

TRS3 Controller for One Heating Circuit

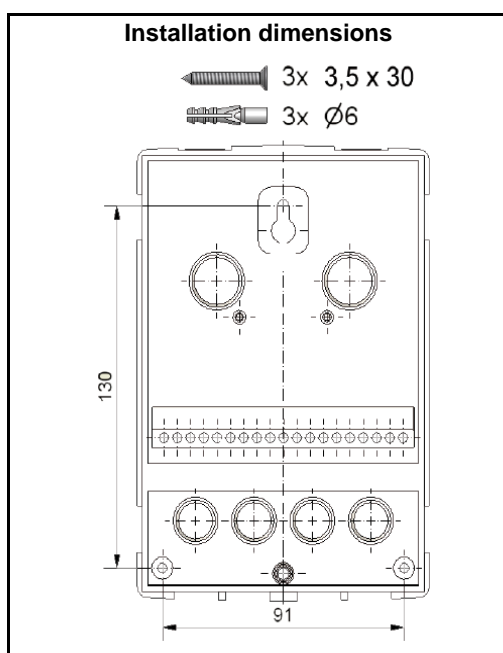


Main features	
Application	control of 1 mixed heating circuit
Purpose	It controls 4 outputs and 4 inputs (3 Pt1000 temperature sensors and 1 room unit)
Code	9 055

Electric data	
Power voltage	230 V AC
Power frequency	50 - 60 Hz
Power input	2 VA
Internal fuse	2 A/250 V, slow-blow
IP rating	IP40
Protection class	II

Energy efficiency data (as per EC Regulation No. 813/2013)	
Class of controller	VII
Correction factor	3.5%

Inputs and outputs	
Mechanical relay	460 VA for AC1/185 W for AC3
Pt1000	temperature range -40 to 300 °C
LAN connection	CAN Bus



Number of inputs and outputs	
Mechanical relay	3 x (R1/R2/R3)
0 -10 V	1 x (V1)
Pt1000	3 x (S1 to S3)
Room control unit	1 x (S4)

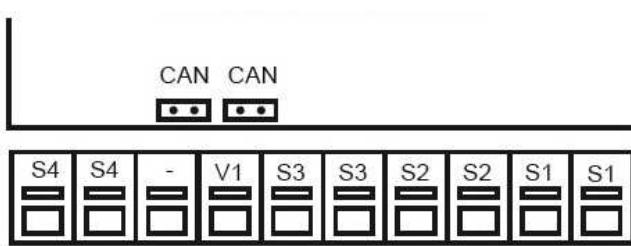
Permissible ambient conditions	
Ambient temper. - operation	0 to 40 °C
Ambient temper. - stock	0 to 60 °C
Air humidity - operation	max. 85 % at 25 °C
Air humidity - stock	no condensation permitted

Other data	
Housing material	ABS (two-part)
Installation	wall mount
Overall dimensions	163 x 110 x 52 mm
Display	fully graphic, 128 x 64
Control manner	4 keys

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Terminal block wiring diagram

EXTRA LOW VOLTAGE - max. 12 V AC/DC



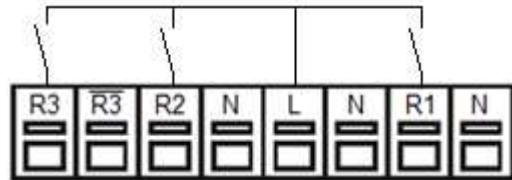
Controller board connection:

CAN - CAN Bus

Terminal board connection:

- S4 - room unit (ground)
- S4 - room unit
- - ground
- V1 - 0-10 V output to boiler
- S3 - room temperature sensor (ground)
- S3 - room temperature sensor
- S2 - sensor 2 heating water
- S2 - sensor 2 heating water
- S1 - sensor 1 outdoor
- S1 - sensor 1 outdoor

MAINS VOLTAGE - 230 V AC, 50 - 60 Hz



Terminal board connection:

- R3 - mixing valve (closes)
- R3 - free
- R2 - mixing valve (opens)
- N - mixing valve (neutral)
- L - mains voltage (live)
- N - mains voltage (neutral)
- R1 - pump (live)
- N - pump (neutral)



Protective PE lead shall be wired to PE terminal board.

Correlation between temperature and resistance for Pt1000 sensors

°C	0	10	20	30	40	50	60	70	80	90	100
Ω	1000	1039	1077	1116	1155	1194	1232	1270	1308	1347	1385