

ELECTRICAL LOAD BANK DEMONSTRATOR

EM-80-07-30-45Q

EDU-LABS



System Description

This is an integral part of an integrated training system in Electrical Power Engineering specially developed for the training of electrical chargemen. This Resistive Load Bank is used primarily to provide high amperage variable electrical loads for testing or for general experimented purposes in an educational environment.

Featured

- Extra safety provisions are emphasized throughout the whole system.
- All compartments and section doors/covers for both the front and back are hinged and provide with quick release fastener for easy access to the internal part.
- All component pads of the system are didactically arranged to ensure that they are effective and efficient instructional units.
- All front panel compartments / part are clearly labeled marked to ensure easy reference and better understanding of the internal circuitry and / or components functions.
- Color scheme adopted for all the boards and panels are matching and aesthetically appropriate within a teaching / learning environment.
- All terminal connections and terminations are clearly numbered, marked and labeled.
- All cables are neatly and systematically arranged and bunched.
- Where appropriate, all cables are terminated with crimped cable lugs or high quality terminal block.
- All metal frames and panels are finished with baked epoxy powder.

Technical Specifications

System is rated for 45KW x 3, 3 phase, 415VAC, 50Hz and consists of the following:

A. Main Supply and Control Panel

1. 1 x Moulded Case Circuit Breaker 400A, TP&N 50Hz, 50KA c/w shunt trip
2. 1 x Combined IDMT Over Current & EFR Relay
3. 1 x Ammeter 0-400A c/w selector switch.
4. 1 x Voltmeter 0-500V c/w selector switch.
5. 3 x Phase Indicating light (R, Y. B).
6. 1 x Three Phase Power Quality Meter
7. 1 x Power Management Software
8. 4 x CT 400/5A Class 10P10 15VA
9. 3 x CT 400/5A Class 1, 5VA
10. 1 x Set of 400A bus bar

B. Resistive Load Bank Compartment (45KW)

This unit equipped With the following:

- 6 x Resistive load banks of combination of 1KW, 2KW, 5KW, 10KW, 12KW and 15KW
- 6 x Miniature Circuit Breaker TP, 10KA assorted amp rating according to the resistive load bank.
- 6 x Pilot Lamp Indicating
- 6 x Push Button ON/OFF Switch
- 1 x Three Phase Power Quality Meter
- 1 x Cooling fan c/w thermostat & Miniature Circuit Breaker SP

C. Capacitive Load Bank Compartment (45KVAR)

This unit equipped With the following:

- 6 x Capacitive load banks of combination of 1KVAR, 2KVAR, 5KVAR, 10KVAR, 12KVAR and 15KVAR
- 6 x Miniature Circuit Breaker TP, 10KA assorted amp rating according to the resistive load bank.
- 6 x Pilot Lamp Indicating
- 6 x Push Button ON/OFF Switch
- 1 x Three Phase Power Quality Meter
- 1 x Cooling fan c/w thermostat & Miniature Circuit Breaker SP

D. Inductive Load Bank Compartment (45KVAR)

This unit equipped With the following:

- 6 x Inductive load banks of combination of 1KVAR, 2KVAR, 5KVAR, 10KVAR, 12KVAR and 15KVAR
- 6 x Miniature Circuit Breaker TP, 10KA assorted amp rating according to the resistive load bank.
- 6 x Pilot Lamp Indicating
- 6 x Push Button ON/OFF Switch
- 1 x Three Phase Power Quality Meter
- 1 x Cooling fan c/w thermostat & Miniature Circuit Breaker SP

E. Overall Dimensions

- Approximate 850W x 750D x 1850H (mm)

F. Manual

- Instruction Manual with Schematic Diagram
- Experiments Manuals

Note: Due to products continuous development process, layout and specification may change without prior notices.