Windancer 2.0 KNX sec

Weather Station with cup anemometer

Item numbers 71238 (Windancer 2.0 KNX sec) and 71239 (Windancer 2.0 GPS KNX sec)

elsner

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This manual is amended periodically and will be brought into line with new software releases. You can find the as-delivered status (software version and date) in the following table
If you have a device with a newer software version, please check the "Service" menu at **www.elsner-elektronik.de** to see if a more recent manual version is available.

Device generations and ETS application programs

Release version	Firmware version	Application version	Description	Release date
1.0	0.1.1	1.0	First official release Windancer 2.0 GPS KNX sec	02.06.2026
1.0	0.1.1	1.0	First official release Windancer 2.0 KNX sec	02.06.2026

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. Safety and operating instructions

Installation, testing, commissioning and fault repair may only be carried out by a qualified electrician.

BEWARE!
Electric voltage!

- Before installation, check the device for damage. Only operate devices if they are free from damage.
- Comply with local directives, provisions and conditions for electrical installation.
- Immediately switch off the device or system and secure it against accidental activation if safe operating is no longer guaranteed.

Only use the device for building automation and follow the instructions for use in the installation guide and manual. Incorrect use, changes to the device or non-observance of the operating instructions lead to warranty and guarantee claims becoming void.
The device may only be operated as a fixed-site installation, i.e. 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.

For information on installation, maintenance, disposal, scope of delivery and technical data, please refer to the installation instructions.

2. Description

The **Weather Station Windancer 2.0 (GPS) KNX sec** for the KNX building bus system measures temperature, wind speed, brightness and recognises precipitation.
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.

The Windancer KNX-GPS model additionally receives the GPS signal for time and location and calculates the exact position of the sun (azimuth and elevation).
The integrated shade control system allows intelligent control of the sun protection of up to eight façades.

Functions of both models:

- **Wind measurement** with stable cup anemometer (up to 200 km/h under laboratory conditions), wind measurements in m/s, km/h and Beaufort

- **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**
- **KNX Data Secure** with extended peer-to-peer key table for secure communication with 1,000 KNX Data Secure devices
- **Intuitive configuration interface/menu navigation**, context-sensitive help and semantic information (Smart Linking Ready)
- **Live Data Adjustment**: current measured value can be set as a limit value via a communication object (wind, temperature, brightness)
- All **threshold values can be set** via parameters or 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

Functionel adicional Windancer 2.0 KNX sec:

- **Brightness measurement** (current illuminance). Measurement with 3 separate sensors (east, south, west). Separate threshold values for night
- **A simple roller shutter and blind control** can be implemented using threshold values and associated switching outputs. For this purpose, up to three brightness thresholds are defined for each compass direction (east/south/west)
- **Location query** (Northern/Southern Hemisphere) controls the correct output of east and west brightness values

Functionel adicional Windancer 2.0 GPS KNX sec:

- **Brightness measurement** (current illuminance). Measurement with 3 separate sensors, output of the current highest value (one maximum value). Separate threshold values for night
- **GPS receiver**, outputting the current time and location coordinates. The **Weather Station** also computes the position of the sun (azimuth and elevation)
- **Shade control** for up to 8 façades with slat tracking and shadow edge tracking
- **Weekly timer** with 4 different time slots per day
- **Calendar timer** with 3 time slots, allowing up to 2 on/off cycles per day. Timer switch outputs can be used as communication objects
- **Switching outputs** for all measured values. **Threshold values can be adjusted** per parameter or via communication objects

3. Cyber security (CRA information)

The following section contains important information and notes on cyber security.

3.1. Contact and reporting channel

3.1.1. Manufacturer and contact

Elsner Elektronik GmbH, Sohlengrund 16, 75395 Ostelsheim, Germany.

E-mail: info@elsner-elektronik.de

Phone: +49 (0) 7033 / 30945-0

3.1.2. Reporting security vulnerabilities

Security-relevant vulnerabilities in this product can be reported to:
security@elsner-elektronik.de

You can find information on our coordinated disclosure procedure at:
www.elsner-elektronik.de/en/security

3.2. Secure use

3.2.1. Product identification

Product and item number: see the cover page of this manual.

Firmware version: see the table "Device generations and ETS application programs".

3.2.2. Intended use and security features

Intended use: see the chapters "Safety and operating instructions" and "Description" in this manual.

Security-relevant functions: KNX Data Secure (authenticated and encrypted bus communication), commissioning as a secure device via the device certificate.

3.2.3. Notes on risks / misuse

Increased risks arise if the bus line is physically freely accessible and if the device is operated without KNX Data Secure: the bus communication can then be read or manipulated. Commission the device as a secure device. After commissioning, remove the device certificate (FDSK) from the device and keep it in a place inaccessible to unauthorised persons.

3.2.4. EU Declaration of Conformity

The EU Declaration of Conformity is available on the product page (see link in the footer).

3.2.5. Secure commissioning and operation

- Commissioning: see chapter "Commissioning", in particular "KNX Secure".
- Activate "secure commissioning" in the ETS and use the device certificate.

- Installing updates: see chapter "Elsner KNX Service App".
- Effects of changes: if the device is operated without KNX Data Secure, the protection level of the bus communication is reduced.

3.2.6. Decommissioning and data deletion

Before disposing of or passing on the device, perform a master reset or factory reset to delete the application program and the configuration (see chapters "Master reset" and "Factory reset"). Observe the disposal instructions in the installation instructions.

4. Commissioning

It is configured using the KNX software from ETS 5.7.6 or from ETS6. The **product file** can be downloaded from the ETS Online Catalogue and from the homepage of Elsner Elektronik at **www.elsner-elektronik.de**.

After the bus voltage has been applied, the unit will enter an initialisation phase lasting a few seconds. During this period, no information can be received or transmitted via the bus.

Before commissioning, please check whether updates are available. Use the Elsner Service App and the update files on the product page (see link in the footer).

4.1. KNX Secure

Activate 'secure commissioning' in the ETS and add the device certificate.
Keep this certificate in a safe place, as the device cannot be recommissioned without it.

For projects with KNX Secure, the ETS requires a project password. Keep this password safe as well: if it is lost, the ETS project can no longer be used and the secure devices it contains can no longer be reprogrammed. The device can then only be put back into operation with the device certificate after a master reset or factory reset (see chapter "Master-Reset" or "Factory-Reset").

4.2. Master reset

A master reset deletes the application program and resets the physical address to the as-delivered status (15.15.255; Firmware is retained). The device then has to be recommissioned with the ETS.
A master reset deactivates device security. The device can then be commissioned again as a secure device using the device certificate.

Perform master reset

- Switch off the bus voltage or remove the bus terminals
- Press and hold the programming button
- Switch in the bus voltage or insert the bus terminals.
- Programming LED flashes briefly 2× for 5 seconds. Release the programming button during this time.

The device restarts and is ready to use after approx. 5 s.

4.3. Factory reset

A factory reset deletes the application program, the physical address and all firmware updates, and uses the firmware contained in the device that was active at the time of delivery (as-delivered status). The device then has to be recommissioned with the ETS. A factory reset deactivates device security. The device can then be commissioned again as a secure device using the device certificate.

Perform factory reset

- Switch off the bus voltage or remove the bus terminals
- Press and hold the programming button
- Switch in the bus voltage or insert the bus terminals.
- Programming LED flashes briefly 3× for 5 seconds. Release the programming button during this time.

The device restarts and is ready to use after approx. 40 s.

4.4. Elsner KNX Service App

The device's firmware can be updated with the Elsner KNX Service App.
As soon as new firmware is available, it is displayed in the Service App.

If there is a firmware update, the device can also be reset to factory settings (= factory reset) using the Elsner KNX Service App.

Log in at https://my.knx.org/ with your access credentials. In the shop, under "ETS-Apps", you will find the free Elsner KNX Service App.

4.5. Addressing the equipment

The physical address is assigned by the ETS. The device has a sensor and a control LED (fig. 1).

The equipment is delivered with the bus address 15.15.255. Another address can be programmed using the ETS.

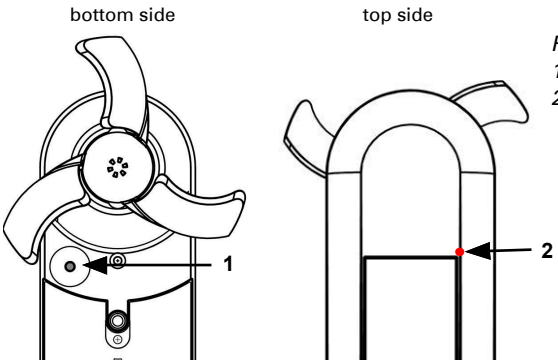


Fig. 1
1 Programming button
2 Programming LED (under the semi-transparent lid)

Use the KNX serial number (barcode) on the device to make it easier to teach the device into the ETS.

5. Transmission protocol

Units:

Temperatures in degrees Celsius
Brightness in lux
Wind in metres per second
Azimuth and elevation in degrees

5.1. List of all communication objects (Windancer 2.0 GPS KNX sec)

Abbreviations Flags:

C Communication
R Read
W Write
T Transmit
U Update

No.	Text	Function	Flags	DPT type	Size
1	Output software version	Software version	-RWT-	[217.1] DPT_Version	2 Bytes
8	Output auxiliary voltage status (1=ON | 0=OFF)	Output auxiliary voltage	-RWT-	[1.1] DPT_Switch	1 Bit
10	Output location: Northern latitude [°]	Location: Latitude [°]	-RWT-	[14.7] DPT_Value_AngleDeg	4 Bytes
11	Output location: Eastern longitude [°]	Location: Longitude [°]	-RWT-	[14.7] DPT_Value_AngleDeg	4 Bytes
12	Output location: Altitude above sea level [m]	Location: Altitude above sea level [m]	-RWT-	[14.39] DPT_Value_Length	4 Bytes
20	Input/Output Date / Time	Date / Time request	CRWT-	[19.1] DPT_DateTime	8 Bytes
21	Input/Output	Date	CRWT-	[11.1] DPT_Date	3 Bytes
22	Input/Output	Time	CRWT-	[10.1] DPT_TimeOfDay	3 Bytes
23	Input Date and time	Date and time request request	C-W--	[1.17] DPT_Trigger	1 Bit
24	Output GPS malfunction (0 : OK | 1 : Not OK)	GPS malfunction (0 : OK | 1 : Not OK) malfunction	-RWT-	[1.2] DPT_Bool	1 Bit
30	Output Rain	Rain switching output	-RWT-	[1.1] DPT_Switch	1 Bit

No.	Text	Function	Flags	DPT type	Size
31	Output Rain	Rain switching output with fixed delays switching delay	-RWT-	[1.1] DPT_Switch	1 Bit
32	Input/Output Rain	Rain switching delay to rain switching delay	CRW--	[7.5] DPT_TimePeriodSec	2 Bytes
33	Input/Output Rain	Rain switching delay to no rain switching delay	CRW--	[7.5] DPT_TimePeriodSec	2 Bytes
40	Output temperature sensor	Temperature sensor malfunction	-RWT-	[1.1] DPT_Switch	1 Bit
41	Input temperature sensor	Temperature sensor measurement value External	-RWT-	[9.1] DPT_Value_Temp	2 Bytes
42	Output temperature sensor	Temperature sensor measurement value	-RWT-	[9.1] DPT_Value_Temp	2 Bytes
43	Output temperature sensor	Temperature sensor measurement value total	-RWT-	[9.1] DPT_Value_Temp	2 Bytes
44	Output temperature sensor	Temperature perceived measurement value	-RWT-	[9.1] DPT_Value_Temp	2 Bytes
45	Input temperature sensor	Temperature sensor measurement value min/max request	C-W--	[1.17] DPT_Trigger	1 Bit
46	Output temperature sensor	Temperature sensor measurement value minimum	-RWT-	[9.1] DPT_Value_Temp	2 Bytes
47	Output temperature sensor	Temperature sensor measurement value maximum	-RWT-	[9.1] DPT_Value_Temp	2 Bytes
48	Input temperature sensor	Temperature sensor measurement value min/max reset	C-W--	[1.17] DPT_Trigger	1 Bit
50	Input Temperature TV 1	Temperature TV 1 storage	C-W--	[1.17] DPT_Trigger	1 Bit
51	Input Temperature TV 1	Temperature TV 1 measurement value	C-W--	[9.1] DPT_Value_Temp	2 Bytes
52	Input/Output Temperature TV 1	Temperature TV 1 absolute value	CRWT-	[9.1] DPT_Value_Temp	2 Bytes
53	Input Temperature TV 1	Temp. threshold value 1 (1:+ | 0:-)	C-W--	[1.1] DPT_Switch	1 Bit

No.	Text	Function	Flags	DPT type	Size
54	Input Temperature TV 1	Temperature TV 1 switching delay from 0 to 1	CRW--	[7.5] DPT_-TimePeriod-Sec	2 Bytes
55	Input Temperature TV 1	Temperature TV 1 switching delay from 1 to 0	CRW--	[7.5] DPT_-TimePeriod-Sec	2 Bytes
56	Output Temperature TV 1	Temperature TV 1 switching output	-RWT-	[1.1] DPT_Switch	1 Bit
57	Input Temperature TV 1	Temperature TV 1 switching output block	C-W--	[1.1] DPT_Switch	1 Bit
60	Input Temperature TV 2	Temperature TV 2 storage	C-W--	[1.17] DPT_Trigger	1 Bit
61	Input Temperature TV 2	Temperature TV 2 measurement value	C-W--	[9.1] DPT_Value_Temp	2 Bytes
62	Input/Output Temperature TV 2	Temperature TV 2 absolute value	CRWT-	[9.1] DPT_Value_Temp	2 Bytes
63	Input Temperature TV 2	Temp. threshold value 2 (1:+ | 0:-)	C-W--	[1.1] DPT_Switch	1 Bit
64	Input Temperature TV 2	Temperature TV 2 switching delay from 0 to 1	CRW--	[7.5] DPT_-TimePeriod-Sec	2 Bytes
65	Input Temperature TV 2	Temperature TV 2 switching delay from 1 to 0	CRW--	[7.5] DPT_-TimePeriod-Sec	2 Bytes
66	Output Temperature TV 2	Temperature TV 2 switching output	-RWT-	[1.1] DPT_Switch	1 Bit
67	Input Temperature TV 2	Temperature TV 2 switching output block	C-W--	[1.1] DPT_Switch	1 Bit
70	Input Temperature TV 3	Temperature TV 3 storage	C-W--	[1.17] DPT_Trigger	1 Bit
71	Input Temperature TV 3	Temperature TV 3 measurement value	C-W--	[9.1] DPT_Value_Temp	2 Bytes
72	Input/Output Temperature TV 3	Temperature TV 3 absolute value	CRWT-	[9.1] DPT_Value_Temp	2 Bytes
73	Input Temperature TV 3	Temp. threshold value 3 (1:+ | 0:-)	C-W--	[1.1] DPT_Switch	1 Bit
74	Input Temperature TV 3	Temperature TV 3 switching delay from 0 to 1	CRW--	[7.5] DPT_-TimePeriod-Sec	2 Bytes

No.	Text	Function	Flags	DPT type	Size
75	Input Temperature TV 3	Temperature TV 3 switching delay from 1 to 0	CRW--	[7.5] DPT_-TimePeriod-Sec	2 Bytes
76	Output Temperature TV 3	Temperature TV 3 switching output	-RWT-	[1.1] DPT_Switch	1 Bit
77	Input Temperature TV 3	Temperature TV 3 switching output block	C-W--	[1.1] DPT_Switch	1 Bit
80	Input Temperature TV 4	Temperature TV 4 storage	C-W--	[1.17] DPT_Trigger	1 Bit
81	Input Temperature TV 4	Temperature TV 4 measurement value	C-W--	[9.1] DPT_Value_Temp	2 Bytes
82	Input/Output Temperature TV 4	Temperature TV 4 absolute value	CRWT-	[9.1] DPT_Value_Temp	2 Bytes
83	Input Temperature TV 4	Temp. threshold value 4 (1:+ | 0:-)	C-W--	[1.1] DPT_Switch	1 Bit
84	Input Temperature TV 4	Temperature TV 4 switching delay from 0 to 1	CRW--	[7.5] DPT_-TimePeriod-Sec	2 Bytes
85	Input Temperature TV 4	Temperature TV 4 switching delay from 1 to 0	CRW--	[7.5] DPT_-TimePeriod-Sec	2 Bytes
86	Output Temperature TV 4	Temperature TV 4 switching output	-RWT-	[1.1] DPT_Switch	1 Bit
87	Input Temperature TV 4	Temperature TV 4 switching output block	C-W--	[1.1] DPT_Switch	1 Bit
190	Output brightness measurement value	Brightness measurement value	-RWT-	[9.4] DPT_Value_Lux	2 Bytes
191	Output brightness measurement value	Sensor malfunction	-RWT-	[1.1] DPT_Switch	1 Bit
220	Input brightness threshold value 1	Brightness threshold value 1 storage	C-W--	[1.17] DPT_Trigger	1 Bit
221	Input brightness threshold value 1	Brightness threshold value 1 measurement value	C-W--	[9.4] DPT_Value_Lux	2 Bytes
222	Input / Output brightness threshold value 1	Brightness threshold value 1 absolute value	CRWTU	[9.4] DPT_Value_Lux	2 Bytes
223	Input brightness threshold value 1	Brightness threshold value 1 change (1:+ | 0 -)	CRW--	[1.1] DPT_Switch	1 Bit

No.	Text	Function	Flags	DPT type	Size
224	Input brightness threshold value 1	Brightness threshold value 1 switching delay from 0 to 1	CRW--	[7.5] DPT_-TimePeriod-Sec	2 Bytes
225	Input brightness threshold value 1	Brightness threshold value 1 switching delay from 1 to 0	CRW--	[7.5] DPT_-TimePeriod-Sec	2 Bytes
226	Output brightness threshold value 1	Brightness threshold value 1 switching output	-RWT-	[1.1] DPT_Switch	1 Bit
227	Input brightness threshold value 1	Brightness threshold value 1 switching output block	CRW--	[1.1] DPT_Switch	1 Bit
230	Input brightness threshold value 2	Brightness threshold value 2 storage	C-W--	[1.17] DPT_Trigger	1 Bit
231	Input brightness threshold value 2	Brightness threshold value 2 measurement value	C-W--	[9.4] DPT_Val-ue_Lux	2 Bytes
232	Input / Output brightness thresh-old value 2	Brightness threshold value 2 absolute value	CRWT U	[9.4] DPT_Val-ue_Lux	2 Bytes
233	Input brightness threshold value 2	Brightness threshold value 2 change (1:+ | 0 -)	CRW--	[1.1] DPT_Switch	1 Bit
234	Input brightness threshold value 2	Brightness threshold value 2 switching delay from 0 to 1	CRW--	[7.5] DPT_-TimePeriod-Sec	2 Bytes
235	Input brightness threshold value 2	Brightness threshold value 2 switching delay from 1 to 0	CRW--	[7.5] DPT_-TimePeriod-Sec	2 Bytes
236	Output brightness threshold value 2	Brightness threshold value 2 switching output	-RWT-	[1.1] DPT_Switch	1 Bit
237	Input brightness threshold value 2	Brightness threshold value 2 switching output block	CRW--	[1.1] DPT_Switch	1 Bit
240	Input brightness threshold value 3	Brightness threshold value 3 storage	C-W--	[1.17] DPT_Trigger	1 Bit
241	Input brightness threshold value 3	Brightness threshold value 3 measurement value	C-W--	[9.4] DPT_Val-ue_Lux	2 Bytes
242	Input / Output brightness thresh-old value 3	Brightness threshold value 3 absolute value	CRWT U	[9.4] DPT_Val-ue_Lux	2 Bytes
243	Input brightness threshold value 3	Brightness threshold value 3 change (1:+ | 0 -)	CRW--	[1.1] DPT_Switch	1 Bit
244	Input brightness threshold value 3	Brightness threshold value 3 switching delay from 0 to 1	CRW--	[7.5] DPT_-TimePeriod-Sec	2 Bytes

