AND logic 3: 1-bit switching output	Output	R-CT	[1.2] DPT_Bool	1 Bit
1809	AND logic 3: 8-bit output A	Output	R-CT	[5.1] DPT_Scaling	1 Byte
1810	AND logic 3: 8-bit output B	Output	R-CT	[5.1] DPT_Scaling	1 Byte
1811	AND logic 3: Block	Input	-WC-	[1.1] DPT_Switch	1 Bit
1812	AND logic 4: 1-bit switching output	Output	R-CT	[1.2] DPT_Bool	1 Bit
1813	AND logic 4: 8-bit output A	Output	R-CT	[5.1] DPT_Scaling	1 Byte
1814	AND logic 4: 8-bit output B	Output	R-CT	[5.1] DPT_Scaling	1 Byte
1815	AND logic 4: Block	Input	-WC-	[1.1] DPT_Switch	1 Bit
1816	AND logic 5: 1-bit switching output	Output	R-CT	[1.2] DPT_Bool	1 Bit
1817	AND logic 5: 8-bit output A	Output	R-CT	[5.1] DPT_Scaling	1 Byte
1818	AND logic 5: 8-bit output B	Output	R-CT	[5.1] DPT_Scaling	1 Byte
1819	AND logic 5: Block	Input	-WC-	[1.1] DPT_Switch	1 Bit
1820	AND logic 6: 1-bit switching output	Output	R-CT	[1.2] DPT_Bool	1 Bit
1821	AND logic 6: 8-bit output A	Output	R-CT	[5.1] DPT_Scaling	1 Byte
1822	AND logic 6: 8-bit output B	Output	R-CT	[5.1] DPT_Scaling	1 Byte
1823	AND logic 6: Block	Input	-WC-	[1.1] DPT_Switch	1 Bit
1824	AND logic 7: 1-bit switching output	Output	R-CT	[1.2] DPT_Bool	1 Bit
1825	AND logic 7: 8-bit output A	Output	R-CT	[5.1] DPT_Scaling	1 Byte
1826	AND logic 7: 8-bit output B	Output	R-CT	[5.1] DPT_Scaling	1 Byte
1827	AND logic 7: Block	Input	-WC-	[1.1] DPT_Switch	1 Bit
1828	AND logic 8: 1-bit switching output	Output	R-CT	[1.2] DPT_Bool	1 Bit
1829	AND logic 8: 8-bit output A	Output	R-CT	[5.1] DPT_Scaling	1 Byte

No.	Text	Function	Flags	DPT type	Size
1830	AND logic 8: 8-bit output B	Output	R-CT	[5.1] DPT_Scaling	1 Byte
1831	AND logic 8: Block	Input	-WC-	[1.1] DPT_Switch	1 Bit
1832	OR logic 1: 1-bit switching output	Output	R-CT	[1.2] DPT_Bool	1 Bit
1833	OR logic 1: 8-bit output A	Output	R-CT	[5.1] DPT_Scaling	1 Byte
1834	OR logic 1: 8-bit output B	Output	R-CT	[5.1] DPT_Scaling	1 Byte
1835	OR logic 1: Block	Input	-WC-	[1.1] DPT_Switch	1 Bit
1836	OR logic 2: 1-bit switching output	Output	R-CT	[1.2] DPT_Bool	1 Bit
1837	OR logic 2: 8-bit output A	Output	R-CT	[5.1] DPT_Scaling	1 Byte
1838	OR logic 2: 8-bit output B	Output	R-CT	[5.1] DPT_Scaling	1 Byte
1839	OR logic 2: Block	Input	-WC-	[1.1] DPT_Switch	1 Bit
1840	OR logic 3: 1-bit switching output	Output	R-CT	[1.2] DPT_Bool	1 Bit
1841	OR logic 3: 8-bit output A	Output	R-CT	[5.1] DPT_Scaling	1 Byte
1842	OR logic 3: 8-bit output B	Output	R-CT	[5.1] DPT_Scaling	1 Byte
1843	OR logic 3: Block	Input	-WC-	[1.1] DPT_Switch	1 Bit
1844	OR logic 4: 1-bit switching output	Output	R-CT	[1.2] DPT_Bool	1 Bit
1845	OR logic 4: 8-bit output A	Output	R-CT	[5.1] DPT_Scaling	1 Byte
1846	OR logic 4: 8-bit output B	Output	R-CT	[5.1] DPT_Scaling	1 Byte
1847	OR logic 4: Block	Input	-WC-	[1.1] DPT_Switch	1 Bit
1848	OR logic 5: 1-bit switching output	Output	R-CT	[1.2] DPT_Bool	1 Bit
1849	OR logic 5: 8-bit output A	Output	R-CT	[5.1] DPT_Scaling	1 Byte
1850	OR logic 5: 8-bit output B	Output	R-CT	[5.1] DPT_Scaling	1 Byte
1851	OR logic 5: Block	Input	-WC-	[1.1] DPT_Switch	1 Bit
1852	OR logic 6: 1-bit switching output	Output	R-CT	[1.2] DPT_Bool	1 Bit
1853	OR logic 6: 8-bit output A	Output	R-CT	[5.1] DPT_Scaling	1 Byte
1854	OR logic 6: 8-bit output B	Output	R-CT	[5.1] DPT_Scaling	1 Byte
1855	OR logic 6: Block	Input	-WC-	[1.1] DPT_Switch	1 Bit
1856	OR logic 7: 1-bit switching output	Output	R-CT	[1.2] DPT_Bool	1 Bit
1857	OR logic 7: 8-bit output A	Output	R-CT	[5.1] DPT_Scaling	1 Byte
1858	OR logic 7: 8-bit output B	Output	R-CT	[5.1] DPT_Scaling	1 Byte
1859	OR logic 7: Block	Input	-WC-	[1.1] DPT_Switch	1 Bit
1860	OR logic 8: 1-bit switching output	Output	R-CT	[1.2] DPT_Bool	1 Bit
1861	OR logic 8: 8-bit output A	Output	R-CT	[5.1] DPT_Scaling	1 Byte
1862	OR logic 8: 8-bit output B	Output	R-CT	[5.1] DPT_Scaling	1 Byte
1863	OR logic 8: Block	Input	-WC-	[1.1] DPT_Switch	1 Bit
1889	Wind direction: Measurement [°]	Output	R-CT	[14.7] DPT_Value_AngleDeg	4 Bytes
1890	Wind direction: Measurement [compass direction]	Output	R-CT	[16.0] DPT_String_ASCII	14 Bytes
1891	Wind direction measurement [°]	Output	R-CT	[5.3] DPT_Angle	1 Byte
1892	Wind direction north	Output	R-CT	[1.2] DPT_Bool	1 Bit
1893	Wind direction North-East	Output	R-CT	[1.2] DPT_Bool	1 Bit

No.	Text	Function	Flags	DPT type	Size
1894	Wind direction east	Output	R-CT	[1.2] DPT_Bool	1 Bit
1895	Wind direction South-East	Output	R-CT	[1.2] DPT_Bool	1 Bit
1896	Wind direction south	Output	R-CT	[1.2] DPT_Bool	1 Bit
1897	Wind direction South-West	Output	R-CT	[1.2] DPT_Bool	1 Bit
1898	Wind direction west	Output	R-CT	[1.2] DPT_Bool	1 Bit
1899	Wind direction North-West	Output	R-CT	[1.2] DPT_Bool	1 Bit
1904	Wind direction: Range 1 Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit
1905	Wind direction range value 1: Delay from 0 to 1	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
1906	Wind direction range value 1: Delay from 1 to 0	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
1907	Wind direction range value 1 from: (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1908	Wind direction range value 1 up to: (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1909	Wind direction range value 1 from: Absolute value	Input / Output	RWC T	[14.7] DPT_Value_AngleDeg	4 Bytes
1910	Wind direction range value 1 up to: Absolute value	Input / Output	RWC T	[14.7] DPT_Value_AngleDeg	4 Bytes
1911	Wind direction range value 1: Switching output block	Input	-WC-	[1.1] DPT_Switch	1 Bit
1914	Wind direction: Range 2 Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit
1915	Wind direction range value 2: Delay from 0 to 1	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
1916	Wind direction range value 2: Delay from 1 to 0	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
1917	Wind direction range value 2 from: (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1918	Wind direction range value 2 up to: (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1919	Wind direction range value 2 from: Absolute value	Input / Output	RWC T	[14.7] DPT_Value_AngleDeg	4 Bytes
1920	Wind direction range value 2 up to: Absolute value	Input / Output	RWC T	[14.7] DPT_Value_AngleDeg	4 Bytes
1921	Wind direction range value 2: Switching output block	Input	-WC-	[1.1] DPT_Switch	1 Bit
1924	Wind direction: Range 3 Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit
1925	Wind direction range value 3: Delay from 0 to 1	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
1926	Wind direction range value 3: Delay from 1 to 0	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes

No.	Text	Function	Flags	DPT type	Size
1927	Wind direction range value 3 from: (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1928	Wind direction range value 3 up to: (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1929	Wind direction range value 3 from: Absolute value	Input / Output	RWC T	[14.7] DPT_Value_AngleDeg	4 Bytes
1930	Wind direction range value 3 up to: Absolute value	Input / Output	RWC T	[14.7] DPT_Value_AngleDeg	4 Bytes
1931	Wind direction range value 3: Switching output block	Input	-WC-	[1.1] DPT_Switch	1 Bit
1934	Wind direction: Range 4 Switching output	Output	R-CT	[1.1] DPT_Switch	1 Bit
1935	Wind direction range value 4: Delay from 0 to 1	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
1936	Wind direction range value 4: Delay from 1 to 0	Input	-WC-	[7.5] DPT_TimePeriodSec	2 Bytes
1937	Wind direction range value 4 from: (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1938	Wind direction range value 4 up to: (1:+ 0:-)	Input	-WC-	[1.7] DPT_Step	1 Bit
1939	Wind direction range value 4 from: Absolute value	Input / Output	RWC T	[14.7] DPT_Value_AngleDeg	4 Bytes
1940	Wind direction range value 4 up to: Absolute value	Input / Output	RWC T	[14.7] DPT_Value_AngleDeg	4 Bytes
1941	Wind direction range value 4: Switching output block	Input	-WC-	[1.1] DPT_Switch	1 Bit

4. Parameter setting

4.0.1. Behaviour on power failure/power restoration

Behaviour on bus or auxiliary power failure

The device sends nothing.

Behaviour on bus or auxiliary voltage restoration and following programming or reset

The device sends all measurement values as well as switching and status outputs according to their send pattern set in the parameters with the delays established in the "General settings" parameter block. The "Software version" communications object is sent once after 5 seconds.

4.0.2. Storage of threshold values

For threshold values that are specified via a communication object, a starting value must be entered for the first commissioning. It is valid until the first communication of a new threshold value.

After this, a threshold value once set per parameter or via a communication object is retained until a new threshold value is sent via a communication object. The last threshold value set by communication object is saved in the device, so that it is retained during a power outage and is available once again when power is restored.

4.0.3. Malfunction objects

Malfunction objects are sent after every reset and, additionally, after changes (i.e. at the beginning and end of a malfunction).

4.0.4. General settings

Set basic characteristics of data transfer. A different transmission delay prevents an overload of the bus shortly after the reset.

Transmission delay after reset/restoration of bus for:	
Measured values	5 ... 300 seconds
Threshold values and switching outputs	5 ... 300 seconds
Façade objects	5 ... 300 seconds
Computer objects	5 ... 300 seconds
time switch objects	5 ... 300 seconds
Logic objects	5 ... 300 seconds
Maximum telegram quota	1 • 2 • 5 • <u>10</u> • 20 • 50 <u>Telegrams per sec.</u>

4.0.5. GPS

Set whether the time and date are to be sent as separate objects or as one common object. Specify whether the time and date are to be set by the GPS signal or objects.

If time and date are **set by the GPS-Signal**, the data is available as soon as a valid GPS signal is received.

If time and date are **set by two objects**, then only a maximum of 10 seconds may elapse between receiving the date and receiving the time. Furthermore, a change of date may not occur between receiving both objects. The objects must be received by the device on the same day.

The device has an integrated real-time clock. Therefore, time keeps on running internally and can be sent to the bus, even when no GPS coverage is available or no time

object has been received for some time. The internal clock can show a time drift of up to ± 6 seconds per day.

Object type date and time	• <u>two separate objects</u> • a common object
Date and time will be set by	• GPS signal and not sent • GPS signal and sent periodically • <u>GPS signal and sent on request</u> • GPS signal and sent on request + periodically • object(s) and not sent
Send cycle (if sent periodically)	5 s ... 2 h; <u>1 min</u>

Set what happens in the event of a GPS malfunction. Please note, that after return of auxiliary voltage, it can take up to 10 minutes before the GPS signal is received.

If there is no reception, GPS fault is ... recognised after the last reception	20 min • <u>30 min</u> • 1 h • 1.5 h • 2 h
GPS fault object sends (1: malfunction 0: no malfunction)	• <u>never</u> • on change • on change to 1 • on change to 0 • on change and periodically • on change to 1 and periodically • on change to 0 and periodically
Send cycle (if sent periodically)	5 s ... 2 h; <u>10 s</u>

4.1. Location

The location data is required in order to be able to calculate the **position of the sun** with the help of the date and time.

The **location** is received via GPS or entered manually (selection of the nearest town or by entering coordinates). Also when using the GPS signal coordinates can be entered manually for the initial commissioning. This data is used as long as no GPS reception exists. For this you select the option "Input (only valid until the first GPS reception)".

Location is determined by	• input • <u>input (only valid until the first GPS reception)</u> • GPS reception
Location input using (if input selected)	• <u>Town</u> • <u>Coordinates</u>

Country (if input by town is selected)	• Belgium • Denmark • <u>Germany</u> • France • Great Britain • Italy	• Liechtenstein • Luxembourg • Netherlands • Austria • Switzerland • USA
Town (if input by town is selected)	6 towns in Belgium 1 town in Denmark 48 towns in Germany; <u>Stuttgart</u> 23 towns in France 4 towns in Great Britain 10 towns in Italy 1 town in Liechtenstein 1 town in Luxembourg 2 towns in the Netherlands 4 towns in Austria 4 towns in Switzerland 2 towns in the USA	
E. longitude [degrees, -180...+180] (if input by coordinates is selected)	9	[negative values mean "western longitude"]
E. longitude [minutes, -59...+59] (if input by coordinates is selected)	10	[negative values mean "western longitude"]
Northern latitude [Degrees, -90...+90] (if input by coordinates is selected)	48	[negative values mean "southern latitude"]
Northern latitude [minutes, -59...+59] (if input by coordinates is selected)	46	[negative values mean "southern latitude"]

The location-**height** above sea level is used to calculate the normal air pressure (see also chapter *Information on air pressure*, page 103).

The height is received per GPS or entered manually. When using the GPS signal a height can be entered manually for the initial commissioning. This data is used as long as no GPS reception exists. For this you select the option "Input (only valid until the first GPS reception)".

Height is determined by	• Input • <u>Input (only valid until the first GPS reception)</u> • GPS reception
Height above sea level in metres	-1000 ... 10000; <u>200</u>

In order to be able to output the **local time**, the time zone (difference to world time (Coordinated Universal Time)) and the summer time rules must be defined. Specify the hours and minutes after winter time (standard time).

Time zone (relative to GMT):	
Prefix	• positive (+) • negative (-)

Hours	0 ... 13; <u>1</u>
Minutes	0 ... 59; <u>0</u>
Summertime rule	• <u>Europe</u> • <u>USA</u> • user-defined • none
All the following times are to be entered as winter time = standard time	
Start of Summer Time:	
on	• Monday ... <u>Sunday</u> • Date
From (day) (for Europe or USA summer time rules) (Day) (For user defined summer time rules)	1 ... 31; <u>25</u>
(Month)	1 ... 12; <u>3</u>
(Hour)	0 ... 23; <u>2</u>
(minutes)	<u>0</u> ... 59
End of Summer Time:	
on	• Monday ... <u>Sunday</u> • Date
From (day) (for Europe or USA summer time rules) (Day) (For user defined summer time rules)	1 ... 31; <u>25</u>
(Month)	1 ... 12; <u>10</u>
(hour)	0 ... 23; <u>2</u>
(minutes)	<u>0</u> ... 59
Time shift:	
hours	-12 ... 12; <u>1</u>
minutes	<u>0</u> ... 59

The standard coordinates can be transmitted from the device to the bus and thus be used in other applications, no matter whether they have been received via GPS or specified manually.

Send coordinates	• <u>never</u> • periodically • on change • on change and periodically
on change of	0.5° • 1° • <u>2°</u> • 5° • 10°
Send cycle	5 s ... 2 h; <u>5 min</u>

4.2. Rain

Activate the rain sensor in order to use objects and switch outputs.

