The voltage configuration connector is installed on the DynaControl V6 LCD Main Board (see board illustration below).

There are four different voltage configuration connectors available:

- for 240 VAC, 1ph (and 400/480VAC 3ph Δ) system, use P/N 150127* plug with blue wires.
- for 230 VAC, 1ph + N, use P/N 150127* plug with black wire.
- for 240 VAC, 3ph, Delta, use P/N 150127* plug with violet wires.
- for 230/400 VAC, 3ph + N, Wye, use P/N 150127* plug with yellow wires.

* The four configuration plugs come as a kit with one p/n. They can be distinguished by color and have corresponding voltage printed on them.

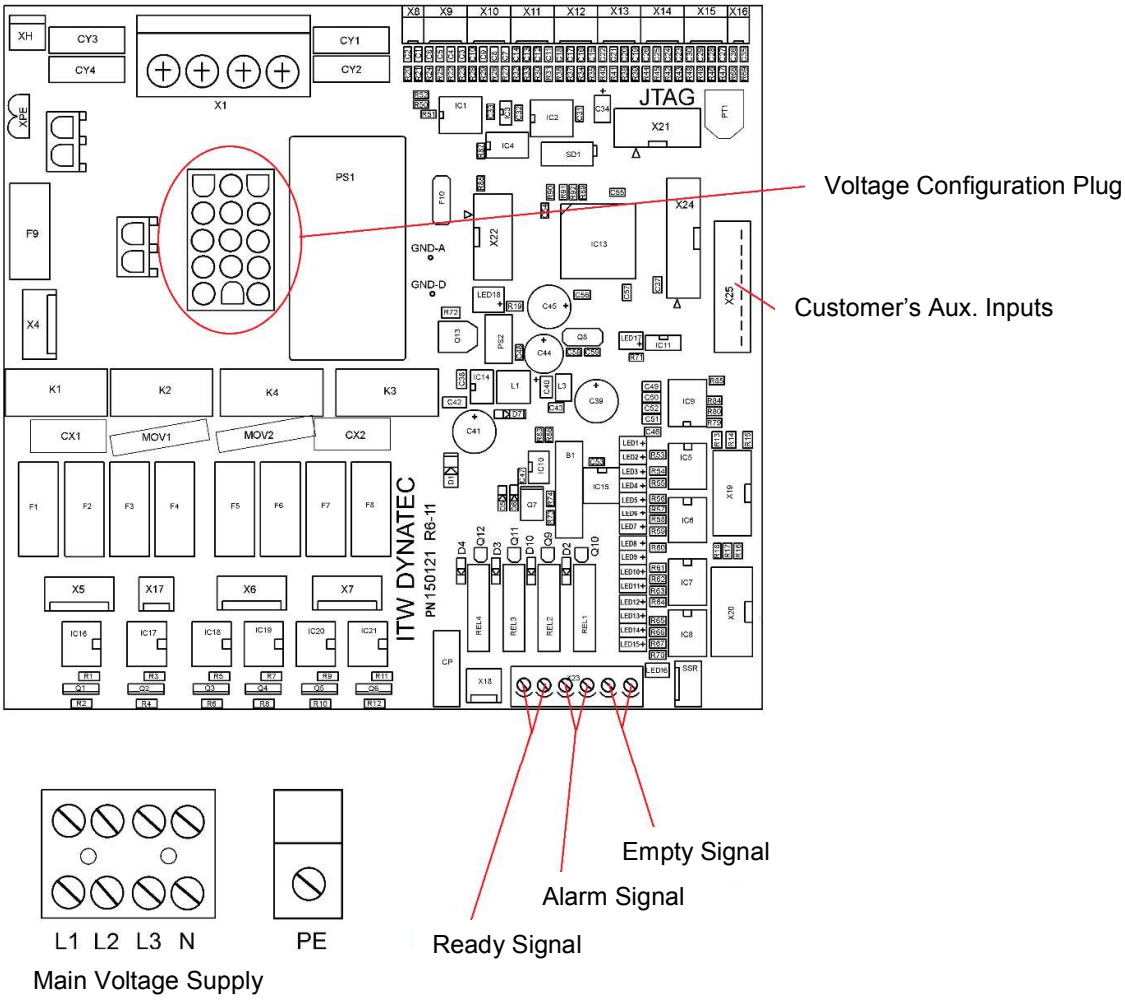
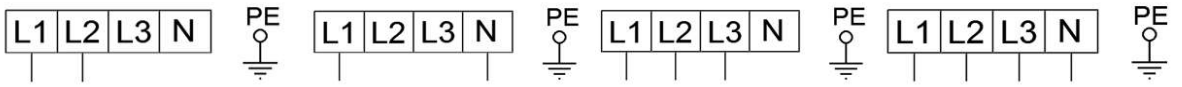


