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MPD-PLB-500KVA-480V-60HZ-TM-N3R-M2

500 KVA Portable Load Bank (Resistive) - 480V Rated, 3-Phase 3-Wire, 60 Hz, Trailer Mount Capable, NEMA 3R, Yellow and black, W/O Air Duct

Product ID: 336415

Please see last page for supporting documentation for this product (certificates, CAD files & drawings, IES files, wiring diagrams, etc).



Image: MPD-PLB-500KVA-480V-60HZ-TM-N3R-M2

Larson Electronics LLC manufactures a wide variety of products, including custom built to spec designs. The pictures displayed for this unit are a general representation of form factor for the product line and may not accurately represent this exact configuration in every detail due to custom builds and changes between similar products in our standard catalog. The specifics for this configuration are listed in the specification table and supporting documentation (CAD files, Dimensional Drawing, Name Plate Diagram, Wiring Diagram, etc.). This means that specific details (receptacles, plugs, wires, connections, mounting brackets, external finishes, etc.) may not be accurately represented in images vs specifications. Please review specifications and do not order based solely on images.

MPD-PLB-500KVA-480V-60HZ-TM-N3R-M2 Portable Load Bank

Unit Type: Portable Load Bank, Resistive
Load Element: Alloy Resistors
Load Voltage: 480V AC, 3Ph, 3 Wire
Nominal Frequency: 60 Hz
Rated Power: 500 KVA (500 KW Resistive Load)
Load Steps: 50KW, 50KW, 100KW, 100KW, 200KW
Insulation Class: F
Operating Condition: Continuous
Power Factor: 1.0 for resistive load, 0.5 to 0.8 for RL load (Adjustable)
Load Accuracy: ±5%
Sampling Accuracy: 0.5 class
Display Type: Touchscreen HMI for operation, settings, configuration
Display Parameters: Voltage, current, active power, reactive power, apparent power, power factor, frequency, etc
Wire Connection: Copper bar (L1, L2, and L3)
Cooling Mode: Force-air cooling, air entry from bottom and outlet to the top, external power supply

Ratings

NRTL Listed Service Equipment
NRTL Listed to UL 1008
NRTL Listed to UL 98
Outdoor Type
Made in the USA

Features

Compact load bank unit with user friendly control panel.
Effectively applied for full load test of generator set, UPS and other AC power systems.
Emergency stop button for quick termination of AC load test
Sectionalized control of input power enables any customized setting of load step and time
Real-time display of test current, voltage, power, power factor, time and frequency.
Alternative control modes by local control of circuit breaker/push button or PC control

Cooling Auxiliary Power: 480 V, 60 Hz

Cooling Air Flow: ≥ 480 m³/min

Cooling Fan Speed: ≥ 1500 rpm

Control Mode: PC software remote control with RS485 connection with load bank/Manual operation via touchscreen, Manual power adjustment (up/down)
Resistive Load Elements: Composed of multiple special alloy resistors in parallel. The outer part of the alloy resistor is made of 304 stainless steel sheet as the heat-dissipating material, the outer tube is made of 304 stainless steel tube as anti-rust and anti-corrosion component. The inside is filled with the Magnesium Oxide powder which is thermal conductive and insulating medium, and the power consumption component Nickel-Chromium alloy resistor is packaged therein
Protection Function:
Over-voltage protection: When input voltage exceeds the safety threshold, it will automatically unload and alarm.
Over-current protection: When load main circuit current exceeds the safety threshold, automatically unloaded and protected.
Over-temperature protection: When temperature exceeds the safety threshold, it will automatically unload and alarm
Fan under-volume protection: When any fan fails to operate normally, it will automatically unload and alarm
Fan power phase protection: When fan power phase sequence is wrong, the fan cannot be started and load will not work
Emergency stop button: Manually unloaded by one button, and it cannot be loaded in the state of emergency stop lock.
Phase Sequence Indication: Included

Input Power Cable (Dummy Load):

3-phase 3-wire, 164ft each phase

Single-core super-flex ≥ #4/0 AWG (350 A)

Flexible rubber insulated, XLPE, NBR jacket

Extra flexible copper (Class 5/6)