No.	Text	Function	Flags	DPT type	Size
245	Input brightness threshold value 3	Brightness threshold value 3 switching delay from 1 to 0	CRW--	[7.5] DPT_-TimePeriod-Sec	2 Bytes
246	Output brightness threshold value 3	Brightness threshold value 3 switching output	-RWT-	[1.1] DPT_Switch	1 Bit
247	Input brightness threshold value 3	Brightness threshold value 3 switching output block	CRW--	[1.1] DPT_Switch	1 Bit
250	Input brightness threshold value 4	Brightness threshold value 4 storage	C-W--	[1.17] DPT_Trigger	1 Bit
251	Input brightness threshold value 4	Brightness threshold value 4 measurement value	C-W--	[9.4] DPT_Val-ue_Lux	2 Bytes
252	Input / Output brightness thresh-old value 4	Brightness threshold value 4 absolute value	CRWTU	[9.4] DPT_Val-ue_Lux	2 Bytes
253	Input brightness threshold value 4	Brightness threshold value 4 change (1:+ | 0 -)	CRW--	[1.1] DPT_Switch	1 Bit
254	Input brightness threshold value 4	Brightness threshold value 4 switching delay from 0 to 1	CRW--	[7.5] DPT_-TimePeriod-Sec	2 Bytes
255	Input brightness threshold value 4	Brightness threshold value 4 switching delay from 1 to 0	CRW--	[7.5] DPT_-TimePeriod-Sec	2 Bytes
256	Output brightness threshold value 4	Brightness threshold value 4 switching output	-RWT-	[1.1] DPT_Switch	1 Bit
257	Input brightness threshold value 4	Brightness threshold value 4 switching output block	CRW--	[1.1] DPT_Switch	1 Bit
460	Input twilight threshold value 1	Twilight threshold value 1 storage	C-W--	[1.17] DPT_Trigger	1 Bit
461	Input twilight threshold value 1	Twilight threshold value 1 measurement value	C-W--	[9.4] DPT_Val-ue_Lux	2 Bytes
462	Input / Output twi-light threshold value 1	Twilight threshold value 1 absolute value	CRWTU	[9.4] DPT_Val-ue_Lux	2 Bytes
463	Input twilight threshold value 1	Twilight threshold value 1 change (1:+ | 0 -)	CRW--	[1.1] DPT_Switch	1 Bit
464	Input twilight threshold value 1	Twilight threshold value 1 switching delay from 0 to 1	CRW--	[7.5] DPT_-TimePeriod-Sec	2 Bytes
465	Input twilight threshold value 1	Twilight threshold value 1 switching delay from 1 to 0	CRW--	[7.5] DPT_-TimePeriod-Sec	2 Bytes

No.	Text	Function	Flags	DPT type	Size
466	Output twilight threshold value 1	Twilight threshold value 1 switching output	-RWT-	[1.1] DPT_Switch	1 Bit
467	Input twilight threshold value 1	Twilight threshold value 1 switching output block	CRW--	[1.1] DPT_Switch	1 Bit
470	Input twilight threshold value 2	Twilight threshold value 2 storage	C-W--	[1.17] DPT_Trigger	1 Bit
471	Input twilight threshold value 2	Twilight threshold value 2 measurement value	C-W--	[9.4] DPT_Value_Lux	2 Bytes
472	Input / Output twilight threshold value 2	Twilight threshold value 2 absolute value	CRWTU	[9.4] DPT_Value_Lux	2 Bytes
473	Input twilight threshold value 2	Twilight threshold value 2 change (1:+ | 0 -)	CRW--	[1.1] DPT_Switch	1 Bit
474	Input twilight threshold value 2	Twilight threshold value 2 switching delay from 0 to 1	CRW--	[7.5] DPT_TimePeriodSec	2 Bytes
475	Input twilight threshold value 2	Twilight threshold value 2 switching delay from 1 to 0	CRW--	[7.5] DPT_TimePeriodSec	2 Bytes
476	Output twilight threshold value 2	Twilight threshold value 2 switching output	-RWT-	[1.1] DPT_Switch	1 Bit
477	Input twilight threshold value 2	Twilight threshold value 2 switching output block	CRW--	[1.1] DPT_Switch	1 Bit
480	Input twilight threshold value 3	Twilight threshold value 3 storage	C-W--	[1.17] DPT_Trigger	1 Bit
481	Input twilight threshold value 3	Twilight threshold value 3 measurement value	C-W--	[9.4] DPT_Value_Lux	2 Bytes
482	Input / Output twilight threshold value 3	Twilight threshold value 3 absolute value	CRWTU	[9.4] DPT_Value_Lux	2 Bytes
483	Input twilight threshold value 3	Twilight threshold value 3 change (1:+ | 0 -)	CRW--	[1.1] DPT_Switch	1 Bit
484	Input twilight threshold value 3	Twilight threshold value 3 switching delay from 0 to 1	CRW--	[7.5] DPT_TimePeriodSec	2 Bytes
485	Input twilight threshold value 3	Twilight threshold value 3 switching delay from 1 to 0	CRW--	[7.5] DPT_TimePeriodSec	2 Bytes
486	Output twilight threshold value 3	Twilight threshold value 3 switching output	-RWT-	[1.1] DPT_Switch	1 Bit
487	Input twilight threshold value 3	Twilight threshold value 3 switching output block	CRW--	[1.1] DPT_Switch	1 Bit

No.	Text	Function	Flags	DPT type	Size
490	Input twilight threshold value 4	Twilight threshold value 4 storage	C-W--	[1.17] DPT_Trigger	1 Bit
491	Input twilight threshold value 4	Twilight threshold value 4 measurement value	C-W--	[9.4] DPT_Value_Lux	2 Bytes
492	Input / Output twilight threshold value 4	Twilight threshold value 4 absolute value	CRWTU	[9.4] DPT_Value_Lux	2 Bytes
493	Input twilight threshold value 4	Twilight threshold value 4 change (1:+ | 0 -)	CRW--	[1.1] DPT_Switch	1 Bit
494	Input twilight threshold value 4	Twilight threshold value 4 switching delay from 0 to 1	CRW--	[7.5] DPT_TimePeriodSec	2 Bytes
495	Input twilight threshold value 4	Twilight threshold value 4 switching delay from 1 to 0	CRW--	[7.5] DPT_TimePeriodSec	2 Bytes
496	Output twilight threshold value 4	Twilight threshold value 4 switching output	-RWT-	[1.1] DPT_Switch	1 Bit
497	Input twilight threshold value 4	Twilight threshold value 4 switching output block	CRW--	[1.1] DPT_Switch	1 Bit
505	Output Night switching output	Night switching output	-RWT-	[1.1] DPT_Switch	1 Bit
506	Input/Output night switching delay to night	Night switching delay to night switching delay	CRW--	[7.5] DPT_TimePeriodSec	2 Bytes
507	Input/Output night switching delay to day	Night switching delay to day switching delay	CRW--	[7.5] DPT_TimePeriodSec	2 Bytes
515	Output Solar position	Solar position Sun direction	-RWT-	[14.7] DPT_Value_AngleDeg	4 Bytes
516	Output Solar position	Solar position Sun elevation	-RWT-	[14.7] DPT_Value_AngleDeg	4 Bytes
517	Output Solar position	Solar position Sun direction	-RWT-	[9.7] DPT_Value_Humidity	2 Bytes
518	Output Solar position	Solar position Sun elevation	-RWT-	[9.7] DPT_Value_Humidity	2 Bytes
581	Output wind sensor	Wind sensor measurement value in m/s	-RWT-	[9.5] DPT_Value_Wsp	2 Bytes

No.	Text	Function	Flags	DPT type	Size
582	Output wind sensor	Wind sensor measurement value in km/h	-RWT-	[9.28] DPT_Value_Wsp_kmh	2 Bytes
583	Output wind sensor	Wind sensor measurement value in Beaufort	-RWT-	[20.14] DPT_Beaufort_Wind_Force_Scale	1 Byte
585	Input wind sensor	Wind sensor measurement value max request	C-W--	[1.17] DPT_Trigger	1 Bit
586	Output wind sensor	Wind sensor measurement value maximum in m/s	-RWT-	[9.5] DPT_Value_Wsp	2 Bytes
587	Output wind sensor	Wind sensor measurement value maximum in km/h	-RWT-	[9.28] DPT_Value_Wsp_kmh	2 Bytes
588	Output wind sensor	Wind sensor measurement value maximum in Beaufort	-RWT-	[20.14] DPT_Beaufort_Wind_Force_Scale	1 Byte
589	Input wind sensor	Wind sensor measurement value max reset	C-W--	[1.17] DPT_Trigger	1 Bit
600	Input wind threshold value 1	Wind threshold value 1 storage	C-W--	[1.17] DPT_Trigger	1 Bit
601	Input wind threshold value 1	Wind threshold value 1 measurement value	C-W--	[9.5] DPT_Value_Wsp	2 Bytes
602	Input / Output wind threshold value 1	Wind threshold value 1 absolute value	CRWT-	[9.5] DPT_Value_Wsp	2 Bytes
603	Input wind threshold value 1	Wind threshold value 1 (1:+ | 0:-)	C-W--	[1.1] DPT_Switch	1 Bit
604	Input wind threshold value 1	Wind threshold value 1 switching delay from 0 to 1	CRW--	[7.5] DPT_TimePeriodSec	2 Bytes
605	Input wind threshold value 1	Wind threshold value 1 switching delay from 1 to 0	CRW--	[7.5] DPT_TimePeriodSec	2 Bytes
606	Output wind threshold value 1	Wind threshold value 1 switching output	-RWT-	[1.1] DPT_Switch	1 Bit
607	Input wind threshold value 1	Wind threshold value 1 switching output block	C-W--	[1.1] DPT_Switch	1 Bit
610	Input wind threshold value 2	Wind threshold value 2 storage	C-W--	[1.17] DPT_Trigger	1 Bit

No.	Text	Function	Flags	DPT type	Size
611	Input wind threshold value 2	Wind threshold value 2 measurement value	C-W--	[9.5] DPT_Value_Wsp	2 Bytes
612	Input / Output wind threshold value 2	Wind threshold value 2 absolute value	CRWT-	[9.5] DPT_Value_Wsp	2 Bytes
613	Input wind threshold value 2	Wind threshold value 2 (1:+ | 0:-)	C-W--	[1.1] DPT_Switch	1 Bit
614	Input wind threshold value 2	Wind threshold value 2 switching delay from 0 to 1	CRW--	[7.5] DPT_TimePeriodSec	2 Bytes
615	Input wind threshold value 2	Wind threshold value 2 switching delay from 1 to 0	CRW--	[7.5] DPT_TimePeriodSec	2 Bytes
616	Output wind threshold value 2	Wind threshold value 2 switching output	-RWT-	[1.1] DPT_Switch	1 Bit
617	Input wind threshold value 2	Wind threshold value 2 switching output block	C-W--	[1.1] DPT_Switch	1 Bit
620	Input wind threshold value 3	Wind threshold value 3 storage	C-W--	[1.17] DPT_Trigger	1 Bit
621	Input wind threshold value 3	Wind threshold value 3 measurement value	C-W--	[9.5] DPT_Value_Wsp	2 Bytes
622	Input / Output wind threshold value 3	Wind threshold value 3 absolute value	CRWT-	[9.5] DPT_Value_Wsp	2 Bytes
623	Input wind threshold value 3	Wind threshold value 3 (1:+ | 0:-)	C-W--	[1.1] DPT_Switch	1 Bit
624	Input wind threshold value 3	Wind threshold value 3 switching delay from 0 to 1	CRW--	[7.5] DPT_TimePeriodSec	2 Bytes
625	Input wind threshold value 3	Wind threshold value 3 switching delay from 1 to 0	CRW--	[7.5] DPT_TimePeriodSec	2 Bytes
626	Output wind threshold value 3	Wind threshold value 3 switching output	-RWT-	[1.1] DPT_Switch	1 Bit
627	Input wind threshold value 3	Wind threshold value 3 switching output block	C-W--	[1.1] DPT_Switch	1 Bit
630	Input wind threshold value 4	Wind threshold value 4 storage	C-W--	[1.17] DPT_Trigger	1 Bit
631	Input wind threshold value 4	Wind threshold value 4 measurement value	C-W--	[9.5] DPT_Value_Wsp	2 Bytes

No.	Text	Function	Flags	DPT type	Size
632	Input / Output wind threshold value 4	Wind threshold value 4 absolute value	CRWT-	[9.5] DPT_Value_Wsp	2 Bytes
633	Input wind threshold value 4	Wind threshold value 4 (1:+ | 0:-)	C-W--	[1.1] DPT_Switch	1 Bit
634	Input wind threshold value 4	Wind threshold value 4 switching delay from 0 to 1	CRW--	[7.5] DPT_TimePeriodSec	2 Bytes
635	Input wind threshold value 4	Wind threshold value 4 switching delay from 1 to 0	CRW--	[7.5] DPT_TimePeriodSec	2 Bytes
636	Output wind threshold value 4	Wind threshold value 4 switching output	-RWT-	[1.1] DPT_Switch	1 Bit
637	Input wind threshold value 4	Wind threshold value 4 switching output block	C-W--	[1.1] DPT_Switch	1 Bit
870	Output façades	Façades heat protection status	-RWT-	[1.1] DPT_Switch	1 Bit
871	Output façade 1	Façade 1 status	-RWT-	[1.1] DPT_Switch	1 Bit
872	Output façade 1	Façade 1 drive position [%]	-RWT-	[5.1] DPT_Scaling	1 Byte
873	Output façade 1	Façade 1 slat position [%]	-RWT-	[5.1] DPT_Scaling	1 Byte
874	Input façade 1	Façade 1 block (1 = blocked)	C-W--	[1.1] DPT_Switch	1 Bit
875	Input façade 1	Façade 1 safety (1 = active)	C-W--	[1.1] DPT_Switch	1 Bit
876	Output façade 2	Façade 2 status	-RWT-	[1.1] DPT_Switch	1 Bit
877	Output façade 2	Façade 2 drive position [%]	-RWT-	[5.1] DPT_Scaling	1 Byte
878	Output façade 2	Façade 2 slat position [%]	-RWT-	[5.1] DPT_Scaling	1 Byte
879	Input façade 2	Façade 2 block (1 = blocked)	C-W--	[1.1] DPT_Switch	1 Bit
880	Input façade 2	Façade 2 safety (1 = active)	C-W--	[1.1] DPT_Switch	1 Bit
881	Output façade 3	Façade 3 status	-RWT-	[1.1] DPT_Switch	1 Bit
882	Output façade 3	Façade 3 drive position [%]	-RWT-	[5.1] DPT_Scaling	1 Byte
883	Output façade 3	Façade 3 slat position [%]	-RWT-	[5.1] DPT_Scaling	1 Byte
884	Input façade 3	Façade 3 block (1 = blocked)	C-W--	[1.1] DPT_Switch	1 Bit

No.	Text	Function	Flags	DPT type	Size
885	Input façade 3	Façade 3 safety (1 = active)	C-W--	[1.1] DPT_Switch	1 Bit
886	Output façade 4	Façade 4 status	-RWT-	[1.1] DPT_Switch	1 Bit
887	Output façade 4	Façade 4 drive position [%]	-RWT-	[5.1] DPT_Scaling	1 Byte
888	Output façade 4	Façade 4 slat position [%]	-RWT-	[5.1] DPT_Scaling	1 Byte
889	Input façade 4	Façade 4 block (1 = blocked)	C-W--	[1.1] DPT_Switch	1 Bit
890	Input façade 4	Façade 4 safety (1 = active)	C-W--	[1.1] DPT_Switch	1 Bit
891	Output façade 5	Façade 5 status	-RWT-	[1.1] DPT_Switch	1 Bit
892	Output façade 5	Façade 5 drive position [%]	-RWT-	[5.1] DPT_Scaling	1 Byte
893	Output façade 5	Façade 5 slat position [%]	-RWT-	[5.1] DPT_Scaling	1 Byte
894	Input façade 5	Façade 5 block (1 = blocked)	C-W--	[1.1] DPT_Switch	1 Bit
895	Input façade 5	Façade 5 safety (1 = active)	C-W--	[1.1] DPT_Switch	1 Bit
896	Output façade 6	Façade 6 status	-RWT-	[1.1] DPT_Switch	1 Bit
897	Output façade 6	Façade 6 drive position [%]	-RWT-	[5.1] DPT_Scaling	1 Byte
898	Output façade 6	Façade 6 slat position [%]	-RWT-	[5.1] DPT_Scaling	1 Byte
899	Input façade 6	Façade 6 block (1 = blocked)	C-W--	[1.1] DPT_Switch	1 Bit
900	Input façade 6	Façade 6 safety (1 = active)	C-W--	[1.1] DPT_Switch	1 Bit
901	Output façade 7	Façade 7 status	-RWT-	[1.1] DPT_Switch	1 Bit
902	Output façade 7	Façade 7 drive position [%]	-RWT-	[5.1] DPT_Scaling	1 Byte
903	Output façade 7	Façade 7 slat position [%]	-RWT-	[5.1] DPT_Scaling	1 Byte
904	Input façade 7	Façade 7 block (1 = blocked)	C-W--	[1.1] DPT_Switch	1 Bit
905	Input façade 7	Façade 7 safety (1 = active)	C-W--	[1.1] DPT_Switch	1 Bit
906	Output façade 8	Façade 8 status	-RWT-	[1.1] DPT_Switch	1 Bit

No.	Text	Function	Flags	DPT type	Size
907	Output façade 8	Façade 8 drive position [%]	-RWT-	[5.1] DPT_S-caling	1 Byte
908	Output façade 8	Façade 8 slat position [%]	-RWT-	[5.1] DPT_S-caling	1 Byte
909	Input façade 8	Façade 8 block (1 = blocked)	C-W--	[1.1] DPT_Switch	1 Bit
910	Input façade 8	Façade 8 safety (1 = active)	C-W--	[1.1] DPT_Switch	1 Bit
1840	Input/Output weekly timer period 1	Weekly timer period 1: switch-on time	CRWT-	[10.1] DPT_-TimeOfDay	3 Bytes
1841	Input/Output weekly timer period 1	Weekly timer period 1: switch-off time	CRWT-	[10.1] DPT_-TimeOfDay	3 Bytes
1842	Output weekly timer period 1	Weekly timer period 1 switching output	-RWT-	[1.1] DPT_Switch	1 Bit
1843	Output weekly timer period 1: 8-bit output	Weekly timer period 1: 8-bit output	-RWT-	[5.10] DPT_Val-ue_1_Ucount	1 Byte
1844	Input/Output weekly timer period 2: switch-on time	Weekly timer period 2: switch-on time	CRWT-	[10.1] DPT_-TimeOfDay	3 Bytes
1845	Input/Output weekly timer period 2: switch-off time	Weekly timer period 2: switch-off time	CRWT-	[10.1] DPT_-TimeOfDay	3 Bytes
1846	Output weekly timer period 2: switching output	Weekly timer period 2 switching output	-RWT-	[1.1] DPT_Switch	1 Bit
1847	Output weekly timer period 2: 8-bit output	Weekly timer period 2: 8-bit output	-RWT-	[5.10] DPT_Val-ue_1_Ucount	1 Byte
1848	Input/Output weekly timer period 3: switch-on time	Weekly timer period 3: switch-on time	CRWT-	[10.1] DPT_-TimeOfDay	3 Bytes
1849	Input/Output weekly timer period 3: switch-off time	Weekly timer period 3: switch-off time	CRWT-	[10.1] DPT_-TimeOfDay	3 Bytes
1850	Output weekly timer period 3: switching output	Weekly timer period 3 switching output	-RWT-	[1.1] DPT_Switch	1 Bit

