

TEMPERATURCONTROLLERE



PÅSPÆNDINGSTERMOSTATER

Surface contact temperature controllers, including tension spring

Mechanical temperature controllers / contact thermostats **THERMASREG® ALTR** with switching output (two-position controller) for monitoring, controlling and limitation of temperatures at pipes or vessels, e.g. in connection with hot-water or floor heating systems. The contact temperature controller ALTR is built as one-step device, as adjustable temperature controller **TR** (with external setting) or as adjustable temperature monitor **TW** (with internal setting).

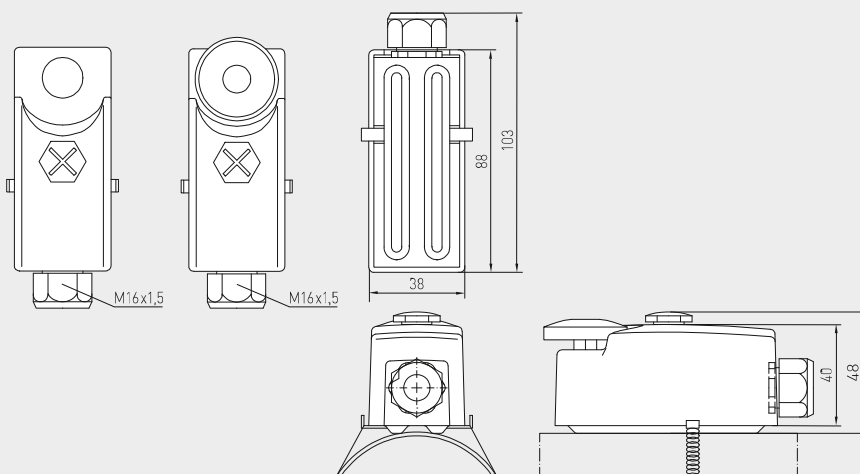
TECHNICAL DATA

| | |
|---------------------------------------|---|
| Switching capacity: (Contact load) | 16 (4) A; 24...250 V AC at 24 V AC min. 150 mA |
| Max. sensor temperature: | +110 °C |
| Contact: | dust-proof switch block unit as potential-free single-pole changeover contact |
| Housing: | ABS (acrylonitrile butadiene styrene), fibre-glass reinforced, base: steel, galvanised, top: grey, M 16 x 1.5 |
| Housing temperature: | -35...+65 °C |
| Tolerance: | T _{min} ± 5 K; T _{max} ± 5 K |
| Sensor element: | bi-metal |
| Housing dimensions: | 38 x 48 x 103 mm |
| Process connection: | by metal tension spring, 220 mm long (included in the scope of delivery) |
| Electrical connection: | 0.14 - 1.5 mm ² via terminal screws |
| Protection class: | I (according to EN 60 730) |
| Protection type: | IP 40 (according to EN 60 529) |
| Standards: | CE conformity, EMC directive 2014 / 30 / EU, low-voltage directive 2014 / 35 / EU |

FUNCTION
Heating: wire contacts C - 1
Cooling: wire contacts C - 2

Dimensional drawing

ALTR 060 / 090



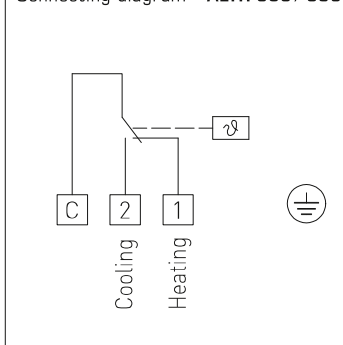
ALTR 060 / 090



ALTR 060 / 090 U



Connecting diagram ALTR 060 / 090



THERMASREG® ALTR 060 / 090 Surface contact temperature controllers

| Type / WG01 | Temperature Range | Thermal Operating Difference (fixed) approx. | Max. Capillary Temperature | Item No. | Price |
|-------------------------|-------------------|--|----------------------------|--------------------|------------------------------|
| ALTR 060 / 090 | | | | | TR (External setting) |
| ALTR-060 | 0...+60 °C | 8 K (± 1 K) | +110 °C | 1102-1040-1100-300 | 30,32 € |
| ALTR-090 | 0...+90 °C | 8 K (± 1 K) | +110 °C | 1102-1040-1100-400 | 30,32 € |
| ALTR 060 / 090 U | | | | | TW (Internal setting) |
| ALTR-060 U | 0...+60 °C | 8 K (± 1 K) | +110 °C | 1102-1040-2100-300 | 30,32 € |
| ALTR-090 U | 0...+90 °C | 8 K (± 1 K) | +110 °C | 1102-1040-2100-400 | 30,32 € |



