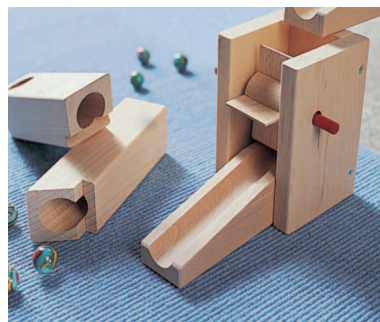


KNX Gateway Software manual

(Keep for future use)



Valid from 1 April 2013
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Sun. Light. Warema.

General information

General information

The publication of this document supersedes all previous corresponding documentation. We reserve the right to make alterations in the interest of technical progress. Considerable care was taken in producing the text and graphics in this documentation. No liability is accepted for any errors which may nevertheless exist in this documentation nor for the consequences of any such errors.

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KNX Gateway

1 Overview

1.1 General information on the KNX Gateway

The KNX Gateway enables the use of WAREMA climatronic® 2.0 as a central control unit in a KNX bus system. It transmits the move commands, weather data and status information of the WAREMA climatronic® 2.0 to the KNX bus. The KNX Gateway can also read out certain status information from the KNX bus and make it available to the WAREMA climatronic® control panel.

Control parameters can readily be changed directly on the WAREMA climatronic® 2.0 control panel without it being necessary to set parameters on the KNX side (e.g. by means of ETS).

A KNX Gateway can address 16 channels. By using multiple KNX Gateways, all channels of the WAREMA climatronic® 2.0 can be implemented on the KNX bus.

The KNX Gateway can only be used in conjunction with the WAREMA climatronic® 2.0 control panel. Older versions of the WAREMA climatronic® are not suitable and cannot be upgraded with a software update.

1.2 Device models

WAREMA offers the KNX Gateway as a DIN rail-mounted device (REG) with a width of 3 units.

The dimensions are provided in the installation instructions, art. no. 890623.

The KNX Gateway is supplied with 24 V DC via the WAREMA climabus.

1.3 Additional documents

The following documents are available in addition to these instructions:

Document	Number
KNX Gateway installation instructions	2003866
WAREMA climatronic® 2.0 operating instructions	2003868
WAREMA climatronic® 2.0 installation instructions	2003869

1.4 Additional documentation

Further information on the installation and commissioning of the KNX Gateway can be found in the installation instructions, art. no. 890623.

Also follow the operating and installation instructions that accompany WAREMA climatronic® 2.0.

NOTE In this document, "communication objects" is abbreviated with CO.

2 For your safety

We developed and tested the KNX Gateway in compliance with the basic safety requirements.

Residual risks nevertheless remain!

- For this reason, please read this manual before commissioning and operating the control. It will help you become familiar with the software functions and use them in an optimal manner.
- **It is very important to adhere to the safety information listed here and the warning information in this manual. Otherwise, any warranty claims against the manufacturer become void.**
- Keep this manual for future use.

2.1 Meanings of symbols and pictographs

The safety information in this manual is identified with warning symbols. It is categorised into different warning types depending on the level of potential danger:



DANGER

warns of an imminently dangerous situation. Possible consequences may include serious injuries and even death (personal injury), property or environmental damage.



WARNING

warns of a **potentially dangerous situation**. Possible consequences **may include light or serious injuries and even death (personal injury), property or environmental damage**.



CAUTION

Reminder to be careful.

Possible consequences of the failure to do so may include **property damage**

NOTE The term **NOTE** marks important **information** and helpful **tips**.

Example The term **Example** marks an **example**.

- The **square** marks an **instruction** or a **prompt for action**. Perform this step.
- ▶ The **triangle** marks an **event** or the **result** of a preceding action.
- ▶ The **black triangle** is a **bullet point** for lists or selections.

KNX Gateway

2.2 Intended use

The KNX Gateway is used to provide channel commands, measured values and status information of the WAREMA climatronic® 2.0 as communication objects on the KNX bus. It can receive status information on communication objects from the KNX bus and transfer them to the WAREMA climatronic® 2.0 system.



WARNING

Please obtain the approval of the manufacturer if you have questions regarding the connection of devices not listed in these instructions.

All control devices are intended to be installed **indoors** unless otherwise specified.



WARNING

The approval of the manufacturer must be obtained for uses outside of the purposes listed here. The consequences of unintended use may include personal injury to the operator or third parties as well as property damage to the control panel itself, to connected devices or to moveable mechanical parts of the entire system.

- Therefore, use our product only as intended.

2.3 Targeted reader group

These instructions are intended for persons who are commissioning a sun shading control system in KNX technology as well as for qualified technicians. Knowledge of KNX technology is essential.



WARNING

Commissioning and operation by persons who are not sufficiently qualified and informed can cause severe damage to the system or may even cause personal injury.

- Commissioning may therefore only be performed by properly trained and qualified technicians. These specialists must be able to recognise sources of danger that may be caused by the mechanical, electrical or electronic equipment.
- Persons commissioning the system must know and understand the content of these instructions.

2.4 General safety instructions

The control system controls your sun shading system automatically. You must therefore observe the following safety instructions



WARNING

An automatically controlled mechanism can start moving unexpectedly.

- Therefore, never place any objects in the area of an automatically controlled mechanism. Make sure that no persons are located in the motion range of automatically controlled sunblinds during commissioning.
- If measuring or test work needs to be carried out on the active system, make sure that applicable accident prevention regulations are observed under all circumstances.



CAUTION

The entire system becomes non-functional if power fails. Therefore, move your sun shading system to a safe position ahead of time if a storm is pending. If the sun shading system is operated when iced over, any warranty and liability claims become void. Changing individual parameters may impair the safety of the system or reduce its effectiveness. It is better to consult an expert if you are not sure about the effect of a change.



WARNING

States of danger, malfunctions and property damage to the unit may be arise from improperly executed mounting, connection, repair or maintenance work.

- Such work may only be carried out by the service department or by authorised qualified technicians.

KNX Gateway

3 General information

This section will give you a brief overview of the functions and configuration of the WAREMA climatronic® and the functional principle of the KNX Gateway.

The KNX Gateway can only be used in conjunction with the WAREMA climatronic® 2.0 control panel. Older versions of the WAREMA climatronic® are not suitable and cannot be upgraded with a software update.

3.1 Principal structure of a WAREMA climatronic® system

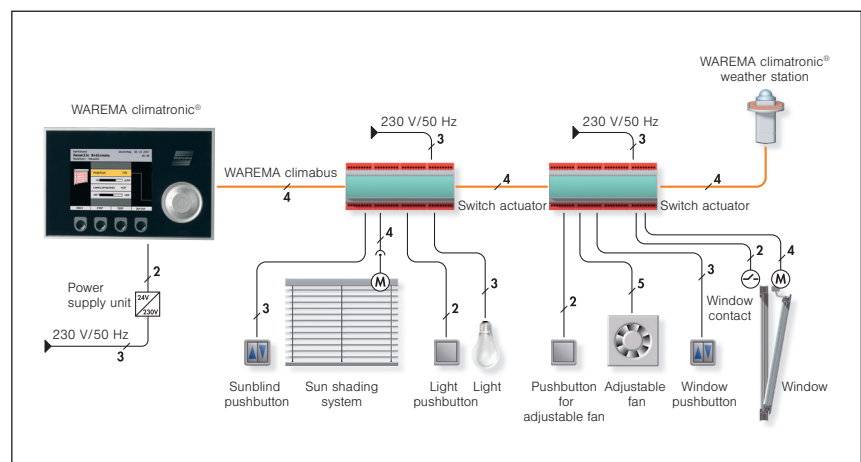


Fig. 1 Overview of the structure of a WAREMA climatronic® system

The WAREMA climatronic® is a complete solution for controlling all WAREMA products and additional systems in a conservatory or in larger building complexes.

The WAREMA climatronic® control panel can control connected products on up to 64 independent channels. In addition to manual operation, a number of control functions is also available. In addition, 16 scenes can be programmed and retrieved.

The WAREMA climatronic® system contains a series of actuators that control the connected products.

3.2 WAREMA climatronic® as a KNX central control unit

When operating the WAREMA climatronic® in KNX mode, only the following components are necessary:

- ▶ **WAREMA climatronic® 2.0 control panel** as the central control unit
- ▶ **climatronic® weather station** or **Sensor Interface** for recording the required weather data (max. 3 devices)
- ▶ **KNX Gateway** for communication with the KNX bus (max. 4 devices, one block of 16 consecutive channels is supported per gateway)

NOTE When the unit is used as a KNX central control unit, the WAREMA climatronic® commands are implemented in the gateway and transmitted to the KNX actuators as communication objects. WAREMA climatronic® actuators cannot be used in KNX mode.

