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MPD-MT-RMU.6U-T.20A-BBT-ST4.7SQ-CZ-T-R1

1 Phase Buck & Boost Step-Down Rack Mounted Transformer, 208V Primary - 230V Secondary, 20 Amps, 50/60Hz, (2) 25A Dual Row 4-Position Covered Screw Terminal Strips, NEMA 3R

Product ID: 313764

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



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-MT-RMU.6U-T.20A-BBT-ST4.7SQ-CZ-T-R1 Buck and Boost Step-Up Rack Mounted Transformer

Line-in Cord: N/A
Line-in: (1) Dual Row 4-Position Covered Screw Terminal Strip 25A [600V]
Primary Voltage (V): 208V AC
Primary Phase (PH): 1-Phase (1PH)
Primary Frequency (HZ): 50/60 Hz (50/60-cycles)
Primary Panel: N/A
Primary Breaker(s): (1) 20A 2P MCB [250V]
Primary Outlet(s): N/A
Primary Protection: MCB Circuit Breaker
Transformer (KVA): 4.77KVA 208V to 230V 1PH BBT N3R
Secondary Voltage (V): 230V AC
Secondary Phase (PH): 1-Phase (1PH)
Secondary Frequency (HZ): 50/60 Hz (50/60-cycles)
Secondary Panel: N/A
Secondary Breaker(s): N/A
Secondary Outlet(s): (1) Dual Row 4-Position Covered Screw Terminal Strip 25A [600V]
Secondary Protection: N/A
Form Factor: 6U 19" Rack Mount
Enclosure Material: Steel
Finish: Powder Coated - Black
Mounting: 19" Standard Server Rack (6U Unit)
Dimensions: 19"-W x 14"-D x 10.5"-H (482.6mm-W x 355mm-D 265mm-H)
Weight: (*Please note that weight is approximate and subject to change*) 45 lb

Ratings

Max Primary OCP: 20A @ 208V
Max Secondary Output: 20A @ 230V
NRTL Listed for United States
NRTL Certified for Canada
Black Powder Coated Steel Enclosure
Meets or Exceeds NEMA ST-20 Standards
NRTL Certified to CSA C22.2 No. 14
Buck and Boost Step-Up Transformer
Low Profile Front Mounted Handles

Powder Coat Finish Standards:
Complies with ASTM D-523
Complies with ASTM D-3359
Complies with ASTM D-522
Complies with ASTM D-3363
Complies with ASTM D-2794

Special Orders - Special Requirements
Contact us for special requirements
Toll Free: 1-800-369-6671
Intl: 1-214-616-6180
E-mail: sales@larsonelectronics.com

The MPD-MT-RMU.6U-T.20A-BBT-ST4.7SQ-CZ-T-R1 from Larson Electronics is a Single Phase Step-Down Buck and Boost Rack Mounted Transformer that is powerful, reliable, and designed with the environment in mind. Suitable for server rack applications, the MPD-MT-RMU.6U-T.20A-BBT-ST4.7SQ-CZ-T-R1 provides increased reliability, higher efficiency, protection against critical equipment failures, and an extra level of protection by isolating the power source from the connected device. The lower operating costs, lower heat emissions, and lower cost of ownership make this transformer ideal for a wide range of applications and businesses. The MPD-MT-RMU.6U-T.20A-BBT-ST4.7SQ-CZ-T-R1 is a 6 rack units (6U) tall and is for a 19-inch standard rack mount.

PLEASE NOTE: ANY FREE SHIPPING OFFERS DO NOT APPLY TO LIGHT MASTS, LIGHT TOWERS, OR TRIPODS

Operation:

- Primary Voltage: 208V AC 1PH
- Primary Panel: N/A
- Primary Breaker(s): (1) 20A 2P MCB [250V]
- Primary Outlet(s): N/A
- Transformer: 4.77KVA 208V to 230V 1PH BBT N3R
- Secondary Voltage: 230V AC 1PH
- Secondary Panel: N/A
- Secondary Breaker(s): N/A
- Secondary Outlet(s): (1) Dual Row 4-Position Covered Screw Terminal Strip 25A [600V]

*See specification table at the top of the page for more information about the power distribution system.