No.	Text	Function	Flags	DPT type	Size
1851	Output weekly timer period 3: 8-bit output	Weekly timer period 3: 8-bit output	-RWT-	[5.10] DPT_Value_1_Ucount	1 Byte
1852	Input/Output weekly timer period 4: switch-on time	Weekly timer period 4: switch-on time	CRWT-	[10.1] DPT_TimeOfDay	3 Bytes
1853	Input/Output weekly timer period 4: switch-off time	Weekly timer period 4: switch-off time	CRWT-	[10.1] DPT_TimeOfDay	3 Bytes
1854	Output weekly timer period 4: switching output	Weekly timer period 4 switching output	-RWT-	[1.1] DPT_Switch	1 Bit
1855	Output weekly timer period 4: 8-bit output	Weekly timer period 4: 8-bit output	-RWT-	[5.10] DPT_Value_1_Ucount	1 Byte
1856	Input/Output weekly timer period 5: switch-on time	Weekly timer period 5: switch-on time	CRWT-	[10.1] DPT_TimeOfDay	3 Bytes
1857	Input/Output weekly timer period 5: switch-off time	Weekly timer period 5: switch-off time	CRWT-	[10.1] DPT_TimeOfDay	3 Bytes
1858	Output weekly timer period 5: switching output	Weekly timer period 5 switching output	-RWT-	[1.1] DPT_Switch	1 Bit
1859	Output weekly timer period 5: 8-bit output	Weekly timer period 5: 8-bit output	-RWT-	[5.10] DPT_Value_1_Ucount	1 Byte
1860	Input/Output weekly timer period 6: switch-on time	Weekly timer period 6: switch-on time	CRWT-	[10.1] DPT_TimeOfDay	3 Bytes
1861	Input/Output weekly timer period 6: switch-off time	Weekly timer period 6: switch-off time	CRWT-	[10.1] DPT_TimeOfDay	3 Bytes
1862	Output weekly timer period 6: switching output	Weekly timer period 6 switching output	-RWT-	[1.1] DPT_Switch	1 Bit
1863	Output weekly timer period 6: 8-bit output	Weekly timer period 6: 8-bit output	-RWT-	[5.10] DPT_Value_1_Ucount	1 Byte

No.	Text	Function	Flags	DPT type	Size
1864	Input/Output weekly timer period 7: switch-on time	Weekly timer period 7: switch-on time	CRWT-	[10.1] DPT_-TimeOfDay	3 Bytes
1865	Input/Output weekly timer period 7: switch-off time	Weekly timer period 7: switch-off time	CRWT-	[10.1] DPT_-TimeOfDay	3 Bytes
1866	Output weekly timer period 7: switching output	Weekly timer period 7 switching output	-RWT-	[1.1] DPT_Switch	1 Bit
1867	Output weekly timer period 7: 8-bit output	Weekly timer period 7: 8-bit output	-RWT-	[5.10] DPT_Val-ue_1_Ucount	1 Byte
1868	Input/Output weekly timer period 8: switch-on time	Weekly timer period 8: switch-on time	CRWT-	[10.1] DPT_-TimeOfDay	3 Bytes
1869	Input/Output weekly timer period 8: switch-off time	Weekly timer period 8: switch-off time	CRWT-	[10.1] DPT_-TimeOfDay	3 Bytes
1870	Output weekly timer period 8: switching output	Weekly timer period 8 switching output	-RWT-	[1.1] DPT_Switch	1 Bit
1871	Output weekly timer period 8: 8-bit output	Weekly timer period 8: 8-bit output	-RWT-	[5.10] DPT_Val-ue_1_Ucount	1 Byte
1872	Input/Output weekly timer period 9: switch-on time	Weekly timer period 9: switch-on time	CRWT-	[10.1] DPT_-TimeOfDay	3 Bytes
1873	Input/Output weekly timer period 9: switch-off time	Weekly timer period 9: switch-off time	CRWT-	[10.1] DPT_-TimeOfDay	3 Bytes
1874	Output weekly timer period 9: switching output	Weekly timer period 9 switching output	-RWT-	[1.1] DPT_Switch	1 Bit
1875	Output weekly timer period 9: 8-bit output	Weekly timer period 9: 8-bit output	-RWT-	[5.10] DPT_Val-ue_1_Ucount	1 Byte
1876	Input/Output weekly timer period 10: switch-on time	Weekly timer period 10: switch-on time	CRWT-	[10.1] DPT_-TimeOfDay	3 Bytes

No.	Text	Function	Flags	DPT type	Size
1877	Input/Output weekly timer period 10: switch-off time	Weekly timer period 10: switch-off time	CRWT-	[10.1] DPT_-TimeOfDay	3 Bytes
1878	Output weekly timer period 10: switching output	Weekly timer period 10 switching output	-RWT-	[1.1] DPT_Switch	1 Bit
1879	Output weekly timer period 10: 8-bit output	Weekly timer period 10: 8-bit output	-RWT-	[5.10] DPT_Val-ue_1_Ucount	1 Byte
1880	Input/Output weekly timer period 11: switch-on time	Weekly timer period 11: switch-on time	CRWT-	[10.1] DPT_-TimeOfDay	3 Bytes
1881	Input/Output weekly timer period 11: switch-off time	Weekly timer period 11: switch-off time	CRWT-	[10.1] DPT_-TimeOfDay	3 Bytes
1882	Output weekly timer period 11: switching output	Weekly timer period 11 switching output	-RWT-	[1.1] DPT_Switch	1 Bit
1883	Output weekly timer period 11: 8-bit output	Weekly timer period 11: 8-bit output	-RWT-	[5.10] DPT_Val-ue_1_Ucount	1 Byte
1884	Input/Output weekly timer period 12: switch-on time	Weekly timer period 12: switch-on time	CRWT-	[10.1] DPT_-TimeOfDay	3 Bytes
1885	Input/Output weekly timer period 12: switch-off time	Weekly timer period 12: switch-off time	CRWT-	[10.1] DPT_-TimeOfDay	3 Bytes
1886	Output weekly timer period 12: switching output	Weekly timer period 12 switching output	-RWT-	[1.1] DPT_Switch	1 Bit
1887	Output weekly timer period 12: 8-bit output	Weekly timer period 12: 8-bit output	-RWT-	[5.10] DPT_Val-ue_1_Ucount	1 Byte
1888	Input/Output weekly timer period 13: switch-on time	Weekly timer period 13: switch-on time	CRWT-	[10.1] DPT_-TimeOfDay	3 Bytes
1889	Input/Output weekly timer period 13: switch-off time	Weekly timer period 13: switch-off time	CRWT-	[10.1] DPT_-TimeOfDay	3 Bytes

No.	Text	Function	Flags	DPT type	Size
1890	Output weekly timer period 13: switching output	Weekly timer period 13 switching output	-RWT-	[1.1] DPT_Switch	1 Bit
1891	Output weekly timer period 13: 8-bit output	Weekly timer period 13: 8-bit output	-RWT-	[5.10] DPT_Value_1_Ucount	1 Byte
1892	Input/Output weekly timer period 14: switch-on time	Weekly timer period 14: switch-on time	CRWT-	[10.1] DPT_TimeOfDay	3 Bytes
1893	Input/Output weekly timer period 14: switch-off time	Weekly timer period 14: switch-off time	CRWT-	[10.1] DPT_TimeOfDay	3 Bytes
1894	Output weekly timer period 14: switching output	Weekly timer period 14 switching output	-RWT-	[1.1] DPT_Switch	1 Bit
1895	Output weekly timer period 14: 8-bit output	Weekly timer period 14: 8-bit output	-RWT-	[5.10] DPT_Value_1_Ucount	1 Byte
1896	Input/Output weekly timer period 15: switch-on time	Weekly timer period 15: switch-on time	CRWT-	[10.1] DPT_TimeOfDay	3 Bytes
1897	Input/Output weekly timer period 15: switch-off time	Weekly timer period 15: switch-off time	CRWT-	[10.1] DPT_TimeOfDay	3 Bytes
1898	Output weekly timer period 15: switching output	Weekly timer period 15 switching output	-RWT-	[1.1] DPT_Switch	1 Bit
1899	Output weekly timer period 15: 8-bit output	Weekly timer period 15: 8-bit output	-RWT-	[5.10] DPT_Value_1_Ucount	1 Byte
1900	Input/Output weekly timer period 16: switch-on time	Weekly timer period 16: switch-on time	CRWT-	[10.1] DPT_TimeOfDay	3 Bytes
1901	Input/Output weekly timer period 16: switch-off time	Weekly timer period 16: switch-off time	CRWT-	[10.1] DPT_TimeOfDay	3 Bytes
1902	Output weekly timer period 16: switching output	Weekly timer period 16 switching output	-RWT-	[1.1] DPT_Switch	1 Bit

No.	Text	Function	Flags	DPT type	Size
1903	Output weekly timer period 16: 8-bit output	Weekly timer period 16: 8-bit output	-RWT-	[5.10] DPT_Value_1_Ucount	1 Byte
1904	Input/Output weekly timer period 17: switch-on time	Weekly timer period 17: switch-on time	CRWT-	[10.1] DPT_TimeOfDay	3 Bytes
1905	Input/Output weekly timer period 17: switch-off time	Weekly timer period 17: switch-off time	CRWT-	[10.1] DPT_TimeOfDay	3 Bytes
1906	Output weekly timer period 17: switching output	Weekly timer period 17 switching output	-RWT-	[1.1] DPT_Switch	1 Bit
1907	Output weekly timer period 17: 8-bit output	Weekly timer period 17: 8-bit output	-RWT-	[5.10] DPT_Value_1_Ucount	1 Byte
1908	Input/Output weekly timer period 18: switch-on time	Weekly timer period 18: switch-on time	CRWT-	[10.1] DPT_TimeOfDay	3 Bytes
1909	Input/Output weekly timer period 18: switch-off time	Weekly timer period 18: switch-off time	CRWT-	[10.1] DPT_TimeOfDay	3 Bytes
1910	Output weekly timer period 18: switching output	Weekly timer period 18 switching output	-RWT-	[1.1] DPT_Switch	1 Bit
1911	Output weekly timer period 18: 8-bit output	Weekly timer period 18: 8-bit output	-RWT-	[5.10] DPT_Value_1_Ucount	1 Byte
1912	Input/Output weekly timer period 19: switch-on time	Weekly timer period 19: switch-on time	CRWT-	[10.1] DPT_TimeOfDay	3 Bytes
1913	Input/Output weekly timer period 19: switch-off time	Weekly timer period 19: switch-off time	CRWT-	[10.1] DPT_TimeOfDay	3 Bytes
1914	Output weekly timer period 19: switching output	Weekly timer period 19 switching output	-RWT-	[1.1] DPT_Switch	1 Bit
1915	Output weekly timer period 19: 8-bit output	Weekly timer period 19: 8-bit output	-RWT-	[5.10] DPT_Value_1_Ucount	1 Byte

No.	Text	Function	Flags	DPT type	Size
1916	Input/Output weekly timer period 20: switch-on time	Weekly timer period 20: switch-on time	CRWT-	[10.1] DPT_-TimeOfDay	3 Bytes
1917	Input/Output weekly timer period 20: switch-off time	Weekly timer period 20: switch-off time	CRWT-	[10.1] DPT_-TimeOfDay	3 Bytes
1918	Output weekly timer period 20: switching output	Weekly timer period 20 switching output	-RWT-	[1.1] DPT_Switch	1 Bit
1919	Output weekly timer period 20: 8-bit output	Weekly timer period 20: 8-bit output	-RWT-	[5.10] DPT_Val-ue_1_Ucount	1 Byte
1920	Input/Output weekly timer period 21: switch-on time	Weekly timer period 21: switch-on time	CRWT-	[10.1] DPT_-TimeOfDay	3 Bytes
1921	Input/Output weekly timer period 21: switch-off time	Weekly timer period 21: switch-off time	CRWT-	[10.1] DPT_-TimeOfDay	3 Bytes
1922	Output weekly timer period 21: switching output	Weekly timer period 21 switching output	-RWT-	[1.1] DPT_Switch	1 Bit
1923	Output weekly timer period 21: 8-bit output	Weekly timer period 21: 8-bit output	-RWT-	[5.10] DPT_Val-ue_1_Ucount	1 Byte
1924	Input/Output weekly timer period 22: switch-on time	Weekly timer period 22: switch-on time	CRWT-	[10.1] DPT_-TimeOfDay	3 Bytes
1925	Input/Output weekly timer period 22: switch-off time	Weekly timer period 22: switch-off time	CRWT-	[10.1] DPT_-TimeOfDay	3 Bytes
1926	Output weekly timer period 22: switching output	Weekly timer period 22 switching output	-RWT-	[1.1] DPT_Switch	1 Bit
1927	Output weekly timer period 22: 8-bit output	Weekly timer period 22: 8-bit output	-RWT-	[5.10] DPT_Val-ue_1_Ucount	1 Byte
1928	Input/Output weekly timer period 23: switch-on time	Weekly timer period 23: switch-on time	CRWT-	[10.1] DPT_-TimeOfDay	3 Bytes

No.	Text	Function	Flags	DPT type	Size
1929	Input/Output weekly timer period 23: switch-off time	Weekly timer period 23: switch-off time	CRWT-	[10.1] DPT_-TimeOfDay	3 Bytes
1930	Output weekly timer period 23: switching output	Weekly timer period 23 switching output	-RWT-	[1.1] DPT_Switch	1 Bit
1931	Output weekly timer period 23: 8-bit output	Weekly timer period 23: 8-bit output	-RWT-	[5.10] DPT_Val-ue_1_Ucount	1 Byte
1932	Input/Output weekly timer period 24: switch-on time	Weekly timer period 24: switch-on time	CRWT-	[10.1] DPT_-TimeOfDay	3 Bytes
1933	Input/Output weekly timer period 24: switch-off time	Weekly timer period 24: switch-off time	CRWT-	[10.1] DPT_-TimeOfDay	3 Bytes
1934	Output weekly timer period 24: switching output	Weekly timer period 24 switching output	-RWT-	[1.1] DPT_Switch	1 Bit
1935	Output weekly timer period 24: 8-bit output	Weekly timer period 24: 8-bit output	-RWT-	[5.10] DPT_Val-ue_1_Ucount	1 Byte
1970	Input/Output calendar timer period 1: start date	Calendar timer period 1: start date	CRWT-	[11.1] DPT_-Date	3 Bytes
1971	Input/Output calendar timer period 1: end date	Calendar timer period 1: end date	CRWT-	[11.1] DPT_-Date	3 Bytes
1972	Input/Output calendar timer period 1 sequence 1: switch-on time	Calendar timer period 1 sequence 1: switch-on time	CRWT-	[10.1] DPT_-TimeOfDay	3 Bytes
1973	Input/Output calendar timer period 1 sequence 1: switch-off time	Calendar timer period 1 sequence 1: switch-off time	CRWT-	[10.1] DPT_-TimeOfDay	3 Bytes
1974	Output calendar timer period 1 sequence 1: switching output	Calendar timer period 1 sequence 1 switching output	-RWT-	[1.1] DPT_Switch	1 Bit
1975	Output calendar timer period 1 sequence 1: 8-bit output	Calendar timer period 1 sequence 1: 8-bit output	-RWT-	[5.10] DPT_Val-ue_1_Ucount	1 Byte

No.	Text	Function	Flags	DPT type	Size
1976	Input/Output calendar timer period 1 sequence 2: switch-on time	Calendar timer period 1 sequence 2: switch-on time	CRWT-	[10.1] DPT_TimeOfDay	3 Bytes
1977	Input/Output calendar timer period 1 sequence 2: switch-off time	Calendar timer period 1 sequence 2: switch-off time	CRWT-	[10.1] DPT_TimeOfDay	3 Bytes
1978	Output calendar timer period 1 sequence 2: switching output	Calendar timer period 1 sequence 2 switching output	-RWT-	[1.1] DPT_Switch	1 Bit
1979	Output calendar timer period 1 sequence 2: 8-bit output	Calendar timer period 1 sequence 2: 8-bit output	-RWT-	[5.10] DPT_Value_1_Ucount	1 Byte
1980	Input/Output calendar timer period 2: start date	Calendar timer period 2: start date	CRWT-	[11.1] DPT_Date	3 Bytes
1981	Input/Output calendar timer period 2: end date	Calendar timer period 2: end date	CRWT-	[11.1] DPT_Date	3 Bytes
1982	Input/Output calendar timer period 2 sequence 1: switch-on time	Calendar timer period 2 sequence 1: switch-on time	CRWT-	[10.1] DPT_TimeOfDay	3 Bytes
1983	Input/Output calendar timer period 2 sequence 1: switch-off time	Calendar timer period 2 sequence 1: switch-off time	CRWT-	[10.1] DPT_TimeOfDay	3 Bytes
1984	Output calendar timer period 2 sequence 1: switching output	Calendar timer period 2 sequence 1 switching output	-RWT-	[1.1] DPT_Switch	1 Bit
1985	Output calendar timer period 2 sequence 1: 8-bit output	Calendar timer period 2 sequence 1: 8-bit output	-RWT-	[5.10] DPT_Value_1_Ucount	1 Byte
1986	Input/Output calendar timer period 2 sequence 2: switch-on time	Calendar timer period 2 sequence 2: switch-on time	CRWT-	[10.1] DPT_TimeOfDay	3 Bytes
1987	Input/Output calendar timer period 2 sequence 2: switch-off time	Calendar timer period 2 sequence 2: switch-off time	CRWT-	[10.1] DPT_TimeOfDay	3 Bytes

No.	Text	Function	Flags	DPT type	Size
1988	Output calendar timer period 2 sequence 2: switching output	Calendar timer period 2 sequence 2 switching output	-RWT-	[1.1] DPT_Switch	1 Bit
1989	Output calendar timer period 2 sequence 2: 8-bit output	Calendar timer period 2 sequence 2: 8-bit output	-RWT-	[5.10] DPT_Val-ue_1_Ucount	1 Byte
1990	Input/Output calendar timer period 3: start date	Calendar timer period 3: start date	CRWT-	[11.1] DPT_-Date	3 Bytes
1991	Input/Output calendar timer period 3: end date	Calendar timer period 3: end date	CRWT-	[11.1] DPT_-Date	3 Bytes
1992	Input/Output calendar timer period 3 sequence 1: switch-on time	Calendar timer period 3 sequence 1: switch-on time	CRWT-	[10.1] DPT_-TimeOfDay	3 Bytes
1993	Input/Output calendar timer period 3 sequence 1: switch-off time	Calendar timer period 3 sequence 1: switch-off time	CRWT-	[10.1] DPT_-TimeOfDay	3 Bytes
1994	Output calendar timer period 3 sequence 1: switching output	Calendar timer period 3 sequence 1 switching output	-RWT-	[1.1] DPT_Switch	1 Bit
1995	Output calendar timer period 3 sequence 1: 8-bit output	Calendar timer period 3 sequence 1: 8-bit output	-RWT-	[5.10] DPT_Val-ue_1_Ucount	1 Byte
1996	Input/Output calendar timer period 3 sequence 2: switch-on time	Calendar timer period 3 sequence 2: switch-on time	CRWT-	[10.1] DPT_-TimeOfDay	3 Bytes
1997	Input/Output calendar timer period 3 sequence 2: switch-off time	Calendar timer period 3 sequence 2: switch-off time	CRWT-	[10.1] DPT_-TimeOfDay	3 Bytes
1998	Output calendar timer period 3 sequence 2: switching output	Calendar timer period 3 sequence 2 switching output	-RWT-	[1.1] DPT_Switch	1 Bit
1999	Output calendar timer period 3 sequence 2: 8-bit output	Calendar timer period 3 sequence 2: 8-bit output	-RWT-	[5.10] DPT_Val-ue_1_Ucount	1 Byte

