Larson Electronics LLC
9419 E US HWY 175, Kemp, TX 75143
Phone: 800.369.6671

www.LarsonElectronics.com
Email: sales@LarsonElectronics.com
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MTPC-HD-RB-240V-60HP-30HP-N1

Rotary Phase Converter for 30HP Hard Loads, 240V 1PH to 3PH, 78.7 Amps Output, 60HP Idler, NEMA 1

Product ID: 243337



Image: MTPC-HD-RB-240V-60HP-30HP-N1

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.

MTPC-HD-RB-240V-60HP-30HP-N1 Rotary Phase Converter
Unit Type: Rotary Phase Converter
Phase Conversion: Single Phase to Three Phase
Kilowatt Rating: 44.7 KW
Kilo Volt-Amp Rating: 60 KVA
Idle Motor Horse Power: 60 HP
Single Phase Voltage Input: 240V
Minimum Fuse/Circuit Breaker Size: 100
Maximum Fuse/Circuit Breaker Size: 300
Minimum Wire (Input) to Converter: 3/0 AWT
Minimum Electrical Service Required: 75 KVA
Idle Amps: -
Service Load Type: Hard motor loads
Three Phase Voltage Output: 240
Maximum Single Motor Load HP: 30 HP
Recommended Combined HP: 30 HP
Optimal Output Amps: 78.7A
Maximum Output Amps: 136A
Maximum Resistive Amps: 84A
Voltage Balance: 2-5%
Minimum Wire to Device Load: 2 AWG
Form Factor: Rectangular Enclosure, Cylindrical Idler w/ Four Legs
Color: Natural Gray
Weight: - lbs

Ratings/Approvals
Indoor Use (NEMA 1)
Built-in Motor Starter
Start/Stop Push Button Switch
Accurate Voltage Balancing
Power Indicator Light
Made in the USA

Special Orders - Special Requirements
Contact us for special requirements
Toll Free:

Dimensions: -
Shipping Weight: - lbs
Shipping Dimensions: -

1-800-369-6671
Intl: 1-903-270-1187
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E-mail: sales@larsonelectronics.com

Made in the USA

The Larson Electronics MTPC-HD-RB-240V-60HP-30HP-N1 60 horsepower rotary phase converter is designed to convert single phase power to three phase power for Hard motor loads. This phase converter accepts a single-phase 240V input and provides a three-phase 240V output. Operators may use this rotary phase converter to power equipment and machines with Hard motor loads up to 30 horsepower and 78.7 amps that require three phase power in locations where only single phase power is available.

Applications: The MTPC-HD-RB-240V-60HP-30HP-N1 is ideal for applications that utilize Hard motor loads. This includes CNC laser table, CNC lathe, CNC mill, CNC plasma table, CNC router, CNC turning machine, CNC waterjet, cooling fan, exhaust fan, gearhead lathe, industrial fan, laser cutter, laser table, plasma cutter, plasma table, plastic grinder, printing press and any other application that induces a Hard motor load up to a recommended 30 horsepower.

The MTPC-HD-RB-240V-60HP-30HP-N1 rotary phase converter is suitable for converting single phase 240V on-site power to three phase 240V power for equipment. This 60 HP idler motor phase converter connects to existing 240V/* single phase. After conversion, the phase converter provides three-phase 240V on the output side at 78.7 continual amps with a maximum of 136 inrush amps. All MTPC series phase converters provide +/- 2-5% voltage balance on the output side, depending on the single phase input power, for maximum efficiency and reduced stress on the motor. This rotary phase converter features a built-in motor starter with a start/stop push button switch for seamless activation. The power distribution blocks are oversized for easy installation in the preferred location.

The MTPC-HD-RB-240V-60HP-30HP-N1 control panel is housed in a NEMA 1 enclosure, making it suitable for indoor environments. This level of protection allows the rotary phase converter to withstand the ingress of solid objects, such as falling dirt. All of Larson Electronics LLC`s phase converter control panels are NRTL certified to UL 508A.

