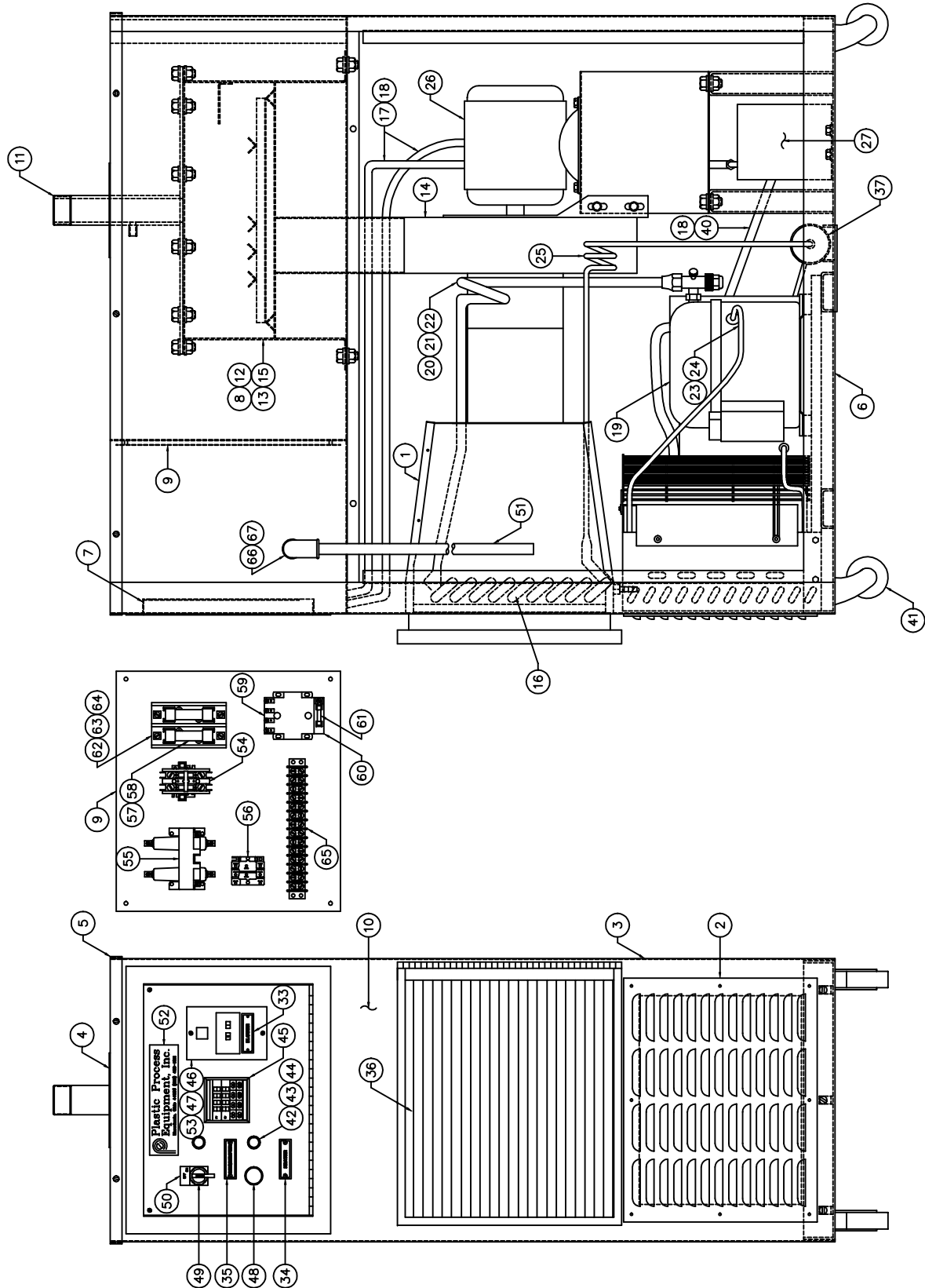


P-161 DRIER



PLASTIC PROCESS EQUIPMENT, INC.

