

## 415-0005 2-30DS99 SUPER BLAST UNIT

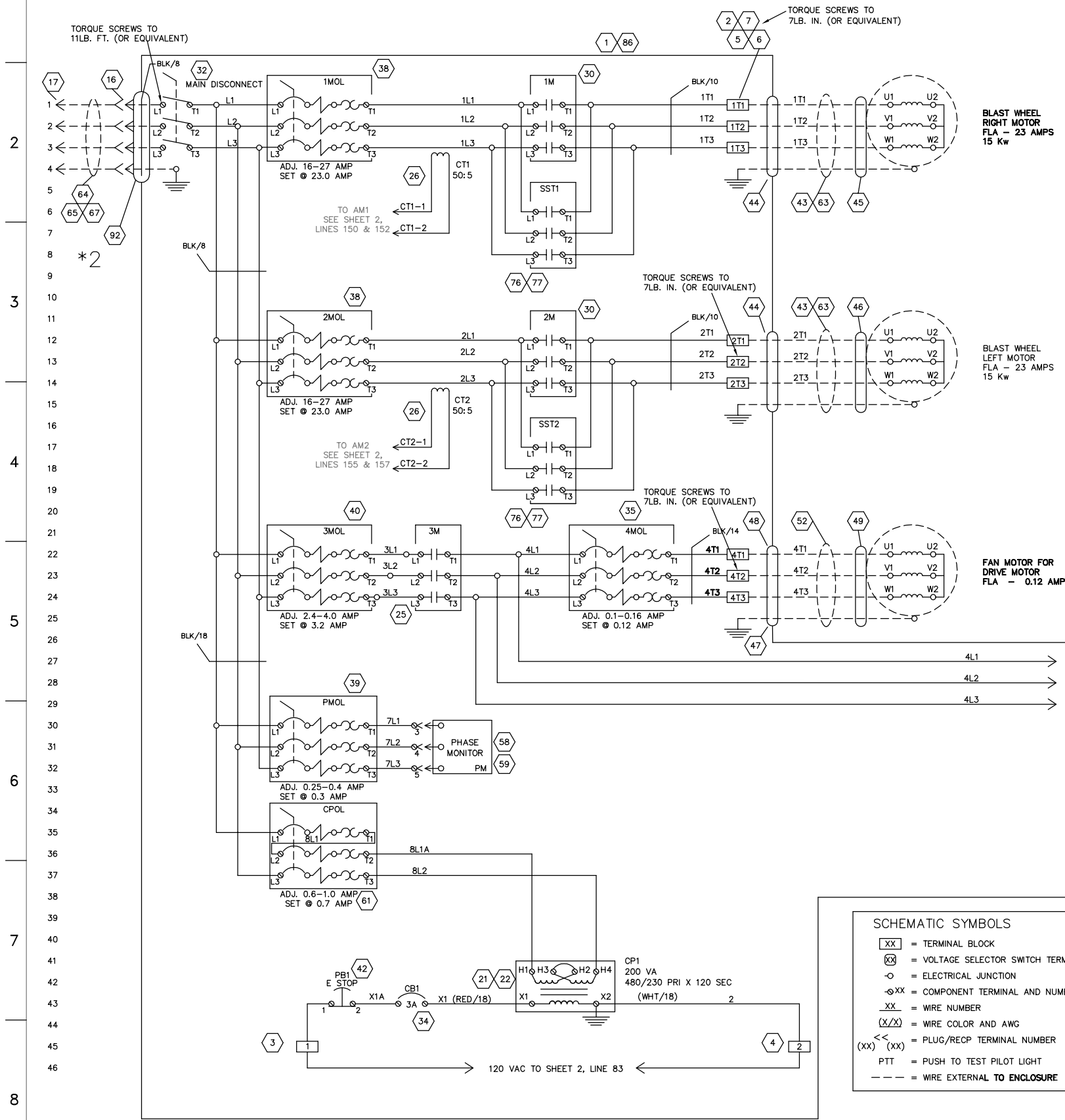
ITEM NO.	QTY	PN.	DESCRIPTION
1	1	P001058	ENCLOSURE/CUSTOM FOR 2-30D/2-20D
2	14	717053	TERMINAL BLOCK, BLACK
3	8	717051	TERMINAL BLOCK, RED
4	2	717052	TERMINAL BLOCK, WHITE
5	1	717048	TERMINAL BLOCK, END BARRIER, KBL6-10 TERMINAL BLOCK
6	1	717049	TERMINAL BLOCK, ISOLATION PARTITION
7	1	717045	TERMINAL BLOCK, END ANCHOR, TERMINAL BLOCK, 35 MM
8	2	717050	TERMINAL BLOCK/GROUND SL4/35
9	3	P000437	TERMINAL BLOCK, SRK2.5, NEUTRAL
10	1	P000438	TERMINAL BLOCK, END BARRIER, SRK2.5
11	1	5730007	CABLE, QD CABLE 5 METER
12	2	P000191	AMMETER, DIGITAL, 5 AMP, 48VDC PS, 50 AMP PROGRAMMING (AM)
13	1	5730008	SWITCH, PROXIMITY SENSOR
14	1	P000144	HOUR METER/ 120V, 50/60 HZ ( HM )
15	1	P001061	FACEPLATE
16	1	P000192	SOCKET, CABLE END, 4 WIRE, 3 POLE, 600V, 60 AMP
17	1	P000193	PLUG, PANEL MOUNT, 4 WIRE, 3 POLE, 600V, 60 AMP
18	4	P000151	PILOT LIGHT, RED, LESS LAMP ( PL1, PL5, PL7, PL9 )
19	9	P000393	LAMP, T3 1/4, 120V ( PL1 - PL9 )
20	5	P000150	PILOT LIGHT, GREEN, LESS LAMP ( PL2, PL3, PL4, PL6, PL8 )
21	1	P000407	TRANSFORMER, 200VA, 230/480X120 ( CP1 )
22	2	P000147	TRANSFORMER, TERMINAL COVER
23	1	P000198	CONTACT AUX, 2NO, TOP MOUNTED ( 3M )
24	3	716826	CONTACT AUX , (1 NO/1 NC) FOR EACH MCP ( 3MOL,4MOL,5MOL)
25	2	P000199	CONTACTOR (DRIVE FAN, BRAKE) 120 VOLT, 50/60 HZ ( 3M, 5M )
26	2	P000351	CURRENT TRANSFORMER, AC, 50:5 RATIO W 24" LEADS ( CT1, CT2 )
27	1	P000440	DIGITAL DISPLAY, FOOT PER MINUTE ( FPM )
28	1	P000342	POWER SUPPLY, 24 VDC, 30 W ( PS1 )