The MTPC series of rotary phase converters are designed to operate based on overall load size. This includes operating multiple devices from one rotary phase converter, providing the combined horsepower of all devices being operated simutaniously does not exceed the horsepower rating for the load type. This includes fractional motors up to 30 HP motors, and any combination of motor sizes in between. Instant reversal motors are no problem for the MTPC series phase converters. Each phase converter comes ready to install.

Rotary Sizing: The MTPC-HD-RB-240V-60HP-30HP-N1 is sized for heavy/hard motor loads up to 30 horsepower. When correctly sized, Larson Electronics phase converters will provide years of trouble free service for your equipment. Larson Electronics offers single phase to three phase static and rotary phase converters for easy, medium, hard, and very hard motor loads. The motor load is dependant on the devices intended to operate on the phase converter. For additional load types or for additional sizes, please see the below links or call us today.

- Single Phase to Three Phase Rotary Converters for Easy Motor Loads
  - Single Phase to Three Phase Converters for Medium Motor Loads
  - Single Phase to Three Phase Converters for Hard Motor Loads
  - Single Phase to Three Phase Converters for Very Hard Motor Loads

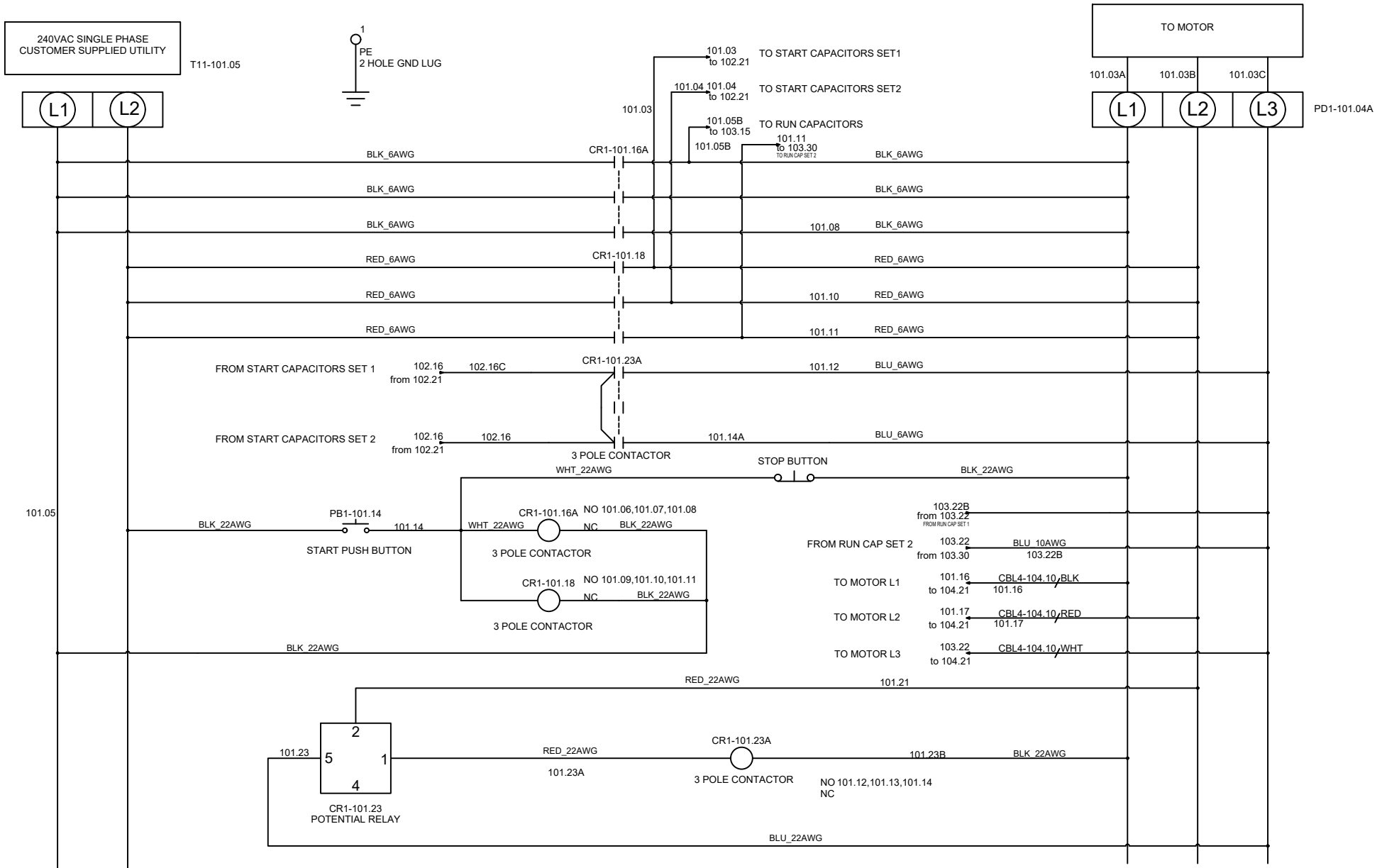
At Larson Electronics, we do more than meet your lighting and power distribution needs. We also provide replacement, retrofit, and upgrade parts as well as industrial grade power accessories. Our craftsmen can custom

