

TR-CONTROL

Remote Control and Room Thermostat



Technical Document

Installation and Operating Guide

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Applications

- ▶ Remote control and room thermostat for the CONTROL 601/701 controller



1 Operation



The buttons on the TR-CONTROL unit illustrated above perform the following functions:

Button	Function on the TR-CONTROL
▷	Next menu item, you can return to the main menu by pressing buttons ◀ and ▶ at the same time
◀	Previous menu item, you can return to the main menu by pressing buttons ◀ and ▶ at the same time
+	Increase or alter the displayed setting value
-	Reduce or alter the displayed setting value
◀ P	Return to the main menu and select functions "Airing, Party Switch, Raise, Lower and Hot Water Backup Heating Extra Comfort"
OK	The OK button confirms and saves your setting. You can also press this button to go to the next menu level after the prompt.

2 Assigning Heating Circuits

Room Thermostat Active:
Yes / No

If you have set "Room Thermostat Active: Yes", the following setting values will appear in the "Heating Input" menu of the CONTROL 601/701 unit:

Regulate the heating circuit via the TR-CONTROL?

If you confirm this menu item with OK, the display on the CONTROL 601/701 unit will show "Please set TR-CONTROLS".

On the CONTROL 601, confirm with the OK button to assign the heating circuit.

On the CONTROL 701, you must assign the relevant heating circuit to each individual TR-CONTROL.

TR-CONTROL for:
heating circuit 1

Press the + or – button to select the appropriate heating circuit. You must repeat this process separately for each TR-CONTROL. After you have assigned the TR-CONTROL addresses, press the P button (◀ P) to return to the main menu.

► **NOTE:**

You can assign only one TR-CONTROL to each heating circuit.

On the CONTROL 701 you can assign a TR-CONTROL to each heating circuit, but you may only assign each address (e.g. heating circuit 1) once.

3 Menu Structure and Functions

The TR-CONTROL can be used as a remote control and features an integrated room thermostat which can be connected to the CONTROL 601/701.

3.1 Menu structure

The TR-CONTROL and CONTROL 601/701 have identical menu structures. The user menu can also be activated via the P button (◀ P) on the TR-CONTROL.

3.2 Setting values

Once you have assigned the TR-CONTROL, you can set the parameters for the user menu in "Heating Circuit Input".

On the CONTROL 701 you can select "Individual Heating Circuit Settings: Yes" in the "Heating Input" menu. The following menu items will be displayed for each of the heating circuits (1 to 3) and can set separately for each circuit.

Heating off at
0...20 K via room target

In this menu you can enter the difference between the target room temperature and actual room temperature at which the boiler, boiler pump and heating circuit pump are switched off and the mixer valve is closed. On a CONTROL 701 with multiple TR-CONTROLS, the boiler and boiler pump are not shut down until all TR-CONTROL units have issued the shutdown command. The default setting for the switching hysteresis is 0.5 K.

If you do not want to switch the heating system off completely (e.g. if you have set "Heating off at 20 K via room target"), you can still reduce the system temperatures in the heating circuits to the calculated inflow temperature when daytime or night temperature drop is selected.

Example:

Room thermostat:	Yes
Heating:	Off at <u>1</u> K via room target
Room temperature required:	20°C

When the target room temperature of 21 °C is reached in the reference room for the heating circuit, the boiler, boiler pump and heating circuit pump are switched off and the mixer valve is closed. If another TR-CONTROL for a different heating circuit is connected to a CONTROL 701, the boiler and boiler pump are shut down only if both reference rooms have reached the relevant target room temperature. The heating is switched on again when the temperature in the reference room reaches 20.5 °C.

Temperature raising
at: 0...40 °C

Temperature raising
for: 0.5...12 h

In this menu you can set an increase in room temperature for a specific time period.

Temperature dropping
at: 0...40 °C

Temperature dropping
for: 0.5...12 h

In this menu you can set a reduction in room temperature for a specific time period.

