



EMCO AVR EE-303C (with Communication Port)

Features :

- Microcontroller based architecture with A/D converter
- RS232 & MODBUS Communication
- Built-in Tap Position Indicator upto 35 Taps
- Readout of pri. & sec. voltages and Tap No
- Two independent timers for first and subsequent pulses
- Independent Lower, Raise & Nominal value settings
- Linear or Inverse Time response
- Blocking of UV, OV, CF & Max / Min Tap No.
- Auto / Manual mode of operation
- Test mode for testing AVR
- Minimum & Maximum PT Voltage display
- Single pulse or continuous pulse operation

Technical Specifications

Auxiliary Supply	: 110/230V AC \pm 15%, 50Hz, 15VA
PT Supply	: 110V AC, 50Hz
Nominal Setting (NS)	: 85 to 140V in steps of 0.1 V
Lower Setting (LS)	: +0.5 to +9% of NS in steps of 0.1V
Raise Setting (RS)	: -0.5 to -9% of NS in steps of 0.1V
UV Blocking	: 60 to 95% of NS in steps of 0.1%
OV Blocking	: 105 to 130% of NS in steps of 0.1%
Primary Voltage (KV)	: 0-999.9 KV corresponding to NS in steps of 0.1KV
Time delay (T1) bet ^d . deviation & 1 st pulse	: 10 to 180 sec, Linear or Inverse Response
Time delay (T2) bet ^d . consecutive pulse	: 0 to 11 sec, where 0 is continuous operation; 11 – T2 = T1
Control Fail Delay	: 300 to 900 sec. in steps of 0.1 sec.
Auto / Manual Mode (A/M)	: Selects Auto or Manual mode of Operation (Tap change via ?, ? keys)
Maximum Tap No.	: 1 to 35 with 1K step resistance
Test mode	: Allows AVR to be tested for all conditions through indication by LEDs. Relay contacts are blocked during TEST mode
AVR Disable (Remote Operation)	: I/P through potential free NO contacts at Remote end

Communication	: 1. 1 RS-232 port for Parameter Setting 2. 1 RS-485 port (3 terminals on back panel) for MODBUS Communication
Readable Para.	: PT, KV, MIN, MAX, TAP No., TAP Count
Programmable Para.	: NOM Vg, L Set (%), R Set (%), KV, UV (%), OV (%), T1 (S), T2 (S), CFR (S), Max. Tap, Oper. Mode, Control Mode.
Tap Change in Progress	: I/P through potential free NO contacts from OLTC
TPI Input	: 1K step resistor chain (35 Taps max.)
Relays Output	: 1 pair of NO contacts for Raise, Lower, UV, OV & CF 1 pair of NC contacts for Manual mode
Relays ON Time	: 2 sec. pulse
Contact Ratings	: 5A @ 240V AC or 24V DC
Operating Temp.	: 0°C to 45°C
Panel Cutout	: 90 mm (H) x 185 mm (W)
Overall size	: 92 x 192 x 220 mm (H x W x D)
Weight	: 1.5Kgs approx.
Options	: 1. PT display of 433V instead of 110V 2. Auxiliary Fail Relay (NO Contacts) 3. 4-20mA TPI Output for SCADA

Product specifications are subject to change without notice.

EMCO ELECTRONICS

(An ISO 9001:2008 Mfg. Co.)

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