

Automatic Voltage Regulating Relay : EE-301T

Emco's solid state Automatic Voltage Regulating Relays are designed for maximum operational simplicity for regulating the secondary voltage of Power Transformers with OLTC. The Lower & Raise settings allow the dead band to be set as per requirement. The time delay control allows the regulator to respond only to voltage fluctuations lasting for periods greater than the set time delay. A pair of NO contacts is provided for operation of tap-changer after the set time delay is over.



EE-301T

Features

- ❖ Digital Readout for PT Supply and Deadband Setting
- ❖ Solid State Circuitry
- ❖ Self Test Facility
- ❖ LED Indicators for Raise, Lower pre-signal and Undervoltage / Overvoltage and Relay operation condition
- ❖ Separate Nominal value and Bandwidth settings
- ❖ Continuously adjustable Time Delay setting
- ❖ Automatic resetting after Voltage correction
- ❖ Single pulse operation of control relays
- ❖ Control Fail Alarm Contacts with Internal Blocking
- ❖ UV Alarm contacts with internal Blocking
- ❖ Optional Line Drop Compensation
- ❖ Integrated Tap Position Indicator with optional 4-20mA output

Technical Specifications

Auxiliary Supply	: 110/230V AC \pm 15%, 50Hz, 15VA	Control Operation	: Single pulse operation with approx. 2 secs ON Time
PT Supply	: 110V AC, 50Hz, 1.5VA and readable on display	CFR	: N/O Control Fail Relay contacts for CFR i.e. in case of 'L' or 'R' cond. for more than 15 min.
Nominal Value Setting (NVA)	: Adjustable between 110V \pm 10% and readable on display	TPI	: Built-in TPI for max. 35 Taps, 1K step resistance with optional 4-20mA O/P.
Lower Volts Setting	: Adjustable between 0.5V to 5V above the NVA and readable on display	Operating Temp.	: 0°C to 45°C
Raise Volts Setting	: Adjustable between 0.5V to 5V below the NVA and readable on display	Overall Dimensions	: 398 x 148 x 261 mm (H x W x D)
Time Delay Setting	: Fixed (Voltage Independent) Time Delay continuously adjustable from 10 to 120 secs.	Panel cutout	: 330 x 135 mm (H x W)
Time Delay Resetting	: Instantaneous resetting with voltage returning to deadband	Weight	: 7Kgs. approx.
UnderVoltage / OverVoltage Blocking	: Internal blocking at 88V (for UV) and 132V (for OV) and Restoration at 93.5V (for UV) and 127V (for OV)	Options	1. Line Drop Compensator with resistive and reactive compensation of either polarity upto 20% and suitable for operation with 1A, 5VA CT. 2. Normally closed Auxiliary Supply Fail Relay contacts. 3. User defined settings for P.T. Supply, Time delay, Undervoltage Blocking.
Control Relays	: One pair of normally open potential free contacts of rating 5A at 240V AC or 24V DC for each Lower, Raise, Control Fail and Undervoltage / Overvoltage control relays (only one pair of contacts is available for either UV or OV)		

Product specifications are subject to change without notice.

EMCO ELECTRONICS

Mumbai Office : 302, Vasan Udyog Bhavan, Senapati Bapat Marg, Opp. Phoenix Mill, Lower Parel (W), Mumbai 400013. Tel.: +91-22-2490 2283, 2491 4638. Fax: +91-22-2495 1024. [Email : office@emcoelectronics.org](mailto:office@emcoelectronics.org)

Factory : Unit No. 13, Kedarnath Tungareashwar Industrial Complex No. 1, Sativali, Vasai (E), Dist. Palghar - 401 208. Tel.: +91-250-648 1782 / 1801 / 0114. Fax: +91-250-248 1087
[Email : mumbai@emcoelectronics.org](mailto:mumbai@emcoelectronics.org), sales.emcoelectronics@gmail.com

Bangalore Office : 15, Wood Street, (1st Floor) Richmond Road, Bangalore - 560 025
Tel.: +91-80-2557 0215. Telefax : +91-80-25 666 06
[Email : emcoblr@emcoelectronics.org](mailto:emcoblr@emcoelectronics.org), emcosalesbangalore@gmail.com



(An ISO 9001:2015 Co.)