

Digital indicating controllers

JCM-33A



Model name		JCM-330 (W72×H72×D100mm)	
Alarm1 (A1)	A	Applied (Selectable by key operation)	
Control output (OUT1)	R	Relay contact	
	S	Non-contact voltage (for SSR drive)	
	A	DC current	
Input	M	Multi-range input	
Supply voltage	1	24V AC/DC	
Option	A2	Alarm 2	
	LA	Loop break alarm	
	W (5A)	Heater burnout alarm	Rated current: 5A
	W (10A)		Rated current: 10A
	W (20A)		Rated current: 20A
	W (50A)		Rated current: 50A
	D	Control output (OUT2) (Heating/Cooling control output)	DR: Relay contact DS: Non-contact voltage DA: DC current
	P24	Isolated power output	
	C5	Serial communication (RS-485)	
	BK	Color, Black	
TC	Terminal cover		
IP	Dust-proof/Drip-proof (IP54)		

Please designate the specification from the , , columns.
When adding an option, enter it punctuated by comma.
 • For DC current output type, option W cannot be added.
 • 100 to 240V AC is standard supply voltage. However when ordering 24V AC/DC, enter "1" after the input code.

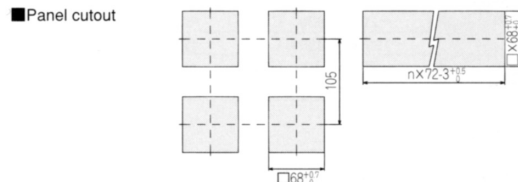
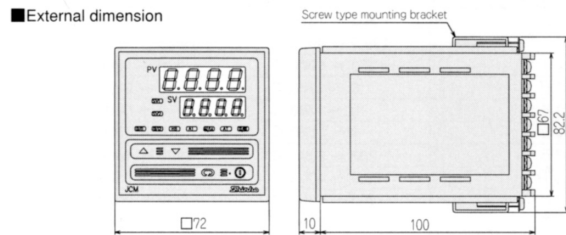
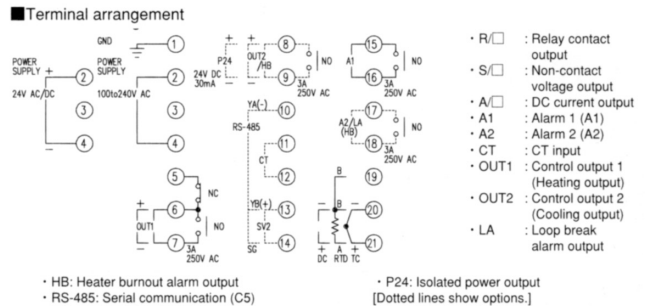
Option combination	A 2	LA	W	D	P24	C 5	BK	TC	IP
Combination 1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Combination 2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Combination 3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Combination 4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Combination 5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Combination 6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Combination 7	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Combination 8	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Rated scale		Scale	
Input type			
Thermocouple	K	-200 to 1370 °C	-320 to 2500 °F
		-199.9 to 400.0 °C	-199.9 to 750.0 °F
	J	-200 to 1000 °C	-320 to 1800 °F
	R	0 to 1760 °C	0 to 3200 °F
	S	0 to 1760 °C	0 to 3200 °F
	B	0 to 1820 °C	0 to 3300 °F
	E	-200 to 800 °C	-320 to 1500 °F
	T	-199.9 to 400.0 °C	-199.9 to 750.0 °F
	N	-200 to 1300 °C	-320 to 2300 °F
	PL-II	0 to 1390 °C	0 to 2500 °F
RTD	Pt100	-200 to 850 °C	-300 to 1500 °F
		-199.9 to 850.0 °C	-199.9 to 999.9 °F
	JPt100	-200 to 500 °C	-300 to 900 °F
DC current	4 to 20mA DC		
	0 to 20mA DC		
DC voltage	0 to 1V DC	-1999 to 9999, -199.9 to 999.9	
	0 to 10V DC		
	1 to 5V DC	-19.99 to 99.99, -1.999 to 9.999	

• For DC inputs, scaling and decimal point place change are possible.
 • For DC current input, 50 Ω shunt resistor (sold separately) has to be externally installed.

