



(An ISO 9001:2008 Mfg. Co.)

**Remote Oil / Winding
Temperature Indicator**

EE-602

INSTRUCTION MANUAL

Instruction Manual
for
**Remote Oil / Winding
Temperature Indicator
EE-602**

EMCO ELECTRONICS

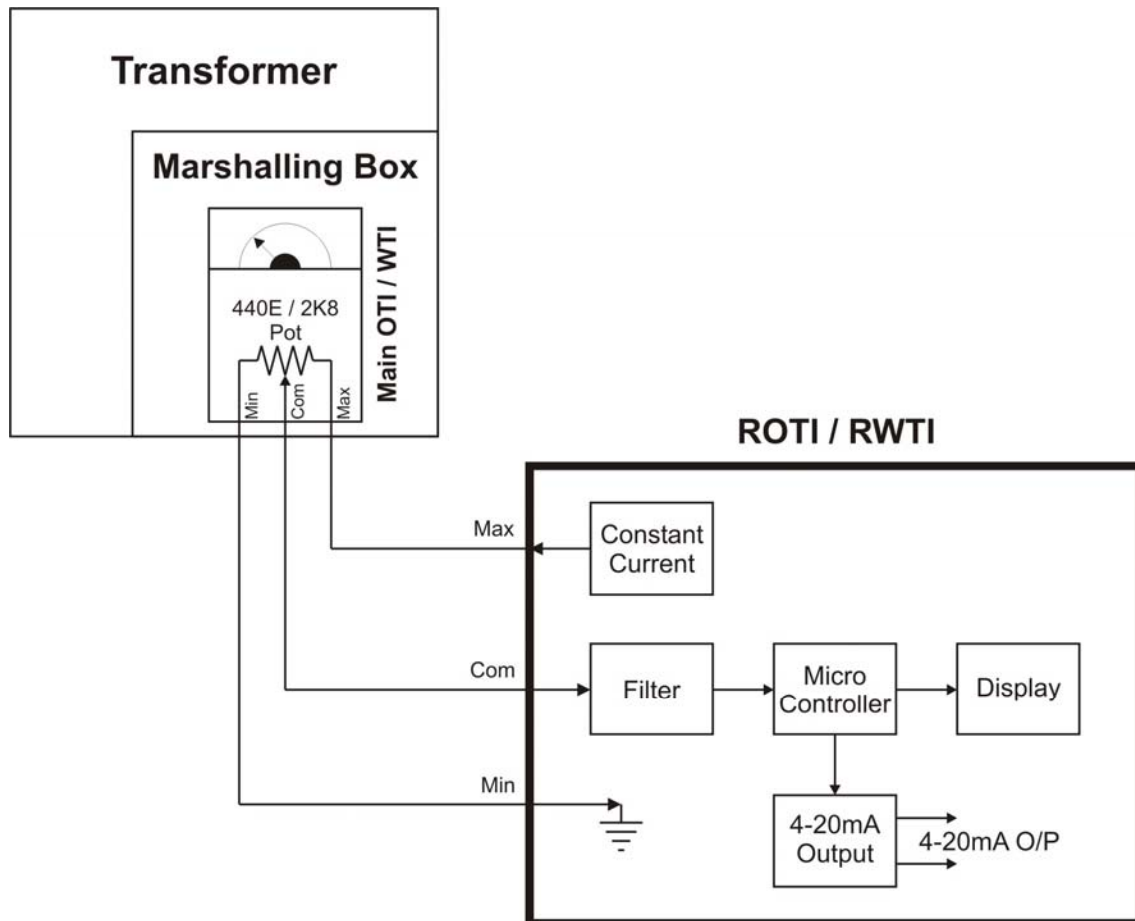
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EMCO's ROTI / RWTI EE-602 are remote temperature indicators which indicate temperature proportional to resistance input. The temperature is indicated on a 3 digit 7 segment LED display. The 3 wires viz Min., Max., and Com. coming from 440E or 2K8 pot within the main analog type OTI / WTI are connected to Min., Max. and Com. Terminals on the unit as indicated on the rear panel.



Block diagram of ROTI / RWTI

AC Power (either 110/230 V AC or 95-260 V AC/DC (UPS)) is also connected to the terminals marked on the Rear Panel.

When the unit is powered on, the display indicates the current Temperature of Oil / Winding in accordance to the pot resistance. As the resistance increases, the display increases and as the resistance decreases, the display decreases. Check the unit by changing the resistance from position 0 (min). to the 150 (max.) Position and confirm that it reads correctly.

