

PCU

Parallel Control Unit EE-501



The Parallel Control Unit (PCU) is used for controlling 2 Transformers in parallel. Raise & Lower contacts from AVR1 & AVR2 are connected to PCU, and the outputs from PCU are connected to OLTC1 & OLTC2. Switches on the front panel allows selecting AVR1 or AVR2 as master & the other as follower, or both as masters (independent). Selecting both AVRs as follower will block the PCU. Also if the Manual mode is selected, PCU is blocked i.e. no output pulses are given. External A/M switch (NO contacts) are sensed for determining Auto / Manual mode of operation.

TPI of both Transformers are displayed on PCU. In Master - Follower mode the tap no. of Follower is made equal to the tap no. of Master. If the Tap nos. of both the Transformers are unequal for 5 Min., both the OLTCs are blocked.

Features

- Microcontroller based architecture
- Built-in Tap position Indicator for both Transmformers
- 4-20 mA output for both Tap Position Indicator
- Selectable delay between Master & Follower pulses
- Switch selectable mode of operation
- Out of Step Indication & blocking
- Bus Coupler closure indication
- Minimum / Maximum Tap Blocking

Technical Specifications

Auxiliary Supply : 110/230V AC $\pm 15\%$, 50Hz, 15VA
Maximum Tap No. : 21 (or as specified)
Time delay between Mater & Follower Pulse : Settable between 10 to 150 secs
Modes of Operation : Selected through Front Panel Switches

↓↓ - Independent AVRs
↓↑ - AVR1 Master, AVR2 Follower
↑↓ - AVR1 Follower, AVR2 Master
↑↑ - PCU Blocked

Overall Size : 92mm X 192mm X 220mm (H X W X D)
Panel Cutout : 90mm X 184mm (H X W)
Weight : 2Kg (approx.)

Inputs

Auto / Manual : External (NO) potential free contacts
Raise & Lower Input Pulses : (NO) potential free contacts from AVR1 & AVR2
Tap Position Indicators : Max, Wiper & Min wires from both OLTCs
Bus Coupler Input : (NO) potential free contacts from Bus Coupler

Outputs

Raise / Lower Pulses : 2 sec pulse with LED indication for both Transformers
Out of Step condition : LED indication with 1 pair of (NO) contacts
Bus Coupler Output : (NO) contacts for idicating Bus Coupler Closure
4-20 mA outputs for TPIs : 4-20 mA DC output for both TPIs with 100 Ω termination

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Product Specifications are subject to change without any prior notice