build any lighting or power distribution 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.

REV	DESCRIPTION	DATE
B	WIRRING CHANGE	6/12/2024

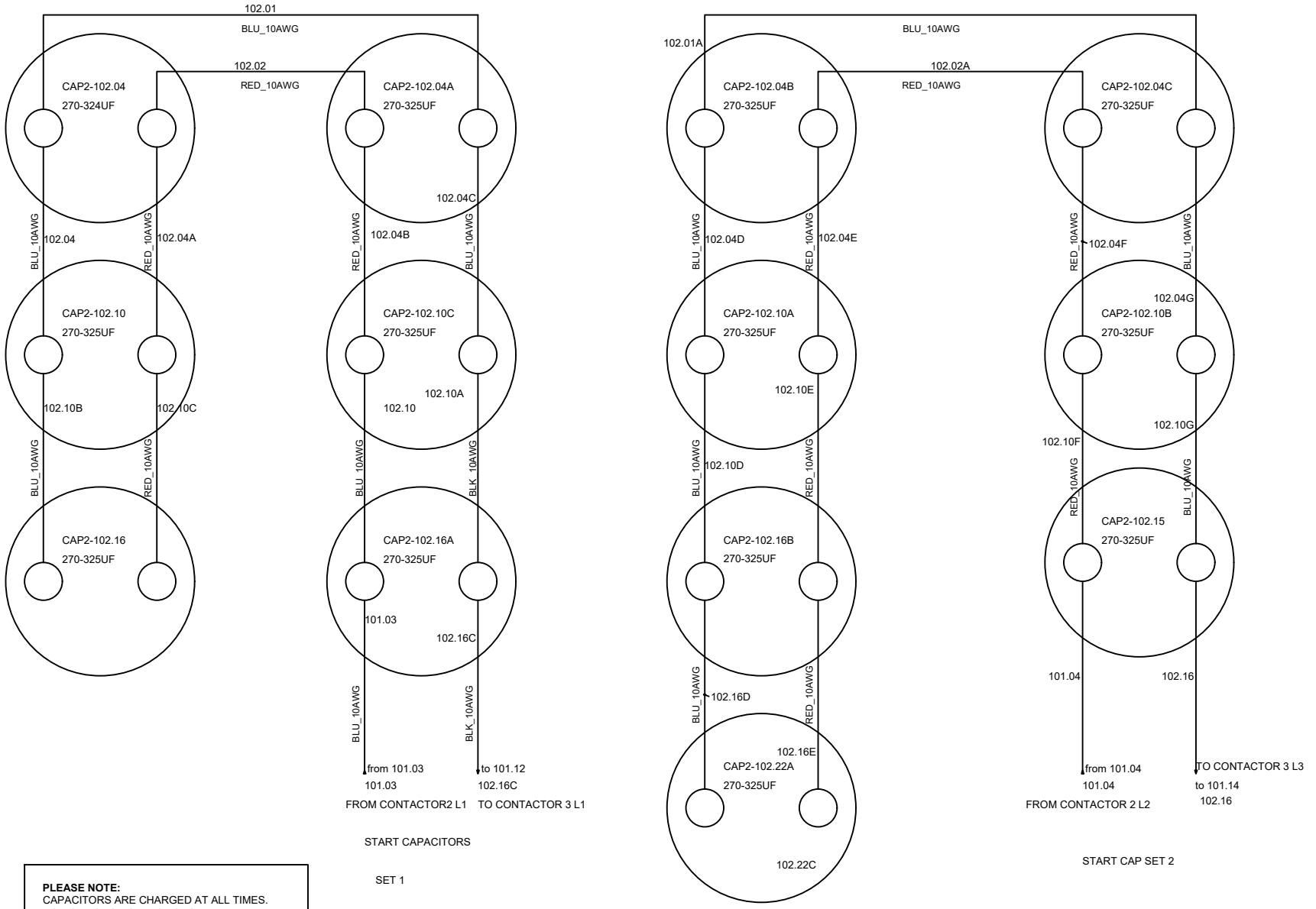
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MTPC-HD-RB-240V-60HP-30HP-N1			
DRAWN BY	DATE	REV	
A.HIRSH	6/12/2024	B	
CHECKED BY	SHEET #	DRAWING #	
J.Maldonado	1 OF 5	101	