When the wiper is open, the display indicates zero



ROTI model EE-602

Specifications :

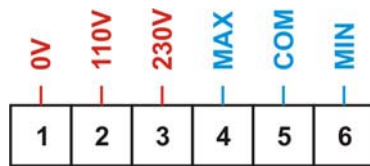
Input Resistance	: 0 to 440Ω / 2.8KΩ ± 2% or as specified
Temperature Range	: 0 to 150°C
Accuracy	: ±1°C
Display	: 3 digit 7 segment LED display
Auxiliary Supply	: 110V / 230V ±10%V AC, 50Hz, 5VA
Dimensions	: 96 x 96 x 100 mm
Panel Cutout	: 92 x 92 mm
Voltage Insulation	: 2kV for 1 minute between I/Ps shorted & chassis
Operating Temperature	: 0 to 45°C
Weight	: 0.5Kg. approx.

<i>Option 1</i>	: <i>Dual 4-20 mA Current Output</i>
<i>Option 2</i>	: <i>4-20 mA Current Input version</i>
<i>Option 3</i>	: <i>PT-100 Sensor Input version</i>

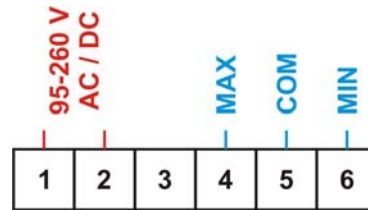
OPERATING PROCEDURE :

1. Connect the Auxiliary Supply to the Back Panel Terminals.
2. Connect the 3 wires coming from the temperature sensing potentiometer (440Ω / 2K8) to the terminals 4, 5, and 6 respectively; (4 - Max (150°C); 5 - Com (Wiper); 6 - Min (0°C)). Put the switch in Normal mode.
3. Vary the temperature sensing pot to take the wiper (common) to minimum position. Display should indicate 0°C . In case display does not indicate zero due to lead resistance, adjust "ADJ" Pot on Front Panel to indicate zero.
4. Vary the temperature sensing pot to take wiper to maximum position. Display should indicate 150°C . Due to tolerance of input pot ($\pm 2\%$) the display may have to be adjusted to 150°C with the "ADJ" Pot on Front Panel.
5. Repeat steps 3 & 4 and confirm the display reads correctly.

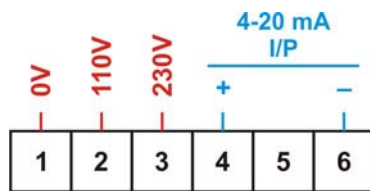
Connection diagrams for different configurations



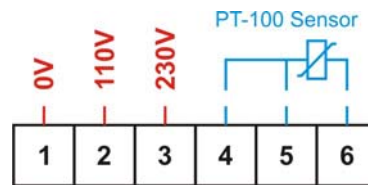
General ROTI / RWTI Connections



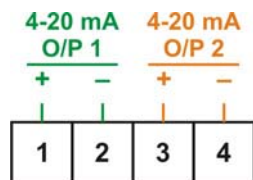
UPS Connections



4-20mA Current I/P version



PT-100 Sensor I/P version



4-20mA Current O/P connections

WARRANTY

This product from EMCO ELECTRONICS is warranted against defects in materials and workmanship for a period of 12 months from the date of dispatch to the first buyer/purchaser of this equipment, this being essentially limited by warranties given to EMCO ELECTRONICS on the component used in equipment.

During the warranty period, EMCO ELECTRONICS will at its option, either repair or replace the product which proves to be defective provided the product has been used with reasonable care and in accordance with the manuals/product specification. Consequently this warranty shall also not apply to defects/damages in transit or resulting from misbehaving, misuse, unauthorized modifications or repairs operations outside the environmental, electrical and/or other specification, improper or inadequate maintenance of the product, or site conditions as required/recommended and damages arising from accidental or abnormal causes.

The warranty period for items repaired/replaced shall not exceed the period for which the equipment was originally warranted and also the liability of EMCO ELECTRONICS to the purchaser shall not in any case, exceed the original purchase price of the equipment.

For warranty service or repair, the equipment must be returned to EMCO ELECTRONICS securely packed on Freight paid basis and accompanied by a certificate stating that the equipment is being returned for warranty repairs along with details of the purchase (Purchaser's Name, and address, Invoice No. and Date of purchase) and details of the equipment failure, faults conditions, other useful information to facilitate early repair/rectification of the equipment.

Return of the equipment duly repaired can be arranged on payment of the packing and forwarding charges together with any other taxes, duties, other miscellaneous expense incurred. Alternatively the purchaser may arrange to collect the equipment from EMCO ELECTRONICS. In case the repairs are not covered under warranty, the charges for the same must also be paid before collection of the equipment.

Our engineer's services are available at site for instruments during warranty or out of warranty period, on chargeable basis, details of which are available on request.

In the interest of development and improvement, EMCO Electronics reserves the right to amend without notice, details contained in this publication. No legal liabilities will be accepted by EMCO Electronics for any errors, omissions or amendments.