Transformer Features: The MPD-MT-RMU.6U-T.20A-BBT-ST4.7SQ-CZ-T-R1 buck and boost transformer is a single phase unit with a 4.77 kVA rating and a primary voltage of 208V AC using a maximum of 20 amps on the primary side. This step-down rack mounted transformer has a secondary voltage of 230V AC and provides up to 20 amps available on the secondary side. Featuring robust construction, this unit's cores are manufactured with non-aging, cold-rolled silicon steel laminations using state of the art technology.

This unit boasts a low cost of ownership and is highly energy efficient. Lower heat emissions mean less cooling is needed as well. The black powder coated steel enclosure makes the unit suitable for mounting in a 19" standard rack mount. A pair of low profile handles on the front of the enclosure make installation and removal a simple task while still allowing server rack doors to close. The MPD-MT-RMU.6U-T.20A-BBT-ST4.7SQ-CZ-T-R1 features a 130°C insulation with a 80°C temperature rise.

Construction: The windings in the MPD-MT-RMU.6U-T.20A-BBT-ST4.7SQ-CZ-T-R1 are formed from high quaility magnetic copper wire help to improve performance. The close tolerances used during manufacturing also eliminates burrs which hinder performance. Each core is specially coated to prevent the ingress of moisture and are electrically balanced to minimize axial forces during short circuit situations. Buck and boost transformers are designed to maximize the performance and life of electrical equipment. The MPD-MT-RMU.6U-T.20A-BBT-ST4.7SQ-CZ-T-R1 is encapsulated in silica sand and resin, and cased in a black powder coated steel enclosure. NEMA 4, NEMA 4X, and NEMA 12 enclosures are available upon request.

Benefits: The MPD-MT-RMU.6U-T.20A-BBT-ST4.7SQ-CZ-T-R1 buck/boost step-up transformer offers many benefits to the consumer. Buck/boost transformers pass the majority of the load voltage directly through the transformer, only transforming a small percentage of the load. Due to this technology, a smaller and quieter step-up transformer is manufactured and uses less materials. This provides owners with significant energy savings as well as offering environmental benefits.

Higher efficiency not only extends the life of the transformer, but also turn into cost savings for owners in the form of lower energy bills and decreased cost of

ownership. Installation and maintenance costs are reduced due to the smaller form factor, and less overall space requirements are decreased. In addition, these step-up transformers operate quieter than a standard autotransformer of the same capacity.

Mounting: This rack mounted transformer is designed to be mounted inside server racks. The MPD-MT-RMU.6U-T.20A-BBT-ST4.7SQ-CZ-T-R1 is a 6U unit which allows it to fit in a 19" standard rack mount. The front located handles assist in inserting and removing the transformer while having a low enough profile to allow server rack doors to close.

Wiring/Connections: The MPD-MT-RMU.6U-T.20A-BBT-ST4.7SQ-CZ-T-R1 features a inlet terminal strip and an outlet terminal strip on the secondary side. The inlet terminal strip is a 25-amp dual row 4-position covered screw terminal strip and the outlet terminal strip is a 25-amp dual row 4-position covered screw terminal strip. The primary side is protected by a 20-amp 2 pole breaker.

Applications: Server rack buck/boost applications.

Limitations: While there are many benefits to a buck/boost transformer, there are some limitations to consider. This transformer will only transformer voltage, it will not convert phases, it will not create even legs between line 1 and line 2 (L1 and L2 WILL be UNEVEN), has no circuit isolation, and does not create a neutral for applications where a neutral is not already present. If any of these limitations apply to you, you will need a standard transformer. Please see below link for our standard line of industrial transformers or our line of phase converters.

