



- ❖ J, K thermocouples, Pt100, mV, 4~20 mA input
- ❖ Membrane keyswitch/Multiturn Trimpot for setpoints
- ❖ Accuracy J, K 1%, Pt100 0.2%, mV, 4~20 mA 0.1%
- ❖ 4~20 mA retransmission output
- ❖ Relay logic : On/off or Time proportioning, Heat, Cool, Hi alarm, Lo alarm
- ❖ Transmitter excitation supply
- ❖ Modular, zero wiring high reliability design
- ❖ Hysteresis or reset control on front panel

MODEL	DESCRIPTION	DISPLAY (DIGITS)	SIZE (mm)
EK0SP	TEMPERATURE/PROCESS INDICATOR	3.5	96x96x150
EK490	TEMPERATURE/PROCESS INDICATOR	3.5	48x96x120
EK450	TEMPERATURE/PROCESS INDICATOR	4.5	96x96x150
EK1SP	1 SETPOINT TEMPERATURE/PROCESS CONTROLLER	3.5	96x96x150
EK2SP	2 SETPOINT TEMPERATURE/PROCESS CONTROLLER	3.5	96x96x150
EK4SP	4 SETPOINT TEMPERATURE/PROCESS CONTROLLER	3.5	96x96x150
EK491	1 SETPOINT TEMPERATURE/PROCESS CONTROLLER	3.5	48x96x120
EK451	1 SETPOINT TEMPERATURE/PROCESS CONTROLLER	4.5	96x96x150
EK452	2 SETPOINT TEMPERATURE/PROCESS CONTROLLER	4.5	96x96x150

SPECIFICATIONS All specifications at ambient of 25 °C, unless specified otherwise

Input Range	See Table 1	Additional adjustment for each setpoint	ONOFF : Hysteresis, 0.5 to 5 °C by Trimpot Time proportioning : Offset (Reset), ± 3 °C, by trimpot
Resolution	See Table 1		
Accuracy	See Table 1	Proportional band	± 3 °C
Display	0.56" (14.2 mm), 7 segment red LED		
Underrange/Overrange Indication	3.5 digits : 1 4.5 digits : Blinking 0000	Proportional cycle time	12 seconds at centre of band
No. of setpoints	See Table 2	Relay outputs	See Table 2
Control action	On/off or Time-Proportioning, Heat, Cool, Hi Alarm, Lo Alarm for each setpoint	Current output ⁽¹⁾	Optional (See Table 2)
Temperature setting for each setpoint	By front panel membrane switch and multiturn potentiometer (Trimpot)	Transmitter excitation ⁽²⁾	Optional (See Table 2)
		Supply voltage	230 V AC ±10%, 50 Hz (std) 110 V AC, 24 V AC, 24 V DC ⁽³⁾
		Operating ambient temperature	0 to 50 °C
		Relative humidity	Below 90%, non condensing
		Mounting panel cutout (in mm)	96x96x150 : 92x92 48x96x120 : 44x92

TABLE 1 : INPUT, RANGE, RESOLUTION, ACCURACY

SENSOR / INPUT	STANDARD CALIBRATION POINTS (°C)		USEFUL RANGE (°C)		ACCURACY BETWEEN CALIBRATION POINTS	RESOLUTION (°C)		
	0	400	-50	500		3.5 Digit	4.5 Digit	
Iron / Constantan (J)	0	400	-50	500	± 1%	1	0.1	
Chromel / Alumel (K)	0	1000	-50	1200	± 0.7%	1	0.1	
Pt100, 3-wire	-100	500	-100	600	± 0.2%	1	0.1	
Pt100, 3-wire	-50.0	100.0	-50.0	199.9	± 0.2%	0.1 ⁽⁴⁾	0.01	
Linear input (4~20 mA, 0~1 V DC, etc) ⁽⁵⁾								
	3.5 digit	0	1999	-1999	1999	± 0.1%	0.1 or 1	-
	4.5 digit	0	19999	-19999	19999	± 0.1%	-	0.01, 0.1, 1

TABLE 2 : OUTPUT DETAILS

	EK0SP	EK490	EK450	EK1SP	EK2SP	EK4SP	EK491	EK451	EK452
No. of setpoints	0	0	0	1	2	4	1	1	2
Relay contacts	-	-	-	NO-C-NC	2 x NO-C-NC	1 x NO-C-NC 3 x NO-C	NO-C-NC	NO-C-NC	2 x NO-C-NC
Transmitter supply ⁽²⁾	YES	YES	YES	YES	YES	YES	YES	YES	YES
Current output ⁽¹⁾	YES	YES	YES	YES	YES	NO	YES	YES	YES

Note : (1), (2), (3), (4), (5) & -ve temperature settings are chargeable options.

❖ See overleaf for product pictures

3.5/4.5 DIGIT PROCESS/TEMPERATURE INDICATORS, CONTROLLERS ——— EKXXX

EK0SP 96x96x150



TEMPERATURE/PROCESS INDICATOR
3.5 DIGIT

EK490 48x96x120



TEMPERATURE/PROCESS INDICATOR
3.5 DIGIT

EK450 96x96x150



TEMPERATURE/PROCESS INDICATOR
4.5 DIGIT

EK1SP 96x96x150



1 SETPOINT TEMPERATURE/PROCESS
CONTROLLER 3.5 DIGIT

EK2SP 96x96x150



2 SETPOINT TEMPERATURE/PROCESS
CONTROLLER 3.5 DIGIT

EK4SP 96x96x150



4 SETPOINT TEMPERATURE/PROCESS
CONTROLLER 3.5 DIGIT

EK491 48x96x120



1 SETPOINT TEMPERATURE/PROCESS
CONTROLLER 3.5 DIGIT

EK451 96x96x150



1 SETPOINT TEMPERATURE/PROCESS
CONTROLLER 4.5 DIGIT

EK452 96x96x150



2 SETPOINT TEMPERATURE/PROCESS
CONTROLLER 4.5 DIGIT

- ❖ Temperature Controllers, Digital
- ❖ Temperature Controllers, Programmable
- ❖ Temperature Controllers, Blind
- ❖ PID Controllers, Autotune
- ❖ Temperature Indicators
- ❖ Handheld Thermometers
- ❖ Scanners
- ❖ Transmitters, 2-Wire
- ❖ Transmitters/Isolators, 3-Port
- ❖ Loop Powered Isolators
- ❖ Loop Powered Indicators
- ❖ Frequency-To-Voltage/Current Converter
- ❖ Calibrators

- ❖ Flameproof Products, Wall Mounting
- ❖ Flameproof Products, Pipe Mounting
- ❖ Counters with Non-Volatile Memory
- ❖ Timers, Time Totalisers, with Non-Volatile Memory
- ❖ Other Timers, Counters & RPM Indicators
- ❖ Thermocouples
- ❖ RTD Sensors
- ❖ Proximity Switches
- ❖ Thermocouple Connectors
- ❖ Full range of RS485/MODBUS instruments
- ❖ Full range of RH products
- ❖ Flow Rate Indicator / Totaliser

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