29	2	P000215	AUX CONTACTS FOR BLAST CONTACTOR (2NO/2NC) (1M)
30	2	P000948	CONTACTOR (BLAST MOTOR) ( 1M, 2M )
31	1	P000168	LIMIT SWITCH ( LS1 )
32	1	P000220	SWITCH/ MAIN DISCONNECT W/ HANDLE, 100 AMP (MAIN)
33	1	P000202	CIRCUIT BREAKER/ POWER SUPPLY SECONDARY, 0.5 AMP ( CB2 )
34	1	P000416	CIRCUIT BREAKER (XFMR SEC.) ( CB1 )
35	1	P000949	MCP FOR DRIVE MOTOR FAN, 0.1-0.16 AMP ( 4MOL )
36	1	P000950	MCP FOR DRIVE MOTOR BRAKE, 0.16-0.25 AMP ( 5MOL )
37	2	P000171	CONTACT AUX, (1 NO/1 NC) FOR BLAST OL (1MOL,2MOL)
38	2	P000343	MCP FOR BLAST, 16-27 AMP ( 1MOL, 2MOL )
39	1	P000207	MCP FOR PHASE MONITOR, 0.25-0.4 AMP ( PMOL )
40	1	716824	VFD PRIMARY PROTECTION, 2.5-4 AMP (3MOL)
41	3	P000155	SWITCH, PUSH BUTTON, DUAL, FOR START/STOP ( PB2 - PB4 )
42	1	P000320	SWITCH, E-STOP, LATCHING, PULL TO RELEASE, 1 NC
43	12	P001042	FLEXIBLE CONDUIT FOR PG29 & 1" NPT
44	2	P001048	FITTING-STRAIGHT, 1" NPT (PANEL FOR BLAST MOTORS)
45	1	P001052	FITTING-STRAIGHT, PG29 (RIGHT BLAST MOTOR)
46	1	P001053	FITTING-ELBOW, PG29 (LEFT BLAST MOTOR)
47	2	P001054	FITTING-STRAIGHT, 1/2" (PANEL FOR DRIVE MOTOR & FAN)
48	2		NUT FOR 1/2"
49	1	P001056	FITTING-STRAIGHT, PG13.5 (DRIVE MOTOR COOLING FAN)
50	1	P001057	FITTING-ELBOW, PG13.5 (DRIVE MOTOR / BRAKE)
51	8	P001040	FLEXIBLE CONDUIT FOR PG13.5 / PG16
52	47	P000330	WIRE, 600V, 14 AWG
53			NOT USED
54	1	P000362	REACTOR/ 460V, 2 HP, 5% ( INPUT REACTOR )
55	1	687122	POTENTIOMETER, 5K, 2 W., FOR DC DRIVE (INCLUDED W/ DRIVE)
56	1	P000181	CORD GRIP, 0.20"-0.35", 13.5PG, ( LS-1)

