



ROTARY STYLE PHASE CONVERTERS SPECIFICATIONS

480VAC Applications

ELITE MODEL	MAX STARTING (HP)	TOTAL RUNNING (HP)	STARTING CURRENT (A)	W/ CURRENT CUTTER PACKAGE (CC)	NO-LOAD IDLE AMPS	FRAME SIZE	WEIGHT (LBS)
P010	5	10	75	N/A	3A	215TZ	206
P015	7.5	15	85	N/A	3A	254TZ	257
PO20	10	20	120A	N/A	3A	256TZ	267
PO30	15	30	182A	50A	4-7A	286TZ	468
PO40	20	40	230A	55A	6-8A	324TZ	512
P050	25	50	357A	82A	8A	326TZ	572
PO60	30	60	313A	87A	8A	364TZ	762
PO75	40	75	437A	123A	10A	365TZ	854
P100	50	90	559A	152A	12A	404TZ	1165
P125	60	100	625A	260A	12A	405TZ	1238

240VAC Application

ELITE MODEL	MAX STARTING (HP)	TOTAL RUNNING (HP)	STARTING CURRENT (A)	W/ CURRENT CUTTER PACKAGE (CC)	NO-LOAD IDLE AMPS	FRAME SIZE	WEIGHT (LBS)
M010	5	10	46A	NA	5A	215T	206
M015	7.5	15	67A	NA	5A	254T	257
MO20	10	20	82A	NA	5A	256T	267
MO30	15	30	205A	105	8A	286T	468
MO40	20	40	270A	120	10A	324T	512
M050	25	50	420A	195	10A	326T	572
MO60	30	60	580A	240	15A	364T	762
MO75	40	75	695A	250	20A	365T	854
M100	50	100	880A	310	35A	404T	1165
M125	60	125	995A	340	35A	405T	1238

ELECTRICAL SPECIFICATIONS

Input Voltage:	240 / 480VAC
Output Voltage:	240 / 480VAC
Power Factor:	96%
Operating Efficiency	95% FLA
Capacitor Rating	370v / 660v-50uf
Startup Time	.05-3 Sec
Temperature Rise	Class B 80 Degrees
Insulation	Class F
Impregnation Resin	Class H
NEMA Rating	Design B

MECHANICAL SPECIFICATIONS

Frame Type:	Cast Iron
Rotary RPM:	1800
Bearings:	Ball Bearing
Lubrication:	Re-greaseable, Positive Pressure
Drain Plugs: (TEFC)	Automatic Pressure Compensated
Control Panel Rating:	NEMA 4, Wet and dirty ready
Rotary Color:	Grey
Control Panel Color:	Light Industrial Grey
Paint:	Synthetic Enamel Alkyd Resin



DESCRIPTION-

Rotary style phase converters are designed to run on 480vac or 240vac single phase power, and produce a 480vac or 240vac 3-phase output. All converters come standard with a Nema 4x rated enclosure, and top of the line 660vac rated capacitors. Rotary style phase converters can be used for many applications from pumps and pivots, wood working machinery, and industrial machinery. Consult with our professional sales team today for which converter best fits your needs.

BENEFICIAL FEATURES:

Elite Phase Converters offer many features for the industry today including the following:

- **Start / Auto Package:** This package offers a built in starter, push button on/off switch, overload for the rotary motor, and input and output termination blocks for easy installation. This package allows for unattended starting of the phase converter. Just simply close our supplied 120vac contact from a different location and the converter will start unattended.

- **Current Cutter Package:** This package reduces the starting current of the phase converter motor by approximately 70%. On the end of a power line? Having problems with your local utility company approving your job? This is the package for you. Contact us today for a specification sheet.

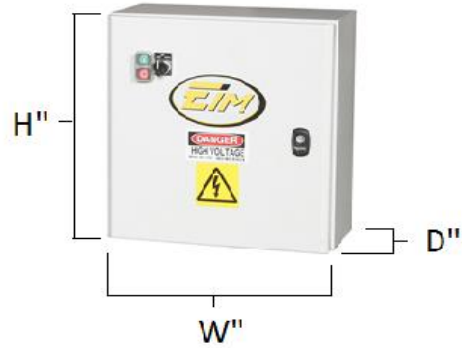
Motor Screening Package: This package is a preventative option for rodents on all our ODP idler motors.