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TECHNICAL DATA

| | |
|------------------------|--|
| Switching capacity: | 24 ... 250 V AC +10%, 16 A, cos φ = 1,0 (Contact load) 24 ... 250 V AC +10%, 1.5 A, cos φ = 0.6 at 24 V AC min. 150 mA |
| Contact: | dust-proof switch block unit as potential-free single-pole changeover contact |
| Housing: | plastic, UV-resistant, material polyamide, 30% glass-globe reinforced, colour traffic white (similar to RAL 9016) |
| Housing dimensions: | 108 x 70 x 73.5 mm (Thor 2) |
| Cable gland: | M20 x 1.5; including strain relief |
| Housing temperature: | -35...+65 °C |
| Tolerance: | T _{min} ± 5 K; T _{max} ± 5 K |
| Design principle: | torsion meter with liquid filling |
| Process connection: | endless strap with metal tightener (included in the scope of delivery), Ø = 13 - 92 mm (1/4 - 3"), L = 300 mm |
| Electrical connection: | 0.14 - 2.5 mm ² via terminal screws |
| Protection class: | I (according to EN 60 730) |
| Protection type: | IP 65 (according to EN 60529) |
| Standards: | CE conformity, EMC directive 2014 / 30 / EU, low-voltage directive 2014 / 35 / EU |

FUNCTION

Heating: The preset setpoint (scale value) is equivalent to the switch-off value of the heating. The switch-on value is lower by the amount of operating difference. Contact 2-3 breaks when temperature rises to the preset value.

Cooling: The preset setpoint (scale value) is equivalent to the switch-on value of the cooling. The switch-off value is lower by the amount of operating difference. Contact 1-2 closes when temperature rises to the preset value.

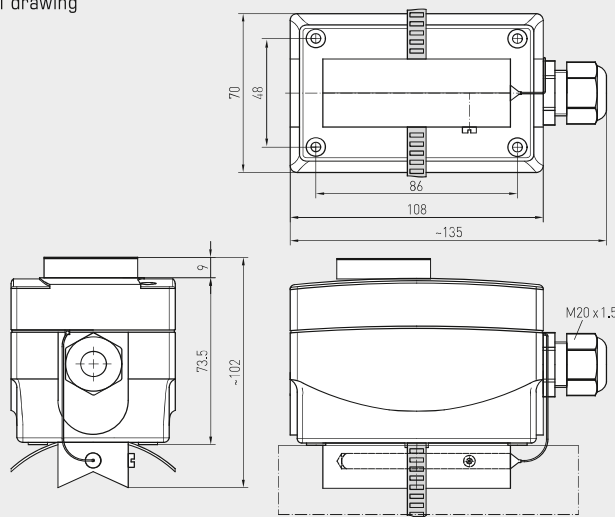
ALTR 1/3/5/7



ALTR 1/3/5/7U



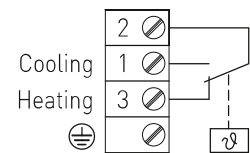
Dimensional drawing



ALTR 1/3/5/7

Connecting diagram

ALTR 1/3/5/7



THERMASREG® ALTR 1 / 3 / 5 / 7 Surface contact temperature controllers

| Type/WG01 | Temperature Range | Thermal Operating Difference (fixed) approx. | Max. Capillary Temperature | Item No. | Price |
|---------------------|--|--|----------------------------|---|----------------|
| ALTR 1/3/5/7 | | | | | |
| ALTR-1 | -35... +35 °C | 5K (± 1 K) | +60 °C | TR (External setting) 1102-1030-1100-100 | 95,89 € |
| ALTR-3 | 0... +60 °C | 5K (± 1 K) | +75 °C | 1102-1030-1100-300 | 95,89 € |
| ALTR-5 | 0... +90 °C | 5K (± 1 K) | +120 °C | 1102-1030-1100-400 | 95,89 € |
| ALTR-7 | 0...+120 °C | 5K (± 1 K) | +130 °C | 1102-1030-1100-500 | 95,89 € |
| Extra charge: | U = Internal setting (TW), e.g. ALTR-1 U | | | | 9,48 € |



**HVAC & BYGNINGS-
AUTOMATIK**

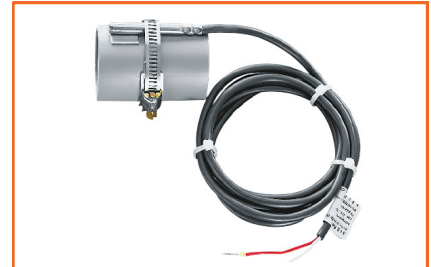
VORES PRODUKTSORTIMENT INKLUDERER:



LUFT & FLOW - KANALFØLERE



PÅSPÆNDINGS- & PENDULFØLERE



PÅSPÆNDINGS- & PENDULFØLERE



FLOWSWITCHE



TEMPERATURCONTROLLERE



MODBUS/BACNET

VI FØRER PRODUKTER INDENFOR KATEGORIERNE:



AUTOMATIK



ELVARME



KØLEPROFILER

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