Use rain sensor	<u>No</u> • Yes
-----------------	-----------------

Set, in which cases delay times received are to be kept per object. The parameter is only taken into consideration if the setting by object is activated further down. Please note that the setting "After power restoration and programming" should not be used for the initial start-up, as the factory settings are always used until the first call (setting via objects is ignored).

Maintain the delays received via communication objects	• <u>never</u> • after power restoration • after power restoration and programming
--	--

Select whether the special rain output is to be used with fixed switching delay. This switching output has no delay on rain recognition and 5 minutes delay after it is dry again.

Use rain output with fixed switching delay	<u>No</u> • Yes
--	-----------------

Set the delay times. If the delays are defined using objects, then the times set here are only valid up to the first call.

Delays can be set via objects (in seconds)	<u>No</u> • Yes
Delay on rain	<u>none</u> • 1 s ... • 2 h
Delay on no rain (after drying of the sensor)	<u>5 min</u> • 1 h... • 2 h

Define the send pattern for the rain switch output and specify the object value for the event of rain.

Switching output sends	• on change • on change to rain • on change to no rain • <u>on change and periodically</u> • on change to rain and periodically • on change to no rain and periodically
Send cycle (if sent periodically)	5 s ... 2 h; <u>10 s</u>
Object value(s) with rain	0 • <u>1</u>

4.3. Temperature measurement value

First of all set whether the temperature sensor malfunction object is to be used and correct, if necessary, the output of the measurement value by specifying an offset (e.g. in order to compensate malfunction sources).

Use malfunction object	<u>No</u> • Yes
Offset in 0.1°C	-50... 50; <u>0</u>

Then set the mixed value calculation if desired.

Use external reading	<u>No</u> • Yes
Ext. Reading proportion of the total reading (if external reading is to be used)	5% • 10% • 15% • ... • <u>50%</u> • ... • 95% • 100%
All following settings refer to the total measured value	

Specify the send pattern for the total measured value.

Send pattern	• <u>never</u> • periodically • on change • on change and periodically
on change of (if sent on change)	0.1°C • 0.2°C • <u>0.5°C</u> • 1.0°C • 2.0°C • 5.0°C
Send cycle (if sent periodically)	5 s ... 2 h; <u>10 s</u>

Select whether the minimum and maximum value should be used.

Use minimum and maximum value	<u>No</u> • Yes
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Define the transmission behavior for the felt temperature.

Transmission behaviour for felt temperature (wind chill and heat index)	• <u>not</u> • periodically • on change • on change and periodically
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4.4. Temperature threshold values

Activate the temperature threshold values required (maximum four) The menus for the further setting of the threshold values are then displayed.

Threshold value 1	<u>No</u> • Yes
Threshold value...	<u>No</u> • Yes
Threshold value 4	<u>No</u> • Yes

4.4.1. Temperature threshold value 1-4

Threshold value

Set, in which cases threshold values and delay times received are to be kept per object. The parameter is only taken into consideration if the specification/ setting by object is activated further down. Please note that the setting "After power restoration and programming" should not be used for the initial start-up, as the factory settings are always used until the first call (setting via objects is ignored).

Maintain the threshold values and delays received via communication objects	• never • after power supply restoration • after power supply restoration and programming

Select whether the threshold value is to be specified per parameter or via a communication object.

Threshold value setpoint using	<u>Parameter</u> • Communications object
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When the **threshold value per parameter** is specified, then the value is set.

Threshold value in 0.1°C	-300 ... 800; <u>200</u>
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When the **threshold value per communication object** is specified, the starting value, object value limit and type of change to the threshold value are then set.

Start threshold value in 0.1°C valid until first call	-300 ... 800; <u>200</u>
Object value limit (min) in 0.1°C	<u>-300</u> ... 800
Object value limit (max) in 0.1°C	-300 ... <u>800</u>
Type of threshold change	<u>Absolute value</u> • Increase/decrease
Step size (upon increase/decrease change)	0.1°C • 0.2°C • 0.3°C • 0.4°C • 0.5°C • 1°C • 2°C • 3°C • 4°C • 5°C

With both of the methods for specifying the threshold values the hysteresis is set.

Hysteresis setting	in % • <u>absolute</u>
Hysteresis in % of the threshold value (for setting in %)	0 ... 50; <u>20</u>
Hysteresis in 0.1°C (for absolute setting)	0 ... 1100; <u>50</u>

Switching output

Define which value the output transmits if the threshold value is exceeded or undercut. Set the delay for the switching and in which cases the switch output transmits.

When the following conditions apply, the output is (LV = Threshold value)	• <u>GW above = 1</u> GW - Hyst. below = 0 • <u>GW above = 0</u> GW - Hyst. below = 1 • GW below = 1 GW + Hyst. above = 0 • GW below = 0 GW + Hyst. above = 1
Delays can be set via objects (in seconds)	<u>No</u> • Yes
Delay from 0 to 1	<u>none</u> • 1 s ... 2 h
Delay from 1 to 0	<u>none</u> • 1 s ... 2 h
Switching output sends	• on change • on change to 1 • on change to 0 • <u>on change and periodically</u> • on change to 1 and periodically • on change to 0 and periodically
Cycle (if sent periodically)	<u>5 s</u> ... 2 h

Block

If necessary, activate the switching output block and set what a 1 or 0 at the block entry means and what happens in the event of a block.

Use switching output block	<u>No</u> • Yes
Analysis of the blocking object	• <u>At value 1: block</u> At value 0: release • At value 0: block At value 1: release
Blocking object value before first call	<u>0</u> • 1
Action when locking	• <u>Do not send message</u> • send 0 • send 1
Action upon release (with 2 seconds release delay)	[Dependent on the "Switching output sends" setting]

The behaviour of the switching output on release is dependent on the value of the parameter "Switching output sends" (see "Switching output")

Switching output sends on change	do not send message • Status object/s send/s
Switching output sends on change to 1	do not send message • If switching output = 1 → send 1
Switching output sends on change to 0	do not send message • If switching output = 0 → send 0
Switching output sends on change and periodically	Send switching output status

Switching output sends on change to 1 and periodically	If switching output = 1 → send 1
Switching output sends on change to 0 and periodically	If switching output = 0 → send 0

4.5. Frost alarm

If necessary, activate the parameter frost alarm. The parameter is independent of the frost alarm used for the façade controller. The internal façade frost alarm is set separately (see *Façade setting > Frostalarm*, page 90)

Use frost alarm	<u>No</u> • Yes
-----------------	-----------------

Set which conditions are valid for the frost alarm. The frost alarm is active in cold outdoor temperatures in combination with precipitation.

Start frost alarm when	
an external temperature of (in 0.1 °C) is not reached.	-50 ... 40; <u>20</u>
during or until (in hours) after precipitation.	1 ... 10; <u>5</u>
End frost alarm when	
an external temperature of (in 0.1 °C)	30 ... 100; <u>50</u>
for more than (in hours) is exceeded.	1 ... 10; <u>5</u>

Define the send pattern and the object value.

Send pattern	• <u>on change</u> • on change to frost • on change to no frost • on change and periodically • on change to frost and periodically • on change to no frost and periodically
Send cycle (if sent periodically)	5 s ... 2 h; <u>1 min</u>
Object value with frost	0 • <u>1</u>

4.6. Humidity measurement

Select, whether a **malfunction object** is to be sent if the sensor is faulty.

Use malfunction object	<u>No</u> • Yes
------------------------	-----------------

Use **Offsets** to adjust the readings to be sent.

Offset in 0,1°C	-100 ... 100; <u>0</u>
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The unit can calculate a **mixed value** from its own reading and an external value. Set the mixed value calculation if desired. If an external portion is used, all of the following settings (threshold values, etc.) are related to the overall reading.

Use external measured value	<u>No</u> • Yes
Ext. Reading proportion of the total reading	5% • 10% • ... • <u>50%</u> • ... • 100%
All of the following settings are referred to the total value.	
Send internal and total reading	• <u>never</u> • periodically • on change • on change and periodically
At and above change of (if sent on change)	0.1% RH • 0.2% RH • 0.5% RH • <u>1.0% RH</u> • ... • 25% RH
Send cycle (if sent periodically)	5 s • <u>10 s</u> • ... • 2 h

The **minimum and maximum readings** can be saved and sent to the bus. Use the „Reset humidity min/max value“ object to reset the values to the current readings. The values are not retained after a reset.

Use minimum and maximum value	<u>No</u> • Yes
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4.7. Humidity threshold values

Activate the required air humidity threshold values. The menus for setting the threshold values are displayed.

Use threshold value 1/2/3/4	Yes • <u>No</u>
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4.7.1. Threshold value 1, 2, 3, 4

Threshold value

Set, in which cases **threshold values and delay times** received via objects are to be retained. The parameter is only taken into consideration if the setting via object is activated below. Please note that the setting "After power supply restoration and programming" should not be used for the initial start-up, as the factory settings are always used until the first communication (setting via objects is ignored).

Threshold values and delays shall be maintained	• <u>never</u> • after power supply restoration • after power supply restoration and programming
---	--

Set the threshold value directly in the application program using parameters, or define them via the bus using a communication object.

Threshold value setting using parameter:

Set the threshold values and hysteresis directly.

Threshold value setting using	Parameter • Communication objects
Threshold value in 0.1% RH (valid until 1st communication)	0 ... 1000; <u>650</u>

Threshold value setting using a communication object:

Define, how the threshold value is to be received from the bus. Basically, a new value can be received, or simply a command to increase or decrease.

During initial commissioning, a threshold value must be defined, which will be valid until the first communication with a new threshold value. For units which have already been taken into service, the last communicated threshold value can be used. Basically, a humidity range is specified in which the threshold value can be changed (object value limit).

A set threshold value will be retained until a new value or a change is transferred. The current value is saved, so that it is retained in the event of a power supply failure and will be available once the power supply is restored.

Threshold value setting using	Parameter • Communication objects
Starting threshold value in 0.1% RH valid until first communication	0 ... 1000; <u>650</u>
Object value limit (min.) in 0.1%RH	<u>0</u> ...1000
Object value limit (max.) in 0.1%RH	0... <u>1000</u>
Type of threshold value change	<u>Absolute value</u> • Increase/Decrease
Increment (upon increase/decrease change)	0,10% • 0,20% • 0,50% • 1,00% • <u>2,00%</u> • 5,00% • 10,00% • 20,00%

Set the **hysteresis** independent of the type of threshold value specification.

Hysteresis setting	in % • <u>absolute</u>
Hysteresis of the threshold value in % (relative to the threshold value)	0 ... 50; <u>20</u>
Hysteresis in 0.1% RH (relative to the threshold value)	0 ... 1000; <u>100</u>

Switching output

Set the behaviour of the switching output when a threshold value is exceeded/undercut. The output switching delay can be set using objects or directly as a parameter.

When the following conditions apply, the output is (TV = Threshold value)	• <u>TV above = 1</u> <u>TV - hyst. below = 0</u> • <u>TV above = 0</u> <u>TV - hyst. below = 1</u> • <u>TV below = 1</u> <u>TV + hyst. above = 0</u> • <u>TV below = 0</u> <u>TV + hyst. above = 1</u>
Delays can be set via objects (in seconds)	<u>No</u> • Yes
Switching delay from 0 to 1 (If delay can be set via objects: valid until 1st communication)	<u>None</u> • 1 s • 2 s • 5 s • 10 s • ... • 2 h
Switching delay from 1 to 0 (If delay can be set via objects: valid until 1st communication)	<u>None</u> • 1 s • 2 s • 5 s • 10 s • ... • 2 h
Switching output sends	• on change • on change to 1 • on change to 0 • <u>on change and periodically</u> • on change to 1 and periodically • on change to 0 and periodically
Cycle (is only sent if periodically is selected)	<u>5 s</u> • 10 s • 30 s... • 2 h

Block

The switching output can be blocked using an object.

Use switching output block	<u>No</u> • Yes
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If the block is activated, define specifications here for the behaviour of the output when blocked.

Analysis of the blocking object	• <u>At value 1: block</u> <u>At value 0: release</u> • <u>At value 0: block</u> <u>At value 1: release</u>
Blocking object value before first communication	<u>0</u> • 1
Behaviour of the switching output	
On block	• <u>Do not send message</u> • send 0 • send 1
On release (with 2 seconds release delay)	[Dependent on the "Switching output sends" setting]

The behaviour of the switching output on release is dependent on the value of the parameter "Switching output sends" (see "Switching output")

Switching output sends on change	• Do not send message • Send switching output status
Switching output sends on change to 1	• Do not send message • if switching output = 1 → send 1

Switching output sends on change to 0	• Do not send message • if switching output = 0 → send 0
Switching output sends on change and periodically	Send switching output status
Switching output sends on change to 1 and periodically	if switching output = 1 → send 1
Switching output sends on change to 0 and periodically	if switching output = 0 → send 0

4.8. Dewpoint measurement

The **Weather Station Suntracer KNX pro** calculates the dewpoint temperature and can output the value to the bus.

Sending pattern	• <u>never</u> • periodically • on change • on change and periodically
At and above change of (if sent on change)	0,1°C • 0,2°C • <u>0,5°C</u> • 1,0°C • 2,0°C • 5,0°C
Send cycle (if sent periodically)	5 s • <u>10 s</u> • 30 s • 1 min • ... • 2 h

Activate the monitoring of the coolant temperature if required. The menus for setting the monitoring are displayed.

Use monitoring of the coolant temperature	<u>No</u> • Yes
---	-----------------

4.8.1. Cooling medium temp. monitoring

A threshold value can be set for the temperature of the coolant, which is based on the current dewpoint temperature (offset/deviation). The switching output of the coolant temperature monitoring system can provide a warning prior to any build-up of condensation in the system, and/or activate appropriate countermeasures.

Threshold value

Threshold value = dewpoint temperature + offset

Set, in which cases **offset** received via object is to be retained. Please note that the setting "After power supply restoration and programming" should not be used for the initial start-up, as the factory settings are always used until the first communication (setting via objects is ignored).

The offset communicated last shall be maintained	• <u>never</u> • after power supply restoration • after power supply restoration and programming
--	--

During initial commissioning, an **offset** must be defined which is valid until the first communication of a new offset. For units which have already been taken into service, the last communicated offset can be used.

A set offset will be retained until a new value or a change is transferred. The current value is saved, so that it is retained in the event of a power supply failure and will be available once the power supply is restored.

Start offset in °C valid until first communication	0...200; <u>30</u>
Increment for offset change via communication object	0,1°C • 0,2°C • 0,3°C • 0,4°C • 0,5°C • 1°C • 2°C • 3°C • 4°C • 5°C
Hysteresis of the threshold value in % (for setting in %)	0 ... 50; <u>20</u>
Hysteresis of the threshold value in 0.1°C (for absolute setting)	0 ... 1000; <u>50</u>
Threshold value sends	• <u>never</u> • periodically • on change • on change and periodically
At and above change of (if sent on change)	<u>0.1°C</u> • 0.2°C • 0.5°C • 1.0°C • 2.0°C • 5.0°C
Send cycle (if sent periodically)	5 s • <u>10 s</u> • 30 s • 1 min • ... • 2 h

Switching output

The output switching delay can be set using objects or directly as a parameter.

When the following conditions apply, the output is (TV = Threshold value)	• TV above = 1 TV - hyst. below = 0 • TV above = 0 TV - hyst. below = 1 • <u>TV below = 1 TV + hyst. above = 0</u> • TV below = 0 TV + hyst. above = 1
Delays can be set via objects (in seconds)	<u>No</u> • Yes
Switching delay from 0 to 1 for setting via objects: valid until 1st communication	<u>None</u> • 1 s • 2 s • 5 s • 10 s • ... • 2 h
Switching delay from 1 to 0 for setting via objects: valid until 1st communication	<u>None</u> • 1 s • 2 s • 5 s • 10 s • ... • 2 h
Switching output sends	• on change • on change to 1 • on change to 0 • <u>on change and periodically</u> • on change to 1 and periodically • on change to 0 and periodically
Send cycle (is only sent if periodically is selected)	<u>5 s</u> • 10 s • 30 s • ... • 2 h

Blocking

The switching output can be blocked using an object. Define specifications here for the behaviour of the output when blocked.

Use switching output block	<u>No</u> • Yes
Analysis of the blocking object	• At value 1: block At value 0: release • At value 0: block At value 1: release
Blocking object value before first communication	<u>0</u> • 1
Behaviour of the switching output	
On block	• <u>Do not send message</u> • send 0 • send 1
On release (with 2 seconds release delay)	[Dependent on the "Switching output sends" setting]

The behaviour of the switching output on release is dependent on the value of the parameter "Switching output sends" (see "Switching output")

Switching output sends on change	• Do not send message • Send switching output status
Switching output sends on change to 1	• Do not send message • if switching output = 1 → send 1
Switching output sends on change to 0	• Do not send message • if switching output = 0 → send 0
Switching output sends on change and periodically	Send switching output status
Switching output sends on change to 1 and periodically	if switching output = 1 → send 1
Switching output sends on change to 0 and periodically	if switching output = 0 → send 0

4.9. Absolute humidity

The absolute air humidity value is detected by the **Suntracer KNX pro** and can be output to the bus.

