Operating Instructions TASU/2 QRTuZHTuH TASU/2 digi 42

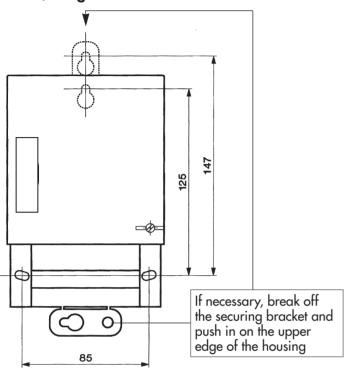
WA-EKF 3268/01.97/S:MMS/D:Bau/80.10.0781.7

1. Assembly

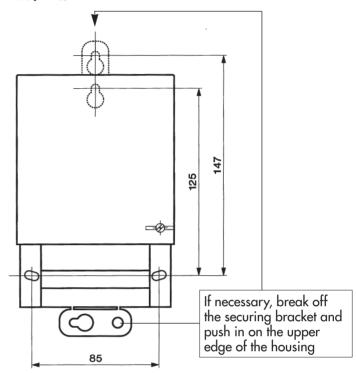
The time switch has the classical 3-point fastening facility

- a) On the counter field
- b) On the terminal cover in accordance with DIN 43857 Part 5

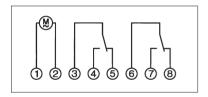
TASU/2 digi 42



TASU/2 QRTuZHTuH



2. Connection See unit sticker / circuit diagram



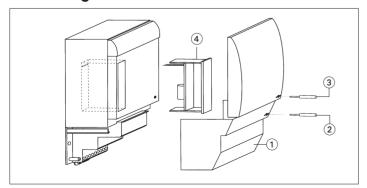
After connecting correctly, attach the terminal cover ① and tighten the sealing screw ②. After setting and programming the switching times, attach the transparent cover on the upper edge of the housing, tilt it downwards and secure with the sealing screw ③. Both housing sections can be fitted, sealed and opened independently of each other.

The accumulator ④ (plug-in unit) can be replaced if necessary. Only accumulators of the corresponding type can be exchanged. See sticker on the unit.

! Exchange the accumulator with care !

Hold it securely at the top and bottom ends and pull it out.

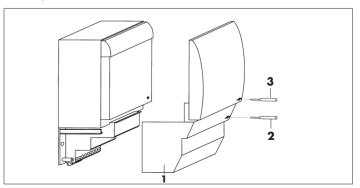
TASU/2 digi 42



Note

Electrical appliances may only be installed and assembled by a skilled electrician. The term "skilled electrician" is defined in VDE 0105. Grässlin time switches are largely protected against external interference.

TASU/2 QRTuZHTuH

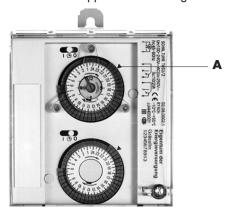


However, if interference still occurs, measures to counter voltage peaks can be taken with common components (varistors, suppressor diodes). Particular attention must be paid to this when inductive loads are being switched.

Operating the time switch TASU/2 QRTuZHTuH

Approximate setting

Turn the switching dial in the direction of the arrow until the current time is almost opposite the marking arrow A (here: 7.45).



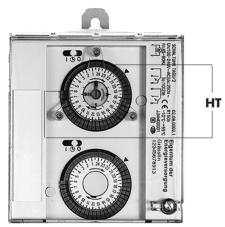
Fine setting

Continue to turn the minutes pointer in the direction of the arrow until the current time is opposite the marking arrow A (here: 9.00).



Einstellung Schaltzeiten

Niederdrücken der Schaltsegmente 6.00 HT ein, 22.00 HT aus



Technical data

Connection: Switching capacity: Ambient temperature:

Protection class:

Accuracy:

Depending on the temperature

change

Running reserve: Accumulator: Charging duration: Programmable every:

Protection type: Standard: see unit sticker see unit sticker -20 °C to +55 °C

Ш

typ ± 1 sec./day at ± 20 °C

150 h Replaceable 70 h 15 minutes IP 51

DIN EN 61038 (IEC 1038)

Operating Instructions TASU/2 digi 42

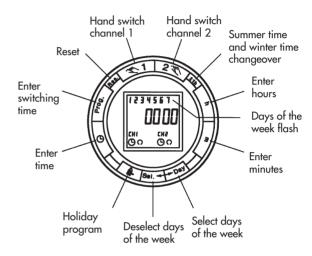
The steps marked with the symbol
are necessary to carry out a switching program.