## 415-0005 2-30DS99 SUPER BLAST UNIT

57	2	691925	CORD GRIP, 0.24"-0.47", .1/2" NPT, (PANEL/DC MTR AND LS)
58	1	P000221	RELAY/PHASE SEQUENCE/LOSS SELF POWERED, 200/480 V, 50/60 HZ ( PM )
59	1	P000315	SOCKET, RELAY FOR PHASE SEQUENCE MONITOR (PM)
60	1	P000392	POTENTIOMETER KNOB, SCALED 1-10
61	1	716825	MCP FOR ( CPOL )
62	1	P000955	VFD, 2HP, 3.6 AMP, 460 V
63	70	P000328	WIRE, #10 AWG, THHN, STRANDED (BLAST MTR/PANEL) 7'
64	55	P000333	WIRE, CABLE, 4 AWG, 4 CONDUCTOR, TYPE W
65	2	691949	STRAIN RELIEF, DOUBLE EYELET, 1-1.25" (ONE END EACH POWER CORD)
66	2	P000336	SWITCH, PUSH BUTTON (REVERSE & OVERDRIVE)
67	2	P000329	LINK, QUICK, 5/16, SPRING CLIP
68	1	P000951	THERMISTOR INTERFACE RELAY ( THR )
69	1	P001067	LEGEND PLATE, BLAST CURRENT
70	1	P001060	DOOR/ENCLOSURE R.H. SIDE
71	1	P001059	DOOR/ENCLOSURE L.H. SIDE
72			NOT USED
73	2	P000349	CONNECTOR/MALE, 4 POLE, 300V
74	2	P000350	CONNECTOR/FEMALE, 4 POLE, 300V, W/STRAIN RELIEF
75	12	P000430	WIRE, 18/4, 300V, SHIELDED (2-6' TO HANDLE)
76	2	P000955	SOFT-START CONTROL MODULE
77	2	P000953	SOFT-START OUTPUT MODULE, 480 VOLT / 90 AMP
78	2	P000958	RELAY, DPDT, 120 VAC COIL ( CR1A,CR2A )
79	4	P000959	RELAY SOCKET
80	2	P001035	REALY, SPDT, 24 VDC COIL (CR1B,CR2B)
81	1	P001068	FAN, AXIAL, 120 VAC, 3 1/8"
82			NOT USED
83	6	P000956	RC NETWORK
84	1	P000957	TIME DELAY RELAY
85	4	P001036	VIBRATION MOUNT, 1" HIGH X 1.375 DIA., 5/16 - 18 STUDS
86	1	P001037	BACKPAN
87	1	P001039	TERMINAL BUS CONNECT
88	1	P000193	PLUG, PANEL MOUNT, 3P+G, 480V, 60 AMP