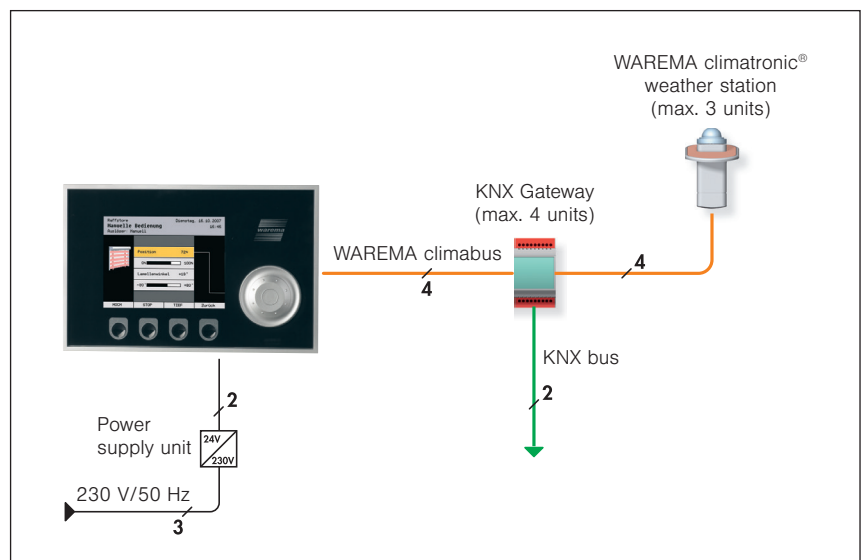


Fig. 2 Overview of a WAREMA climatronic® system as a KNX central control unit

The WAREMA climatronic® is a complete solution for controlling all WAREMA products and additional systems in a conservatory or in larger building complexes.

Whatever the season, WAREMA climatronic® will lower your energy consumption and make sure the climate is always just right. This involves an interplay between sun shading products, fans, windows, heating, air conditioning and much more in order to respond to weather-related influences from outside.

KNX Gateway

3.3 KNX Gateway

The KNX Gateway is a DIN rail-mounted device with a width of 3 units.

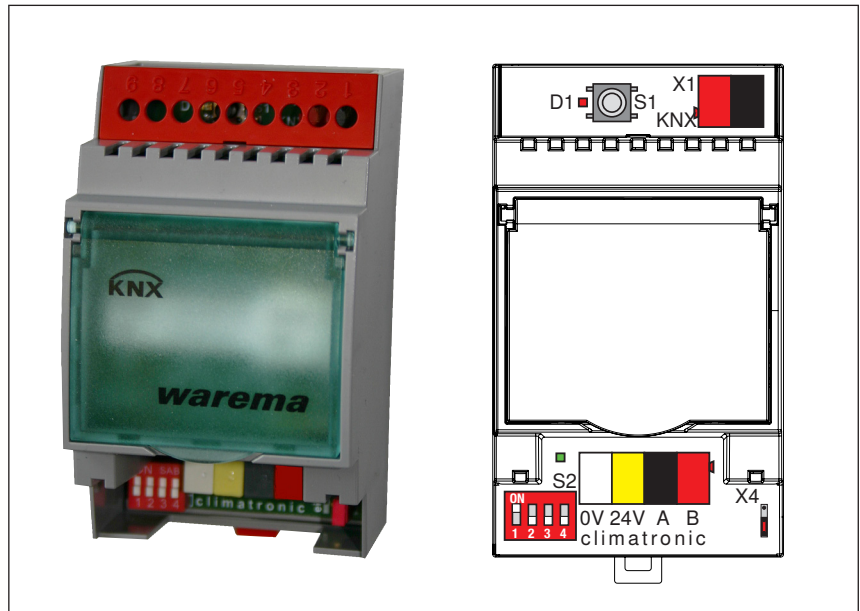


Fig. 3 KNX Gateway

KNX side:

- X1** Bus terminal black/red for connecting to the KNX bus
- S1** Programming button
- D1** Programming LED

WAREMA climatronic® side:

- X2** Bus terminal white/yellow for connecting to the climabus (power supply 24 V DC)
- X3** Bus terminal black/red for connecting to the climabus (communication)
- X4** Jumper for switching the terminating resistance on and off (if the gateway is the last device on the climabus)
- S2** Encoding switch for selecting the device ID for the climabus

Encoding switch				Gateway	WAREMA climatronic®	
1	2	3	4	Number	Channels	Scenes
ON	OFF	OFF	OFF	1	1 – 16	1 – 8
OFF	ON	OFF	OFF	2	17 – 32	9 – 16
OFF	OFF	ON	OFF	3	33 – 48	–
OFF	OFF	OFF	ON	4	49 – 64	–

Only one encoding switch may be set to ON at any one time. The information with the communication direction from KNX to climatronic is only processed by Gateway 1.

NOTE Subsequent changes to the setting of the encoding switch are only adopted after the operating voltage is switched off and on again.

3.4 Functions of the KNX Gateway

The KNX Gateway performs the following functions:

- ▶ Outputs channel commands of the climatronic on the KNX bus as communication objects
- ▶ Outputs measured values of the climatronic system on the KNX bus as communication objects
- ▶ Outputs binary status information of the climatronic system on the KNX bus as communication objects
- ▶ Receives communication objects with binary status information from the KNX bus and transfers them to the climatronic system

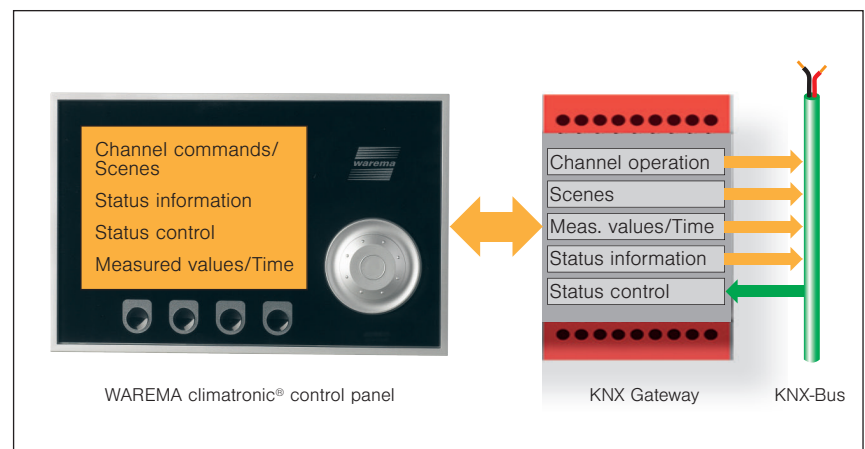


Fig. 4 Overview of a WAREMA climatronic® system as a KNX central control unit

3.5 Technical data

Technical data, wiring diagrams and specifications for electrical cables can be found in the installation instructions, art. no. 2003866.

Also follow the operating and installation instructions that accompany WAREMA climatronic® 2.0.

3.6 Electrical connections

Technical data, wiring diagrams and specifications for electrical cables can be found in the installation instructions, art. no. 2003866.

3.7 Master reset

The master reset returns the KNX Gateway to its delivered state. This means that all group addresses in the device are deleted, all parameters are set to the default values and the physical address is set to 15.15.255.

A master reset is performed as follows:

1. Switch off the operating voltage
2. Press and hold the learn button
3. Switch on the operating voltage
4. Wait for the learn LED to begin flashing and release the button after approx. 3 seconds
5. Wait for the learn LED to go out
6. Switch off the operating voltage
7. The master reset is finished

After a master reset, the KNX Gateway must be recommissioned.

4 Commissioning the WAREMA climatronic®

Before initial operation, move all connected sun shading products to a safe position, e.g. move venetian blinds to their upper limit position.

Proceed as follows:

- Check whether the KNX Gateway is correctly connected and the encoding switch is correctly set.

NOTE Subsequent changes to the setting of the encoding switch are only adopted after the operating voltage is switched off and on again.

- Switch on the operating voltage for all WAREMA climatronic® products and the KNX bus.
- ▶ The KNX Gateways are automatically recognised by the WAREMA climatronic®. The following selection window appears:

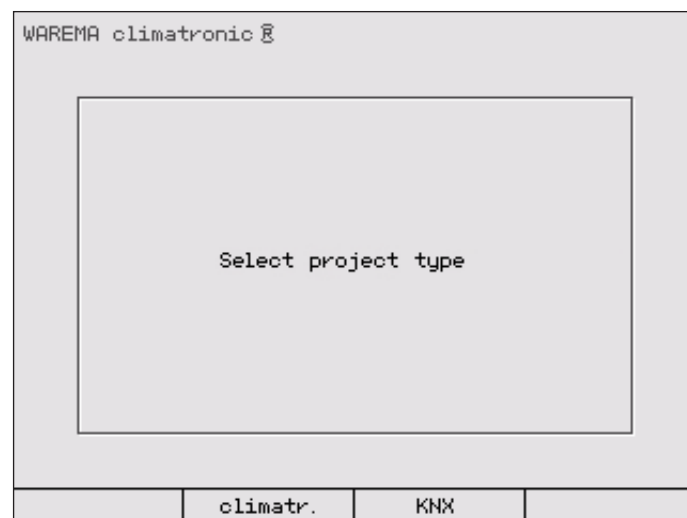


Fig. 5 Selecting the operating mode

- Select KNX.
- ▶ The start menu appears. **KNX** is displayed on the right in the header.
- Register as a specialist partner and plan the WAREMA climatronic® as usual (see the installation instructions of the WAREMA climatronic®). In KNX mode, the WAREMA climatronic® cannot be commissioned via the wizard.
- Create the required channels and sensors.