▶ 1.1 Reset

Press the **"Res"** key with a pencil or similar object. This sets the time switch to its basic setting.

- before every restart
- to delete all switching times and the time (with the exception of the standard program)

The following appears after approximately 2 seconds:



► 1.2 Entering the time and current day of the week

- 1 After pressing the "Res" key (see 1.1):
- 2 During the summer time period: press the "±1h" key once.
- 3 Keep the "" key pressed during steps 4, 5, 6
- 4 With the "h" key: enter the hours
- **5** With the "m" key: enter the minutes
- **6** With the "Day" key: enter the current day 1 = Mo...7 = Su
- Release the "O" key

The colon now flashes at one second intervals.

Note:

If the **"h/m"** keys are pressed for longer than 2 seconds, the display will enter fast-forward scroll mode.

► 1.3 Entering the time and current day of the week

42 memory locations are available.

Each switching time occupies 1 memory location.

- Keep pressing the "Prog." key until a free memory location "--: --" is shown in the display.
- ② Select the switching functions "◎" (ON) or "○" (OFF) with the "ॐ" key for channel 2.
- 3 With the "h" key: enter the hours
- 4 With the "m" key: enter the minutes

If a switching command is to be executed every day, proceed with step **3**. If 1 switching command is to be executed **only on one day or on certain days** skip step **3** and continue with step **3**.

- **5** Save with the **"Prog."** key
 - or
- With the "Day" key, select 1 day on which the switching command is not to be carried out (cursor flashes)
- O Confirm this day with the "Sel." key (day of the week and cursor flash)
- 8 Press the "Day" key (day is deselected).

Repeat steps **6**, **7** and **8** for every day to be deselected.

Save with the "Prog." key (the next free memory location is displayed)

10 Save with the "O" key.

The time switch goes over to automatic mode and displays the current time.

Begin every additional switching time and the associated \odot = ON or \bigcirc = OFF again with 1.3.

Note:

If an input is incomplete, the segments still not selected are displayed flashing.

If you have deselected a day on which the switching command should be carried out:

- Reselect the deselected day with the "Day" key (day of the week and cursor flash).
- 2 Confirm this day with "Sel." (cursor flashes).
- 3 Press the "Day" key (day is reselected).
- Save with the "Prog." key (the next free memory location is displayed)

OI

6 Save with the "O" key

1.4 Free channel block formation

On the two channel version, one timed instruction space can be used to enter a switching command (ON or OFF) for channel 2, **or both channels if required.**

2. Additional functions

2.1 Manual switch "

The current switching state can be changed at any time with the "" key for channel 2. Use of this manual override facility does not alter any of the programmed information.

Automatic Mode ©	Manual Mode	Continuous Operation
©	○ ◆ = OFF	= Continuous ON
© ∩ = OFF		= Continuous OFF
The switching times correspond to the entered program.	If the current switching state is changed manually, the next switching command is again executed automatically according to the entered switching program	The ouput will remain fixed ON (a) or fixed OFF (c) as selected indefinitely until the "%" key is used to restore the timed function.

2.2 Reading the programmed switching times

- Press the "Prog." key several times:
 - displays all entered switching times starting with the first memory location.
 - the first free memory location "--:-" is then displayed.
 - the number of memory locations still free is then displayed

If the memory locations are occupied, the following appears in the display: "FR $\rm IM$ "

2 Press the "O" key:

The time switch changes to automatic mode and displays the current time.

2.3 Changing the programmed switching times

- Keep pressing "Prog." the key until the switching time to be changed is displayed.
- 2 The new data can the be entered as described in Point 1.3.

Note on saving switching times:

If programming is **not** completed with the "O" key after the switching time is entered (1.4), the complete switching command is still automatically saved after approximately io seconds. The time switch then changes to automatic mode and shows the current time again.

2.4 Deleting individual switching times

- Keep pressing the "Prog." key until the switching time to be deleted is displayed.
- 2 Set to "--" with the "h" or "m" key and keep the "O" key pressed for about 3 seconds.

The switching time is deleted and the current time is displayed after the key is released.

2.5 AM/PM time display

If the "**±1h**" key and the **"h"** key are pressed simultaneously, the time display is switched to AM/PM mode (used mainly in English-speaking countries).

2.6 Manual summer time and winter time setting Manual summer time and winter time setting

• Press the "±1h" key once.

Automatic summer time/winter time changeover The following 3 changeover variants are available:

AU (Automatic) = fixed changeover

The S/W time changeover is performed on the basis of a predefined calendar program which is permanently programmed up until the year 2079 and **cannot** be changed.

