

TEMPERATURE INDICATORS & CONTROLLERS

8000 SERIES

● Miniature 48 × 24mm DIN size indicator with low power dc or mains operation.

Housed in a compact case for use with a Type K thermocouple this unit can be powered with a 5V to 8V dc supply, or 240V ac supply in conjunction with remote or integral mains adaptors.

3754 PT = RS 258-192

3900 KNE = RS 257-284

3900 KTJ = RS 258-186

8000 KC = RS 258-108

4000 SERIES

Low cost panel mounting indicators/controllers for use with K,J,R,S,T thermocouple or Pt100 Ω sensors. Units are housed in standard 96 × 48mm DIN size cases with minimal, behind-the-panel space requirements.

Selector Units

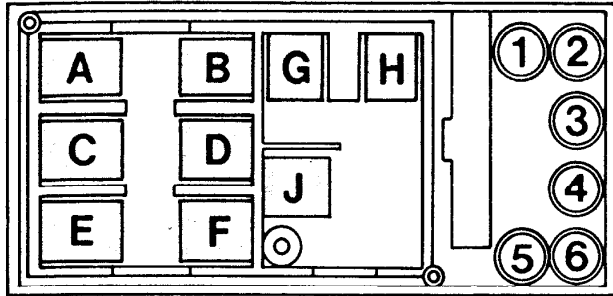
Panel mounting units in matching DIN size formats are available for 3700, 3900 and 8000 series indicators. A 12-way selector unit is compatible with Type K,J,R,S,T thermocouples and a 6-way selector unit for use with platinum sensors.



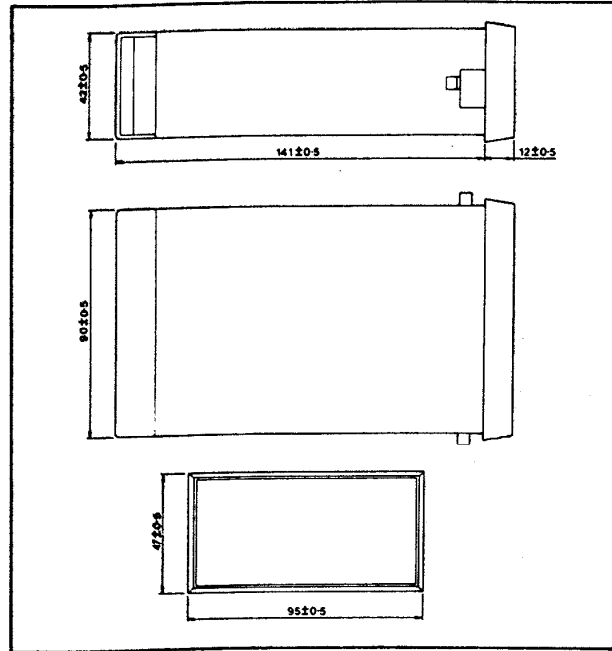
SPECIFICATION	MODEL 3750	MODEL 3754 PT	MODEL 3900	MODEL 3800	MODEL 3800 PT	MODEL 8000 KC
Instrument Range	K -50°C to +1200°C J -50°C to +700°C R 0°C to +1700°C S 0°C to +1700°C T -50°C to +400°C N -100°C to +1200°C	-150°C to +800°C	KRJ K -50°C to +1000°C R +500°C to +1700°C J -25°C to +625°C KTJ K -50°C to +1000°C T -50°C to +325°C J -25°C to +625°C KSJ K -50°C to +1000°C S +500°C to +1700°C J -25°C to +625°C KNE K -50°C to +1000°C N -100°C to +1100°C E -50°C to +800°C	K -50°C to +999°C T -60°C to +400°C J -50°C to +600°C	-99°C to +650°C	-25°C to +999°C
Sensor Type	Thermocouples to BS.4937 DIN 43710	Pt 100 Ω resistor to BS.1904 DIN 43760	Thermocouples to BS.4937 DIN 43710	Thermocouples to BS.4937 DIN 43710	Pt 100 Ω resistor to BS.1904 DIN 43760	Type K Thermocouple to BS.4937 DIN 43710
Resolution	0.1°C below 185°C 1°C above 185°C (Auto range change at 185°C \pm 5°C)	0.1°C below 185°C 1°C above 185°C (Auto range change at 185°C \pm 5°C)	1°C	1°C	1°C	1°C
Accuracy (15°C-25°C ambient)	K \pm 0.2% of reading \pm 0.5°C J \pm 0.3% of reading \pm 0.5°C R \pm 0.5% of reading \pm 1°C S \pm 0.5% of reading \pm 1°C T \pm 0.3% of reading \pm 0.5°C N \pm 0.5% of reading \pm 1°C	\pm 0.2% of reading \pm 1 digit	\pm 0.3% \pm 1°C	\pm 0.3% \pm 1°C	\pm 0.2% \pm 1°C	\pm 0.3% \pm 1 digit
Accuracy Set Point (15-25°C ambient)				\pm 1°C typical	\pm 1°C typical	
Input Impedance	30 M Ω typical		30 M Ω typical	30 M Ω typical		30 M Ω typical
Cold Junction Compensation	Automatic by precision thermistor		Automatic by precision thermistor	Automatic by precision thermistor		Automatic by precision thermistor
Sensor Operation Mode		4 wire constant current, voltage sensing			4 wire constant current, voltage sensing	
Display	3½ digit, 13.5mm LED	3½ digit, 13.5mm LED	3½ digit, 13.5mm LED	3 digit, 11mm LED	3 digit, 11mm LED	3 digit, 7.6mm LED
Sampling Rate	2.5 per second	2.5 per second	2.5 per second	2.5 per second	2.5 per second	2.5 per second
Power Supply	240/120V ac \pm 10% 50/60/400 Hz, 4VA	240/120V ac \pm 10% 50/60/400 Hz, 4VA	240/120V ac \pm 10% 50/60/400 Hz, 4VA 8-15V ac, 8-15V dc	240/120V ac \pm 10% 50/60/400 Hz, 6VA	240/120V ac \pm 10% 50/60/400 Hz, 6VA	5 to 8V dc, 150mA maximum. Mains adaptor available
Sensor Input	Screw terminals	Screw terminals	Screw terminals	Screw terminals	Screw terminals	Edge connector
Recorder Output	1 mV/°C (2K Ω source)	1 mV/°C (2K Ω source)				
Relay Output				Heavy duty relay. Silver cadmium oxide Rating 250V ac, 5 amps resistive load. 30V dc, 5 amps resistive load.		
Sensor Break Indication	Automatic (Down Scale)			Automatic (Up Scale)		
Overall Dimensions	95×47×153mm	95×47×153mm	95×47×153mm	95×47×153mm	95×47×153mm	48×24×112.5mm
Panel Cut Out	91×43mm (+0.75 - 0.00mm)	91×43mm (+0.75 - 0.00mm)	91×43mm (+0.75 - 0.00mm)	91×43mm (+0.75 - 0.00mm)	91×43mm (+0.75 - 0.00mm)	44.5×20.7mm (+1.0 - 0.00mm)
Depth Behind Panel	141mm	141mm	141mm	141mm	141mm	With edge connector = 113mm. With ADI mains adaptor and edge connector = 171mm