Illustration: DynaControl V6 LCD Main Board

Line input power wiring for each type power supply:



1PH PE 200-240VAC 1PH N/PE 200-240VAC 3PH Δ PE200-240VAC 3PH Y N/PE 230/400VAC

4. At installation, the customer must make the following terminal connections into the ASU's main power (ON/OFF) switch and modules.

Terminal	Circuit	Location
L 1, L 2, L 3, N	Input Power from Main Power	Base Frame Main Terminals
PE	Ground	Ground Lug
Non-essential connections; connect if feature is installed:		
RELAY OUTPUT 1	Ready Output Signal (contact closes when ready)	V6 Main Board, see drawing above
RELAY OUTPUT 2	Alarm Output Signal (contact opens when alarm)	
RELAY OUTPUT 3	Hopper Low Level Signal (contact closes when glue level is low)	
ST.BY PU.ST. IN-C.	Standby Input External Pump Start/Stop (activate to start pump) Common for Inputs	See chapter 7.2 and schematics for details

5. The air pressure regulator, gauge and solenoid valve assembly (located in the base frame on the front of the unit) are pre-installed.

   Connect a one-quarter inch (1/4") airline to the female 1/4 NPT fitting on the bottom of the unit, located in the base frame. Air supplied to the unit must be regulated, clean and dry (see advices under point "Quality of compressed Air" on next page). Recommended supply pressure is 10 to 100 psi (0.7 to 6.8 bar).

   To increase pressure, use a flat tip screw driver to turn the regulator valve clockwise. To decrease pressure, turn the regulator counter-clockwise. The recommended pressure is 0.7 to 6.8 bar (10 to 100 psi).

6. Nine hydraulic hose connection ports are located on the filter manifold. These ports are positioned to allow for up to six hoses to be routed either from the back of the unit, or from the right-hand side. It is recommended that you use a 45° fitting (available from ITW Dynatec) when using the three ports located on the corner of the filter manifold. ITW Dynatec recommends that hoses be connected to the bottom ports first, then the middle ports, and finally the top ports.

7. The hydraulic pressure gauge can be installed either in one of the hose ports or gauge port labeled "PRE PSI" indicating pressure before the filter.