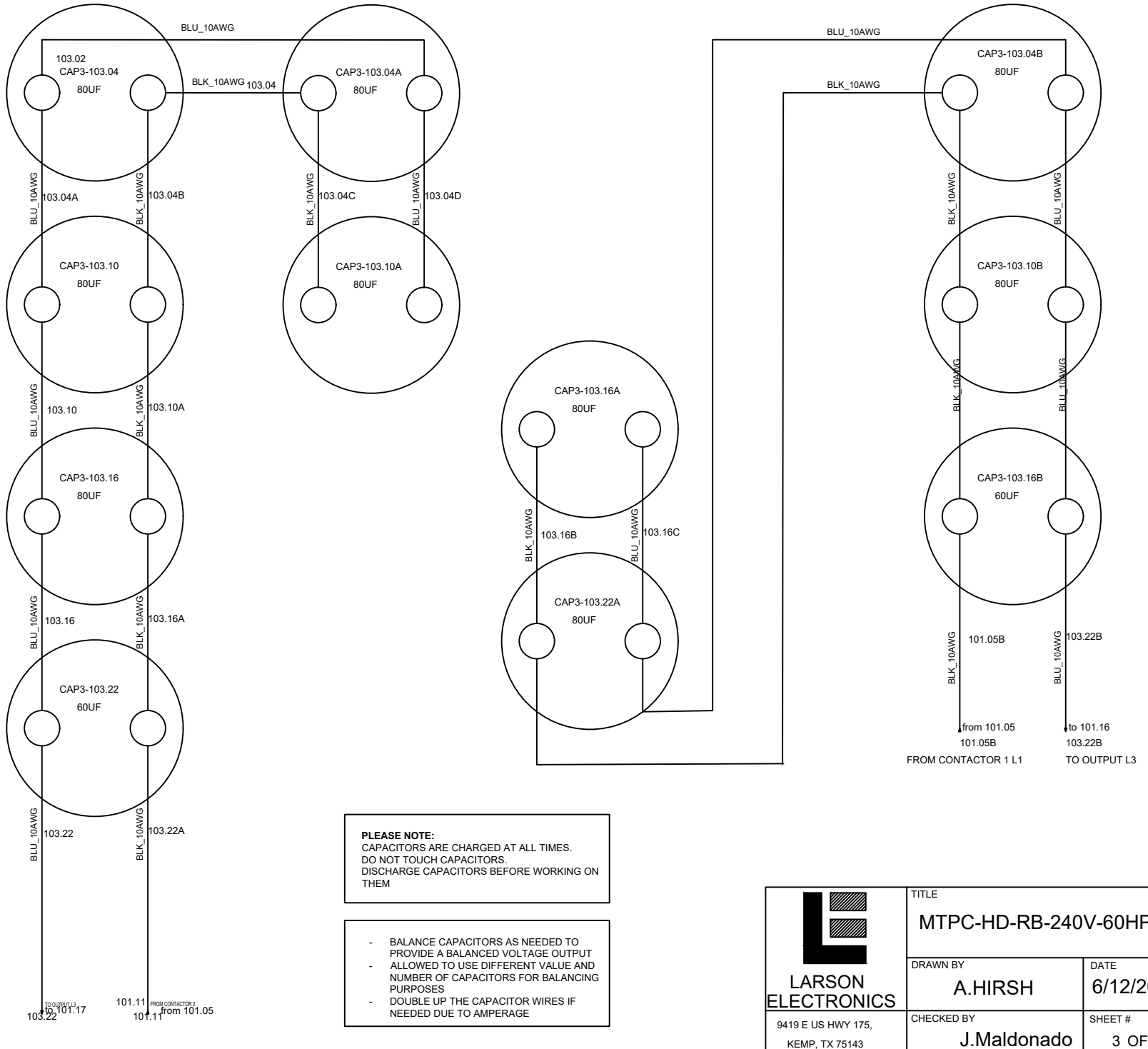


PLEASE NOTE:
CAPACITORS ARE CHARGED AT ALL TIMES.
DO NOT TOUCH CAPACITORS.
DISCHARGE CAPACITORS BEFORE WORKING ON THEM

- BALANCE CAPACITORS AS NEEDED TO PROVIDE A BALANCED VOLTAGE OUTPUT