In KNX mode, products or actuators do not need to be created; these menu items are automatically hidden when KNX is selected.

NOTE If slat angles are parameterised, the same values must later be entered in the settings of the corresponding channel in the KNX Gateway.

- Parameterise the comfort functions and the safety functions for the previously created channels.
- Proceed with *Planning the KNX Gateway on page 16*.

KNX Gateway

5 Planning the KNX Gateway

The KNX Gateway is commissioned using the Engineering Tool Software (ETS) V3.0 f or later.
The required product data base (.vd5) can be downloaded from the Internet.
<http://www.warema.com>

5.1 Setting parameters

The parameters of the KNX Gateway are set in the parameter dialogue box of the ETS. For the sake of clarity, the parameters there are presented in parameter groups.

The parameter settings should be created in the following order:

1. Activate the required channels 1–8 and 9–16
2. Parameterise the channels (product type and safety object)
3. Activate the measured values and parameterise the transmission intervals
4. Activate the scene objects if necessary
5. Define the transmission interval for time/date
6. Parameterise the interference signal and the building control system if these are to be used.

Details on the parameters are provided in *section 7 on page 35*.

5.2 Group addresses/ linking

The output channels are set up in the parameter settings. For every activated channel, only a specific set of communication objects is required in the ETS. Communication objects that are not required are automatically hidden by the ETS. Thus, if the channels are deactivated, links that already exist may be deleted from the ETS project.

5.3 Physical address

The physical address is used for the exact identification of a device. The KNX Gateway obtains its physical address in the following manner:

- ▶ select [Program individual address] in the ETS and
- ▶ press the programming button **S1** until the prog.-LED **D1** lights up

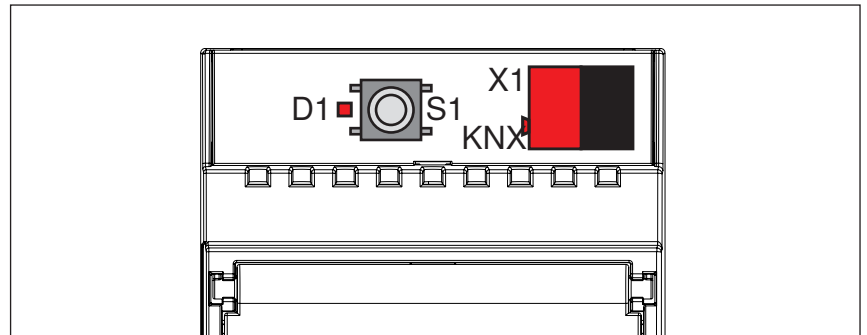


Fig. 6 Programming button

The device is delivered with the physical address 15.15.255.

5.4 Application program

During initial operation of the KNX Gateway, the physical address, communication objects, parameters and group addresses must be programmed. If a project is changed later on, only the group addresses and parameters need to be programmed.

NOTE Communication objects are loaded, for example, by selecting the following in the ETS: [Programming...] > [Application program].

KNX Gateway

6 Communication objects

6.1 Overview

The KNX Gateway has a total of 250 communication objects (CO). Depending on the parameter setting (e.g. product type), the communication objects available in each case are shown on the ETS interface.

The following table contains all communication objects with the associated specifications.

No.	Designation	Length	DPT-ID	Flags
1	K1 UP/DOWN	1 bit	1.xxx	C, T
2	K1 OPEN/CLOSE	1 bit	1.xxx	C, T
3	K1 ON/OFF	1 bit	1.xxx	C, T
4	K1 Stop/step	1 bit	1.xxx	C, T
5	K1 Move to blind length/window position	1 byte	5,001	C, T
6	K1 Move to slat position	1 byte	5,001	C, T
7	K1 Set value	1 byte	5,001	C, T
8	K1 Safety function	1 bit	1.xxx	C, T
9	K1 Comfort function	1 bit	1.xxx	C, T
10	K1 Position enable	1 bit	1.xxx	C, T
11	K1 Automatic status	1 bit	1.xxx	C, T
12	K1 Automatic on/off	1 bit	1.xxx	C, W
13	K2 UP/DOWN	1 bit	1.xxx	C, T
14	K2 OPEN/CLOSE	1 bit	1.xxx	C, T
15	K2 ON/OFF	1 bit	1.xxx	C, T
16	K2 Stop/step	1 bit	1.xxx	C, T
17	K2 Move to curtain length/window position	1 byte	5,001	C, T
18	K2 Move to slat position	1 byte	5,001	C, T
19	K2 Set value	1 byte	5,001	C, T
20	K2 Safety function	1 bit	1.xxx	C, T
21	K2 Comfort function	1 bit	1.xxx	C, T
22	K2 Position enable	1 bit	1.xxx	C, T
23	K2 Automatic status	1 bit	1.xxx	C, T
24	K2 Automatic on/off	1 bit	1.xxx	C, W
25	K3 UP/DOWN	1 bit	1.xxx	C, T
26	K3 OPEN/CLOSE	1 bit	1.xxx	C, T
27	K3 ON/OFF	1 bit	1.xxx	C, T
28	K3 Stop/step	1 bit	1.xxx	C, T
29	K3 Move to blind length/window position	1 byte	5,001	C, T
30	K3 Move to slat position	1 byte	5,001	C, T
31	K3 Set value	1 byte	5,001	C, T
32	K3 Safety function	1 bit	1.xxx	C, T
33	K3 Comfort function	1 bit	1.xxx	C, T
34	K3 Position enable	1 bit	1.xxx	C, T
35	K3 Automatic status	1 bit	1.xxx	C, T
36	K3 Automatic on/off	1 bit	1.xxx	C, W

No.	Designation	Length	DPT-ID	Flags
37	K4 UP/DOWN	1 bit	1.xxx	C, T
38	K4 OPEN/CLOSE	1 bit	1.xxx	C, T
39	K4 ON/OFF	1 bit	1.xxx	C, T
40	K4 Stop/step	1 bit	1.xxx	C, T
41	K4 Move to blind length/window position	1 byte	5,001	C, T
42	K4 Move to slat position	1 byte	5,001	C, T
43	K4 Set value	1 byte	5,001	C, T
44	K4 Safety function	1 bit	1.xxx	C, T
45	K4 Comfort function	1 bit	1.xxx	C, T
46	K4 Position enable	1 bit	1.xxx	C, T
47	K4 Automatic status	1 bit	1.xxx	C, T
48	K4 Automatic on/off	1 bit	1.xxx	C, W
49	K5 UP/DOWN	1 bit	1.xxx	C, T
50	K5 OPEN/CLOSE	1 bit	1.xxx	C, T
51	K5 ON/OFF	1 bit	1.xxx	C, T
52	K5 Stop/step	1 bit	1.xxx	C, T
53	K5 Move to blind length/window position	1 byte	5,001	C, T
54	K5 Move to slat position	1 byte	5,001	C, T
55	K5 Set value	1 byte	5,001	C, T
56	K5 Safety function	1 bit	1.xxx	C, T
57	K5 Comfort function	1 bit	1.xxx	C, T
58	K5 Position enable	1 bit	1.xxx	C, T
59	K5 Automatic status	1 bit	1.xxx	C, T
60	K5 Automatic on/off	1 bit	1.xxx	C, W
61	K6 UP/DOWN	1 bit	1.xxx	C, T
62	K6 OPEN/CLOSE	1 bit	1.xxx	C, T
63	K6 ON/OFF	1 bit	1.xxx	C, T
64	K6 Stop/step	1 bit	1.xxx	C, T
65	K6 Move to blind length/window position	1 byte	5,001	C, T
66	K6 Move to slat position	1 byte	5,001	C, T
67	K6 Set value	1 byte	5,001	C, T
68	K6 Safety function	1 bit	1.xxx	C, T
69	K6 Comfort function	1 bit	1.xxx	C, T
70	K6 Position enable	1 bit	1.xxx	C, T
71	K6 Automatic status	1 bit	1.xxx	C, T
72	K6 Automatic on/off	1 bit	1.xxx	C, W

