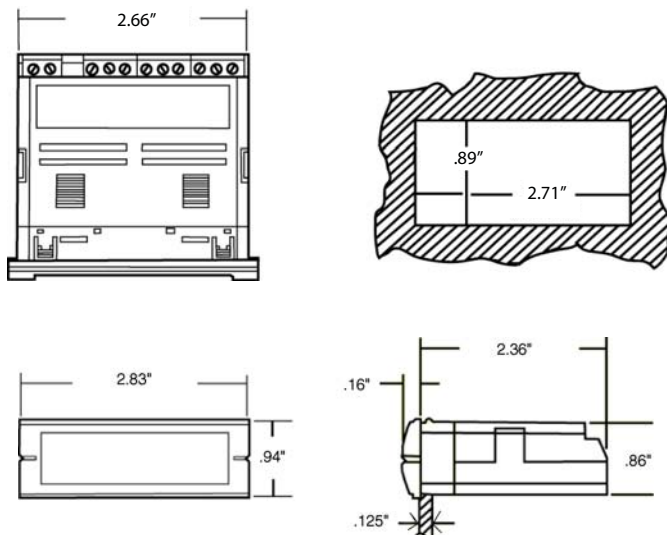# Mini-Max M240 Temperature Indicator

Simpson

- **3/64 DIN Temperature Indicator**

- **Jumper-selectable input type and ºC/ºF indication**

- **Screw terminal connectors for easy installation**

- **Unique mounting bracket allows for stacking of multiple meters**

Dimensions - M235, M245 & M240

Specifications

DISPLAY

Type	7-segment red LED
Height	0.56" (14.2mm)

Display resolution	0.1° from -99.9° to 999.9°; 1.0° below -100° or above 1000°; 0.1mV for mV indication
Overrange indication (T/C or mV)	The left-most digit shows 1: "1" (other digits are blank)
Open or faulty input connection	"----"
Uncalibrated instrument	Display will flash continuously "INFO FAIL CALB REQD" upon application of power.
Polarity	Automatic, with "-" indication; "+" indication implied

POWER REQUIREMENTS

AC Voltage	85-250VAC @50-60Hz
Power Consumption	2VA

INPUTS

Thermocouple	J, K
Millivolt	±70mV (uncompensated for temperature)
Lead Resistance Effect	-13μV/100Ω max.
RTD	Platinum 100 Ohm (.00385 alpha)
Lead Resistance Effect	4-wire -.26°C/100V max.
	2- and 3-wire 1°/.29Ω max.
Temperature Coefficient	±0.2°C / °C

Input Type	Temperature Range	Accuracy @25ºC
K T/C	-100 to 1370°C	±(0.1% rdg +1.5°C)
	-148 to 2498°F	±(0.1% rdg +2.7°F)
J T/C	-100 to 1200°C	±(0.1% rdg +1.5°C)
	-148 to 2192°F	±(0.1% rdg +2.7°F)
RTD Pt100	-100 to 850°C	±(0.2% rdg +1.5°C)
(4-wire)	-148 to 1562°F	±(0.2% rdg +2.7°F)
mV	-70 to 70mV	±(0.1% rdg +0.1mV)

Input Impedance:	22MΩ

ENVIRONMENTAL

Operating Temperature	0 to 55°C
Storage Temperature	-10 to 60°C
Relative Humidity	0 to 85% non-condensing
Warmup time	Less than 20 minutes

A TO D CONVERSION

Technique	12 Bit Successive Approximation (SAR)
Rate	10 samples per second

NOISE REJECTION

NMRR	60dB, 50/60Hz
CMRR	(w/1KΩ unbalanced @ 60Hz) 90dB min

MECHANICAL

Bezel	0.94" x 2.83"
Depth	2.36"
Panel cutout	0.89" x 2.71"
Weight	3.5oz (99.2g)
Case Material	94-0,UL-rated, glass-filled thermoplastic

Ordering Information

Mini-Max Indicators can be configured by making an entry in each section. Example: M240-0-91-0-F.

Basic Unit	Power Supply	Input	Output	Display
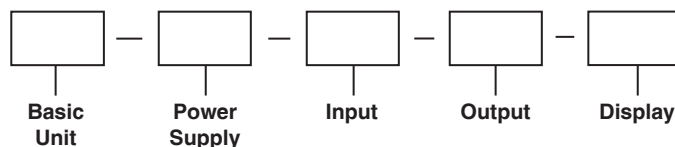
Selection	Description		Selection	Description
	Basic Unit			**Output**
M240	4 Digit LED		0	None
	Power Supply			**Display**
0	85-250 VAC		C	°C
			F	°F
			0	mV
	Input			
91	J T/C			
92	K T/C			
93	RTD Pt100 Ohm			
94	DC mV			

Thermocouples can be found in Accessories

Mounting Requirements

Insert the Mini-Max through the panel, and then slide the mounting bracket on to the Mini-Max. The mounting bracket allows Mini-Max units to be stacked side-to-side or top-to-bottom. Panel cutout instructions for stacking multiple units are provided under "stacking features" on our website.
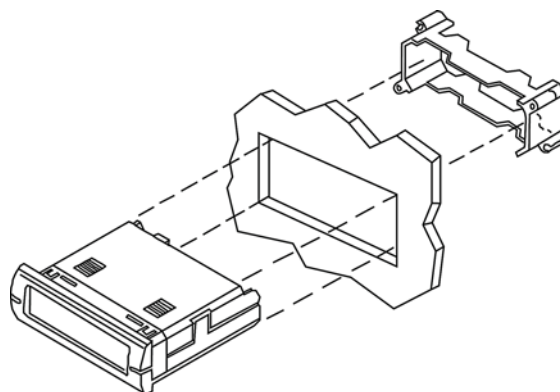
See Dimensions on previous page