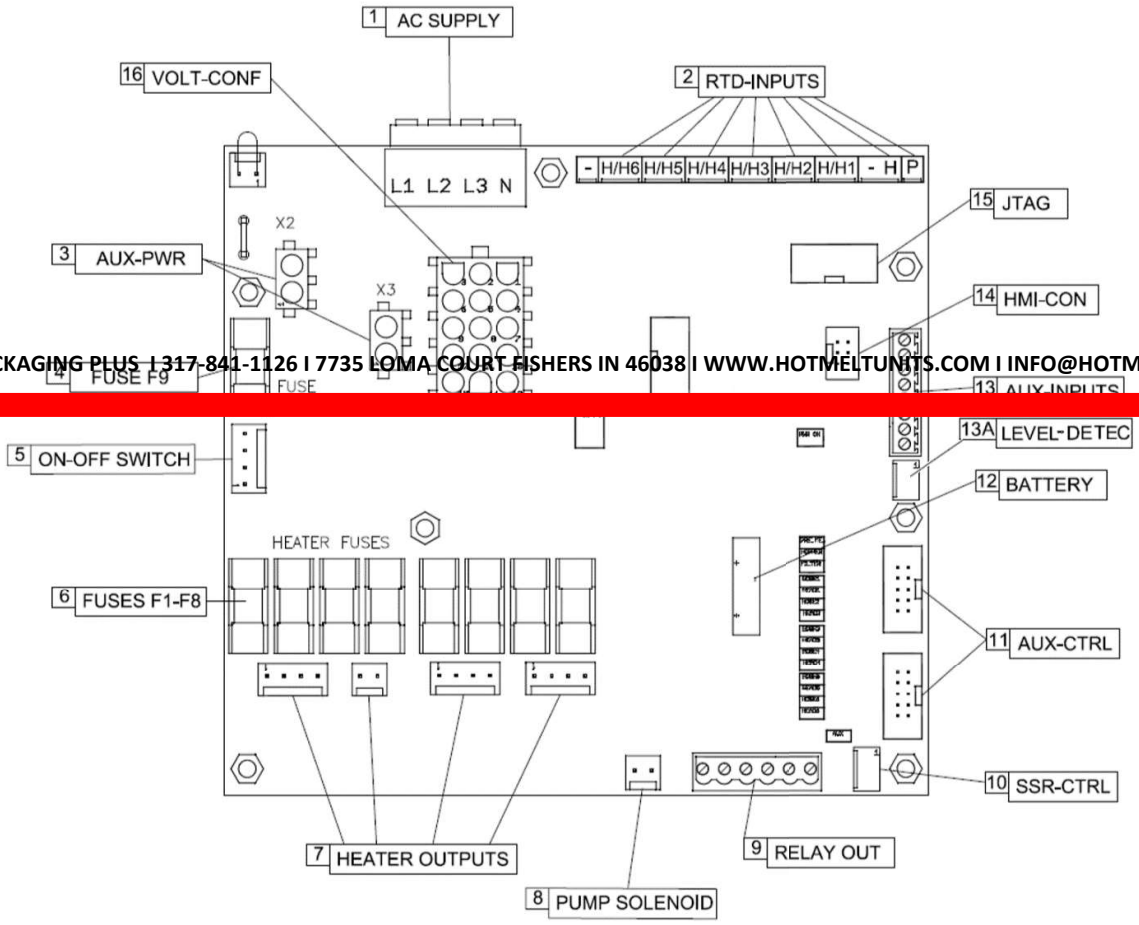
WARNING HOT ADHESIVE

Do not remove the manifold cover. This cover should remain in place during operation in order to prevent burns and maintain the temperature of the filter manifold. Replace the foam cover if it becomes damaged or dirty.

7.2 V6 MAIN PCB PN 150146

The V6 Main PCB is the main control board of the DynaControl V6 controller. Most of the internal and external components are connected to this PCB.

ITW Dynatec recommends using dry contacts for connecting to DynaControl V6!



Description of Components

The following items are referenced to the illustration on previous page:

- **Item #1** AC input connected to the main supply terminal on the unit's base frame.
- **Item #2** RTD (Temperature sensor) inputs for all zones. Depending on configuration either PT100 or NI120 RTDs are used.
- **Item #3** Power connections to the aux-power boards. Depending on configuration those might not be used.

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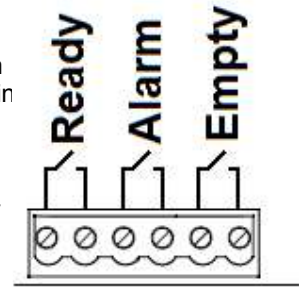
V6 MAIN PCB, cont.