KNX Gateway

No.	Designation	Length	DPT-ID	Flags
73	K7 UP/DOWN	1 bit	1.xxx	C, T
74	K7 OPEN/CLOSE	1 bit	1.xxx	C, T
75	K7 ON/OFF	1 bit	1.xxx	C, T
76	K7 Stop/step	1 bit	1.xxx	C, T
77	K7 Move to blind length/window position	1 byte	5,001	C, T
78	K7 Move to slat position	1 byte	5,001	C, T
79	K7 Set value	1 byte	5,001	C, T
80	K7 Safety function	1 bit	1.xxx	C, T
81	K7 Comfort function	1 bit	1.xxx	C, T
82	K7 Position enable	1 bit	1.xxx	C, T
83	K7 Automatic status	1 bit	1.xxx	C, T
84	K7 Automatic on/off	1 bit	1.xxx	C, W
85	K8 UP/DOWN	1 bit	1.xxx	C, T
86	K8 OPEN/CLOSE	1 bit	1.xxx	C, T
87	K8 ON/OFF	1 bit	1.xxx	C, T
88	K8 Stop/step	1 bit	1.xxx	C, T
89	K8 Move to blind length/window position	1 byte	5,001	C, T
90	K8 Move to slat position	1 byte	5,001	C, T
91	K8 Set value	1 byte	5,001	C, T
92	K8 Safety function	1 bit	1.xxx	C, T
93	K8 Comfort function	1 bit	1.xxx	C, T
94	K8 Position enable	1 bit	1.xxx	C, T
95	K8 Automatic status	1 bit	1.xxx	C, T
96	K8 Automatic on/off	1 bit	1.xxx	C, W
97	K9 UP/DOWN	1 bit	1.xxx	C, T
98	K9 OPEN/CLOSE	1 bit	1.xxx	C, T
99	K9 ON/OFF	1 bit	1.xxx	C, T
100	K9 Stop/step	1 bit	1.xxx	C, T
101	K9 Move to blind length/window position	1 byte	5,001	C, T
102	K9 Move to slat position	1 byte	5,001	C, T
103	K9 Set value	1 byte	5,001	C, T
104	K9 Safety function	1 bit	1.xxx	C, T
105	K9 Comfort function	1 bit	1.xxx	C, T
106	K9 Position enable	1 bit	1.xxx	C, T
107	K9 Automatic status	1 bit	1.xxx	C, T
108	K9 Automatic on/off	1 bit	1.xxx	C, W

No.	Designation	Length	DPT-ID	Flags
109	K10 UP/DOWN	1 bit	1.xxx	C, T
110	K10 OPEN/CLOSE	1 bit	1.xxx	C, T
111	K10 ON/OFF	1 bit	1.xxx	C, T
112	K10 Stop/step	1 bit	1.xxx	C, T
113	K10 Move to blind length/window position	1 byte	5,001	C, T
114	K10 Move to slat position	1 byte	5,001	C, T
115	K10 Set value	1 byte	5,001	C, T
116	K10 Safety function	1 bit	1.xxx	C, T
117	K10 Comfort function	1 bit	1.xxx	C, T
118	K10 Position enable	1 bit	1.xxx	C, T
119	K10 Automatic status	1 bit	1.xxx	C, T
120	K10 Automatic on/off	1 bit	1.xxx	C, W
121	K11 UP/DOWN	1 bit	1.xxx	C, T
122	K11 OPEN/CLOSE	1 bit	1.xxx	C, T
123	K11 ON/OFF	1 bit	1.xxx	C, T
124	K11 Stop/step	1 bit	1.xxx	C, T
125	K11 Move to blind length/window position	1 byte	5,001	C, T
126	K11 Move to slat position	1 byte	5,001	C, T
127	K11 Set value	1 byte	5,001	C, T
128	K11 Safety function	1 bit	1.xxx	C, T
129	K11 Comfort function	1 bit	1.xxx	C, T
130	K11 Position enable	1 bit	1.xxx	C, T
131	K11 Automatic status	1 bit	1.xxx	C, T
132	K11 Automatic on/off	1 bit	1.xxx	C, W
133	K12 UP/DOWN	1 bit	1.xxx	C, T
134	K12 OPEN/CLOSE	1 bit	1.xxx	C, T
135	K12 ON/OFF	1 bit	1.xxx	C, T
136	K12 Stop/step	1 bit	1.xxx	C, T
137	K12 Move to blind length/window position	1 byte	5,001	C, T
138	K12 Move to slat position	1 byte	5,001	C, T
139	K12 Set value	1 byte	5,001	C, T
140	K12 Safety function	1 bit	1.xxx	C, T
141	K12 Comfort function	1 bit	1.xxx	C, T
142	K12 Position enable	1 bit	1.xxx	C, T
143	K12 Automatic status	1 bit	1.xxx	C, T
144	K12 Automatic on/off	1 bit	1.xxx	C, W

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No.	Designation	Length	DPT-ID	Flags
145	K13 UP/DOWN	1 bit	1.xxx	C, T
146	K13 OPEN/CLOSE	1 bit	1.xxx	C, T
147	K13 ON/OFF	1 bit	1.xxx	C, T
148	K13 Stop/step	1 bit	1.xxx	C, T
149	K13 Move to blind length/window position	1 byte	5,001	C, T
150	K13 Move to slat position	1 byte	5,001	C, T
151	K13 Set value	1 byte	5,001	C, T
152	K13 Safety function	1 bit	1.xxx	C, T
153	K13 Comfort function	1 bit	1.xxx	C, T
154	K13 Position enable	1 bit	1.xxx	C, T
155	K13 Automatic status	1 bit	1.xxx	C, T
156	K13 Automatic on/off	1 bit	1.xxx	C, W
157	K14 UP/DOWN	1 bit	1.xxx	C, T
158	K14 OPEN/CLOSE	1 bit	1.xxx	C, T
159	K14 ON/OFF	1 bit	1.xxx	C, T
160	K14 Stop/step	1 bit	1.xxx	C, T
161	K14 Move to blind length/window position	1 byte	5,001	C, T
162	K14 Move to slat position	1 byte	5,001	C, T
163	K14 Set value	1 byte	5,001	C, T
164	K14 Safety function	1 bit	1.xxx	C, T
165	K14 Comfort function	1 bit	1.xxx	C, T
166	K14 Position enable	1 bit	1.xxx	C, T
167	K14 Automatic status	1 bit	1.xxx	C, T
168	K14 Automatic on/off	1 bit	1.xxx	C, W
169	K15 UP/DOWN	1 bit	1.xxx	C, T
170	K15 OPEN/CLOSE	1 bit	1.xxx	C, T
171	K15 ON/OFF	1 bit	1.xxx	C, T
172	K15 Stop/step	1 bit	1.xxx	C, T
173	K15 Move to blind length/window position	1 byte	5,001	C, T
174	K15 Move to slat position	1 byte	5,001	C, T
175	K15 Set value	1 byte	5,001	C, T
176	K15 Safety function	1 bit	1.xxx	C, T
177	K15 Comfort function	1 bit	1.xxx	C, T
178	K15 Position enable	1 bit	1.xxx	C, T
179	K15 Automatic status	1 bit	1.xxx	C, T
180	K15 Automatic on/off	1 bit	1.xxx	C, W

No.	Designation	Length	DPT-ID	Flags
181	K16 UP/DOWN	1 bit	1.xxx	C, T
182	K16 OPEN/CLOSE	1 bit	1.xxx	C, T
183	K16 ON/OFF	1 bit	1.xxx	C, T
184	K16 Stop/step	1 bit	1.xxx	C, T
185	K16 Move to blind length/window position	1 byte	5,001	C, T
186	K16 Move to slat position	1 byte	5,001	C, T
187	K16 Set value	1 byte	5,001	C, T
188	K16 Safety function	1 bit	1.xxx	C, T
189	K16 Comfort function	1 bit	1.xxx	C, T
190	K16 Position enable	1 bit	1.xxx	C, T
191	K16 Automatic status	1 bit	1.xxx	C, T
192	K16 Automatic on/off	1 bit	1.xxx	C, W
193	climatronic -> KNX fault	1 bit	1.xxx	C, T
194	climatronic -> KNX absent	1 bit	1.xxx	C, T
195	climatronic -> KNX leave	1 bit	1.xxx	C, T
196	climatronic -> KNX automatic	1 bit	1.xxx	C, T
197	KNX -> climatronic BCS	1 bit	1.xxx	C, W
198	KNX -> climatronic absent	1 bit	1.xxx	C, W
199	KNX -> climatronic leave	1 bit	1.xxx	C, W
200	KNX -> climatronic automatic	1 bit	1.xxx	C, W
201	Time	3 byte	10,001	C, T
202	Date	3 byte	11,001	C, T
203	Date and time	8 byte	19,001	C, T
204	Scene 1 Learn	1 bit	1.xxx	C, T
205	Scene 1 Execute	1 bit	1.xxx	C, T
206	Scene 2 Learn	1 bit	1.xxx	C, T
207	Scene 2 Execute	1 bit	1.xxx	C, T
208	Scene 3 Learn	1 bit	1.xxx	C, T
209	Scene 3 Execute	1 bit	1.xxx	C, T
210	Scene 4 Learn	1 bit	1.xxx	C, T
211	Scene 4 Execute	1 bit	1.xxx	C, T
212	Scene 5 Learn	1 bit	1.xxx	C, T
213	Scene 5 Execute	1 bit	1.xxx	C, T
214	Scene 6 Learn	1 bit	1.xxx	C, T
215	Scene 6 Execute	1 bit	1.xxx	C, T
216	Scene 7 Learn	1 bit	1.xxx	C, T
217	Scene 7 Execute	1 bit	1.xxx	C, T
218	Scene 8 Learn	1 bit	1.xxx	C, T
219	Scene 8 Execute	1 bit	1.xxx	C, T
220	Scene number	1 byte	18,001	C, T

