TCW-19 TORQUE CONTROLLER



Features:

- 1) Fully Solid State Design no moving parts no wear and tear of parts no noise consequently long life.
- 2) Uses one main circuit board for easy maintenance.
- 3) Uses the latest micro-controller chip for control functions.
- 4) Accurately calibrated digital torque settings with a resolution of 1 watt makes torque settings accurate and can be easily reproduced for identical results.
- 5) Soft start has been provided for all drives. This feature reduces starting currents in the drive. As a result, life of carbon brushes and drive increases.
- 6) Connected drive is automatically recognised & indicated by means of LED on the torque controller.
- 7) Torque setting arranged in four different ranges to suit four different drives. Appropriate wattage range is automatically selected for the connected drive, hence drives can not be abused or overused.
- 8) Actual drive wattage (torque) is displayed. Set wattage (torque), drive current and line voltage can be seen by press of a button.
- 9) Trip time adjustable from (0.1 sec to 10 secs.)
- 10) Adjustable reverse time from (1 sec to 90 secs.)
- 11) TRIP time cannot be set if the SET value is below 'no load wattage'. In this case the TRIP time will be automatically set to 7 secs.
- 12) The panel enables the operator to select "Speed change % wattage" between 50 % and 100% of the SET wattage.
- 13) This effectively reduces the variation between TRIP value & SET value.
- 14) Pause time (time interval between cycles) adjustable from (1 sec to 90 secs.)
- 15) Manual reverse by push button, in case of emergency.
- 16) Drive Speed adjustable in reverse rotation.
- 17) Hand (trigger) mode or foot switch mode, both are available.
- 18) Expansions can be carried out either in single cycle mode or auto repeat mode.
- 19) LED indicators provided for forward, reverse $\&\ trip\ conditions$ of drive.
- 20) MCB has been provided to protect the controller and drives against over current by short circuits.
- 21) Plug in type of PCBs reduce down time to minimum during trouble shooting.
- 22) All the spares inside the panel viz: PCBs, Transformers, CT, Relays DPM etc. can be replaced by use of only a screw driver.
- 23) Superior SCR technology has been incorporated rather than triacs. SCRS have much better voltage, current & dv/dt ratings than triacs. This leads to greater reliability & the power circuit becomes almost failsafe.

Microprocessor used : 89C55WD (8 bit)

Clock Frequency : 12 Mhz
Programme Memory : built in
Real Power Measurement upto : 2 KW
Voltage, Current sampling rate : 50 times/sec.

Model No.	Voltage Single Phase 50/60 Hz	Weight (kg)
TCW-19-110	110 V	7.5
TCW-19-230	230 V	7.5

Note: All TCW torque controllers are supplied with operation manuals.