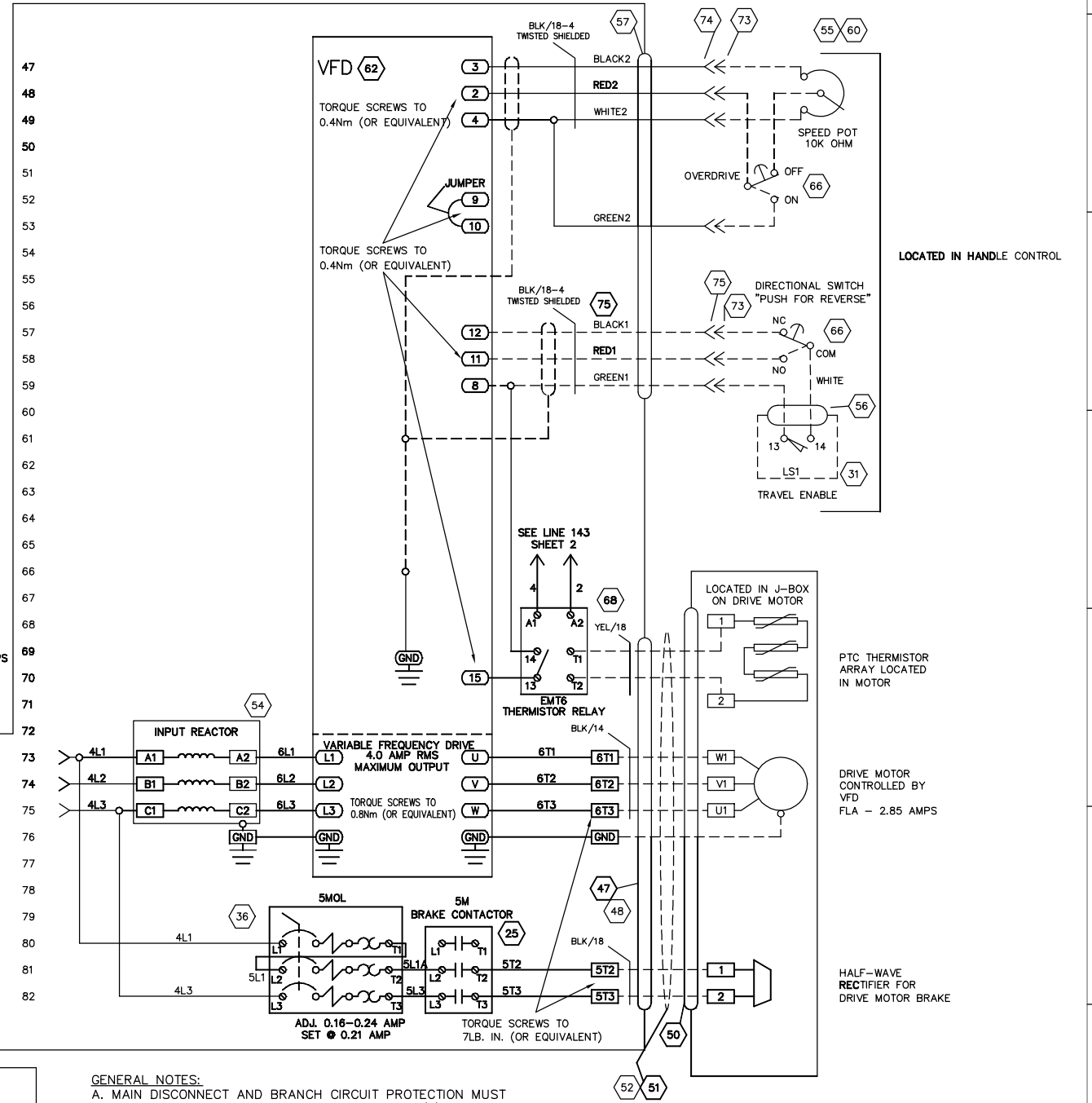
TOTAL FLA	LARGEST MOTOR FLA @ SUPPLY VOLTAGE
50.2 AMPS	23.0 AMPS 460 V
PHASE - 3	ENCLOSURE - TYPE 1
HERTZ - 60	MODEL - 2-30DS99

