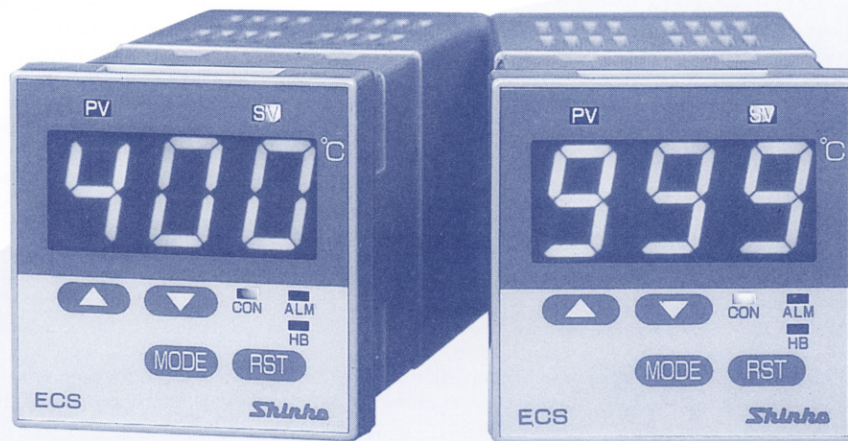


Digital Temperature Indicating Controller



ECS-200



48×48mm

Model name

ECS - 2 □ □ - □ / □ , □ □		Series name: ECS-200 (W48×H48×D85mm)	
Control action	1	ON/OFF action	
	2	PD action	
Temperature alarm output	0	No alarm	
	2	High limit alarm	
	3	Low limit alarm	
	4	High/Low limits alarm	
	6	High/Low limit range alarm	
	8	Process high alarm	
Control output	R	Relay contact: 1a	
	S	Non-contact voltage: 15±3Vdc	
Input	E	Thermocouple: K, J	
	R	RTD: Pt100, JPt100	
Option	H	Temperature alarm output with standby function *	
	W	Heater burnout alarm output	CT input rating: 5A
			CT input rating: 10A
			CT input rating: 20A
	CM	Cooling action	
	SB	Specified proportional band: 0.1 to 9.9%	
	SK	Specified control sensitivity: 0.1 to 2.0%	
SC	Specified proportional cycle: 1 to 99s		
BK	Color: Black		
BL	Screw type mounting bracket		

Features

- Compact and Popular type.
- Low price, Easy-to-operate.
- Large LEDs are used.

Rated scale

Thermocouple		RTD
K	J	Pt100, JPt100
0 to 300 °C	0 to 300 °C	0 to 200 °C
0 to 400 °C	0 to 400 °C	-100 to 300 °C
0 to 600 °C	0 to 600 °C	
0 to 800 °C	0 to 800 °C	
0 to 999 °C		

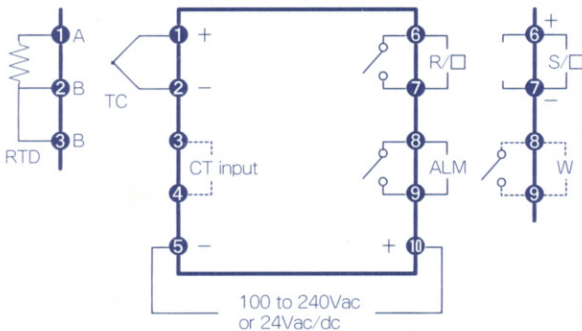
*: Applicable only to High limit, Low limit and High/Low limits.
With the type ECS-2□4, it is applicable only to the Low side.

