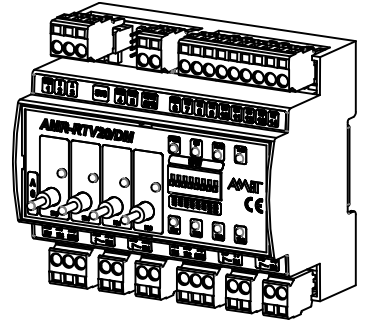


# AMR-RTV20/DM

Heat source controller

- 8 × universal input
- 4 × relay output with mode on / off / aut.
- 4 × relay output
- 1 × RS485, galvanically isolated
- Power supply 24 V DC
- DetStudio / EsiDet programming



## TECHNICAL DATA

<b>Universal inputs *)</b>	6 × dry contact input / Ni1000 / Pt1000 2 × dry contact input Ni1000 / Pt1000 / 0 mA to 20 mA
Inputs accuracy	< 1 % / ±0.5 °C **)
R <sub>MAX</sub> / R <sub>MIN</sub> for log. 0 / log. 1	< 1000 Ω / > 1300 Ω
Galvanic isolation	No
<b>Relay outputs</b>	8
Outputs type	4 × relay, switching contact, mode selection
Maximum output current (resistive load)	6 A (on / off / aut.) at 230 V AC / 24 V DC 2 × 2 relay, switching contact, common inlet 2 A at 230 V AC / 24 V DC
Nominal switched voltage	230 V AC / 24 V DC
Galvanic isolation	Yes, insulation strength 4000 V AC
Contact lifetime	Without load > 2 × 10 <sup>7</sup> operations
Operation mode selection	4 × switch on panel
<b>Communication</b>	1 × RS485
Galvanic isolation	Yes ***)
Communication speed	9600 bps up to 57600 bps
Number of segment units	256
<b>Power supply</b>	19.2 V DC to 28.8 V DC
Power consumption (without outputs)	Max. 140 mA at 24 V DC
<b>Others</b>	
Connection points	WAGO 231-30x
Ingress protection rate	IP20
Operating temperature range	0 °C to 50 °C
Maximum ambient humidity	< 95 % non-condensing
Mounting	On DIN rail
Weight	0.29 kg
Dimensions (w × h × d)	(106 × 90 × 75) mm
Programming	DetStudio / EsiDet

\*) Sensors Ni1000 can be used with sensitivity 6180 ppm or 5000 ppm.

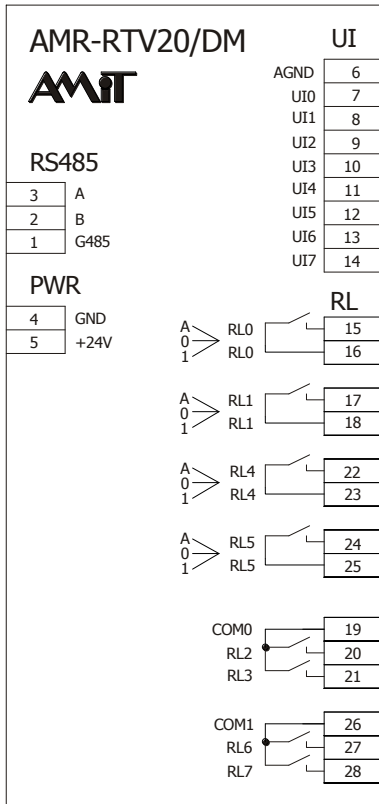
\*\*) It is valid for Ni1000/6180.

\*\*\*) Insulation strength 500 V AC / 1 minute, galvanic isolation must not be used for safe and unsafe parts separation.

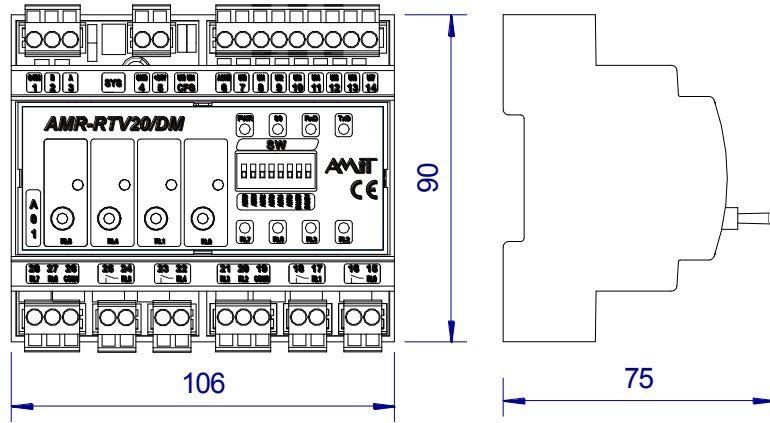
## ORDERING INFORMATION

<b>AMR-RTV20/DM</b>	Controller, counterparts of connectors WAGO, operation manual, warranty certificate
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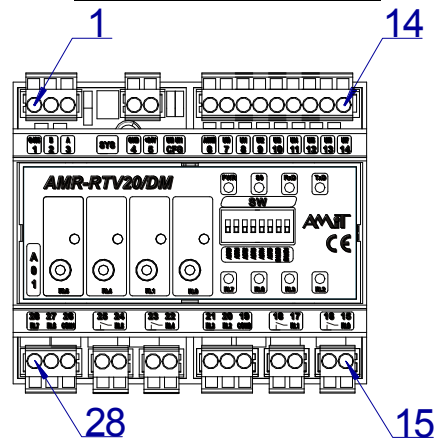
## RECOMMENDED DRAWING SYMBOL



## MECHANICAL DIMENSIONS



## TERMINAL LAYOUT



## TERMINAL'S DESCRIPTION

Terminal	Signal	Description	Terminal	Signal	Description
1	G485	RS485, ground	15	RL0	Relay output 0
2	B	RS485, signal B	16	RL0	Relay output 0
3	A	RS485, signal A	17	RL1	Relay output 1
4	GND	Power supply ground	18	RL1	Relay output 1
5	+24V	Power supply +24 V	19	COM0	Common inlet to RL2 and RL3
6	AGND	Analogue ground	20	RL2	Relay output 2
7	UI0	Universal input 0	21	RL3	Relay output 3
8	UI1	Universal input 1	22	RL4	Relay output 4
9	UI2	Universal input 2	23	RL4	Relay output 4
10	UI3	Universal input 3	24	RL5	Relay output 5
11	UI4	Universal input 4	25	RL5	Relay output 5
12	UI5	Universal input 5	26	COM1	Common inlet to RL6 and RL7
13	UI6	Universal input 6	27	RL6	Relay output 6
14	UI7	Universal input 7	28	RL7	Relay output 7

Data provided in this datasheet are informative only. Detailed information can be found in operational manual ([amr-rtv20dm\\_g\\_en\\_xxx.pdf](#)). Documentation and examples can be downloaded from [www.amitotion.com](http://www.amitotion.com).