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No.	Designation	Length	DPT-ID	Flags
221	Brightness value 1	2 byte	9,004	C, T
222	Brightness value 2	2 byte	9,004	C, T
223	Brightness value 3	2 byte	9,004	C, T
224	Brightness value 4	2 byte	9,004	C, T
225	Brightness value 5	2 byte	9,004	C, T
226	Brightness value 6	2 byte	9,004	C, T
227	Brightness value 7	2 byte	9,004	C, T
228	Brightness value 8	2 byte	9,004	C, T
229	Brightness value 9	2 byte	9,004	C, T
230	Brightness value 10	2 byte	9,004	C, T
231	Brightness value 11	2 byte	9,004	C, T
232	Brightness value 12	2 byte	9,004	C, T
233	Global radiation value	2 byte	9.xxx	C, T
234	Wind speed value 1	2 byte	9,005	C, T
235	Wind speed value 2	2 byte	9,005	C, T
236	Wind speed value 3	2 byte	9,005	C, T
237	Wind speed value 4	2 byte	9,005	C, T
238	Wind speed value 5	2 byte	9,005	C, T
239	Wind speed value 6	2 byte	9,005	C, T
240	Wind speed value 7	2 byte	9,005	C, T
241	Wind speed value 8	2 byte	9,005	C, T
242	Wind speed value 9	2 byte	9,005	C, T
243	Wind speed value 10	2 byte	9,005	C, T
244	Wind speed value 11	2 byte	9,005	C, T
245	Wind speed value 12	2 byte	9,005	C, T
246	Wind direction value	2 byte	5,003	C, T
247	Outside temperature value	2 byte	9,001	C, T
248	Inside temperature value	2 byte	9,001	C, T
249	Humidity value	2 byte	9.xxx	C, T
250	Precipitation value	1 bit	1.xxx	C, T

6.2 Channel-bound communication objects

These communication objects are available for each of the 16 channels. They are only shown on the ETS if the associated channel was activated. Communication objects that do not fit the parameterised product type of the channel are hidden.

6.2.1 Kn UP/DOWN

Moves a sun shading product UP or DOWN; this is used in conjunction with 6.2.4 *Kn Stop/step*.

Length	DPT-ID	Meaning
1 bit	1.xxx	1: DOWN move command
		0: UP move command

CO available for product type:

- ▶ Roller shutter/fabric sun shading system
- ▶ External venetian blind/venetian blind

6.2.2 Kn OPEN/CLOSED

OPENS or CLOSES a window; used in conjunction with 6.2.4 *Kn Stop/step*.

Length	DPT-ID	Meaning
1 bit	1.xxx	1: OPEN move command
		0: CLOSE move command

CO available for product type:

- ▶ Window

6.2.3 Kn ON/OFF

Switches a switchable product ON or OFF (e.g. light).

Length	DPT-ID	Meaning
1 bit	1.xxx	1: ON switch command
		0: OFF switch command

CO available for product type:

- ▶ Switchable

KNX Gateway

6.2.4 Kn Stop/step

STOPS a sun shading product or performs STEP movement of a sun shading product; used in conjunction with 6.2.1 Kn UP/DOWN and 6.2.2 Kn OPEN/CLOSED.

Length	Channel	Meaning
1 bit	1.xxx	1: DOWN stop or step
		0: UP stop or step

CO available for product type:

- ▶ Roller shutter/fabric sun shading system
- ▶ External venetian blind/venetian blind

NOTE Depending on the parameterisation of the KNX actuators and the product type, this command may trigger a variety of behaviours in the actuated product.

6.2.5 Kn Move to blind length/window position

Move to a position of the sun shading product/window by specifying a value.

Length	DPT-ID	Meaning
1 byte	5,001	{0, 1, 2, 3,..., 254, 255} corresponds to {0, 0.4, 0.8, 1.2,...99.6, 100}% where 0% is the upper limit position and 100% the lower limit position.

CO available for product type:

- ▶ Roller shutter/fabric sun shading system
- ▶ External venetian blind/venetian blind
- ▶ Window

NOTE In sun shading products, the CO is displayed as "Move to the blind length". If the window product type is selected for the channel, the name of the CO changes to "Move to window position".

6.2.6 Kn Move to slat position

Move to a position of the sun shading product by specifying a value.

Length	DPT-ID	Meaning
1 byte	5,001	{0, 1, 2, 3,..., 127,..., 254, 255} corresponds to {0, 0.4, 0.8, 1.2,..., 50,..., 99.6, 100}% of the slat position, where 0% corresponds to the smallest slat angle and 100% to the largest slat angle (see also Section 7.3 on page 37)

CO available for product type:

- ▶ External venetian blind/venetian blind

6.2.7 Kn Set value

Move to the setting/position of an adjustable product (e.g. brightness of a dimmer) by specifying a value.

Length	DPT-ID	Meaning
1 byte	5,001	0...255 corresponds to 0%...100% of the value

CO available for product type:

- ▶ Switchable and adjustable

6.2.8 Kn Safety function

The output indicates whether a safety function (e.g. wind alarm) is active in the corresponding channel

Length	DPT-ID	Meaning
1 bit	1.xxx	1: Safety function active
		0: Safety function not active

CO available for product type:

- ▶ Roller shutter/fabric sun shading system
- ▶ External venetian blind/venetian blind
- ▶ Window
- ▶ Switchable
- ▶ Switchable and adjustable

6.2.9 Kn Comfort function

The output indicates whether a comfort function is active in the corresponding channel

Length	DPT-ID	Meaning
1 bit	1.xxx	1: Active comfort function
		0: Inactive comfort function

CO available for product type:

- ▶ Roller shutter/fabric sun shading system
- ▶ External venetian blind/venetian blind
- ▶ Window
- ▶ Switchable
- ▶ Switchable and adjustable

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6.2.10 Kn Position enable

This communication object supports a special function of the actuators WAREMA KNX MSE 6M230 and KNX MSE 8M230 (see also the actuator manual).

After a 0-telegram on the KNX bus, these actuators ignore all telegrams to the communication objects listed in the table. To make it possible for the WAREMA actuators to be executed anyway, a 1-telegram is transmitted to the appropriate CO.

A synonym for position enable is the term "automatic control".

Length	DPT-ID	Meaning
1 bit	1.xxx	1: Enable of the Move to positions 1+2, Move to blind length, Move to window position and Move to slat position COs.
		0: Disable of the Move to positions 1+2, Move to blind length, Move to window position and Move to slat position COs.

CO available for product type:

- ▶ Roller shutter/fabric sun shading system
- ▶ External venetian blind/venetian blind
- ▶ Window

6.2.11 Kn Automatic status

Specifies on the KNX bus whether the control functions of the corresponding channel on the WAREMA climatronic® are switched on or off.

Length	DPT-ID	Meaning
1 bit	1.xxx	1: The control functions of the channel are switched on
		0: The control functions of the channel are switched off

CO available for product type:

- ▶ Roller shutter/fabric sun shading system
- ▶ External venetian blind/venetian blind
- ▶ Window
- ▶ Switchable
- ▶ Switchable and adjustable

6.2.12 Kn Automatic on/off

Makes it possible to switch the control functions of the channel on and off from the KNX bus.

Length	DPT-ID	Meaning
1 bit	1.xxx	1: The control functions of the channel are switched on
		0: The control functions of the channel are switched off

CO available for product type:

- ▶ Roller shutter/fabric sun shading system
- ▶ External venetian blind/venetian blind
- ▶ Window
- ▶ Switchable
- ▶ Switchable and adjustable

6.3 General communication objects

The following communication objects pertain to WAREMA climatronic® system overall and to the individual channels.

NOTE The status information with the communication direction from KNX to the climatronic is only read out from the first KNX Gateway (encoding switch on the gateway is set to 1) by the WAREMA climatronic® control panel.

6.3.1 climatronic → KNX fault

At regular intervals, a signal can be transmitted to the KNX bus to monitor that the WAREMA climatronic® is operating without a fault. The behaviour of the signal can be set in the "Fault" parameter window (see section 7.9 on page 44).