No.	Text	Function	Flags	DPT type	Size
2000	Input/Output calendar timer period 4: start date	Calendar timer period 4: start date	CRWT-	[11.1] DPT_Date	3 Bytes
2001	Input/Output calendar timer period 4: end date	Calendar timer period 4: end date	CRWT-	[11.1] DPT_Date	3 Bytes
2002	Input/Output calendar timer period 4 sequence 1: switch-on time	Calendar timer period 4 sequence 1: switch-on time	CRWT-	[10.1] DPT_TimeOfDay	3 Bytes
2003	Input/Output calendar timer period 4 sequence 1: switch-off time	Calendar timer period 4 sequence 1: switch-off time	CRWT-	[10.1] DPT_TimeOfDay	3 Bytes
2004	Output calendar timer period 4 sequence 1: switching output	Calendar timer period 4 sequence 1 switching output	-RWT-	[1.1] DPT_Switch	1 Bit
2005	Output calendar timer period 4 sequence 1: 8-bit output	Calendar timer period 4 sequence 1: 8-bit output	-RWT-	[5.10] DPT_Value_1_Ucount	1 Byte
2006	Input/Output calendar timer period 4 sequence 2: switch-on time	Calendar timer period 4 sequence 2: switch-on time	CRWT-	[10.1] DPT_TimeOfDay	3 Bytes
2007	Input/Output calendar timer period 4 sequence 2: switch-off time	Calendar timer period 4 sequence 2: switch-off time	CRWT-	[10.1] DPT_TimeOfDay	3 Bytes
2008	Output calendar timer period 4 sequence 2: switching output	Calendar timer period 4 sequence 2 switching output	-RWT-	[1.1] DPT_Switch	1 Bit
2009	Output calendar timer period 4 sequence 2: 8-bit output	Calendar timer period 4 sequence 2: 8-bit output	-RWT-	[5.10] DPT_Value_1_Ucount	1 Byte
2180	Input logic input 1	Logic input 1	C-W--	[1.2] DPT_Bool	1 Bit
2181	Input logic input 2	Logic input 2	C-W--	[1.2] DPT_Bool	1 Bit
2182	Input logic input 3	Logic input 3	C-W--	[1.2] DPT_Bool	1 Bit
2183	Input logic input 4	Logic input 4	C-W--	[1.2] DPT_Bool	1 Bit

No.	Text	Function	Flags	DPT type	Size
2184	Input logic input 5	Logic input 5	C-W--	[1.2] DPT_-Bool	1 Bit
2185	Input logic input 6	Logic input 6	C-W--	[1.2] DPT_-Bool	1 Bit
2186	Input logic input 7	Logic input 7	C-W--	[1.2] DPT_-Bool	1 Bit
2187	Input logic input 8	Logic input 8	C-W--	[1.2] DPT_-Bool	1 Bit
2188	Input logic input 9	Logic input 9	C-W--	[1.2] DPT_-Bool	1 Bit
2189	Input logic input 10	Logic input 10	C-W--	[1.2] DPT_-Bool	1 Bit
2190	Input logic input 11	Logic input 11	C-W--	[1.2] DPT_-Bool	1 Bit
2191	Input logic input 12	Logic input 12	C-W--	[1.2] DPT_-Bool	1 Bit
2192	Input logic input 13	Logic input 13	C-W--	[1.2] DPT_-Bool	1 Bit
2193	Input logic input 14	Logic input 14	C-W--	[1.2] DPT_-Bool	1 Bit
2194	Input logic input 15	Logic input 15	C-W--	[1.2] DPT_-Bool	1 Bit
2195	Input logic input 16	Logic input 16	C-W--	[1.2] DPT_-Bool	1 Bit
2201	Output AND logic 1	AND logic 1: 1-bit switching output	-RWT-	[1.2] DPT_-Bool	1 Bit
2202	Output AND logic 1	AND logic 1: 8-bit output A	-RWT-	depending on setting	1 Byte
2203	Output AND logic 1	AND logic 1: 8-bit output B	-RWT-	depending on setting	1 Byte
2204	Input AND logic 1	AND logic 1: block	C-W--	[1.1] DPT_Switch	1 Bit
2205	Output AND logic 2	AND logic 2: 1-bit switching output	-RWT-	[1.2] DPT_-Bool	1 Bit
2206	Output AND logic 2	AND logic 2: 8-bit output A	-RWT-	depending on setting	1 Byte
2207	Output AND logic 2	AND logic 2: 8-bit output B	-RWT-	depending on setting	1 Byte
2208	Input AND logic 2	AND logic 2: block	C-W--	[1.1] DPT_Switch	1 Bit
2209	Output AND logic 3	AND logic 3: 1-bit switching output	-RWT-	[1.2] DPT_-Bool	1 Bit
2210	Output AND logic 3	AND logic 3: 8-bit output A	-RWT-	depending on setting	1 Byte

No.	Text	Function	Flags	DPT type	Size
2211	Output AND logic 3	AND logic 3: 8-bit output B	-RWT-	depending on setting	1 Byte
2212	Input AND logic 3	AND logic 3: block	C-W--	[1.1] DPT_Switch	1 Bit
2213	Output AND logic 4	AND logic 4: 1-bit switching output	-RWT-	[1.2] DPT_-Bool	1 Bit
2214	Output AND logic 4	AND logic 4: 8-bit output A	-RWT-	depending on setting	1 Byte
2215	Output AND logic 4	AND logic 4: 8-bit output B	-RWT-	depending on setting	1 Byte
2216	Input AND logic 4	AND logic 4: block	C-W--	[1.1] DPT_Switch	1 Bit
2217	Output AND logic 5	AND logic 5: 1-bit switching output	-RWT-	[1.2] DPT_-Bool	1 Bit
2218	Output AND logic 5	AND logic 5: 8-bit output A	-RWT-	depending on setting	1 Byte
2219	Output AND logic 5	AND logic 5: 8-bit output B	-RWT-	depending on setting	1 Byte
2220	Input AND logic 5	AND logic 5: block	C-W--	[1.1] DPT_Switch	1 Bit
2221	Output AND logic 6	AND logic 6: 1-bit switching output	-RWT-	[1.2] DPT_-Bool	1 Bit
2222	Output AND logic 6	AND logic 6: 8-bit output A	-RWT-	depending on setting	1 Byte
2223	Output AND logic 6	AND logic 6: 8-bit output B	-RWT-	depending on setting	1 Byte
2224	Input AND logic 6	AND logic 6: block	C-W--	[1.1] DPT_Switch	1 Bit
2225	Output AND logic 7	AND logic 7: 1-bit switching output	-RWT-	[1.2] DPT_-Bool	1 Bit
2226	Output AND logic 7	AND logic 7: 8-bit output A	-RWT-	depending on setting	1 Byte
2227	Output AND logic 7	AND logic 7: 8-bit output B	-RWT-	depending on setting	1 Byte
2228	Input AND logic 7	AND logic 7: block	C-W--	[1.1] DPT_Switch	1 Bit
2229	Output AND logic 8	AND logic 8: 1-bit switching output	-RWT-	[1.2] DPT_-Bool	1 Bit
2230	Output AND logic 8	AND logic 8: 8-bit output A	-RWT-	depending on setting	1 Byte
2231	Output AND logic 8	AND logic 8: 8-bit output B	-RWT-	depending on setting	1 Byte
2232	Input AND logic 8	AND logic 8: block	C-W--	[1.1] DPT_Switch	1 Bit

No.	Text	Function	Flags	DPT type	Size
2233	Output OR logic 1	OR logic 1: 1-bit switching output	-RWT-	[1.2] DPT_Bool	1 Bit
2234	Output OR logic 1	OR logic 1: 8-bit output A	-RWT-	depending on setting	1 Byte
2235	Output OR logic 1	OR logic 1: 8-bit output B	-RWT-	depending on setting	1 Byte
2236	Input OR logic 1	OR logic 1: block	C-W--	[1.1] DPT_Switch	1 Bit
2237	Output OR logic 2	OR logic 2: 1-bit switching output	-RWT-	[1.2] DPT_Bool	1 Bit
2238	Output OR logic 2	OR logic 2: 8-bit output A	-RWT-	depending on setting	1 Byte
2239	Output OR logic 2	OR logic 2: 8-bit output B	-RWT-	depending on setting	1 Byte
2240	Input OR logic 2	OR logic 2: block	C-W--	[1.1] DPT_Switch	1 Bit
2241	Output OR logic 3	OR logic 3: 1-bit switching output	-RWT-	[1.2] DPT_Bool	1 Bit
2242	Output OR logic 3	OR logic 3: 8-bit output A	-RWT-	depending on setting	1 Byte
2243	Output OR logic 3	OR logic 3: 8-bit output B	-RWT-	depending on setting	1 Byte
2244	Input OR logic 3	OR logic 3: block	C-W--	[1.1] DPT_Switch	1 Bit
2245	Output OR logic 4	OR logic 4: 1-bit switching output	-RWT-	[1.2] DPT_Bool	1 Bit
2246	Output OR logic 4	OR logic 4: 8-bit output A	-RWT-	depending on setting	1 Byte
2247	Output OR logic 4	OR logic 4: 8-bit output B	-RWT-	depending on setting	1 Byte
2248	Input OR logic 4	OR logic 4: block	C-W--	[1.1] DPT_Switch	1 Bit
2249	Output OR logic 5	OR logic 5: 1-bit switching output	-RWT-	[1.2] DPT_Bool	1 Bit
2250	Output OR logic 5	OR logic 5: 8-bit output A	-RWT-	depending on setting	1 Byte
2251	Output OR logic 5	OR logic 5: 8-bit output B	-RWT-	depending on setting	1 Byte
2252	Input OR logic 5	OR logic 5: block	C-W--	[1.1] DPT_Switch	1 Bit
2253	Output OR logic 6	OR logic 6: 1-bit switching output	-RWT-	[1.2] DPT_Bool	1 Bit
2254	Output OR logic 6	OR logic 6: 8-bit output A	-RWT-	depending on setting	1 Byte

No.	Text	Function	Flags	DPT type	Size
2255	Output OR logic 6	OR logic 6: 8-bit output B	-RWT-	depending on setting	1 Byte
2256	Input OR logic 6	OR logic 6: block	C-W--	[1.1] DPT_Switch	1 Bit
2257	Output OR logic 7	OR logic 7: 1-bit switching output	-RWT-	[1.2] DPT_Bool	1 Bit
2258	Output OR logic 7	OR logic 7: 8-bit output A	-RWT-	depending on setting	1 Byte
2259	Output OR logic 7	OR logic 7: 8-bit output B	-RWT-	depending on setting	1 Byte
2260	Input OR logic 7	OR logic 7: block	C-W--	[1.1] DPT_Switch	1 Bit
2261	Output OR logic 8	OR logic 8: 1-bit switching output	-RWT-	[1.2] DPT_Bool	1 Bit
2262	Output OR logic 8	OR logic 8: 8-bit output A	-RWT-	depending on setting	1 Byte
2263	Output OR logic 8	OR logic 8: 8-bit output B	-RWT-	depending on setting	1 Byte
2264	Input OR logic 8	OR logic 8: block	C-W--	[1.1] DPT_Switch	1 Bit

5.2. List of all communication objects (Windancer 2.0 KNX sec)

Abbreviations Flags:

CCommunication
RRead
WWrite
TTransmit
UUpdate

For communication objects 1, 8, 30-87, 460-507, 581-637 and 2180-2264 See “List of all communication objects (Windancer 2.0 GPS KNX sec)” on page 11.

No.	Text	Function	Flags	DPT type	Size
190	Output brightness measurement value South	Brightness measurement value South	-RWT-	[9.4] DPT_Value_Lux	2 Bytes
191	Output brightness measurement value South	Sensor malfunction South	-RWT-	[1.1] DPT_Switch	1 Bit
192	Output brightness measurement value East	Brightness measurement value East	-RWT-	[9.4] DPT_Value_Lux	2 Bytes

No.	Text	Function	Flags	DPT type	Size
193	Output brightness measurement value East	Sensor malfunction East	-RWT-	[1.1] DPT_Switch	1 Bit
194	Output brightness measurement value West	Brightness measurement value West	-RWT-	[9.4] DPT_Value_Lux	2 Bytes
195	Output brightness measurement value West	Sensor malfunction West	-RWT-	[1.1] DPT_Switch	1 Bit
220	Input brightness threshold value South 1	Brightness threshold value South 1 storage	C-W--	[1.17] DPT_Trigger	1 Bit
221	Input brightness threshold value South 1	Brightness threshold value South 1 measurement value	C-W--	[9.4] DPT_Value_Lux	2 Bytes
222	Input / Output brightness threshold value South 1	Brightness threshold value South 1 absolute value	CRWTU	[9.4] DPT_Value_Lux	2 Bytes
223	Input brightness threshold value South 1	Brightness threshold value South 1 change (1:+ | 0 -)	CRW--	[1.1] DPT_Switch	1 Bit
224	Input brightness threshold value South 1	Brightness threshold value South 1 switching delay from 0 to 1	CRW--	[7.5] DPT_TimePeriodSec	2 Bytes
225	Input brightness threshold value South 1	Brightness threshold value South 1 switching delay from 1 to 0	CRW--	[7.5] DPT_TimePeriodSec	2 Bytes
226	Output brightness threshold value South 1	Brightness threshold value South 1 switching output	-RWT-	[1.1] DPT_Switch	1 Bit
227	Input brightness threshold value South 1	Brightness threshold value South 1 switching output block	CRW--	[1.1] DPT_Switch	1 Bit
230	Input brightness threshold value South 2	Brightness threshold value South 2 storage	C-W--	[1.17] DPT_Trigger	1 Bit
231	Input brightness threshold value South 2	Brightness threshold value South 2 measurement value	C-W--	[9.4] DPT_Value_Lux	2 Bytes
232	Input / Output brightness threshold value South 2	Brightness threshold value South 2 absolute value	CRWTU	[9.4] DPT_Value_Lux	2 Bytes
233	Input brightness threshold value South 2	Brightness threshold value South 2 change (1:+ | 0 -)	CRW--	[1.1] DPT_Switch	1 Bit

No.	Text	Function	Flags	DPT type	Size
234	Input brightness threshold value South 2	Brightness threshold value South 2 switching delay from 0 to 1	CRW--	[7.5] DPT_-TimePeriod-Sec	2 Bytes
235	Input brightness threshold value South 2	Brightness threshold value South 2 switching delay from 1 to 0	CRW--	[7.5] DPT_-TimePeriod-Sec	2 Bytes
236	Output brightness threshold value South 2	Brightness threshold value South 2 switching output	-RWT-	[1.1] DPT_Switch	1 Bit
237	Input brightness threshold value South 2	Brightness threshold value South 2 switching output block	CRW--	[1.1] DPT_Switch	1 Bit
240	Input brightness threshold value South 3	Brightness threshold value South 3 storage	C-W--	[1.17] DPT_Trigger	1 Bit
241	Input brightness threshold value South 3	Brightness threshold value South 3 measurement value	C-W--	[9.4] DPT_Value_Lux	2 Bytes
242	Input / Output brightness threshold value South 3	Brightness threshold value South 3 absolute value	CRWTU	[9.4] DPT_Value_Lux	2 Bytes
243	Input brightness threshold value South 3	Brightness threshold value South 3 change (1:+ | 0 -)	CRW--	[1.1] DPT_Switch	1 Bit
244	Input brightness threshold value South 3	Brightness threshold value South 3 switching delay from 0 to 1	CRW--	[7.5] DPT_-TimePeriod-Sec	2 Bytes
245	Input brightness threshold value South 3	Brightness threshold value South 3 switching delay from 1 to 0	CRW--	[7.5] DPT_-TimePeriod-Sec	2 Bytes
246	Output brightness threshold value South 3	Brightness threshold value South 3 switching output	-RWT-	[1.1] DPT_Switch	1 Bit
247	Input brightness threshold value South 3	Brightness threshold value South 3 switching output block	CRW--	[1.1] DPT_Switch	1 Bit
250	Input brightness threshold value South 4	Brightness threshold value South 4 storage	C-W--	[1.17] DPT_Trigger	1 Bit
251	Input brightness threshold value South 4	Brightness threshold value South 4 measurement value	C-W--	[9.4] DPT_Value_Lux	2 Bytes
252	Input / Output brightness threshold value South 4	Brightness threshold value South 4 absolute value	CRWTU	[9.4] DPT_Value_Lux	2 Bytes

No.	Text	Function	Flags	DPT type	Size
253	Input brightness threshold value South 4	Brightness threshold value South 4 change (1:+ | 0 -)	CRW--	[1.1] DPT_Switch	1 Bit
254	Input brightness threshold value South 4	Brightness threshold value South 4 switching delay from 0 to 1	CRW--	[7.5] DPT_-TimePeriod-Sec	2 Bytes
255	Input brightness threshold value South 4	Brightness threshold value South 4 switching delay from 1 to 0	CRW--	[7.5] DPT_-TimePeriod-Sec	2 Bytes
256	Output brightness threshold value South 4	Brightness threshold value South 4 switching output	-RWT-	[1.1] DPT_Switch	1 Bit
257	Input brightness threshold value South 4	Brightness threshold value South 4 switching output block	CRW--	[1.1] DPT_Switch	1 Bit
260	Input brightness threshold value East 1	Brightness threshold value East 1 storage	C-W--	[1.17] DPT_Trigger	1 Bit
261	Input brightness threshold value East 1	Brightness threshold value East 1 measure-ment value	C-W--	[9.4] DPT_Val-ue_Lux	2 Bytes
262	Input / Output brightness thresh-old value East 1	Brightness threshold value East 1 absolute value	CRWTU	[9.4] DPT_Val-ue_Lux	2 Bytes
263	Input brightness threshold value East 1	Brightness threshold value East 1 change (1:+ | 0 -)	CRW--	[1.1] DPT_Switch	1 Bit
264	Input brightness threshold value East 1	Brightness threshold value East 1 switching delay from 0 to 1	CRW--	[7.5] DPT_-TimePeriod-Sec	2 Bytes
265	Input brightness threshold value East 1	Brightness threshold value East 1 switching delay from 1 to 0	CRW--	[7.5] DPT_-TimePeriod-Sec	2 Bytes
266	Output brightness threshold value East 1	Brightness threshold value East 1 switching output	-RWT-	[1.1] DPT_Switch	1 Bit
267	Input brightness threshold value East 1	Brightness threshold value East 1 switching output block	CRW--	[1.1] DPT_Switch	1 Bit
270	Input brightness threshold value East 2	Brightness threshold value East 2 storage	C-W--	[1.17] DPT_Trigger	1 Bit
271	Input brightness threshold value East 2	Brightness threshold value East 2 measure-ment value	C-W--	[9.4] DPT_Val-ue_Lux	2 Bytes