Airing TR target:
0...30 °C

In this menu you can set the minimum room temperature at which the heating system must switch on again.

Wall Correction:
-10...+10 °C

In this menu you can correct the room temperature measurement.

3.3 User menu



Main Menu 15:00
Tk: 80°C TR:20°C

Press the P button to go to the main menu in which the collector temperature and room temperature are displayed on the TR-CONTROL. If you press the P button again, you will switch from the main menu to the user functions listed below.

You also use the P button to scroll through the user menu.

Airing?

The airing function is activated when you press the OK button. The heating circuit pump is switched off and the mixer valve closed when airing is active. If the temperature drops below the programmed target room temperature (Airing TR target), the airing function is deactivated and the heating system resumes normal operation.

Party switch:
Off

If the party switch is set to "On" during the night temperature drop period, the temperature drop is delayed until the party switch is set to "Off" again. If the party switch is not deactivated, the night temperature

drop does not become operative until the following night.

► **NOTE RELATING TO CONTROL 701:**

When " Individual Heating Circuit Settings" is set to:

Yes": The relevant TR-CONTROL unit applies the "Airing" and "Party switch" functions to the assigned heating circuit.

No": The relevant TR-CONTROL unit applies the "Airing" and "Party switch" functions to all heating circuits.

Lowering
60 min to 18°C

You can reduce the temperature of the relevant reference room by confirming this option with the OK button. At the end of the programmed time period, the heating system will resume normal operation.

Raising
60 min to 22 °C

You can increase the temperature of the relevant reference room by confirming this option with the OK button. At the end of the programmed time period, the heating system will resume normal operation.

Hot Water Backup Heating Extra
Comfort Temp 65°C

If you confirm this option with the OK button, the target temperature for the hot water backup heating is increased on a one-off basis to the programmed value. This function provides an extra comfortable hot water temperature. This function is active even when the timer switch is off.

► **NOTE:**

To manually deactivate user functions, you must press one of the arrow buttons (< or >) or the P button (◀ P) and then confirm by pressing the OK button. The TR-CONTROL unit continues to display an active user function until the function is automatically or manually deactivated again.

4 Remote Monitoring and Setting the CONTROL 601/701 via the TR-CONTROL

All functions activated in the CONTROL 601/701 can be programmed from the TR-CONTROL. The temperature and performance input can also be monitored.

► **NOTE:**

The functions of the CONTROL 601/701 are described in detail in the Technical Documentation and the Installation and Operating Guide.

5 Installing the TR-CONTROL

► **NOTE**

The unit must always be installed by a properly trained and qualified electrician. The system must always be isolated from the supply before installation work commences. The manufacturer does not accept liability for units which have not been installed correctly.

- It is easy to remove the top section of the housing by applying slight pressure at the top and bottom and pulling the base section at the same time.
- Use screws to attach the base section to the required position on the wall.
- After the top housing section has been latched onto the base and the controller connection made, the supply voltage to the controller can be switched on.
- The TR-CONTROL must then be assigned to the heating circuit, see page 2.
- The TR-CONTROL settings can now be programmed.

5.1 "Bus Term" jumper

The "Bus Term" jumpers must be inserted on the CONTROL 601 and the TR-CONTROL. See Figures 4 and 5.

With a CONTROL 701, it is possible to connect a separate TR-CONTROL for each heating circuit. In this case, the TR-CONTROLS must be wired up in a line. The "Bus Term" jumpers need only be inserted in the CONTROL 701 and the last bus node (last TR-CONTROL in the line); the jumpers on the other nodes (centre TR-CONTROL in line) must be removed. See Figures 4 and 6.