# BLASTRAC 2-30DS99 BLAST UNIT CONTROL PANEL FOR 460/480V - 60 HZ WITH VOLTAGE/PHASE ROTATION VERIFICATION



**SCHEMATIC SYMBOLS**

- XX = TERMINAL BLOCK
- ⊗ = VOLTAGE SELECTOR SWITCH TERMINAL
- = ELECTRICAL JUNCTION
- ⊗XX = COMPONENT TERMINAL AND NUMBER
- XX = WIRE NUMBER
- (X/X) = WIRE COLOR AND AWG
- <<(xx)>> = PLUG/RECP TERMINAL NUMBER
- PIT = PUSH TO TEST PILOT LIGHT
- = WIRE EXTERNAL TO ENCLOSURE



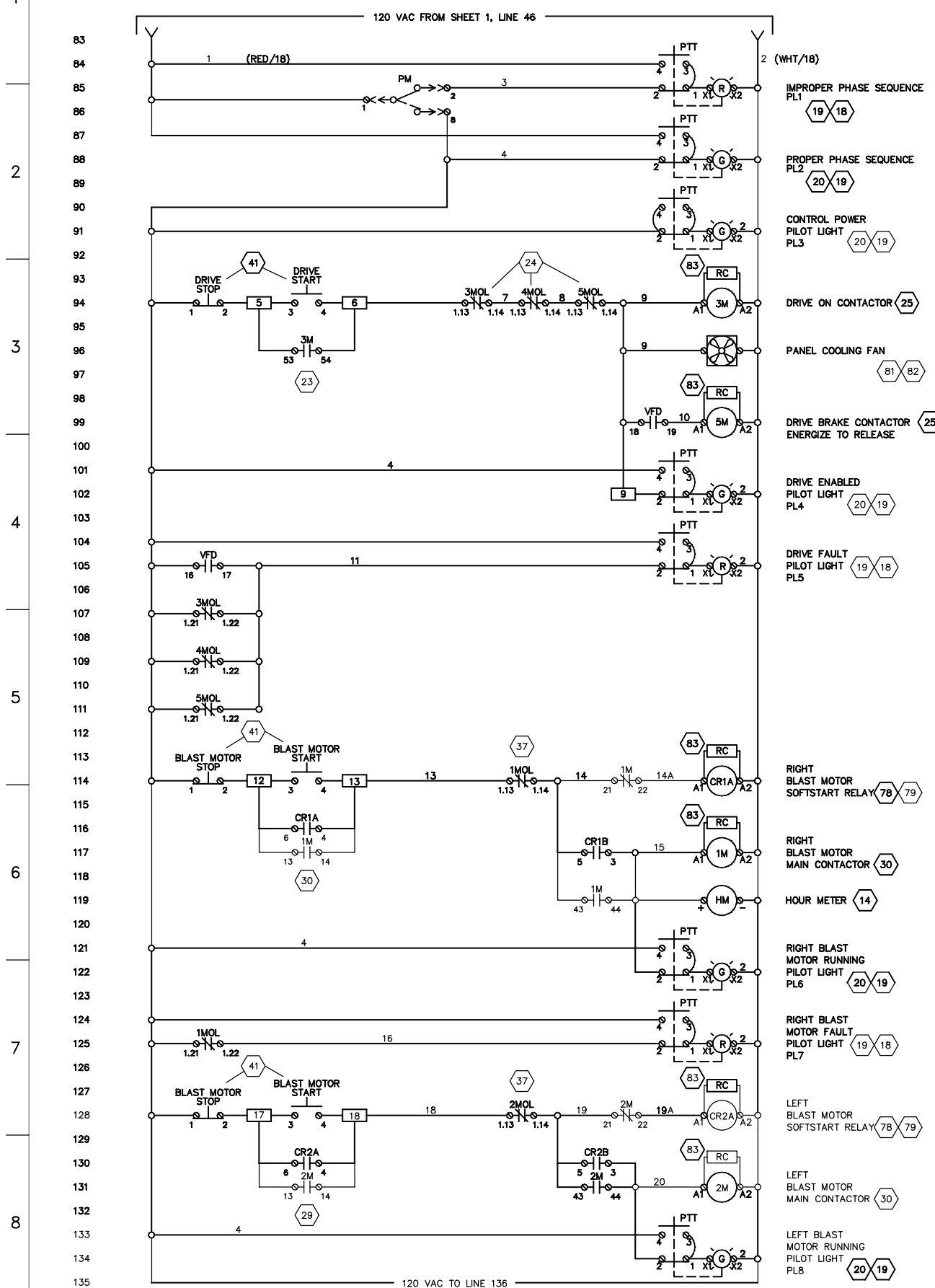
- GENERAL NOTES:**
- A. MAIN DISCONNECT AND BRANCH CIRCUIT PROTECTION MUST BE PROVIDED BY INSTALLER PER NEC 430-53(c)
  - B. INSTALL ONLY COPPER FIELD CONDUCTORS RATED AT 75°C.
  - C. THIS MACHINE MUST BE EFFECTIVELY GROUNDING FOR OPERATOR SAFETY. SEE NATIONAL ELECTRIC CODE ARTICLE 250.