No.	Text	Function	Flags	DPT type	Size
272	Input / Output brightness threshold value East 2	Brightness threshold value East 2 absolute value	CRWTU	[9.4] DPT_Value_Lux	2 Bytes
273	Input brightness threshold value East 2	Brightness threshold value East 2 change (1:+ | 0 -)	CRW--	[1.1] DPT_Switch	1 Bit
274	Input brightness threshold value East 2	Brightness threshold value East 2 switching delay from 0 to 1	CRW--	[7.5] DPT_TimePeriodSec	2 Bytes
275	Input brightness threshold value East 2	Brightness threshold value East 2 switching delay from 1 to 0	CRW--	[7.5] DPT_TimePeriodSec	2 Bytes
276	Output brightness threshold value East 2	Brightness threshold value East 2 switching output	-RWT-	[1.1] DPT_Switch	1 Bit
277	Input brightness threshold value East 2	Brightness threshold value East 2 switching output block	CRW--	[1.1] DPT_Switch	1 Bit
280	Input brightness threshold value East 3	Brightness threshold value East 3 storage	C-W--	[1.17] DPT_Trigger	1 Bit
281	Input brightness threshold value East 3	Brightness threshold value East 3 measurement value	C-W--	[9.4] DPT_Value_Lux	2 Bytes
282	Input / Output brightness threshold value East 3	Brightness threshold value East 3 absolute value	CRWTU	[9.4] DPT_Value_Lux	2 Bytes
283	Input brightness threshold value East 3	Brightness threshold value East 3 change (1:+ | 0 -)	CRW--	[1.1] DPT_Switch	1 Bit
284	Input brightness threshold value East 3	Brightness threshold value East 3 switching delay from 0 to 1	CRW--	[7.5] DPT_TimePeriodSec	2 Bytes
285	Input brightness threshold value East 3	Brightness threshold value East 3 switching delay from 1 to 0	CRW--	[7.5] DPT_TimePeriodSec	2 Bytes
286	Output brightness threshold value East 3	Brightness threshold value East 3 switching output	-RWT-	[1.1] DPT_Switch	1 Bit
287	Input brightness threshold value East 3	Brightness threshold value East 3 switching output block	CRW--	[1.1] DPT_Switch	1 Bit
290	Input brightness threshold value East 4	Brightness threshold value East 4 storage	C-W--	[1.17] DPT_Trigger	1 Bit

No.	Text	Function	Flags	DPT type	Size
291	Input brightness threshold value East 4	Brightness threshold value East 4 measurement value	C-W--	[9.4] DPT_Value_Lux	2 Bytes
292	Input / Output brightness threshold value East 4	Brightness threshold value East 4 absolute value	CRWTU	[9.4] DPT_Value_Lux	2 Bytes
293	Input brightness threshold value East 4	Brightness threshold value East 4 change (1:+ | 0 -)	CRW--	[1.1] DPT_Switch	1 Bit
294	Input brightness threshold value East 4	Brightness threshold value East 4 switching delay from 0 to 1	CRW--	[7.5] DPT_TimePeriodSec	2 Bytes
295	Input brightness threshold value East 4	Brightness threshold value East 4 switching delay from 1 to 0	CRW--	[7.5] DPT_TimePeriodSec	2 Bytes
296	Output brightness threshold value East 4	Brightness threshold value East 4 switching output	-RWT-	[1.1] DPT_Switch	1 Bit
297	Input brightness threshold value East 4	Brightness threshold value East 4 switching output block	CRW--	[1.1] DPT_Switch	1 Bit
300	Input brightness threshold value West 1	Brightness threshold value West 1 storage	C-W--	[1.17] DPT_Trigger	1 Bit
301	Input brightness threshold value West 1	Brightness threshold value West 1 measurement value	C-W--	[9.4] DPT_Value_Lux	2 Bytes
302	Input / Output brightness threshold value West 1	Brightness threshold value West 1 absolute value	CRWTU	[9.4] DPT_Value_Lux	2 Bytes
303	Input brightness threshold value West 1	Brightness threshold value West 1 change (1:+ | 0 -)	CRW--	[1.1] DPT_Switch	1 Bit
304	Input brightness threshold value West 1	Brightness threshold value West 1 switching delay from 0 to 1	CRW--	[7.5] DPT_TimePeriodSec	2 Bytes
305	Input brightness threshold value West 1	Brightness threshold value West 1 switching delay from 1 to 0	CRW--	[7.5] DPT_TimePeriodSec	2 Bytes
306	Output brightness threshold value West 1	Brightness threshold value West 1 switching output	-RWT-	[1.1] DPT_Switch	1 Bit
307	Input brightness threshold value West 1	Brightness threshold value West 1 switching output block	CRW--	[1.1] DPT_Switch	1 Bit

No.	Text	Function	Flags	DPT type	Size
310	Input brightness threshold value West 2	Brightness threshold value West 2 storage	C-W--	[1.17] DPT_Trigger	1 Bit
311	Input brightness threshold value West 2	Brightness threshold value West 2 measurement value	C-W--	[9.4] DPT_Value_Lux	2 Bytes
312	Input / Output brightness threshold value West 2	Brightness threshold value West 2 absolute value	CRWTU	[9.4] DPT_Value_Lux	2 Bytes
313	Input brightness threshold value West 2	Brightness threshold value West 2 change (1:+ | 0 -)	CRW--	[1.1] DPT_Switch	1 Bit
314	Input brightness threshold value West 2	Brightness threshold value West 2 switching delay from 0 to 1	CRW--	[7.5] DPT_TimePeriodSec	2 Bytes
315	Input brightness threshold value West 2	Brightness threshold value West 2 switching delay from 1 to 0	CRW--	[7.5] DPT_TimePeriodSec	2 Bytes
316	Output brightness threshold value West 2	Brightness threshold value West 2 switching output	-RWT-	[1.1] DPT_Switch	1 Bit
317	Input brightness threshold value West 2	Brightness threshold value West 2 switching output block	CRW--	[1.1] DPT_Switch	1 Bit
320	Input brightness threshold value West 3	Brightness threshold value West 3 storage	C-W--	[1.17] DPT_Trigger	1 Bit
321	Input brightness threshold value West 3	Brightness threshold value West 3 measurement value	C-W--	[9.4] DPT_Value_Lux	2 Bytes
322	Input / Output brightness threshold value West 3	Brightness threshold value West 3 absolute value	CRWTU	[9.4] DPT_Value_Lux	2 Bytes
323	Input brightness threshold value West 3	Brightness threshold value West 3 change (1:+ | 0 -)	CRW--	[1.1] DPT_Switch	1 Bit
324	Input brightness threshold value West 3	Brightness threshold value West 3 switching delay from 0 to 1	CRW--	[7.5] DPT_TimePeriodSec	2 Bytes
325	Input brightness threshold value West 3	Brightness threshold value West 3 switching delay from 1 to 0	CRW--	[7.5] DPT_TimePeriodSec	2 Bytes
326	Output brightness threshold value West 3	Brightness threshold value West 3 switching output	-RWT-	[1.1] DPT_Switch	1 Bit

No.	Text	Function	Flags	DPT type	Size
327	Input brightness threshold value West 3	Brightness threshold value West 3 switching output block	CRW--	[1.1] DPT_Switch	1 Bit
330	Input brightness threshold value West 4	Brightness threshold value West 4 storage	C-W--	[1.17] DPT_Trigger	1 Bit
331	Input brightness threshold value West 4	Brightness threshold value West 4 measurement value	C-W--	[9.4] DPT_Value_Lux	2 Bytes
332	Input / Output brightness threshold value West 4	Brightness threshold value West 4 absolute value	CRWTU	[9.4] DPT_Value_Lux	2 Bytes
333	Input brightness threshold value West 4	Brightness threshold value West 4 change (1:+ | 0 -)	CRW--	[1.1] DPT_Switch	1 Bit
334	Input brightness threshold value West 4	Brightness threshold value West 4 switching delay from 0 to 1	CRW--	[7.5] DPT_TimePeriodSec	2 Bytes
335	Input brightness threshold value West 4	Brightness threshold value West 4 switching delay from 1 to 0	CRW--	[7.5] DPT_TimePeriodSec	2 Bytes
336	Output brightness threshold value West 4	Brightness threshold value West 4 switching output	-RWT-	[1.1] DPT_Switch	1 Bit
337	Input brightness threshold value West 4	Brightness threshold value West 4 switching output block	CRW--	[1.1] DPT_Switch	1 Bit

6. Setting of the parameters

In general, periodic sending allows the value/status to be sent to the bus even if there is no change.

6.1. Behaviour on power failure/restoration

Behaviour on bus power failure:

The device does not send anything.

Behaviour on auxiliary voltage failure:

The object "Auxiliary voltage status" sends according to the parameter setting.

Behaviour on bus power restoration and after programming or reset:

The device sends all measurement values as well as switching and status outputs according to their transmission behaviour set in the parameters with the delays defined in the parameter block „General settings“.

Behaviour on auxiliary voltage restoration:

The object "Auxiliary voltage status" sends according to the parameter setting.

6.2. General settings

First set the send delays after power-up and programming here.
These delays should be coordinated with the entire KNX system, i.e. for a KNX system with many subscribers care should be taken that the bus is not overloaded after a KNX bus reset. The telegrams of the individual subscribers should be sent at staggered times.

Send delay after power-up and programming for:	
Measurement values	5 s ... 300 s
Threshold values and switching outputs	5 s ... 300 s
Façades *(Windancer 2.0 GPS KNX sec)*	5 s ... 300 s
Timers *(Windancer 2.0 GPS KNX sec)*	5 s ... 300 s
Logic	5 s ... 300 s

The maximum telegram rate limits the bus load. Many telegrams per second load the bus but provide faster data transmission.

Maximum telegram rate	1 • 2 • ... • 20 • 50 telegrams per sec.

The object auxiliary voltage status indicates whether the auxiliary voltage is connected to the weather station. If the precipitation sensor is used, the auxiliary voltage must be connected.

Object auxiliary voltage status sends	• do not • on change • on change and periodically

When sending periodically, the object auxiliary voltage status is sent to the bus in a fixed cycle that can be set here.

Send cycle *(only if auxiliary voltage status is sent „periodically“)*	5 s ... 2 h; 10 s

6.2.1. Location (Windancer 2.0 GPS KNX sec)

The weather station Windancer 2.0 GPS KNX sec has a GPS receiver that, among other things, provides the geo position. The location is required to calculate the solar position together with date and time. At initial commissioning, the entered coordinates can be used as long as no GPS reception exists yet.

To be able to output the correct time, the UTC offset must also be known. Only then can the weather station automatically take into account the UTC offset (difference to world time) and the daylight saving/standard time changeover.

The location is either determined by GPS reception, entered manually, or set by a manual entry that remains valid until valid GPS data is received for the first time.

Location is determined by	Input • Input (valid until first GPS reception) • GPS reception

The altitude is either determined by GPS reception, entered manually, or set by a manual entry that remains valid until valid GPS data is received for the first time.

Altitude is determined by	Input • Input (valid until first GPS reception) • GPS reception

Sign for the time offset relative to GMT. Select here whether the entered deviation to Greenwich Mean Time (GMT) is positive (+) or negative (–).

Sign	+ (positive) • – (negative)

Set the deviation to GMT in hours here.

Hours	0 • 1 ... 13

Set the deviation to GMT in minutes here.

Minutes	0 ... 59

Daylight saving rule for automatic adjustment of the time. Select the desired rule for daylight saving changeover here:

Europe: Automatic changeover according to European daylight saving rule. USA: Automatic changeover according to US daylight saving rule. User-defined: Individually adjustable daylight saving rule. None: No automatic daylight saving changeover; the time remains unchanged all year.

Daylight saving rule	Europe • USA • user-defined • none

Here the corresponding values of the daylight saving rule for the user-defined setting are specified. The start and end of daylight saving time can be defined manually.

at *(only if „user-defined“ is selected)*	Monday ... Sunday • Date
(Day) *(only if „user-defined“ is selected)*	1 ... 31; 25
(Month) *(only if „user-defined“ is selected)*	1 ... 12; 10
(Hour) *(only if „user-defined“ is selected)*	0 ... 23; 2
(Minute) *(only if „user-defined“ is selected)*	0 ... 59

Hours *(only if „user-defined“ is selected)*	-12 ... 12; 1
Minutes *(only if „user-defined“ is selected)*	0 ... 59

The location coordinates can be sent to the KNX bus if required. Sending on change or periodically is more useful for mobile structures such as motor homes or ships.

Send coordinates	• do not • periodically • on change • on change and periodically

When sending on change, the location coordinates are sent to the bus as soon as they change by the percentage set here.

From change of *(only if sent „on change“)*	0.5° • 1° • 2° • 5° • 10°

When sending periodically, the location coordinates are sent to the bus in a fixed cycle that can be set here.

Send cycle *(only if sent „periodically“)*	5 s ... 2 h; 5 min

The altitude can be sent to the KNX bus if required.

Send altitude	do not • periodically

When sending periodically, the location coordinates are sent to the bus in a fixed cycle that can be set here.

Send cycle *(only if sent „periodically“)*	5 s ... 2 h; 5 min

6.2.2. GPS (Windancer 2.0 GPS KNX sec)

Date and time can be sent as separate objects or as a single shared object.

Date and time object type	• two separate objects • one shared object

The weather station Windancer 2.0 GPS KNX sec has a GPS receiver that provides date and time, among other things. Since a KNX system should have only one date/time source (e.g. when using multiple GPS weather stations), here you set how to handle the time signal of the weather station.

If date and time are set by the GPS signal and not sent, they are only used internally, e.g. to calculate the solar position.

By sending to the bus (periodically or on request), date and time of the weather station can also be used by other bus subscribers.

Alternatively, date and time can be set via communication objects (i.e. from the bus). This setting is useful if another bus subscriber is to provide a unified time signal.

Date and time are set by	• GPS signal and not sent • GPS signal and sent periodically • GPS signal and sent on request • GPS signal and sent on request + periodically sent • object(s) and not sent

When sending periodically, date and time are sent to the bus in a fixed cycle that can be set here.

Send cycle *(only if date and time are sent „periodically“)*	5 s ... 2 h; 1 min

After applying or restoring the bus voltage, it may take up to 10 minutes until the GPS signal is received, sometimes even longer at locations with poor GPS reception. Therefore a longer duration should be selected in such cases.

GPS malfunction is detected if no signal ... is received after the last reception/reset	20 min • 30 min • 1 h • 1.5 h • 2 h
After auxiliary voltage restoration it may take up to 10 minutes until GPS OK	

The information of the GPS malfunction can be used by other bus subscribers for monitoring. The transmission behaviour can be set here accordingly.

Object GPS malfunction sends (1 = malfunction | 0 = no malfunction)	• do not • 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

When sending periodically, the GPS malfunction is sent to the bus in a fixed cycle that can be set here.

Send cycle *(only if GPS malfunction object is sent „periodically“)*	5 s ... 2 h

If date and time are set via GPS signal:

The current date and time can initially be specified via the ETS. The weather station uses this data until a valid GPS signal is received for the first time.

If date and time are set via communication objects:

There must be no change of date between sending the date and sending the time; they must be sent to the weather station on the same day.

Date and time must be received within 10 s of each other so that the internal device clock accepts this data as valid.

The weather station has an integrated real-time clock. The time therefore continues internally and can be sent to the bus, even if no GPS signal or time communication object is received for some time. A time deviation of up to ±6 seconds per day may occur in the internal clock of the weather station.

6.3. Wind

Set here whether the measurement value shall additionally be used in Beaufort.

Use measurement value additionally in Beaufort	No • Yes

The wind measurement value can be sent to the bus and further processed there by other subscribers.

Transmission behaviour	• do not • periodically • on change • on change and periodically

When sending on change, the wind measurement value is sent to the bus as soon as it changes by the percentage set here.

From change of *(only if sent „on change“)*	2% • 5% • 10% • 25% • 50%

When sending periodically, the wind measurement value is sent to the bus in a fixed cycle that can be set here.

Send cycle *(only if sent „periodically“)*	5 s ... 2 h; 10 s

The highest wind measurement value since programming or a reset can be sent to the bus. This value can be reset via the object „Wind measurement value reset max.“.

Use maximum value (values are not retained after reset)	No • Yes

6.3.1. Wind threshold value 1 / 2 / 3 / 4

Set the unit of wind speed here.

Unit of wind speed for all following threshold values	m/s • km/h

The wind threshold values are used to perform certain actions when a wind speed is exceeded or fallen below, e.g. protective functions for shading or windows.

Use threshold value 1 / 2 / 3 / 4	No • Yes

Threshold value:

Set whether the measurement value is supplied by the sensor or via an object.

Measurement value type	Sensor measurement value • Object value

Here you set in which cases threshold values and delays received via communication object shall be retained. Please note that the setting „after power restoration and programming“ should not be used for initial commissioning, as the factory settings are always used until the 1st communication.

The threshold values and delays received via communication object shall ... be retained	• do not • after power restoration • after power restoration and programming

Here you set whether the threshold value is to be specified via parameter or via a communication object.

Threshold value setting via	Parameter • Communication objects

If the threshold value is specified via parameter, the value is set.

Threshold value in 0.1 m/s or km/h	0 ... 350; 50 (m/s) / 18 (km/h)

If the threshold value is set via communication object, a threshold value must be specified at initial commissioning that is valid until the 1st communication of a new threshold value. For a weather station that is already in operation, the last communicated threshold value can be used. From the 1st communication onwards, the threshold value corresponds to the value of the communication object and is not multiplied by the factor 0.1.

Once a threshold value has been set via parameter or via communication object, with this setting the last set threshold value is retained until a new threshold value is transmitted via communication object.
The threshold values last set via communication objects are stored in the device, are retained on power failure and are available again when the voltage returns.

Start threshold value in 0.1 m/s or km/h valid until 1st communication	0...350; 50 (m/s) / 18 (km/h)

Minimum value that can be set via object.

Object value limit (min) in 0.1 m/s or km/h	0...350

Maximum value that can be set via object.

Object value limit (max) in 0.1 m/s	0…350; 150 (m/s) / 130 (km/h)

Here the type of threshold value change is set.

Type of threshold value change	Absolute value • Increase / Decrease

Here the increment is selected.

Increment in 0.1 m/s or km/h (only for threshold value change via „Increase / Decrease“)	0…50; 5

The switching distance (hysteresis) is important for the output of the value at the switching output.
The switching distance prevents the switching output of the threshold value from changing too often with temperature fluctuations. With a falling temperature value, the switching output only reacts when the temperature drops below the threshold value by the switching distance (option 1 and 2 for the first parameter of the switching output). With a rising temperature value, the switching output only reacts when the temperature exceeds the threshold value by the switching distance (option 3 and 4 for the first parameter of the switching output).

Setting of the switching distance	in % • absolute

Set the value of the switching distance.

Switching distance in 0.1 m/s or km/h	0...500; 20 (m/s) / 5 (km/h)
Switching distance in %	0 ... 50; 20

Switching output:

Here you set which value the output sends when the threshold value is exceeded/fallen below.

Output is at (TV = threshold value)(SD = switching distance)	• TV above = 1 | TV – SD below = 0 • TV above = 0 | TV – SD below = 1 • TV below = 1 | TV + SD above = 0 • TV below = 0 | TV + SD above = 1

Here you set whether the delays are adjustable via objects.

Delays adjustable via objects (in seconds)	No • Yes

Short-term temperature fluctuations around the threshold value or threshold value and switching distance are ignored for the switching output by means of switching delays.

Switching delay from 0 to 1	none • 5 s ... 2 h
Switching delay from 1 to 0	none • 5 s ... 2 h

Here you set when the switching output is to be sent to the bus.

Switching output sends	• 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

When sending periodically, the temperature threshold switching output is sent to the bus in a fixed cycle that can be set here.

Send cycle *(only if sent „periodically“)*	5 s ... 2 h

Block:

By means of the input object „Block“ the switching output can be blocked, e.g. by a manual command (push-button).

Use blocking of the switching output	No • **Yes**

The block can take effect at value 0 or 1, depending on the intended use.

Evaluation of the block object	• At value 1: block | At value 0: release • At value 0: block | At value 1: release

Here, an object value is specified until the 1st communication.

