KNX manual
MIX 2 series actuators
RMG 8 T / RME 8 T and
FIX2 series RM 16 T

RMG 8 T	4930200
RME 8 T	4930205
RM 16 T	4940205

Contents

1 Functional characteristics

- 8-way switch or 4-way blinds actuator MIX2
- MIX2 basic module
- For extension to a maximum of 24 channels
- Flexible selection of channel function as switch actuator or blinds actuator for controlling drives for blinds, sun and vision protection devices, skylights and ventilation flaps (for blinds function, two adjacent channels are combined)
- Up to 2 MIX or MIX2 extension modules can be connected to a basic module
- Device and KNX bus module can be swapped independently of each other
- Removable KNX bus module enables devices to be changed without reprogramming
- Manual start-up and operation of the actuators are also possible without KNX bus module
- LED switching status indicator for each channel
- Manual operation on device (even without bus voltage)
- Adjustable features: e.g. switching, delayed switching, pulse function
- Links, type of contact (opening contact/NO contact) and participation in central commands such as permanent On, permanent Off, central switching and save/call up scene
- Switch functions: e.g. On/Off, pulse, On/Off delay, staircase light with forewarning
- Logical links: e.g. lock, AND, release, OR

2 MIX2 and FIX2 devices

This manual describes the MIX2 devices and can also be used with devices from the FIX Series.

A FIX2 device (Order No. 494..) behaves like a MIX2 basic module and an extension module of the same type (e.g. blinds actuator) in a common housing.

Devices in the FIX2 Series:

- Cannot be extended
- Cannot be combined

The remaining functions are identical to those in the MIX2 series.

3 MIX and MIX2 devices

The MIX2 series consists, among others, of the basic modules RMG 4 I, RMG 8 S, RMG 8 T, DMG 2 T, JMG 4 T, JMG 4 T 24V, HMG 6 T as well as the extensions RME 4 I, RME 8 S, RME 8 T, DME 2 T, JME 4 T, JME 4 T 24V, HMG 6 T (as of 04/2014).

Different MiX and MIX2 extension modules can be connected to one MIX2 basic module.

Table 1

Device type	Order No.	Designation	Can be used with basic module.	
			in the MIX series	in the MIX2 series
MIX2 basic modules	493…	RMG 4 I, RMG 8 S, RMG 8 T, DMG 2 T, JMG 4 T, JMG 4 T 24V, HMG 6 T.	-	-
MIX2 extensions	493…	RME 4 I, RME 8 S, RME 8 T, DME 2 T, JME 4 T, JME 4 T 24V, HME 6 T.	no	Yes
MIX basic modules	491…	BMG 6, DMG 2 S, HMG 4, JMG 4 S, RMG 4 S, RMG 4 C-load, SMG 2 S.	-	-
MIX extensions	491…	BME 6, DME 2 S, HME 4, JME 4 S, RME 4 S, RME 4 C-load, SME 2 S.	yes	Yes*

* Adjusted parameter display and object numbering.

3.1 Operation

Each channel can be switched independently of all parameters using the buttons on the device. A status LED shows the current switching status or the current direction of movement. The channels can be configured as a switch actuator as well as a blinds actuator.

- If channels C1, C2, C3, or C4 are defined as switch actuator, C5 to C8 are also available as switch actuator channels.

- For blinds or roller blinds function, 2 channels are required per drive.

Table 2: Channel assignment and direction of movement for the blinds actuator*

First drive	Second drive	Third drive	Fourth drive
▲ C1	▲ C2	▲ C3	▲ C4
▼ C5	▼ C6	▼ C7	▼ C8

*These directional information are only valid if the parameter *direction of movement of drives = normal* is set.

All bus telegrams are ignored with manual operation switched on (manual button) and the channels are exclusively to be operated via the buttons.
Telegrams on the objects *Safety* and *Priority on safety* are still being executed.

Mains voltage is required for the functioning of the buttons and LEDs, bus voltage or bus module are not required.

4 Technical data

Operating voltage KNX	Bus voltage, ≤ 4 mA
Operating voltage	110 – 240 V AC
Frequency	50 – 60 Hz
Standby output	0,3 W / 0,5W[1]
Type of installation	DIN-rail
Width	4 module / 8 module[1]
Connection type	KNX bus terminal
Max. cable cross-section	Solid: 0.5 mm² (Ø 0.8) to 4 mm² | strand with crimp terminal: 0.5 mm² to 2.5 mm²
Number of channels	8 switching or 4 blinds channels 16 switching or 8 blinds channels[1]
Type of contact	16 A, 3 A NO contact
Contact gap	< 3 mm
Resistive load	3680 W
Incandescent and halogen lamp load	2000 W
Fluorescent lamp load (conventional) parallel-corrected	1300 W (140 µF)
Fluorescent lamp load (conventional) not corrected	2000 VA
Fluorescent lamp load (EB)	1200 W
Energy-saving lamps	300 W
LED lamps	< 2 W = 55 W or > 2 W < 8 W = 180 W
Voltage output	240 V AC
Switch output	Floating
Switching of different phases	Possible
Suitable for SELV	Yes, if all channels switch SELV
Ambient temperature	-5 °C … +45 °C
Protection rating	IP 20
Protection class	II

[1] RM 16 T

5 The application programme "MIX2 V1.6"

5.1 Selection in the product database

Manufacturer	THEBEN AG
Product family	Output
Product type	RMG 8 T
Program name	MIX2 V1.6

The ETS database can be found on our downloads page: www.theben.de/downloads.

Table 3

Number of communication objects:	254
Number of group addresses:	254
Number of associations:	255

5.2 Communication objects

The objects are divided into channel-related and common objects
The function of the objects depends on the selected channel function, i.e. switch or blinds actuator.

5.2.1 Channel-related objects for the switch actuator

Table 4

No.	Object name	Function	Type DPT	Flags			
				C	R	W	T
0	*RMG 8 T channel C1*	*Switch object*	1 bit 1,001	C	R	W	-
	RMG 8 T channel C1	*Threshold 0..255*	1 byte 5,010	C	R	W	-
	RMG 8 T channel C1	*Threshold 0..65535*	2 byte 7,001	C	R	W	-
	RMG 8 T channel C1	*Threshold EIS 5 (DPT9.xxx)*	2 byte 9.xxx	C	R	W	-
	RMG 8 T channel C1	*Threshold as percent*	1 byte 5,001	C	R	W	-
1	*RMG 8 T channel C1*	*Logic input in OR gate*	1 bit 1,001	C	R	W	-
	RMG 8 T channel C1	*Logic input in AND gate*	1 bit 1,001	C	R	W	-
	RMG 8 T channel C1	*Logic input in XOR gate*	1 bit 1,001	C	R	W	-
2	*RMG 8 T channel C1*	*Lock*	1 bit 1,003	C	R	W	-
3	*RMG 8 T channel C1*	*Call up/save scenes*	1 byte 18,001	C	R	W	T
4	*RMG 8 T channel C1*	*Enable scenes = 1*	1 bit 1,003	C	R	W	-
	RMG 8 T channel C1	*Lock scenes = 1*	1 bit 1,003	C	R	W	-
5	*RMG 8 T channel C1*	*Feedback On/Off*	1 bit 1,001	C	R	-	T
6	*RMG 8 T channel C1*	*Operating hours feedback*	2 byte 7,001	C	R	W	T
	RMG 8 T channel C1	*Time to next service*	2 byte 7,001	C	R	W	T
7	*RMG 8 T channel C1*	*Service required*	1 bit 1,001	C	R	-	T
8	*RMG 8 T channel C1*	*Reset operating hours*	1 bit 1,001	C	R	W	-
	RMG 8 T channel C1	*Reset service*	1 bit 1,001	C	R	W	-
	RMG 8 T channel C1	*Switching with priority*	2 bit 2,001	C	R	W	-

Continuation:

No.	Object name	Function	Type DPT	Flags			
				C	R	W	T
10	*RMG 8 T channel C2*	*Switch object*	1 bit 1,001	C	R	W	-
	RMG 8 T channel C2	*Threshold 0..255*	1 byte 5,010	C	R	W	-
	RMG 8 T channel C2	*Threshold 0..65535*	2 byte 7,001	C	R	W	-
	RMG 8 T channel C2	*Threshold EIS 5 (DPT9.xxx)*	2 byte 9.xxx	C	R	W	-
	RMG 8 T channel C2	*Threshold as percent*	1 byte 5,001	C	R	W	-
11	*RMG 8 T channel C2*	*Logic input in OR gate*	1 bit 1,001	C	R	W	-
	RMG 8 T channel C2	*Logic input in AND gate*	1 bit 1,001	C	R	W	-
	RMG 8 T channel C2	*Logic input in XOR gate*	1 bit 1,001	C	R	W	-
12	*RMG 8 T channel C2*	*Lock*	1 bit 1,003	C	R	W	-
13	*RMG 8 T channel C2*	*Call up/save scenes*	1 byte 18,001	C	R	W	T
14	*RMG 8 T channel C2*	*Enable scenes = 1*	1 bit 1,003	C	R	W	-
	RMG 8 T channel C2	*Lock scenes = 1*	1 bit 1,003	C	R	W	-
15	*RMG 8 T channel C2*	*Feedback On/Off*	1 bit 1,001	C	R	-	T
16	*RMG 8 T channel C2*	*Operating hours feedback*	2 byte 7,001	C	R	W	T
	RMG 8 T channel C2	*Time to next service*	2 byte 7,001	C	R	W	T
17	*RMG 8 T channel C2*	*Service required*	1 bit 1,001	C	R	-	T
18	*RMG 8 T channel C2*	*Reset operating hours*	1 bit 1,001	C	R	W	-
	RMG 8 T channel C2	*Reset service*	1 bit 1,001	C	R	W	-
	RMG 8 T channel C2	*Switching with priority*	2 bit 2,001	C	R	W	-
20	*RMG 8 T channel C3*	*Switch object*	1 bit 1,001	C	R	W	-
	RMG 8 T channel C3	*Threshold 0..255*	1 byte 5,010	C	R	W	-
	RMG 8 T channel C3	*Threshold 0..65535*	2 byte 7,001	C	R	W	-
	RMG 8 T channel C3	*Threshold EIS 5 (DPT9.xxx)*	2 byte 9.xxx	C	R	W	-
	RMG 8 T channel C3	*Threshold as percent*	1 byte 5,001	C	R	W	-

Continuation:

No.	Object name	Function	Type DPT	Flags			
				C	R	W	T
21	*RMG 8 T channel C3*	*Logic input in OR gate*	1 bit 1,001	C	R	W	-
	RMG 8 T channel C3	*Logic input in AND gate*	1 bit 1,001	C	R	W	-
	RMG 8 T channel C3	*Logic input in XOR gate*	1 bit 1,001	C	R	W	-
22	*RMG 8 T channel C3*	*Lock*	1 bit 1,003	C	R	W	-
23	*RMG 8 T channel C3*	*Call up/save scenes*	1 byte 18,001	C	R	W	T
24	*RMG 8 T channel C3*	*Enable scenes = 1*	1 bit 1,003	C	R	W	-
	RMG 8 T channel C3	*Lock scenes = 1*	1 bit 1,003	C	R	W	-
25	*RMG 8 T channel C3*	*Feedback On/Off*	1 bit 1,001	C	R	-	T
26	*RMG 8 T channel C3*	*Operating hours feedback*	2 byte 7,001	C	R	W	T
	RMG 8 T channel C3	*Time to next service*	2 byte 7,001	C	R	W	T
27	*RMG 8 T channel C3*	*Service required*	1 bit 1,001	C	R	-	T
28	*RMG 8 T channel C3*	*Reset operating hours*	1 bit 1,001	C	R	W	-
	RMG 8 T channel C3	*Reset service*	1 bit 1,001	C	R	W	-
	RMG 8 T channel C3	*Switching with priority*	2 bit 2,001	C	R	W	-
30	*RMG 8 T channel C4*	*Switch object*	1 bit 1,001	C	R	W	-
	RMG 8 T channel C4	*Threshold 0..255*	1 byte 5,010	C	R	W	-
	RMG 8 T channel C4	*Threshold 0..65535*	2 byte 7,001	C	R	W	-
	RMG 8 T channel C4	*Threshold EIS 5 (DPT9.xxx)*	2 byte 9.xxx	C	R	W	-
	RMG 8 T channel C4	*Threshold as percent*	1 byte 5,001	C	R	W	-
31	*RMG 8 T channel C4*	*Logic input in OR gate*	1 bit 1,001	C	R	W	-
	RMG 8 T channel C4	*Logic input in AND gate*	1 bit 1,001	C	R	W	-
	RMG 8 T channel C4	*Logic input in XOR gate*	1 bit 1,001	C	R	W	-
32	*RMG 8 T channel C4*	*Lock*	1 bit 1,003	C	R	W	-

Continuation:

No.	Object name	Function	Type DPT	Flags			
				C	R	W	T
33	*RMG 8 T channel C4*	*Call up/save scenes*	1 byte 18,001	✓	R	W	T
34	*RMG 8 T channel C4*	*Enable scenes = 1*	1 bit 1,003	C	R	W	-
	RMG 8 T channel C4	*Lock scenes = 1*	1 bit 1,003	C	R	W	-
35	*RMG 8 T channel C4*	*Feedback On/Off*	1 bit 1,001	C	R	-	T
36	*RMG 8 T channel C4*	*Operating hours feedback*	2 byte 7,001	C	R	W	T
	RMG 8 T channel C4	*Time to next service*	2 byte 7,001	C	R	W	T
37	*RMG 8 T channel C4*	*Service required*	1 bit 1,001	C	R	-	T
38	*RMG 8 T channel C4*	*Reset operating hours*	1 bit 1,001	C	R	W	-
	RMG 8 T channel C4	*Reset service*	1 bit 1,001	C	R	W	-
	RMG 8 T channel C4	*Switching with priority*	2 bit 2,001	C	R	W	-
40	*RMG 8 T channel C5*	*Switch object*	1 bit 1,001	C	R	W	-
	RMG 8 T channel C5	*Threshold 0..255*	1 byte 5,010	C	R	W	-
	RMG 8 T channel C5	*Threshold 0..65535*	2 byte 7,001	C	R	W	-
	RMG 8 T channel C5	*Threshold EIS 5 (DPT9.xxx)*	2 byte 9.xxx	C	R	W	-
	RMG 8 T channel C5	*Threshold as percent*	1 byte 5,001	C	R	W	-
41	*RMG 8 T channel C5*	*Logic input in OR gate*	1 bit 1,001	C	R	W	-
	RMG 8 T channel C5	*Logic input in AND gate*	1 bit 1,001	C	R	W	-
	RMG 8 T channel C5	*Logic input in XOR gate*	1 bit 1,001	C	R	W	-
42	*RMG 8 T channel C5*	*Lock*	1 bit 1,003	C	R	W	-
43	*RMG 8 T channel C5*	*Call up/save scenes*	1 byte 18,001	C	R	W	T
44	*RMG 8 T channel C5*	*Enable scenes = 1*	1 bit 1,003	C	R	W	-
	RMG 8 T channel C5	*Lock scenes = 1*	1 bit 1,003	C	R	W	-
45	*RMG 8 T channel C5*	*Feedback On/Off*	1 bit 1,001	C	R	-	T

Continuation:

No.	Object name	Function	Type DPT	Flags			
				C	R	W	T
46	*RMG 8 T channel C5*	*Operating hours feedback*	2 byte 7,001	C	R	W	T
	RMG 8 T channel C5	*Time to next service*	2 byte 7,001	C	R	W	T
47	*RMG 8 T channel C5*	*Service required*	1 bit 1,001	C	R	-	T
48	*RMG 8 T channel C5*	*Reset operating hours*	1 bit 1,001	C	R	W	-
	RMG 8 T channel C5	*Reset service*	1 bit 1,001	C	R	W	-
	RMG 8 T channel C5	*Switching with priority*	2 bit 2,001	C	R	W	-
50	*RMG 8 T channel C6*	*Switch object*	1 bit 1,001	C	R	W	-
	RMG 8 T channel C6	*Threshold 0..255*	1 byte 5,010	C	R	W	-
	RMG 8 T channel C6	*Threshold 0..65535*	2 byte 7,001	C	R	W	-
	RMG 8 T channel C6	*Threshold EIS 5 (DPT9.xxx)*	2 byte 9.xxx	C	R	W	-
	RMG 8 T channel C6	*Threshold as percent*	1 byte 5,001	C	R	W	-
51	*RMG 8 T channel C6*	*Logic input in OR gate*	1 bit 1,001	C	R	W	-
	RMG 8 T channel C6	*Logic input in AND gate*	1 bit 1,001	C	R	W	-
	RMG 8 T channel C6	*Logic input in XOR gate*	1 bit 1,001	C	R	W	-
52	*RMG 8 T channel C6*	*Lock*	1 bit 1,003	C	R	W	-
53	*RMG 8 T channel C6*	*Call up/save scenes*	1 byte 18,001	C	R	W	T
54	*RMG 8 T channel C6*	*Enable scenes = 1*	1 bit 1,003	C	R	W	-
	RMG 8 T channel C6	*Lock scenes = 1*	1 bit 1,003	C	R	W	-
55	*RMG 8 T channel C6*	*Feedback On/Off*	1 bit 1,001	C	R	-	T
56	*RMG 8 T channel C6*	*Operating hours feedback*	2 byte 7,001	C	R	W	T
	RMG 8 T channel C6	*Time to next service*	2 byte 7,001	C	R	W	T
57	*RMG 8 T channel C6*	*Service required*	1 bit 1,001	C	R	-	T

Continuation:

No.	Object name	Function	Type DPT	Flags			
				C	R	W	T
58	*RMG 8 T channel C6*	*Reset operating hours*	1 bit 1,001	C	R	W	-
	RMG 8 T channel C6	*Reset service*	1 bit 1,001	C	R	W	-
	RMG 8 T channel C6	*Switching with priority*	2 bit 2,001	C	R	W	-
60	*RMG 8 T channel C7*	*Switch object*	1 bit 1,001	C	R	W	-
	RMG 8 T channel C7	*Threshold 0..255*	1 byte 5,010	C	R	W	-
	RMG 8 T channel C7	*Threshold 0..65535*	2 byte 7,001	C	R	W	-
	RMG 8 T channel C7	*Threshold EIS 5 (DPT9.xxx)*	2 byte 9.xxx	C	R	W	-
	RMG 8 T channel C7	*Threshold as percent*	1 byte 5,001	C	R	W	-
61	*RMG 8 T channel C7*	*Logic input in OR gate*	1 bit 1,001	C	R	W	-
	RMG 8 T channel C7	*Logic input in AND gate*	1 bit 1,001	C	R	W	-
	RMG 8 T channel C7	*Logic input in XOR gate*	1 bit 1,001	C	R	W	-
62	*RMG 8 T channel C7*	*Lock*	1 bit 1,003	C	R	W	-
63	*RMG 8 T channel C7*	*Call up/save scenes*	1 byte 18,001	C	R	W	T
64	*RMG 8 T channel C7*	*Enable scenes = 1*	1 bit 1,003	C	R	W	-
	RMG 8 T channel C7	*Lock scenes = 1*	1 bit 1,003	C	R	W	-
65	*RMG 8 T channel C7*	*Feedback On/Off*	1 bit 1,001	C	R	-	T
66	*RMG 8 T channel C7*	*Operating hours feedback*	2 byte 7,001	C	R	W	T
	RMG 8 T channel C7	*Time to next service*	2 byte 7,001	C	R	W	T
67	*RMG 8 T channel C7*	*Service required*	1 bit 1,001	C	R	-	T
68	*RMG 8 T channel C7*	*Reset operating hours*	1 bit 1,001	C	R	W	-
	RMG 8 T channel C7	*Reset service*	1 bit 1,001	C	R	W	-
	RMG 8 T channel C7	*Switching with priority*	2 bit 2,001	C	R	W	-

Continuation:

No.	Object name	Function	Type DPT	Flags			
				C	R	W	T
69	*RMG 8 T channel C8*	*Switch object*	1 bit 1,001	C	R	W	-
	RMG 8 T channel C8	*Threshold 0..255*	1 byte 5,010	C	R	W	-
	RMG 8 T channel C8	*Threshold 0..65535*	2 byte 7,001	C	R	W	-
	RMG 8 T channel C8	*Threshold EIS 5 (DPT9.xxx)*	2 byte 9.xxx	C	R	W	-
	RMG 8 T channel C8	*Threshold as percent*	1 byte 5,001	C	R	W	-
70	*RMG 8 T channel C8*	*Logic input in OR gate*	1 bit 1,001	C	R	W	-
	RMG 8 T channel C8	*Logic input in AND gate*	1 bit 1,001	C	R	W	-
	RMG 8 T channel C8	*Logic input in XOR gate*	1 bit 1,001	C	R	W	-
71	*RMG 8 T channel C8*	*Lock*	1 bit 1,003	C	R	W	-
72	*RMG 8 T channel C8*	*Call up/save scenes*	1 byte 18,001	C	R	W	T
73	*RMG 8 T channel C8*	*Enable scenes = 1*	1 bit 1,003	C	R	W	-
	RMG 8 T channel C8	*Lock scenes = 1*	1 bit 1,003	C	R	W	-
74	*RMG 8 T channel C8*	*Feedback On/Off*	1 bit 1,001	C	R	-	T
75	*RMG 8 T channel C8*	*Operating hours feedback*	2 byte 7,001	C	R	W	T
	RMG 8 T channel C8	*Time to next service*	2 byte 7,001	C	R	W	T
76	*RMG 8 T channel C8*	*Service required*	1 bit 1,001	C	R	-	T
77	*RMG 8 T channel C8*	*Reset operating hours*	1 bit 1,001	C	R	W	-
	RMG 8 T channel C8	*Reset service*	1 bit 1,001	C	R	W	-
	RMG 8 T channel C8	*Switching with priority*	2 bit 2,001	C	R	W	-
80 237	Extension modules 1 and 2: See below, overview of channel-related objects.						

Table 5: Overview of channel-related objects, switch actuator channels

BASIC MODULE: RMG 8 T							
C1	C2	C3	C4	C5	C6	C7	C8
0	10	20	30	40	50	60	69
1	11	21	31	41	51	61	70
2	12	22	32	42	52	62	71
3	13	23	33	43	53	63	72
4	14	24	34	44	54	64	73
5	15	25	35	45	55	65	74
6	16	26	36	46	56	66	75
7	17	27	37	47	57	67	76
8	18	28	38	48	58	68	77
1st EXTENSION: RME 8 T							
C1	C2	C3	C4	C5	C6	C7	C8
80	90	100	110	120	130	140	149
81	91	101	111	121	131	141	150
82	92	102	112	122	132	142	151
83	93	103	113	123	133	143	152
84	94	104	114	124	134	144	153
85	95	105	115	125	135	145	154
86	96	106	116	126	136	146	155
87	97	107	117	127	137	147	156
88	98	108	118	128	138	148	157
2nd EXTENSION: RME 8 T							
C1	C2	C3	C4	C5	C6	C7	C8
160	170	180	190	200	210	220	229
161	171	181	191	201	211	221	230
162	172	182	192	202	212	222	231
163	173	183	193	203	213	223	232
164	174	184	194	204	214	224	233
165	175	185	195	205	215	225	234
166	176	186	196	206	216	226	235
167	177	187	197	207	217	227	236
168	178	188	198	208	218	228	237

5.2.2 Channel-related objects for the blinds actuator:

For the blinds function, 2 channels (e.g. C1+C5) are combined.
Therefore, the object numbers are not in consecutive order.

Table 6:

No.	Object name	Function	Type DPT	Flags			
				C	R	W	T
0	*RMG 8 T channel C1*	*UP/DOWN*	1 bit 1,008	C	R	W	-
1	*RMG 8 T channel C1*	*Step/stop*	1 bit 1,010	C	R	W	-
2	*RMG 8 T channel C1*	*% Height*	1 byte 5,001	C	R	W	-
3	*RMG 8 T channel C1*	*% Slat*	1 byte 5,001	C	R	W	-
4	*RMG 8 T channel C1*	*Lock comfort/automatic*	1 bit 1,003	C	R	W	-
5	*RMG 8 T channel C1*	*1 = Lock*	1 bit 1,003	C	R	W	-
	RMG 8 T channel C1	*1 = Release*		C	R	W	-
6	*RMG 8 T channel C1*	*Call up/save scenes*	1 byte 18,001	C	R	W	-
7	*RMG 8 T channel C1*	*Enable scenes = 1*	1 bit 1,003	C	R	W	-
	RMG 8 T channel C1	*Lock scenes = 1*		C	R	W	-
8	*RMG 8 T channel C1*	*Priority on safety*	2 bit 2,003	C	R	W	-
40	*RMG 8 T channel C1*	*Position A*	1 bit 1,003	C	R	W	-
41	*RMG 8 T channel C1*	*Position B*	1 bit 1,003	C	R	W	-
42	*RMG 8 T channel C1*	*Position C*	1 bit 1,003	C	R	W	-
43	*RMG 8 T channel C1*	*Height feedback*	1 byte 5,001	C	R	-	T
44	*RMG 8 T channel C1*	*Slat feedback*	1 byte 5,001	C	R	-	T

Continuation:

No.	Object name	Function	Type DPT	Flags			
				C	R	W	T
10	*RMG 8 T channel C2*	*UP/DOWN*	1 bit 1,008	C	R	W	-
11	*RMG 8 T channel C2*	*Step/stop*	1 bit 1,010	C	R	W	-
12	*RMG 8 T channel C2*	*% Height*	1 byte 5,001	C	R	W	-
13	*RMG 8 T channel C2*	*% Slat*	1 byte 5,001	C	R	W	-
14	*RMG 8 T channel C2*	*Lock comfort/automatic*	1 bit 1,003	C	R	W	-
15	*RMG 8 T channel C2*	*1 = Lock*	1 bit 1,003	C	R	W	-
	RMG 8 T channel C2	*1 = Release*		C	R	W	-
16	*RMG 8 T channel C2*	*Call up/save scenes*	1 byte 18,001	C	R	W	-
17	*RMG 8 T channel C2*	*Enable scenes = 1*	1 bit 1,003	C	R	W	-
	RMG 8 T channel C2	*Lock scenes = 1*		C	R	W	-
18	*RMG 8 T channel C2*	*Priority on safety*	2 bit 2,003	C	R	W	-
50	*RMG 8 T channel C2*	*Position A*	1 bit 1,003	C	R	W	-
51	*RMG 8 T channel C2*	*Position B*	1 bit 1,003	C	R	W	-
52	*RMG 8 T channel C2*	*Position C*	1 bit 1,003	C	R	W	-
53	*RMG 8 T channel C2*	*Height feedback*	1 byte 5,001	C	R	-	T
54	*RMG 8 T channel C2*	*Slat feedback*	1 byte 5,001	C	R	-	T
20	*RMG 8 T channel C3*	*UP/DOWN*	1 bit 1,008	C	R	W	-
21	*RMG 8 T channel C3*	*Step/stop*	1 bit 1,010	C	R	W	-
22	*RMG 8 T channel C3*	*% Height*	1 byte 5,001	C	R	W	-
23	*RMG 8 T channel C3*	*% Slat*	1 byte 5,001	C	R	W	-
24	*RMG 8 T channel C3*	*Lock comfort/automatic*	1 bit 1,003	C	R	W	-
25	*RMG 8 T channel C3*	*1 = Lock*	1 bit 1,003	C	R	W	-
	RMG 8 T channel C3	*1 = Release*		C	R	W	-
26	*RMG 8 T channel C3*	*Call up/save scenes*	1 byte 18,001	C	R	W	-