(Statutory summer time ruling of the European Union and Switzerland).

Start of summer time: Always the last Saturday in March.

The hour is advanced by one hour from 2 to 3.

End of summer time: Always the last Saturday in October. The hour is moved back by one hour from 3 to 2.

cHA (calculated semi-automatic) = freely selectable changeover with weekday reference

You enter the valid summer time starting date for your country (e.g. date of the last Friday in April of the current calendar year) and also the date on which summer time ends (e.g. date of the first Tuesday in October of the current calendar year).

The program automatically assigns to this date the correct day of the week (in this case Friday and Tuesday).

In the subsequent years, the time changeover always takes place on the calculated day of the week, irrespective of the date (in this case the last Friday in April and the last Tuesday in October).

HA (semi-automatic) = freely selectable changeover with date reference

You enter the valid summer time starting and end dates for your country. In the subsequent years, the time changeover always takes place on the same date.

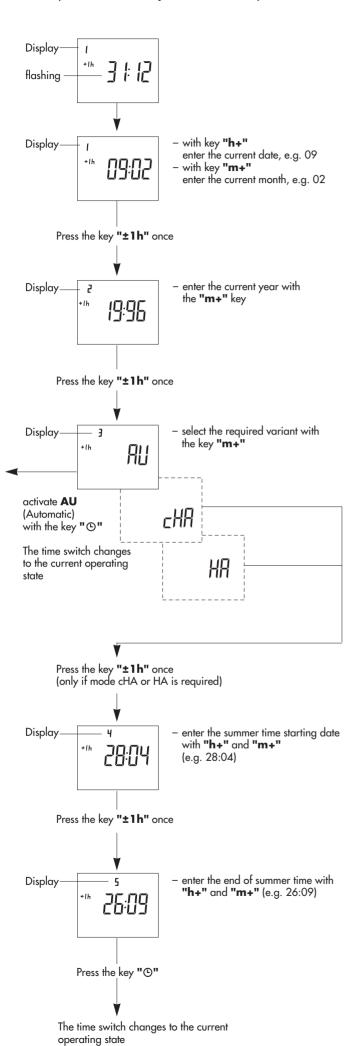
Activation of the automatic summer time/winter time changeover function

A requirement for the automatic S/W time changeover is, that the current date is entered.

If the time switch is set to AM/PM, the month is set with the key "h+" and the date is set with the key "m+".

Entering the current date

Press the keys "±1h" and ">Day" once simultaneously.



2.7 Holiday program 🖦

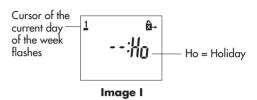
The holiday program has priority over the standard week program. The holiday program can only be entered if all seven days of the week (1234567) are selected.

Entering switching times as described under 1.3

The "key must be pressed for eauch switching time. Next save the holiday switching times with the "Prog" or "O" key.

Entering the start and duration of the holiday program

- After entering the switching times for the holiday program
- 2 Press the "O" key once. The following image appears:



3 If the holiday program is to start on a different day to the current one – max. 6 Tdays ahead – use the **"Day"** key to select the day on which the holiday program is to commence.

If the holiday program is to be executed for up to max. 99 days, continue with steps 4+6.

If the holiday program is to be executed for an unlimited period, leave out step 4 and continue with step 5.

- 4 Enter the required number of holiday days with the "Sel." key (1 to max. 99).
- **5** Press the "O" key to save the entries.

If the current day of the week was entered as the holiday program start, the following appears:

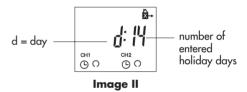


Image II remains until the holiday days have passed, for example d:10, d:09, d:08 etc.

Pressing the " $\mbox{@"}$ key again and holding it down now allows the day of the week, the time and the **current** switching state – " $\mbox{@"}$ = ON or " $\mbox{O"}$ = OFF – to be checked.

If a day of the week other than the current day was entered as the holiday program start, the current time is displayed after the "O" key is pressed. The holiday program is then started at midnight at the start of the selected day of the week and its duration is displayed (Figure II). After the programmed holiday days have expired, the current time

Aborting the holiday program prematurely

If the holiday program has already started:

● Press the " 🏔→" key once

appears in the display.

If the holiday program has not yet started:

● Press the " 🏔 " key twice

3. Technical data

Connection see unit imprint Switching capacity see unit imprint $-10\,^{\circ}\text{C}$ to $+55\,^{\circ}\text{C}$ Ambient temperature 150 h at +20°C Running reserve Memory locations 42 1 min. Shortest switching time Programmable every minute IP 20 Protection