

AR642

Universal Microprocessor Controller Type AR642



- table protection box 96 x 48 x 79 mm
- usage for stable control
- 2 control outputs with characteristics
 - output 1 : ON-OFF with hysteresis, PID, AUTOTUNING PID
 - output 2 : ON-OFF with hysteresis
- programmable work characteristic (process control, ramping)
- manual function for output control (type on-off)
- two row digital readout LED with brightness adjustment
- programmable indication range (for analog inputs)
- access to configuration protected by password
- programmable from 3-key keyboard IP65
- optional:
 - interface RS232C or RS485, MODBUS-RTU, galvanic insulation
 - analog output 0/4÷20mA or 0÷10V
 - third relay output or SSR (ON-OFF)

Technical specification

Universal input (chosen from keyboard), range of indicators and controllers:

RTD:

- Pt100 (3- or 2-wire).....-200 ÷ 850 °C
- Ni100 (3- or 2-wire).....-50 ÷ 170 °C

Thermocouple:

- thermocouple J.....0 ÷ 800 °C
- thermocouple K.....0 ÷ 1200 °C
- thermocouple S.....0 ÷ 1600 °C
- thermocouple B.....300 ÷ 1800 °C
- thermocouple R.....0 ÷ 1600 °C
- thermocouple T.....0 ÷ 350 °C
- temperature compensations of thermocouple cold junctions

Analog:

- current (Rwe = 110 Ω).....0 ÷ 20mA, 4÷20mA
- voltage (Rwe = 100 kΩ).....0 ÷ 10V
- voltage (Rwe = 2,2 MΩ).....0 ÷ 60mV

Measuring accuracy:0,1 % span ±1 digit

- thermocouple input ...0,2 % span ±1 digit, <2°C
(temperature of cold ends)

Power supply:.....24V= / 30mA

Digital readout LED: (standard 2 x 4 digits)

- range of readout-1999÷9999,
- height of numbers:9 mm (red), 9 mm (green)

Outputs:

- relay.....8A / 250V~ (for resist.)
- SSR (transistor type NPN OC, option) 2V/20mA
- Analog output (without galvanic insulation from input, option):
 - current.....0 ÷ 20mA, 4÷20mA
 - output resistance Ro < 350 Ω
 - voltage0 ÷ 10V,
 - output resistance Io < 4,5mA
 - deviation of output level <0,1 % output span

Signalling:

- found errorsmessage on screen
- activity of relaysdiode LED red

Power supply:

- grid supply230V~ (85÷260 V~) / 3VA, voltage
(option) 24V~ (15÷50 V~)/ 3VA

Operating temperature range:..0 ÷ 50 °C

Relative humidity range:.....0 ÷ 90 % (without condensation),

Internal protection:IP65 from the front,
IP20 from wire connections

Ordering Information

AR642	A	B	C	D								
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A Power supply

S1	230 VAC (85 – 260 V)
S2	24 VDC (18 – 72 V)
S3	24 VAC (15 – 50 V)

B Output 1

P	Relay
S	SSR (transistor NPN OC)

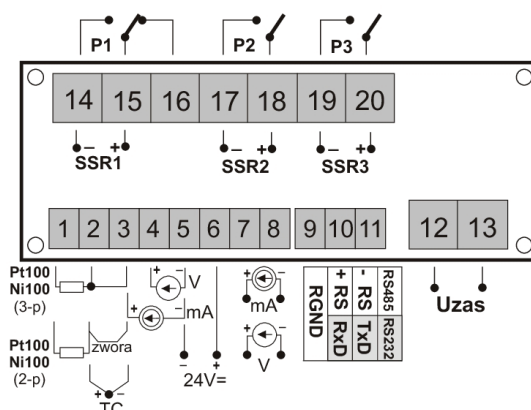
C Output 2

P	Relay
S	SSR (transistor NPN OC)

D Additional options

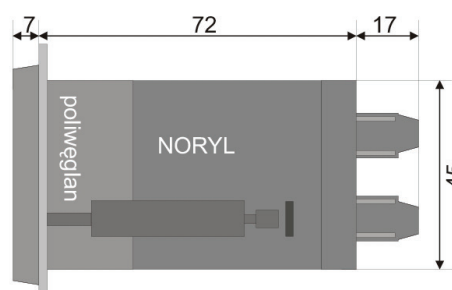
RS485	Series interface RS485
RS232	Series interface RS232
WA	Analog output 0/4 – 20 mA
WU	Analog output 0 – 10 V
P	Output 3 relay
S	Output 3 SSR (NPN OC)

Description Of Wire Connections



Protection Box And Mounting Style

Table INCABOX XT	96x48 XT L57
Material	polycarbonate, self-extinguishing NORYL 94V-0
Dimensions of box	96 x 48 x 79 mm
Window of table	92 x 46 mm
Mounting	grips of the box side



Ordering Example

AR642-S1-P-P-RS485

stands for: Universal controller AR642, power supply 230 VAC (85 – 260 VAC), output 1 – relay, output 2 – relay, series interface RS485.