Continuation:

No.	Object name	Function	Type DPT	Flags			
				C	R	W	T
27	*RMG 8 T channel C3*	*Lock scenes = 1*	1 bit 1,003	C	R	W	-
	RMG 8 T channel C3	*Enable scenes = 1*		C	R	W	-
28	*RMG 8 T channel C3*	*Priority on safety*	2 bit 2,003	C	R	W	-
60	*RMG 8 T channel C3*	*Position A*	1 bit 1,003	C	R	W	-
61	*RMG 8 T channel C3*	*Position B*	1 bit 1,003	C	R	W	-
62	*RMG 8 T channel C3*	*Position C*	1 bit 1,003	C	R	W	-
63	*RMG 8 T channel C3*	*Height feedback*	1 byte 5,001	C	R	-	T
64	*RMG 8 T channel C3*	*Slat feedback*	1 byte 5,001	C	R	-	T
30	*RMG 8 T channel C4*	*UP/DOWN*	1 bit 1,008	C	R	W	-
31	*RMG 8 T channel C4*	*Step/stop*	1 bit 1,010	C	R	W	-
32	*RMG 8 T channel C4*	*% Height*	1 byte 5,001	C	R	W	-
33	*RMG 8 T channel C4*	*% Slat*	1 byte 5,001	C	R	W	-
34	*RMG 8 T channel C4*	*Lock comfort/automatic*	1 bit 1,003	C	R	W	-
35	*RMG 8 T channel C4*	*1 = Release*	1 bit 1,003	C	R	W	-
	RMG 8 T channel C4	*1 = Lock*		C	R	W	-
36	*RMG 8 T channel C4*	*Call up/save scenes*	1 byte 18,001	C	R	W	-
37	*RMG 8 T channel C4*	*Lock scenes = 1*	1 bit 1,003	C	R	W	-
	RMG 8 T channel C4	*Enable scenes = 1*		C	R	W	-
38	*RMG 8 T channel C4*	*Priority on safety*	2 bit 2,003	C	R	W	-
70	*RMG 8 T channel C4*	*Position A*	1 bit 1,003	C	R	W	-
71	*RMG 8 T channel C4*	*Position B*	1 bit 1,003	C	R	W	-
72	*RMG 8 T channel C4*	*Position C*	1 bit 1,003	C	R	W	-
73	*RMG 8 T channel C4*	*Height feedback*	1 byte 5,001	C	R	-	T
74	*RMG 8 T channel C4*	*Slat feedback*	1 byte 5,001	C	R	-	T
80 237	Extension modules 1 and 2: See below, overview of channel-related objects.						

Table 7: Overview of channel-related objects, blinds channels

BASIC MODULE: RMG 8 T				1st EXTENSION: RME 8 T				2nd EXTENSION: RME 8 T			
C1	C2	C3	C4	C1	C2	C3	C4	C1	C2	C3	C4
0	10	20	30	80	90	100	110	160	170	180	190
1	11	21	31	81	91	101	111	161	171	181	191
2	12	22	32	82	92	102	112	162	172	182	192
3	13	23	33	83	93	103	113	163	173	183	193
4	14	24	34	84	94	104	114	164	174	184	194
5	15	25	35	85	95	105	115	165	175	185	195
6	16	26	36	86	96	106	116	166	176	186	196
7	17	27	37	87	97	107	117	167	177	187	197
8	18	28	38	88	98	108	118	168	178	188	198
40	50	60	69	120	130	140	149	200	210	220	229
41	51	61	70	121	131	141	150	201	211	221	230
42	52	62	71	122	132	142	151	202	212	222	231
43	53	63	72	123	133	143	152	203	213	223	232
44	54	64	73	124	134	144	153	204	214	224	233

5.2.3 Common objects:

These objects are partly used by the basic module and the two extension modules.

Table 8:

No.	Object name	Function	Type DPT	Flags			
				C	R	W	T
78	*RMG 8 T*	*Manual*	1 bit 1,001	✓	✓	✓	✓
158	*EM1 RME 8 T*						
238	*EM2 RME 8 T*						
79	*RMG 8 T**	*Collective feedback*	4 Byte 27,001	✓	✓		✓
159	*EM1 RME 8 T**						
239	*EM2 RME 8 T**						
240	*Central continuous ON*	*RMG4I/8x, DMG/E2x, SME2S*	1 bit 1,001	✓	✓	✓	✓
241	*Central continuous OFF*	*RMG4I/8x, DMG/E2x, SME2S*	1 bit 1,001	✓	✓	✓	✓
242	*Central switching*	*RMG4I/8x, DMG/E2x, SME2S*	1 bit 1,001	✓	✓	✓	✓
243	*Call up/save central scenes*	*RMG4I/8x, DMG/E2x, JMG/E4x, SME2S*	1 byte 18,001	✓	✓	✓	✓
244	*Central safety 1*	*JMG/E4T, RMG/E8T (Wind), JME4S*	1 bit 1,001	✓	✓	✓	
245	*Central safety 2*	*JMG/E4T, RMG/E8T (Wind), JME4S*	1 bit 1,001	✓	✓	✓	
246	*Central safety 3*	*JMG/E4T, RMG/E8T (Wind), JME4S*	1 bit 1,001	✓	✓	✓	
247	*Central up/down*	*JMG/E 4 T, RMG/E 8 T, JME 4 S*	1 bit 1,008	✓	✓	✓	
248	*Central safety rain*	*JMG/E 4 T, RMG/E 8 T*	1 bit 1,001	✓	✓	✓	
249	*Central safety frost*	*JMG/E 4 T, RMG/E 8 T*	1 bit 1,001	✓	✓	✓	
250	*Version of bus coupling unit*	*transmit*	14 byte 16,001	✓	✓		✓
251	*Version of basic module*	*transmit*	14 byte 16,001	✓	✓		✓
252	*Version of 1st extension module*	*transmit*	14 byte 16,001	✓	✓		✓
253	*Version of 2nd extension module*	*transmit*	14 byte 16,001	✓	✓		✓

*Only for the switch actuator channels.

5.2.4 Description of objects for the switch actuator (channel C1)

- **Object 0** "*Switch object, threshold as percent, threshold 0..255, threshold EIS 5 (DPT 9.xxx), threshold 0..65535* "

This object activates the set channel function (see parameter: *Channel function*).

The set channel function can either be activated via 1-bit telegram or by exceeding a threshold (8- or 16-bit telegram).

Table 9:

Parameters		Activation of channel function via
Activation of function via	*Type of threshold object*	
Switch object		1-bit telegram
Exceeding the threshold	*Object type: per cent (DPT 5.001)*	Exceeding per cent value
	Object type: counter value 0..255 (DPT 5.010)	Any value in given numerical range
	Object type: counter value 0..65535 (DPT 7.001)	
	Object type: EIS5 e.g. CO2, brightness (DPT 9.xxx)	2 byte floating-point number

- **Object 1** "*Logic input in AND gate, in OR gate, in XOR gate*"

Only available if *Link* is activated (*configuration options* parameter page).
Forms a logical link together with object 0 to activate the channel function.

- **Object 2** "*Lock*"

Locks the channel function.
Responses to setting and cancelling the lock can be configured if the block function has been activated (*configuration options* parameter page).

- **Object 3** "*Call up/save scene*"

Only available if the scene function has been activated (*configuration options* parameter page).

This object can be used to save and subsequently call up scenes.
Saving stores the channel status.
It does not matter how this status is produced (whether via switch commands, central objects or the buttons on the device).
The saved status is restored when it is called up.

All scene numbers from 1 to 64 are supported.
Each channel can participate in up to 8 scenes.

See appendix: Scenes

- **Object 4** "*Lock scenes = 1, Enable scenes = 1*"

Locks the scene function with a 1 or a 0 depending on the configuration.
As long as it is locked, scenes cannot be saved or called up.

- **Object 5** "*On/Off feedback*"

Reports the current channel status.
The status can also be inverted depending on configuration.

- **Object 6** "*Time to next service, operating hours feedback* "

Only available if the hour counter function
has been activated (*configuration options* parameter page).
Reports, depending on selected *Type of hour counter* (*Hour counter and service* parameter page), either the remaining period to the next service or the current status of the hour counter.

- **Object 7** "*Service required*"

Only available if the hour counter function has been activated (*configuration options* parameter page) and *Type of hour counter = Counter for time to next service*.

Reports if the next service is due.
0 = not due
1 = service is due.

- **Object 8** "*Switching with priority, reset service, reset operating hours*"

The function of the object depends on whether or not the hour counter function has been activated (*configuration options* parameter page).

<table>
<tr><th>Activate hour counter</th><th>Function</th><th>Use</th></tr>
<tr><td rowspan="2">yes</td><td>Reset service*</td><td>Reset service interval counter.</td></tr>
<tr><td>Reset operating hours*</td><td>Reset hour counter</td></tr>
<tr><td>no</td><td>Switching with priority</td><td>Priority control:
<table>
<tr><th>Status of object 8</th><th>Channel status</th></tr>
<tr><td>0</td><td rowspan="2">as set by object 0**</td></tr>
<tr><td>1</td></tr>
<tr><td>2</td><td>OFF</td></tr>
<tr><td>3</td><td>ON</td></tr>
</table></td></tr>
</table>

* Depending on configuration.
** or set by logic, central objects or scene

5.2.5 Description of objects for the blinds actuator (channel C1)

For the blinds function, 2 channels (e.g. C1+C5) are combined.
Therefore, the object numbers are not in consecutive order.

- **Object 0** "*UP/DOWN*"

Raise the roller blinds/blinds with “0” and lower with “1”.

- **Object 1** "*Step/Stop*"

If the drive moves, it will be stopped when a Step/Stop telegram is received.
If the drive is stationary at this moment, then a short slat turning (step) is performed on blinds.
With the other drive types, the current position is adjusted up or down depending on the specified step direction.

The direction of the step is determined from whether a "0" or "1" is sent to the object.
No step is performed if the configured number of steps for a complete turn has already been reached.

- **Object 2** "*% Height*"

This raises/lowers the roller blinds/blinds to a certain height.
The set point value is expressed in %.
0% ... 3% = upper end position
100% = lower end position
This function can be disabled by the comfort automatic object (see below).

- **Object 3** "*% Slat*"

Specification of a particular slat turning in %
This function can be disabled by the comfort automatic object (see below)

- **Object 4** "*Lock Comfort/Automatic*"

A "1" on this object locks the functions Drive 1 Height and Drive 1 Slat.
This function is used to prevent the blind from being adjusted due to external influences, and to thus maintain a preferred slat position of the blinds.
The Up/Down function (obj. 0) is maintained.

- **Object 5** "*Lock/Release*"

Locks the channel function.
Responses to setting and cancelling the lock can be configured if the block function has been activated (configuration options parameter page).

- **Object 6** "*Call up/save scenes*"

Only available if the scene function has been activated (configuration options parameter page).
This object can be used to save and subsequently call up scenes.
Saving stores the channel status.
It does not matter how this status is produced (whether via switch commands, central objects or the buttons on the device). The saved status is restored when it is called up.
All scene numbers from 1 to 63 are supported.
Each channel can participate in up to 8 scenes.

The scene that is currently active can be ended with the value 63 (= scene 64).
See appendix: Scenes

- **Object 7** "*Lock scenes/Release scenes* "

Locks the scene function with a 1 or a 0 depending on the configuration.
As long as it is locked, scenes cannot be saved or called up

- **Object 8** "*Priority on safety*"

Priority on safety will be used when the roller blinds or sun protection devices must remain stationary in an end position for a certain time, e.g. for window cleaning.

This operating mode has the highest priority level.
While priority on safety is active, all operating commands (*UP/DOWN, % Height, Step/Stop, Slat %*), the other safety objects and the manual operation will be ignored.

Value obj. 8	Priority on safety
0	inactive
1	
2	UP
3	DOWN

Priority on safety is ended with a 1 or a 0.

- **Object 40 „***Position A***“**

With a 1, the drive is brought to the predefined position A (preset or end position).
See parameter page *Positions via 1 bit*.

- **Object 41 „***Position B*“

With a 1, the drive is brought to the predefined position B (preset or end position).
See parameter page *Positions via 1 bit*.

- **Object 42 „***Position C***“**

With a 1, the drive is brought to the predefined position C (preset or end position).
See parameter page *Positions via 1 bit*.

- **Object 43 „***Height feedback*“

Current drive height feedback in %.

- **Object 44 "***Slat feedback"*

Current slat position feedback in %.

5.2.6 Description of common objects

- **Objects 78, 158, 238 "***Manual***"**

Only available for devices in the MIX2 series (order number 493…)
Puts the relevant module in manual mode or sends the status of the manual operation.

Telegram	Meaning	Explanation
0	Auto	All channels can be operated via the bus as well as via the buttons.
1	Manual	The channels can only be operated via the buttons on the device. The safety telegrams are still being executed.

The duration of the manual mode, i.e. the *Function of the manual button* can be configured on the *General* parameter page.

- **Objects 79, 159, 239 „***RMG 8 T, EM1 RME 8 T, EM2 RME 8 T collective feedback***“**

Only applies to switch actuator channels.
Sends the current switching status of the channels in a module as DPT 27.001.

- **Object 240 "***Central permanent ON***"**

Central switch-on function.
Enables simultaneous switch on of all channels (basic and extension modules) with a single telegram.
0 = No function
1 = Permanent ON

Participation in this object can be set individually for each channel (*configuration options* parameter page).