Block object value before 1st communication	0 • 1

The behaviour of the switching output when blocking can be set.

Behaviour of the switching output	
When blocking	• do not send telegram • send 0 • send 1
When releasing (with 2 seconds release delay)	[Depending on setting at „Switching output sends“]

The behaviour of the switching output when released depends on the value of the parameter „Switching output sends“ (see „Switching output“)

Switching output sends on change	do not send telegram • Send status of the switching output
Switching output sends on change to 1	do not send telegram • if switching output = 1 ➔ send 1
Switching output sends on change to 0	do not send telegram • if switching output = 0 ➔ send 0
Switching output sends on change and periodically	send status of the switching output

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

6.4. Temperature

Here the temperature measurement can be activated if required.

Use temperature measurement	No • Yes

The malfunction object is used to monitor the function of the temperature sensor. In case of a malfunction, a 1 is sent, otherwise a 0.

Use malfunction object	No • Yes

The device can calculate a mixed value from its own measurement value and an external value, e.g. to determine an average. If desired, set the mixed value calculation. If an external portion is used, all following settings (threshold values, etc.) refer to the total measurement value.

Use external measurement value	No • Yes

Here the percentage of the external measurement value share of the total value is specified.

Ext. measurement value share of total measurement value	5% • 10% • ... • 50% • ... • 100%

The temperature measurement value can be sent to the bus and further processed there by other subscribers.

Transmission behaviour	• do not • periodically • on change • on change and periodically

When sending on change, the temperature values are sent to the bus as soon as it changes by the value set here.

From change of *(if sent on change)*	0.1°C • 0.2°C • 0.5°C • ... • 5.0°C

When sending periodically, the temperature values are sent to the bus in a fixed cycle that can be set here.

Send cycle *(if sent periodically)*	5 s • 10 s • ... • 2 h

The output temperature value can be corrected here by an offset value if required. This allows deviations caused by interference sources to be compensated, e.g. dark surfaces that heat up.

Offset in 0.1°C	-50... 50; 0

The temperature value of the perceived temperature can be sent to the bus and further processed there by other subscribers.

Transmission behaviour for perceived temperature (Windchill)	• do not send • send periodically • send on change • send on change and periodically

When sending on change, the temperature values are sent to the bus as soon as it changes by the value set here.

From change of *(if sent on change)*	0.1°C • 0.2°C • 0.5°C • ... • 5.0°C

When sending periodically, the temperature values are sent to the bus in a fixed cycle that can be set here.

Send cycle *(if sent periodically)*	5 s • 10 s • ... • 2 h

The highest (max.) and the lowest (min.) temperature value since programming or a reset can be sent to the bus. The two values can be reset via the object „Temperature measurement value reset min./max.“.

Use min. and max. values (values are not retained after reset)	No • Yes

6.4.1. Temperature threshold value 1 / 2 / 3 / 4

The temperature threshold values are used to perform certain actions when a temperature value is exceeded or fallen below.

Use threshold value 1 / 2 / 3 / 4	No • Yes

Threshold value:
- - - - - - - - - - - - - - -

Set whether the measurement value is supplied by the sensor or via an object.

Measurement value type	Sensor measurement value • Object value

Here you set in which cases threshold values and delays received via communication object shall be retained. Please note that the setting „after power restoration and pro-

gramming“ should not be used for initial commissioning, as the factory settings are always used until the 1st communication.

The threshold values and delays received via communication object shall ... be retained	• do not • after power restoration • after power restoration and programming

Here you set whether the threshold value is to be specified via parameter or via a communication object.

Threshold value setting via	Parameter • Communication objects

If the threshold value is specified via parameter, the value is set.

Threshold value in 0.1°C	-300 ... 800; 200

If the threshold value is set via communication object, a threshold value must be specified at initial commissioning that is valid until the 1st communication of a new threshold value. For a weather station that is already in operation, the last communicated threshold value can be used. From the 1st communication onwards, the threshold value corresponds to the value of the communication object and is not multiplied by the factor 0.1.

Once a threshold value has been set via parameter or via communication object, with this setting the last set threshold value is retained until a new threshold value is transmitted via communication object.
The threshold values last set via communication objects are stored in the device, are retained on power failure and are available again when the voltage returns.

Start threshold value in 0.1°C valid until 1st communication	-300 ... 800; 200

Minimum value that can be set via object.

Object value limit (min) in 0.1°C	-300...800

Maximum value that can be set via object.

Object value limit (max) in 0.1°C	-300...800

Here the type of threshold value change is set.

Type of threshold value change	Absolute value • Increase / Decrease

Here the increment is selected.

Increment (only for threshold value change via „Increase / Decrease“)	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

The switching distance (hysteresis) is important for the output of the value at the switching output.
The switching distance prevents the switching output of the threshold value from changing too often with temperature fluctuations. With a falling temperature value, the switching output only reacts when the temperature drops below the threshold value by the switching distance (option 1 and 2 for the first parameter of the switching output). With a rising temperature value, the switching output only reacts when the temperature exceeds the threshold value by the switching distance (option 3 and 4 for the first parameter of the switching output).

Setting of the switching distance	in % • absolute

Set the value of the switching distance.

Switching distance in 0.1°C	0...1100; 50
Switching distance in %	0 ... 50; 20

Switching output:

Here you set which value the output sends when the threshold value is exceeded/fallen below.

Output is at (TV = threshold value)(SD = switching distance)	• TV above = 1 | TV – SD below = 0 • TV above = 0 | TV – SD below = 1 • TV below = 1 | TV + SD above = 0 • TV below = 0 | TV + SD above = 1

Here you set whether the delays are adjustable via objects.

Delays adjustable via objects (in seconds)	No • Yes

Short-term temperature fluctuations around the threshold value or threshold value and switching distance are ignored for the switching output by means of switching delays.

Switching delay from 0 to 1	none • 5 s ... 2 h
Switching delay from 1 to 0	none • 5 s ... 2 h

Here you set when the switching output is to be sent to the bus.

Switching output sends	• 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

When sending periodically, the temperature threshold switching output is sent to the bus in a fixed cycle that can be set here.

Send cycle *(only if sent „periodically“)*	5 s ... 2 h

Block:

By means of the input object „Block“ the switching output can be blocked, e.g. by a manual command (push-button).

Use blocking of the switching output	No • **Yes**

The block can take effect at value 0 or 1, depending on the intended use.

Evaluation of the block object	• At value 1: block | At value 0: release • At value 0: block | At value 1: release

Here, an object value is specified until the 1st communication.

Block object value before 1st communication	0 • 1

The behaviour of the switching output when blocking can be set.

Behaviour of the switching output	
When blocking	• do not send telegram • send 0 • send 1
When releasing (with 2 seconds release delay)	[Depending on setting at „Switching output sends“]

The behaviour of the switching output when released depends on the value of the parameter „Switching output sends“ (see „Switching output“)

Switching output sends on change	do not send telegram • Send status of the switching output
Switching output sends on change to 1	do not send telegram • if switching output = 1 ➔ send 1
Switching output sends on change to 0	do not send telegram • if switching output = 0 ➔ send 0
Switching output sends on change and periodically	send status of the switching output
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

6.5. Rain

If the rain sensor is used, the auxiliary voltage must be connected. The auxiliary voltage supplies the heating of the rain sensor. Only if the rain sensor is heated, the end of a precipitation event is detected in time and false alarms caused by fog or dew are avoided.

Use rain sensor	No • **Yes**

Here you set in which cases delays received via communication object shall be retained. Please note that the setting „after power restoration and programming“ should not be used for initial commissioning, as the factory settings are always used until the 1st communication.

The delays received via communication object shall ... be retained.	• do not • after power restoration • after power restoration and programming

The additional rain output is used if 2 rain outputs with different delays are needed. For example, if a façade has windows and awnings to control, they can react differently to rain. For windows, the longer rain delay time would prevent the motors from running continuously in changeable weather. The awnings on the same façade would react quickly with the help of the 2nd rain output.

Use rain output with fixed switching delays (this switching output has no delay at rain detection and 5 minutes delay after drying)	No • Yes

The delay times in seconds can be defined via objects.

Delays adjustable via objects (in seconds)	No • Yes

With larger switching delays, a brief rain shower or a brief dry phase is not reported.

Delay to rain	none • 5 s ... • 2 h
Delay to no rain after drying	5 min • 10 min ... • 2 h

Here you set when the switching output is to be sent to the bus.

Switching output sends	• on change • on change to rain • on change to no rain • on change and periodically • on change to rain and periodically • on change to no rain and periodically

When sending periodically, the rain switching output is sent to the bus in a fixed cycle that can be set here.

Send cycle *(only if sent „periodically“)*	5 s • 10 s • ... • 2 h

The object value at rain is defined.

Object value(s) at rain	0 • 1

6.6. Light

Here the brightness detection can be activated if required.

Use brightness	No • Yes

Here the twilight detection can be activated if required.

Use twilight	No • Yes

Here the night detection can be activated if required.

Use night detection	No • Yes

6.6.1. Brightness

If the shading automation is to be used, a threshold value must be activated!

The weather station Windancer 2.0 KNX sec has three brightness sensors (East, South and West) with 4 brightness threshold values each.

The weather station Windancer 2.0 GPS KNX sec has three brightness sensors and uses the maximum value with 4 brightness threshold values.

Sensor (East / South / West)

The weather station measures the current brightness. This value can be sent to the bus and further processed there by other subscribers. In the version with GPS reception, the brightness value used is the highest currently measured value of the three internal sensors. In the version without GPS reception, the brightness is measured separately from the three directions East, South and West.

Measurement value	• do not send • send periodically • send on change • send on change and periodically

When sending on change, the brightness measurement value is sent to the bus as soon as it changes by the percentage set here.

from change in % *(only if sent "on change")*	2% • 5% • 10% • 25% • 50%

When sending periodically, the brightness measurement value is sent to the bus in a fixed cycle that can be set here.

Send cycle *(only if sent "periodically")*	5 s ... 2 h

The malfunction object is used to monitor the function of the brightness sensor. In case of a malfunction, a 1 is sent, otherwise a 0.

Use malfunction object	No • Yes

The brightness threshold values are used to perform certain actions when an illuminance in the kilolux range is exceeded or fallen below.

Use threshold value 1 / 2 / 3 (/ 4)	No • Yes

Brightness threshold value (East / South / West) 1 / 2 / 3 / 4

The temperature threshold values are used to perform certain actions when a temperature value is exceeded or fallen below.

Use threshold value 1 / 2 / 3 / 4	No • Yes

Threshold value:

Set whether the measurement value is supplied by the sensor or via an object.

Measurement value type	Sensor measurement value • Object value

Here you set in which cases threshold values and delays received via communication object shall be retained. Please note that the setting „after power restoration and programming“ should not be used for initial commissioning, as the factory settings are always used until the 1st communication.

The threshold values and delays received via communication object shall ... be retained	• do not • after power restoration • after power restoration and programming

Here you set whether the threshold value is to be specified via parameter or via a communication object.

Threshold value setting via	Parameter • Communication objects

If the threshold value is specified via parameter, the value is set.

Threshold value in klux	1 ... 150; 60

If the threshold value is set via communication object, a threshold value must be specified at initial commissioning that is valid until the 1st communication of a new threshold value. For a weather station that is already in operation, the last communicated threshold value can be used. From the 1st communication onwards, the threshold value corresponds to the value of the communication object and is not multiplied by the factor 0.1.

Once a threshold value has been set via parameter or via communication object, with this setting the last set threshold value is retained until a new threshold value is transmitted via communication object.
The threshold values last set via communication objects are stored in the device, are retained on power failure and are available again when the voltage returns.

Start threshold value in klux valid until 1st communication	1 ... 150; 60

Minimum value that can be set via object.

Object value limit (min) in klux	1 ... 150; 30

Maximum value that can be set via object.

Object value limit (max) in klux	1 ... 150; 120

Here the type of threshold value change is set.

Type of threshold value change	Absolute value • Increase / Decrease

Here the increment is selected.

Increment (only for threshold value change via „Increase / Decrease“)	1 klux • 2 klux • 3 klux • 4 klux • 5 klux • 10 klux

The switching distance (hysteresis) is important for the output of the value at the switching output.
The switching distance prevents the switching output of the threshold value from changing too often with temperature fluctuations. With a falling temperature value, the switching output only reacts when the temperature drops below the threshold value by the switching distance (option 1 and 2 for the first parameter of the switching output). With a rising temperature value, the switching output only reacts when the temperature exceeds the threshold value by the switching distance (option 3 and 4 for the first parameter of the switching output).

Setting of the switching distance	in % • absolute

Set the value of the switching distance.

Switching distance in klux	0...50; 15
Switching distance in %	0 ... 50; 25

Switching output:

Here you set which value the output sends when the threshold value is exceeded/fallen below.

Output is at (TV = threshold value)(SD = switching distance)	• TV above = 1 | TV – SD below = 0 • TV above = 0 | TV – SD below = 1 • TV below = 1 | TV + SD above = 0 • TV below = 0 | TV + SD above = 1

Here you set whether the delays are adjustable via objects.

Delays adjustable via objects (in seconds)	No • Yes

Short-term temperature fluctuations around the threshold value or threshold value and switching distance are ignored for the switching output by means of switching delays.

Switching delay from 0 to 1	none • 5 s ... 2 h
Switching delay from 1 to 0	none • 5 s ... 2 h

Here you set when the switching output is to be sent to the bus.

Switching output sends	• 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

When sending periodically, the temperature threshold switching output is sent to the bus in a fixed cycle that can be set here.

Send cycle *(only if sent „periodically“)*	5 s ... 2 h

Block:

By means of the input object „Block“ the switching output can be blocked, e.g. by a manual command (push-button).

Use blocking of the switching output	No • **Yes**

The block can take effect at value 0 or 1, depending on the intended use.

Evaluation of the block object	• At value 1: block | At value 0: release • At value 0: block | At value 1: release

Here, an object value is specified until the 1st communication.

Block object value before 1st communication	0 • 1

The behaviour of the switching output when blocking can be set.

Behaviour of the switching output	
When blocking	• do not send telegram • send 0 • send 1
When releasing (with 2 seconds release delay)	[Depending on setting at „Switching output sends“]

The behaviour of the switching output when released depends on the value of the parameter „Switching output sends“ (see „Switching output“)

Switching output sends on change	do not send telegram • Send status of the switching output
Switching output sends on change to 1	do not send telegram • if switching output = 1 ➔ send 1
Switching output sends on change to 0	do not send telegram • if switching output = 0 ➔ send 0
Switching output sends on change and periodically	send status of the switching output
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

6.6.2. Twilight

The twilight threshold values are used to perform certain actions when an illuminance in the lux range is exceeded or fallen below.

Use threshold value 1 / 2 / 3 / 4	No • Yes

Twilight threshold value 1 / 2 / 3 / 4

Threshold value:

Set whether the measurement value is supplied by the sensor or via an object.

Measurement value type	Sensor measurement value • Object value

Here you set in which cases threshold values and delays received via communication object shall be retained. Please note that the setting „after power restoration and programming“ should not be used for initial commissioning, as the factory settings are always used until the 1st communication.

The threshold values and delays received via communication object shall ... be retained	• do not • after power restoration • after power restoration and programming

Here you set whether the threshold value is to be specified via parameter or via a communication object.

Threshold value setting via	Parameter • Communication objects

If the threshold value is specified via parameter, the value is set.

Threshold value in lux	1 ... 1000; 10

If the threshold value is set via communication object, a threshold value must be specified at initial commissioning that is valid until the 1st communication of a new thres-

hold value. For a weather station that is already in operation, the last communicated threshold value can be used. From the 1st communication onwards, the threshold value corresponds to the value of the communication object and is not multiplied by the factor 0.1.

Once a threshold value has been set via parameter or via communication object, with this setting the last set threshold value is retained until a new threshold value is transmitted via communication object.
The threshold values last set via communication objects are stored in the device, are retained on power failure and are available again when the voltage returns.

Start threshold value in lux valid until 1st communication	1 ... 1000; 10

Minimum value that can be set via object.

Object value limit (min) in lux	1 ... 1000

Maximum value that can be set via object.

Object value limit (max) in lux	1 ... 1000

Here the type of threshold value change is set.

Type of threshold value change	Absolute value • Increase / Decrease

Here the increment is selected.

Increment (only for threshold value change via „Increase / Decrease“)	1 lux • 2 lux • 3 lux ... 100 lux

The switching distance (hysteresis) is important for the output of the value at the switching output.
The switching distance prevents the switching output of the threshold value from changing too often with temperature fluctuations. With a falling temperature value, the switching output only reacts when the temperature drops below the threshold value by the switching distance (option 1 and 2 for the first parameter of the switching output). With a rising temperature value, the switching output only reacts when the temperature exceeds the threshold value by the switching distance (option 3 and 4 for the first parameter of the switching output).

Setting of the switching distance	in % • absolute

Set the value of the switching distance.

Switching distance in lux	0...1000; 5
Switching distance in %	0 ... 100; 25

Switching output:

Here you set which value the output sends when the threshold value is exceeded/fallen below.

Output is at (TV = threshold value)(SD = switching distance)	• TV above = 1 | TV – SD below = 0 • TV above = 0 | TV – SD below = 1 • TV below = 1 | TV + SD above = 0 • TV below = 0 | TV + SD above = 1

Here you set whether the delays are adjustable via objects.

Delays adjustable via objects (in seconds)	No • Yes

Short-term temperature fluctuations around the threshold value or threshold value and switching distance are ignored for the switching output by means of switching delays.

Switching delay from 0 to 1	none • 5 s ... 2 h
Switching delay from 1 to 0	none • 5 s ... 2 h

Here you set when the switching output is to be sent to the bus.

Switching output sends	• 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

When sending periodically, the temperature threshold switching output is sent to the bus in a fixed cycle that can be set here.

Send cycle *(only if sent „periodically“)*	5 s ... 2 h

Block:

By means of the input object „Block“ the switching output can be blocked, e.g. by a manual command (push-button).

Use blocking of the switching output	No • **Yes**

The block can take effect at value 0 or 1, depending on the intended use.

Evaluation of the block object	• At value 1: block | At value 0: release • At value 0: block | At value 1: release

Here, an object value is specified until the 1st communication.

Block object value before 1st communication	0 • 1

The behaviour of the switching output when blocking can be set.

Behaviour of the switching output	
When blocking	• do not send telegram • send 0 • send 1
When releasing (with 2 seconds release delay)	[Depending on setting at „Switching output sends“]

The behaviour of the switching output when released depends on the value of the parameter „Switching output sends“ (see „Switching output“)

Switching output sends on change	do not send telegram • Send status of the switching output
Switching output sends on change to 1	do not send telegram • if switching output = 1 ➔ send 1
Switching output sends on change to 0	do not send telegram • if switching output = 0 ➔ send 0
Switching output sends on change and periodically	send status of the switching output
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

6.6.3. Night

Here you set in which cases delays received via communication object shall be retained. Please note that the setting „after power restoration and programming“ should not be used for initial commissioning, as the factory settings are always used until the 1st communication.

The delays received via communication object shall ... be retained.	• do not • after power restoration • after power restoration and programming

Here you can set below which brightness night is detected.

Night is detected below lux	1 ... 1000; 10

Set the value of the switching distance.

Switching distance in lux	0...500; 5

Here you can set whether a 1 or 0 is sent to the bus at night.

At night the switching output is	1 • 0

The delay times in seconds can be defined via objects.

Delays adjustable via objects (in seconds)	No • Yes

Small brightness fluctuations can be compensated by switching delays, e.g. dimming by clouds at twilight.

Switching delay to night	none • 5 s ... 2 h
Switching delay to not night	none • 5 s ... 2 h

Here you set when the switching output is to be sent to the bus.