- NOTES:**
- \*1. ASSURE POWER CABLE IS SECURED TO CLEVIS ON DUST COLLECTOR LIFTING EYE W/HARDWARE PROVIDED.
  - \*2. DO NOT CONNECT/DISCONNECT POWER CABLE WHEN POWER IS ON. DISCONNECT ALL POWER BEFORE CONNECTING/DISCONNECTING CABLE WIRING DEVICES.

REV	ZONE	DESCRIPTION	DATE	BY
<b>REVISION</b>				
<small>THIS DRAWING AND THE DESIGN SHOWN THEREIN IS THE PROPERTY OF U.S. FILTER WHEELABRATOR AND USE OR COPIES THEREOF CANNOT BE MADE WITHOUT WRITTEN CONSENT.</small>				
FIRST USED	5-1-00	REF DWG	415-0005	PART NO. P001178
<b>TOLERANCE UNLESS SPECIFIED</b>		<b>U.S. FILTER</b>		
ANGLES ± 1°		<b>BLASTRAC</b>		
FRACTIONS ± 1/16		<b>2-30DS99 460/480V 60Hz BLAST UNIT</b>		
2 PL DEC ± .06		<b>SCHEMATIC (page 1 of 2)</b>		
3 PL DEC ± .005		SCALE	NTS	DRWN
		DATE	1/14/00	SHT 1 OF 5
		<b>415-0005</b>		