Shinko

Standard specifications

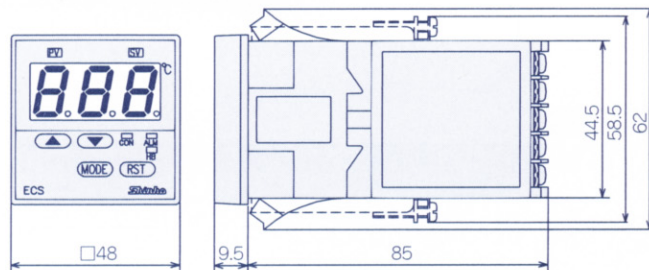
Input	Thermocouple : K, J External resistance: 100Ω or less
	RTD : Pt100, JPt100 3-wire system Allowable input lead wire resistance (Resistance per wire: 2Ω or less)
Accuracy (Set, Indication)	Scale : Refer to the Rated scale
	Resolution : 1°C
Control action	Within ±0.5% of full scale ±1digit
	PD action: Proportional band(P)----- 2.5%FS ON/OFF action: Control sensitivity----- 0.3%FS (Hysteresis: 0.6%) Derivative time(D)----- 32s Proportional cycle----- 20s
Control output	Relay contact : 1a Control capacity----- 220Vac 3A (resistive load), 220Vac 1A (inductive load cos φ=0.4)
	Non-contact voltage: For SSR drive 15±3Vdc (load resistance: 1.5kΩ) (short circuit protected)
Temperature alarm output	<ul style="list-style-type: none"> • No alarm • High limit alarm (Deviation setting): -100 to 100°C (off when set to 0) • Low limit alarm (Deviation setting): -100 to 100°C (off when set to 0) • High/Low limits alarm (Deviation setting): ±(0 to 100°C) (off when set to 0) • High/Low limit range alarm (Deviation setting): ±(0 to 100°C) (off when set to 0) • Process high alarm : Scaling low limit setting value to Scaling high limit setting value
	(In case of the Process high alarm and RTD input, it works even if setting to 0.) Setting accuracy : Within ±0.5%FS ±1digit Control action : ON/OFF action Hysteresis : 1°C Control output : Relay contact 1a, 220Vac 3A(resistive load), 220Vac 1A(inductive load cos φ=0.4)
Supply voltage	100 to 240Vac, 50/60Hz or 24Vac/dc, 50/60Hz
Allowable voltage fluctuation	In case of 100 to 240Vac, 85 to 264Vac In case of 24Vac/dc, 20 to 28Vac/dc
Power failure compensation	In case the time is 30ms or greater the setting data are backed up by non-volatile memory.
Power consumption	Approx. 2VA
Ambient temperature	0 to 55°C
Ambient humidity	35 to 85%RH (non-condensing)
External dimension	48×48×85mm (W×H×D)
Mounting method	Flush
Case, Base	Flame resisting resin Color: Light gray
Panel	Membrane sheet Color: Light gray
Attached function	Setting value lock, Self-diagnosis, Automatic cold junction temperature compensation, Sensor burnout alarm, Scaling, Sensor correction
Option	Temperature alarm output with standby function [H], Heater burnout alarm output [W], Cooling action [CM], Specified proportional band [SB], Specified control sensitivity [SK], Specified proportional cycle [SC], Color: Black[BK], Screw type mounting bracket[BL]

Terminal arrangements

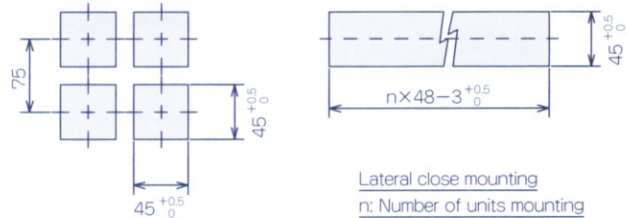


- ALM : Temperature alarm
- R/□ : Relay contact output
- S/□ : Non-contact voltage output
- W : Heater burnout alarm output
- Dotted line shows the option, the terminal is equipped only when it is specified.

External dimension drawing



Panel cutout drawing



- This catalog is as of December 1999, specifications subject to change without notice.
- When inquiring, please consult your shop where purchased or our agency.

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