Switching output sends	• on change • on change to night • on change to day • on change and periodically • on change to night and periodically • on change to day and periodically

When sending periodically, the night switching output is sent to the bus in a fixed cycle that can be set here.

Send cycle *(only if sent „periodically“)*	5 s ... 2 h

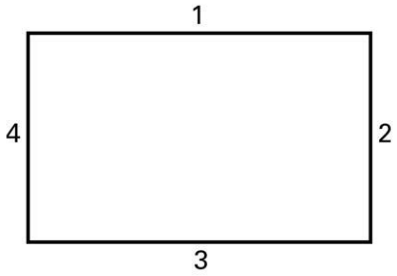
The object value at night is defined.

Object value at night	0 • 1

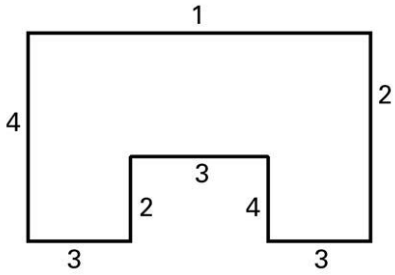
6.7. Shading (Windancer 2.0 GPS KNX sec)

6.7.1. Classification of the façades for the control unit

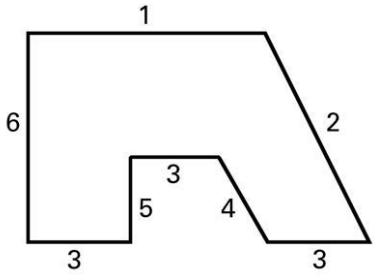
The control options for shading (shadow edge tracking and slat tracking) are façade-related functions.



Most buildings have 4 façades. As a rule, the sun shield of each façade should be controlled separately.



Even for buildings with a U-shaped floor plan, only 4 façades need to be controlled differently, since several are oriented identically.



For buildings with an asymmetric floor plan, the façades with non-rectangular orientation (2, 4) must be controlled separately.

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

If a building has more than 8 façades, an additional weather station should be used.

Depending on the location, it may be useful to use an additional wind speed sensor from 5 or 6 façades onwards. With several buildings, wind measurement should be carried out separately for each building, since different wind speeds may occur depending on the position of the buildings relative to each other.

6.8. Shade settings (Windancer 2.0 GPS KNX sec)

Solar position:

The solar position can either be calculated automatically using GPS data or obtained from an external source.

Solar position	• is calculated • is received

The weather station model with GPS receiver calculates the direction (azimuth) and elevation of the sun from current time data and position. Sending the solar position is purely informative.

Transmission behaviour	• do not send • send periodically • send on change • send on change and periodically

Heat protection:

Through the heat protection temperature or the object output "Heat protection status", measures for summer heat protection can be initiated, e.g. closing the roller shutters.

Use heat protection temperature	No • **Yes**

The suitable heat protection temperature depends on the project requirements.

Heat protection temperature in °C	15 ... 50; 35

The value of the switching distance determines by how many °C the temperature must fall below the threshold value before the heat protection becomes inactive again.

Switching distance in °C	5...20
Heat protection is at (HTV = heat protection threshold value) (SD = switching distance)	HTV above = active HTV - SD below = inactive

Sending only on change, or even only on change in one direction (1 = active or 0 = inactive), relieves the bus.

Object „façades heat protection status“ sends	• 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

When sending periodically, the object „façades heat protection status“ is sent to the bus in a fixed cycle that can be set here.

Send cycle *(only if sent „periodically“)*	5 s ... 2 h; 1 min

Façades:

How many façades are used depends on the project requirements; see chapter “Classification of the façades for the control unit” on page 67.

Use façade 1 / 2 / 3 / 4 / 5 / 6 / 7 / 8	No • Yes

6.9. Façade 1 / 2 / 3 / 4 / 5 / 6 / 7 / 8 (Windancer 2.0 GPS KNX sec)

Enter a name for the façade if required.

Change name of façade 1 / 2 / 3 / 4 / 5 / 6 / 7 / 8	Façade 1 / 2 / 3 / 4 / 5 / 6 / 7 / 8 [free text]

6.10. Façade settings (Windancer 2.0 GPS KNX sec)

For each façade, the conditions for shading (brightness, solar position) and the settings for the façade (architectural conditions such as orientation or slat type) can be individually specified.

Only when these conditions are fulfilled is the shading action carried out; see chapter “Façade actions (Windancer 2.0 GPS KNX sec)” on page 79.

Shading conditions:

The first condition for shading is an exceeded brightness threshold value. The previously configured threshold value is selected here. For explanations on the brightness threshold value see chapter “Brightness threshold value (East / South / West) 1 / 2 / 3 / 4” on page 60.

Brightness condition fulfilled if:	
Brightness greater than	Brightness threshold value 1 / 2 / 3 / 4

The brightness threshold value is additionally provided with a switching distance, which is used to filter out small brightness fluctuations around the threshold value.

Brightness conditions not fulfilled if: Brightness less than Threshold value - switching distance	
Switching distance in % of the threshold value	0 ... 50; 20

The solar position condition defines at which solar position shading shall take place. As a rule, the sun direction set here should correspond to the orientation of the façade. In addition, the shadow casting by roof overhangs, neighbouring buildings or trees can

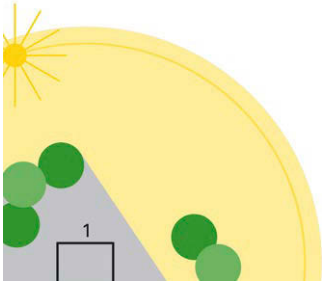
be considered and these angle ranges can also be excluded from shading. The aim is to shade only when the façade lies in the sun.
For the sun direction (azimuth), predefined angle ranges can be used, or a custom angle range can be specified numerically.

Solar position condition fulfilled if:	
Sun	• from East direction (azimuth 0°...180°) • from South-East direction (azimuth 45°...225°) • from South direction (azimuth 90°...270°) • from South-West direction (azimuth 135°...315°) • from West direction (azimuth 180°...360°) • in the range

For numerical setting of the sun range:

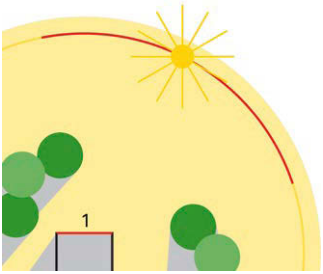
Sun	**in the range**
Azimuth [°] from	0 ... 360; 90
Azimuth [°] to	0 ... 360; 270
Elevation [°] from	0 ... 90
Elevation [°] to	0 ... 90

Azimuth setting example



Top view:

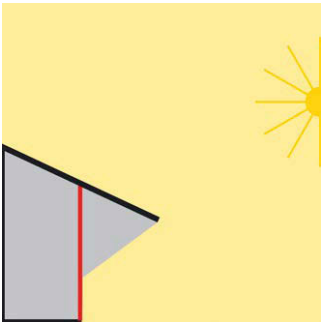
For example, the building is fully shaded by surrounding trees in the morning.



Top view:

Shading for façade 1 only needs to be active in the azimuth marked in red, since the sun can then shine unobstructed onto the building.

Elevation setting example



Side view:

The façade is shaded by the projecting roof when the sun is high. Only when the sun is low (in the figure approx. below 53°) shading is required.

Shade settings

The shading can be tracked according to the solar position. See chapter “Use of shadow edge and slat tracking” on page 74.

Shadow edge tracking can only be used with a sun shield that is lowered from top to bottom, such as roller shutters and blinds, and defines how far the sun is allowed to shine into the room. See chapter “Shadow edge tracking” on page 73.

The higher the sun stands, the further the blind can be moved upwards without the sun penetrating deeper into the room.

Slat tracking is only suitable for slat blinds and ensures, by tilting the slats, that no direct sun but as much daylight as possible enters the room. See chapter “Slat tracking” on page 73.

Type of tracking	• without tracking • Shadow edge tracking • Slat tracking • Shadow edge and slat tracking

6.10.1.Shadow edge tracking

Type of tracking	**Shadow edge tracking**

For the correct calculation of shadow edge tracking, the direction and inclination of the façade must be entered. More information in chapter “Orientation and inclination of the façade” on page 75.

Orientation of the façade in ° [North 0°, East 90°, South 180°, West 270°]	0 ... 360; 180
Inclination of the façade in ° [0° = no inclination]	-90 ... 90; 0

The distance from the floor to the upper edge of the window (window height) is required for correct shadow edge tracking.

Window height in cm	1 ... 1000; 150

The maximum penetration depth defines how far the sun, seen from the façade/ window surface, may shine into the room. This can prevent, for example, sensitive plants from being exposed to direct sunlight.

Maximum sun penetration depth into the room in cm	10 ... 250; 50

The fineness of the tracking is set by the shift in cm.

Tracking starts from a shadow edge shift of	1 ... 50; 10 cm

6.10.2.Slat tracking

Type of tracking	**Slat tracking**

For the correct calculation of slat tracking, the direction and inclination of the façade must be entered. More information in chapter “Orientation and inclination of the façade” on page 75.

Orientation of the façade in ° [North 0°, East 90°, South 180°, West 270°]	0 ... 360; 180
Inclination of the façade in ° [0° = no inclination]	-90 ... 90; 0

The orientation, width and spacing of the slats are required for correct slat tracking. More information in chapter “Slat types and determination of width and spacing” on page 76.

Slat orientation	horizontal • vertical
Slat width in mm	1 ... 1000; 50
Slat spacing in mm	1 ... 1000; 50

The fineness of the tracking is set by the minimum angle change.

Minimum angle change in ° for sending the new slat position	1 ... 90; 10

The slat angles in the upper end position (0%) and lower end position (100%) differ depending on the blind type. More information in chapters “Slat position for horizontal slats” on page 77 and “Slat position for vertical slats” on page 78.

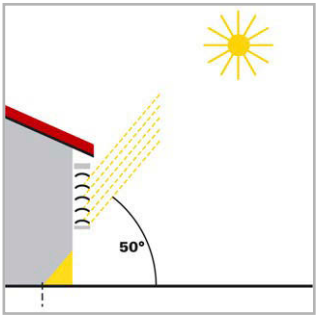
Slat angle in ° after position command 0%	0 ... 180; 90
Slat angle in ° after position command 100%	0 ... 180

6.10.3.Use of shadow edge and slat tracking

With shadow edge tracking, the sun shield is not lowered completely but only far enough that the sun can still shine a parameterisable distance (e.g. 50 cm) into the room.

Shadow edge tracking can only be used with a sun shield that is lowered from top to bottom (such as roller shutters, textile sun shields or blinds with horizontal slats). This function cannot be used with a sun shield that is drawn in front of a window from one side or both sides.

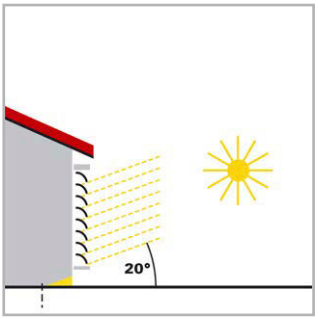
With slat tracking, the horizontal slats of blinds are not fully closed but adjusted to the solar position and automatically positioned so that the sun cannot shine directly into the room. Between the slats, however, diffuse daylight can still enter the room and contribute to glare-free room illumination. With slat tracking on an external blind, heat input into the room from sunshine is avoided and at the same time the energy required for room lighting is reduced.



Sun shield at high solar position

The sun shield was only partially closed and automatically lowered only far enough that the sun cannot shine into the room any further than the maximum allowed penetration depth.

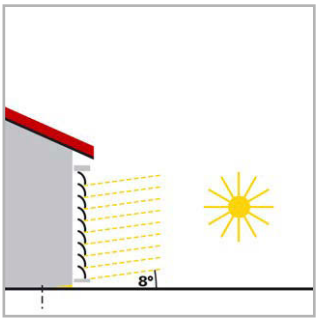
The slats can be set almost horizontally without the sun shining directly into the room.



Sun shield at medium solar position

The sun shield was automatically lowered further so that the maximum allowed sun penetration depth into the room is not exceeded.

The slats were automatically closed somewhat so that the sun cannot shine directly into the room. Diffuse daylight can still enter the room and contribute to room lighting.

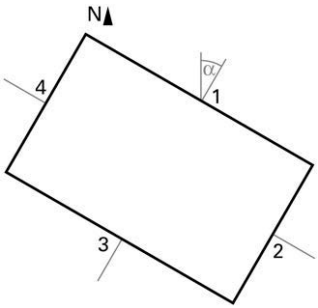


Sun shield at low solar position

The sun shield was automatically lowered almost completely so that the sun does not shine too far into the room.

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

6.10.4.Orientation and inclination of the façade



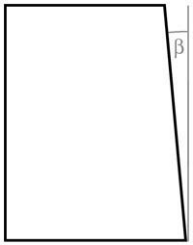
Top view

The façade orientation corresponds to the angle between the North-South axis and the perpendicular to the façade. The angle ? is measured clockwise (North corresponds to 0°, East 90°, South 180° and West 270°).

The façade orientations result as follows:

Façade 1: ?; Façade 2: ? + 90°; Façade 3: ? + 180°; Façade 4: ? + 270°

Example: The building in the figure is rotated by ? = 30° towards the East, i.e. the façade orientation is 30°, 120°, 210° and 300°



Side view

If a façade surface is not aligned vertically, this must be taken into account. An inclination of the façade forwards is counted as a positive angle, an inclination backwards (as in the figure) as a negative angle. This also allows the sun shield of windows installed in a sloped roof surface to be controlled according to the current solar position.

If a façade is not a flat surface but curved or kinked, it must be divided into several segments that are controlled separately.

6.10.5.Slat types and determination of width and spacing

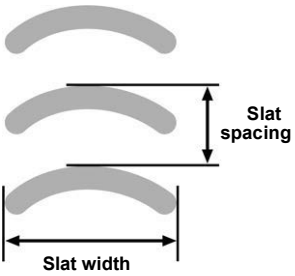
With slat tracking a distinction is made between a sun or anti-glare protection with horizontal slats and one with vertical slats.

A sun shield with horizontal slats (e.g. an external blind) is usually lowered from top to bottom. An internal anti-glare protection, in contrast, often consists of narrow fabric strips (vertical slats) that can rotate by up to 180° and are drawn in front of the window from one side or both sides.

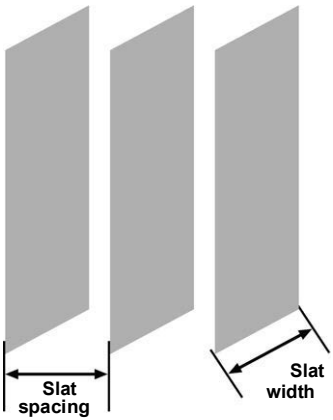
Both slat types can be adjusted by the weather station so that no direct sunlight enters the room, but as much diffuse daylight as possible.

So that the slats are correctly positioned during slat tracking, their width and spacing from each other must be known.

Horizontal slats

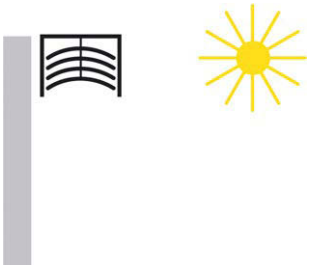


Vertical slats



6.10.6.Slat position for horizontal slats

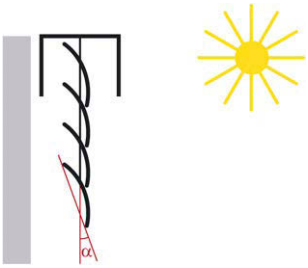
For blind drives with 2 end-position switches, the upper end position (i.e. sun shield fully open) is addressed via the value 0% or reported as status.



Sun shield open / upper end position / 0%

If the lower end position is to be reached, this is specified to the blind actuator as sun shield position „100%“, or reaching the lower end position (i.e. sun shield fully closed) is reported by it via this value. When a blind is lowered from the upper end position, the slats first tilt into an almost vertical position, and the sun shield moves with closed slats to the lower end position.

If the blind is in the lower end position and the slats are fully closed, this slat position is termed „vertical“ and equals „100%“. Normally, however, fully closed slats do not have an exactly vertical position (? = 0°) but form a small angle with the vertical. This angle must be determined during slat tracking and entered via the parameter "Slat angle in ° after position command 100%".

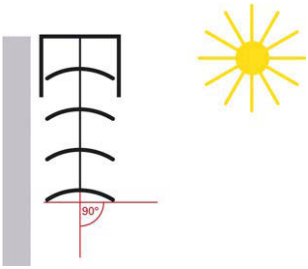


Sun shield and slats closed / lower end position / 100%

Slat position 100%

From their „vertical“ position (fully closed, 100%) the slats can be adjusted to their horizontal position (fully open, ? = 90°). The blind drive used determines whether this adjustment can be performed almost continuously in many small steps (as for example with SMI drives) or whether this is only possible in a few large steps (as with most standard drives). For standard blinds, there are usually two possible angles that can be entered in the parameter "Slat angle in ° after position command 0%". With both settings it is important that the corresponding actuator that controls the blind is also set accordingly! The first option is to enter this angle as ? = 90°. This setting is sufficient for anti-

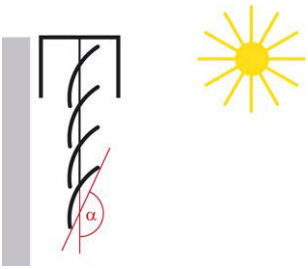
glare protection.



Slat position horizontal / fully open

$\alpha = 90°$

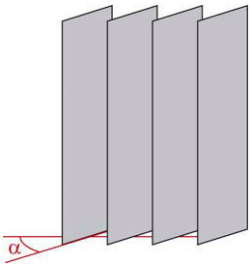
For standard blinds, the slats can be adjusted further beyond their horizontal position until the slat adjustment ends and the lifting of the blind begins. The slats then form an angle between 90° and 180° with the vertical. This maximum angle can be entered as the second option in the parameter "Slat angle in ° after position command 0%". With this setting, all angles from approx. 0° to approx. 180° can be reached.



Slat position at start of UP travel

6.10.7.Slat position for vertical slats

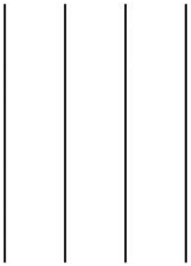
For an internal anti-glare or privacy protection with vertical slats, the position in which the slats are fully closed is addressed or reported as slat position 100%. This is the position in which the anti-glare protection is moved from its lateral end position in front of the window. The angle that the slats form with the direction of travel is here slightly >0°.



View from outside

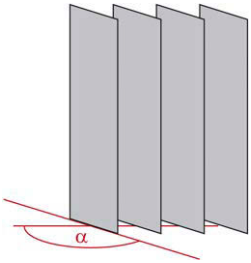
Fully closed vertical slats / slat position 100%

If the slats are fully open, they form a 90° angle with the direction of travel from „anti-glare protection fully open“ to „anti-glare protection fully closed“.
Depending on the blind used, there are usually two possible angles that can be entered in the parameter "Slat angle in ° after position command 0%". With both settings it is important that the corresponding actuator that controls the blind is also set accordingly! The first option is to enter this angle as ? = 90°. This setting is sufficient for anti-glare protection.



Fully open vertical slats / slat position 0%

When the anti-glare protection is retracted (i.e. opened), the vertical slats are rotated to a position slightly less than 180°. This maximum angle can be entered as the second option in the parameter "Slat angle in ° after position command 0%". With this setting, all angles from approx. 0° to approx. 180° can be reached.