Anti–rat-bite protective shield

Connection to Unit Under Test:

3-phase 3-wire, 984ft × 4 pcs with lugs

Same specification as input cable

Power Connection: Copper busbars

Auxiliary Connection: Terminal blocks

Cable Entry: Gland protected from water leakage

Transient Testing: Capable

Standard Parts: AC power cord and RS485-USB cable

Air Duct: N/A

Handling: Trailer mounted

Wheels: Included, (4) heavy-duty, w/ Braking

Accessories: Lunette ring/eye for towing

Operating Atmospheric Pressure: 86 - 106kPa

Operating Temperature: -50°C to +55°C

Humidity: ≤ 95%, (non-condensing)

Altitude: ≤ 8,200ft

Protection Level: IP44 when in storage, IP20 during operation. This is an outdoor type and can be placed outdoors. However, it cannot be tested on rainy days. If a test on rainy days is required, air duct installation is needed.

Axial flow fans with big blast capacity for quick ventilation with low noise

It adopts latest load element with high density power, safer and more durable

Protection upon over load, over voltage, over temperature, short circuit and so on

Enclosure Finish: Yellow and black
Enclosure Type: NEMA 3R, Single galvanized steel sheet
Mount: Mobile trolley, Capacity: 4–5 tons (dummy load), 3–4 tons (cable trolley)
Dimensions: 63"-L x 63"-W x 78.74"-H
Weight: 1,323 Lbs
Shipping Dimensions: TBD
Shipping Weight: TBD
Larson Electronics manufactures a wide variety of custom power distribution systems. The pictures displayed for this unit are a general representation of form factor and may not accurately represent this exact configuration in every detail due to being custom builds. The specifics for this configuration are listed in the specification table and one-line diagram.

Special Orders - Special Requirements
Contact us for special requirements
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All grounding shall comply with state and local codes and meet the minimum requirements of the National Electronic Code section 250

Made in the USA

The Larson Electronics MPD-PLB-500KVA-480V-60HZ-TM-N3R-M2 Portable Load Bank is essential for maintenance to ensure your generator performs to the required engine wattage. Normally a generator runs at a level less than its rated output; therefore a load bank test provides an artificial load to ensure the generator is running at the correct wattage if needed.

The MPD-PLB-500KVA-480V-60HZ-TM-N3R-M2 portable load bank provides a safe and reliable way for operators in industrial settings to test generators' wattage. Compatible with three-phase 480V AC, the PLB features 50 kW load step resolution. This 3-phase load bank carries 500 KVA at 480V AC operating voltage.

Operation: The MPD-PLB-500KVA-480V-60HZ-TM-N3R-M2 features a locking door. The door provides access to a permanently attached operating handle.

Enclosure Design: This portable load bank is a compartmental design. The housing is fabricated from steel. The front electrical enclosure carries a NEMA 3R rating. Two hinged exterior doors allow for access into the compartments. A steel plate allows for underground conduit entry into the enclosure compartments. A removable steel plate at the base of the power compartment prevents rodents and other intrusions from entering the enclosure once installed. Four removable caster wheels are installed in the load bank base to enable easy movement.

Certification: This PLB is NRTL listed to UL 98 and UL 1008, as well as NRTL listed for service equipment.

Mount: Ground/Trailer mount capable

Applications: This Load bank has a wide variety of applications such as: Generator servicing, generating set exercising and / or testing, keeping generating set above minimum loading (load shedding), battery discharge and UPS systems exercising, and /or testing to reduce ‘Wet Stacking’ problems and ground power testing.

At Larson Electronics, we do more than meet your lighting needs. We also provide replacement, retrofit, and upgrade parts as well as industrial grade power accessories. Our craftsmen can custom build any lighting system and/or accessories to fit the unique demands of your operation. A commitment to honesty, quality, and dependability has made Larson

Electronics a leader in the lighting and electronics business since 1973. Contact us today at 800-369-6671 or message sales@larsonelectronics.com for more information about our custom options tailored to meet your specific industry needs.

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Frequently Asked Questions (FAQ)

There are no Faqs

Export Control Classification Number (ECCN): EAR99

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