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Data Sheet 60.4046

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JUMO Room thermostats (1-pole) Type AMDR



Brief description

Type AMDR room thermostats are used in HVAC, in industrial and commercial premises, garden centers and stables for the control of heating / cooling, air-conditioning and ventilation systems.

Room thermostats in the AMDR series operate on the principle of liquid expansion. A temperature change in the liquid-filled sensing system, which consists of probe, capillary and diaphragm, produces a volume change. The resulting movement of the diaphragm operates a microswitch through a lever mechanism.



AMDR-1

Switching action

TR and TW

If the temperature at the probe exceeds the set limit, the circuit is opened through a snap-action switch. If the temperature falls below the set limit (by the switching differential), the switch returns to its initial position.

Types

AMDR-1 temperature controller TR

switching point externally adjustable

AMDR-2 temperature monitor TW

switching point adjustable after removing the blanking plug



AMDR-2

Technical data

Electrical data

Switching element	1-pole microswitch with changeover contact
Max. rating	terminal 2: 16 (3) A, 230 V AC +10%, p.f. = 1 (0.6) terminal 4: 8 (1.5) A, 230 V AC +10%, p.f. = 1 (0.6) 0.25 A, 230 V DC +10% max. current surge: 16 A, p.f. = 0.6
Electrical connection	after removing case cover, at screw terminals up to 2.5mm ² conductor cross-section

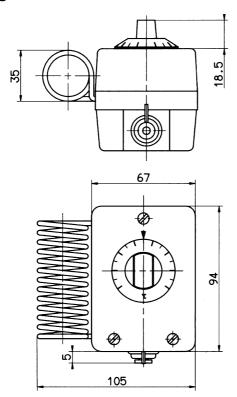
Operating data

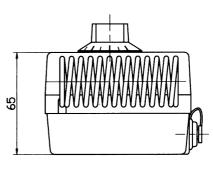
Control ranges	0 to +50°C or -10 to +40°C
Switching point accuracy	±0.75°C at +20°C
Switching differential	1 – 2°C
Permissible ambient temp.	in operation: -20 to +60°C
Permissible storage temp.	-50 to +50°C
Nominal position (NL)	to DIN 16 257, NL 0 — NL 90 (other NL on request)

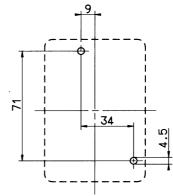
Case

Case	plastic case in impact-resistant polycarbonate color: cover gray beige, RAL 1019; base/setpoint knob light brown RAL 8025
Case fixing	by 2 screws on the inside of case
Cable entry	as standard: clamping gland M 20 x 1.5, for 8 — 10 mm cable diameter
Enclosure protection	EN 60 529-IP54
Temperature probe	coiled probe, tinned copper
Weight	approx. 0.35 kg

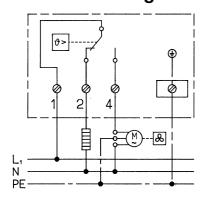
Dimensions







Connection diagram



Order details: AMDR series

Order code	(1)	Basic type (Basic version)
604046-01	AMDR-1	Temperature controller (TR), switching point set externally by rotary knob
604046-02	AMDR-2	Temperature monitor (TW), switching point set with screwdriver after removing the blanking plug
(2)	Control / limit ranges	
16		-10 to + 40°C
21		0 to + 50°C
Order code		
(1)	(2)	
	/	
rder example		
604046-02	/ 16 =	temperature monitor (TW), switching point set with screwdriver after removing the blanking plug, -10 to +40°C