



Model LP400-240-480-5M, 400 Kilowatt Portable, Resistive Load Bank with the following ratings:

- 400 KW at 480 Volts AC, 3-phase, 60 Hertz, 481 Amps per Phase
- 400 KW at 240 Volts AC, 3-phase, 60 Hertz, 965 Amps per Phase
- 300 KW at 208 Volts AC, 3-phase, 60 Hertz, 834 Amps per Phase
- 5 KW minimum load step resolution provided



Duty Cycle: Forced Air-Cooled, rated for continuous operation.

Power Factor: 1.0

Cooling System: Integrally mounted blower motor with high-performance, direct-driven fan blade delivers the required airflow volume (CFM) for cooling resistor load elements. Motor is rated 3 HP at 230 or 460 Volts AC, 3-phase, 60 Hertz. Power for the blower circuit can be selected from an “external” power source, or “internally” derived and operated from the main input load bus (source under test).

Control Power: External 120 Volt AC, 1-phase, 10 Amp source.

Local Operator Control Panel Including: Emergency Stop (E-STOP) push button, Main Power On/Off switch, Blower Start/Stop push buttons, Blower Voltage selector switch (208-240, Center-OFF, 440-480), Fan-Phase Reversal switch (ABC-OFF-ACB), Load Voltage selector switch (208-240, Center-OFF, 440-480), Master Load On/Off switch, and Individual Load Step switches (KW On/Off) provided for each load step. *Illuminated indicators provided for Power On, Blower On, Motor Overload, Air-Flow Failure, Over-Temperature, Load Dump, and Wrong Voltage.*

[M] Digital Power Meter: Fully equipped, 3-phase Digital Metering System that measures a standard range of 16 load parameters. Includes RS485 (Modbus protocol) for remote reading - compatible with PC, PLC, and data loggers. See additional details at: <http://www.multitek-ltd.com/meters/M850.aspx>

Operator Protection and Safety Features:

- A Control Power Emergency-Stop (E-STOP) push button is provided to disable control power voltage to all operator control power circuits, including blower circuit and load application circuits.
- Operator control panel provides detection and display of Main Power On, Blower Motor On, Motor Overload, Air-Flow Failure, Over-Temperature, Load Dump, and Wrong Voltage Applied.
- Branch circuit fuse protection provides short-circuit fault protection of all load steps. Fuses are fast-acting, current-limiting type with an interrupting rating of 200K A.I.C.
- Blower Motor is short-circuit protected by current-limiting fuses and thermally protected by overload relay.
- A differential air pressure switch provides protection from loss of cooling air or insufficient airflow. The switch automatically removes all load if an airflow problem is detected. Load cannot be reapplied until sufficient airflow is present.
- An over-temperature switch is provided to monitor load bank exhaust temperature. The switch automatically removes all load if an over-temperature condition is detected. Load cannot be reapplied until the over-temperature condition is corrected.
- An operator wrong voltage protection circuit is provided to prevent application of load if 480 VAC is detected with the Load Voltage selector switch in the 240 VAC position.
- Operator warning and caution statements are located on appropriate access panels.

LBD-PowerDyne™ Resistor load elements provide the necessary KW load rating for each load step. **PowerDyne™** Resistors are fully supported across their entire length within the air stream by stainless steel support rods which are insulated with heavy-duty, high-temperature ceramic insulators. Change in resistance is minimized by maintaining conservative resistor designs, thermally derated resistor designs and by utilizing a high-quality nickel chrome alloy. Tolerance is 5%.

Construction: The load bank is constructed of galvanized steel with powder coat paint finish, and is designed for operation indoors on a flat, level surface with sufficient volume of fresh intake air available. Cooling airflow is drawn from the screened air-intake sides, with hot air vertically exhausted from the top of the unit away from personnel. The exhaust should be positioned to minimize hot air recirculation into the load bank air-intake. Fork-lift channels are provided in the base for lifting.

Casters: Durable, quiet, swivel casters come *standard* on the LP making maneuverability simple.

Quick-Connect-Disconnect of customer load cable provided by fully rated "industry exclusive" Cam-Lok power connectors. Connectors are color-coded for safe and easy phase identification. Protective snap-back covers provide added safety during storage and operation.

Approximate Dimensions: 34"W x 49"D x 63"H [860 x 1240 x 1600 mm]

Approximate Weight: 900 pounds [410 kg]