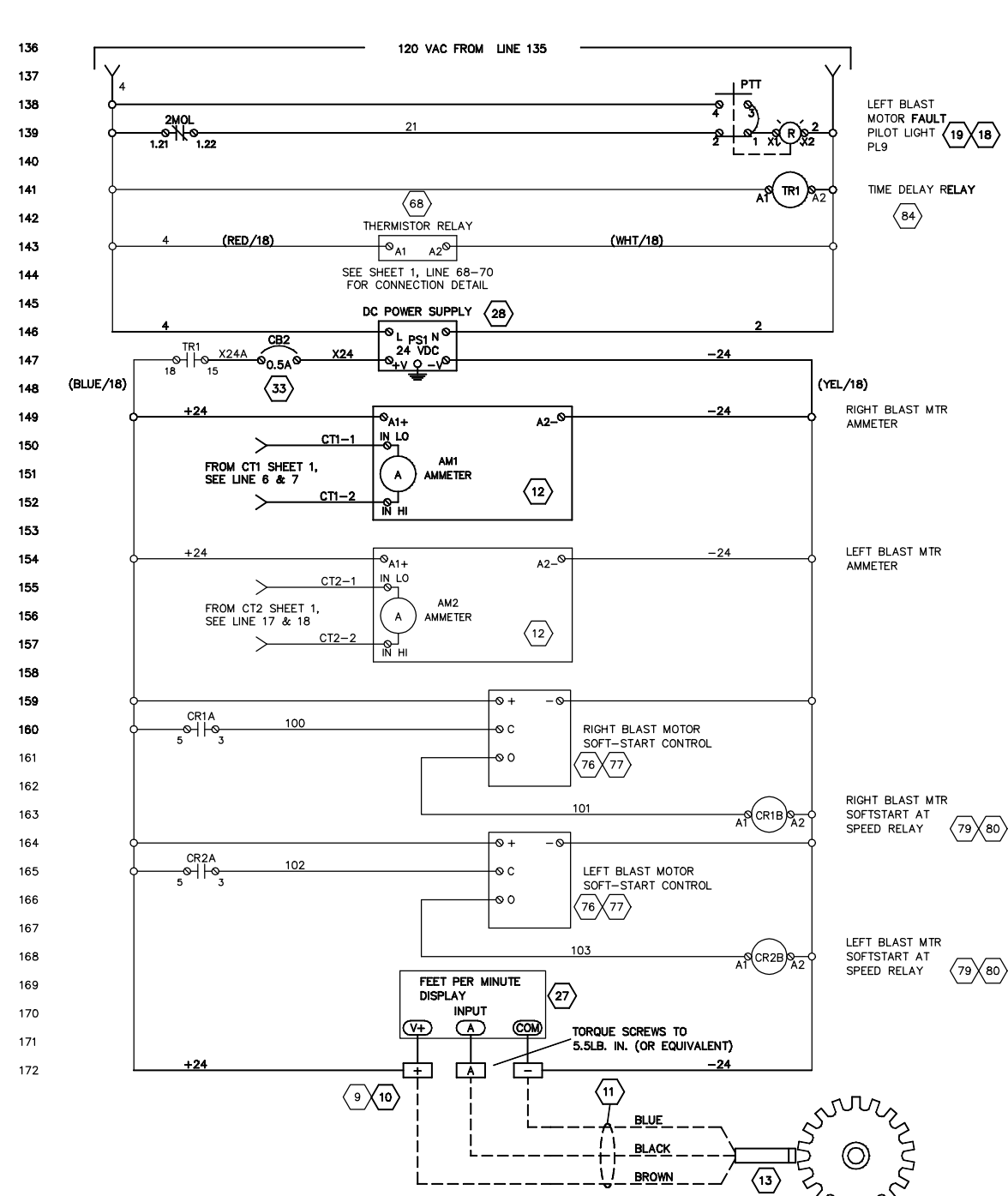
# BLASTRAC 2-30DS99 BLAST UNIT CONTROL PANEL FOR 460/480V - 60 HZ WITH VOLTAGE/PHASE ROTATION VERIFICATION

TOTAL FLA	LARGEST MOTOR FLA @ SUPPLY VOLTAGE
50.2 AMPS	23.0 AMPS 460 V
PHASE - 3	ENCLOSURE - TYPE 1
HERTZ - 60	MODEL - 2-30DS99