- **Item #4** Fuse 1. This fuse protects the electronic board. Fuse rating: 2AT (2-amp slow blow)
- **Item #5** Connection to On/Off switch. Keep in mind that this switch does not completely disconnect voltage.
- **Item #6** Heater Fuses. Those fuses protect the individual heater circuits. Fuse rating: 10AF (10-amp fast). Replace only with appropriate spare fuses.
- **Item #7** Heater outputs. Connect to the heaters of the individual zones.
- **Item #8** Connection for Pump Solenoid. This 230VAC output gets energized when the pump is turned on and system is in ready condition.
- **Item #9** Auxiliary Output Relays.

  Ready: this contact closes once the system is in ready condition (ready condition = all active temperature zones are within their tolerances and there is no other alarm message pending). Normally open.

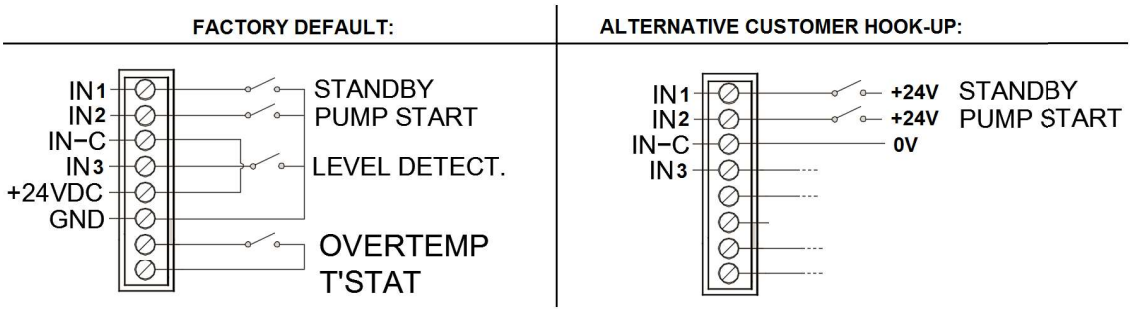
  Alarm: this contact is normally closed. In case of an Alarm (over temp, RTD fault etc.) the contact will open.

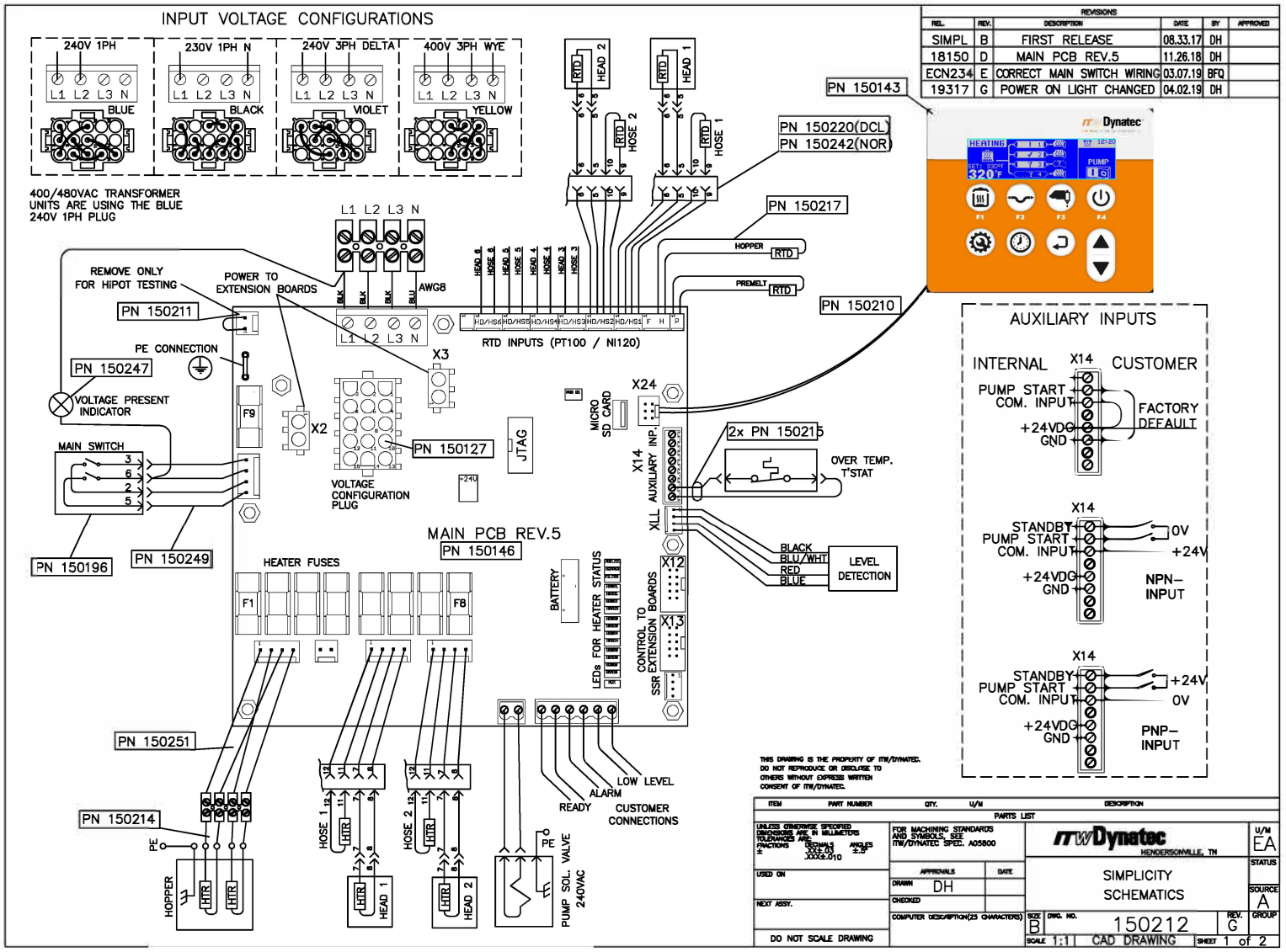
  Empty: this contact will close when the adhesive level is below a certain minimum. (optional)