IMPORTANT:
This object takes top priority.
As long as it is set, the other switch commands will not work on the participating channels.

Works on the following devices:
RMG 8 S/RME 8 S, RMG 4 I/RME 4 I, RMG 8 T*/RME 8 T*, RME 4 S/C-load,
DMG 2 T, DME 2 S/T, SME 2 S.

* Only applies to switch actuator channels

- **Object 241** "*Central permanent OFF*"

Central switch-off function.
Enables simultaneous switch off of all channels (basic and extension modules) with a single telegram.
0 = No function
1 = Permanent OFF

Participation in this object can be set individually for each channel (*configuration options* parameter page).

IMPORTANT: This object has the second highest priority after *Central permanent ON*. As long as it is set, the other switch commands will not work on the participating channels.

Works on the following devices:
RMG 8 S/RME 8 S, RMG 4 I/RME 4 I, RMG 8 T*/RME 8 T*, RME 4 S/C-load,
DMG 2 T, DME 2 S/T, SME 2 S.

- **Object 242** "*Central switching*"

Central switch function.

Enables simultaneous switch on or off of all channels (basic and extension modules) with a single telegram.
0 = OFF
1 = ON
Participation in this object can be set individually for each channel (*configuration options* parameter page).
With this object, every participating channel responds exactly as if its 1st object (i.e. obj. 0, 10, 20, etc.) were receiving a switch command.

Works on the following devices:
RMG 8 S/RME 8 S, RMG 4 I/RME 4 I, RMG 8 T*/RME 8 T*, RME 4 S/C-load,
DMG 2 T, DME 2 S/T, SME 2 S.

- **Object 243** "*Call up/save central scenes*"

Central object for using scenes.
This object can be used to save and subsequently call up "scenes".

Works on the following devices:
RMG 4 I/RME 4 I, RMG 8 S/RME 8 S, RMG 8 T/RME 8 T, DMG 2 T/DME 2 T,
JMG 4 T/JME 4 T, RME 4 S/C-load, DME 2 S, SME 2 S, JME 4 S

See appendix: Scenes.

* Only applies to switch actuator channels

- **Objects 244, 245, 246 "***Central safety 1, 2, 3***"**

The safety objects allow a specific response of the drives to a particular situation with a high priority. These objects can, for example, be linked with 3 differently placed wind sensors (weather stations).

Example:
A safety object is linked to a wind sensor.
A drive to which a textile sun protection device is connected is configured to react to this safety object.
The operating condition is normal as long as a “0” is present.
In the event of a storm, the wind sensor sends a "1" to the safety object and the sun protection is immediately moved to the configured safety position.

Notes:
1. A safety object must only be actuated by one device, as otherwise conflicting commands could cancel each other out.
2. With a request for safety objects e.g. via the ETS function "Read value":
   If the "Safety on" status arises through cyclical monitoring, the object value remains at 0.
3. The safety statuses must be reinitialized after download.

Works on the following devices: JMG 4 T, JME 4 T, JME 4 S, RMG 8 T*, RME 8 T*.

- **Object 247 "***Central Up/Down***"**

This object can be used to centrally control all drives which are configured for it.
For example, all of the roller blinds on one facade can be raised or lowered at the same time with one push button
0 = raise
1 = lower

Works on the following devices: JMG 4 T, JME 4 T, JME 4 S, RMG 8 T*, RME 8 T*.

- **Object 248** *"Central safety rain"*

This object can be used to move all drives which are configured for it into a defined position when there is a central rain alarm.
Works on the following devices: JMG 4 T, JME 4 T, JME 4 S, RMG 8 T*, RME 8 T*.

*Only applies to blinds channels.

- **Object 249** *"Central safety frost"*

This object can be used to move all drives which are configured for it into a defined position when there is a central frost alarm.
Works on the following devices: JMG 4 T, JME 4 T, JME 4 S, RMG 8 T*, RME 8 T*.

- **Object 250 "***Version of bus coupling unit***"**

For diagnostic purposes only.

Sends the bus coupling unit software version after reset or download.
Can also be read out via the ETS.

Format: **A**xx **H**yy **V**zzz

Code	Meaning
xx	00 .. FF = Version of application without dividing point (10 = V1.0, 11 = V1.1, etc.).
yy	Hardware version 00..99
zzz	Firmware version 000..999

EXAMPLE: A16 H03 V014
- ETS application version 1.6
- Hardware version $03
- Firmware version $14

*Only applies to blinds channels.

- **Object 251** "*Version of basic module*"

For diagnostic purposes only.
Only for basic modules in the MIX 2 series (order number 493…).

Sends the software version (firmware) of the basic module after reset or download.
Can also be read out via the ETS.

The version is issued as an ASCII character string.
Format: **M**xx **H**yy **V**zzz

Code	Meaning
xx	01 .. FF = Module code (hexadecimal).
yy	Hardware version 00..99
zzz	Firmware version 000..999

EXAMPLE: M11 **H**25 **V**025
- Module $11 = RMG 8 T
- Hardware version V25
- Firmware version V25

Possible module codes (as of 04/2014)

Module	Code
Module or mains voltage are unavailable.	$00
RMG 8 S	$11
RMG 4 I	$12
DMG 2 T	$13
JMG 4 T/JMG 4 T 24V	$14
HMG 6 T	$15
RMG 8 T	$17

- **Object 252** "*Version of 1st extension module*"

Telegram format: See above, object 251

Possible module codes (as of 04/2014)

Module	Code
Module or mains voltage are unavailable.	$00
RME 8 S	$11
RME 4 I	$12
DME 2 T	$13
JME 4 T/JME 4 T 24V	$14
HME 6 T	$15
RME 8 T	$17

- **Object 253 "***Version of 2nd extension module***"**

See above, object 252

5.3 Parameters

5.3.1 Common parameter pages

Table 10

Function	Description
General	Selection of module and central parameters.
BASIC MODULE: RMG 8 T	Channel functions: switch actuator/blinds actuator. General parameters for the basic module.

5.3.2 Parameter pages for the switch actuator

Table 11

Function	Description
RMG 8 T channel Cx configuration options	Characteristics of channel and activation of additional functions (scenes, links, etc.).
Contact characteristics	Type of contact and status after download, bus failure etc.
Threshold	Settings for triggering channel function through exceeding threshold.
Block function	Type of lock telegram and response to locking.
Scenes	Selection of scene numbers relevant to the channel.
Feedback	Status of feedback object etc.
Hour counter and service	Type of hour counter and, if required, service interval etc.
Link	Selection of logical link.

5.3.3 Parameter pages for the blinds actuator

RMG 8 T channel Cx configuration options	Characteristics of channel and activation of additional functions (scenes, sun protection, lock, etc.).
Drive settings	Direction of movement, runtimes, etc.
Block function	Type of lock telegram and response to locking.
Safety wind/rain/frost	Priority and participation in the safety objects for wind, rain and frost.
Presets	8 preset heights and slat positions that can be called up via scenes or 1-bit objects
Scenes	Selection of scene numbers relevant to the channel.
Positions over 1 bit	Behaviour when calling up or leaving the 1-bit positions
Power failure and restoration	Behaviour during failure and restoration of bus and mains power.

5.3.4 Parameter description for common parameters

Settings that lead to the display of other pages or functions are identified by .. .
Example: *Pulse function..*

5.3.4.1 The "*General*" parameter page

Designation	Values	Description
Type of basic module	***Select device..*** *RMG 8 S..* *RMG 8 T..* *RMG 4 I..* *DMG 2 T..* *JMG 4 T/JMG 4 T 24V..* *HMG 6 T..*	Selection of available basic module (MIX2 series only)
Type of 1st extension module	***not available/inactive*** *RME 8 S..* *RME 8 T..* *RME 4 I..* *DME 2 T..* *JME 4 T/JME 4 T 24V..* *HME 6 T..* *RME 4 S/RME 4 C-load..* *DME 2/SME 2..* *BME 6..* *JME 4 S..* *HME 4..*	Selection of 1st extension module, if available. (MIX or MIX2 series)
Type of 2nd extension module	***not available/inactive*** *RME 8 S..* *RME 8 T..* *RME 4 I..* *DME 2 T..* *JME 4 T/JME 4 T 24V..* *HME 6 T..* *RME 4 S/RME 4 C-load..* *DME 2/SME 2..* *BME 6..* *JME 4 S..* *HME 4..*	Selection of 2nd extension module, if available. (MIX or MIX2 series)
Time for cyclical sending of feedback object (MIX series, order no. 491...)	*2 minutes, 3 minutes,* *5 minutes, 10 minutes,* ***15 minutes,** 20 minutes* *30 minutes, 45 minutes* *60 minutes*	This parameter is used exclusively for MIX series extension modules. (DME 2 S, SME 2, JME 4 S, BME 6 RME 4 S/C-load, and HME 4)

Continuation:

Designation	Values	Description
Function of manual button (MIX2 series, order no. 493...)	*applies for 24 hours or until reset via object* *locked* ***applies until reset via object*** *applies for 30 minutes or until reset via object* *applies for 1 hour or until reset via object* *applies for 2 hours or until reset via object* *applies for 4 hours or until reset via object* *applies for 8 hours or until reset via object* *applies for 12 hours or until reset via object*	Determines how long the device works manually and how this is ended. In manual mode, the channels can only be switched on and off via the buttons on the device. See also: object 78 This parameter is used exclusively for MIX2 series devices.
Manual operation of channels (MIX2 series, order no. 493...)	***unlocked*** *locked*	The channels can be operated via the buttons on the device. No manual operation, the buttons on the device are locked.

5.3.5 Parameter description for the switch actuator

5.3.5.1 The "*RMG 8 T basic module*" parameter page

Designation	Values	Description
Sending collective feedback	*no*	No collective feedback, object is unavailable (obj. 79, 159, 239).
	report as inactive	Object value cannot be requested.
	only at change	Sends whenever a channel status changes.
	cyclically and at change	Sends cyclically and with status changes See appendix: collective feedback
Relay switch delay		This parameter sets the minimum delay between switching on two relays if several are activated at the same time. The shortest delay is achieved by using the central switch object (object 242). When switching on via individual telegrams (1 telegram per channel) , the bus running times and the sequential processing of commands cause an additional delay. This can help avoid high current peaks when devices are switched on simultaneously (e.g. with a number of lighting strips).
	None	There is no added delay.
	60 ms *100 ms* *200 ms*	When a relay switches on, the next one can only switch on after the set delay is completed. The switch-on delay between the first and last relay is calculated according to the following formula: (Number of channels – 1) x delay RMG 8 T and 60 ms: = (8 channels – 1) * 60 ms = 420 ms → The last channel switches 420 ms after the first. The same applies to the first or second extension module.

5.3.5.2 The "*RMG 8 T channel Cx: configuration options*" parameter page

Table 12

Designation	Values	Description
Channel function	***Switching On/Off..*** *On/off time delay..* *Pulse function..* *Staircase light time switch with forewarning function..* *Flashing..*	Determines the basic functionality of the channel.
Activation of function via	***Switch object***	The channel is operated via a 1-bit object.
	Exceeding the threshold	The channel is operated through exceeding a 1 or 2-byte threshold. See below: The „Threshold“ parameter page
Activate block function	*Yes..*	The block function can be individually adjusted. The relevant parameter page is shown.
	no	No block function.
Activate scenes	*Yes..* ***no***	Should scenes be used?
Participation in central objects	***no***	Central objects are not taken into account.
	at Central switching, Permanent On, Permanent OFF *only in central continuous ON* *only in central continuous OFF* *only in central switching* *only in central switching and continuous ON* *only in central switching and continuous OFF* *only in central permanent On and permanent OFF*	Which central objects are to be taken into account? Central objects enable the simultaneous switching on and off of several channels with one single object.

Continuation:

Designation	Values	Description
Adjust feedback	*Yes.*. ***no***	The feedback function can be individually adjusted. The relevant parameter page is shown. The *Feedback* function works with the standard parameters: - *not inverted* - *do not transmit cyclically*
Activate hour counter	*Yes.*. ***no***	Is the *hour counter/service interval* function to be used?
Activate link	*Yes.*. ***no***	Are logical links to be used with the channel object?

5.3.5.3 The "*Contact characteristics*" parameter page

Table 13

Designation	Values	Description
Type of contact	***NO contact***	Standard: The relay contact is closed when a switch-on command is issued.
	Opening contact	Inverted: The relay contact is opened when a switch-on command is issued.
Status with download and bus failure		After download or with loss of bus voltage...
	OFF	..the relay remains switched off.
	ON	..the relay switches on.
	unchanged	…the relay remains in the same state as before.
Status after restoration of the mains supply or bus supply		After return of mains or bus voltage...
	OFF	..the relay remains switched off.
	ON	..the relay switches on.
	Same as before failure	…the relay remains in the same state as before.

5.3.5.4 The "*On/Off delay*" parameter page

This parameter page appears if *On/Off delay* is chosen as the *Channel function*.

Table 14

Designation	Values	Description
Switch-on delay		
hours (0..3)	***0**..3*	Input of desired switch-on delay in hours.
minutes (0..60)	***0**..60*	Input of desired switch-on delay in minutes.
seconds (0.225)	***0**..255*	Input of desired switch-on delay in seconds.
Switch-off delay		
hours (0..3)	***0**..3*	Input of desired switch-off delay in hours.
minutes (0..60)	***0**..60*	Input of desired switch-off delay in minutes.
seconds (0.255)	***0**..255*	Input of desired switch-off delay in seconds.

5.3.5.5 The "*Pulse function..*" parameter page

This parameter page appears if *Pulse function* is chosen as the *Channel function*.

