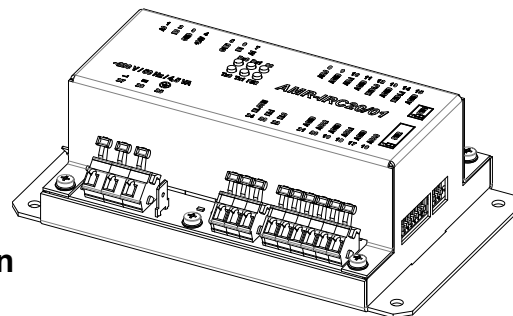


AMR-IRC20/01

Programmable controller

- 2 × analogue input
- 2 × RTD input for resistive temperature measurement
- 3 × analogue output
- 2 × relay output
- MODBUS RTU / ARION (RS485) communication
- Possibility of user programming
- Power supply 230 V AC



TECHNICAL DATA

Analogue inputs	2 ×
Input type	0 V DC to 10 V DC
Accuracy	1 %
Galvanic isolation	No
RTD inputs	2 ×
Input type	Dry contact input / Ni1000 / Pt1000
Accuracy	< 0.8 °C ¹⁾
R _{min} for log. 0 / R _{max} for log. 1	> 1320 Ω / < 1080 Ω
Galvanic isolation	No
Analogue outputs	3 ×
Output type	0 V DC to 10 V DC
Accuracy	1 %
Galvanic isolation	No
Relay outputs	2 ×
Output type	2 × switching contact with common inlet
Max output current	4 A at 230 V AC / 24 V DC (resistance load)
Max. total current	6 A
Galvanic isolation	Yes
Contact lifetime	Without load > 30×10 ⁶ cycles
Communication	2 × RS485
Number of segment units	256
Galvanic isolation	1 × Yes ²⁾ , 1 × No
Power supply	207 V AC to 253 V AC
Maximum power consumption	0.055 A ³⁾
Power outage (type)	6.3 W
Others	
Connection points	Cage clamp terminals WAGO 256
Ingress protection rate	IP20
Operating temperature range	-10 °C to 50 °C
Maximum ambient humidity	< 95 % non-condensing
Mounting	On the base plate
Weight	0.67 kg
Dimensions	(157 × 95 × 51) mm
Programming	DetStudio / EsiDet

¹⁾ Valid for 25 °C. The accuracy depends on the measured value and does not contain the accuracy of the connected stand-alone sensor.


²⁾ Insulation strength 500 V AC / 1 minute, galvanic isolation must not be used for safe and unsafe parts separation.

³⁾ Without connected outputs.

ORDERING INFORMATION

AMR-IRC20/01	Programmable controller
--------------	-------------------------

DRAWING SYMBOL

AMR-IRC20/01


(RS485-0)

1	A0
2	B0
3	GND
4	+24V

(RS485-1)

5	G485
6	B1
7	A1

(AI)

8	AI0.0
9	AGND
10	AI0.1
11	AGND
12	RTD1.0
13	AGND
14	RTD1.1
15	AGND

(AO)

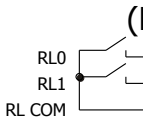
16	AO0.0
17	AGND
18	AO0.1
19	AGND
20	AO0.2
21	AGND

(RL)

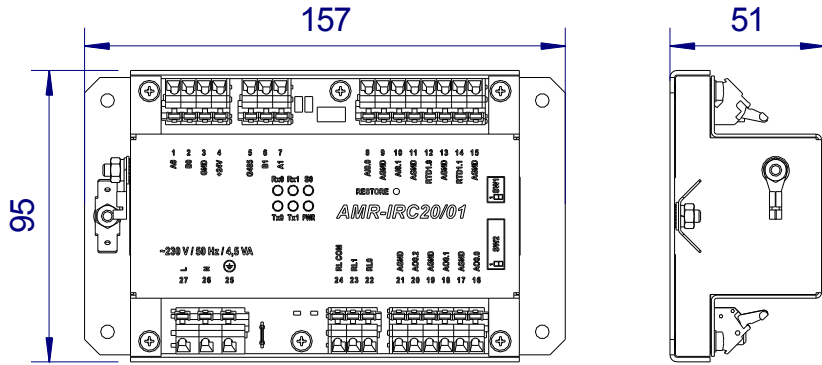
22	RL0
23	RL1
24	RL COM

(PWR)