Use absolute humidity	<u>No</u> • Yes
Sending pattern	• <u>never</u> • periodically • on change • on change and periodically
At and above change of (if sent on change)	0,1 g • 0,2 g • <u>0,5 g</u> • 1,0 g • 2,0 g • 5,0 g
Send cycle (if sent periodically)	5 s • <u>10 s</u> • 30 s... • 2 h

4.10. Comfort field

The **Weather Station Suntracer KNX pro** can send a message to the bus if the limits of the comfort field are exceeded. In this way, it is for example possible to monitor compliance with DIN 1946 (standard values) or even to define your own comfort field.

Use comfort field	<u>No</u> • Yes
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Specify the sending pattern, a text for comfortable and uncomfortable, and how the object value should be.

Sending pattern	• <u>never</u> • on change • on change to comfortable • on change to uncomfortable • on change and periodically • on change to comfortable and periodically • on change to uncomfortable and periodically
Text for comfortable	Enter a text here!
Text for uncomfortable	Enter a text here!
Object value is at	• <u>comfortable</u> = 1 <u>uncomfortable</u> = 0 • <u>comfortable</u> = 0 <u>uncomfortable</u> = 1
Send cycle (if sent periodically)	5 s • <u>10 s</u> • 30 s... • 2 h

Define the comfort field by specifying the minimum and maximum values for temperature and humidity. The specified standard values comply with DIN 1946

Maximum temperature in °C (Standard 26°C)	25 ... 40; <u>26</u>
Minimum temperature in °C (Standard 20°C)	10 ... 21; <u>20</u>
Maximum relative humidity in % (Standard 65%)	52 ... 90; <u>65</u>
Minimum relative humidity in % (Standard 30%)	10 ... 43; <u>30</u>
Maximum absolute humidity in 0.1 g/kg (Standard 115 g/kg)	50 ... 200; <u>115</u>

Temperature hysteresis: 1°C

Relative humidity hysteresis: 2% RH

Absolute humidity hysteresis: 2 g/kg

4.11. Brightness measurement value

Set the send pattern for the measured brightness.

Send pattern	• <u>never</u> • periodically • on change • on change and periodically
at and above change in % (if sent on change)	1 ... 100; <u>20</u>
Send cycle (if sent periodically)	<u>5 s</u> ... 2 h

4.12. Brightness threshold values

Activate the brightness threshold values required (maximum eight) The menus for the further setting of the threshold values are then displayed.

Threshold value 1	<u>No</u> • Yes
Threshold value...	<u>No</u> • Yes
Threshold value 8	<u>No</u> • Yes

If the shade automation is to be used, a threshold value must be active!

4.12.1. Brightness threshold value 1-8

Threshold value

Set, in which cases threshold values and delay times received are to be kept per object. The parameter is only taken into consideration if the specification/ setting by object is activated further down. Please note that the setting "After power restoration and programming" should not be used for the initial start-up, as the factory settings are always used until the first call (setting via objects is ignored).

Maintain the	
threshold values and delays received via communication objects	• <u>never</u> • after power supply restoration • after power supply restoration and programming

Select whether the threshold value is to be specified per parameter or via a communication object.

Threshold value setpoint using	<u>Parameter</u> • Communications object
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When the **threshold value per parameter** is specified, then the value is set.

Threshold value in kLux	1000 ... 150000; <u>60000</u>
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When the **threshold value per communication object** is specified, the starting value, object value limit and type of change to the threshold value are then set.

Start threshold value in Lux valid until first call	1000 ... 150000; <u>60000</u>
Object value limit (min.) in Lux	<u>1000</u> ... 150000
Object value limit (max.) in Lux	1000 ... <u>150000</u>
Type of threshold change	<u>Absolute value</u> • Increase/decrease
Increment in Lux (upon increase/decrease change)	1000 • <u>2000</u> • 5000 • 10000 • 20000

With both of the methods for specifying the threshold values the hysteresis is set.

Hysteresis setting	in % • <u>absolute</u>
Hysteresis in % of the threshold value (for setting in %)	0 ... 100; <u>50</u>
Hysteresis in Lux (for absolute setting)	0 ... 150000; <u>30000</u>

Switching output

Define which value the output transmits if the threshold value is exceeded or undercut. Set the delay for the switching and in which cases the switch output transmits.

When the following conditions apply, the output is (LV = Threshold value)	• <u>GW above = 1</u> GW - Hyst. below = <u>0</u> • GW above = 0 GW - Hyst. below = 1 • GW below = 1 GW + Hyst. above = 0 • GW below = 0 GW + Hyst. above = 1
Delays can be set via objects (in seconds)	<u>No</u> • Yes
Delay from 0 to 1	<u>none</u> • 1 s ... 2 h
Delay from 1 to 0	<u>none</u> • 1 s ... 2 h
Switching output sends	• on change • on change to 1 • on change to 0 • <u>on change and periodically</u> • on change to 1 and periodically • on change to 0 and periodically
Cycle (if sent periodically)	<u>5 s</u> ... 2 h

Block

If necessary, activate the switching output block and set what a 1 or 0 at the block entry means and what happens in the event of a block.

Use switching output block	<u>No</u> • Yes
Analysis of the blocking object	• At value 1: block At value 0: release • At value 0: block At value 1: release
Blocking object value before first call	<u>0</u> • 1
Action when locking	• <u>Do not send message</u> • send 0 • send 1
Action upon release (with 2 seconds release delay)	[Dependent on the "Switching output sends" setting]

The behaviour of the switching output on release is dependent on the value of the parameter "Switching output sends" (see "Switching output")

Switching output sends on change	do not send message • Status object/s send/s
Switching output sends on change to 1	do not send message • If switching output = 1 → send 1
Switching output sends on change to 0	do not send message • If switching output = 0 → send 0
Switching output sends on change and periodically	Send switching output status
Switching output sends on change to 1 and periodically	If switching output = 1 → send 1
Switching output sends on change to 0 and periodically	If switching output = 0 → send 0

4.13. Twilight brightness threshold values

Activate the twilight threshold values required (maximum four) The menus for the further setting of the threshold values are then displayed.

Threshold value 1	<u>No</u> • Yes
Threshold value...	<u>No</u> • Yes
Threshold value 4	<u>No</u> • Yes

4.13.1. Twilight threshold value 1-4

Threshold value

Set, in which cases threshold values and delay times received are to be kept per object. The parameter is only taken into consideration if the specification/ setting by object is activated further down. Please note that the setting "After power restoration and pro-

gramming" should not be used for the initial start-up, as the factory settings are always used until the first call (setting via objects is ignored).

Maintain the threshold values and delays received via communication objects	• never • after power supply restoration • after power supply restoration and programming

Select whether the threshold value is to be specified per parameter or via a communication object.

Threshold value setpoint using	<u>Parameter</u> • Communications object
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When the **threshold value per parameter** is specified, then the value is set.

Threshold value in kLux	1 ... 1000; <u>10</u>
-------------------------	-----------------------

When the **threshold value per communication object** is specified, the starting value, object value limit and type of change to the threshold value are then set.

Start threshold value in Lux valid until first call	1 ... 1000; <u>10</u>
Object value limit (min.) in Lux	<u>1</u> ... 1000
Object value limit (max.) in Lux	1 ... <u>1000</u>
Type of threshold change	<u>Absolute value</u> • Increase/decrease
Increment in Lux (upon increase/decrease change)	1 • <u>2</u> • 5 • 10 • 20 • 50

With both of the methods for specifying the threshold values the hysteresis is set.

Hysteresis setting	in % • <u>absolute</u>
Hysteresis in % of the threshold value (for setting in %)	0 ... 100; <u>50</u>
Hysteresis in Lux (for absolute setting)	0 ... 1000; <u>5</u>

Switching output

Define which value the output transmits if the threshold value is exceeded or undercut. Set the delay for the switching and in which cases the switch output transmits.

When the following conditions apply, the output is (LV = Threshold value)	• <u>GW above = 1</u> GW - Hyst. below = 0 • GW above = 0 GW - Hyst. below = 1 • GW below = 1 GW + Hyst. above = 0 • GW below = 0 GW + Hyst. above = 1
Delays can be set via objects (in seconds)	<u>No</u> • Yes
Delay from 0 to 1	<u>none</u> • 1 s ... 2 h
Delay from 1 to 0	<u>none</u> • 1 s ... 2 h

Switching output sends	• on change • on change to 1 • on change to 0 • <u>on change and periodically</u> • on change to 1 and periodically • on change to 0 and periodically
Cycle (if sent periodically)	<u>5 s</u> ... 2 h

Block

If necessary, activate the switching output block and set what a 1 or 0 at the block entry means and what happens in the event of a block.

Use switching output block	<u>No</u> • Yes
Analysis of the blocking object	• At value 1: block At value 0: release • At value 0: block At value 1: release
Blocking object value before first call	<u>0</u> • 1
Action when locking	• <u>do not send message</u> • send 0 • send 1
Action upon release (with 2 seconds release delay)	[Dependent on the "Switching output sends" setting]

The behaviour of the switching output on release is dependent on the value of the parameter "Switching output sends" (see "Switching output")

Switching output sends on change	do not send message • status object/s send/s
Switching output sends on change to 1	do not send message • if switching output = 1 → send 1
Switching output sends on change to 0	do not send message • if switching output = 0 → send 0
Switching output sends on change and periodically	send switching output status
Switching output sends on change to 1 and periodically	if switching output = 1 → send 1
Switching output sends on change to 0 and periodically	if switching output = 0 → send 0

4.14. Night

If necessary, activate the night recognition.

Use night recognition	<u>No</u> • Yes
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Set, in which cases delay times received are to be kept per object. The parameter is only taken into consideration if the setting by object is activated further down. Please

note that the setting "After power restoration and programming" should not be used for the initial start-up, as the factory settings are always used until the first call (setting via objects is ignored).

Maintain the delays received via communication objects	• <u>never</u> • after power supply restoration • after power supply restoration and programming
--	--

Specify below which brightness the device should recognise "night" and with which hysteresis this is to be outputted.

Night is recognised below Lux	1 ... 1000; <u>10</u>
Hysteresis in Lux	0 ... 500; <u>5</u>

Set the delay for the switching and in which cases the switch output sends and which value is output at night.

Delays can be set via objects (in seconds)	<u>No</u> • Yes
Switching delay on night	<u>none</u> • 1 s ... 2 h
Switching delay on day	<u>none</u> • 1 s ... 2 h
Switching output sends	• <u>on change</u> • on change to night • on change to day • on change and periodically • on change to night and periodically • on change to day and periodically
Send cycle (if sent periodically)	5 s ... 2 h; <u>10 s</u>
Object value at night	0 • <u>1</u>

4.15. Sun position

Select whether the device should calculate the sun position itself or if the values are received via the bus. The type of object and send pattern are also set.

Sun position	<u>is calculated</u> • is received
Object type	<u>4 Byte floating point</u> • 2 Byte floating point
Send pattern (if the sun position is calculated by the device)	• <u>never</u> • periodically • on change • on change and periodically
on change of (if sent on change)	0.1 degrees • 0.2 degrees • 0.5 degrees • <u>1.0 degree</u> • 2.0 degrees • 5.0 degrees
Send cycle (if sent periodically)	5 s ... 2 h; <u>1 min</u>

4.16. Wind measurement

Enter the unit for wind speed.

If changing the unit, the parameters for the wind threshold values and facade/wind alarm must be set again!

Wind speed units: (valid for all parameters and measured values)	<u>m/s</u> • km/h
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If necessary, activate the wind malfunction object. Specify whether the measurement should also be output in Beaufort.

Use malfunction object	<u>No</u> • Yes
Measured value additionally output in the Beaufort scale	<u>No</u> • Yes

Define the send pattern and, if necessary, activate the maximum value (this value is not retained after a reset).

Send pattern	• <u>never</u> • periodically • on change • on change and periodically
on change of (if sent on change)	2% • <u>5%</u> • 10% • 25% • 50%
Send cycle (if sent periodically)	5 s ... 2 h; <u>10 s</u>
Use maximum value	<u>No</u> • Yes

Beaufort scale

Beaufort	Meaning
0	Calm
1	Light air
2	Light breeze
3	Gentle breeze
4	Moderate breeze
5	Fresh breeze
6	Strong breeze
7	High wind
8	Gale
9	Severe gale

Beaufort	Meaning
10	Storm
11	Violent storm
12	Hurricane

4.17. Wind threshold values

Activate the wind threshold values required (maximum four) The menus for the further setting of the threshold values are then displayed.

Threshold value 1	<u>No</u> • Yes
Threshold value...	<u>No</u> • Yes
Threshold value 4	<u>No</u> • Yes

4.17.1. Wind threshold value 1-4

Threshold value

Set, in which cases threshold values and delay times received are to be kept per object. The parameter is only taken into consideration if the specification/ setting by object is activated further down. Please note that the setting "After power restoration and programming" should not be used for the initial start-up, as the factory settings are always used until the first call (setting via objects is ignored).

Maintain the threshold values and delays received via communication objects	• never • after power supply restoration • after power supply restoration and programming
.	

Select whether the threshold value is to be specified per parameter or via a communication object.

Threshold value setpoint using	<u>Parameter</u> • Communications object
--------------------------------	--

When the **threshold value per parameter** is specified, then the value is set.

Threshold value in 0.1 m/s	1 ... 350; <u>40</u>
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When the **threshold value per communication object** is specified, the starting value, object value limit and type of change to the threshold value are then set.

Start threshold value in 0.1 m/s valid until first call	1 ... 350; <u>40</u>
Object value limit (min.) in 0.1 m/s increments	<u>1</u> ... 350

Object value limit (max.) in 0.1 m/s increments	1 ... <u>350</u>
Type of threshold change	<u>Absolute value</u> • Increase/decrease
Step size (upon increase/decrease change)	0.1 m/s • 0.2 m/s • <u>0.5 m/s</u> • 1.0 m/s • 2.0 m/s • 5.0 m/s

With both of the methods for specifying the threshold values the hysteresis is set.

Hysteresis setting	in % • <u>absolute</u>
Hysteresis in % (relative to threshold value) (for setting in %)	0 ... 50; <u>20</u>
Hysteresis in 0.1 m/s (for absolute setting)	0 ... 350; <u>20</u>

Switching output

Define which value the output transmits if the threshold value is exceeded or undercut. Set the delay for the switching and in which cases the switch output transmits.

When the following conditions apply, the output is (LV = Threshold value)	• <u>GW above = 1</u> GW - Hyst. below = 0 • GW above = 0 GW - Hyst. below = 1 • GW below = 1 GW + Hyst. above = 0 • GW below = 0 GW + Hyst. above = 1
Delays can be set via objects (in seconds)	<u>No</u> • Yes
Delay from 0 to 1	<u>none</u> • 1 s ... 2 h
Delay from 1 to 0	<u>none</u> • 1 s ... 2 h; <u>5 min</u>
Switching output sends	• on change • on change to 1 • on change to 0 • <u>on change and periodically</u> • on change to 1 and periodically • on change to 0 and periodically
Cycle (if sent periodically)	<u>5 s</u> ... 2 h

Block

If necessary, activate the switching output block and set what a 1 or 0 at the block entry means and what happens in the event of a block.

Use switching output block	<u>No</u> • Yes
Analysis of the blocking object	• <u>At value 1: block</u> At value 0: release • At value 0: block At value 1: release
Blocking object value before first call	<u>0</u> • 1
Action when locking	• <u>Do not send message</u> • send 0 • send 1

Action upon release (with 2 seconds release delay)	[Dependent on the "Switching output sends" setting]
---	---

The behaviour of the switching output on release is dependent on the value of the parameter "Switching output sends" (see "Switching output")

Switching output sends on change	do not send message • Status object/s send/s
Switching output sends on change to 1	do not send message • If switching output = 1 → send 1
Switching output sends on change to 0	do not send message • If switching output = 0 → send 0
Switching output sends on change and periodically	Send switching output status
Switching output sends on change to 1 and periodically	If switching output = 1 → send 1
Switching output sends on change to 0 and periodically	If switching output = 0 → send 0

4.18. Wind direction measured value

Measured value object

Specify whether the measured value is to be sent.

Send measured value	• <u>no</u> • periodically • on change • on change and periodically
On change of (is only sent if „on change“ is selected)	1° • 2° • <u>5°</u> • 10° • 20° • 30°
Send cycle (is sent periodically)	<u>5 s</u> • ... • 2 h
Send measured value as	1 byte object • <u>4 byte object</u>

Text object

Specify whether the wind direction should be sent as text.