-**Voltage Assist Panel:** This package was designed so that you can run your smaller loads without the natural high voltage from a phase converter. Running a pivot and pump combo? This unit is the one for you so you can run your pivot dry in the off season.



ELITE INDUSTRIAL MANUFACTURING LLC.

" ROTARY CONVERTER DIMENSIONS "



EIM ROTARY GENERATOR DIMENSIONS

FRAME / HP	W''	H''	D''	LBS
184T / (5HP)	12.34''	8.49''	8.50''	94
213T / (7.5HP)	14.39''	11''	13.31''	144
215T / (10HP)	17.39''	12.46''	13.20''	161
254T / (15HP)	20.18''	13.46''	13.78''	174
256T / (20HP)	22.18''	13.46''	13.78''	191
286T / (30HP)	23.24''	17.98''	21.36''	525
324T / (40HP)	20.75''	18.04''	20.00''	453
326T / (50HP)	22.25''	18.04''	20.00''	465
364T / (60HP)	23.02''	20.75''	25.62''	748
365T / (75HP)	24.02''	20.75''	25.62''	803
404T / (100HP)	25.63''	22.57''	29.17''	1056
405T / (125HP)	27.13''	22.57''	29.17''	1132

Note: Image above is for frames 184T-256T. Frames

CONTROL CABINET DIMENSIONS

W''	H''	D''
16''	16''	8''
16''	16''	8''
16''	16''	8''
16''	16''	8''
16''	16''	8''
20''	20''	10''
20''	20''	10''
20''	20''	10''
32''	32''	12''
32''	32''	12''
32''	32''	12''
32''	32''	12''

Note: Dimensions above are based off the converter having the "SA" package included. If the converter needs our "CC" option then go up one enclosure size.





ROTARY CONVERTER APPLICATION NOTES:

Sizing a Rotary Phase Converter is important and can be confusing at times. The information below should be used as a guideline when sizing your next project. Please feel free to consult our sales team for additional sizing needs.

Motor loads should be broken down into 4 separate categories due to their starting characteristics. Typically a motor will require 5-6 times its full load amp rating (FLA) to reach full speed on startup. EIM recommends sizing our converter a minimum of 50% larger than the load motor being applied. By using are conservative guidelines below you will achieve maximum performance from your converter and possibly have extra capacity to add additional loads in the future.

MOTOR LOADS

1. **Light / Easy Loads:** Light/Easy loads require little rotating force, low starting torque, and typically do not start under a load. These loads typically draw 2 times the Full Load Amp rating (FLA) of the motor. EIM recommends sizing the converter 1.5 times larger than the motor being applied in these applications. I.e.: Mills, table saws, some pumps, drill press, wheel balancers, sewing machines, lathes with a clutch, dough mixers, meat grinders, air conditioners, etc.
2. **Moderate Loads:** Moderate loads are typically loaded upon startup, resulting in a moderate amount of force. These loads will typically require 4-5 times the FLA rating to reach full speed on startup. EIM recommends sizing the converter 2 times larger than the load being applied.
I.e.: Air Compressors, Fans, Wide belt sanders, all pumps starting under a load, Mexican, Chinese, Taiwanese, or Brazilian motors, and Design E motors (higher starting currents).
3. **Heavy Loads:** Heavy loads typically start under a significant load, have high inertia, have heavy rotational force, or go well beyond there FLA rating for short periods of time while running. These loads will require 5-6 times the FLA or more to reach full speed on startup or even after the load is running. EIM recommends sizing the converter 2.5-3 times the size of the load being applied. Consult our sales staff for more info.
I.e.: Screw Air compressors, elevators, hoists, laundry extractors, bailers, compactors, shears, paper cutters, etc.

MULTIPLE LOAD APPLICATIONS:

Multiple motor loads can be run from a rotary phase converter. When sizing for multiple loads always start with the largest motor being started. This may be one motor by itself of multiple motors starting at the same time. After you have identified the largest motor starting, then simply add the smaller motors and make sure they don't exceed the converters total HP requirements. I.e.: 5hp air compressor, 2hp grinder, 2hp lathe, 2hp drill press = 5hp largest motor starting at one time. Total motors that could run at a given time= 11hp (this is up to the customer) EIM recommends our Model # M015 Rotary Converter which is good for 15 total running HP and or 40A at 240VAC.