- ALLOWED TO USE DIFFERENT VALUE AND NUMBER OF CAPACITORS FOR BALANCING PURPOSES
- DOUBLE UP THE CAPACITOR WIRES IF NEEDED DUE TO AMPERAGE

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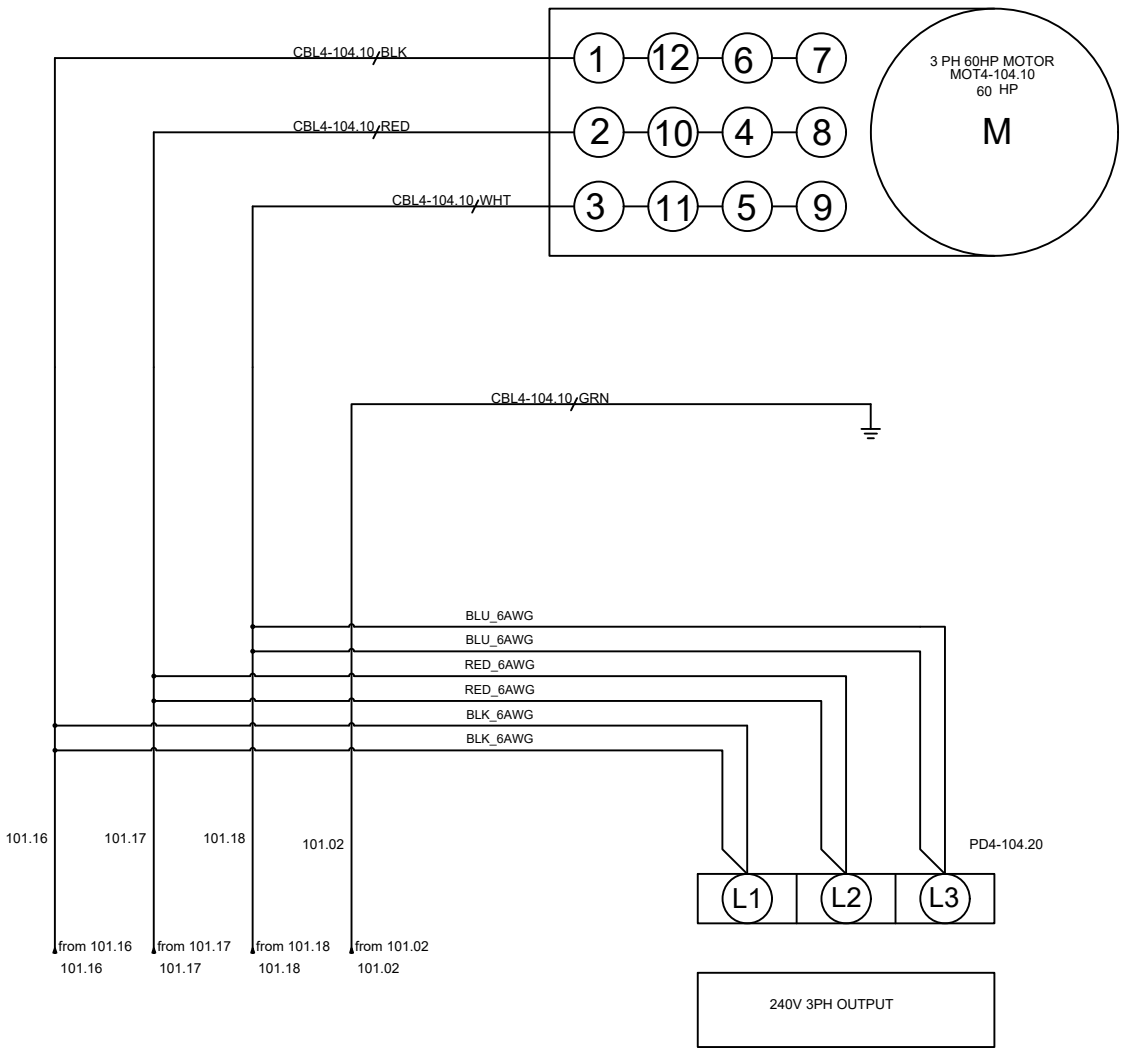