Send wind direction as text	• <u>no</u> • periodically • on change • on change and periodically
Wind direction hysteresis (is only sent if „on change“ is selected)	0° • 1° • 3° • <u>5°</u> • 8° • 12° • 16° • 20°
Send cycle (is sent periodically)	<u>5 s</u> • ... • 2 h

at lower wind speed ($v < 0.5$ m/s):	Calm [Free text]
North (0°):	North [Free text]
North-East (45°):	North-East [Free text]
East (90°):	East [Free text]
South-East (135°):	South-East [Free text]
South (180°):	South [Free text]
South-West (225°):	South-West [Free text]
West (270°):	West [Free text]
North-West (315°):	North-West [Free text]

1 bit object

Specify whether the wind direction is to be sent as a 1 bit object.

Send wind direction as a 1 bit object	• <u>no</u> • periodically • on change • on change and periodically
Wind direction hysteresis (is only sent if „on change“ is selected)	0° • 1° • 3° • <u>5°</u> • 8° • 12° • 16° • 20°
Send cycle (is sent periodically)	<u>5 s</u> • ... • 2 h
North (0°) if active, send:	0 • <u>1</u>
North-East (45°) if active, send:	0 • <u>1</u>
East (90°) if active, send:	0 • <u>1</u>
South-East (135°) if active, send:	0 • <u>1</u>
South (180°) if active, send:	0 • <u>1</u>
South-West (225°) if active, send:	0 • <u>1</u>

West (270°) if active, send:	0 • <u>1</u>
North-West (315°) if active, send:	0 • <u>1</u>

4.19. Wind direction ranges

Activate the wind direction ranges required (maximum four) The menus for the further setting of the threshold values are then displayed.

Use range 1	<u>No</u> • Yes
Use range...	<u>No</u> • Yes
Use range 4	<u>No</u> • Yes

4.19.1. Range 1-4

Wind direction angle range

Set, in which cases ranges and delay times received are to be kept per object. The parameter is only taken into consideration if the specification/ setting by object is activated further down. Please note that the setting "After power restoration and programming" should not be used for the initial start-up, as the factory settings are always used until the first call (setting via objects is ignored).

Maintain the	
Ranges and delays received via communication objects	• <u>not</u> • after power supply restoration • after power supply restoration and programming
.	

Select whether the range is to be specified per parameter or via a communication object.

Threshold value setpoint using	<u>Parameter</u> • Communications object
--------------------------------	--

When the **angle range per parameter** is specified, then the value is set.

from:	<u>0</u> ... 359
to:	<u>0</u> ... 359

When the **angle range per communication object** is specified, the starting value, object value limit and type of change to the threshold value are then set.

Angle range until first communication:	
from:	<u>0</u> ... 359
to:	<u>0</u> ... 359
Type of range change	<u>Absolute value</u> • Increase/decrease
Step size (upon increase/decrease change)	<u>1°</u> • 2° • 3° • 5° • 8° • 12° • 16° • 20°

With both of the methods for specifying the range values the hysteresis is set.

Hysteresis	1° • 2° • 3° • <u>5°</u> • 8° • 12° • 16° • 20°
------------	---

Switching output

Set the delay for the switching and in which cases the switch output transmits.

Delays can be set via objects (in seconds)	<u>No</u> • Yes
Delay from 0 to 1	<u>none</u> • 1 s ... 2 h
Delay from 1 to 0	<u>none</u> • 1 s ... 2 h; <u>5 min</u>
Send switching outputs	• on change • on change to 1 • on change to 0 • <u>on change and periodically</u> • on change to 1 and periodically • on change to 0 and periodically
Cycle (if sent periodically)	<u>5 s</u> ... 2 h

Block

If necessary, activate the switching output block and set what a 1 or 0 at the block entry means and what happens in the event of a block.

Use switching output block	<u>No</u> • Yes
Analysis of the blocking object	• At value 1: block At value 0: release • <u>At value 0: block At value 1: release</u>
Blocking object value before first call	<u>0</u> • 1
Action when locking	• <u>Do not send message</u> • send 0 • send 1
Action upon release (with 2 seconds release delay)	[Dependent on the "Switching output sends" setting]

The behaviour of the switching output on release is dependent on the value of the parameter "Switching output sends" (see "Switching output")

Switching output sends on change	do not send message • Status object/s send/s
Switching output sends on change to 1	do not send message • If switching output = 1 → send 1
Switching output sends on change to 0	do not send message • If switching output = 0 → send 0
Switching output sends on change and periodically	Send switching output status

Switching output sends on change to 1 and periodically	If switching output = 1 → send 1
Switching output sends on change to 0 and periodically	If switching output = 0 → send 0

4.20. Air pressure measurement

If necessary, activate the air pressure malfunction object. Specify whether the measured value is, in addition, to be outputted as barometric pressure (see below *Information on air pressure*).

Use malfunction object	<u>No</u> • Yes
Measured value additionally output as barometric pressure	<u>No</u> • Yes

Define the send pattern and, if necessary, activate the minimum and maximum value (these values are not retained after a reset).

Send pattern measurement	• <u>never</u> • periodically • on change • on change and periodically
on change of (if sent on change)	<u>10 Pa</u> • 20 Pa • 50 Pa • 100 Pa • 200 Pa • 500 Pa
Send cycle (if sent periodically)	5 s ... 2 h; <u>1 min</u>
Use minimum and maximum value	<u>No</u> • Yes

Information on air pressure

The unit for air pressure is Pascal (Pa).

1 Pa = 0,01 hPa = 0,01 mbar

The air pressure is specified as "normal air pressure" or as "barometric pressure". The normal air pressure is the pressure compensated for height and temperature. The barometric air pressure is the pressure measured directly by the sensor (without compensation).

Air pressure (in Pa)	Meaning	Weather tendency
up to 98,000 Pa	very low	stormy
98,000 ... 100,000 Pa	low	rainy
100,000 ... 102,000 Pa	normal	changeable
102,000 ... 104,000 Pa	high	sunny
104,000 Pa:	very high	very dry

4.21. Air pressure threshold values

Activate the air pressure threshold values required (maximum four) The menus for the further setting of the threshold values are then displayed.

Threshold value 1	<u>No</u> • Yes
Threshold value...	<u>No</u> • Yes
Threshold value 4	<u>No</u> • Yes

4.21.1. Air pressure threshold value 1-4

Threshold value

Set, in which cases threshold values and delay times received are to be kept per object. The parameter is only taken into consideration if the specification/ setting by object is activated further down. Please note that the setting "After power restoration and programming" should not be used for the initial start-up, as the factory settings are always used until the first call (setting via objects is ignored).

Select the type of measured value for the calculation of the threshold value (see *Information on air pressure*)

Maintain the threshold values and delays received via communication object	• <u>never</u> • after power supply restoration • after power supply restoration and programming
Type of measurement for threshold value calculation	• Normal air pressure • Barometric pressure

Select whether the threshold value is to be specified per parameter or via a communication object.

Threshold value setpoint using	<u>Parameter</u> • Communications object
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When the **threshold value per parameter** is specified, then the value is set.

Threshold value in 10 Pa	3000 ... 11000; <u>10200</u>
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When the **threshold value per communication object** is specified, the starting value, object value limit and type of change to the threshold value are then set.

Start threshold value in 10 Pa valid until first call	3000 ... 11000; <u>10200</u>
Object value limit (min.) in 10 Pa	<u>3000</u> ... 11000
Object value limit (max.) in 10 Pa	3000 ... <u>11000</u>
Type of threshold change	<u>Absolute value</u> • Increase/decrease
Step size (upon increase/decrease change)	10 Pa • 20 Pa • <u>50 Pa</u> • 100 Pa • 200 Pa • 500 Pa

With both of the methods for specifying the threshold values the hysteresis is set.

Hysteresis setting	in % • <u>absolute</u>
Hysteresis in % (relative to threshold value) (for setting in %)	0 ... 50; <u>20</u>
Hysteresis in 10 Pa (for absolute setting)	0 ... 11000; <u>100</u>

Switching output

Define which value the output transmits if the threshold value is exceeded or undercut. Set the delay for the switching and in which cases the switch output transmits.

When the following conditions apply, the output is (LV = Threshold value)	• <u>GW above = 1</u> GW - Hyst. below = 0 • GW above = 0 GW - Hyst. below = 1 • GW below = 1 GW + Hyst. above = 0 • GW below = 0 GW + Hyst. above = 1
Delays can be set via objects (in seconds)	<u>No</u> • Yes
Delay from 0 to 1	<u>none</u> • 1 s ... 2 h
Delay from 1 to 0	<u>none</u> • 1 s ... 2 h
Switching output sends	• on change • on change to 1 • on change to 0 • <u>on change and periodically</u> • on change to 1 and periodically • on change to 0 and periodically
Cycle (if sent periodically)	<u>5 s</u> ... 2 h

Block

If necessary, activate the switching output block and set what a 1 or 0 at the block entry means and what happens in the event of a block.

Use switching output block	<u>No</u> • Yes
Analysis of the blocking object	• <u>At value 1: block</u> At value 0: release • At value 0: block At value 1: release
Blocking object value before first call	<u>0</u> • 1
Action when locking	• <u>Do not send message</u> • send 0 • send 1
Action upon release (with 2 seconds release delay)	[Dependent on the "Switching output sends" setting]

The behaviour of the switching output on release is dependent on the value of the parameter "Switching output sends" (see "Switching output")

Switching output sends on change	do not send message • Status object/s send/s
----------------------------------	---

Switching output sends on change to 1	do not send message • If switching output = 1 → send 1
Switching output sends on change to 0	do not send message • If switching output = 0 → send 0
Switching output sends on change and periodically	Send switching output status
Switching output sends on change to 1 and periodically	If switching output = 1 → send 1
Switching output sends on change to 0 and periodically	If switching output = 0 → send 0

4.22. Summer Compensation

With the summer compensation the target value for the room temperature can automatically be adapted by cooling at higher outdoor temperatures. The objective is to prevent a too great a difference between indoor and outdoor temperature in order to keep the energy consumption low.

Activate the summer compensation.

Use summer compensation	<u>No</u> • Yes
-------------------------	-----------------

Using the points 1 and 2, define the outdoor temperature range in which the target value for the indoor temperature is to be adapted linearly. Then, specify which indoor temperature target values are to be valid below point1 and above point 2.

Standard values according to DIN EN 60529

Point 1: External temperature = 20°, Target value = 20°C.

Point 2: External temperature = 32°, Target value = 26°C.

Characteristic curve description:	
External temperature point 1 (in 0.1°C increments)	0 ... 500 ; <u>200</u>
Outdoor temperature point 2 (in 0.1°C increments)	0 ... 500 ; <u>320</u>
below point 1 the target value is (in 0.1°C)	0 ... 500 ; <u>200</u>
above point 2 the target value is (in 0.1°C)	0 ... 500 ; <u>260</u>

Set the send pattern for the summer compensation.

Send pattern	- periodically <u>on change</u> - on change and periodically
--------------	--

on change of (if sent on change)	0.1°C • <u>0.2°C</u> • 0.5°C • 1°C • 2°C • 5°C
Send cycle (if sent periodically)	5 s ... 2 h; <u>1 min</u>

If necessary, activate the block for the summer compensation and set what a 1 or 0 at the block input means and what happens in the event of a block.

Use block	<u>No</u> • Yes
Analysis of the blocking object	• At value 1: block At value 0: <u>release</u> • At value 0: block At value 1: <u>release</u>
Blocking object value before first call	<u>0</u> • 1
Action when locking	• <u>do not send</u> • <u>Send value</u>
Value (in increments of 0.1°C) (if a value is sent during blocking)	0 ... 500; <u>200</u>

4.23. Optimal usage of façade controller functions

4.23.1. Classifying the façades for the control unit

The control options for shades are façade-related functions.

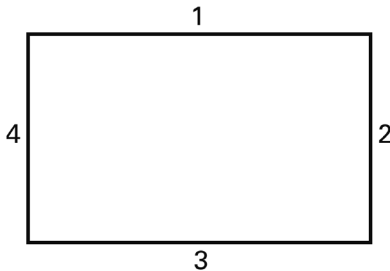


Fig. 12

Most buildings have 4 façades. It is generally recommended that the solar protection of each façade be controlled separately.

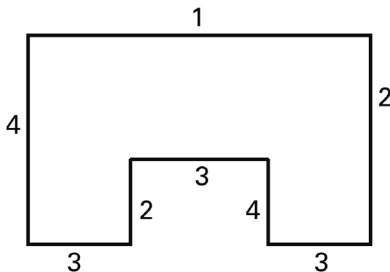


Fig. 13

Even in buildings with a U-shaped layout, only 4 façades have to be controlled differently, as several have the same alignment.

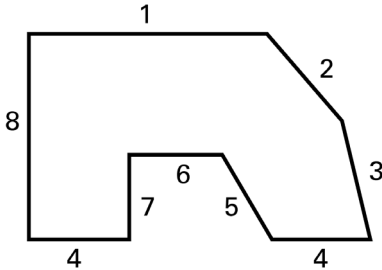


Fig. 14

In buildings with an asymmetrical layout the façades with a non-right-angled orientation (2, 3, 5) and façades that are set back (6) must be controlled separately.

Curved/round fronts should be divided into several façades (segments) to be controlled individually.

If a building has more than 12 façades, the deployment of another weather station is recommended; particularly as this also makes it possible to measure the wind speed in another location.

When there are several buildings, wind measurement should take place separately for each building (e.g. with additional KNX W sl wind sensors), as, depending on the positions of the buildings in relation to one another, different wind speeds may occur.

4.23.2. Orientation and inclination of the façade

Alignment and slant of the façade are needed for the shadow edge tracking and the slat auto-guide.

Top view

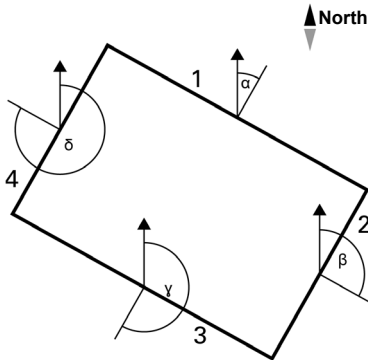


Fig. 15

The façade orientation corresponds to the angle between the North-South axis and the façade vertical. The angle α is measured here in a clockwise direction.

The façade orientations result as follows:

- Façade 1: α
- Façade 2: $\beta = \alpha + 90^\circ$
- Façade 3: $\gamma = \alpha + 180^\circ$
- Façade 4: $\delta = \alpha + 270^\circ$

Example: If the building is skewed by $\alpha = 30^\circ$, then the direction for façade 1 = 30° , façade 2 = 120° , façade 3 = 210° and façade 4 = 300° .

Side view

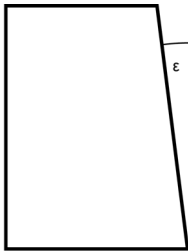


Fig. 16

If a façade surface is not oriented vertically, this must be taken into account. A forward inclination of the façade is counted as a positive angle; a backwards inclination (as in the picture) as a negative angle. This also allows a sunshade of a window built into a sloping roof surface to be controlled according to the current position of the sun.

If a façade is not a flat surface, but rather arched or bent, it must be subdivided into several segments to be controlled separately.

Remember, when setting a façade inclination greater than 0° also to adjust the height of the sun at which shading is to take place.

4.23.3. Shadow edge tracking and slat tracking

Shadow edge tracking

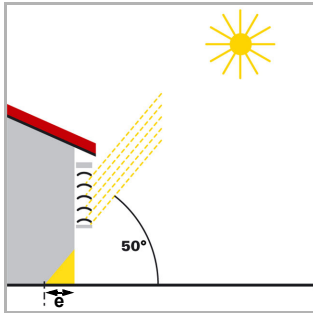
With shadow edge tracking the sunshade is not moved down fully; instead, it is moved only so far that the sun can still shine a configurable distance (e.g. 50 cm) into the room. This allows the room user to look outside through the lower part of the window, and plants which may be on the window ledge to be exposed to the sun.

Shadow edge tracking can only be used with a sunshade which is moved **from the top downwards** (e.g. shutters, textile shades or blinds with horizontal slats). This function *cannot* be used with sunshades which are pulled in front of a window from one or both sides.

Slat tracking

During slat tracking the horizontal slats of shutters are not fully closed but rather automatically adjusted according to the position of the sun so that it cannot shine directly into the room. Diffuse daylight can still enter the room through the slats and contribute to dazzle-free room lighting. Using slat tracking with an external shutter, the entry of warm air into the room through sunshine can be reduced and, at the same time, energy costs for lighting the room can be reduced.