- **Item #10** SSR connection. In case heater circuits use additional Solid State Relays, those are connected here
- **Item #11** Control connections to aux-power boards. Depending on configuration, those might not be used.
- **Item #12** This battery is required to keep the internal clock for the 7-day scheduler running. If you notice the unit is losing the time/day setting it needs to be replaced. The battery type is CR2032.
- **Item #13** Auxiliary Inputs. This connector accepts external signals that can be used to control the ASU. The inputs require 24VDC signals. Although the internal 24VDC can be used to provide voltage for the inputs, it is recommended to use external 24VDC. For this purpose, the common of the signal inputs is available on terminal IN-C. and is isolated from the internal 24VDC.

  Inputs IN1 and IN2 are not polarity sensitive. That means the common (IN-C.) can either be positive or negative.




INPUT VOLTAGE CONFIGURATIONS
240V 1PH
230V 1PH N
240V 3PH DELTA
400V 3PH WYE
L1 L2 L3 N
BLUE
BLACK
VIOLET
YELLOW
400/480VAC TRANSFORMER
UNITS ARE USING THE BLUE
240V 1PH PLUG
REMOVE ONLY
FOR HIPOT TESTING
POWER TO
EXTENSION BOARDS
AWG8
PN 150211
PE CONNECTION
PN 150247
VOLTAGE PRESENT
INDICATOR
MAIN SWITCH
PN 150196
PN 150249
F9
X2
X3
PN 150127
VOLTAGE
CONFIGURATION
PLUG
JTAG
RTD INPUTS (PT100 / NI120)
MAIN PCB REV.5
PN 150146
HEATER FUSES
F1
F8
BATTERY
LEDs FOR HEATER STATUS
CONTROL TO
SSR EXTENSION BOARDS
X24