DIGITAL PANEL METERS FOR CONTROL & MEASUREMENT

DIMENSIONS AND TERMINALS DIAGRAMS



MODEL 3750 **MODEL 7600** **MODEL 3900KTJ**
MODEL 3754 **MODEL 7800** **MODEL 3900KNE**
MODEL 7000 **MODEL P300**
MODEL 7400 **MODEL P400**



	IDENTS	P300 AND P400	7600 AND 7800	3900	3750	3754	7000 AND 7400
A	NORMALLY CLOSED ALARM 1	1	SIGNAL INPUT -VE	4 TO 20mA INPUT -VE	TH/COUPLE INPUT -VE	TH/COUPLE INPUT -VE	PLATINUM SENSOR I/P B BLACK -VE
B	NORMALLY CLOSED ALARM 2	2	SIGNAL OUTPUT +VE	4 TO 20mA INPUT +VE	TH/COUPLE INPUT +VE	TH/COUPLE INPUT +VE	PLATINUM SENSOR I/P C RED +VE
C	COMMON ALARM 1	3	TRANSDUCER SUPPLY +VE	LOOP SUPPLY -VE	NOT USED	NOT USED	PLATINUM SENSOR I/P A YELLOW USED
D	COMMON ALARM 2	4	TRANSDUCER SUPPLY -VE	LOOP SUPPLY +VE	NOT USED	NOT USED	PLATINUM SENSOR I/P D BLUE USED
E	NORMALLY OPEN ALARM 1	5	ANALOGUE OUTPUT -VE	ANALOGUE OUTPUT -VE	POWER INPUT -VE AC/DC	ANALOGUE OUTPUT -VE	ANALOGUE OUTPUT -VE
F	NORMALLY OPEN ALARM 2	6	ANALOGUE OUTPUT +VE	ANALOGUE OUTPUT +VE	POWER INPUT +VE AC/DC	ANALOGUE OUTPUT +VE	ANALOGUE OUTPUT +VE
G	120V AC LIVE OR +DC						
H	240V AC LIVE OR -DC						
J	NEUTRAL						

- NOTES
1. ALL DIMENSIONS IN MM
 2. OVERALL DIMENSIONS 95 × 47 × 153
 3. PANEL CUT OUT SIZES $91 \begin{matrix} +0.75 \\ -0.00 \end{matrix} \times 43 \begin{matrix} +0.75 \\ -0.00 \end{matrix}$
 4. PANEL THICKNESS 5MM MAX
 5. DEPTH BEHIND PANEL 141

Please note: Unless otherwise stated in the specification charts, the dimensions and terminals diagrams for all panel series are given above.

TEMPERATURE INDICATORS & CONTROLLERS

3700 SERIES

- High accuracy, high reliability for thermocouple or Pt100 Ω sensors
- 1mV/°C linear analogue output

Bright, LED displays indicate wide temperature ranges from -50°C to +1700°C for the various thermocouple models and -150°C to +800°C for the platinum resistance model

These indicators are autoranging from 0.1°C to 1°C resolution at 185°C with a high accuracy of ± 0.2%, ± 0.5°C. The standard linear analogue output of 1mV/°C can be used to drive chart recorders or analogue control systems.

Options: Single and dual alarms, 12V or 24V dc isolated supply, °C or °F scaling and a 4-20mA re-transmission signal are available.

3900 SERIES

- 'Three-in-one' indicators with Type K, J, R, S, T, N, E customer selectable thermocouple combinations
- Standard 96 × 48mm DIN size casing

These indicators offer long term stability for the following thermocouple combinations, Type KRJ, KSJ, KTJ, or KNE — user selectable by an internal switch. With one indicator performing the job which has previously required these separate units, this series offers users and distributors the opportunity to save space and money otherwise tied up in stocks.

Option: With the exception of thermocouple combinations Type KRJ and KSJ a °C or °F scaling is available.

3800 SERIES

- High performance, 1-3 set point indicators/controllers
- Standard 96 × 48mm DIN size casing

The 3800 series, 3 digit, 1-3 set point indicators/controllers are competitively priced units for use with Type K, T, J or Pt 100 Ω sensors offering high accuracy, resolution and repeatability.