Using shadow edge tracking and slat tracking

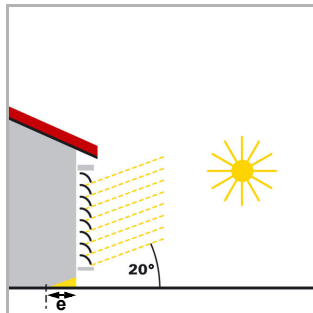


Sunshade when the position of the sun is high

Fig. 17

The sunshade is only partially closed and automatically moved down only enough so that the sun cannot shine further into the room than specified via the maximum permitted penetration depth (e).

The slats can be set horizontally without the sun shining directly into the room.

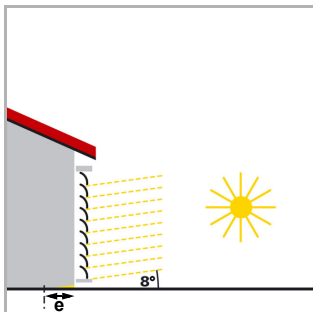


Sunshade when the sun is in a central position

Fig. 18

The sunshade is automatically moved down only far enough so that the sun does not exceed the maximum permitted penetration depth (e) in the room.

The slats are automatically closed further, so that the sun cannot shine directly into the room. Despite that, diffuse daylight can still reach the room and so contribute to the room lighting.



Sunshade when the position of the sun is low

Fig. 19

The sunshade is automatically moved down almost fully, so that the sun does not shine too far into the room.

The slats are automatically closed further, so that the sun does not shine in directly.

4.23.4. Slat types and determination of width and spacing

With slat tracking, a distinction is made between a sunshade or glare protection with horizontal slats and one with vertical slats.

A sunshade with horizontal slats (e.g. external shutter) is typically moved downwards from the top. In the case of an internal glare protector there are versions consisting of thin strips of material (vertical slats), which can be rotated by up to 180° and are pulled out from one or both sides of the window.

Both types of slat can be adjusted by the sensor **Suntracer KNX pro** so that no direct sunlight falls into the room, but as much diffuse daylight as possible does.

In order for slat tracking to set the slats correctly, their width and spacing from one another must be known.

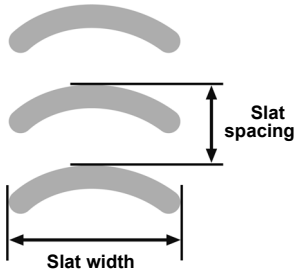


Fig. 20

Horizontal slats

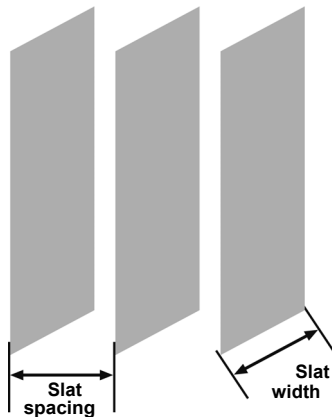


Fig. 21

Vertical slats

4.23.5. Slat position for horizontal slats

The slat angle at 0% move command and at 100% move command must, during commissioning, be aligned to the pre-settings of the product parameters of the **Weather Station Suntracer KNX pro**, and, if necessary, corrected, so that the slat guide on the façade works properly.

The drive used for the shutters defines whether this adjustment can take place almost continuously during slat tracking in many small steps (as with SMI drives, for example) or whether it is only possible in a few large steps (as with most standard drives).

Slat position at 100%

After moving to the 100% slat position the slats form an angle α with the vertical. This angle must be entered in the parameter "Slat angle (in °) after slat move command 100%" (see *Sonnenschutzposition und Nachführungen*, page 106 following). The default setting is 10°.

The angle α is always measured to the vertical (perpendicular).

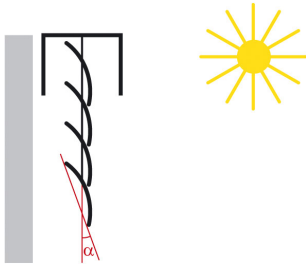


Fig. 22

Example of a typical slat position at move command 100% (angle α approx. 10°)

Slat position at 0%

After moving to the 0% slat position the slats form another angle with the vertical. This must be entered in the parameter "Slat angle (in °) after slat move command 0%" (see *Sonnenschutzposition und Nachführungen*, page 106 following). The default setting is 90°.

The possible angle at slat position 0% depends on the mechanics of the blind and the actuator.

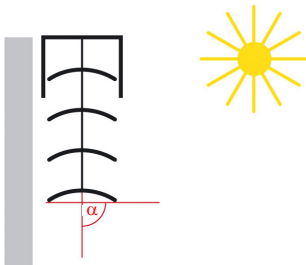


Fig. 23

Example 1 of a slat position at move command 0% (angle α approx. 90°)

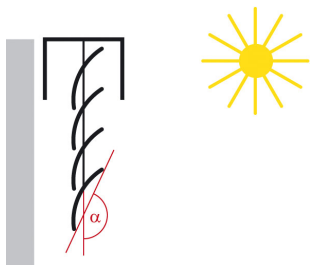


Fig. 24

Example 2 of a slat position at move command 0% (angle α approx. 160°)

By setting the actual angle at 0% and 100% slat position the façade controller can convert the optimal slat angle for the actual sun position into a % command and transmit this to the actuator.

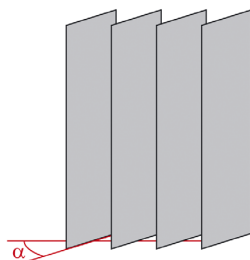
4.23.6. Slat position for vertical slats

The slat angle at 0% move command and at 100% move command must, during commissioning, be aligned to the pre-settings of the product parameters of the **Weather Station Suntracer KNX pro**, and, if necessary, corrected, so that the slat guide on the façade works properly.

Slat position at 100%

After moving to the 100% slat position the slats form an angle α with the direction of movement. This angle must be entered in the parameter "Slat angle (in °) after slat move command 100%" (see *Sonnenschutzposition und Nachführungen*, page 106 following). The default setting is 10°.

The angle α is, seen from the outside, always measured to the left.



View from the outside

Fig. 25

Example of a slat position at move command 100% (angle α approx. 10°)

Position 0%

After moving to the 0% slat position the slats form another angle with the direction of movement. This must be entered in the parameter "Slat angle (in °) after slat move command 0%" (see *Sonnenschutzposition und Nachführungen*, page 106 following). The default setting is 90°.

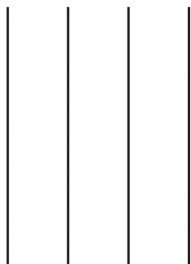


Fig. 26

Example 1 of a slat position at move command 0% (angle α approx. 90°)

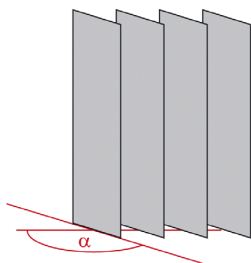


Fig. 27

Example 2 of a slat position at move command 0% (angle α approx. 130°)

The possible angle utilisation (difference between slat position 100% and 0%) depends on the mechanics of the blind and the actuator. Take care that the angle utilisation is not limited by the configuration of the actuator.

By setting the actual angle at 0% and 100% slat position the façade controller can convert the ideal slat angle for the actual sun position into a % command and transmit this to the actuator.

4.24. Simulation

Simulation objects help when testing the settings that have been made for façades. They are activated in the setting area *Façades*. By sending various values to the simulation objects number 576 to 591 different weather conditions and times of day can be tested. With the object "590 façade simulation reset (1:Reset)" you can delete all the simulation values that were set.

Activating simulation

In order to start the simulation, the simulation object for the façade must be activated. For façade 1, for example, the object is "592 façade 1 simulation (1: On | 0: Off) Set the value of this object to 1 to start the simulation for façade 1.

The facade and all other subordinate functions must be released (no active blocks) so that the simulated positions can be output.

When the simulation is activated the retraction delay (movement delay LONG) is set to 10 seconds. All other delay times are set to 0. All output objects of the relevant façade

adapt their state to the values of the input objects for the simulation. The objects for normal operation are ignored.

Ending the simulation

Set the value of the object "Façade 1 simulation (1:on | 0:off)" to 0 to end the simulation for façade 1.

When deactivating the simulation, it is possible that when an automation is performed for the first time (e.g. sun automation) that the delay times from the simulation are still used. All output objects of the relevant façade adapt their state to the values of the input objects for normal operation. The simulation objects are once again ignored.

The most recently received values for the simulation objects and also for the objects for normal operation are retained when switching between simulation and normal mode. No reset takes place. This means that when the simulation is ended the last used value for normal operation is applied.

Calculation of the sun position for the simulation

During the simulation it is possible to have the sun position, dependent on the simulation object for date and time, sent to the bus. In order that this functions, a location must be set in the product parameters or the location received via GPS. As long as the location is unknown sun positions are not calculated in the simulation.

4.25. Status output

The status of the automation functions of the façade controller can be used for visualisation or other bus functions. The device offers various possibilities for the status output.

Object status

A status object is available for every function of the automatic.

For the rain alarm on façade 1, for example, it is the object No. 605 "Façade 1 rain alarm status".

Status of all façades

The status of all façades and their automatic functions can be issued in a compact form via an automatic status-bit object. For this purpose, a status of safety, automatic delay after an alarm, wind extension block, timed opening, outdoor temperature block, timed/night closure, heat protection, pyranometer, rain automation, indoor temperature block, shading because of the sun or automatic status, can be issued for every façade. Only the condition of one function of one façade is always issued. Using the object 575 one can switch to the next function (status-bit) and/or with the object 570 to the next façade.

The objects 568 to 575 are used for the compact output.

No	Identification	Range	Function / Info
568	Façade X channel Status output	Activation	Set to "active" in order to use the status output
569	Façade X channel Name	Façade	Output of the façade name (when changing façades). Name of the parameter can be adapted (see <i>Fassade Sicherheit</i> , page 92).
570	Façade X channel (1:+ 0:-)	Façade	Change to the next/previous façade.
571	Façade X channel Status text	Status	Output of the condition of the selected status-bit as text. Text can be adapted per parameter, see <i>Texte für Fassade (Objekt „Fass. X Kanal Zustand Text“)</i> , page 91.
572	Façade X channel Status-bit text	Status	Text output for visualising the selected status-bit (when changing the status bit). Text can be adapted per parameter, see <i>Texte für Status-Bits (Objekt „Fass. X Kanal Statusbit Text“)</i> , page 92.
573	Façade X channel Status-bit condition	Status	Output of the selected automatic status-bit
574	Façade X channel Delay	Status	Displaying the delay time for the selected status-bit. Some automation functions have delay times that must first be run through before the status-bit is (re-)set.
575	Façade X channel Status-bit selection (1:+ 0:-)	Status	Output of the automatic status-bit

Status of a façade

The compact form of the status output described for all façades can also be performed for single façades. For this, the objects 650 to 655 are used for façade 1, for the other façades the objects named accordingly for the desired façade. The status output corresponds to that for all façades, only that here the objects for changing façades and the text object for the output of the name of the façade are missing. The text output with the object 652 "Façade 1 channel status-bit text" is also taken from the table *Texts for object „façade. X: Channel status-bit text“*.

4.26. Façade setting

If necessary, activate the façade controller (shading controller). When the façade controller is activated, the objects for the simulation of various parameter settings can also be activated. For this simulation, with the exception of a retraction delay (10 seconds),

no time functions (delay times etc.) are used. Please observe the instructions for the simulation in chapter *Simulation*, page 114

Use façades	<u>No</u> • Yes
Use simulation objects	<u>No</u> • Yes

In addition, you must activate the required façades individually in order to load the menus for the safety and automation functions.

Use façade 1	<u>No</u> • Yes
Use façades ...	<u>No</u> • Yes
Use facade 8	<u>No</u> • Yes

Furthermore, fundamental settings for the façade controller are made in the façade menu, e.g. for wind and rain alarm, twilight, outdoor temperature sensor, frost and heat protection and the status output.

General settings

Set, in which cases threshold values received are to be kept per object. Please note that the setting "After power restoration and programming" should not be used for the initial start-up, as the factory settings are always used until the first call (setting via objects is ignored).

Maintain the	
target threshold values received via communication objects	• <u>never</u> • after power supply restoration • after power supply restoration and programming

Live monitoring

If the functionality of the wind and rain sensors is to be checked, use wind and rain object monitoring. If data is not regularly being received from the sensors, a defect is assumed and the corresponding alarm is triggered.

Using wind and rain object monitoring	<u>No</u> • Yes
Monitoring period	<u>5 s</u> ... 2 h

Independently of live monitoring, the measured values for wind, outdoor temperature and global radiation (pyranometer) are monitored **for changes**. After 48 hours without any change in the measured values a defect is assumed and the corresponding function is set to alarm or block. No settings are required for this.

Wind and rain alarm

Set the automation block for wind and rain alarm. Please observe, that this block begins after the end of the wind or rain alarm and is **only valid for automation**. It avoids frequent extension and retraction during rapidly changing weather conditions. Manual operation is again possible directly after the end of the alarm.

The duration of the blocking can be specified by parameter or received as an object via the bus.

Preset automation blocking duration per	<u>Parameter</u> • object
Automation blocking duration after wind and rain alarm (in minutes) <i>(for definition via an object only valid until first call)</i>	0 ... 360; <u>5</u>

When specifying the blocking duration **by object** the minimum and maximum blocking duration and the increment for the change to the parameter are also defined.

Minimum automation blocking duration	<u>0</u> ... 360
Maximum automation blocking duration	0 ... 360; <u>30</u>
Blocking duration increment	0 ... 50; <u>1</u>

Rain automation

For external shades either a rain alarm or a rain automation can be set which have opposite functions. The selection is made in the menu *Façades: Façade X safety*.

The rain alarm protects the shading against getting wet. The rain automation ensures that the shading is, under certain conditions, extended during rainfall. The curtain can thus be cleaned by natural means. Please observe the specifications from the manufacturer of the curtain and set the rain alarm or automation accordingly.

If a rain automation has been set for the shading, then the extension delay can be specified directly via parameter or received as an object via the bus.

Preset extension delay for rain automation per	<u>Parameter</u> • object
Extension delay on rain automation (in minutes) <i>(for definition via an object only valid until first call)</i>	0 ... 360; <u>5</u>

Rain alarm: Shading is retracted as soon as precipitation is signalled and is blocked during the precipitation.

Rain automation: Precipitation is only considered in pre-set periods. A rain position is approached. The extension delay during precipitation can be set.

Night

Set the night threshold value. The threshold value can be specified directly by parameter or received as an object via the bus. The device's internally measured value is used for brightness. The switching delay between day and night is 1 minute.

Preset threshold value for night per	<u>Parameter</u> • object
Night is determined at a light level below (in Lux) <i>(for definition via an object only valid until first call)</i>	1 ... 200; <u>10</u>

When specifying the threshold value **by object** the minimum and maximum values that can be set for twilight values and the increment for the change are also defined.

Minimum variable value (in Lux) for twilight	1 ... 200; <u>2</u>
Maximum variable value (in Lux) for twilight	1 ... 200; <u>100</u>
Increment (in Lux)	1 ... 10; <u>2</u>

Outdoor temperature

Define which outdoor temperature value for frost alarm, heat protection and outdoor temperature block are to be used. The device's own internal values or a value received via a communication object can be used.

Measured value from	<u>Internal sensor</u> • communication object
---------------------	---

After 48 hours without any change in the value a defect is assumed and the frost alarm, heat protection and outdoor temperature block are activated.

Heat protection

Define the outdoor temperature for the heat protection. The threshold value can be specified directly by parameter or received as an object via the bus.

Preset threshold value for heat protection per	<u>Parameter</u> • object
Activate heat protection, if outdoor temperature is exceeded.	
Temperature (in 0.1°C) (for definition via an object only valid until first call)	100 ... 500; <u>350</u>
Hysteresis (in 0.1°C)	10 ... 200; <u>50</u>

When specifying the threshold value **by object** the minimum and maximum values that can be set for temperature and the increment for the change are also defined.

Minimum temperature that can be set (in 0.1 °C)	100 ... 500; <u>200</u>
Maximum temperature that can be set (in 0.1 °C)	100 ... 500; <u>380</u>
Increment (in 0.1 °C)	1 ... 10; <u>5</u>

Frost alarm

This frost alarm is only used within the façade controller and is independent of the general parameter *Frost alarm* (see *Frost alarm*, page 119).

The frost alarm is active in cold outdoor temperatures in combination with precipitation. The conditions can be specified directly by parameter or received as an object via the bus.

Preset frost protection values per	Parameter • object
Start frost alarm when	
an external temperature of (in 0.1 °C) is not reached. <i>(for definition via an object only valid until first call)</i>	-200 ... 300; <u>20</u>
during or until (in hours) after precipitation. <i>(for definition via an object only valid until first call)</i>	1 ... 10; <u>5</u>
End frost alarm when	
an external temperature of (in 0.1 °C)	-200 ... 300; <u>50</u>
for more than (in hours) is exceeded.	1 ... 10; <u>5</u>

When specifying the conditions **by object** the minimum and maximum temperature and time values that can be set and the temperature increment for the change are also defined.