MICRO
SD CARD
X14
AUXILIARY INP.
XLL
2x PN 150215
OVER TEMP.
T'STAT
BLACK
BLU/WHT
RED
BLUE
LEVEL
DETECTION
X12
X13
PN 150251
PN 150214
PE
HOPPER
HTR
HOSE 1
HEAD 1
HOSE 2
HEAD 2
PUMP SOL. VALVE
240VAC
LOW LEVEL
ALARM
READY
CUSTOMER
CONNECTIONS
HOPPER
RTD
PREMELT
PN 150143
PN 150220(DCL)
PN 150242(NOR)
PN 150217
PN 150210
Dynatec
HEATING
PUMP
320°F
F1
F2
F3
F4
AUXILIARY INPUTS
INTERNAL
X14
CUSTOMER
PUMP START
COM. INPUT
+24VDC
GND
FACTORY
DEFAULT
STANDBY
0V
+24V
NPN–
INPUT
PNP–
INPUT
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CONSENT OF ITW/DYNATEC.
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ITEM
PART NUMBER
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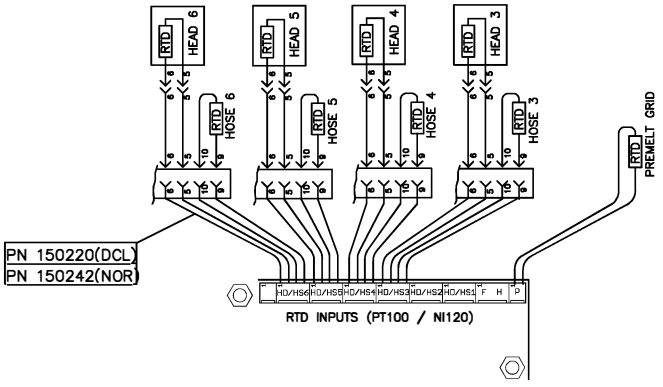
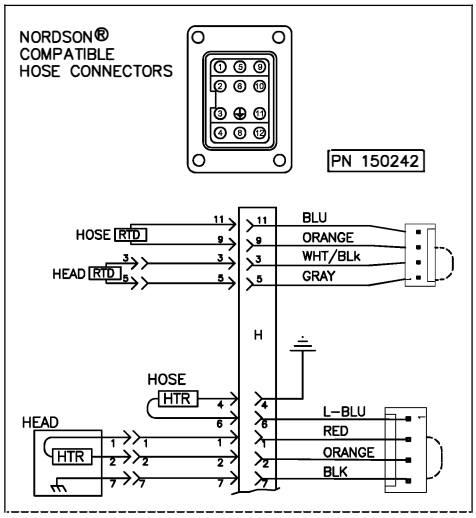
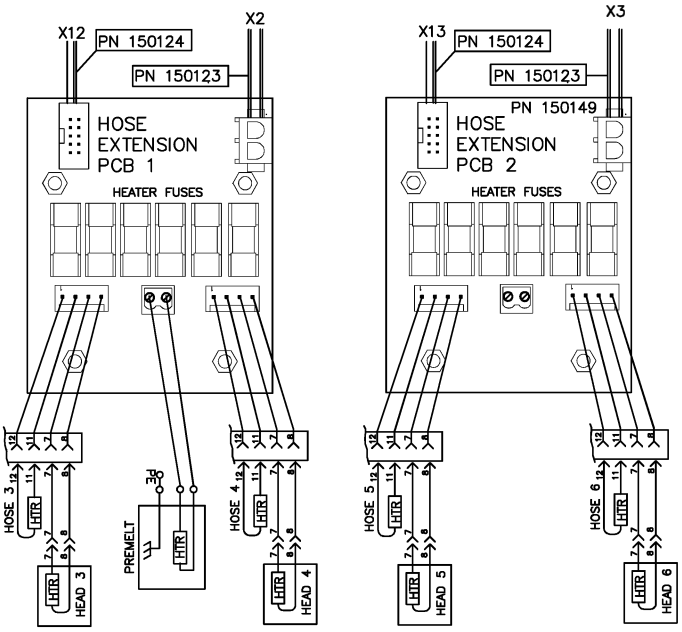
UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN MILLIMETERS
TOLERANCES ARE:
FRACTIONS
DECIMALS
ANGLES
FOR MACHINING STANDARDS
AND SYMBOLS, SEE
ITW/DYNATEC SPEC. A05800
ITW Dynatec
HENDERSONVILLE, TN
U/M
EA
USED ON
APPROVALS
DATE
DRAWN
DH
CHECKED
NEXT ASSY.
COMPUTER DESCRIPTION(23 CHARACTERS)
SIMPLICITY
SCHEMATICS
STATUS
SOURCE
A
GROUP
SIZE
B
DWG. NO.
150212
REV.
G
DO NOT SCALE DRAWING
SCALE 1:1
CAD DRAWING
SHEET 1 of 2
REVISIONS
REL.
REV.
DESCRIPTION
DATE
BY
APPROVED
SIMPL B FIRST RELEASE 08.33.17 DH
18150 D MAIN PCB REV.5 11.26.18 DH
ECN234 E CORRECT MAIN SWITCH WIRING 03.07.19 BFQ
19317 G POWER ON LIGHT CHANGED 04.02.19 DH