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	DRAWN BY: A.HIRSH	DATE: 6/12/2024	REV: B
	CHECKED BY: J.Maldonado	SHEET #: 4 OF 5	DRAWING #: 104

TAGS	QTY	CATALOG	DESCRIPTION
CAP3-103.22 CAP3-103.28	2	UNV00014208	MULTI-PURPOSE ROUND CAPACITOR 60uF 370VAC
CAP2-102.04 CAP2-102.04A CAP2-102.04B CAP2-102.04C CAP2-102.10 CAP2-102.10A CAP2-102.10B CAP2-102.10C CAP2-102.15 CAP2-102.16 CAP2-102.16A CAP2-102.16B CAP2-102.22 CAP2-102.22A CAP2-102.28	13	UNV00014354	START CAPACITOR 270-324uF 330V
CAP3-103.04 CAP3-103.04A CAP3-103.04B CAP3-103.10 CAP3-103.10A CAP3-103.10B CAP3-103.16 CAP3-103.16A CAP3-103.22A	9	UNV00014209	80uF MOTOR RUN CAPACITOR
CR1-101.16A CR1-101.18 CR1-101.23A	3	UNV000014930	3 POLE 75 A CONTACTOR 208/240V COIL
CR1-101.23	1	UNV00017881	POTENTIAL RELAY 66 CONTINUOUS, UNIVERSAL MOTOR STARTING RELAY
MOT4-104.10	1	UNV00014094	50HP 3 PHASE MOTOR
PB1-101.14	1	UNV00016588	START STOP PUSH BUTON 10A 600V
PE	1	UNV00007136	2 CONDUCTOR GND LUG
T11-101.05	1	UNV00014375	175A 2POLE TERMINAL BLOCK 1/6
PD1-101.04A PD4-104.20	2	UNV00014376	175A 3P 600V 1-6 OPENING TERMINAL BLOCK
CBL4-104.10	1	UNV00007275	1AWG 4C TYPE W 2KV

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Material Safety Data Sheet

To Whom It May Concern,

Larson Electronics LLC MTPC industrial line of phase converters are considered "ARTICLES" under 29 CFR 1910-1200, the OSHA Hazard Communication Standard, and do not require a Material Safety Data Sheet (MSDS).

Articles are specifically exempt from the regulations of this standard. OSHA defines an article as follows:

1910-1200(c) – Article means a manufactured item other than a fluid or particle:

i. Which is formed to a specific shape or design during manufacture;
ii. Which has end use function(s) dependent in whole or in part upon its shape or design during end use; and
iii. Which under normal conditions does not release more than very small quantities.

Regards,

Ray Smith
Larson Electronics, LLC.

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Frequently Asked Questions (FAQ)

There are no Faqs