

## Split Phase Buck/Boost Step-Up Prewired Transformer - 208V Primary - 120/240V Secondary - 44.07 Amps - 50/60Hz - Cart Mount

MT-MCD-BBT-208V-120.240V-2P-44.07-2X20FT-SS2.50-WP



## MT-MCD-BBT-208V-120.240V-2P-44.07-2X20FT-SS2.50-WP Buck and Boost Prewired

Cart Mounted Step-Up Transformer

Transformer Type: Buck/Boost Step-Up Prewired Transformer

**Transformer Configuration: Boost** 

Phase: Split Phase Frequency: 50/60 Hz Input Voltage: 208V AC Primary Amps: 50A

Primary Configuration: Two winding

kVA: 10.4

Output Voltage: 120/240V AC

Secondary Amps: 44.07 A @ 240 V or (2) Legs of 44.07 A @ 120 V For a Total of 88.14

A @ 120 V

Voltage % Difference: -

Secondary Configuration: Two winding

Winding Material: Aluminum

Wiring: Prewired with (2) 20' 8/3 SOOW Whips (One on Each Side) w/ Cord Caps Cord Caps: NEMA SS2-50 Plug on Primary; NEMA SS2-50 Connector on Secondary

Knockouts: Side and rear

Primary Termination: Front access copper tabs or lead wires Secondary Termination: Front access copper tabs or lead wires

Cooling: Air / Dry Type Insulation: 130°C Temperature Rise: 80°C Sound Level: 36 dB Enclosure Rating: NEMA 3R

Encapsulation: Silica sand, resin compounds

Enclosure Material: Steel Finish: ANSI 61 Grey / UL50 Mounting: Cart Mount

Transformer Dimensions: 11.75"H x 14.12"W x 6.25"D

Cart Dimensions: 20.875"L x 22.50"W x 52"H

Total Weight: 190 lbs

## <u>Ratings</u>

NRTL listed for United States CSA certified for Canada NEMA 3R Indoor/Outdoor Enclosure Meets or Exceeds NEMA ST-20 Standards Buck and Boost Step-Up Transformer

Special Orders- Requirements

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Contact us for special requirements

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The MT-MCD-BBT-208V-120.240V-2P-44.07-2X20FT-SS2.50-WP Split Phase Step-Up Dolly Mounted Prewired Buck and Boost Transformer from Larson Electronics is powerful, reliable, and designed with the environment in mind. Suitable for both indoor and outdoor applications, the MT-MCD-BBT-208V-120.240V-2P-44.07-2X20FT-SS2.50-WP 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 MT-MCD-BBT-208V-120.240V-2P-44.07-2X20FT-SS2.50-WP is a prewired transformer for customer installation and is equipped with 20' of 8/3 SOOW cable on each side connected to the transformer with a NEMA SS2-50 plug on the primary side and a NEMA SS2-50 connector on the secondary side.

\*PLEASE NOTE: ANY FREE SHIPPING OFFERS DO NOT APPLY TO POWER DISTRIBUTION PANELS, TRANSFORMERS, OR SUBSTATIONS\*

**Transformer Features:** The MT-MCD-BBT-208V-120.240V-2P-44.07-2X20FT-SS2.50-WP buck and boost transformer is a split phase unit with a 10.4 kVA rating and a primary voltage of 208V split phase using a maximum of 53.19 amps on the primary side. This step-up transformer has a split phase secondary voltage of 120/240 V that generates a neutral and provides up to 44.07 amps at 240V or two legs of 44.07 amps at 120V for a total capacity of 88.14 A at 120V 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 NEMA 3R painted steel enclosure makes the unit suitable for both indoor and outdoor applications. The MT-MCD-BBT-208V-120.240V-2P-44.07-2X20FT-SS2.50-WP features a 130°C insulation with a 80°C temperature rise.

**Construction:** The aluminum winding in the MT-MCD-BBT-208V-120.240V-2P-44.07-2X20FT-SS2.50-WP are formed from high quality aluminum 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 MT-MCD-BBT-208V-120.240V-2P-44.07-2X20FT-SS2.50-WP is encapsulated in silica sand and resin, and cased in a NEMA 3R steel enclosure. NEMA 4, NEMA 4X, and NEMA 12 enclosures are available upon request.





## Click Image to Enlarge

**Benefits:** The MT-MCD-BBT-208V-120.240V-2P-44.07-2X20FT-SS2.50-WP 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:** The MT-MCD-BBT-208V-120.240V-2P-44.07-2X20FT-SS2.50-WP is mounted on an upright steel dolly cart style frame for easy movement, transportation, and positioning. The cart measures 20.875"L x 22.50"W x 52"H. The cart is also equipped with a pair of run-flat tires for easy movement around

the job site or work location.

**Installation:** The MT-MCD-BBT-208V-120.240V-2P-44.07-2X20FT-SS2.50-WP is equipped with 20' 8/3 SOOW whips on both the primary and secondary sides. The primary side whip is equipped with a NEMA SS2-50 plug and the secondary side whip is equipped with a NEMA SS2-50 connector. This transformer makes installation simple. Operators connect them to the corresponding current. For example, the 208 V whip gets connected to 208V current.

**Applications:** Air conditioners, lighting systems, heating elements, motor applications and other applications that that require the ability to power loads that differ from the available line voltage.

**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, 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 <u>industrial transformers</u> or our line of <u>phase converters</u>.

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 <a href="mailto:sales@larsonelectronics.com">sales@larsonelectronics.com</a> to discuss your specific requirements.



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