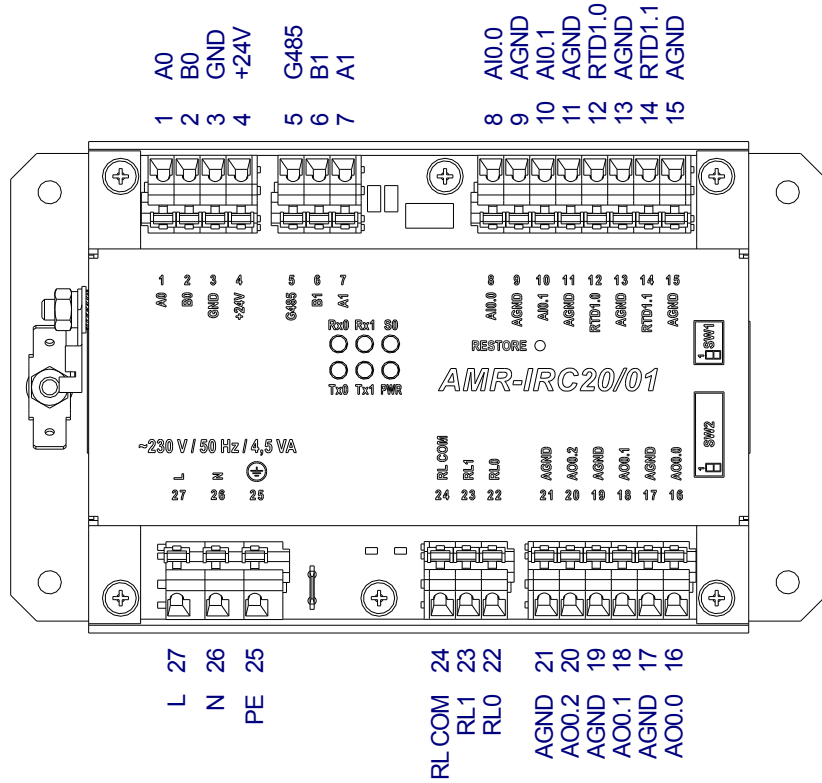
25	PE
26	N
27	L



MECHANICAL DIMENSIONS



TERMINAL LAYOUT



AMR-IRC20/01

Programmable controller

TERMINAL LABELS

Terminal	Signal	Description	Terminal	Signal	Description
1	A0	RS485 without GI, COM0 signal A	15	AGND	Analogue ground
2	B0	RS485 without GI, COM0 signal B	16	AO0.0	Analogue output 0
3	GND	Ground	17	AGND	Analogue ground
4	+24V	Power supply output 24 V DC	18	AO0.1	Analogue output 1
5	G485	RS485 with GI, COM1 ground	19	AGND	Analogue ground
6	B1	RS485 with GI, COM1 signal B	20	AO0.2	Analogue output 2
7	A1	RS485 with GO, COM1 signal A	21	AGND	Analogue ground
8	AI0.0	Analogue input 0	22	RL0	Relay output 0
9	AGND	Analogue ground	23	RL1	Relay output 1
10	AI0.1	Analogue input 1	24	RL COM	Relay outputs, common terminal
11	AGND	Analogue ground	25	PE	Protective conductor
12	RTD1.0	RTD input 0	26	N	230 V AC power supply, neutral conductor
13	AGND	Analogue ground	27	L	230 V AC power supply, phase
14	RTD1.1	RTD input 1			

Data provided in this datasheet are only informative. Binding detailed information can be found in operational manual ([amr-irc2001_g_en_xxx.pdf](#)). Documentation and examples can be downloaded from www.amitautomation.com.