## Technical Documentation





The time switch (weekly contact-making clock) is a series installation unit with an integrated bus coupling unit suitable for installation in distribution systems. The connection to the EIB is produced via a bus connector.

The time switch offers the following: 36 captive switching times, which can be programmed on one, several or all weekdays through the formation of free blocks. At delivery, the time switch is pre-programmed with the valid Central European time change rules for automatic changeovers for summer and winter time and the current time. If different time change rules or no rules are required, then these can be re-programmed in accordance with the Operating Instructions.

Switching (make contact), priority and dim or value telegrams can be set on any channel at predefined times.

#### **Database structure:**

Gebr. Berker

III Time switch



Time switch 2gang RMD

### Application summary:

· Switching, value transmitter, forced guidance

#### **Technical Data**

Number of channels: 2
Memory areas: 36

Automatic program: Daily and weekly program

**Custom program:** Holiday circuit to interrupt automatic programs on both channels for

a duration of between 1 and 99 days with pre-selection between 0

and 99 days

Manual possibilities for intervention: - Temporary manual shifting

- Continuous manual shifting

Minimum time between switching

operations:

1 minute

Switching precision: 1 second

Formation of blocks: Free block formation of weekdays

Switching from summer to winter time: Automatic

Voltage supply:Via bus voltagePower consumption:2 mA + BCU

Time basis: Quartz

Accuracy: < 1sec./day at 20 °C

**Power reserve:** > 6 years with fully operational display (Temp. 20°C)

Permitted ambient temperature: -10°C to +50°C

**Display:** Liquid crystal display (time, weekday, summer/winter time, holiday

program, switching mode and manual operations)

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Operating elements: 7 touch controls for setting weekday, hour, minute, time, inputting

programs and 2 manual operations

Safety class: II as per EN 60335 when installed

Protection class: IP 20 as per EN 60529

Assembly: On DIN rail

**Housing dimensions:**  $45 \times 35.8 \times 60 \text{ mm (H/W/D)}$ 

RMD-width 2 Units

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### Application: Switching , value transmitter, forced guidance

Application	Function	
Switching , value transmitter, forced guidance	A selection can be made between the following types of telegrams on each of the 2 channels:  Switch telegram (1 Bit) Forced guidance (priority) telegram (2 Bit) Dimming or value transmitter telegram (8 Bit) Option to select cyclic transmission	
	A light scene with up to 4 different telegram types is also possible for every channel. As a result, various types of actuators or actuator groups can be addressed (switch / dim / shutter actuators) at one switching time. There is also the possibility of suppressing the send response for a channel via a blocking object.	

#### **Communications objects:**

Obj.	Name	Function	Туре	Response
0	Input 1 - scene object 1	Switching	1 Bit	Send
0	Input 1 - scene object 1	Value transmitter	8 Bit	Send
0	Input 1 - scene object 1	Forced guidance	2 Bit	Send
1	Input 1 - scene object 2	Switching	1 Bit	Send
1	Input 1 - scene object 2	Value transmitter	8 Bit	Send
1	Input 1 - scene object 2	Forced guidance	2 Bit	Send
2	Input 1 - scene object 3	Switching	1 Bit	Send
2	Input 1 - scene object 3	Value transmitter	8 Bit	Send
2	Input 1 - scene object 3	Forced guidance	2 Bit	Send
3	Input 1 - scene object 4	Switching	1 Bit	Send
3	Input 1 - scene object 4	Value transmitter	8 Bit	Send
3	Input 1 - scene object 4	Forced guidance	2 Bit	Send
4	Input 2 - scene object 1	Switching	1 Bit	Send
4	Input 2 - scene object 1	Value transmitter	8 Bit	Send
4	Input 2 - scene object 1	Forced guidance	2 Bit	Send
5	Input 2 - scene object 2	Switching	1 Bit	Send
5	Input 2 - scene object 2	Value transmitter	8 Bit	Send
5	Input 2 - scene object 2	Forced guidance	2 Bit	Send
6	Input 2 - scene object 3	Switching	1 Bit	Send
6	Input 2 - scene object 3	Value transmitter	8 Bit	Send
6	Input 2 - scene object 3	Forced guidance	2 Bit	Send
7	Input 2 - scene object 4	Switching	1 Bit	Send
7	Input 2 - scene object 4	Value transmitter	8 Bit	Send
7	Input 2 - scene object 4	Forced guidance	2 Bit	Send
8	Week time switch	Lock telegram reception	1 Bit	Send

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Max. number of communication objects:9Max. number of group addresses:11Max. number of associations:11

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### Parameter description:

Scene objects		
Number of scene objects	1 scene object	Setting for how many light scene objects will be
for input 1	2 scene objects	created for input 1.
	3 scene objects	
	4 scene objects	
Number of scene objects	1 scene object	Setting for how many light scene objects will be
for input 2	2 scene objects	created for input 2.
	3 scene objects	·
	4 scene objects	