Table 15

Designation	Values	Description
hours (0..3)	***0**..3*	Input of desired pulse duration in hours.
minutes (0..60)	***0**..60*	Input of desired pulse duration in minutes.
seconds (0.255)	***0**..255*	Input of desired pulse duration in seconds.
Pulse can be retriggered (with 1 on switch object)	*yes* ***no***	The pulse can be extended as often as desired via a 1-telegram The pulse cannot be extended.
Pulse can be reset (with 0 on switch object)	*yes* ***no***	The pulse can be ended early at anytime via a 0-telegram. The pulse cannot be ended early

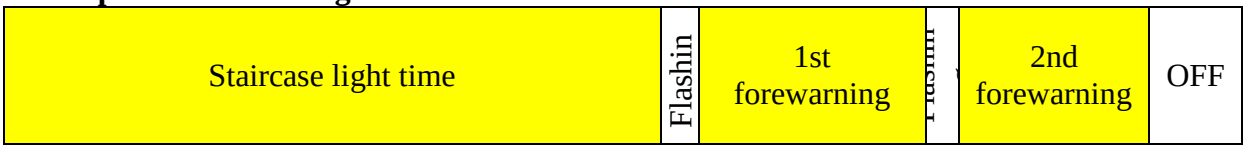
5.3.5.6 The "*Staircase light with forewarning function ..*" parameter page

This parameter page appears if *Staircase light with forewarning function* is chosen as the *Channel function*.
The user can, anytime, press a push button again, to extend the staircase light time.

Table 16

Designation	Values	Description
Staircase light time (min. 1 s)		
hours (0..3)	***0**..3*	Input of desired staircase light time in hours.
minutes (0..60)	***0**..60*	Input of desired staircase light time in minutes.
seconds (0.255)	*0..255* Default value = ***1***	Input of desired staircase light time in seconds.
The maximum sum of pulses 1..40	*1..40*	determines how long the staircase light time can be extended by pressing the button again.
Duration of 1st forewarning in s (0..60)	*0* *1..60* Default value = *10*	The light switches off immediately once the staircase light time is completed. Once the staircase light time is completed, the light should briefly flash and then stay on for the duration of the forewarning
Duration of 2nd forewarning in s (0..60)	0 *1..60* Default value = *10*	No 2nd forewarning. The light switches off at the end of the 1st forewarning. Second forewarning: Once the 1st forewarning is completed, the light should flash briefly and then stay on for the duration of the 2nd forewarning. The light switches off when this time is completed.

Example of forewarning function:



5.3.5.7 The "*Flashing..*" parameter page

This parameter page appears if *Flashing* is chosen as the *Channel function*.

Table 17

Designation	Values	Description
ON phase of flash pulse		
hours (0..3)	***0**..3*	Input of desired pulse time (t_i) in hours.
minutes (0..60)	***0**..60*	Input of desired pulse time in minutes.
seconds (0.255)	***0**..255*	Input of desired pulse time in seconds.
OFF phase of flash pulse		
hours (0..3)	***0**..3*	Input of desired length of break (t_p) in hours.
minutes (0..60)	***0**..60*	Input of desired length of break in minutes.
seconds (0.255)	***0**..255*	Input of desired length of break in seconds.
How often should it flash	*Until it switches off*	The channel flashes until a switch-off telegram is received.
	1 x	The channel flashes as often as set here.
	2 x	
	3 x	
	4 x	
	5 x	
	7 x	
	10 x	
	15 x	
	20 x	
	30 x	
	50 x	

5.3.5.8 The "*Threshold*" parameter page

This side is shown if the *Activation of the function by* parameter is set to *Exceeding threshold*.

Table 18

Designation	Values	Description
Type of threshold object	***Object type: Percent (DPT 5.001)*** *Object type: Counter value 0..255 (DPT 5.010)* *Object type: Counter value 0..65535 (DPT 7.001)* *Object type: EIS5 e.g. CO2, brightness etc. (DPT 9.xxx)*	Value type for threshold.
Response on exceeding the threshold		Should the channel switch on or off on exceeding the threshold? The set *type of contact* must be taken into account here.
	As switch object = 0	*NO contact*: the relay switches **off** if threshold is exceeded. *Opening contact:* The relay switches **on** if threshold is exceeded.
	As switch object = 1	*NO contact*: The relay switches **on** if threshold is exceeded. *Opening contact:* the relay switches **off** if threshold is exceeded.
Parameter for *Percent* threshold object		
Threshold	*1..99 %* *Default value =* ***50%***	Desired threshold. Example of *NO contact* with response *as switch object = 1*: Switches on when: Object value > threshold Switches off when: Object value = threshold - hysteresis
Hysteresis (as %)	*1..99 %* *Default value =* ***10%***	The hysteresis prevents frequent switching after small fluctuations in readings.

Continuation:

Designation	Values	Description
Parameter for threshold object *Counter value 0..255*		
Threshold	*1..254* *Default value = **127***	Desired threshold. Example of *NO contact* with response *as switch object = 1*: Switches on when: Object value > threshold Switches off when: Object value = threshold - hysteresis
Hysteresis	*1..254* *Default value = **5***	The hysteresis prevents frequent switching after small fluctuations in readings.
Parameter for threshold object *Counter value 0..65535*		
Threshold	*1..65534* *Default value = **1000***	Desired threshold. Example of *NO contact* with response *as switch object = 1*: Switches on when: Object value > threshold Switches off when: Object value = threshold - hysteresis
Hysteresis	*1..65534* *Default value = **5***	
Parameter for threshold object *EIS5 (e.g. CO_2, brightness…)*		
Threshold *Format (-)0.00..99999*	*0.00..99999* *Default value = **20***	Desired threshold. Example of *NO contact* with response *as switch object = 1*: Switches on when: Object value > threshold Switches off when: Object value = threshold - hysteresis
Hysteresis *0.00..9999*	*0.00..9999* *Default value = **1***	The hysteresis prevents frequent switching after small fluctuations in readings.

5.3.5.9 The "*Block function*" parameter page

This page appears when *Adjust block function* is selected on the *Configuration options* parameter page.

Table 19

Designation	Values	Description
Lock telegram	***Lock with ON telegram***	0 = Enable 1 = Lock
	Lock with OFF telegram	0 = Lock 1 = Enable **Note:** The lock is always deactivated after reset.
Response when setting the lock	*OFF*	Switch off
	ON	Switch on
	unchanged	No response
Response when cancelling the lock	*OFF*	Switch off
	ON	Switch on
	Unchanged	No response
	update	Restore normal operation and switch relay accordingly.

5.3.5.10 The "*Scenes*" parameter page

This page appears when the *Scenes* are activated on the *Configuration options* parameter page.
Each channel can participate in up to 8 scenes.

Table 20

Designation	Values	Description
Lock telegram for scenes	***Lock with ON telegram***	0 = Enable 1 = Lock
	Lock with OFF telegram	0 = Lock 1 = Enable **Note:** With this setting the scenes are always locked immediately after reset or download.
All channel scene statuses	***Overwrite on download***	A download deletes all scene memories in a channel, i.e. all previously taught in scenes. When a scene number is called, the channel assumes the configured *Status after download* (see below). See appendix: Teach in scenes without telegrams
	Unchanged after download	All previously taught in scenes are saved. However, the scene numbers the channel should react to can be changed (see below: *Channel reacts to*).
Participation in central scene object	***No*** *yes*	Should the device react to the central scene object?
Channel reacts to	*No scene number* ***Scene number 1*** *Scene number 63*	First of the 8 possible scene numbers the channel is to react to.
Status after download	***Off*** *On*	New switching status that the selected scene number is to be allocated to. Only possible if the scene statuses are to be overwritten after download.
Permit teach in	***No***	Scenes can only be called up.
	Yes	The user can both call up and teach in or amend scenes.

Continuation:

Designation	Values	Description
Channel reacts to	*No scene number* *Scene number1* ***Scene number 2*** … *Scene number 63*	Second of the 8 possible scene numbers
Status after download	***Off*** *On*	See above.
Permit teach in	*No* ***Yes***	See above.
Channel reacts to	*No scene number* *Scene number1* … ***Scene number 3*** … *Scene number 63*	Third of the 8 possible scene numbers
Status after download	***Off*** *On*	See above.
Permit teach in	*No* ***Yes***	See above.
Channel reacts to	*No scene number* *Scene number1* … ***Scene number 4*** … *Scene number 63*	Fourth of the 8 possible scene numbers
Status after download	***Off*** *On*	See above.
Permit teach in	*No* ***Yes***	See above.
Channel reacts to	*No scene number* *Scene number1* … ***Scene number 5*** … *Scene number 63*	Fifth of the 8 possible scene numbers
Status after download	***Off*** *On*	See above.
Permit teach in	*No* ***Yes***	See above.
Channel reacts to	*No scene number* *Scene number1* … ***Scene number 6*** … *Scene number 63*	Sixth of the 8 possible scene numbers

Continuation:

Designation	Values	Description
Status after download	***Off*** *On*	See above.
Permit teach in	*No* ***Yes***	See above.
Channel reacts to	*No scene number* *Scene number1* … ***Scene number 7*** … *Scene number 63*	Seventh of the 8 possible scene numbers
Status after download	***Off*** *On*	See above.
Permit teach in	*No* ***Yes***	See above.
Channel reacts to	*No scene number* *Scene number1* … ***Scene number 8*** … *Scene number 63*	Last of the 8 possible scene numbers
Status after download	***Off*** *On*	See above.
Permit teach in	*No* ***Yes***	See above.

5.3.5.11 The "*Feedback*" parameter page

This page appears when *Adjust feedback* is selected on the *Configuration options* parameter page.

Table 21

Designation	Values	Description
Reported status	***Not inverted***	Channel switched on: feedback object sends a 1
	inverted	Channel switched on: feedback object sends a 0
Transmit feedback cyclically	***No***	Send at regular intervals?
	yes	
Time for cyclical transmission of feedback	*2 minutes, 3 minutes, 5 minutes, 10 minutes,* ***15 minutes****, 20 minutes, 30 minutes, 45 minutes 60 minutes*	At what interval?

5.3.5.12 The "*Hour counter and service*" parameter page

This page appears when *Activate hour counter* is selected on the *Configuration options* parameter page.

Table 22

Designation	Values	Description
Type of hour counter	***Hour counter***	Forward counter for duty cycle of the channel.
	counter for time period before next service	Backward counter for duty cycle of the channel.
Hour counter		
Reporting of operating hours when changing (0..100 h, 0 = no report)	*0..100* *Default value = **10***	At what interval is the current meter reading to be sent? Example: 10 = Send each time the meter reading increases by another 10 hours.
Report operating hours cyclically	***No*** *yes*	Send at regular intervals?
Time for cyclical transmission	*2 minutes, 3 minutes, 5 minutes, 10 minutes, 15 minutes, 20 minutes, 30 minutes, 45 minutes* ***60 minutes***	At what interval?
counter for time period before next service		
Service interval (0..2000, x10 h)	*0..2000* *Default value = **100***	Desired timescale between two services. Example: 10 = 10 x 10 h = 100 hours
Reporting of time to service when changing (0..100 h, 0 = no report)	*0..100* *Default value = **10***	At what interval is the current meter reading to be sent? Example: 10 = Send each time the meter reading decreases by another 10 hours.
Report time to service cyclically	***no*** *Yes*	Send **remaining** time to next service at regular intervals? → Object *Time to next service*.
Report service cyclically	***no*** *Yes*	Send report, whether the *time to next service* has expired at regular intervals? → Object *Service required*.

Continuation:

Designation	Values	Description
Time for cyclical transmission (time to service and service	*2 minutes, 3 minutes, 5 minutes, 10 minutes, 15 minutes, 20 minutes, 30 minutes, 45 minutes* ***60 minutes***	At what interval?

5.3.5.13 The "*Link*" parameter page

This page appears when *Activate link* is selected on the *Configuration options* parameter page.

An additional object appears, which forms a logical link in combination with the channel's switching/threshold object.
The channel only switches if the link requirement has been met.

Table 23

Designation	Values	Description
Activate link		Selection of logical link with the channel object
	AND link	The *Logic input in AND gate* object appears (e.g. object 1).
	OR link (override)	The *Logic input in OR gate* object appears (e.g. object 1).
	XOR link	The *Logic input in XOR gate* object appears (e.g. object 1).
Disable object affects logic object	***No***	The disable object only affects the channel object (e.g. object 0). If required, the logic object can activate the channel function despite lock (with OR and XOR link).
	yes	The disable object affects the channel object and the logic object. The channel function is completely blocked if the lock is active.

5.3.6 Parameter description for the blinds actuator

5.3.6.1 The "*RMG 8 T basic module*" parameter page

Designation	Values	Description
Relay switch delay		This parameter sets the minimum delay between switching on two relays if several are activated at the same time. The shortest delay is achieved by using the central UP/DOWN object (Obj. 247). When switching via individual telegrams (1 telegram per channel), the bus running time and the sequential processing of commands causes an additional delay. This can help avoid high current peaks when devices are switched on simultaneously
	None	There is no added delay.
	60 ms *100 ms* *200 ms*	When a relay has switched on, the next one (within the module) can only switch on after the set delay is completed. The switch-on delay between the first and last relay is calculated according to the following formula: (Number of channels – 1) x delay **Example:** RMG 8 T and 60 ms: = (4 channels – 1) * 60 ms = 180 ms → Last channel switches with a delay of 180 ms. The same applies to the first or second extension module.

5.3.6.2 The "*RMG 8 T channel Cx: configuration options*" parameter page

Table 24

Designation	Values	Description
Type of hanging	***Blinds*** *Roller blinds/awning/general drive...*	The type of hanging which is to be actuated
Activate block function	*Yes..* ***no***	Should the block function be used?
Activate scenes	*Yes..* ***no***	Should scenes be used?