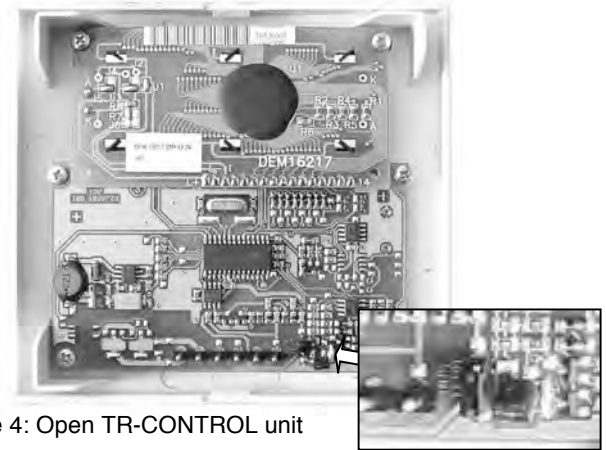


Figure 4: Open TR-CONTROL unit

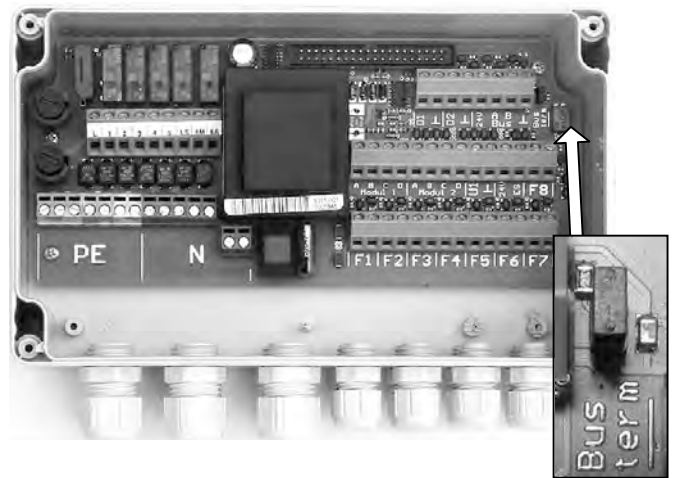


Figure 5: Open CONTROL 601 unit

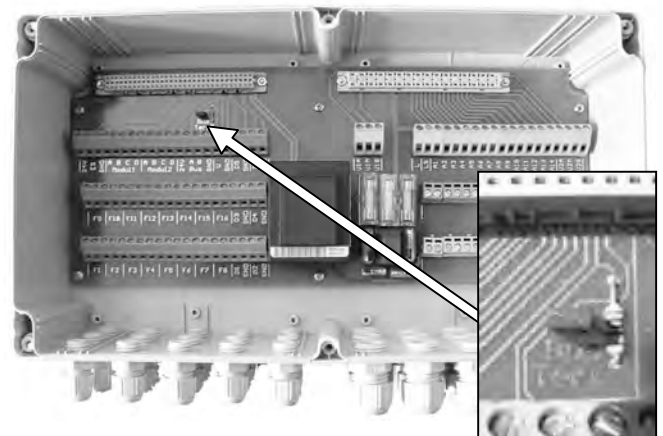


Figure 6: Open CONTROL 701 unit

6 Technical Data

6.1 Housing dimensions:

118 x 111 x 28 mm

6.2 Terminal designations on TR-CONTROL

The terminal numbering refers to the labelling in the base section of the housing.

Term. No.	Description
1	BUS- A
2	BUS- B
3	+24V supply via appropriate terminal in the CONTROL 601/701
4	0V supply (GND) via appropriate terminal in the CONTROL 601/701
5	Not used, do not attach cable to terminal
6	Not used, do not attach cable to terminal

► NOTE:

The information specified in this Technical Documentation does not claim to be complete and is not a substitute for proper planning and configuration. Subject to technical changes and errors.

Technical Hotline: 0700-CONSOLAR
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Normal Telecom rate

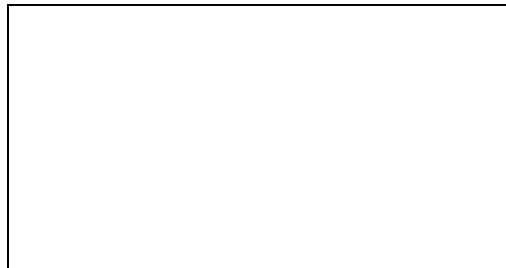


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