### Parameters for the input function: Switching

Input x - scene object y		
Function	Switching Value transmitter Forced guidance	Setting governing whether a switching (1 bit), value transmitter(8 bit) or forced guidance telegram (2 bit) needs to be sent via the channel.
Transmission at OFF command of clock	YES NO	Setting governing whether a telegram or no telegram has to be sent after clock transmits OFF telegram.
Transmits switch telegram	OFF ON	This parameter appears if a switch telegram is to be sent. Setting governs whether a "0" or a "1" telegram will be sent when the clock channel transmits OFF telegram.
Transmission at ON command of clock	YES NO	Setting governing whether a telegram or no telegram has to be sent after clock channel transmits ON telegram.
Transmits switch telegram	OFF ON	This parameter appears if a switch telegram is to be sent. Setting governs whether a "0" or a "1" telegram will be sent when the clock channel transmits ON telegram.
Cyclic transmission ?	NO YES	Setting governs whether the telegram is only sent to the bus when clock channel makes contact or cyclically.
Lock function ?	NO YES	Setting governs whether the send object should ignore the receiving of a blocking telegram ("1" telegram to object "Lock telgram received") or not.
Command at beginning of lock function	Send no telegram Send telegram	Setting governs the send response if the blocking telegram is to be observed.

### Parameters for the input function: Value transmitter

Input x - scene object y		
Function	Switching Value transmitter Forced guidance	Setting governing whether a switching (1 bit), value transmitter(8 bit) or forced guidance telegram (2 bit) needs to be sent via the channel.
Transmission at OFF command of clock	YES NO	Setting governing whether a telegram or no telegram has to be sent after clock transmits OFF telegram.
Transmits value (0255)	0 255	Parameter appears if a value telegram is to be sent. Setting governs which value will be sent when the clock channel breaks contact.
Transmission at ON command of clock	YES NO	Setting governing whether a telegram or no telegram has to be sent after clock transmits ON telegram.

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		telegram.
Transmits value (0255)	0 255	Parameter appears if a value telegram is to be sent. Setting governs which value will be sent when the clock channel breaks contact.
Cyclic transmission ?	NO YES	Setting governs whether the telegram is only sent to the bus when clock channel makes contact or cyclically.
Lock function ?	NO YES	Setting governs whether the send object should ignore the receiving of a blocking telegram ("1" telegram to object "Lock telegram received") or not.
Command at beginning of lock function	Send no telegram Send telegram	Setting governs the send response if the blocking telegram is to be observed.

### Parameters for the input function: Forced guidance

Input x - scene object y		
Function	Switching Value transmitter Forced guidance	Setting governing whether a switching (1 bit), value transmitter(8 bit) or forced guidance telegram (2 bit) needs to be sent via the channel.
Transmission at OFF command of clock	YES NO	Setting governing whether a telegram or no telegram has to be sent after clock transmits OFF telegram.
Transmits forced guidance telegram	Forced guidance OFF Forced guidance ON,actuator OFF Forced guidance ON,actuator ON	This parameter appears if a switch telegram is to be sent. Setting governs whether a forced guidance telegram will be sent when the clock transmits OFF telegram.
Transmission at ON command of clock	YES NO	Setting governing whether a telegram or no telegram has to be sent after clock channel transmits ON telegram.
Transmits forced guidance telegram	Forced guidance OFF Forced guidance ON,actuator OFF Forced guidance ON,actuator ON	This parameter appears if a switch telegram is to be sent. Setting governs whether a forced guidance telegram will be sent when the clock transmits ON telegram.
Cyclic transmission ?	NO YES	Setting governs whether the telegram is only sent to the bus when clock channel makes contact or cyclically.
Lock function ?	NO YES	Setting governs whether the send object should ignore the receiving of a blocking telegram ("1" telegram to object "Lock telegram received") or not.
Command at beginning of lock function	Send no telegram Send telegram	Setting governs the send response if the blocking telegram is to be observed.

Cycle time		
Time for all cyclic sending objects	approx. 2.5 min approx. 5 min approx. 10 min approx. 15 min approx. 20 min approx. 30 min approx. 45 min approx. 60 min	Setting for cycle time used for sending repeat telegrams to the bus. This parameter applies for all send objects for which the send response "Cyclic transmission" has been set.

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#### **Functional properties**

A select can be made from among the following telegram types on each of the 2 channels:

- Switch telegram (1-Bit)
- Forced guidance (priority) telegram (2-Bit)
- Dimming or value telegram (8-Bit)

Cyclical transmissions can be selected for each channel, however a mutual timer controls this. There is also the possibility to address a blocking object, to suppress the clock's contact making program via the bus. The parameters can be used to set whether the blocking object will have an affect on the send response for the individual channel objects. If this is the case, optionally setting the blocking object once for every channel objects triggers whether a telegram corresponding to the break contact command from the clock or the make contact command from the clock will be sent. No further telegram will subsequently be sent to the corresponding channel object. If the blocking object is reset again, then the current status of the channel object will be sent to the bus immediately.

#### Possible applications

- Ideal application for a one family house or smaller EIB projects
- Up to four telegrams can be sent to the bus over one channel during one switching period (e.g. at end of workday: switch off main lighting, move down shutter, lower room temperature, lock outside door)

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