RP-Series

FUNCTION SPECIFIC METERS

RP-35A

Autozeroing Panel Meter
3 1/2 Digit 0.56" LED
In a NEMA Style Case

A Precision AC-Powered Differential Meter for DIN/NEMA Cutouts.

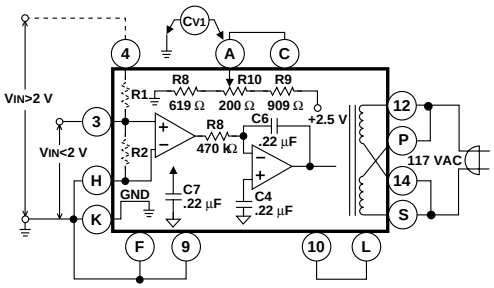
General Features

The Texmate Model RP-35A is a precision, autozeroing 3½ digit meter designed to fit most other manufacturers' panel cutouts, including DIN/NEMA standard. It measures bipolar differential and single-ended DC voltages over five user-programmable ranges from ±199.9 mV to ±1200 V full-scale. Provision has been made for offset capability, as well as for various operating modes, such as a ratiometric ohmmeter, ratiometric voltmeter, current meter, and temperature meter. For 4-20 mA applications, the suggested meter, in the same case size is the UM-35CL.

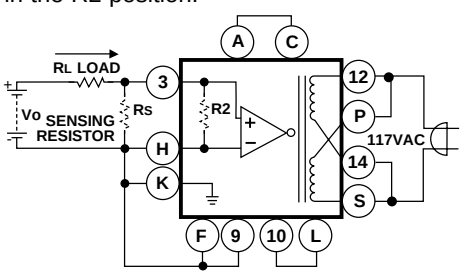
The UM-Series also has temperature, pressure, AC Volts and AC Amp meters that are in the same case size as the RP-35A.

Typical Application Connections

SINGLE-ENDED METER – 200 mV RANGE, >2 V RANGE
200mV Range: (1) Omit R1 and R2. (2) Change R8 from 619Ω to 121Ω. (3) Change R9 from 909Ω to 4.32 kΩ. (4) Change R6 from 470kΩ to 47kΩ. (5) Adjust R10 until CV1=100mV.
>2V Range: Install R1 and R2 as specified under section titled Useful Tables.



SINGLE-ENDED CURRENT METER
(1) Connect meter as for 200 mV voltmeter. (2) Install Rs. NOTE: Rs must be externally mounted when F.S. current is greater than 200 mA, and 4-wire type connection should be used. For currents of 200 mA F.S. or less, Rs may be internally mounted in the R2 position.



View more application connections and connection instructions on page 3.

Compatibility

The RP-Series NEMA case style is complementary to Texmate's Classic UM-Series. For economy, each RP model is dedicated to a specific application. RPs are ideal for upgrading or replacing the traditional USA NEMA case panel meters presently in use.

Traditional NEMA STYLE USA CASE

Specifications

Input Configuration:.....True differential and single-ended
Full Scale Ranges: .....±199.9mVDC
±1.999VDC (standard)
±19.99VDC
±199.9VDC
±1200VDC
Input Impedance: .....Exceeds 1000MΩ on 200mV and 2V ranges; 10MΩ on all other ranges
Input Protection:.....±500VDC or 350VAC maximum on 200mVand 2V ranges; ±1200VDC or 850VAC on all other ranges
Accuracy: .....±(0.05% of reading = 1 digit)
Temperature Coefficient: ..5PPM/°C in ratiometric operation; 60 PPM/°C Typ. using internal reference on 200mV and 2V ranges
Warm Up Time: .....10 minutes to specified accuracy
Conversion Rate: .....3 readings per second nominal, controllable from 1 to 20 readings per second
Display: .....0.56" LED
Decimal Selection: .....User programmable to 4 positions
Overrange Indication: ..When input exceeds full scale on any range being used, most significant "1" digit & "-" symbol (for negative inputs) is displayed with all other digits blanked
Power Requirements:....110V or 220V, ±5% at 50Hz; 117V or 230V, ±5% at 60 and 400Hz
Operating Temperature: ....-10° to +50°C
Storage Temperature:....-20° to +70°C
Relative Humidity .....95% (non-condensing)
Case Dimensions: .....Bezel 4.06"Wx1.89"H (102.7Wx47.9Hmm) Depth behind bezel 3.64" (92.22 mm) Plus 0.5 to .9" (12.7 to 22.8mm) depending on connector used.
Weight: .....8 oz (227 gms)