Note on Phases: This buck/boost transformer is a single phase step-up transformers. For three phase transformers, click on the following links:
Three Phase Delta Buck/Boost Transformers
Three Phase Wye Buck/Boost Transformers

Larson Electronics is a manufacturer and as such can build stationary and portable transformer systems to your specifications. Although we carry several models of power distribution transformer systems, we can deliver custom ordered units almost as quickly as our prebuilt units. If this model does not meet your needs, please contact us at 1-800-369-6671 or sales@larsonelectronics.com to discuss your specific requirements.

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Frequently Asked Questions (FAQ)

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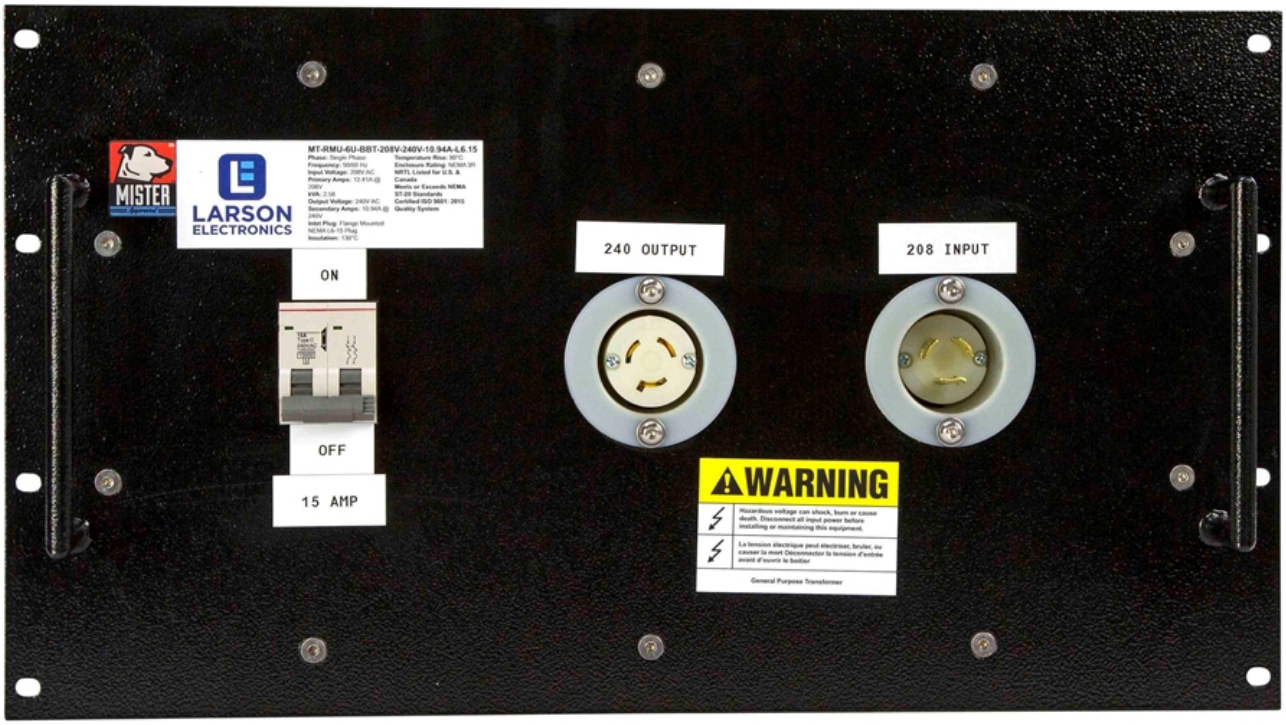