Start frost alarm when	
Minimum outdoor temperature that can be set (in 0.1 °C)	-200 ... 300; <u>-10</u>
Maximum outdoor temperature that can be set (in 0.1 °C)	-200 ... 300; <u>40</u>
Minimum start-time that can be set (in 0.1 °C)	<u>1</u> ... 10
Maximum start-time that can be set (in 0.1 °C)	1 ... <u>10</u>
End frost alarm when	
Minimum outdoor temperature that can be set (in 0.1 °C)	-200 ... 300; <u>20</u>
Maximum outdoor temperature that can be set (in 0.1 °C)	-200 ... 300; <u>100</u>
Minimum start-time that can be set (in 0.1 °C)	<u>1</u> ... 10
Maximum start-time that can be set (in 0.1 °C)	1 ... <u>10</u>
Temperature increment (in 0.1 °C)	0 ... 250; <u>5</u>
Time increment ± 1 hour	

Status output façade

Information on the various possibilities for the status output can be found in chapter *Status output*, page 115. In principal the status output is a singular function, but, in compact form, possible for singular and for all façades possible. For the output in a compact form pre-sets are made here and the output texts defined.

Set which value in the status release object **for all façades** means active respectively inactive.

Analysis of the status release object	• 1 = activated 0 = deactivated • 0 = activated 1 = deactivated
value until first call	<u>0</u> • 1

For the status output the status bit selected (i.e. the function) and, if applicable, also the active façade is output. As a result, it can easily be visualised which status is just being issued. The texts can be adapted individually and should, as a maximum, be 14 characters long.

Texts for façade (Object "Fac. X channel state text"

Safety	Safety [Free text]
Automatic delay after alarm	Autom. delay [free text]
Wind extension block	Wind ext. bl. [free text]
Time open	Time - open [Free text]
Outdoor temperature block	Outd. temp. Sp. [free text]
Time/night closure	Time/night clo. [free text]
Heat protection	Heat protection [Free text]
Pyranometer	Pyranometer [Free text]
Rain automation	Rain automation [Free text]
Interior temperature block	Int. temp. Sp. [free text]
Shading because of the sun	Brightness [Free text]
No automation active	No automat. [free text]

Texts for status bits (Object "Fac. X channel status bit text"

Blocking the automation via Communications object	Auto. Block [Free text]
Wind extension block status	Wind ext. bl. [free text]
Wind alarm status	Wind alarm [Free text]
Rain alarm status	Rain alarm [Free text]
Rain automation status	Rain automation [Free text]
Frost alarm status	Frost alarm [Free text]
Safety status	Safety [Free text]
Time open status	Time open [Free text]
Outdoor temperature blocking status	Out-temp block [Free text]
Night closure status	Night closure [Free text]
Timed closure status	Timed closure [Free text]
Heat protection status	Heat protection [Free text]
Pyranometer status	Pyranometer [Free text]
Indoor temperature blocking status	Indoor-temp block [Free text]

Sun shining on façade status	Sun on fac. [Free text]
Sun bright, short retraction delay Status	Bright. short [Free text]
Sun bright, long retraction delay Status	Bright. long [Free text]

4.26.1. Façade safety

Set the basic and safety relevant functions for the façade.

Enter a name for the façade and specify whether simulation objects are to be loaded. Simulation help when testing the settings that have been made. For this observe the chapter *Simulation*, page 114.

For shutters and slat blinds use the setting - shade has slats. As a result, further settings, especially for slats, are possible.

Name	Façade 1 [Free text]
Use simulation objects	<u>No</u> • Yes
Does the shade have slats?	<u>No</u> • Yes

Configure the blocking for the façade and define how safety/ alarm objects and movement/position objects are to be handled.

Analysis of the blocking object	• <u>1 = block 0 = release</u> • <u>0 = block 1 = release</u>
Blocking object value before first call	<u>0</u> • 1
Action after locking	• <u>executing the last automation command</u> • Waiting for next automation command
Consolidate wind, frost and rain alarms to safety object?	<u>No</u> • Yes
Send pattern of the safety and alarm status objects	• <u>on change</u> • on change to 1 • on change to 0 • on change and periodically • on change to 1 and periodically • on change to 0 and periodically
Send cycle (if sent periodically)	5 s ... 2 h; <u>10 s</u>
Send pattern of the move and slat position objects	• <u>on change</u> • on change and periodically
Send cycle (if sent periodically)	5 s ... 2 h; <u>10 s</u>

Set, in which cases threshold values received are to be kept per object.

Maintain the	
target threshold values received via communication objects	• <u>never</u> • after power supply restoration • after power supply restoration and programming
(applicable for façade safety and façade automation)	

This setting also affects the release objects of the facade automation (opening time, outdoor temperature block, time and night closing, heat protection, pyranometer, rain automation, indoor temperature block and solar protection automation).

Please note that the setting "After power restoration and programming" should not be used for the initial start-up, as the factory settings are always used until the first call (setting via objects is ignored).

Priorities

The functions of the façade are arranged according to their priorities. First named have higher priority. 1. Wind, 2. Frost, 3. Rain.

Wind alarm and wind extension block

If the wind threshold values are exceeded, a wind alarm can be triggered, i.e. the shade is retracted.

If the wind extension block is active, the curtain can no longer be extended (not even by manual commands). If the curtain has already been extended, it remains in its position.

If the wind alarm is used, then, as a precaution, the alarm is activated, if over a period of 48 hours no change in the measured value has been recorded at the relevant wind sensor.

Set with what the wind alarm and, if desired, wind extension blocking is to be defined.

Use	• <u>No</u> • as wind alarm per threshold value • as wind alarm per bit object • as wind alarm and extension block per threshold value • as wind alarm per threshold value/extension block per bit object • as wind alarm per bit object/extension block per threshold value • as wind alarm/wind extension block per bit object
-----	--

If **alarm or extension block per bit object** is defined, no further settings are required. The wind alarm is defined externally and the alarm or block information is received by the weather station as a 1-bit object. The duration of blocking by the auto-

mation after a wind alarm is set in the "façades" menu (see *Wind and rain alarm*, page 117).

If **Alarm or extension block per threshold value** is defined, then set which sensors are relevant for this. The wind value measured internally in the device can be used, but also the values of the external wind communication objects assigned to the façades. With several sensors, only one must exceed the threshold value in order for the alarm/block to become active.

In addition, a delay can be specified per parameter. It specifies the time that elapses from the point at which the threshold value is exceeded until the wind alarm or the wind extension block is triggered. If the value falls below the threshold value, a fixed holding time of 5 minutes elapses before the wind alarm / the wind extension block is deactivated again. If the threshold value is exceeded within 5 minutes, the holding time starts again from the beginning.

After the five-minute holding time has elapsed, the automatic block starts. It is set in the "Façades" menu (see *Wind and rain alarm*, page 117). Manual driving is possible again immediately after the holding time has elapsed.

Internal sensor measurement	No • <u>Yes</u>
Communication object measurements	
Façade wind 1 ... 12	<u>No</u> • Yes

Select whether the threshold value is to be specified per parameter or via a communication object.

Threshold value setpoint using	<u>Parameter</u> • object
--------------------------------	---------------------------

When the **threshold value per parameter** is specified, then the value and delay time are set.

Wind threshold value (in 0.1 m/s) prevents shading (extension block)	0 ... 255; <u>40</u>
Wind alarm threshold (in 0.1 m/s) retracts the shade (wind alarm)	0 ... 255; <u>40/80</u> ;
Wind alarm delay (in s)	0 ... 255; <u>2</u>

When the **threshold value per communication object** is specified, then the starting value, minimum and maximum threshold value and delay time are set.

Wind alarm threshold (in 0.1 m/s) retracts the shade	0 ... 255; <u>80</u>
Minimum threshold value (in 0.1 m/s)	0 ... 255; <u>20</u>
Maximum threshold value (in 0.1 m/s)	0 ... 255; <u>120</u>
0.5 m/s increment	
Wind alarm delay (in s)	0 ... 255; <u>2</u>

Frost alarm

Set whether the frost alarm is to be used for this façade. Further parameters for the frost alarm are set in the "façades" menu (see *Frost alarm*, page 119).

Use	<u>No</u> • Yes
-----	-----------------

If the frost alarm is used, then, as a precaution, the alarm is activated, if over a period of 48 hours no change in the measured value has been recorded at the relevant outdoor temperature sensor.

Rain

In the event of precipitation either a rain alarm can be triggered for the façade, i.e. the shade is retracted and blocked, or a rain automation is executed. The rain automation moves to a certain position and is valid for the periods set. At other times with "rain automation" set the shade does not react to precipitation.

Further parameters for the rain automation are set in the "façades" menu (see *Rain automation*, page 118). Rain alarm does not have any extension delay.

Set whether precipitation should trigger the rain alarm or the rain automation.

Use	• <u>No</u> • as rain alarm • as rain automation
-----	--

If in the event of precipitation, the **rain automation** is triggered, then set in which periods of the week and the calendar-timer, the rain movement position is to be travelled to. The periods are defined in the menu "week timer" or "month timer" (see *Weekly timer*, page 142 and *Calendar timer*, page 144).

Use rain automation	
with week timer	
Period 1 24	<u>No</u> • Yes
with calendar timer	
Period 1...4 Sequence 1/2	<u>No</u> • Yes

Then also set the movement position.

Movement position (in %)	<u>0</u> ... 100
Slat position (in %) (only for window shades with slats)	<u>0</u> ... 100

Define the value of the release object for the rain automation. Using the release object, the rain automation can be deactivated at short-notice.

Evaluation of the rain automation - release object	<u>1 = activated</u> 0 = deactivated 0 = activated 1 = deactivated
value until first call	0 • <u>1</u>

Define the follow-up time The follow-up time is the delay time after the end of the precipitation warning.

Rain automation follow-up time in minutes	1 ... 120; <u>5</u>
--	---------------------

Within the automation functions the rain automation has a low priority. To display the sequence, rain automation is also listed in the *Façade X automation* without the settings being possible.

4.26.2. Façade automation

Set automation for the façade

Priorities

The functions of the façade are arranged according to their priorities. First named have higher priority. 1. Time open, 2. Outdoor temperature block, 3. Time and night closure, 4. Heat protection, 5. Pyranometer 6. Rain automation 7. Interior temperature block, 8. Solar protection automation.

Time open

The curtain can, at certain times, be opened compulsorily or stay open. For time opening, a movement position can be defined.

Set whether a time opening is to be used.

use	<u>No</u> • Yes
-----	-----------------

Set in which periods of the week and the calendar-timer, the time opening movement position is to be approached. The periods are defined in the menu "week timer" or "month timer" (see *Weekly timer*, page 142 and *Calendar timer*, page 144).

Use time opening	
with week timer	
Period 1 24	<u>No</u> • Yes
with calendar timer	
Period 1...4 Sequence 1/2	<u>No</u> • Yes

Set the movement position. Define the value of the release object for time opening. Using the release object, time opening can be deactivated at short-notice.

Movement position (in %)	<u>0</u> ... 100
Slat position (in %) (only for window shades with slats)	<u>0</u> ... 100
Evaluation of the time opening-release object	<u>1 = activated</u> 0 = deactivated 0 = activated <u>1 = deactivated</u>
value until first call	0 • <u>1</u>

Outdoor temperature block

Below a certain outdoor temperature, the shade is withdrawn.

Set whether an outdoor temperature block is to be used. The threshold value can also be set by "changeable per object".

Use	• <u>No</u> • Yes • Changeable per object
-----	---

Then set the threshold value for the temperature block and the hysteresis for the event that the value is exceeded.

Deactivate block for outdoor temperatures above	
Threshold value (in 0.1°C increments) (if changeable: until first call)	-200 ... 300; <u>50</u>
Hysteresis (in 0.1°C)	-200 ... 300; <u>30</u>

When specifying the threshold value **by object** the minimum and maximum values that can be set and the increment for the change are also defined.

Minimum variable per object Threshold value (in 0.1°C increments)	-200 ... 300; <u>0</u>
Maximum variable per object Threshold value (in 0.1°C increments)	-200 ... 300; <u>200</u>
Increment for threshold value change (in 0.1°C)	1 ... 20; <u>5</u>

Define the value of the release object for the outdoor temperature block. Using the release object, the outdoor temperature block can be deactivated at short-notice.

Evaluation of the outdoor temperature - release object	<u>1</u> = activated 0 = deactivated 0 = activated 1 = deactivated
value until first call	0 • <u>1</u>

If the outdoor temperature block is used, then, as a precaution, the block is activated, if over a period of 48 hours no change in the measured value has been recorded at the relevant temperature sensor.

Time and night closure

The curtain can, at certain times, and at night, be closed compulsorily. For the time and night closure a movement position can be defined.

Set whether a time and/or night closure is to be used

Use	<u>No</u> • Yes
Use timed closure	<u>No</u> • Yes
Use night-time closure	<u>No</u> • Yes

For the **timed closure**, set in which periods of the week and the calendar-timer, the timed closure movement position is to be travelled to. The periods are defined in the menu "week timer" or "month timer" (see *Calendar timer*, page 144 and *Calendar timer*, page 144).

Use time opening	
with week timer	
Period 1 24	<u>No</u> • Yes
with calendar timer	
Period 1...4 Sequence 1/2	<u>No</u> • Yes

Define the value of the release object for the timed closure. Using the release object, the timed closure can be deactivated at short-notice.

Evaluation of the timed closure-release object	1 = activated 0 = deactivated
	0 = activated 1 = deactivated
value until first call	0 • <u>1</u>

Define the value of the release object for the **night closure**. Using the release object, the night closure can be deactivated at short-notice.

Evaluation of the timed closure-release object	1 = activated 0 = deactivated
	0 = activated 1 = deactivated
value until first call	0 • <u>1</u>

The brightness below which the "night" is recognised is set in the "façades" menu (see *Night*, page 118).

You can define that the **time and night closure** are only performed once per period/night. Then also set the movement position.

Night and timed closure only once	<u>No</u> • Yes
Position for night or timed closure	
Movement position (in %)	0 ... <u>100</u>
Slat position (in %) (only for window shades with slats)	0 ... <u>100</u>

Heat protection

Above a certain outdoor temperature, a heat protection can be travelled to. Further parameters for heat protection are set in the "façades" menu (see *Heat protection*, page 128).

Define the value of the release object. Using the release object, the heat protection can be deactivated at short-notice.

Evaluation of the heat protection object	1 = activated 0 = deactivated
	0 = activated 1 = deactivated
value until first call	0 • <u>1</u>

Set the movement position.

Position for heat protection	
Movement position (in %)	0 ... <u>100</u>
Slat position (in %) (only for window shades with slats)	0 ... 100; <u>90</u>

If heat protection is used, then, as a precaution, protection is activated, if over a period of 48 hours no change in the measured value has been recorded at the relevant temperature sensor.

Pyranometer (global radiation)

Above a certain global radiation value, a protection position can be taken up.

Set whether the global radiation is to be considered. The threshold value can also be set by "changeable per object".

Use	• <u>No</u> • Yes • Changeable per object
-----	---

Then set the threshold value for the global radiation and the hysteresis for the event that the value is not reached.

Deactivate block for outdoor temperatures above	
Threshold value (in W/m ²) (if changeable: until first call)	0 ... 2500; <u>500</u>
Hysteresis threshold value in	percent • <u>Watt/m²</u>
Hysteresis of the threshold value (in 0.1 °C) (in %)	0 ... 2500; <u>400</u> 0 ... 100; <u>30</u>

When specifying the threshold value **by object** the minimum and maximum values that can be set and the increment for the change are also defined.

Minimum threshold value that can be set (in W/m ²)	0 ... 2500; <u>100</u>
Maximum threshold value that can be set (in W/m ²)	0 ... <u>2500</u>
Threshold value increment (in W/m ²)	0 ... 200; <u>50</u>

Set the movement position and define the value of the release object. Using the release object, the pyranometer controller can be deactivated at short-notice.

Movement position pyranometer	
Movement position (in %)	0 ... <u>100</u>
Slat position (in %) (only for window shades with slats)	0 ... 100; <u>90</u>

Evaluation of the Pyranometer release object	1 = activated 0 = deactivated 0 = activated 1 = deactivated
value until first call	0 • <u>1</u>

If global radiation monitoring is used, then, as a precaution, the protection is activated, if over a period of 48 hours no change in the measured value has been recorded at the relevant pyranometer.

Rain automation

If rain protection has configured as rain automation, then its priority is between the pyranometer controller and the interior temperature block. Rain automation is set in the general settings of the *façade* (see chapter *Rain automation*, page 130) and at *façade X safety* (see chapter *Rain*, page 125).

Interior temperature block

Below a certain interior temperature, the curtain can be prevented from opening.