8303 Corporate Park Drive, Macedonia (CLEVELAND), OHIO 44056
 (216) 367-7000 TOLL FREE: 800-321-0562 FAX (216) 367-7022 ORDER FAX: 800-223-8305 EMAIL: SALES@PPE.COM

6385 Montessouri Street, Las Vegas, Nevada 89113
 (702) 433-6385 TOLL FREE: 800-258-8877
 FAX: (702) 433-6388

11218 Challenger Ave., Odessa, FL 33556
 (727) 834-8888 TOLL FREE: 800-282-6783
 FAX: (727) 834-8873



INSTRUCTIONS FOR P-161 DEHUMIDIFYING HOPPER DRYER

MODEL NO.
P-161
SERIAL NO.



PPE Hopper Dryers are manufactured and sold direct by Plastic Process Equipment, Inc. We are not associated with any other manufacturer except Budget Molder's Supply, Inc. Always specify genuine PPE or Budget Machinery! Do not accept substitutes.

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PLASTIC PROCESS EQUIPMENT, INC.

www.ppe.com • e-mail: sales@ppe.com

**PPE
WEST**

3615 Walnut Avenue, Chino, California 91710, U.S.A.
909-627-8511 • 800-258-8877 • Fax: 909-627-8101

**PPE
SOUTH**

11218 Challenger Avenue, Odessa, Florida 33556, U.S.A.
727-834-8888 • 800-282-6783 • Fax: 727-834-8873

8303 CORPORATE PARK DRIVE, MACEDONIA (Cleveland), OHIO 44056, U.S.A.

Toll Free: USA, Canada & Mexico

216-367-7000 • Toll Free: 800-321-0562 • Fax: 216-367-7022 • Order Fax: 800-223-8305

1-800-362-0706

RECEIVING

Please thoroughly inspect your hopper drier and report any damage to the motor freight carrier before uncrating for set up. They are responsible for any damage incurred during transit. Uncrate and remove protective wrap, retain information package and note unit serial number.

ELECTRICAL

CAUTION: All supply wire and electrical apparatus used must be in compliance with all local and/or national electrical codes. The model P-161 Hopper Drier control panel is completely wired with a 120 volt OSHA approved control circuit. To comply with OSHA 1910.147 Lockout/tagout the user must supply a separate fused disconnect power supply rated as follows:

For 230/60/3 operation: Use a 40 amp fused disconnect.

For 460/60/3 operation: Use a 30 amp fused disconnect.

AIR HOSE CONNECTION

ALWAYS MAKE CONNECTIONS WITH HEAT TURNED OFF. Connect air hose to outlet on top of drier. Secure with stainless steel hose clamp supplied. Repeat the same for the air dispersion cone. Locate air cone in the bottom of your material hopper and fill hopper with material.

PRINCIPLE OF OPERATION

- 1) Energize control circuit by depressing manual starter blower switch. This will cause blower to operate, check blower rotation. This can be done simply by checking to see if air is flowing out of the discharge.
- 2) Energize dehumidifier. Pilot light will indicate dehumidifier is in operation.
- 3) Energize heater circuit. Pilot light will indicate heat coils are on. Heat circuit can function without dehumidifier operating. This circuit can only be de-energized by, (a) the Fuji control, (b) the manual starter blower switch, and (c) the hi-limit safety switch.
- 4) Set desired temperature on the Fuji control (see section on setting the control), the heat circuit and pilot light will react accordingly. **NOTE:** Your heater circuit is protected from runaway heats with a hi-limit safety sensor located on the heat chamber top. This device is preset at approximately 450° F at the factory and will shut down your heater circuit above that temperature. If your heating circuit is de-energized prior to reaching your temperature setting, the hi-limit switch may be out of adjustment.

SETTING THE FUJI CONTROL

The PYZ7 Fuji process/temperature control is a micro-processor based unit which allows simple finger tip control by the operator and displays both the desired setting (SV) and the actual temperature (PV) simultaneously. The control parameters have been pre set at the factory so all that is required from the user is to set the desired temperature (SV).

Setting the fuji control is very simple, to set the desired temperature (SV) proceed as follows:

- 1) Press the (^) button below whichever digit you wish to change, this will cause the digit to flash. Pushing the (^) button again will cause the digit to index up by 1, to reduce the digit by 1 press the (V) button on the far left.
- 2) Repeat step 1 for all digits.
- 3) Once you have your desired temperature displayed correctly press the (ENT) button, this will store your setting in memory. The (PV) light will light and you are operational.



MAINTENANCE

- 1) Electrical control panel must be kept closed. Moisture and dust can affect the relay and switch performance.
- 2) Air intake filter should be kept clean to insure adequate air flow.
- 3) Keep area around top of cabinet and exhaust stack clean and free of objects. These areas could become extremely hot during prolonged periods of operation.