REVISIONS					
REL.	REV.	DESCRIPTION	DATE	BY	APPROVED
19317	G	CORRECTION ON PAGE 2	04.02.19	DH	







ITEM	PART NUMBER	QTY.	U/M	DESCRIPTION
PARTS LIST				

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS TOLERANCES ARE: FRACTIONS ± XX.X±.03 .XXX±.010 ANGLES ±.5°

FOR MACHINING STANDARDS AND SYMBOLS SEE ITW/DYNATEC SPEC. A05800

ITW Dynatec HENDERSONVILLE, TN

U/M EA

USED ON

NEXT ASSY.

DO NOT SCALE DRAWING

APPROVALS	DATE
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CHECKED	

COMPUTER DESCRIPTION(25 CHARACTERS)

SIMPLICITY SCHEMATICS

STATUS

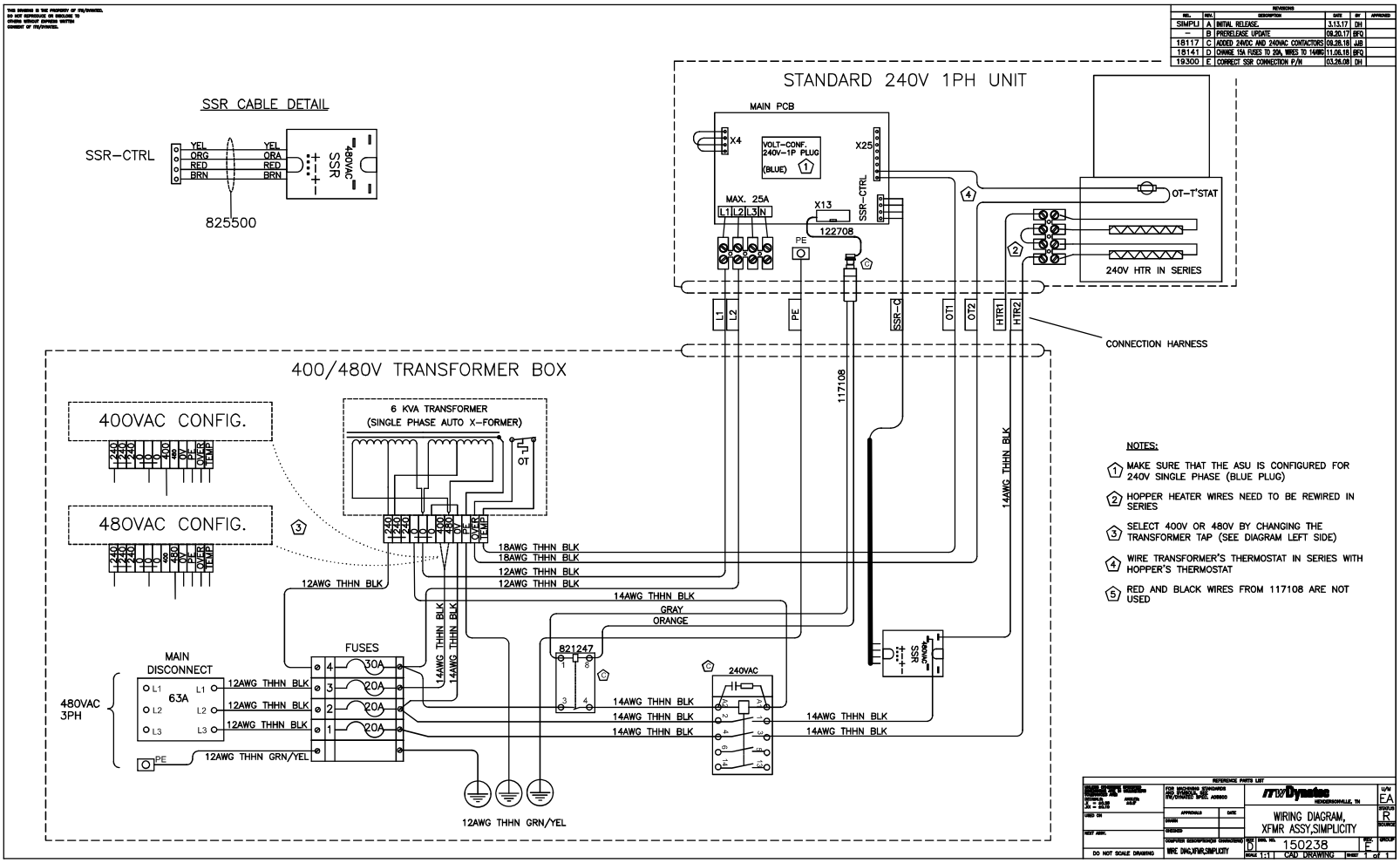
SOURCE A

GROUP

SIZE B | DWG. NO. 150212 | REV. G

SCALE 1:1 | CAD DRAWING | SHEET 2 of 2

Transformer 400/480V Schematics, PN 150238


SSR CABLE DETAIL
SSR-CTRL
YEL
ORG
RED
BRN
480VAC
SSR
825500
STANDARD 240V 1PH UNIT
MAIN PCB
X4
VOLT-CONF. 240V-1P PLUG (BLUE)
X25
SSR-CTRL
MAX. 25A
L1 L2 L3 N