■ Input For the input type, refer to the "Rated scale".
 Thermocouple: External resistance, 100 Ω or less
 (However, for B input, external resistance, 40 Ω or less)
 RTD : 3-wire system (Resistance per wire: 10 Ω or less)
 DC current : Input impedance, 50 Ω (Connect 50 Ω shunt resistor between input terminals)
 Allowable input current, 50mA or less (when using 50 Ω shunt resistor)
 DC voltage : Input impedance, 1M Ω or greater (for input 0 to 1V DC)
 Input impedance, 100k Ω or greater (for inputs 0 to 10V DC, 1 to 5V DC, 0 to 5V DC)

■ Accuracy (Setting, Indication)
 Thermocouple: Within ±0.2% of each input span ±1digit, or within ±2°C (4°F), whichever is greater
 However, R, S inputs, 0 to 200°C (400°F): Within ±6°C (12°F)
 B input, 0 to 300°C (600°F): Accuracy is not guaranteed.
 K, J, E, T, N inputs, less than 0°C (32°F): Within 0.4% of each input span ±1digit
 RTD : Within ±0.1% of each input span ±1digit, or within ±1°C (2°F), whichever is greater
 DC current, DC voltage: Within ±0.2% of each input span ±1digit
 ■ Input sampling period 0.25 seconds
 ■ Control output Relay contact: 1a1b 3A 250V AC (resistive load), 1A 250V AC (inductive load cos φ=0.4)
 Electric life: 100,000 times
 Non-contact voltage: 12 V DC Max. 40mA (short-circuit protected)
 DC current: 4 to 20mA DC Load resistance: Max. 550 Ω
 PID, PI, PD, P, ON/OFF
 ■ Control action Alarm action and Energized/Deenergized can be selected by keypad operation.
 • No alarm action
 • High limit alarm (deviation setting), Low limit alarm (deviation setting), High limit alarm with standby (deviation setting), Low limit alarm with standby (deviation setting)
 Setting range: — (Input span) to input span
 • High/Low limits alarm (deviation setting), High/Low limit range alarm (deviation setting), High/Low limits alarm with standby (deviation setting)
 Setting range: 0 to input span
 • Process high alarm, Process low alarm
 Setting range: Input range low limit value to input range high limit value
 • When input has a decimal point, the negative minimum value is -199.9 and the positive maximum value is 999.9.
 • For DC current or voltage inputs, input span is the same as the input range scaling span.
 • For DC inputs, input range low limit (high limit) value is the same as input range scaling low limit (high limit) value.
 Action: ON/OFF action
 Output: Relay contact 1a, 3A 250V AC (resistive load), 1A 250V AC (inductive load cos φ=0.4)
 Electric life: 100,000 times
 100 to 240V AC 50/60Hz, 24V AC/DC 50/60Hz
 Allowable voltage fluctuation range: 85 to 264V AC, 20 to 28V AC/DC
 ■ Supply voltage Approx. 8VA
 ■ Power consumption 0 to 50°C
 ■ Ambient temperature 35 to 85%RH (Non-condensing)
 ■ Ambient humidity Screw type mounting bracket
 ■ Mounting method Mountable panel thickness: Within 1 to 15mm
 ■ Weight Approx. 300g
 ■ Attached function Sensor correction, Setting value lock, Power failure countermeasure, Self-diagnosis, Automatic cold junction temperature compensation (for thermocouple only), Sensor burnout alarm, Input burnout
 ■ Option Refer to the "Model name".



• This catalog is as of July 2020, and specifications are subject to change without notice.
 • If you have any inquiries, please consult us or our agency.

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