

# TEMPERATURE

## 1000 OHM PLATINUM RTD RANGEABLE TEMPERATURE TRANSMITTER TT809 SERIES



**MINCO**



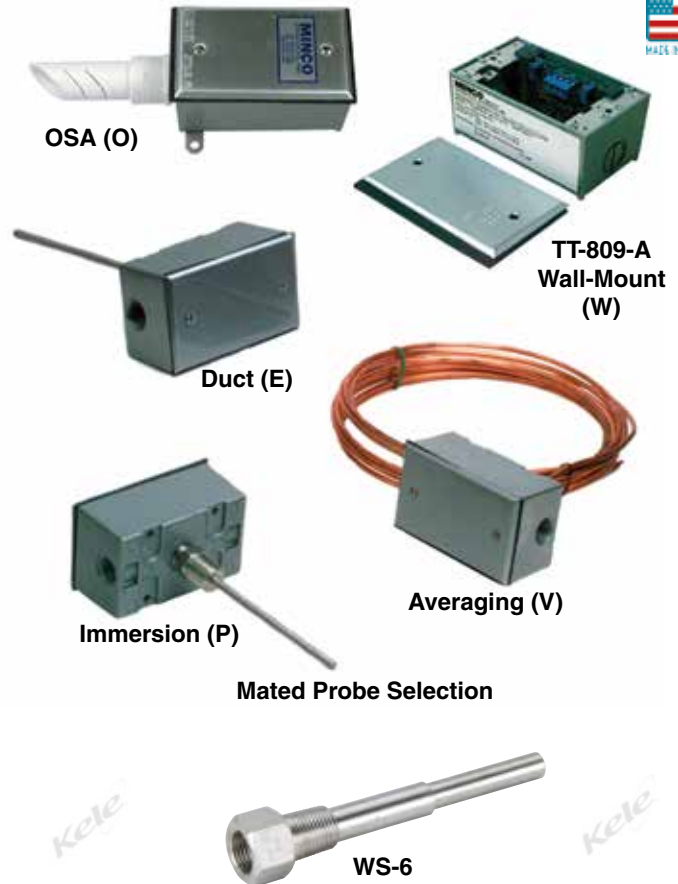
### DESCRIPTION

The Minco TT809 is a 1000Ω Platinum RTD User-Rangeable Temperature Transmitter. Zero setting can be anywhere from -50° to 212°F (-45° to 100°C) and span from 30° to 320°F (17° to 180°C). The TT809 comes factory calibrated, and once installed, it can be field calibrated with high precision DVM and decade box. The TT809 is easily calibrated by adjusting the zero pot to match the calibration reference.

The gasketed cast-metal housing provides excellent weather resistance. The screw terminal connections on the transmitter circuit, 1/2" NPT threaded connection, and adjustable mounting brackets simplify installation. Several varieties of precision 1000Ω platinum RTD probes are easily mated with the transmitter housing.

### FEATURES

- Switch-set rangeable with zero and span
- One-point field calibration
- Non-polar loop connections
- Weatherproof sensor interface housing
- Non-interacting zero/span adjustment



SPECIFICATIONS	
<b>Supply Voltage</b>	9.4-35 VDC
<b>Accuracy</b>	Transmitter accuracy ±0.1% of span
<b>Transmitter linearity</b>	±0.1% of span
<b>Sensor accuracy</b>	±0.12%
<b>Signal Output</b>	4-20 mA @ 730Ω, two-wire, loop powered
<b>Rangeability</b>	Zero -50° to 212°F (-45° to 100°C)
<b>Span</b>	30° to 320°F (17° to 180°C)
<b>Sensor Type</b>	1000 platinum RTD, two-wire 0.00375 Ω/Ω/°C TCR 0.00385 Ω/Ω/°C TCR
<b>Operating Temperature</b>	-40° to 185°F (-40° to 85°C)
<b>Enclosure</b>	Cast aluminum moisture-resistant 1/2" FNPT and gasketed cover, suitable for outdoor use, UL #459L
<b>Averaging Sensor</b>	Copper
<b>Probe</b>	Stainless steel
<b>Wiring Terminations</b>	Screw terminals; non-polar, for connections either way; 4" (10 cm) 22 AWG leads
<b>Weight</b>	
<b>Duct</b>	0.8 lb (0.36 Kg)
<b>AVG</b>	
<b>12'</b>	1.5 lb (0.68 Kg)
<b>24'</b>	2 lb (0.91 Kg)
<b>50'</b>	3.6 lb (1.63 Kg)
<b>OSA</b>	0.75 lb (0.34 Kg)
<b>Immersion</b>	0.75 lb (0.34 Kg)
<b>Wall</b>	0.75 lb (0.34 Kg)
<b>Warranty</b>	3 years

