

MPD-480-45K-125MB-120.240-C-W

Portable Power Distribution Substation - 45KVA - 480V Primary - 120/240V Secondary - NEMA 3R
Product ID: 71226



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-480-45K-125MB-120/240-C-W Power Distribution Substation

Line In: Three Phase 480 VAC 20' SO Cable

Disconnect: 60 amp fused at 60 amps

Load Center: 125 amp Main Breaker, NEMA 3R , 42 circuit panel

Transformer KVA: 45

Dimensions: W-44" X L-42" X H-56"

Mounting: Steel Frame w/ Eyelet and Locking Casters

Ground: Mechanical Ground

Weight: ~420lbs

Features:

Max Primary OCP: 60 amps @ 480V

Max Secondary OCP: 108.3 amps @ 240V

Ratings

UL 1640 Portable Power-Distribution Equipment

NEMA 3R Indoor or Outdoor Use

Made in the USA

Special Orders- Requirements

Contact us for special requirements

Toll Free: 1-800-369-6671

Intl: 1-903-270-1187

E-mail: sales@larsonelectronics.com

Larson Electronics manufacture 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.

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

This Larson Electronics Power Distribution Substation converts 480 VAC three phase primary electrical current to three phase and 120V and 240V single phase on the secondary. This heavy duty power distribution system includes a 60 amp 3 phase fusible safety switch fused at 60 amps on the main for incoming 480V three

phase power.

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

The MPD-480-45K-125MB-120/240-C-W portable power transformer substation provides a safe and reliable way for operators in industrial settings to tap into and utilize power sources independently of the work area. This unit provides an effective power distribution system for operators performing plant turnarounds, maintenance and cleaning in hazardous areas, equipment installations and repairs, and any activities requiring an alternative to native power sources.

This portable transformer is designed to accept 480v 3-phase power via a 20 foot SO cord line-in, which it then steps down to 240D/120VAC with a 45KVA transformer. The power distribution system on this portable substation makes 120/240VAC single phase available for operators.

Features:

- 20' line in SO cable
- Fusible 60-Amp, 480V disconnect, fused at 60 amps
- 45KVA NEMA 3R 480V to 240D/120V Transformer
- 125 Amp NEMA 3R, 42 circuit panel



[Click Photo to Enlarge](#)



[Click Photo to Enlarge](#)

The load center on this unit is mounted within a NEMA 3R enclosure for protection against accidental contact, rain, dust, splashing water, and sprayed water. The transformer is mounted on a 3/16" thick carbon steel mounting platform and the load center/distribution assembly is mounted to the standard 2" x 2" x 1/8" square carbon steel tubing frame, resulting in an extremely stable, durable, and well protected power distribution platform. This model is equipped with 4 heavy duty polyurethane 8" casters and a top located lifting eyelet which allows easy lifting with cable or chain hooks.

Applications:

This power distribution system is ideal for indoor or outdoor use and applications including but not limited to, construction sites, plant maintenance, plant turnarounds, hazardous location operations, shows, exhibits, and shipyard operations. These power transformers are popularly used in applications where external power sources are often necessary and work well in combination with explosion proof lights and equipment.

Larson Electronics is a manufacturer and as such can build portable transformer systems to your specifications. Although we carry several models of power distribution transformers, 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.

Larson Electronics LLC
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Phone: 800.369.6671



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Fax: 903.498.3364

8	7	6	5	4	3	2	1
REV	DESCRIPTION						DATE
A	PRODUCTION RELEASE						11/14/2023
MPD-480-45K-125MB-120.240-C-W							
							
8	7	6	5	4	3	2	1



CUSTOMER
SUPPLIED
UTILITY 1PH
480V 60A MAX
SUPPLY

20FT OF 6/4
TYPE W CABLE
CBL1-101.06/BRN
CBL1-101.06/ORG
CBL1-101.06/YEL
CBL1-101.06/GRN

3P 480V 60A 35KAIC
UL489 MCCB
CB1-101.06

BRN_6AWG
ORG_6AWG
YEL_6AWG

XF1-101.07
3PH 480V-240D/120V 45KVA
N3R TRANSFORMER

3P 240V 125A 35KAIC
UL489 MCCB
CB1-101.06A

BLK_1-0AWG
RED_1-0AWG
BLU_1-0AWG

BOND SECONDARY
NEUTRAL TO
GROUND

WHT_6AWG
GRN_6AWG

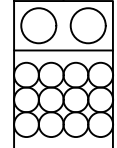
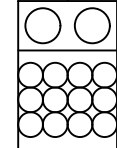
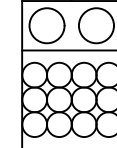
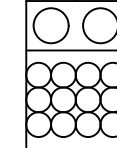
WHT_1-0AWG
DV1-101.13A
PD1

DV1-101.13B
PD2

DV1-101.13C
PD3

DV1-101.13D
PD4

- MARK THE HIGH LEG USING ORANGE COLOR WIRE AND ADD A HIGH LEG LABEL ON THE BUILD.
- THE SINGLE PHASE LOAD SHOULD NOT EXCEED 5% OF THE THREE PHASE KVA RATING.



NEUTRAL KIT

LINE 1

LINE 2

LINE 3

GROUND BAR 1

P1-101.20

GROUND BAR 2

P1-101.20

CONNECT ALL THE
GROUNDS TO THE
GROUND BAR

TAGS	QTY	CATALOG	DESCRIPTION
P1-101.20	2	UNV00013942C	GROUND BAR KIT
CB1-101.06	1	UNV00015180	3P 60A 600V UL689 MCCB
CB1-101.06A	1	UNV00015184	3P 125A 480VAC UL489 MCCB
DV1-101.13A DV1-101.13B DV1-101.13C DV1-101.13D	4	UNV00015085	POWER DISRIBUTION BLOCK 2-12 OPENING 570A
CBL1-101.06	1	UNV00007277	6/4 TYPE W
XF1-101.07	1	UNV00001277	3PH 480V-240D/120VAC 45KVA N3R TRANSFORMER

 LARSON ELECTRONICS 9419 E US HWY 175, KEMP, TX 75143	TITLE MPD-480-45K-125MB-120.240-C-W		
	DRAWN BY S.Desai	DATE 11/15/2023	REV A
	CHECKED BY J.Maldonado	SHEET # 1 OF 1	DRAWING # 101





Frequently Asked Questions (FAQ)