Length	DPT-ID	Meaning
1 bit	1.xxx	1: A fault message is active in the WAREMA climatronic® or the WAREMA climatronic® has failed
		0: No fault

CO number: 193

6.3.2 climatronic → KNX absent

This communication object outputs the setting of the Absent parameter on the WAREMA climatronic® to the KNX bus.

Length	DPT-ID	Meaning
1 bit	1.xxx	1: Absent
		0: Present

CO number: 194

6.3.3 climatronic → KNX leave

This communication object outputs the setting of the Leave parameter on the WAREMA climatronic® to the KNX bus.

Length	DPT-ID	Meaning
1 bit	1.xxx	1: Leave
		0: No leave

CO number: 195

6.3.4 climatronic → KNX automatic

This communication object outputs, to the KNX bus, whether or not the control functions on the WAREMA climatronic® are globally deactivated.

Length	DPT-ID	Meaning
1 bit	1.xxx	1: Control functions of the WAREMA climatronic® are active
		0: Control functions of the WAREMA climatronic® are switched off

CO number: 196

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6.3.5 KNX → climatronic BCS

The KNX Gateway can monitor whether or not a building control system signal is being transmitted by the KNX bus at regular intervals. The behaviour in the event that there is no signal can be set in the BCS parameter window (see section 7.10 on page 45).

Length	DPT-ID	Meaning
1 bit	1.xxx	1: BCS signal is active
		0: No BCS signal

CO number: 197

NOTE In the WAREMA climatronic®, the response to a BCS signal can be set individually for each channel.

6.3.6 KNX → climatronic absent

This communication object outputs the setting of the Absent parameter from the KNX bus to the WAREMA climatronic®. For the WAREMA climatronic® control panel, the last command always applies.

Length	DPT-ID	Meaning
1 bit	1.xxx	1: Absent
		0: Present

CO number: 198

6.3.7 KNX → climatronic leave

This communication object outputs the setting of the Leave parameter from the KNX bus on the WAREMA climatronic®.

Length	DPT-ID	Meaning
1 bit	1.xxx	1: Leave
		0: No leave

CO number: 199

NOTE For the WAREMA climatronic®, leave is considered to be switched on if the leave times on the control panel is active OR the object is set on the KNX bus.

6.3.8 KNX → climatronic automatic

This communication object makes it possible to switch the control functions of the WAREMA climatronic® on and off from the KNX bus. For the WAREMA climatronic® control panel, the last command always applies.

Length	DPT-ID	Meaning
1 bit	1.xxx	1: Switch on the control functions of the WAREMA climatronic®
		0: Switch off the control functions of the WAREMA climatronic®

CO number: 200

6.4 Time and date

The time information of the WAREMA climatronic® can be transmitted to the KNX bus at regular intervals. A variety of communication objects are available for transmitting the time information. The transmission intervals are set in the Time/date parameter dialogue box (see section 7.8 on page 43).

NOTE If a suitable sensor for receiving the DCF77 time signal is connected to the WAREMA climatronic®, a highly accurate time signal will be available in the KNX system.

6.4.1 Time

This communication object makes the system time of the WAREMA climatronic® available on the KNX bus.

Length	DPT-ID	Meaning
3 byte	10,001	Time

CO number: 201

6.4.2 Date

This communication object makes the current date of the WAREMA climatronic® available on the KNX bus.

Length	DPT-ID	Meaning
3 byte	11,001	Date

CO number: 202

6.4.3 Date and time

This communication object makes the date and time of the WAREMA climatronic® available on the KNX bus.

Length	DPT-ID	Meaning
8 byte	19,001	Date and time

CO number: 203

6.5 Scene objects

The WAREMA climatronic® supports up to 16 scenes. The communication objects for learning and executing scenes must be activated in the Scenes parameter window (see *section 7.7 on page 42*).

NOTE The KNX Gateway makes binary communication objects available for 8 scenes.

The scene objects on KNX Gateway 1 (encoding switch 1) correspond to WAREMA climatronic® scenes 1-8.

The scene objects on KNX Gateway 2 (encoding switch 2) correspond to WAREMA climatronic® scenes 9-16.

If there are additional KNX Gateways, the scene objects have no function.

6.5.1 Learn scene n

This communication object triggers the learning of the corresponding scene by writing a 1.

Length	DPT-ID	Meaning
1 bit	1.xxx	Learn scene

6.5.2 Execute scene n

This communication object causes the corresponding scene to be executed by writing a 1.

Length	DPT-ID	Meaning
1 bit	1.xxx	Execute scene

6.5.3 Scene number

This communication object can be used to learn or trigger any particular scene.

Length	DPT-ID	Meaning
1 byte	18,001	Learn or trigger a scene

CO number: 220

6.6 Measured values

WAREMA climatronic® can record numerous measured values through the connected sensors:

- ▶ Brightness
- ▶ Global radiation
- ▶ Wind speed
- ▶ Wind direction
- ▶ Outside temperature
- ▶ Inside temperature
- ▶ Humidity
- ▶ Precipitation

Numerous communication objects are available to transmitting the measured values to the KNX system. In the Measured Values parameter window (see sections 7.4 to 7.6 beginning on Seite 39), the desired communication objects can be activated and the transmission intervals can be set.

NOTE The WAREMA climatronic® only holds measured values from sensors that have actually been connected and evaluated.

6.6.1 Brightness value n

Twelve communication objects are available for the brightness values of the WAREMA climatronic®. Four values are collected for each weather station. The associated communication objects can be activated in groups (see section 7.4 on page 39).

Length	DPT-ID	Meaning
2 byte	9,004	Brightness in [Lux]

CO number: 221 to 232

6.6.2 Global radiation value

Via a Sensor Interface with a connected sensor, the WAREMA climatronic® can record a value for the global radiation. This measured value is contained in the WAREMA climatronic® only once; the Sensor Interface must be created there as Weather Station 1.

Length	DPT-ID	Meaning
2 byte	9.xxx	Global radiation in [W/m ²]

CO number: 233

6.6.3 Wind speed value n

A total of 12 communication objects are available for the wind speed. One value (up to four values with the Sensor Interface) is recorded for each connected weather station. The associated communication objects can be activated in groups (see section 7.4 on page 39).

Length	DPT-ID	Meaning
2 byte	9,005	Wind speed in [m/s]

CO number: 234 to 245

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6.6.4 Wind direction value

The WAREMA climatronic® evaluates the wind direction from the connected sensors. This measured value is contained in the WAREMA climatronic® only once; it is recorded there by the weather station (or Sensor Interface) 1.

Length	DPT-ID	Meaning
2 byte	5,003	Wind direction in [°]

CO number: 246

6.6.5 Outside temperature value

The WAREMA climatronic® evaluates the outside temperature from the connected sensors. This measured value is contained in the WAREMA climatronic® only once; it is recorded there by the weather station (or Sensor Interface) 1.

Length	DPT-ID	Meaning
2 byte	9,001	Outside temperature in [°C]

CO number: 247

6.6.6 Inside temperature value

The WAREMA climatronic® records the inside temperature directly at the control panel. This measured value is contained in the WAREMA climatronic® only once.

Length	DPT-ID	Meaning
2 byte	9,001	Inside temperature in [°C]

CO number: 248

6.6.7 Humidity value

The WAREMA climatronic® records the humidity directly at the control panel. This measured value is contained in the WAREMA climatronic® only once.

Length	DPT-ID	Meaning
2 byte	9.xxx	Humidity in [%]

CO number: 249

6.6.8 Precipitation value

The WAREMA climatronic® determines whether there is precipitation using the connected sensors. This measured value is contained in the WAREMA climatronic® only once; it is recorded there by the weather station (or Sensor Interface) 1.

Length	DPT-ID	Meaning
1 bit	1.xxx	1: Precipitation
		0: No precipitation

CO number: 250

7 Setting parameters

In the parameter dialogue box of the KNX Gateway, general parameter groups are displayed as well as a set of parameter groups for each channel. For each activated channel, parameter groups and communication objects are displayed or hidden.

NOTE The default values are shown in **bold** in the tables.

7.1 Channels 1-8

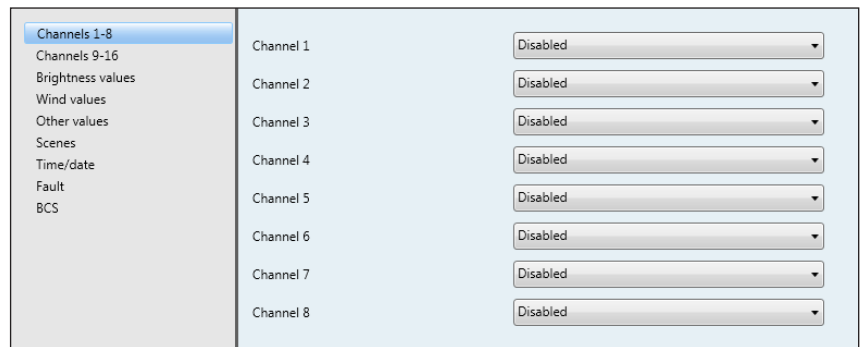


Fig. 7 Channel 1-8 parameter dialogue box

In this parameter dialogue box, channels 1 to 8 can be activated or deactivated. For each activated channel, another parameter dialogue box appears in the left half of the window.