LAMP REPLACEMENT

CAUTION: To prevent injury, disconnect all power sources prior to initiating work.

- 1) Remove lens.
- 2) Push lamp inward, turn counterclockwise and remove.
- 3) Reverse procedure to install new lamp. Tighten lens securely. Lamp part number is 35F2806

TEMPERATURE CONTROLLER TROUBLE SHOOTING

- 1) Control will not operate.
 - a) If CRI is energized and L1 is not lit then proceed to step 2.
 - b) Check fuses to heaters.
 - c) Check power at control terminals.
 - d) Check hi-limit switch
- 2) Relay will not energize.
 - a) Place jumper wire across thermocouple terminals. If relay switches at room temperature, controller is operating properly.
 - b) Check all connections for tightness, Replace thermocouple if necessary.

GENERAL TROUBLE SHOOTING

- 1) Blower fails to start
 - a) Check supply voltage
 - b) Press the manual blower start/stop button to reset and try restarting.
- 2) Dehumidifier not working
 - a) Check control circuit fuse (F3)
 - b) Check voltage to dehumidifier wires 107 & 108 - 230 volt, wires 110 & 111 - 460 volt
- 3) Heat not working
 - a) Check Fuji control desired temperature (SV) setting.
 - b) Check control circuit fuse (F3)
 - c) Check heater fuses (F1 and F2)
 - d) Check voltage between wire #2 and #4 should read 110v - if not CRI not working
 - e) Check voltage between wire #3 and #4 should read 110v - if not hi-limit switch open
 - f) Check voltage between wire #1 and #7 should read 0v - if not Fuji control not functioning correctly.
 - g) Check voltage between wires #105 and #106 should read 230v on 230v unit and 460v on 60v unit
 - h) Check heater for continuity
 - i) Check hi-limit switch, turn CCW to raise hi-limit temperature. **Warning, do not set hi-limit switch above 450°F maximum temperature.**
- 4) Ice buildup on evaporator/radiator unit (located behind the filter)
 - a) Check refrigeration pressure - you must run the system for 1/2 hour before checking the pressure which should read 27psi at ambient temperature of 70°F with the compressor running. If system loses charge **do not vacuum system**. Check for leaks then purge with R-134-A (in accordance with all local and federal regulations) and recharge to 27psi with compressor running. The system is charged with 2 lbs. of freon.
 - b) If compressor is freezing up then system is **overcharged**.
 - c) If evaporator is freezing up then system is **undercharged**.
 - d) **CAUTION: DO NOT LOOSEN OR REMOVE RED CAP!**

