

Double Programmable Controller RT228

- ◆ Two RT28 controllers in one housing
- ◆ ON/OFF or PD-for-MV control algorithm
- ◆ Fixed input
- ◆ Various power supplies
- ◆ Easy programming

RT228 combines two RT28 controllers in one 96x96 mm case. Thanks to its lower cost than the combined cost of 2 separate RT28 controllers, this model is often preferred when 2 technological parameters are controlled in one machine or installation or of separate adjacent processes. Typical applications include control of 2 temperatures, temperature and humidity, pressure and temperature, pH and temperature, and other combinations. Each of the 2 incorporated controllers controls its relay outputs through an ON/OFF or PD algorithm, and thanks to these relay duplex outputs (2 relays per controller, 4 relays per whole device), RT228 is best suited for controlling motorized valve actuators or other actuators with 2-way action. The reliable operation even in the presence of electromagnetic disturbances makes the RT228 controller a widely applicable device.



Technical specifications

Input (for each controller)

Pt50 (w=1.385); 3-wire	-9.9(-50)...90.0(500) °C
Pt100 (w=1.385); 3-wire	-9.9(-50)...90.0(500) °C
Pt500 (w=1.385); 3-wire	-9.9(-50)...90.0(500) °C
Pt1000 (w=1.385); 3-wire	-9.9(-50)...90.0(500) °C
Cu100; 3-wire	-9.9(-50)...90.0(200) °C
Cu50; 3-wire	-9.9(-50)...90.0(200) °C
Other RTD ⁽¹⁾	min. -99...max. 500 °C
Thermocouple "J"	0...999(600) °C
Thermocouple "K"	0...999(850) °C
Thermocouple "L"	0...900(600) °C
Thermocouple "L-GOST"	0...650(550) °C
Other thermocouple ⁽¹⁾	-99(0)...900(999) °C
Linear voltage 0...10 V	-99...900 (0...999) ^(2,3)
Linear current 0(4)...20 mA	-99...900 (0...999) ^(2,3)
Custom linear voltage; max. 40 V	-99...max. 999 ^(2,3)
Custom linear current; max. 80 mA	-99...max. 999 ^(2,3)

Outputs (for each controller, up to 2 relay outputs)

Relay electromechanical	5A/250V w/ NO/NC contact
Solid state relay ⁽⁴⁾	1A/250VAC
MOS gate ⁽⁴⁾	0.1A/60V, optically isolated
Output for external SSR	5...24 V, 30 mA
Control algorithm	ON/OFF, PD
Set point	within input range limits
Programmable parameters	according to control algorithm

Accuracy (for each controller)

Measurement error	0.4% from span
Temperature drift	0.005% from span for 1 °C
Cold junction compensation	± 1 °C
RTD line compensation (option)	0.01% from span for 1 Ω

Power supply (for each controller)

Mains supply voltage	230 VAC or 115 VAC
SMPS voltage	90...250 V
Isolated low voltage	12...24 V or 24 VAC
Non-isolated low voltage	12...24 V
Consumption	max. 3 VA

Indication and controls (for each controller)

Digital display	3 LED indicators, 14 mm
LEDs	2 LEDs for output state
Keyboard	3 membrane keys

Operating conditions

Ambient temperature	-10...65 °C
Ambient humidity	0...85 %RH

Design and materials

Case material	plastic
Mounting	in 90x90 mm panel cut-out
Wiring	plug-in terminals
Dimensions	96x96(front)x107 mm
Mounting depth	98 mm
Weight	max. 600 g
Protection, front/terminals	IP54 / IP20
Increased front IP (option)	IP65

⁽¹⁾ Custom; specify range within the limits stated.

⁽²⁾ Specify lower and upper display limits.

⁽³⁾ Provides loop supply voltage - 24 VDC (only w/ isolated power supply)

⁽⁴⁾ Ask for availability!

Ordering code RT228 - G1(G1).G3(G3).G5G5(G5G5).G6'6"(G6'6").G8(G8) - #1(#1).#2 ⁽⁵⁾

Code	Feature or option	Code values	
G1	Power supply	A - 230 VAC, B - 115 VAC, C - 90...250 V, P - 12...24 V, non-isolated, Q - 12...24 V, isolated, R - 24 VAC	
G3	Resolution	B - 1, C - 0.1	
G5	Relay output	X - none, C - relay NO/NC, D - SSR ⁽⁴⁾ , J - for external SSR, M - isolated MOS gate ⁽⁴⁾	
G6'	Input signal	B - thermoresistance, C - thermocouple, D - linear, Z - other on request	
G6"	Sensor	RTD	B - Pt50, D - Pt100, F - Pt500, G - Pt1000, H - Cu50, K - Cu100, Z - other ⁽¹⁾
		T/C	J - "J", K - "K", L - "L", M - "L-GOST", Z - other ⁽¹⁾
		linear	B - 0...20 mA ⁽²⁾ , C - 4...20 mA ⁽²⁾ , K - 0...10 V ⁽²⁾ , Z - other ⁽²⁾
G8	Control algorithm	A - ON/OFF, C - PD	
#1	Compensation for 3-wire RTD line	X - none, LC - built-in line resistance compensation	
#2	Increased front protection	X - none, P - IP65 front protection	

⁽⁵⁾ Second controller values are in brackets.