Set whether an interior temperature block is to be used. The threshold value can also be set by "changeable per object".

Use	• <u>No</u> • Yes • Changeable per object • are activated via the bit object
-----	---

Then set the threshold value for the temperature block and the hysteresis for the event that the value is not reached.

Allow shading at internal temperature above	
Threshold value (in 0.1°C increments) (if <i>changeable</i> : until first call)	-32768 ... 32767; <u>200</u>
Hysteresis (in 0.1°C)	-200 ... 300; <u>20</u>

When specifying the threshold value **by object** the minimum and maximum values that can be set and the increment for the change are also defined.

Minimum variable per object Threshold value (in 0.1°C increments)	-32768 ... 32767; <u>100</u>
Maximum variable per object Threshold value (in 0.1°C increments)	-32768 ... 32767; <u>350</u>
Increment for threshold value change (in 0.1°C)	1 ... 20; <u>5</u>

When specifying the threshold value **by bit object** the interior temperature block object is also defined.

Assessment of the indoor temperature blocking object	<u>1 = Lock 0 = Release</u> 0 = Lock 1 = Release
Action until first communication	<u>disable</u> • enable

Define the value of the release object for the interior temperature block. Using the release object, the interior temperature block can be deactivated at short-notice.

Evaluation of the interior temperature blocking release object	<u>1 = activated 0 = deactivated</u> 0 = activated 1 = deactivated
value until first call	0 • <u>1</u>

Solar protection automation

If none of the blocks is active, then the position of the sun and the brightness are checked and is, corresponding to the solar protection automation, shaded.

Set whether solar protection automation is to be used.

Use	<u>No</u> • Yes
-----	-----------------

Define the value of the release object for solar protection automation. Using the release object, solar protection automation can be deactivated at short notice.

Evaluation of the solar automation release object	<u>1 = activated 0 = deactivated</u> 0 = activated 1 = deactivated
value until first call	0 • <u>1</u>

Sun position

Set the direction and height of the sun for shading. The angle, which is specified for the direction of the sun (azimuth), is aligned according to the orientation of the façade. In addition, the angle of the façade and obstacles which cast a shadow on the façade, such as, for example, a wall or overhanging roof, can also be taken into account in the setting for sun direction (azimuth) and sun height (elevation).

Top view

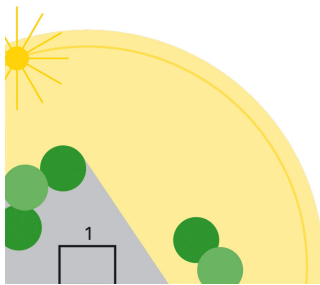


Fig. 28

1a: Sun elevation (Azimuth)

In the morning the building is fully shaded by surrounding trees.

Top view

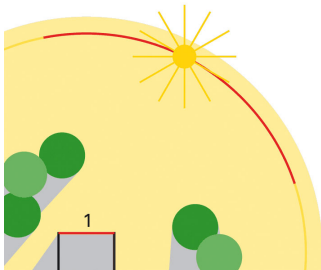


Fig. 29

1b: Sun elevation (Azimuth)

For façade 1, shading must only be active in the azimuth marked red, as the sun can then shine on to the building without obstruction

Side view

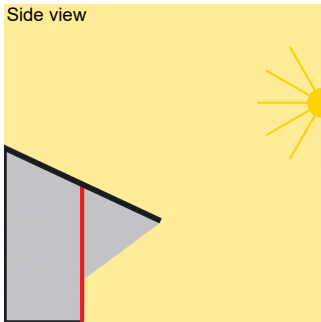


Fig. 30

2: Sun position (Elevation)

When the sun's position is high, the façade is only shaded by the roof overhang. Shading is only necessary if the sun is low (in the figure approx. below 53°).

Select whether the ranges for the direction and height of the sun are to be specified per parameter or via a communication object.

Specification for the ranges of sun direction and height by	<u>Parameter</u> • object
---	---------------------------

If the ranges are specified **by parameter**, then several ranges can be specified. Specify the direction for the shading, either with the defined compass direction or with "angle range" and by inputting the values exact to a degree. If the ranges are specified **by communication object**, then only the starting values for direction and height are defined, that are valid until the first call.

Number of ranges for sun direction and height	<u>1</u> • 2 • 3
Range 1 / 2 / 3	
Sun direction (when specified by parameter: valid until first call)	• All sides (0° ... 360°) • West (180° ... 360°) • South-West (135° ... 315°) • South (90° ... 270°) • South-East (45° ... 225°) • East (0° ... 180°) • Angle range

at and above (in °) (for angle range)	0 ... 360; <u>90</u>
until (in °) (for angle range)	0 ... 360; <u>270</u>
Sun elevation (when specified by parameter: valid until first call)	• <u>every height (0° ... 90°)</u> • Angle range
at and above (in °) (for angle range)	<u>0</u> ... 90
until (in °) (for angle range)	0 ... <u>90</u>
Incrementally in ° (for specification by parameter)	1 ... 10; <u>2</u>

For sun direction and height, a fixed hysteresis of 1° is valid

Brightness value (sensor selection)

Next you select which brightness value (sensor) is to be relevant for the shading of the façade. As a brightness value the highest value actually measured by the three internal sensors can be used, or a value that was received via a communication object.

Brightness sensor selection:	• <u>Internal sensors (maximum value)</u> • via communication object
------------------------------	---

Brightness threshold value

Select whether the brightness threshold value is to be specified per parameter or via a communication object. Please observe that the communication object outputs the threshold value in *Lux* the threshold value, however is set in *Kilolux*.

Threshold value definition for brightness per	<u>Parameter</u> • object
--	---------------------------

Set the brightness threshold value and the hysteresis for the event that the value is not reached. If the value is specified via communication object, then a starting value and the possible setting range is defined.

Threshold value (in kLux) (when specified by parameter: valid until first call)	1 ... 150; <u>60</u>
Minimum threshold value that can be set (in kLux) (for specification by parameter)	1 ... 150; <u>10</u>
Maximum threshold value that can be set (in kLux) (for specification by parameter)	1 ... 150; <u>80</u>
Increment for threshold value (kLux) (for specification by parameter)	1 ... 5; <u>5</u>

Hysteresis threshold value in	in percent (%) • <u>in kLux</u>
Hysteresis of the threshold value (in kLux) (in %)	1 ... 150; <u>20</u> 0 ... 100; <u>30</u>

Travel delays

For the shading there are three travel delays:

The **extension delay** defines the waiting time for the sun automation after the brightness threshold value has been exceeded.

At the end of the **short delay time** after the brightness value has not been reached an intermediate position is approached. For example, here a position can be defined that only differs from the shading position "extended" by the slat position on the shutter. The shade does not immediately go up, but lets in somewhat more light. This position is set further down in the same menu.

The **retraction delay** defines the waiting time for the retraction after the brightness threshold value has not been reached.

Select whether the travel delay is to be specified per parameter or via objects.

Specifying the withdrawal and extension delay	<u>Parameter</u> • object
---	---------------------------

Set the delay times. If the delays are specified via communication object, then a starting value and the possible setting range is defined.

Extension delay (in minutes) (when specified by parameter: valid until first call)	<u>1</u> ... 240
Minimum extension delay that can be set (in minutes) (for specification by parameter)	<u>1</u> ... 240
Maximum extension delay that can be set (in minutes) (for specification by parameter)	1 ... 240; <u>40</u>
Incrementally (in minutes) (for specification by parameter)	<u>1</u> ... 10
Brief delay (in seconds) (when specified by parameter: valid until first call)	1 ... 3600; <u>10</u>
Minimum short delay (in seconds) (for specification by parameter)	<u>1</u> ... 3600
Maximum short delay (in seconds) (for specification by parameter)	1 ... 3600; <u>120</u>

Increment (in seconds) (for specification by parameter)	<u>1</u> ... 240
Retraction delay (in minutes) (when specified by parameter: valid until first call)	1 ... 240; <u>30</u>
Minimum extension delay that can be set (in minutes) (for specification by parameter)	1 ... 240; <u>10</u>
Maximum extension delay that can be set (in minutes) (for specification by parameter)	1 ... <u>240</u>
Incrementally (in minutes) (for specification by parameter)	<u>1</u> ... 10

Solar protection position and auto-guiding

Solar protection extends the shading automatically if

- the sun is coming from the set direction and
- the brightness of the set threshold value
- is exceeded over a period longer the extension delay time.

For the movement position "Solar protection" auto-guiding can be set. Settings for slats are only displayed if the shading for the façade has been defined as having slats (see *Façade safety*, page 122).

Without auto-guiding a fixed position is travelled to.

With a four step slat guiding concept, a defined movement position is travelled to and the slats are tilted in four steps according to the position of the sun.

For slat auto-guiding, the direction and slant of the façade are taken into account, and internally the angle of the slat so calculated that no direct light can shine through the slats.

For shadow edge tracking, a fixed slat position is set (only for shades with slats). For the movement position, the orientation and slant of the façade and the height of the window are taken into consideration so that it can be defined how far the sun may shine into the room.

Shadow edge tracking and slat auto-guide are also possible in combination.

Before setting auto-guide, please read the instructions in chapter Optimal usage of façade controller functions, page 107

Solar protection position	• <u>Without auto-guide</u> • Slats in 4 stages • Shadow edge tracking • Slat auto-guide • Shadow edge tracking and slat auto-guide
---------------------------	---

Without auto-guiding a fixed position is travelled to.

Movement position (in %)	0 ... <u>100</u>
Slat position (in %) (only for window shades with slats)	0 ... 100; <u>80</u>

With the **four step slat guiding** the fixed movement position and the four slat angles are defined (only for shades with slats).

Movement position (in %)	0 ... <u>100</u>
Slat position (in %) for sun height (in °)	
0° to 15°	0 ... <u>100</u>
15° to 30°	0 ... 100; <u>80</u>
30° to 45°	0 ... 100; <u>65</u>
45° to 90°	0 ... 100; <u>50</u>

For the **slat guiding** the fixed movement position and the characteristics of the façade and the slats are specified (only for shades with slats). The device calculates the ideal slat position, so that no direct light can enter through the slats, but such that, at all times, as much indirect light as possible lights up the room.

With the setting for the minimum change of angle for transmission of a movement command, the "increment" respectively the frequency of the angle correction can be adjusted. Hereby, the technical possibilities of the drive used must be taken into consideration. The minimum change of angle is taken into account in the device internal calculation, so that direct sunlight can be prevented, even for large steps.

The slat angle at 0% move command and at 100% move command must, during commissioning, be aligned to the pre-settings of the parameters, and, if necessary, corrected, so that the slat guide on the façade works properly. For this purpose, observe chapter *Slat position for horizontal slats*, page 111 respectively *Slat position for vertical slats*, page 113.

Movement position (in %)	0 ... <u>100</u>
Orientation of the façade (North=0°, East=90°, South=180°, West=270°)	0 ... 360; <u>180</u>
Inclination of the façade in ° (0° = no inclination)	-90 ... 90; <u>0</u>
see <i>Orientation and inclination of the façade</i> , page 108	
Slat orientation	<u>Horizontal</u> • vertical
Slat width (in mm)	0 ... 1000; <u>80</u>
Slat distance (in mm)	0 ... 1000; <u>75</u>
see <i>Slat types and determination of width and spacing</i> , page 110	
Minimum change of angle for transmitting a new slat position	1 ... 90; <u>10</u>

Slat angle (in °) after after slat move command 0%	0 ... 180; <u>90</u>
Slat angle (in °) after after slat move command 100%	0 ... 180; <u>10</u>
see <i>Slat position for horizontal slats</i> , page 111 respectively <i>Slat position for vertical slats</i> , page 113	

For the **shadow edge auto-guide** a fixed slat position is set (only for shades with slats). For the movement position the orientation and angle of the façade and the height of the windows (glass height) are specified. The device calculates the ideal position so that the specified maximum depth of penetration into the room for the sun, is not exceeded.

Using the setting for, from which shadow edge shift, in centimetres, a move command is to be transmitted, the frequency of the position correction can be adjusted. Hereby, the technical possibilities of the drive used must be taken into consideration.

See also chapter *Shadow edge tracking and slat tracking*, page 109.

Slat position (in %)	0 ... 100; <u>80</u>
Orientation of the façade (North=0°, East=90°, South=180°, West=270°)	0 ... 360; <u>180</u>
Inclination of the façade in ° (0° = no inclination)	-90 ... 90; <u>0</u>
Window height in cm	0 ... 1000; <u>150</u>
Maximum depth of penetration by the sun into the room in cm	10 ... 250; <u>50</u>
From a shadow shift of cm auto-tracking is performed	1 ... 50; <u>10</u>

Please observe: The slant of the façade and the angle set for the height of the sun should be compatible. Thus, if the façade is slanted forwards by 10°, then the sun only needs to be considered up to a height of 80°. Enter this separately with the parameters the parameter for sun direction and height (see chapter *solar protection automation, Sun position*, page 131).

Intermediate position for the short retraction delay time

Solar protection automation moves to the "short delay" position if

- the shading has been extended by the solar protection automation and
- the brightness is then below the value (threshold value - hysteresis)
- for longer than the short delay time.

For the movement position "short retraction delay" a movement position and a slat position can be set. Settings for slats are only displayed if the shading for the façade has been defined as having slats (see *Façade safety*, page 122).

Use movement position	<u>No</u> • Yes
Movement position (in %)	0 ... <u>100</u>
Use slat position	<u>No</u> • Yes
Slat position (in %)	0 ... <u>100</u>

Standard movement position

Solar protection automation is terminated and the standard position is approached.

- the sun is not coming from the set shading direction or
- the brightness is then below the value (threshold value - hysteresis)
- for longer than the time (short delay + retraction delay time).

Move to position, if no automation with higher priority is being executed	
Movement position (in %)	<u>0</u> ... 100
Slat position (in %) (only for window shades with slats)	<u>0</u> ... 100

Settings for slats are only displayed if the shading for the façade has been defined as having slats (see *Façade safety*, page 122).

Status output façade

Information on the various possibilities for the status output can be found in chapter *Status output*, page 115. In principal the status output is a singular function, but, in compact form, possible for singular and for all façades possible. The texts for the output in compact form are defined in the general settings for the façade (see chapter *Status output*, page 115).

Set which value in the status release object **for this façade** means active respectively in active.

Evaluation of the façade	<u>1</u> = activated 0 = deactivated
Status release object	0 = activated <u>1</u> = deactivated
value until first call	<u>0</u> • 1

4.26.3. Computer

Activate the multi-functional computer, with which the input data can be changed by calculation, querying a condition or converting the data point type. The menus for the further setting of the computer are then displayed.

Computer 1	<u>No</u> • Yes
Computer...	<u>No</u> • Yes
Computer 8	<u>No</u> • Yes

4.26.4. Computers 1-8

Set, in which cases input values received are to be kept per object. Please note that the setting "After power restoration and programming" should not be used for the initial

start-up, as the factory settings are always used until the first call (setting via objects is ignored).

Maintain the input values received via communication objects	• never • after power supply restoration • after power supply restoration and programming

Select the function set the input mode and starting values for input 1 and input 2.

Function (I = Input)	• Prerequisite: $E1 = E2$ • Prerequisite: $E1 > E2$ • Prerequisite: $E1 \geq E2$ • Prerequisite: $E1 < E2$ • Prerequisite: $E1 \leq E2$ • Prerequisite: $E1 - E2 \geq E3$ • Prerequisite: $E2 - E1 \geq E3$ • Prerequisite: $E1 - E2 \text{ amount} \geq E3$ • Calculation: $E1 + E2$ • Calculation: $E1 - E2$ • Calculation: $E2 - E1$ • Calculation: $E1 - E2 \text{ Amount}$ • Calculation: $\text{Output 1} = E1 \times X + Y$ $\text{Output 2} = E2 \times X + Y$ • Transformation: General
Tolerance for comparison (in the case of prerequisite $E1 = E2$)	<u>0</u> ... 4,294,967,295
Input type	[Selection options depending on the function] • <u>1 bit</u> • 1 byte (0...255) • 1 byte (0%...100%) • 1 byte (0°...360°) • 2 byte counter without math. symbol • 2 byte counter with math. symbol • 2 byte floating point • 4 byte counter without math. symbol • 4 byte counter with math. symbol • 4 byte floating point
Starting value E1 / E2 / E3	[Input range depending on the type of input]

Prerequisites

When querying the prerequisites set the output type and output values at different statuses:

Output type	• <u>1 bit</u> • 1 byte (0...255) • 1 byte (0%...100%) • 1 byte (0°...360°) • 2 byte counter without math. symbol • 2 byte counter with math. symbol • 2 byte floating point • 4 byte counter without math. symbol • 4 byte counter with math. symbol • 4 byte floating point
Output value (if applicable output value A1 / A2)	
if the condition is met	<u>0</u> [Input range depending on the type of output]
if the condition is not met	<u>0</u> [Input range depending on the type of output]
if the monitoring time period is exceeded	<u>0</u> [Input range depending on the type of output]
if blocked	<u>0</u> [Input range depending on the type of output]

Set the output send pattern.