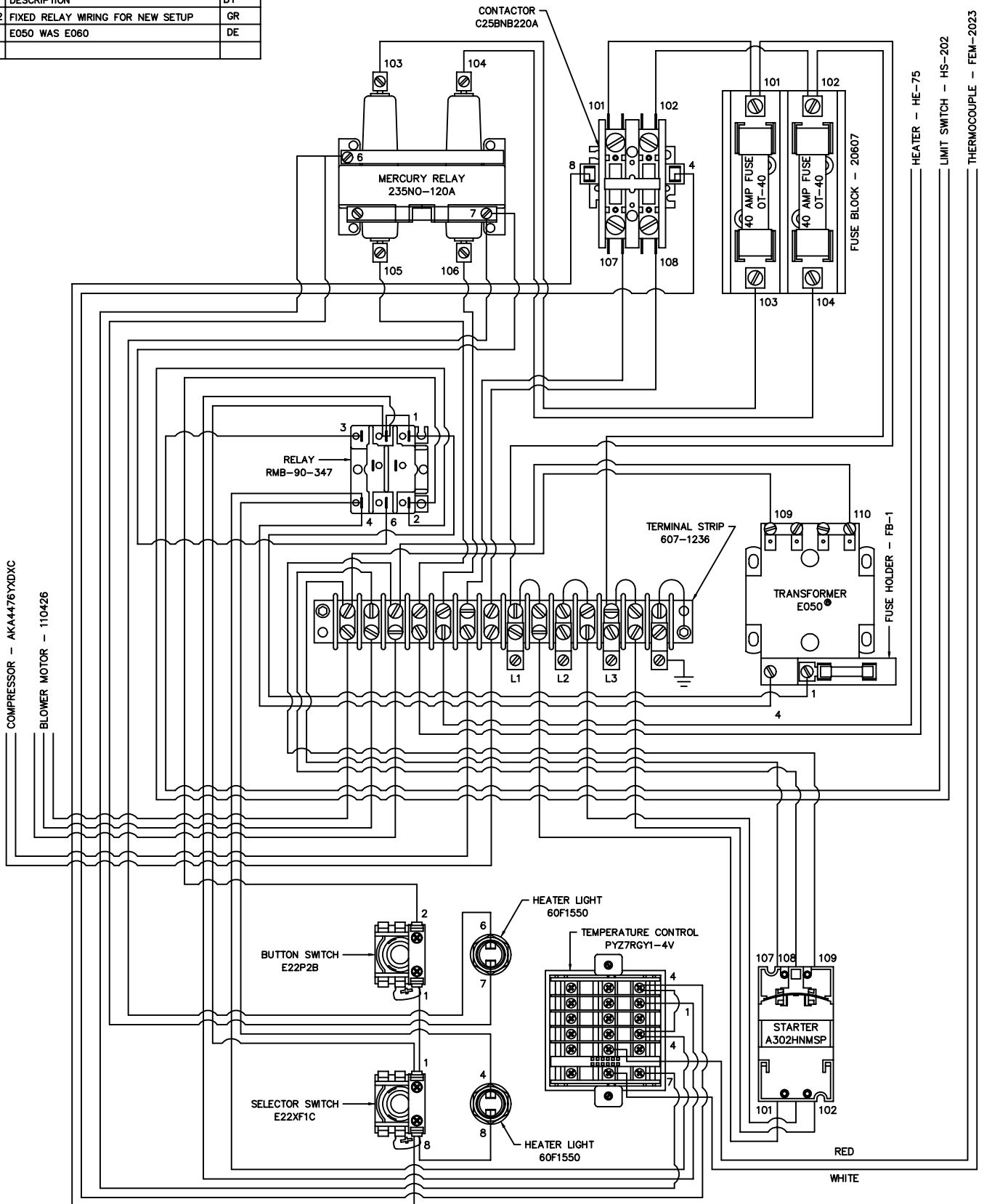
WARRANTY

All PPE machinery is warranted to be free of defective material and workmanship for a minimum period of **1 YEAR from date of Invoice**. Some machinery components may carry longer warranties per our suppliers policies which are passed on to our customers i.e., our drier compressors, conveyor motors, etc.

DEFAULT CONTROLLER SETTINGS

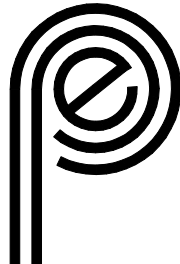
ITEM	MEANING	INITIAL SETTING
P	Proportional Band	22
I	Integral Time (Reset)	34
d	Derivative Time (Rate)	6.6
TC	Cycle Time (Output 1)	7
HYS	Hysteresis (Output 1)	1
AT	Autotuning	0
bAL	Balance	0.0
Ar	Anti-reset windup	48
LoC	Lock out	0
P-n1	Control Action	0
P-n2	Input Type	2
P-dF	Input filter constant	4.0
P-SL	Lower range of input	32
P-SU	Upper range of input	500
P-dP	Decimal Point Position (Resolution)	0
PVOF	Process Variable Offset	0
SVOF	Setpoint Variable Offset	0
P-F	°C/°F Selection	1
FUZY	Fuzzy Control	OFF
dSP1	Parameter mask	49
dSP2	Parameter mask	253
dSP3	Parameter mask	248
dSP4	Parameter mask	255
dSP5	Parameter mask	129
dSP6	Parameter mask	139
dSP7	Parameter mask	125