Parameter group	Parameter	Values
Channels 1-8	Channel 1	Activated
		Disabled
	Channel 2	Activated
		Disabled
	Channel 3	Activated
		Disabled
	Channel 4	Activated
		Disabled
	Channel 5	Activated
		Disabled
	Channel 6	Activated
		Disabled
	Channel 7	Activated
		Disabled
	Channel 8	Activated
		Disabled

7.2 Channels 9-16

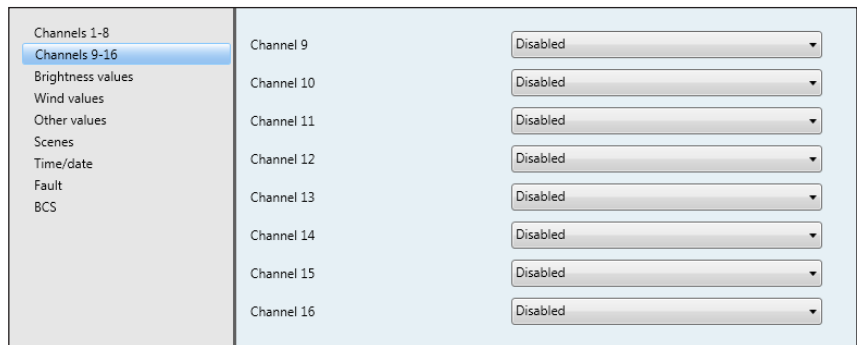


Fig. 8 Channel 9–16 parameter dialogue box

In this parameter dialogue box, channels 9 to 16 can be activated or deactivated. For each activated channel, another parameter dialogue box appears in the left half of the window.

Parameter group	Parameter	Values
Channels 1-8	Channel 9	Activated
		Disabled
	Channel 10	Activated
		Disabled
	Channel 11	Activated
		Disabled
	Channel 12	Activated
		Disabled
	Channel 13	Activated
		Disabled
	Channel 14	Activated
		Disabled
	Channel 15	Activated
		Disabled
	Channel 16	Activated
		Disabled

NOTE The move commands of channels 17–64 of the WAREMA climatronic® can be transmitted through the use of additional KNX gateways if needed (channel 1 on Gateway 2 then corresponds to channel 17, etc.).

7.3 Channel n

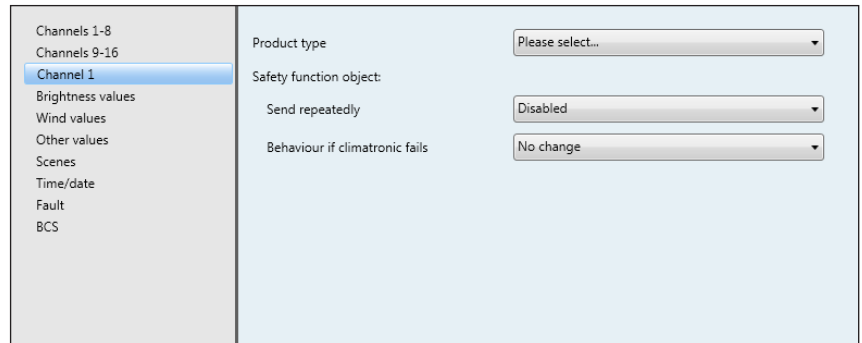


Fig. 9 Channel n parameter dialogue box (channel 1 here)

In this parameter dialogue box, the settings are made for a certain channel. The dialog only appears if the channel was activated first.

If the external/internal venetian blind product type is selected, additional fields appear for the slat angles.

Parameter group	Parameter	Values
Channel n	Product type	Roller shutter/fabric sun shading system
		External venetian blind/venetian blind
		Window
		Switchable
		Switchable and adjustable
	Minimum slat angle [°]	-360° to +360° default: -80
	Maximum slat angle [°]	-360° to +360° default: +80
	Safety function object: transmit cyclically	Disabled
		30 s
		1 min
2 min		
5 min		
Behaviour if climatronic fails	No change	
	Set	
	Delete	

NOTE When slat angles are parameterised, the values entered here must agree with the settings in the corresponding channel of the WAREMA climatronic®. The gateway converts the angle entries in degrees of the WAREMA climatronic® into a value that is valid for KNX (0...255).

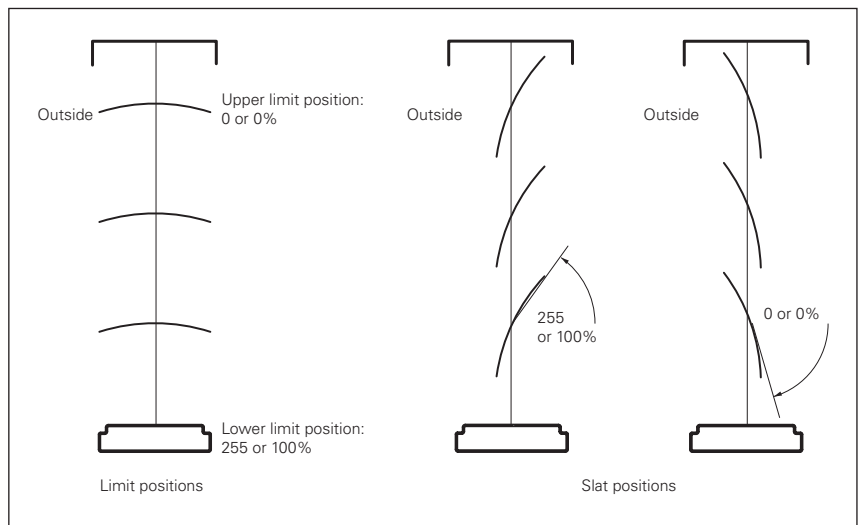


Fig. 10 Slat position, limit positions

7.4 Brightness values

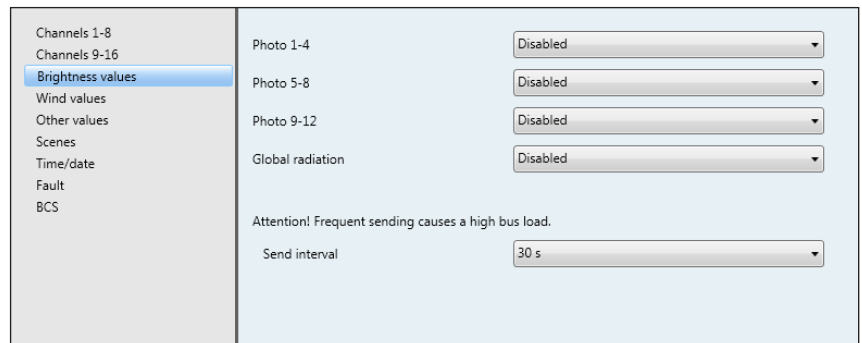


Fig. 11 Brightness values parameter dialogue box

In this parameter dialogue box, the transmission of the brightness values recorded by the WAREMA climatronic® can be activated. The values are arranged in groups of four (corresponds to a weather station).

In addition to the brightness values, global radiation can also be activated if this value is recorded via the WAREMA climatronic® (in conjunction with a Sensor Interface).

Parameter group	Parameter	Values
Brightness values	Photo 1-4	Activated
		Disabled
	Photo 5-8	Activated
		Disabled
	Photo 9-12	Activated
		Disabled
	Global radiation	Activated
		Disabled
	Transmission interval	5 s
		10 s
		20 s
		30 s
		1 min
		2 min
5 min		
10 min		

NOTE Do not select a transmission interval that is too short as the KNX bus load will otherwise be unnecessarily high.

A long transmission interval can lead to delayed reactions to brightness changes.

7.5 Wind values

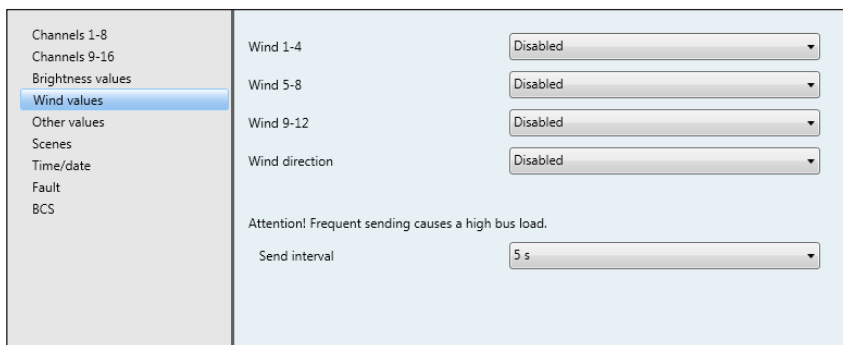


Fig. 12 Wind values parameter dialogue box

In this parameter dialogue box, the transmission of the wind values recorded by the WAREMA climatronic® can be activated.