Output sends	• <u>on change</u> • on change and after reset • on change and periodically • when receiving an input object • when receiving an input object and periodically
Type of change (is only sent if "on change" is selected)	• <u>on each change</u> • on change to condition met • on change to condition not met
Send cycle (if sent periodically)	5 s ... 2 h; <u>10 s</u>

Set the text to be displayed for conditions met / not met.

Text if the condition is met	[Free text max. 14 chars.]
Text if the condition is not met	[Free text max. 14 chars.]

If applicable set the send delays.

Send delay in the event of change to the condition is met	<u>none</u> • 1 s • ... • 2 h
Send delay in the event of change to the condition is not met	<u>none</u> • 1 s • ... • 2 h

Calculations and transformation

For calculations and transformations set the output values to the various conditions:

Output value (if applicable A1 / A2)	
if the monitoring time period is exceeded	<u>0</u> [Input range depending on the type of output]
if blocked	<u>0</u> [Input range depending on the type of output]

Set the output send pattern.

Output sends	• <u>on change</u> • on change and after reset • on change and periodically • when receiving an input object • when receiving an input object and periodically
on change of (only if calculations are transmitted for changes)	1 ... [Input range depending on the type of input]
Send cycle (if sent periodically)	5 s ... 2 h; <u>10 s</u>

For **Calculations of the form output 1 = E1 × X + Y | output 2 = E2 × X + Y** define the variables X and Y. The variables can have a positive or negative sign, 9 digits before and 9 digits after the decimal point.

Formula for output A1: A1 = E1 × X + Y	
X	<u>1.00</u> [free input]
Y	<u>0.00</u> [free input]
Formula for output A2: A2 = E2 × X + Y	
X	<u>1.00</u> [free input]
Y	<u>0.00</u> [free input]

Further settings for all formulas

If necessary, activate the input monitoring. Set which inputs are to be monitored, at which intervals the inputs are to be monitored and what value the "monitoring status" should have, if the monitoring period is exceeded without feedback.

Use input monitoring	<u>No</u> • Yes
Monitoring of	• <u>E1</u> • E2 • E3 • E1 and E2 • E1 and E3 • E2 and E3 • E1 and E2 and E3 [depending on the function]

Monitoring period	5 s • ... • 2 h; <u>1 min</u>
Value of the object "monitoring status" if period is exceeded	0 • <u>1</u>

If necessary, activate the computer block and set what a 1 or 0 at the block entry means and what happens in the event of a block.

Use block	<u>No</u> • Yes
Analysis of the blocking object	• <u>At value 1: block At value 0: release</u> • <u>At value 0: block At value 1: release</u>
Value before first call	<u>0</u> • 1
Output pattern On block	• <u>do not send anything</u> • send value
On release	• as send pattern [see above] • <u>send current value immediately</u>

4.27. Weekly timer

In the weekly timer in the device 24 periods can be defined. These periods are, for example, used for the internal automatic function timed opening and timed closure.

The respective period objects can be configured as inputs or outputs, i.e. send to the bus (timer internal, use internal and for other bus members) or be switched from there (timer function via an external device). If several devices are used in the system, the timer settings may be done on one device that sends the period objects as output. The other devices take over the timer-command (input), whereby a better synchronisation is achieved.

Activate the required periods for the weekly timer. The menus for the further setting of the computer are then loaded.

Use period 1	<u>No</u> • Yes
Use ... period	<u>No</u> • Yes
Use period 24	<u>No</u> • Yes

4.27.1. Weekly timer period 1-24

Set whether the period can be set (period object is the output and is sent to the bus) or if the period is received externally via the bus (period object is the input).

Period	• <u>can be set</u> <u>(period object is output)</u> • can be switched (time period object is output)
--------	--

Period can be set (time period object is output)

Set whether the switching times are set per object and in which cases the switching times received are to be retained. Please note that the setting "After power restoration

and programming" should not be used for the initial start-up, as the factory settings are always used until the first call (setting via objects is ignored).

Use objects for switching times	<u>No</u> • Yes
The threshold values and delays received by the communication object	
Switching data should	• <u>not</u> be retained • be retained after power restoration • be retained after power restoration and programming

Set the switching on and off times and the days of the week for this period. If, for example, 15:35 is set as the switch-off time, the output switches off on the change from 15:35 to 15:36.

Switch on time (hours)	<u>0</u> ... 23
Switch on time (minutes)	<u>0</u> ... 59
Switch-off time (hours)	<u>0</u> ... 23
Switch-off time (minutes)	<u>0</u> ... 59
Period switches to	
Monday ... Sunday	<u>No</u> • Yes

Set the send pattern for the week clock switch output and the value of the output.

Switching output sends	• <u>never</u> • on change • on change to active • on change to inactive • on change and periodically • on change to active and periodically • on change to inactive and periodically
Send cycle (if sent periodically)	5 s ... 2 h; <u>10 s</u>
8-bit output value if Period active	<u>0</u> ... 255
8-bit output value if Period not active	<u>0</u> ... 255

Period that can be switched externally (time period is the input)

The time switches are taken over from an external timer switch. Set at which value the period is to be active and define the object value before the first communication.

Period is active	• <u>at object value = 1</u> • at object value = 0
Object value prior to initial communication	<u>0</u> • 1

4.28. Calendar timer

In the calendar timer in the device, four periods with two switching sequences can be defined. These periods are, for example, used for the internal automatic function timed opening and timed closure (see chapter *Time open*, page 126 and *Time and night closure*, page 127).

Activate the required periods for the calendar timer. The menus for the further setting of the computer are then loaded.

Use period 1	<u>No</u> • Yes
Use ... period	<u>No</u> • Yes
Use period 4	<u>No</u> • Yes

4.28.1. Calendar clock Period 1-4

Set whether the switching date and the switching time are set per object and in which cases the switching dates and times received are to be retained. Please note that the setting "After power restoration and programming" should not be used for the initial start-up, as the factory settings are always used until the first call (setting via objects is ignored).

Use objects for switching times	<u>No</u> • Yes
Maintain the	
switching data and times received via communication objects	• never • after power restoration • after power restoration and programming
.	

Define the period

From:	
Month	<u>January</u> ... December
Day	<u>1</u> ... 29 / 1 ... 30 / 1 ... 31 (according to month)
Up to and including:	
Month	<u>January</u> ... December
Day	<u>1</u> ... 29 / 1 ... 30 / 1 ... 31 (according to month)

Sequence 1 / 2

Define the switching times.

Switch on time (hours)	<u>0</u> ... 23
Switch on time (minutes)	<u>0</u> ... 59
Switch-off time (hours)	<u>0</u> ... 23
Switch-off time (minutes)	<u>0</u> ... 59

Switching output sends	• <u>never</u> • on change • on change to active • on change to inactive • on change and periodically • on change to active and periodically • on change to inactive and periodically
Send cycle (if sent periodically)	5 s ... 2 h; <u>10 s</u>

Set the send pattern for the switch sequence and the value of the 8-bit output.

Switching output sends	• <u>never</u> • on change • on change to active • on change to inactive • on change and periodically • on change to active and periodically • on change to inactive and periodically
Send cycle (if sent periodically)	5 s ... 2 h; <u>10 s</u>
8-bit output value if Period active	<u>0</u> ... 255
8-bit output value if Period not active	<u>0</u> ... 255

4.29. Logic

The device has 16 logic inputs, eight AND and eight OR logic gates.

Activate the logic inputs and assign object values up to first call.

Use logic inputs	Yes • <u>No</u>
Object value prior to first call for:	
- Logic input 1	<u>0</u> • 1
- Logic input ...	<u>0</u> • 1
- Logic input 16	<u>0</u> • 1

Activate the required logic outputs.

AND logic

AND logic 1	<u>not active</u> • active
AND logic ...	<u>not active</u> • active
AND logic 8	<u>not active</u> • active

OR logic

OR logic 1	<u>not active</u> • active
OR logic ...	<u>not active</u> • active
OR logic 8	<u>not active</u> • active

4.29.1. AND logic 1-8 and OR logic outputs 1-8

The same setting options are available for AND and OR logic.

Each logic output may transmit one 1 bit or two 8 bit objects. Determine what the output should send if logic = 1 and = 0.

1. / 2. / 3. / 4. Input	• <u>do not use</u> - Logic inputs 1...16 - Logic inputs 1...16 inverted • all switching events that the device provides (see <i>Connection inputs of the AND/OR logic</i>)
Output type	• a 1-Bit-object • two 8-bit objects

If the **output type is a 1-bit object**, set the output values for the various conditions.

Output value if logic = 1	<u>1</u> • 0
Output value if logic = 0	1 • <u>0</u>
Output value If block is active	1 • <u>0</u>
Output value if monitoring period is exceeded	1 • <u>0</u>

If the **output type is two 8-bit objects**, set the type of object and the output values for the various conditions.

Object type	• <u>Value (0...255)</u> • Percent (0...100%) • Angle (0...360°) • Scene call-up (0...127)
Output value object A if logic = 1	0 ... 255 / 100% / 360° / 127; <u>1</u>
Output value object B if logic = 1	0 ... 255 / 100% / 360° / 127; <u>1</u>
Output value object A if logic = 0	0 ... 255 / 100% / 360° / 127; <u>0</u>
Output value object B if logic = 0	0 ... 255 / 100% / 360° / 127; <u>0</u>

Output value object A if block is active	0 ... 255 / 100% / 360° / 127; <u>0</u>
Output value object B if block is active	0 ... 255 / 100% / 360° / 127; <u>0</u>
Output value object A if monitoring period is exceeded	0 ... 255 / 100% / 360° / 127; <u>0</u>
Output value object B if monitoring period is exceeded	0 ... 255 / 100% / 360° / 127; <u>0</u>

Set the output send pattern.

Send pattern	• <u>on change of logic</u> • on change of logic to 1 • on change of logic to 0 • on change of logic and periodically • on change of logic to 1 and periodically • on change of logic to 0 and periodically • on change of logic+object receipt • on change of logic+object receipt and periodically
Send cycle (if sent periodically)	5 s • <u>10 s</u> • ... • 2 h

Block

If necessary, activate the block for the logic output and set what a 1 or 0 at the block input means and what happens in the event of a block.

Use block	<u>No</u> • Yes
Analysis of the blocking object	• <u>At value 1: block</u> <u>At value 0: release</u> • At value 0: block At value 1: release
Blocking object value before first call	<u>0</u> • 1
Output pattern On block	• <u>Do not send message</u> • Transmit block value [see above, Output value if blocking active]
On release (with 2 seconds release delay)	[send value for current logic status]

Monitoring

If necessary, activate the input monitoring. Set which inputs are to be monitored, at which intervals the inputs are to be monitored and what value the "monitoring status" should have, if the monitoring period is exceeded without a feedback being given.

Use input monitoring	<u>No</u> • Yes
Input monitoring	• 1 • 2 • 3 • 4 • 1 + 2 • 1 + 3 • 1 + 4 • 2 + 3 • 2 + 4 • 3 + 4 • 1 + 2 + 3 • 1 + 2 + 4 • 1 + 3 + 4 • 2 + 3 + 4 • <u>1 + 2 + 3 + 4</u>

Monitoring period	5 s • ... • 2 h; <u>1 min</u>
Output behaviour on exceeding the monitoring time	• <u>Do not send message</u> • Send value exceeding [= value of the parameter "monitoring period"]

4.29.2.AND logic connection inputs

do not use

Logic input 1

Logic input 1 inverted

Logic input 2

Logic input 2 inverted

Logic input 3

Logic input 3 inverted

Logic input 4

Logic input 4 inverted

Logic input 5

Logic input 5 inverted

Logic input 6

Logic input 6 inverted

Logic input 7

Logic input 7 inverted

Logic input 8

Logic input 8 inverted

Logic input 9

Logic input 9 inverted

Logic input 10

Logic input 10 inverted

Logic input 11

Logic input 11 inverted

Logic input 12

Logic input 12 inverted

Logic input 13

Logic input 13 inverted

Logic input 14

Logic input 14 inverted

Logic input 15

Logic input 15 inverted

Logic input 16

Logic input 16 inverted

Temperature Sensor Malfunction ON

Temperature sensor malfunction OFF

Pressure sensor malfunction ON

Pressure sensor malfunction OFF

GPS Malfunction ON

GPS malfunction OFF

Wind Sensor malfunction ON
Wind sensor malfunction OFF
Switching output rain
Switching output rain inverted
Switching output rain 2
Switching output rain 2 inverted
Switching output night
Switching output inverted
Frost alarm active
Frost alarm inactive
Switching output 1 Temperature
Switching output 1 Temperature inverted
Switching output 2 Temperature
Switching output 2 Temperature inverted
Switching output 3 Temperature
Switching output 3 Temperature inverted
Switching output 4 Temperature
Switching output 4 Temperature inverted
Brightness sensor switching output 1
Brightness sensor switching output 1 inverted
Brightness sensor switching output 2
Brightness sensor switching output 2 inverted
Brightness sensor switching output 3
Brightness sensor switching output 3 inverted
Brightness sensor switching output 4
Brightness sensor switching output 4 inverted
Switching output 1 Twilight
Switching output 1 Twilight inverted
Switching output 2 Twilight
Switching output 2 Twilight inverted
Switching output 3 Twilight
Switching output 3 Twilight inverted
Switching output 4 Twilight
Switching output 4 Twilight inverted
Switching output 1 Pressure
Switching output 1 Pressure inverted
Switching output 2 Pressure
Switching output 2 Pressure inverted
Switching output 3 Pressure
Switching output 3 Pressure inverted
Switching output 4 Pressure
Switching output 4 Pressure inverted
Wind switching output 1
Wind switching output 1 inverted
Wind switching output 2
Wind switching output 2 inverted
Wind switching output 3
Wind switching output 3 inverted

Wind switching output 4
Wind switching output 4 inverted
Weekly timer period 1 active
Weekly timer period 1 inactive
Weekly timer period 2 active
Weekly timer period 2 inactive
Weekly timer period 3 active
Weekly timer period 3 inactive
Weekly timer period 4 active
Weekly timer period 4 inactive
Weekly timer period 5 active
Weekly timer period 5 inactive
Weekly timer period 6 active
Weekly timer period 6 inactive
Weekly timer period 7 active
Weekly timer period 7 inactive
Weekly timer period 8 active
Weekly timer period 8 inactive
Weekly timer period 9 active
Weekly timer period 9 inactive
Weekly timer period 10 active
Weekly timer period 10 inactive
Weekly timer period 11 active
Weekly timer period 11 inactive
Weekly timer period 12 active
Weekly timer period 12 inactive
Weekly timer period 13 active
Weekly timer period 13 inactive
Weekly timer period 14 active
Weekly timer period 14 inactive
Weekly timer period 15 active
Weekly timer period 15 inactive
Weekly timer period 16 active
Weekly timer period 16 inactive
Weekly timer period 17 active
Weekly timer period 17 inactive
Weekly timer period 18 active
Weekly timer period 18 inactive
Weekly timer period 19 active
Weekly timer period 19 inactive
Weekly timer period 20 active
Weekly timer period 20 inactive
Weekly timer period 21 active
Weekly timer period 21 inactive
Weekly timer period 22 active
Weekly timer period 22 inactive
Weekly timer period 23 active
Weekly timer period 23 inactive

Weekly timer period 24 active
Weekly timer period 24 inactive
Calendar timer period 1 sequence 1 active
Calendar timer period 1 sequence 1 inactive
Calendar timer period 1 sequence 2 active
Calendar timer period 1 sequence 2 inactive
Calendar timer period 2 sequence 1 active
Calendar timer period 2 sequence 1 inactive
Calendar timer period 2 sequence 2 active
Calendar timer period 2 sequence 2 inactive
Calendar timer period 3 sequence 1 active
Calendar timer period 3 sequence 1 inactive
Calendar timer period 3 sequence 2 active
Calendar timer period 3 sequence 2 inactive
Calendar timer period 4 sequence 1 active
Calendar timer period 4 sequence 1 inactive
Calendar timer period 4 sequence 2 active
Calendar timer period 4 sequence 2 inactive

4.29.3. Connection inputs of the OR logic

The OR logic connection inputs correspond to those of the AND logic. In addition, the following inputs are available for the OR logic:

AND logic output 1
AND logic output 1 inverted
AND logic output 2
AND logic output 2 inverted
AND logic output 3
AND logic output 3 inverted
AND logic output 4
AND logic output 4 inverted
AND logic output 5
AND logic output 5 inverted
AND logic output 6
AND logic output 6 inverted
AND logic output 7
AND logic output 7 inverted
AND logic output 8
AND logic output 8 inverted