REV	DATE	DESCRIPTION	BY
A	8/22/02	FIXED RELAY WIRING FOR NEW SETUP	GR
B	6/7/04	E050 WAS E060	DE



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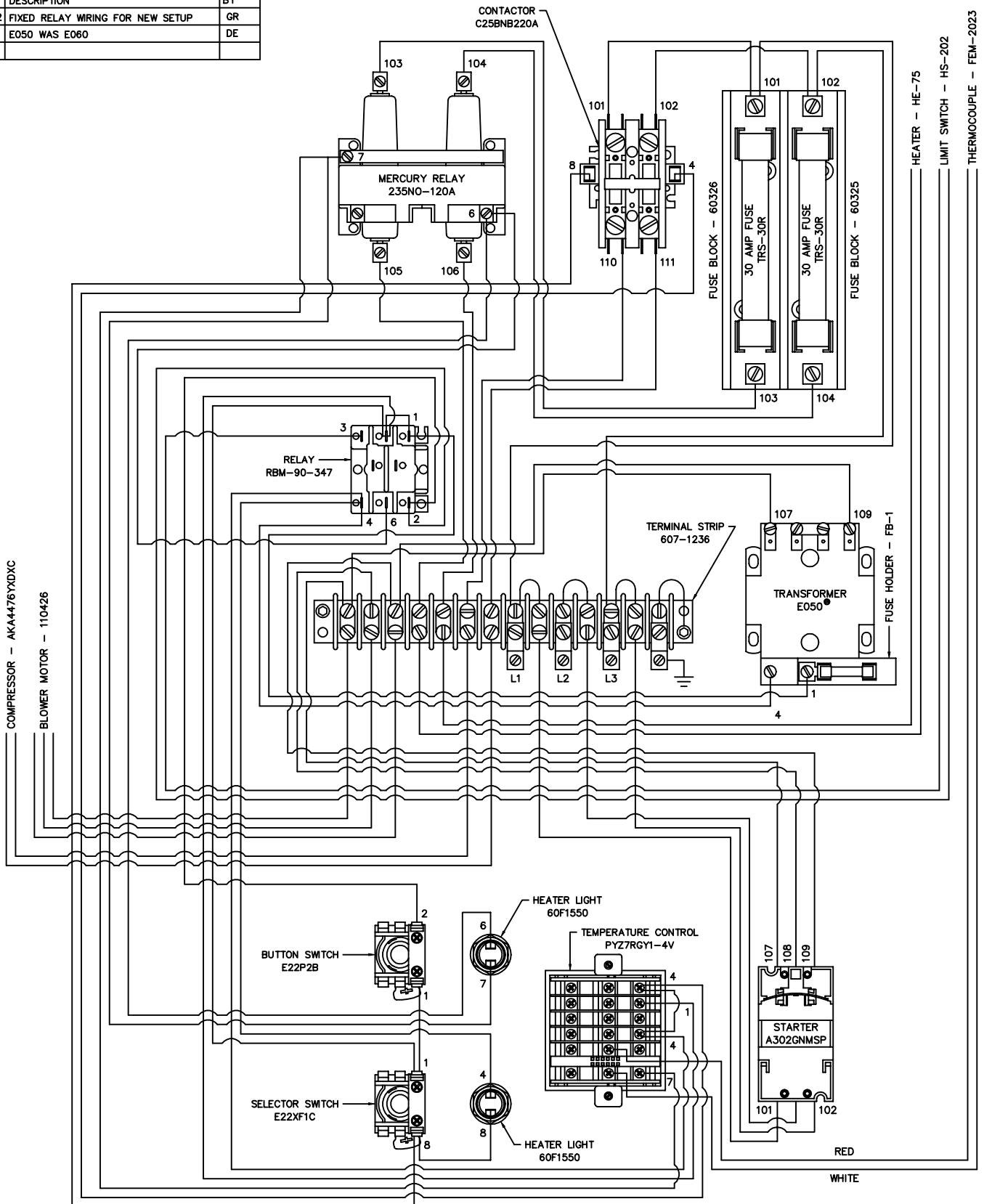
TOLERANCES UNLESS OTHERWISE SPECIFIED		PLASTIC PROCESS EQUIPMENT, INC. MACEDONIA, OH	
DECIMAL ± .005	P-101	SCALE	DRAWN BY <i>BTS</i>
FRACTIONAL ± 1/64	TITLE 230V WIRING DIAGRAM		
ANGULAR ± 1/2°	DATE 03-25-92	DRAWING NUMBER	A-4912
		APPROVED BY	