5.3.6.3 The "*Drive settings*" parameter page

Table 25

Designation	Values	Description
Direction of drive run	*normal* *inverted*	Standard setting: Hanging moves from top to bottom. For special applications or quick fix for wrongly wired devices (up/down directions mixed up).
Complete runtime Down (s)	Manual input 5 .. 500	Only available when *Drive runtime setting = via ETS*. Enter the measured runtime for descending (in seconds).
Runtime adjustment for ascent (s)	Manual input -15 .. +15	Enter difference between runtime when ascending and runtime (in seconds) when descending. Correction value = $t_{Up} - t_{Down}$
Step duration of Step/Stop object	*No steps* *250 ms* *500 ms* ***1 s*** *2 s* *3 s* *4 s* *5 s* *6 s* *7 s* *10 s*	Only for *roller blinds/awning/general drive.* This specifies whether or not it should be possible to adjust the drive in small steps, and it also specifies the duration of a single step.
Complete slat turning 4 ... 250 [x100 ms]	*4 .. 250*	Enter the measured turn time of the slats in increments of 100 ms. 10 = 10 x 100 ms = 1s
No. of steps for a complete turn	*3 Steps* *4 Steps* ***7 Steps*** … *12 Steps*	This specifies the number of individual steps a complete slat turn is to be divided into (3 to 12).

Continuation:

Designation	Values	Description
On receipt of a step/stop command	***Process immediately (recommended)*** *Wait 0.3 s to see if an UP/DOWN command follows* *Wait 0.4 s to see if an UP/DOWN command follows* *Wait 0.5 s to see if an UP/DOWN command follows*	Every received step command is carried out immediately Step commands are only executed if no operating command is received within the set time. These settings apply to push buttons which, when pressed and held, first send a step command and then an operating command.
Tighten fabric (awning)	*yes* ***no***	Only for *roller blinds/awning/general drive.* At values above 70%, the hanging, awning or roller blind will be retightened by moving back briefly. On roller blinds it is guaranteed that the vent slots will remain open. No tensioning.
Pause time before reversal of direction	***0.5 s*** *1 s* *2 s* *3 s*	Pause introduced to protect the drive motor against conflicting commands (e.g. if a descend command is received while ascending). This setting depends on the information supplied by the manufacturer of the drive
Automatic execution of the slat object value [%] after the height object [%]	***yes*** *no*	Selection whether or not the slat position (according to the slat object *% slat*) is to be resumed after the height adjustment via the height object *% Height*.
Assignment of the 0% position to the slat objects [%]	***0% corresponds to slat position on lowering*** *0% corresponds to slat position on ascending*	Input of the starting position for the calculations of the slat turn.
Participation in central Up/Down object	***yes*** *no*	Should the drive respond to the central object?
Transmission of feedback	***only at change*** *cyclically and at change*	When should feedback (Obj. *Slat feedback* and *Height feedback*) be sent?
Time for cyclical transmission of feedback	*2 minutes, 3 minutes, 5 minutes, 10 minutes,* ***15 minutes****, 20 minutes, 30 minutes, 45 minutes 60 minutes*	If cyclically, at what interval?

5.3.6.4 The "*Block function*" parameter page

This page can be activated on the Configuration options parameter page.

Table 26

Designation	Values	Description
Lock telegram	***Lock with ON telegram***	0 = Enable 1 = Lock
	Lock with OFF telegram	0 = Lock 1 = Enable **Note:** The lock is always deactivated after reset.
Response when setting the lock	*Preset 1* *Preset 2* *Preset 3* *Preset 4* *Preset 5* *Preset 6* *Preset 7* *Preset 8*	Approach a preset position. See Presets parameter page.
	Top end position *Lower end position*	Approach an end position.
	unchanged (stopped upon operating command)	Do not react. The drive should stop when a lock command is received during a movement.
Response when cancelling the lock	*Preset 1* *Preset 2* *Preset 3* *Preset 4* *Preset 5* *Preset 6* *Preset 7* *Preset 8*	Approach a preset position. See Presets parameter page.
	Top end position *Lower end position*	Approach an end position.
	unchanged (stopped upon operating command)	Do not react. The drive should stop when a lock command is received during a movement.
	Update (height/slat)	Approach last received position.

5.3.6.5 The "*Safety Wind/Rain/Frost*" parameter page

Table 27

Designation	Values	Description
Priority of safety objects	***1. Wind 2. Rain, 3. Frost*** *1. Wind, 2. Frost, 3. Rain* *1. Rain, 2. Wind, 3. Frost* *1. Rain, 2. Frost, 3. Wind* *1. Frost, 2. Wind, 3. Rain* *1. Frost, 2. Rain, 3. Wind*	If wind, rain and frost alarm occur together, the parameters of the object with the highest priority will be implemented. Example: 1. Rain, 2. Frost, 3. Wind The parameters with priority 1 apply, i.e. *Start* and *End* of *Safety rain.* If the rain alarm (Priority 1) is cancelled, the parameters for the object with priority 2 apply, here *Frost - Start*. If the object with priority 2 is also cancelled, the one with priority 3 applies.
Monitor safety objects cyclically	***no*** *every 10 min* *every 20 min* *every 60 min*	No monitoring. After mains failure the safety object will be reset to 0. Safety objects that do not receive any telegrams within the time set here will be handled as if they had received an ON telegram and trigger an alarm (e.g. WIND, etc.). The sender of the safety telegrams (e.g. weather station) must transmit them cyclically. *Max. cycle time = Monitoring time/2* Example: Monitoring time = every 20 minutes, cyclical transmission time = 10 min or less.

Continuation:

Designation	Values	Description
Participation in safety WIND	*yes* ***no***	Should channel react to wind alarm?
Source(s)	*Safety object 1 wind* *Safety object 2 wind* *Safety object 3 wind* *Safety object 1 + 2 (OR linked)* *Safety object 1 + 3 (OR linked)* *Safety object 2 + 3 (OR linked)* ***Safety object 1 + 2 + 3 (OR linked)***	Which safety objects are used for wind alarm?
Start		Start on wind alarm:
	Preset 1 *Preset 2* *Preset 3* *Preset 4* *Preset 5* *Preset 6* *Preset 7* *Preset 8*	Approach a preset position. See Presets parameter page.
	Top end position	Approach an end position.
	Lower end position	
	unchanged (stopped upon operating command)	Do not react. The drive should stop upon safety start during a movement.
End		End on wind alarm:
	same as before safety	move back to the previous position.
	Preset 1 *Preset 2* *Preset 3* *Preset 4* *Preset 5* *Preset 6* *Preset 7* *Preset 8*	Approach a preset position. See Presets parameter page.
	Top end position	Approach an end position.
	Lower end position	
	Update (height/slat)	Approach last received position.
	No response	Do not react.

Continuation:

Designation	Values	Description
Participation in safety RAIN	*yes* ***no***	Should channel react to rain alarm?
Start		Start on rain alarm:
	Preset 1	Approach a preset position.
	Preset 2	See Presets parameter page.
	Preset 3	
	Preset 4	
	Preset 5	
	Preset 6	
	Preset 7	
	Preset 8	
	Top end position	Approach an end position.
	Lower end position	
	unchanged (stopped upon operating command)	Do not react. The drive should stop upon safety start during a movement.
End		End on rain alarm:
	same as before safety	move back to the previous position.
	Preset 1	Approach a preset position.
	Preset 2	See Presets parameter page.
	Preset 3	
	Preset 4	
	Preset 5	
	Preset 6	
	Preset 7	
	Preset 8	
	Top end position	Approach an end position.
	Lower end position	
	Update (height/slat)	Approach last received position.
	No response	Do not react.
Participation in safety FROST	*yes* ***no***	Should channel react to frost alarm?
Start		Start on frost alarm:
	Preset 1	Approach a preset position.
	Preset 2	See Presets parameter page.
	Preset 3	
	Preset 4	
	Preset 5	
	Preset 6	
	Preset 7	
	Preset 8	
	Top end position	Approach an end position.
	Lower end position	
	unchanged (stopped upon operating command)	Do not react. The drive should stop upon safety start during a movement.

Continuation:

Designation	Values	Description
End		End on frost alarm:
	same as before safety	move back to the previous position.
	Preset 1	Approach a preset position.
	Preset 2	See Presets parameter page.
	Preset 3	
	Preset 4	
	Preset 5	
	Preset 6	
	Preset 7	
	Preset 8	
	Top end position	Approach an end position.
	Lower end position	
	Update (height/slat)	Approach last received position.
	No response	Do not react.
Response after priority on safety		Priority on safety will be used when the roller blinds or sun protection devices must remain stationary in an end position for a certain time, e.g. for window cleaning. See object 8. This operating mode has the highest priority level.
	Preset 1	Approach a preset position.
	Preset 2	See Presets parameter page.
	Preset 3	
	Preset 4	
	Preset 5	
	Preset 6	
	Preset 7	
	Preset 8	
	Top end position	Approach an end position.
	Lower end position	
	no reaction, unchanged	Do not react.
	Update (height/slat)	Approach last received position.

5.3.6.6 The "*Presets*" parameter page

With the presets, the user can freely configure presettings for drive height and slat position. These can, for example, be called up with *Safety* with *Set or cancel the lock* or when a scene is cancelled.

Table 28

Designation	Values	Description
Preset 1		
Position	*0 %, 10 %, 20 % 30 %, 40 %, 50 % 60 %, 70 %, 80 % 90 %, 100 %, no change*	Desired drive height and slat position for preset 1
Slat	*0 %, 10 %, 20 % 30 %, 40 %, 50 % 60 %, 70 %, 80 % 90 %, 100 %, no change*	
Preset 2		
Position	*See above*	Desired drive height and slat position for preset 2
Slat	*See above*	
Preset 3		
Position	*See above*	Desired drive height and slat position for preset 3
Slat	*See above*	
Preset 4		
Position	*See above*	Desired drive height and slat position for preset 4
Slat	*See above*	
Preset 5		
Position	*See above*	Desired drive height and slat position for preset 5
Slat	*See above*	
Preset 6		
Position	*See above*	Desired drive height and slat position for preset 6
Slat	*See above*	
Preset7		
Position	*See above*	Desired drive height and slat position for preset 7
Slat	*See above*	
Preset 8		
Position	*See above*	Desired drive height and slat position for preset 8
Slat	*See above*	

5.3.6.7 The "*Scenes*" parameter page

This page appears when the *Scenes* are activated on the *Configuration options* parameter page.
Each channel can participate in up to 8 scenes.
Each of these 8 scenes reacts to a specific, freely configurable scene number.
When the associated number is called up, the taught in position will be approached.

Each of the 8 scenes is preconfigured with a position from the Presets page.
When a scene number that has not been taught in is received, this preset position will be called up.

Table 29

Designation	Values	Description
Lock telegram for scenes	***Lock with ON telegram***	0 = Enable 1 = Lock
	Lock with OFF telegram	0 = Lock 1 = Enable **Note:** With this setting the scenes are always locked immediately after reset or download.
All channel scene statuses	***Overwrite on download***	A download deletes all scene memories in a channel, i.e. all previously taught in scenes. When a scene number is called, the channel assumes the configured *Status after download* (see below). See appendix: Teach in scenes without telegrams
	Unchanged after download	All previously taught in scenes are saved. However, the scene numbers the channel should react to can be changed (see below: *Channel reacts to*).
Participation in central scene object	***No*** *yes*	Should the device react to the central scene object?

Continuation:

Designation	Values	Description
Response when unlocking the scene (with scene value 63)		Behaviour when object 6 receives the value 63 ($3F) and thus the current scene is cancelled.
	Preset 1 *Preset 2* *Preset 3* *Preset 4* *Preset 5* *Preset 6* *Preset 7* *Preset 8*	Approach a preset position. See Presets parameter page.
	Top end position *Lower end position*	Approach an end position.
	No response	Do not react.
	Update (height/slat)	Approach last received position.
1st scene - Preallocated preset 1		
Channel reacts to	*No scene number* ***Scene number 1 (value = 0)*** … *Scene number 63 (value = 62)*	First of the 8 possible scene numbers the channel is to react to.
Comment for this scene number	*(Enter name)*	Description or comment for this scene number.
Lock comfort/automatic during this scene	***no***	During this scene the channel continues to react to height and slat telegrams
	yes	During this scene the channel no longer reacts to height and slat telegrams. The Up/Down function is maintained.
Permit teach in	*No*	Scenes can only be called up.
	Yes	The user can both call up and teach in or amend scenes.
2nd scene - Preallocated preset 2		
Channel reacts to	*No scene number* *Scene number 1 (value = 0)* ***Scene number 2 (value = 1)*** … *Scene number 63 (value = 62)*	Second of the 8 possible scene numbers
Comment for this scene number	*(Enter name)*	See above.
Lock comfort/automatic during this scene	***no*** *yes*	See above.
Permit teach in	*No* ***Yes***	See above.

