

RTD THERMOMETER ANALOG METER REPLACEMENT DPM

MODEL
595

U.S. Patent No.
4,908,569

Features

- PT100 Platinum (0.00385 Alpha)
- High Stability & Accuracy
- 3½" Standard Meter Case
- .5" High LCD Display
- Rugged
- Low Cost
- Optional Backlight
- MTBFC: 80,000 Hours

DESCRIPTION: Model 595 requires 5VDC power to operate and is of the 2 wire type. A standard calibration is for PT100, having a TC of 0.00385 Ω/Ω/°C and an operating range (of RTD) is typically -200°C to +600°C. Scale calibration of °F or °C is available. 2 or 3 wire RTD is accepted by the 595.

BACKLIGHT: Standard display is reflective black digits over silver background. An optional backlight is available at time of ordering. When ordered, the digits are black over an illuminated green background. The intensity is not adjustable, (see Typical Connections). **Not available with 7-32VDC power option.**

LIGHT SOURCE: Electroluminescent (E.L.) requiring 120VAC @ 400Hz to operate. If ordered an internal DC-AC converter is installed and requires 5VDC @ 70mA. The E.L. has uniform light output and its life expectancy is in excess of 15,000 hours.

COMMON MODE VOLTAGE: The unit can be connected in differential mode with up to 2VDC/AC between digital ground and - signal. For better results and noise rejection connect the unit in single ended mode (digital ground to - signal).

POWER SUPPLIES: When required and ordered will be externally mounted. Two types are available, the "Open Frame" style accepts 120/240VAC and delivers 5VDC @ up to 400mADC. The "Power Pack" is a wall plug in module available only for 120VAC input and delivers 5VDC at up to 100mADC.

DECIMAL POINTS: Installed at Otek and must be specified at the time of ordering.



TEMPERATURE RTD

SPECIFICATIONS AT 25°C

Accuracy and Linearity	±0.1% of F.S. ± 1 digit
Excitation Current	500µA max
Current Source Stability	±0.01%°C (0-40°C)
Open RTD Indication	(1---
Input Type	2 wire PT100 (0.00385 alpha)
Zero Adjustment	Internal & Factory set
Full Scale Adjustment	±30% of F.S.
Temperature Coefficient	100PPM/°C
Range (Resolution)	1999°/199.9° (1°/0.1°)
Power Requirement	5VDC ±10% @ 5mA
Operating/Storage Temperature	-10° to +60°C/-20° to +70°C
Backlight Operating Range (for DC-AC)	4-6VDC @ 70mA
Display5" Reflective LCD
MTBFC	80,000 Hours

CASE MATERIAL: U.L. approved ABS Polycarbonate 94VO rated. Black matte with clear winow.

ORDERING INFORMATION (1/1/97)

MODEL **5** **9** **5**-**1**

INPUT RANGE (1)

- 0 -200.0 to +200.0°C
- 1 -200.0 to +200.0°F
- 2 -200 to +800°C
- 3 -200 to +1500°F

POWER INPUT

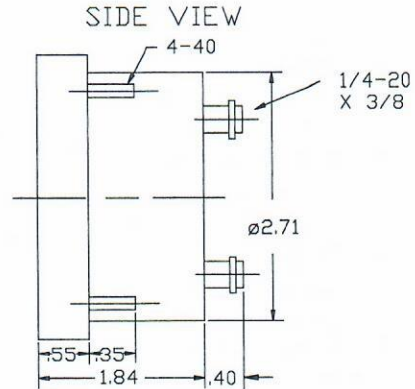
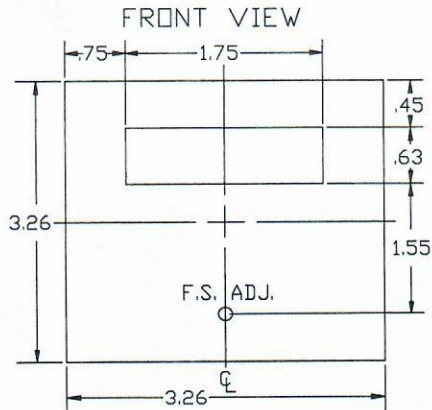
- 0 5VDC
- 1 120/240VAC
- 2 120VAC
- 3 7-32VDC

BACKLIGHT & DECIMAL POINT

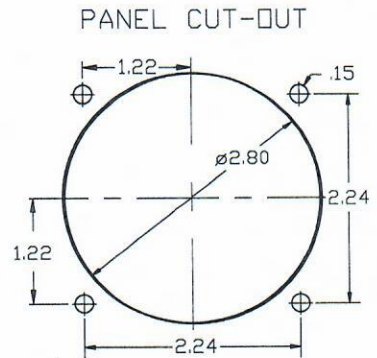
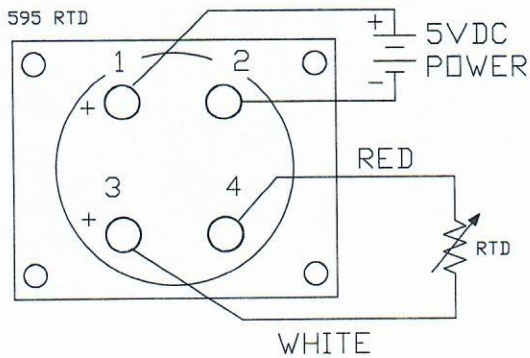
- 0 No and No D.P.
- 1 No and 1.XXX D.P.
- 2 No and 1X.XX D.P.
- 3 No and 1XX.X D.P.
- 4 Backlight and No D.P.
- 5 Bklt and 1.XXX D.P.
- 6 Bklt and 1X.XX D.P.
- 7 Bklt and 1XX.X D.P.

(1) ANSI (α=0.003923) & 10Ω Cu on request

595 MECHANICALS & TYPICAL CONNECTIONS
MECHANICALS

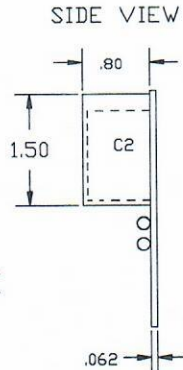
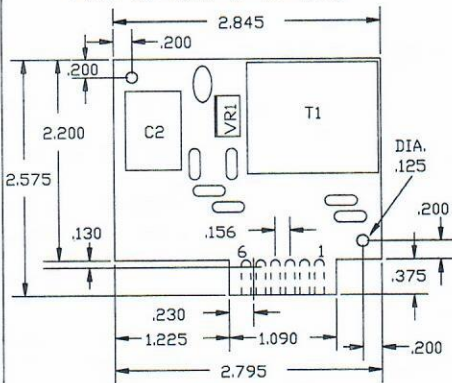


MOD. 595 RTD INPUT TYPICAL CONNECTIONS (REAR VIEW)

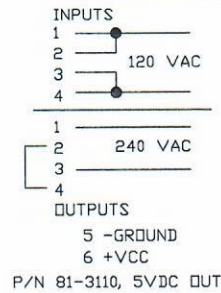


OPTIONAL BACKLIGHT
OPEN FRAME STYLE
P/N 81-3110 & 81-3112

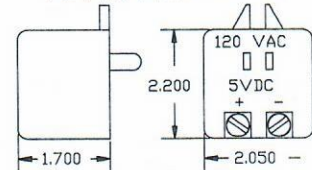
MECHANICALS FOR POWER SUPPLIES



OPEN FRAME
POWER SUPPLY
TYPICAL CONNECTIONS



POWER PACK STYLE



ORDER P/N 75-3110 FOR 5VDC

F#87MC595.DWG

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520-748-7900

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