P-161 DRIERS PARTS LIST

12/06/2010

ID NUMBER	PART NUMBER	DESCRIPTION	UOM
1	A-1148	EVAPORATOR ASSEMBLY	EA
2	B-1745	LOUVERED PANEL	EA
3	D-2794	SIDE PANELS FOR P-161	EA
4	B-2795	FLANGE	EA
5	D-2796	TOP COVER FOR P-161	EA
6	D-2797	BASE FRAME FOR P-161	EA
7	A-4463	CONTROL PANEL	EA
8	D-4547	HEATER ELEMENT HOUSING FOR P-161	EA
9	A-4603	COMPONENT MOUNTING PLATE	EA
10	D-4610	P161 CABINET NEW (extended model)	EA
11	A-4616	PIPE PLATE	EA
12	HS-202	LIMIT SWITCH	EA
13	FEM-2023	THERMOCOUPLE "J"	EA
14	4C108	BLOWER LESS MOTOR	EA
15	HE-75	HEATER ELEMENT	EA
16	XE-22-5215	EVAPORATOR COIL SUNDSTRAND	EA
17	XC220	3/8 FLEX CONDUIT CONNECTOR	EA
18	FLEXBX12	3/8" CONDUIT 12"	EA
19	AKA4476YDXC	COMPRESSOR & CONDENSING UNIT R134A	EA
20	3/8CTUBE	3/8" COPPER TUBING PER FT	EA
21	1/2CTUBE	1/2" COPPER TUBING	EA
22	1/2-3/8CRC	1/2" TO 3/8" COPPER REDUCING COUPLING	EA
23	1/4CTUBE	1/4" COPPER TUBING PER INCH	EA
24	1/4CC	1/4" COPPER COUPLING	EA
25	S862	STRAINER	EA
26	110426	1 HP MOTOR (460V 3PH) P-161	EA
27	53012-S	TRANSFORMER 2.0 KVA (460V)	EA
28	OSHA-8	HOT FLUID SIGN	EA
29	HVTAG	HIGH VOLTAGE TAG	EA
30	PLTAG	PLASTIC LOGO DECAL	EA
31	PPETAG	PPE SERIAL NO. TAG	EA
32	DRTAG	DRAIN TAG P-161	EA
33	BLTAG	BLOWER TAG	EA
34	HETAG	HEATER TAG P-161	EA
35	DETAG	DEHUMIDIFIER TAG P-161	EA
36	14X16X1	FILTER 97614186	EA
37	C052-S	DRIER SPORLAN CATCHALL	EA
38	CN-50	CHASE NIPPLES (APPLETON)	EA
39	BL-50	1/2" TIGER GRIPS	EA
40	XC290	3/8 CONNECTOR	EA
41	5X925	CASTERS FOR P-161 (4030-01-STL)	EA
42	88F4232	BASE	EA
43	60F1551	LENS FOR P-161	EA
44	96F6580	LAMP	EA
45	PXR7-RGY1-4V0A1	TEMPERATURE CONTROLLER	EA
46	A302HNMSP	230V MANUAL STARTER	EA
47	A302GNMSP	460V MANUAL STARTER	EA
48	E22P2B	PUSH BUTTON SWITCH	EA
49	E22XF1C	SELECTOR SWITCH	EA
50	E22NS105	ON/OFF TAG	EA
51	10-4	NEOPRENE COVERED POWER CORD PER FT 4 COND 10GA	EA
52	PPE	PPE BUMPER STICKER	EA
53	C799FP41	ENCLOSURE FOR P-161	EA
54	C25BNB220A	CONTACTOR	EA
55	235NO-120A	MERCURY RELAY FOR P-161	EA
56	RBM-90-347	RELAY	EA
57	OT-40	40 AMP FUSES (230V)	EA
58	TRS-30R	30 AMP FUSES (460V)	EA
59	E050	TRANSFORMER	EA
60	FB-1	FUSE HOLDER	EA
61	FUSE	FUSE	EA
62	20607	GOULD FUSE BLOCK (230V)	EA
63	A53TP25D	SOLID STATE RELAY	EA
64	60326	GOULD FUSE BLOCK 460V) FOR P-161	EA
65	607-1236	ALLIED TERMINAL STRIP FOR P-161	EA
66	2274	90 DEG CORD CONNECTOR 3/4	EA
67	BL-75	APPLETON BONDING LOCK NUT 3/4	EA
68	E22B2	SINGLE CONTACT BLOCK	EA

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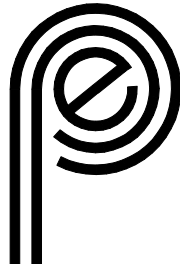


COMPRESSOR - AKA4476YDXC
 BLOWER MOTOR - 110426

HEATER - HE-75
 LIMIT SWITCH - HS-202
 THERMOCOUPLE - FEM-2023

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