View from outside

Vertical slats at start of UP travel

6.11. Façade actions (Windancer 2.0 GPS KNX sec)

If the brightness condition is fulfilled for the specified duration and the solar position condition is fulfilled, the actions described below are carried out. For the conditions see chapter “Façade 1 / 2 / 3 / 4 / 5 / 6 / 7 / 8 (Windancer 2.0 GPS KNX sec)” on page 70.
The delay time can be used to „mask out“ short-term higher illuminances, e.g. caused by a gap in the clouds.

If it is bright enough (brightness condition fulfilled)	
for more than	0 s ... 2 h; 2 min
AND	
the sun shines on the façade	
(solar position condition fulfilled)	

Actions:
- Façade status object is set to value = 1.
- If shadow edge tracking is activated, the calculated position is reached. Otherwise the drive position set here is reached.
- If slat tracking is activated, the calculated angle is reached. Otherwise the slat angle set here is reached.

Then: →Object „façade 1 status“ = 1	
→ drive position in %	0 ... 100 (or follows shadow edge tracking)
→ slat position in %	0 ... 100 (or follows slat tracking)

If the brightness condition is no longer fulfilled for the duration specified here, the actions of the „first retraction stage“ described below are carried out.
The delay time can be used to „mask out“ short-term lower illuminances, e.g. caused by passing clouds.

If it is not bright enough	
for more than	0 s ... 2 h; 10 min

This is the first retraction stage, which can be used to not yet fully retract the shading. Such an intermediate step is particularly pleasant for large windows, as somewhat more light is let in, but the sun shield position is also quickly reached again if it gets brighter again shortly after. Here it is recommended not to change the drive position and to set the slat position to maximum light transmission.

Actions:
- Drive position can be changed.
- Slat position can be changed.

If no change is selected, this „first retraction stage“ is skipped.

Then:	
→ change drive position	Yes • No
Drive position in % *(only if drive position is to be changed)*	0 ... 100
→ change slat position	Yes • No
Slat position in % *(only if slat position is to be changed)*	0 ... 100

If the brightness condition continues to not be fulfilled for the duration specified here, the actions described below are carried out. The same applies if the solar position condition is no longer fulfilled.

If after another it is still not bright enough	0 s ... 2 h; 30 min
OR	

the sun no longer shines on the façade

Actions:
- Façade status object is set to value = 0.
- Drive position can be changed.
- Slat position can be changed.

If no change is selected, the shading remains in its current position. This can be used if the shading was already fully retracted in the „first retraction stage“ or if the shading should not fully retract for other reasons.

Then: → object „façade 1 status“ = 0	
→ change drive position	Yes • No
Drive position in % (*only if drive position is to be changed*)	0 ... 100
→ change slat position	Yes • No
Slat position in % (*only if slat position is to be changed*)	0 ... 100

Transmission behaviour of the objects:

The change of a drive or slat position is sent to the bus immediately.

Drive position and slat position	• send on change • send on change and periodically

With additional periodic sending, the two objects „façade X: drive position“ and „façade X: slat position“ are sent to the bus in a fixed cycle that can be set here. The two objects are only sent periodically as long as the façade status = 1.

Send cycle (only if façade status = 1) *(only if sent „periodically“)*	5 s ... 2 h; 2 min

Here you set when the object „façade X status“ is to be sent to the bus.

Object „façade X status“ sends	• 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

When sending periodically, the object „façade X: status“ is sent to the bus in a fixed cycle that can be set here.

Send cycle *(only if sent „periodically“)*	5 s ... 2 h; 2 min

Heat protection:

Via the heat protection function, shading can be closed to block heat. For this, the heat protection temperature must be activated in the section „Shading“. See heat protection temperature in chapter “Shade settings (Windancer 2.0 GPS KNX sec)” on page 68.

Use heat protection	**Yes** • No
Drive position in % *(only if heat protection is used)*	0 ... 100
Slat position in % *(only if heat protection is used)*	0 ... 100

Block and safety:

The façade has its own block object (façade X: block (1 = blocked)). For example, a manual command (push-button) can block the shading automation.

Behaviour after block	• react to last automatic command • wait for next automatic command

Before the first communication, i.e. after commissioning or bus power restoration, the block can be active (1) or not (0).

Block object value before 1st communication	0 • 1

Additionally, a safety function can be used that, for example, moves the shading into the safe position.

Use safety (lower priority than block)	**Yes** • No

If the safety object is 1, the shading can be retracted or keep its position, but all further automatic actions are ignored.

Action at safety = 1	• do not send positions • move to safe position (0% / 0%)

When the safety status ends, i.e. when a 0 is received via the safety object, the last stored automatic command can be executed or the next one can be waited for.

Action at safety = 0	• react to last automatic command • wait for next automatic command

6.12. Timer (Windancer 2.0 GPS KNX sec)

Here the weekly clock timer can be activated if required.

Use weekly clock timer	No • Yes

Here the calendar clock timer can be activated if required.

Use calendar clock timer	No • Yes

6.12.1.Weekly clock timer

You can activate up to 24 weekly periods. For each period, the days of the week on which it shall be active can be specified.

Use period 1 ... 24	No • Yes

Weekly period 1 ... 24

Set here whether the switching times shall be specified via objects.

Use objects for switching times	No • Yes

Here you set in which cases switching times received via communication object shall be retained. Please note that the setting „after power restoration and programming“ should not be used for initial commissioning, as the factory settings are always used until the 1st communication.

The switching times received via communication object shall ... be retained.	• do not • after power restoration • after power restoration and programming

A sequence defines the switch-on and switch-off time for the day of the week.
If, for example, 8:35 is set as switch-on time, the output switches on at the transition from 8:34 to 8:35.
If, for example, 15:35 is set as switch-off time, the output switches off at the transition from 15:35 to 15:36.

Switch-on time Hours	0 ... 23
Switch-on time Minutes	0 ... 59
Switch-off time Hours	0 ... 23
Switch-off time Minutes	0 ... 59

Activate or deactivate the days of the week on which the sequence shall be active.

Monday ... Sunday	No • Yes

If the switching outputs of the weekly clock timer are only used for the internal logic, they do not need to be sent to the bus.

Switching outputs send	• do not • on change • on change to active • on change to not active • on change and periodically • on change to active and periodically • on change to not active and periodically

When sending periodically, the object „weekly timer [weekday] X: switching output“ is sent to the bus in a fixed cycle that can be set here.

Send cycle *(only if sent periodically)*	5 s ... 2 h; 10 s

Set the 8-bit output value here when the period is active.

8-bit output value if period active	0 ... 255

Set the 8-bit output value here when the period is not active.

8-bit output value if period not active	0 ... 255

6.12.2.Calendar clock timer

The calendar clock timer defines switching sequences for specific periods during the year. For example, a garden pond pump can be operated only during the summer months.

Use period 1 / 2 / 3 / 4	**Yes** • No

Calendar clock period 1 / 2 / 3 / 4

Set here whether the switching date and the switching times shall be specified via objects.

Use objects for switching date and switching times	No • Yes

Here you set in which cases switching values received via communication object shall be retained. Please note that the setting „after power restoration and programming“ should not be used for initial commissioning, as the factory settings are always used until the 1st communication.

The switching dates and times received via communication object shall ... be retained.	• do not • after power restoration • after power restoration and programming

Start date and end date are defined.

from:	
Month	January ... December
Day	1 ... 29 / 1 ... 30 / 1 ... 31 (depending on month)
up to and including:	
Month	January ... December
Day	1 ... 29 / 1 ... 30 / 1 ... 31 (depending on month)

Calendar clock period 1 / 2 / 3 / 4, sequence 1 / 2

A sequence defines the switch-on and switch-off time for each day of the set period.

Switch-on time Hours	0 ... 23
Switch-on time Minutes	0 ... 59
Switch-off time Hours	0 ... 23
Switch-off time Minutes	0 ... 59

If the switching outputs of the calendar clock timer are only used for the internal logic, they do not need to be sent to the bus.

Switching outputs send	• do not • on change • on change to active • on change to not active • on change and periodically • on change to active and periodically • on change to not active and periodically

When sending periodically, the object „calendar clock timer period X, seq. X: switching output“ is sent to the bus in a fixed cycle that can be set here.

Send cycle *(only if sent periodically)*	5 s ... 2 h; 10 s

Set the 8-bit output value here when the period is active.

8-bit output value if period active	0 ... 255

Set the 8-bit output value here when the period is not active.

8-bit output value if period not active	0 ... 255

6.13. Logic

The device provides 16 logic inputs, eight AND and eight OR logic gates.
For each logic input, the object value before the first communication can be assigned; it is used for initial commissioning and on power restoration.

Use logic inputs	No • Yes
Object value before 1st communication for:	
Logic input 1 / 2 / 3 / 4 / 5 / 6 / 7 / 8 / 9 / 10 / 11 / 12 / 13 / 14 / 15 / 16	0 • 1

Here you select which logic gates are to be used.

AND logic

Use AND logic 1 / 2 / 3 / 4 / 5 / 6 / 7 / 8	No • Yes

OR logic

Use OR logic 1 / 2 / 3 / 4 / 5 / 6 / 7 / 8	No • Yes

6.13.1.AND logic 1 / 2 / 3 / 4 / 5 / 6 / 7 / 8

Four inputs can be defined for each logic gate.

1st / 2nd / 3rd / 4th input	• do not use • all switching events that the device provides (see „Connection inputs of the AND logic“)

Each logic output sends a 1-bit or two 8-bit objects.

Logic output sends	• a 1-bit object • two 8-bit objects

If the output type is a 1-bit object, the object values are set.

Output value if logic = 1	1 • 0
Output value if logic = 0	1 • 0
Output value if block active	1 • 0
Output value if monitoring time exceeded	1 • 0

Here you set when the logic output is to be sent to the bus.

Transmission behaviour	• on change of logic • 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 reception • on change of logic + object reception and periodically

When sending periodically, the AND logic object is sent to the bus in a fixed cycle that can be set here.

Send cycle *(only if sent „periodically“)*	5 s • 10 s ... 2 h

If the output type is two 8-bit objects, object type and object values are set.

Object type	• Value [0...255] • Percent [0...100%] • Angle [0...360°] • Scene call [0...63]
Output value object A if logic = 1	0 ... 255; 1
Output value object B if logic = 1	0 ... 255; 1
Output value object A if logic = 0	0 ... 255
Output value object B if logic = 0	0 ... 255
Output value object A if block active	0 ... 255
Output value object B if block active	0 ... 255
Output value object A if monitoring time exceeded	0 ... 255
Output value object B if monitoring time exceeded	0 ... 255

Here you set when the logic output is to be sent to the bus.

Transmission behaviour	• on change of logic • 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 reception • on change of logic + object reception and periodically

When sending periodically, the AND logic object is sent to the bus in a fixed cycle that can be set here.

Send cycle *(only if sent „periodically“)*	5 s • 10 s ... 2 h

For example, frost protection can be implemented as follows:
AND X input 1 = rain (with 2h switch-off delay)
AND X input 2 = temperature TV1 (= 1 when falling below e.g. +1.0°C)
AND X output A = 0%
AND X output B = 0%
AND X outputs send on change to 1

Block:

By means of the input object „Block“ the switching output can be blocked, e.g. by a manual command (push-button).

Use block	No • **Yes**

Each logic gate has its own block object (AND logic X: output block), for which is set here whether it blocks on receiving a 1 or 0.

Evaluation of the block object	• At value 1: block | At value 0: release • At value 0: block | At value 1: release

Before the first communication, i.e. after commissioning or bus power restoration, the block can be active (1) or not (0).

Block object value before 1st communication	0 • 1

The behaviour of the switching output when blocking can be set.

Behaviour of the switching output	
When blocking	• do not send telegram • send 0 • send 1
When releasing (with 2 seconds release delay)	[Depending on setting at „Switching output sends“]

The behaviour of the switching output when released depends on the value of the parameter „Transmission behaviour“.

Switching output sends on change	do not send telegram • Send value for current logic status
Switching output sends on change to 1	do not send telegram • if logic = 1 ➔ send value for 1
Switching output sends on change to 0	do not send telegram • if logic = 0 ➔ send value for 0

Switching output sends on change and periodically	Send value for current logic status
Switching output sends on change to 1 and periodically	if logic = 1 ➔ send value for 1
Switching output sends on change to 0 and periodically	if logic = 0 ➔ send value for 0
Switching output sends on change + object reception	do not send telegram • Send value for current logic status
Switching output sends on change + object reception and periodically	Send value for current logic status

Monitoring:

Activates or deactivates the monitoring of the input. If activated, the system continuously checks whether the input signal is received and updated within a defined time. If deactivated, the input is used directly without error detection.

Use input monitoring	No • **Yes**

Set which inputs are to be monitored.

Monitoring of input	• 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 • 1 + 2 + 3 + 4

Set the cycle in which the inputs are monitored.

Monitoring period	5 s • ... • 2 h; 1 min

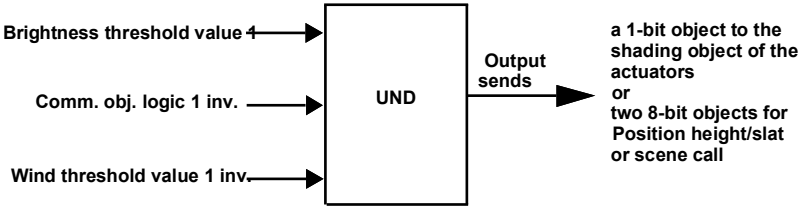
Set the value the object „Monitoring status“ shall have if the monitoring period is exceeded without feedback.

Output behaviour on exceedance of monitoring time	• do not send telegram • Send overrun value [= value of parameter „Monitoring period“]

6.13.2.Use of the AND logic

Example sun automation

The AND logic can be used, e.g., to define the conditions for shading; for example a brightness threshold value and also the reactivation of shading after a wind alarm and blocking by manual operation were included in this example.



- Brightness threshold value 1: defines from which brightness shading takes place.
- Communication object logic 1 inverted: block function for the sun automation, e.g. via a push-button (block after manual operation). Logic = 0 ? released, Logic = 1? blocked. For this, the „communication objects logic inputs“ must be enabled under “Logic” on page 86 and the „communication object logic 1“ must be linked to the push-button via group addresses.
- Wind threshold value 1 inverted: re-activates the automation after the end of a wind alarm (i.e. if the other conditions are fulfilled, shading takes place again).

6.13.3.Connection inputs of the AND logic

Windancer 2.0 KNX sec:

do not use (AND)
do not use (OR)
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
Rain
Rain inverted
Rain fixed
Rain fixed inverted
Rain heating
Rain heating inverted
Temperature sensor malfunction
Temperature sensor malfunction inverted
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 South malfunction
Brightness sensor South malfunction inverted
Brightness sensor East malfunction
Brightness sensor East malfunction inverted
Brightness sensor West malfunction
Brightness sensor West malfunction inverted
Switching output 1 brightness South
Switching output 1 brightness South inverted
Switching output 2 brightness South
Switching output 2 brightness South inverted
Switching output 3 brightness South
Switching output 3 brightness South inverted
Switching output 4 brightness South
Switching output 4 brightness South inverted
Switching output 1 brightness East
Switching output 1 brightness East inverted
Switching output 2 brightness East
Switching output 2 brightness East inverted
Switching output 3 brightness East
Switching output 3 brightness East inverted
Switching output 4 brightness East
Switching output 4 brightness East inverted
Switching output 1 brightness West

Switching output 1 brightness West inverted
Switching output 2 brightness West
Switching output 2 brightness West inverted
Switching output 3 brightness West
Switching output 3 brightness West inverted
Switching output 4 brightness West
Switching output 4 brightness West 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 night
Switching output night inverted
Solar position OK
Solar position OK inverted
Switching output wind 1
Switching output wind 1 inverted
Switching output wind 2
Switching output wind 2 inverted
Switching output wind 3
Switching output wind 3 inverted
Switching output wind 4
Switching output wind 4 inverted

Windancer 2.0 GPS KNX sec:

do not use (AND)
do not use (OR)
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
GPS malfunction
GPS malfunction inverted
Rain
Rain inverted
Rain fixed
Rain fixed inverted
Rain heating
Rain heating inverted
Temperature sensor malfunction
Temperature sensor malfunction inverted
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 malfunction
Brightness sensor malfunction inverted
Switching output 1 brightness sensor
Switching output 1 brightness sensor inverted
Switching output 2 brightness sensor
Switching output 2 brightness sensor inverted
Switching output 3 brightness sensor
Switching output 3 brightness sensor inverted
Switching output 4 brightness sensor
Switching output 4 brightness sensor 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 night
Switching output night inverted
Solar position OK
Solar position OK inverted
Switching output wind 1
Switching output wind 1 inverted
Switching output wind 2
Switching output wind 2 inverted
Switching output wind 3
Switching output wind 3 inverted
Switching output wind 4
Switching output wind 4 inverted
Weekly clock period 1
Weekly clock period 1 inverted
Weekly clock period 2
Weekly clock period 2 inverted
Weekly clock period 3
Weekly clock period 3 inverted
Weekly clock period 4
Weekly clock period 4 inverted
Weekly clock period 5
Weekly clock period 5 inverted
Weekly clock period 6
Weekly clock period 6 inverted
Weekly clock period 7
Weekly clock period 7 inverted
Weekly clock period 8
Weekly clock period 8 inverted
Weekly clock period 9
Weekly clock period 9 inverted
Weekly clock period 10
Weekly clock period 10 inverted
Weekly clock period 11
Weekly clock period 11 inverted
Weekly clock period 12
Weekly clock period 12 inverted
Weekly clock period 13
Weekly clock period 13 inverted
Weekly clock period 14
Weekly clock period 14 inverted
Weekly clock period 15
Weekly clock period 15 inverted
Weekly clock period 16
Weekly clock period 16 inverted
Weekly clock period 17

Weekly clock period 17 inverted
Weekly clock period 18
Weekly clock period 18 inverted
Weekly clock period 19
Weekly clock period 19 inverted
Weekly clock period 20
Weekly clock period 20 inverted
Weekly clock period 21
Weekly clock period 21 inverted
Weekly clock period 22
Weekly clock period 22 inverted
Weekly clock period 23
Weekly clock period 23 inverted
Weekly clock period 24
Weekly clock period 24 inverted
Calendar clock period 1 seq.1
Calendar clock period 1 seq.1 inverted
Calendar clock period 1 seq.2
Calendar clock period 1 seq.2 inverted
Calendar clock period 2 seq.1
Calendar clock period 2 seq.1 inverted
Calendar clock period 2 seq.2
Calendar clock period 2 seq.2 inverted
Calendar clock period 3 seq.1
Calendar clock period 3 seq.1 inverted
Calendar clock period 3 seq.2
Calendar clock period 3 seq.2 inverted
Calendar clock period 4 seq.1
Calendar clock period 4 seq.1 inverted
Calendar clock period 4 seq.2
Calendar clock period 4 seq.2 inverted

6.13.4.OR logic 1 / 2 / 3 / 4 / 5 / 6

Four inputs can be defined for each logic gate.

1st / 2nd / 3rd / 4th input	• do not use • all switching events that the sensor provides (see „Connection inputs of the OR logic“)

All settings of the OR logic correspond to those of the AND logic.

6.13.5.Connection inputs of the OR logic

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

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

Questions about the product?

Please contact your specialist retailer or, if you purchased the product directly from Elsner Elektronik, our technical service at
Tel. +49 (0) 70 33 / 30 945-250 or
service@elsner-elektronik.de

We need the following information to process your service request:

- Type of appliance (model name or item number)
- Serial number or software version
- Description of the problem
- Proof of purchase (invoice)

For questions about KNX functions:

- Version of the device application
- ETS version used for the project
- Factory-Default-Setup-Key (FDSK)
- Firmware version used

elsner

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