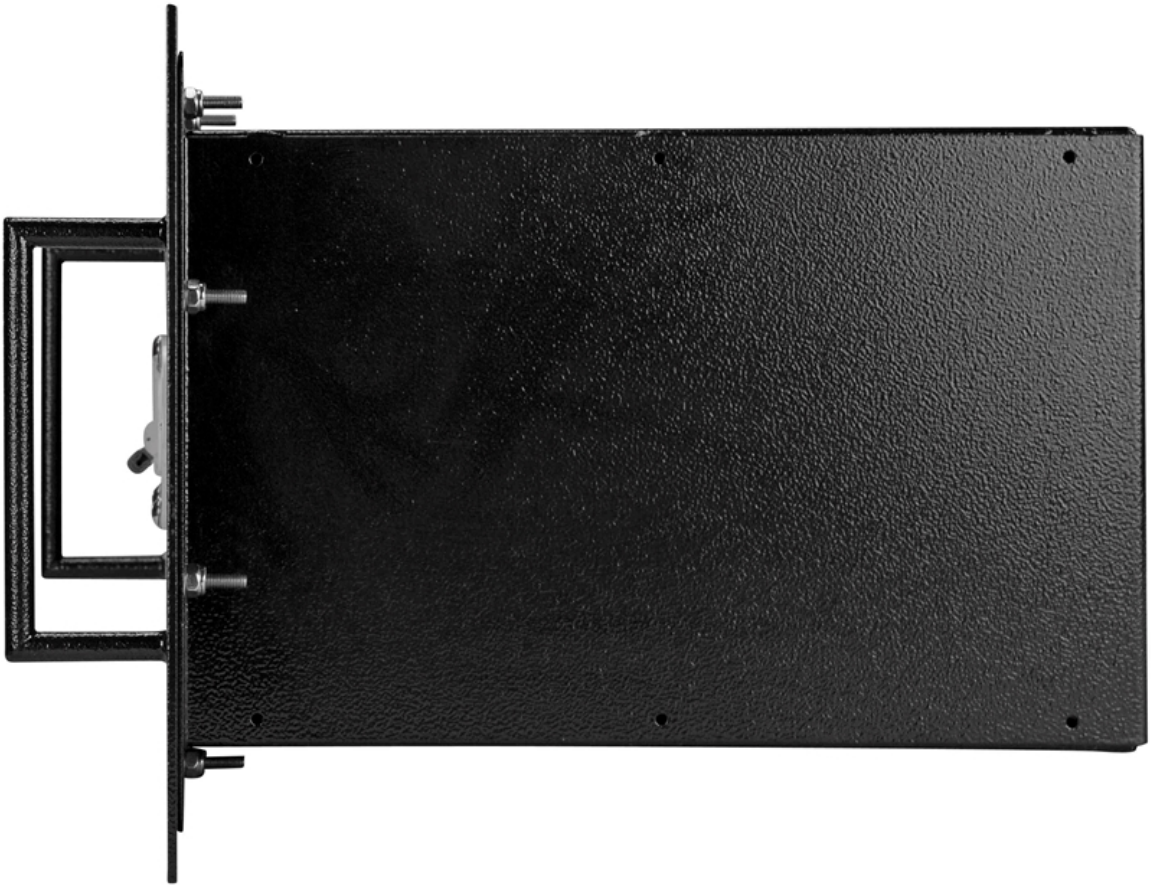



LARSON
ELECTRONICS
ON
OFF
15 AMP
240 OUTPUT
208 INPUT
WARNING





Export Control Classification Number (ECCN): EAR99

Links (Click on the below items to view):

- ANSI Certificate 1
- Canadian CEC Certificate (Commonly referred to as CSA Certificate)
- Catalog Page - Product Series
- CE Certificate
- Certificate 1, Misc
- Certificate 2, Misc
- Certificate 5, Misc
- MSDS (Material Safety Data Sheet
- RoHS Certificate (Restriction of Hazardous Substances)
- Single Line Diagram (One-Line Diagram)
- USA NEC Certificate (Commonly referred to as UL Certificate)
- Wiring Diagram
- HigResPic1
- HigResPic2
- HigResPic3
- HigResPic4
- HigResPic5
- HigResPic6
- HigResPic7
- Video1
- ISO 9001 Certification
- Business Certificate
- Shipping Time Map