The values are arranged in groups of four. A Sensor Interface connected to the WAREMA climatronic® supplies a maximum of four measured values; a weather station always only supplies one measured value for the wind. Accordingly, only the first value of the group (in other words, 1.5 or 9) can be used when a weather station is used.

The wind direction value is always evaluated from sensor 1 (weather station or Sensor Interface).

Parameter group	Parameter	Values
Brightness values	Wind 1-4	Activated
		Disabled
	Wind 5-8	Activated
		Disabled
	Wind 9-12	Activated
		Disabled
	Wind direction	Activated
		Disabled
	Transmission interval	5 s
		10 s
		20 s
		30 s
		1 min
2 min		
5 min		
10 min		

NOTE Do not select a transmission interval that is too short as the KNX bus load will otherwise be unnecessarily high.



CAUTION

Wind information is only provided for visualisation purposes and may not be used for safety functions in the KNX bus.

If the transmission interval is too long, the display is delayed if wind suddenly comes up.

7.6 Other values

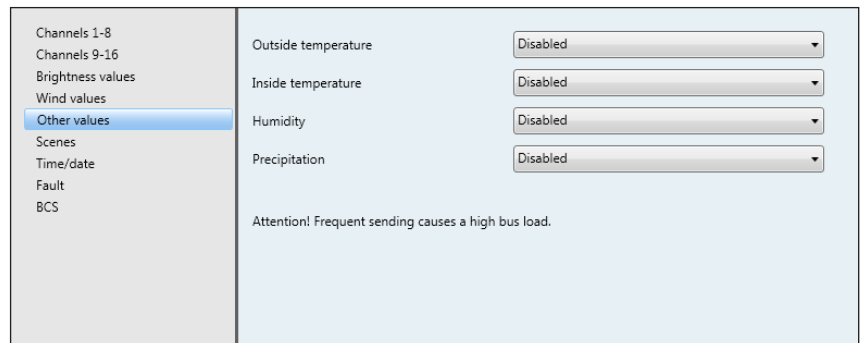


Fig. 13 Other values parameter dialogue box

In this parameter dialogue box, the transmission of additional measured values recorded by the WAREMA climatronic® can be activated.

The outside temperature and precipitation values are always evaluated from sensor 1 (weather station or Sensor Interface).

The inside temperature and humidity measured values are the values measured by the WAREMA climatronic® control panel.

Parameter group	Parameter	Values
Other values	Outside temperature	Activated
		Disabled
	Inside temperature	Activated
		Disabled
	Humidity	Activated
		Disabled
	Precipitation	Activated
		Disabled
	Transmission interval (separately adjustable for each measured value)	5 s
		10 s
		20 s
		30 s
		1 min
		2 min
5 min		
10 min		

NOTE Do not select a transmission interval that is too short as the KNX bus load will otherwise be unnecessarily high. A long transmission interval can lead to delayed reactions to measured value changes.

7.7 Scenes

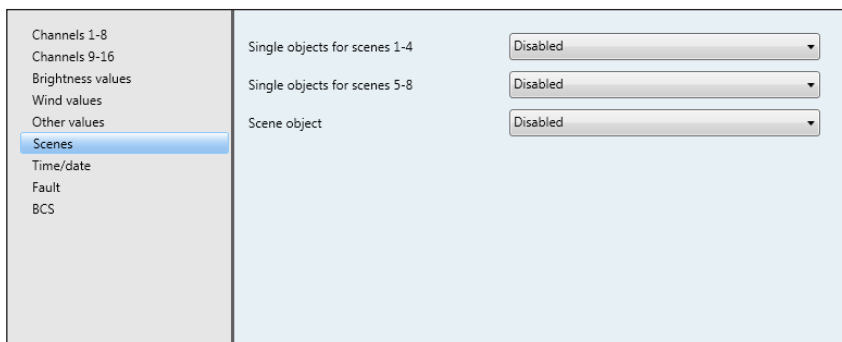


Fig. 14 Scenes parameter dialogue box

In this parameter dialogue box, the communication objects for executing and learning scenes can be activated. The values are arranged in groups of four. In addition, a universal scene object can be activated.

Parameter group	Parameter	Values
Scenes	Single objects for scenes 1–4	Activated
		Disabled
	Single objects for scenes 5–8	Activated
		Disabled
	Scene object	Activated
		Disabled

NOTE The scene commands of scenes 9–16 of WAREMA climatronic® can be transmitted through the use of another KNX Gateway if necessary.

7.8 Time/date



Fig. 15 Time/date parameter dialogue box

This parameter dialogue box can be used to define whether the time of WAREMA climatronic® is transmitted to the KNX bus.

Parameter group	Parameter	Values
Time/date	Transmission interval	Disabled
		1 min
		10 min

If a suitable sensor for receiving the DCF77 time signal is connected to the WAREMA climatronic®, a highly accurate time signal will be available in the KNX system.

NOTE The communication objects of time, date and time/date (combined) are transmitted.
The objects are always transmitted at the full minute or full 10 minutes.

7.9 Fault

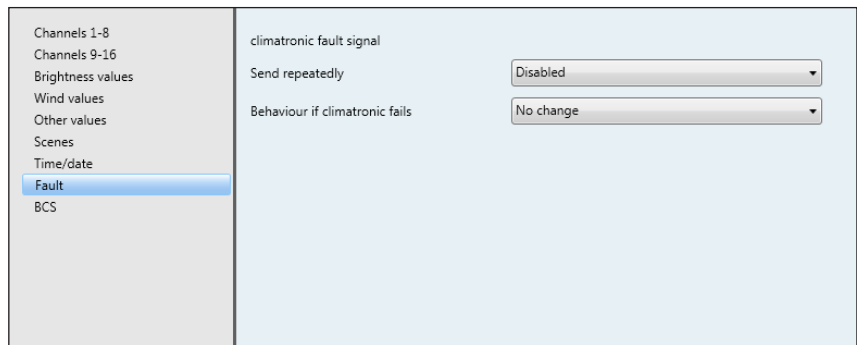


Fig. 16 Fault parameter dialogue box

In this parameter dialogue box, transmission of a fault signal can be activated. This makes it possible to monitor the WAREMA climatronic® to ensure it is operating flawlessly.

Parameter group	Parameter	Values
Fault	Transmit the climatronic fault signal cyclically	Disabled
		5 s
		10 s
		20 s
		30 s
		1 min
		2 min
		5 min
		10 min
		Behaviour if climatronic fails
	Set	
	Delete	

Example: When the settings are **5 min** and **Set**, the value 0 is output every 5 min via the CO. When a fault arises, the value 1 is output every 5 min.

NOTE Do not select a transmission interval that is too short as the KNX bus load will otherwise be unnecessarily high. A long transmission interval can lead to a delayed reaction to faults.

7.10 BCS

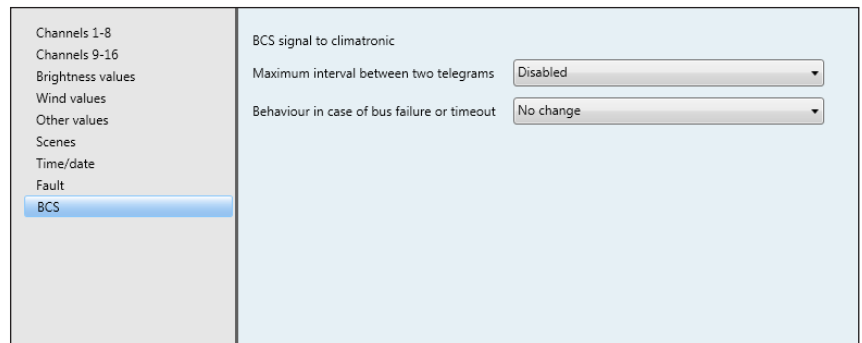


Fig. 17 BCS parameter dialogue box

This parameter dialogue box can be used to define when a KNX-side building control system signal is forwarded from the KNX Gateway to the WAREMA climatronic®.

By defining the maximum interval between the received telegrams, a heart-beat monitor can be implemented.

Parameter group	Parameter	Values
BCS	BCS signal to climatronic Maximum interval between two telegrams	Disabled
		30 s
		1 min
		2 min
		5 min
		10 min
	Behaviour in case of bus failure or timeout	No change
		Set
		Delete
	Restore previous value when bus voltage returns * (Parameter only appears if <i>Behaviour in case of bus failure or timeout</i> is set to Set)	No
Yes		

NOTE A longer interval can lead to a delayed reaction to faults.

KNX Gateway