X13
122708
PE
OT-T'STAT
240V HTR IN SERIES
CONNECTION HARNESS
L1
L2
PE
SSR-C
OT1
OT2
HTR1
HTR2
400/480V TRANSFORMER BOX
400VAC CONFIG.
480VAC CONFIG.
6 KVA TRANSFORMER (SINGLE PHASE AUTO X-FORMER)
OT
117108
14AWG THHN BLK
18AWG THHN BLK
18AWG THHN BLK
12AWG THHN BLK
12AWG THHN BLK
14AWG THHN BLK
GRAY
ORANGE
FUSES
MAIN DISCONNECT
480VAC 3PH
63A
30A
20A
20A
12AWG THHN BLK
12AWG THHN BLK
12AWG THHN BLK
12AWG THHN GRN/YEL
821247
240VAC
14AWG THHN BLK
14AWG THHN BLK
14AWG THHN BLK
14AWG THHN BLK
14AWG THHN BLK
12AWG THHN GRN/YEL
NOTES:
1 MAKE SURE THAT THE ASU IS CONFIGURED FOR 240V SINGLE PHASE (BLUE PLUG)
2 HOPPER HEATER WIRES NEED TO BE REWIRED IN SERIES
3 SELECT 400V OR 480V BY CHANGING THE TRANSFORMER TAP (SEE DIAGRAM LEFT SIDE)
4 WIRE TRANSFORMER'S THERMOSTAT IN SERIES WITH HOPPER'S THERMOSTAT
5 RED AND BLACK WIRES FROM 117108 ARE NOT USED
WIRING DIAGRAM, XFMR ASSY,SIMPLICITY
150238