Continuation:

Designation	Values	Description
3rd scene - Preallocated preset 3		
Channel reacts to	*No scene number* *Scene number 1 (value = 0)* … ***Scene number 3 (value = 2)*** … *Scene number 63 (value = 62)*	Third of the 8 possible scene numbers
Comment for this scene number	*(Enter name)*	See above.
Lock comfort/automatic during this scene	***no*** *yes*	See above.
Permit teach in	*No* ***Yes***	See above.
4th scene - Preallocated preset 4		
Channel reacts to	*No scene number* *Scene number 1 (value = 0)* … ***Scene number 4 (value = 3)*** … *Scene number 63 (value = 62)*	Fourth of the 8 possible scene numbers
Comment for this scene number	*(Enter name)*	See above.
Lock comfort/automatic during this scene	***no*** *yes*	See above.
Permit teach in	*No* ***Yes***	See above.
5th scene - Preallocated preset 5		
Channel reacts to	*No scene number* *Scene number 1 (value = 0)* … ***Scene number 5 (value = 4)*** … *Scene number 63 (value = 62)*	Fifth of the 8 possible scene numbers
Comment for this scene number	*(Enter name)*	See above.
Lock comfort/automatic during this scene	***no*** *yes*	See above.
Permit teach in	*No* ***Yes***	See above.
6th scene - Preallocated preset 6		
Channel reacts to	*No scene number* *Scene number 1 (value = 0)* … ***Scene number 6 (value = 5)*** … *Scene number 63 (value = 62)*	Sixth of the 8 possible scene numbers

Continuation:

Designation	Values	Description
Comment for this scene number	*(Enter name)*	See above.
Lock comfort/automatic during this scene	***no*** *yes*	See above.
Permit teach in	*No* ***Yes***	See above.
7th scene - Preallocated preset 7		
Channel reacts to	*No scene number* *Scene number 1 (value = 0)* … ***Scene number 7 (value = 6)*** … *Scene number 63 (value = 62)*	Seventh of the 8 possible scene numbers
Comment for this scene number	*(Enter name)*	See above.
Lock comfort/automatic during this scene	***no*** *yes*	See above.
Permit teach in	*No* ***Yes***	See above.
8th scene - Preallocated preset 8		
Channel reacts to	*No scene number* *Scene number 1 (value = 0)* … ***Scene number 8 (value = 7)*** … *Scene number 63 (value = 62)*	Last of the 8 possible scene numbers
Comment for this scene number	*(Enter name)*	See above.
Lock comfort/automatic during this scene	***no*** *yes*	See above.
Permit teach in	*No* ***Yes***	See above.

5.3.6.8 The "*Positions via 1 bit*" parameter page

This page will only be shown when the *Sun protection* function is **not** activated on the *Configuration options* parameter page.
3 individual preallocated positions can be called up using 1-bit objects (Obj. 40, 41, 42).

Table 30

Designation	Values	Description
Position A		
Response when receiving a 1	*Preset 1* *Preset 2* *Preset 3* *Preset 4* *Preset 5* *Preset 6* *Preset 7* *Preset 8* ***Top end position*** *Lower end position*	Approach a preset position. See Presets parameter page. Approach an end position.
Response when receiving a 0	*Preset 1* *Preset 2* *Preset 3* *Preset 4* *Preset 5* *Preset 6* *Preset 7* *Preset 8* *Top end position* *Lower end position* ***No response*** *Update (height/slat)*	Approach a preset position. See Presets parameter page. Approach an end position. Do not react. Approach last received position.
Position B		
Response when receiving a 1	*See above*	Desired drive height or slat position for position B
Response when receiving a 0	*See above*	
Position C		
Response when receiving a 1	*See above*	Desired drive height or slat position for position C
Response when receiving a 0	*See above*	

5.3.6.9 The "*Power failure and restoration*" parameter page

Table 31

Designation	Values	Description
Response in the event of download and bus failure		After download or with loss of bus voltage...
	Preset 1	Approach a preset position.
	Preset 2	See Presets parameter page.
	Preset 3	
	Preset 4	
	Preset 5	
	Preset 6	
	Preset 7	
	Preset 8	
	Top end position	Approach an end position.
	Lower end position	
	No response	Do not react.
Behaviour after restoration of the mains supply or bus supply		After return of mains or bus voltage...
	Preset 1	Approach a preset position.
	Preset 2	See Presets parameter page.
	Preset 3	
	Preset 4	
	Preset 5	
	Preset 6	
	Preset 7	
	Preset 8	
	Top end position	Approach an end position.
	Lower end position	
	No response	Do not react.

6 Typical applications

These typical applications are designed to aid planning.
They have no claim to completeness and may be adjusted or extended as desired.

6.1 2x switching with push button interface (switch actuator)

2 push buttons are connected to a TA 2 push button interface and they control 2 channels on the RMG 8 T.

6.1.1 Devices:

- RMG 8 T (Order no. 4930200)
- TA 2 (Order no. 4969202)

6.1.2 Overview

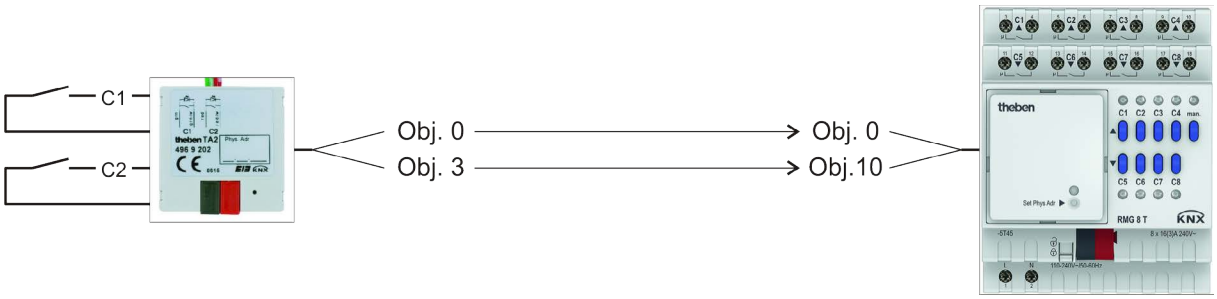


Figure 1

6.1.3 Objects and links

Table 32

No.	TA 2 Object name	No.	RMG 8 T Object name	Comment
0	*Channel 1 switching*	0	*RMG 8 T channel C1 Switch object*	-
3	*Channel 2 switching*	10	*RMG 8 T channel C2 switch object*	-

6.1.4 Important parameter settings

Standard or customer-defined parameter settings apply for unlisted parameters.

Table 33: TA 2

Parameter page	Parameters	Setting
Channel 1	*Channel function*	*Switch/push button*
	Object type	*Switching (1-bit)*
	Response to rising edge	*BY*
	Response to falling edge	*none*
Channel 2	*See channel 1*	

Table 34: RMG 8 T

Parameter page	Parameters	Setting
General	*Type of basic module*	*RMG 8 T*
Basic module: RMG 8 T	*Channel C1 function*	*Switch actuator*
RMG 8 T channel C1: configuration options	*Channel function*	*Switching ON/OFF*
	Activation of function via	*Switch object*
Contact characteristics	*Type of contact*	*NO contact*
RMG 8 T channel C2	*See channel C1*	

6.2 Switching light with service counter and display (switch actuator)

A fluorescent light strip in a hall is controlled by channel C1.
The lamps have to be replaced after 20,000 hours (= service).
The time period to the service and the service status are shown on the VARIA 826 display.

6.2.1 Devices

- RMG 8 T (Order no. 4930200)
- VARIA 824/826 (8249200/8269200)

6.2.2 Overview

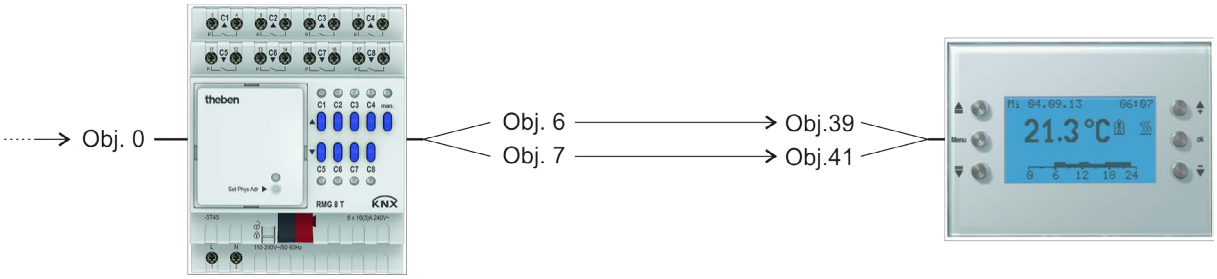


Figure 2

6.2.3 Objects and links

Table 35

No.	KNX sensor Object name	No.	RMG 8 T Object name	Comment
-	*(Switching object)*	0	*Switch object*	Any KNX sensor: Push button, time switch, twilight switch, etc. sends the switch command to RMG 8 T

Table 36:

No.	RMG 8 T Object name	No.	VARIA Object name	Comment
6	*Time to next service*	39	*Counter value 0 ..65535*	Time in hours
7	*Service required*	41	*Switching ON/OFF*	1 = Time has elapsed

6.2.4 Important parameter settings

Standard or customer-defined parameter settings apply for unlisted parameters.

Table 37: RMG 8 T

Parameter page	Parameters	Setting
General	*Type of basic module*	*RMG 8 T*
Basic module: RMG 8 T	*Channel C1 function*	*Switch actuator*
RMG 8 T channel C1: configuration options	*Channel function*	*Switching ON/OFF*
	Activate hour counter	*Yes..*
Contact characteristics	*Type of contact*	*NO contact*
Hour counter and service	*Type of hour counter*	*counter for time period before next service*
	Service interval (0..2000, x10 h)	*200*
	Reporting of time to service when changing (0..100 h, 0 = no report)	*100*
	Report service cyclically	*yes*

Table 38: VARIA 824 / 826

Parameter page	Parameters	Setting
Selection of display pages	*Show page 1 for display objects*	*yes*
Display objects page 1	*Fade in operating instructions on page 1*	*No*
	Page heading	*Lamp maintenance**
Page 1, line 1	*Line format*	*16 bit counter value object type*
	Text for line 1	*Service in**
	Unit for display object	*h*
	Value range	*Negative and positive numbers*
	Display before receipt of value	*Read from object via bus*
Page 1, line 2	*Line format*	*Switch on object type*
	Text for line 1	*Lamp status**
	Text for object value = 0	*OK**
	Text for object value = 1	*Service**
	Display before receipt of value	*Read from object via bus*

*Suggested text

6.3 Simple alarm function with flashing light (switch actuator)

A monitoring device, e.g. flood alarm is connected to a TA 2 push button interface, and it controls a channel on the RMG 8 T.
A lamp flashes in the event of an alarm (channel 1 relay output).

6.3.1 Devices:

- RMG 8 T (Order no. 4930200)
- TA 2 (Order no. 4969202)

6.3.2 Overview

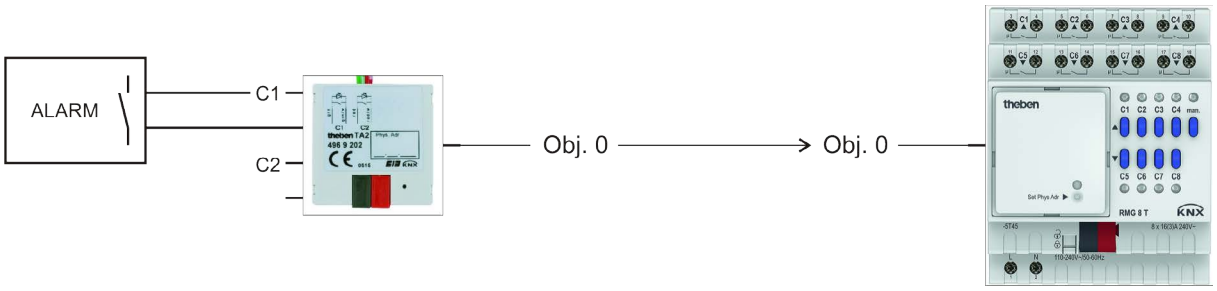


Figure 3

6.3.3 Objects and links

Table 39

No.	TA 2 Object name	No.	RMG 8 T Object name	Comment
0	*Channel 1 switching*	0	*RMG 8 T channel C1 Switch object*	-

6.3.4 Important parameter settings

Standard or customer-defined parameter settings apply for unlisted parameters.

Table 40: TA 2

Parameter page	Parameters	Setting
Channel 1	*Channel function*	*Switch/push button*
	Object type	*Switching (1-bit)*
	Response to rising edge	*On*
	Response to falling edge	*Off*

Table 41: RMG 8 T

Parameter page	Parameters	Setting
General	*Type of basic module*	*RMG 8 T*
Basic module: RMG 8 T	*Channel C1 function*	*Switch actuator*
RMG 8 T channel C1: configuration options	*Channel function*	*Flashing*
	Activation of function via	*Switch object*
Contact characteristics	*Type of contact*	*NO contact*
Flashing	*ON phase:*	
	Hours	*0*
	Minutes	*0*
	Seconds	*1*
	OFF phase:	
	Hours	*0*
	Minutes	*0*
	Seconds	*1*
	How often should it flash	*Until it switches off*

6.4 Basic switching, simple blind controls (blinds actuator)

All channels are configured as blinds actuators and are controlled by the push button interface TA 4.

1 single push button is connected to the push button interface TA 4 for each set of blinds (single-surface operation).
Depending on whether the push buttons are pressed for a short or long time, the push button interface sends UP/DOWN or step/stop telegrams.
The blinds should be raised in the evenings and remain open at night.
For this purpose the time switch TR 648 top2 RC is programmed in such a way that channel 1 sends an Off telegram (astro-pulse) to the central UP-DOWN object.