RESISTIVE LOADS:

Resistive loads can also be run from a Rotary Style Phase Converter. Typically resistive loads will not give you a HP rating so you will have to do some math. Find the total amperage rating of the machine and divide it by 2.6 for 240VAC applications and 1.3 for 480VAC applications. This number will give you the equivalent HP rating and you can now size your converter to the correct total output current. I.e.: Welder that has a maximum rating of 40A at 240VAC. $40 / 2.6 = 15.38$ HP. EIM would recommend our model # M020.

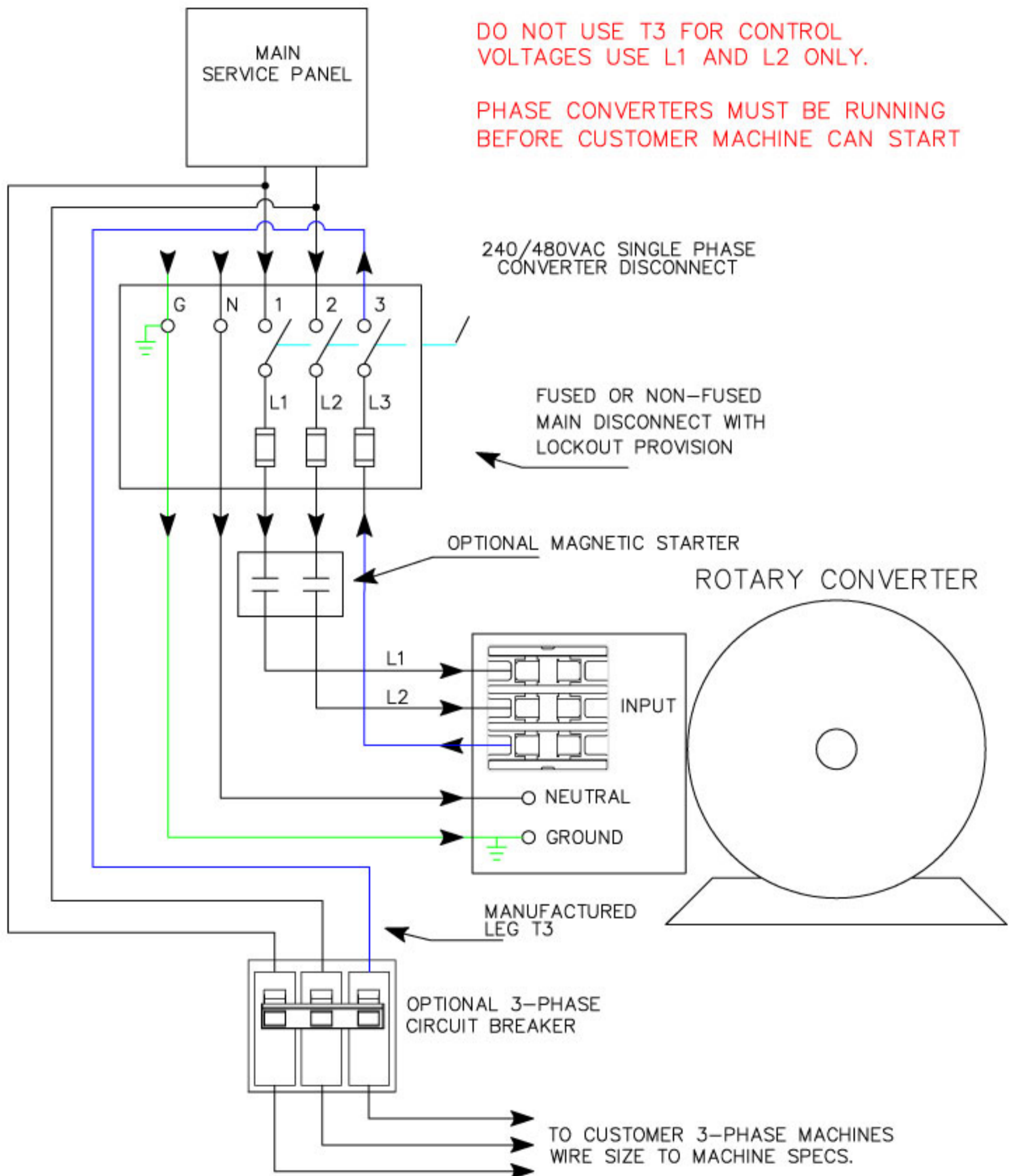
Note: EIM Rotary Phase Converters have a Delta Output. Applications such as CNC loads that require a 4 wire Wye Input will require an isolation delta-wye transformer to be installed between the phase converter and the load motor, resulting in equal voltages to ground on all three lines.