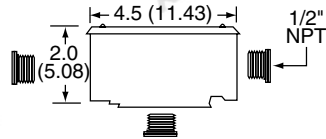


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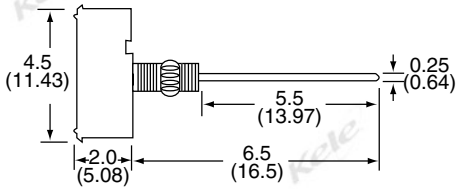
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### DIMENSIONS

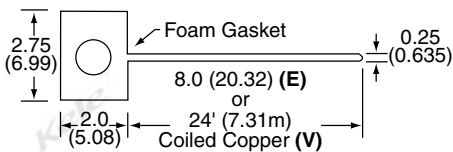
in  
(cm)



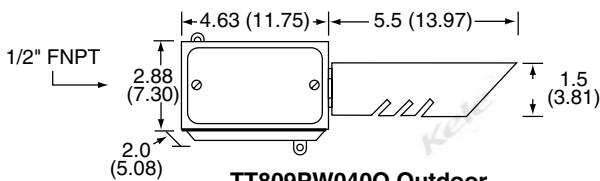
**TT809PW000W Enclosure Only**



**TT809PW055P Immersion**



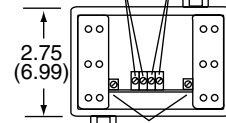
**TT809PW080E Duct; TT809PW288V Averaging**



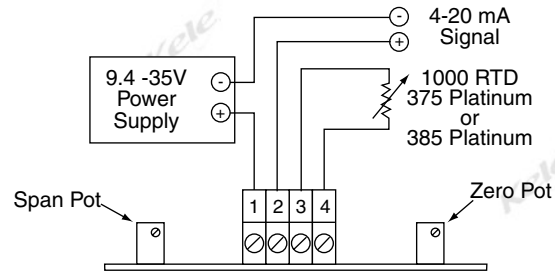
**TT809PW0400 Outdoor**

### WIRING

Power Connection Sensor Connection



Span and Zero Adjustments



The **TT809** has range switch adjustments and non-interacting zero and span pots. The weatherproof box is standard and provides easy accessibility for installation and service.

**TT809  
Temperature Transmitter**

### ORDERING INFORMATION

MODEL	DESCRIPTION
<b>TT809</b>	Assembly probe for two-wire RTDs
<b>PW</b>	1000Ω 0.0375 Ω/Ω°C platinum curve, 6" leads
<b>LLL</b>	Length LLL in 0.1" increments 040 = 4.0", 120 = 12.0", 0.000 for "W" without sensors
<b>E</b>	Duct mount, weather-resistant box, LLL typically = 8.0"
<b>V</b>	Duct averaging, weather-resistant box, LLL must be = 144", 288", or 600"
<b>O</b>	Outside air, weather-resistant box with weather shield, LLL = 4.0"
<b>P</b>	Immersion, weather-resistant box, LLL typically = 5.5" for 6" well insertion
<b>W</b>	Wall mount, weather-resistant box, LLL typically 4.0" or 000 for no probe**
<b>1</b>	4-20 mA DC output
<b>BI</b>	Range codes 30°/130°F (-1°/54°C)
<b>S</b>	Range codes 0°/100°F (-18°/38°C)
<b>H</b>	Range codes 40°/90°F (4°/32°C)
<b>N</b>	Range codes 32°/122°F (0°/50°C)
<b>EN</b>	Range codes -20°/140°F (-29°/60°C)
<b>1</b>	No calibration data, sensor, or transmitter
<b>2</b>	Sensor/transmitter matched at 0°C with NIST
<b>3</b>	Sensor/transmitter matched at 0°, 100°, and 260°C with NIST

Sample order:

- TT809PW080E1S1** Transmitter with 8" duct probe, 375 curve platinum RTD, ranged for 0°/100°F
- TT809PW055P1B12** Transmitter with 5.5" immersion probe, 375 curve RTD, with NIST at 0°C, ranged for 30°/130°F
- TT809PW000W1N1** Transmitter only for two-wire 1000Ω, 375 curve RTD, ranged for 32°/122°F

\*\*Must order sensor separately.

### RELATED PRODUCTS

- CC-1G-K** Plastic capillary and sensor holder mounting clip
- DCP-1.5-W** Power supply, 24 VAC IN to 24 VDC OUT
- DCPA-1.2** Power supply, 120 VAC IN to 24 VAC/24 VDC OUT
- M-648-K** Copper-clad capillary mounting clip
- TCC-111** Thermal conductive compound 111 ml tub
- WB-6** Brass well
- WS-6** Stainless steel well