6.4.1 Devices:

- RMG 8 T (Order no. 4930200)
- TA 4 (Order no. 4969204)
- TR 648 top2 RC-DFC or RC (6489210/6489212)

6.4.2 Overview

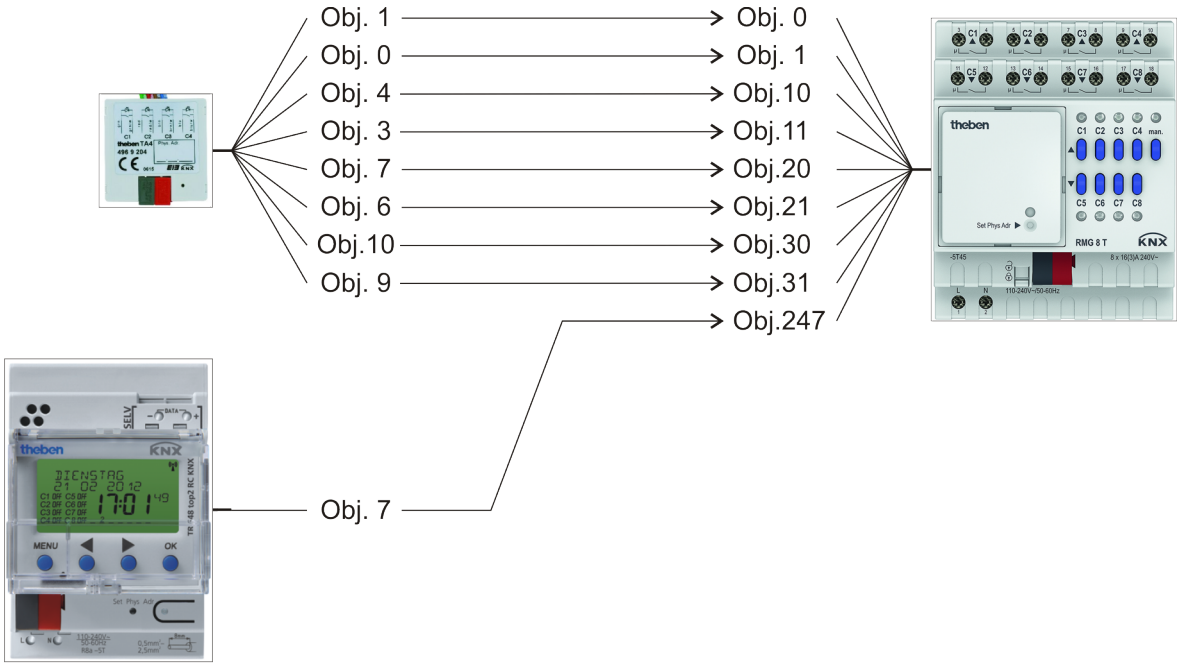


Figure 4

From top to bottom:

- The push button interface: operation by the user (up/down, step/stop).
- The time switch: sends an OFF telegram at sunset as an UP command for all blinds.

6.4.3 Objects and links

Table 42

No.	TA 4 Object name	No.	RMG 8 T Object name	Comment
1	*Blinds channel 1 Up/Down*	0	*RMG 8 T channel C1 Up/Down*	Long keystroke for Up/down operating commands. Short press of push button for Step/stop commands.
0	*Blinds channel 1 Step/stop*	1	*RMG 8 T channel C1 Step/stop*	
4	*Blinds channel 2 Up/Down*	10	*RMG 8 T channel C2 Up/Down*	
3	*Blinds channel 2 Step/stop*	11	*RMG 8 T channel C2 Step/stop*	
7	*Blinds channel 3 Up/Down*	20	*RMG 8 T channel C3 Up/Down*	
6	*Blinds channel 3 Step/stop*	21	*RMG 8 T channel C3 Step/stop*	
10	*Blinds channel 4 Up/Down*	30	*RMG 8 T channel C4 Up/Down*	
9	*Blinds channel 4 Step/stop*	31	*RMG 8 T channel C4 Step/stop*	

Table 43

No.	TR 648 top2 Object name	No.	RMG 8 T Object name	Comment
7	*C1.1 Switching channel - switching*	247	*Central UP/DOWN*	Timer sends an OFF telegram at sunset. All drives are run up.

6.4.4 Important parameter settings

The standard parameter settings apply for unlisted parameters or user's own parameter settings.

Table 44: TA 4

Parameter page	Parameters	Setting
Channel 1.. Channel 4	*Channel function*	*Blinds*
	Operation	*Single-surface operation*

Table 45: RMG 8 T

Parameter page	Parameters	Setting
General	*Type of basic module*	*RMG 8 T*
Basic module: RMG 8 T	*Channel C1 function*	*Blinds actuator*
RMG 8 T	*Type of hanging*	*Blinds*

Table 46: TR 648 top2 KNX

Parameter page	Parameters	Setting
General	*Activate time switch channel C1*	*Yes*
Switching channel C1	*Telegram type C1.1**	*Switch command*
	With clock → ON	*no telegram*
	With clock → OFF	*send following telegram once*
	Telegram	*OFF*

* Channel C1 of the TR 648 top2 time switch is programmed as an Astro channel.
This channel should generate a 1 s long Astro pulse at sunset.
An OFF telegram will be sent when the pulse is switched off.

6.5 Blinds control with sun position tracking and frost alarm (blinds actuator)

Channel 1 is set as blinds actuator.
A push button, which is connected with the binary input TA4, sends the up/down and step/stop commands. The weather station Meteodata 140 controls the slat tilt in accordance with the sun position.
This helps achieve optimal light incidence without direct solar radiation.
The blinds should be raised when there is a danger of frost. The object *Central safety frost* is involved in this.

6.5.1 Devices:

- RMG 8 T (Order no. 4930200)
- Meteodata 140 (order no. 1409200)
- TA 4 (Order no. 4969204)

6.5.2 Overview

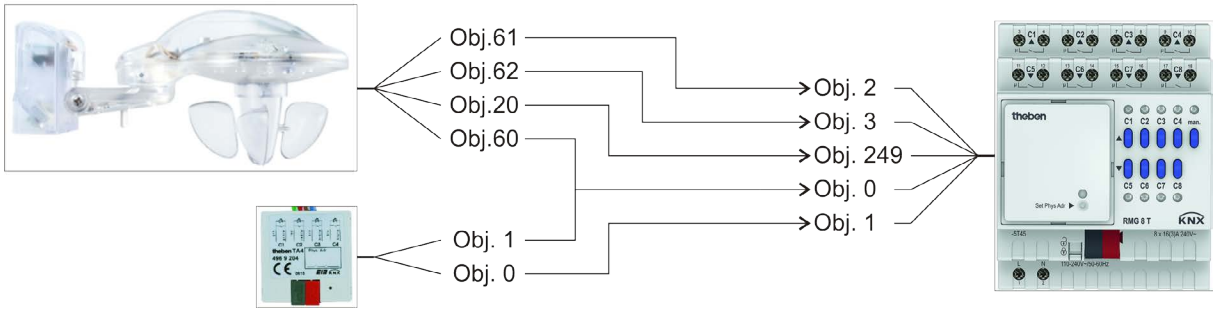


Figure 5

From top to bottom:

- The weather station: sends the telegrams for positioning of the blinds according to the position of the sun.
  If no shading is required, the blinds will be raised (obj. 60).
- The push button interface: operation by the user (up/down, step/stop)

6.5.3 Objects and links

Table 47

No.	Meteodata 140 Object name	No.	RMG 8 T Object name	Comment
20	*C1.1 Switching*	249	*Central safety frost*	The safety telegram is sent by Meteodata (*C1.1 universal channel*).
60	*C11 up/down*	0	*RMG 8 T channel C1 Up/Down*	-
61	*C11 Blinds height*	2	*% Height*	-
62	*C11 Slat position*	3	*% Slat*	-

Table 48

No.	TA 4 Object name	No.	RMG 8 T Object name	Comment
0	*Blinds channel 1 Step/stop*	1	*RMG 8 T channel C1 Step/stop*	Long keystroke for Up/down operating commands. Short press of push button for Step/stop commands.
1	*Blinds channel 1 Up/Down*	0	*RMG 8 T channel C1 Up/Down*	

6.5.4 Important parameter settings

Standard or customer-defined parameter settings apply for unlisted parameters.

Table 49: Meteodata 140

Parameter page	Parameters	Setting
General	*Activate universal channel C1*	*yes*
	Activate sun protection channel C11	*yes*
Universal channel C1: Function	*Channel function*	*Temperature sensor*
	Temperature threshold	*below 4 °C*
	Temperature hysteresis	*1.0 K*
Sun protection channel C11	*Channel controls*	*Blinds*
	Sun position adjustment	*yes..*
	Drive height when brightness threshold is exceeded	*100 %*
Automatic sun function	*Activation of automatic sun function*	*via dimming threshold*
Sun position adjustment	The individual location and user-dependent settings apply here.	

Table 50: RMG 8 T

Parameter page	Parameters	Setting
General	*Type of basic module*	*RMG 8 T*
Basic module: RMG 8 T	*Channel C1 function*	*Blinds actuator*
RMG 8 T channel C1 configuration options	*Type of hanging*	*Blinds*
Safety wind/rain/frost	*Participation in safety wind*	*no*
	Participation in safety rain	*no*
	Participation in safety frost	*yes*
	Start	*Top end position*
	End	*Update (Height/Slat)*

7 Appendix

7.1 Manual mode

This mode can be set or reset with the manual button or via object 78 (manual).
The object can be locked on the General parameter page.
Whether manual mode should be ended after the expiry of a set time can also be defined.

7.1.1 With blinds channels

The positions of the hangings will be frozen.
All non-safety related bus telegrams are disabled, i.e. only the safety commands (on objects 8, 244, 245, 246, 248, 249) can still be executed.

Any current operating commands will be terminated when the specified position or the end position is reached. The condition will be reported to the associated object.

After cancelling manual mode, the bus telegrams work again. Bus events already received will not be obtained later.
Manual mode will be reset after power returns.

7.2 The scenes

7.2.1 Principle

The current status of a channel, or a complete MIX system
can be stored and retrieved as required at a later point via the scene function.

That applies to switching, blinds and dimming channels.
Each channel can participate simultaneously in up to 8 scenes.

This requires permission to access scenes for the relevant channel via parameter.
See Activate scenes parameter and Scenes parameter page.

The current status is allocated to the appropriate scene number when a scene is saved.
The previously saved status is restored when a scene number is called up.

This allows a MIX system to be easily associated with each chosen user scene.

Table 51: Permitted scene numbers

Series	Device	Supported scene numbers
MIX (order no. 4910xxx)	DME 2 S	1 .. 8
	JME 4 S	
	RME 4 S / C-load	
MIX2 (order no. 4930xxx)	RMG/RME 8 S	1 .. 64
	RMG/RME 4 I	
	DMG 2 T/DME 2 T	
	RMG 8 T/JME 4 T	
	RMG 8 T/RME 8 T	

The scenes are permanently stored and remain intact even after the application has been downloaded again.
See All channel scene statuses parameter on the Scenes parameter page.

7.2.2 Call up or save scenes:

To call up or save a scene, the relevant code is sent to the scene object (obj. 243).

Table 52

Scene	Call up		Save	
	Hex.	Dec.	Hex.	Dec.
1	$00	0	$80	128
2	$01	1	$81	129
3	$02	2	$82	130
4	$03	3	$83	131
5	$04	4	$84	132
6	$05	5	$85	133
7	$06	6	$86	134
8	$07	7	$87	135
9	$08	8	$88	136
10	$09	9	$89	137
11	$0A	10	$8A	138
12	$0B	11	$8B	139
13	$0C	12	$8C	140
14	$0D	13	$8D	141
15	$0E	14	$8E	142
16	$0F	15	$8F	143
17	$10	16	$90	144
18	$11	17	$91	145
19	$12	18	$92	146
20	$13	19	$93	147
21	$14	20	$94	148
22	$15	21	$95	149
23	$16	22	$96	150
24	$17	23	$97	151
25	$18	24	$98	152
26	$19	25	$99	153
27	$1A	26	$9A	154
28	$1B	27	$9B	155
29	$1C	28	$9C	156
30	$1D	29	$9D	157
31	$1E	30	$9E	158
32	$1F	31	$9F	159

Continuation:

Scene	Call up		Save	
	Hex	Dec.	Hex	Dec.
33	$20	32	$A0	160
34	$21	33	$A1	161
35	$22	34	$A2	162
36	$23	35	$A3	163
37	$24	36	$A4	164
38	$25	37	$A5	165
39	$26	38	$A6	166
40	$27	39	$A7	167
41	$28	40	$A8	168
42	$29	41	$A9	169
43	$2A	42	$AA	170
44	$2B	43	$AB	171
45	$2C	44	$AC	172
46	$2D	45	$AD	173
47	$2E	46	$AE	174
48	$2F	47	$AF	175
49	$30	48	$B0	176
50	$31	49	$B1	177
51	$32	50	$B2	178
52	$33	51	$B3	179
53	$34	52	$B4	180
54	$35	53	$B5	181
55	$36	54	$B6	182
56	$37	55	$B7	183
57	$38	56	$B8	184
58	$39	57	$B9	185
59	$3A	58	$BA	186
60	$3B	59	$BB	187
61	$3C	60	$BC	188
62	$3D	61	$BD	189
63	$3E	62	$BE	190
64	$3F	63	$BF	191

Examples (central or channel-related)**:**

Select status of scene 5:
→ Send $04 to the relevant scene object.

Save current status with scene 5:
→ Send $84 to the relevant scene object.

7.2.3 Teach in scenes without telegrams (MIX2 ONLY)

Instead of defining scenes individually by telegram, this can be done in advance in the ETS. This merely requires the setting of the *All channel scene statuses* (*Scenes* parameter page) to *Overwrite at download*.

Accordingly, the required status can be selected for each of the 8 possible scene numbers in a channel (= *Status after download* parameter).
The scenes are programmed into the device after the download has been completed.

Later changes via teach in telegrams are possible if required and they can be permitted or locked via a parameter.

7.3 Conversion of percentages to hexadecimal and decimal values

Percentage value	**0%**	**10%**	**20%**	**30%**	**40%**	**50%**	**60%**	**70%**	**80%**	**90%**	**100%**
Hexadecimal	00	1a	33	4D	66	80	99	B3	CC	E6	FF
Decimal	00	26	51	77	102	128	153	179	204	230	255

All values from 00 to FF hex. (0 to 255 dec.) are valid.