ELITE INDUSTRIAL MANUFACTURING

SYSTEM WIRING FOR STANDARD PACKAGE CONNECTION

DO NOT USE T3 FOR CONTROL
VOLTAGES USE L1 AND L2 ONLY.

PHASE CONVERTERS MUST BE RUNNING
BEFORE CUSTOMER MACHINE CAN START

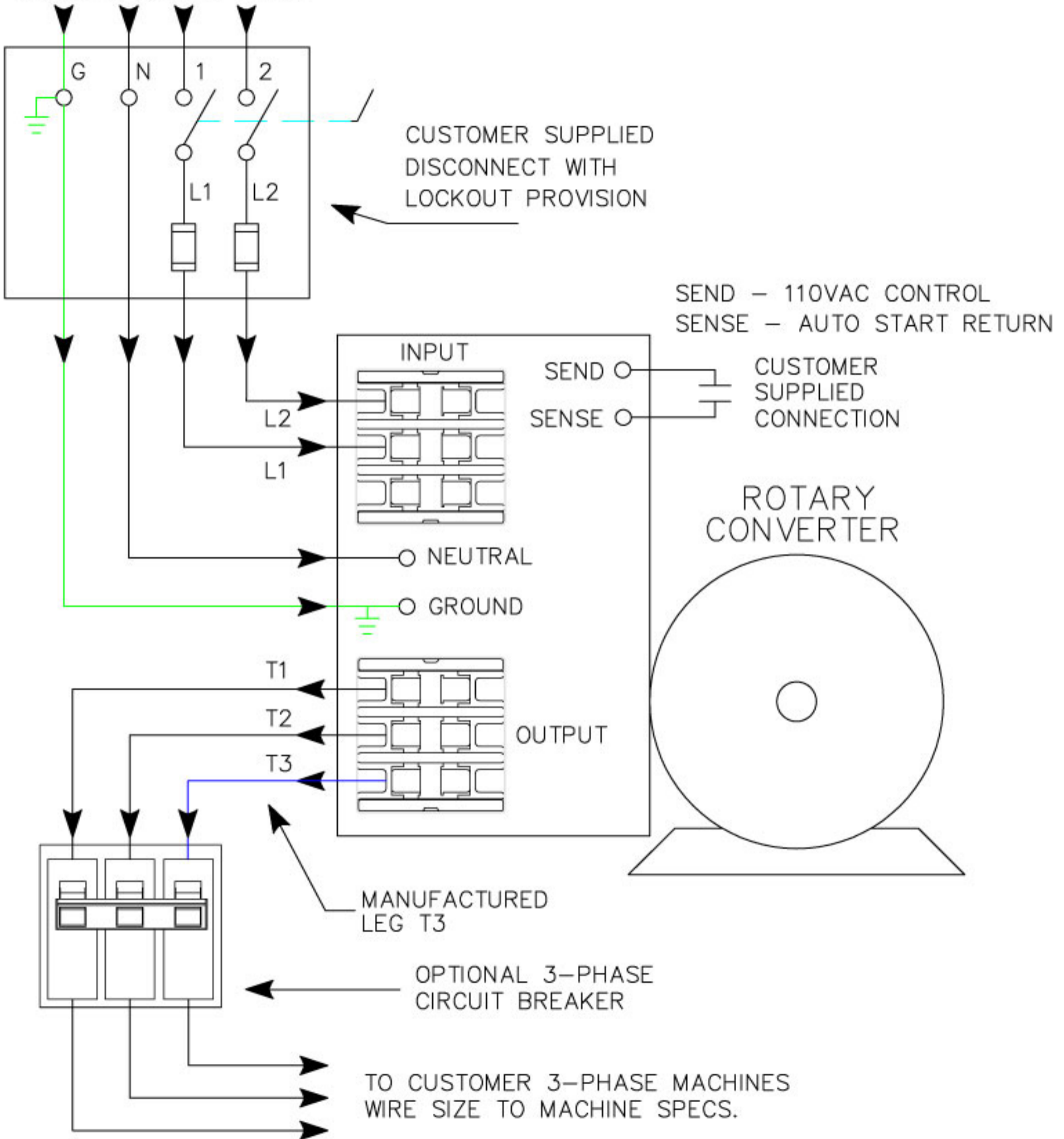


ELITE INDUSTRIAL MANUFACTURING

SYSTEM WIRING FOR STARTER PACKAGE, AUTO/MANUAL

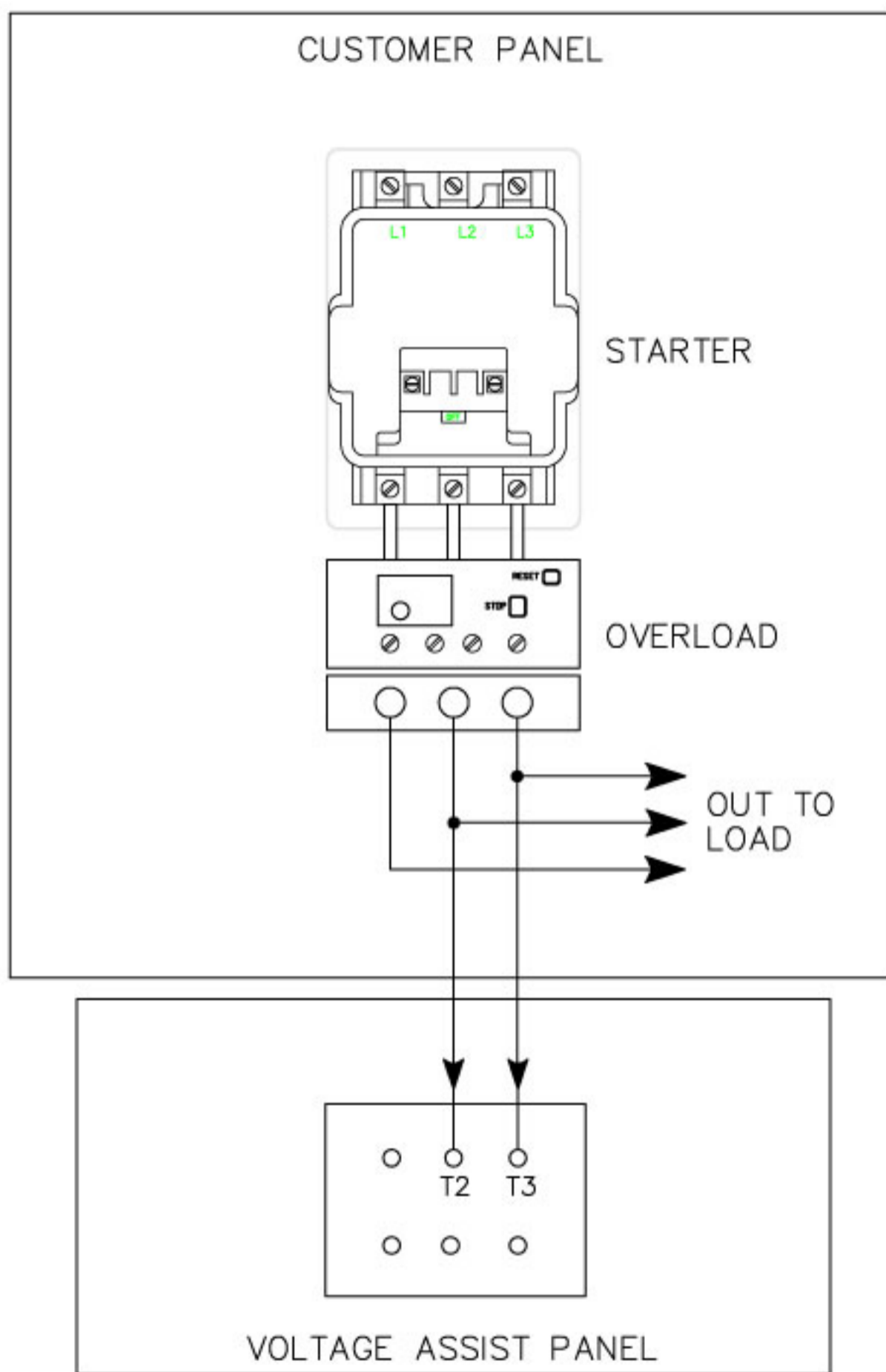
240/480VAC
INCOMING SINGLE PHASE

DO NOT CONNECT CONTROL VOLTAGE TO LINE 3



ELITE INDUSTRIAL MANUFACTURING

WIRING FOR VOLTAGE ASSIST PANEL



VOLTAGE ASSIST PANEL IS WIRED ON THE LOAD SIDE OF CUSTOMERS STARTER OVERLOAD. L2 AND L3 ONLY.