**SCHEMATIC SYMBOLS**

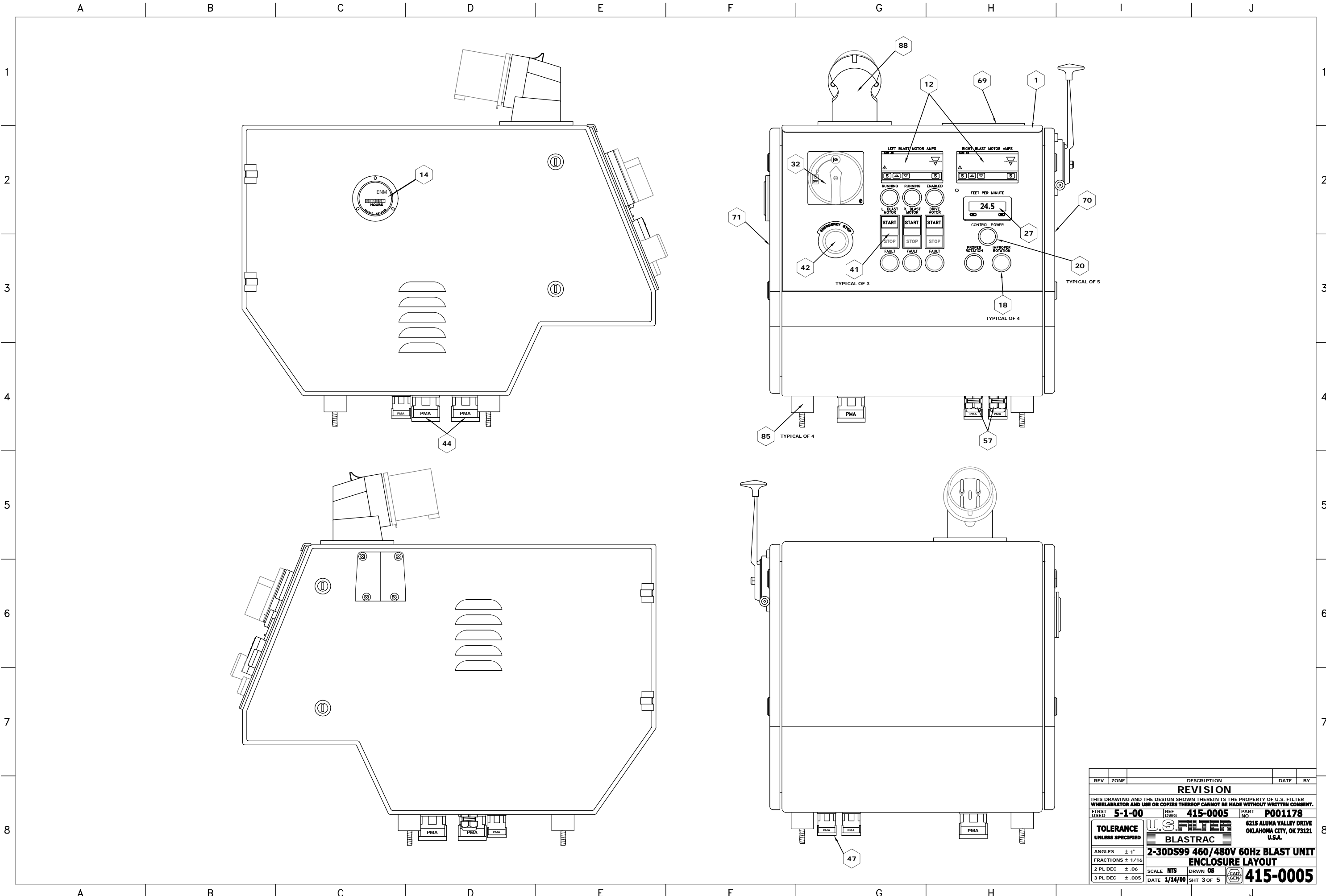
- XX = TERMINAL BLOCK
- ⊗ = VOLTAGE SELECTOR SWITCH TERMINAL
- = ELECTRICAL JUNCTION
- ⊙XX = COMPONENT TERMINAL AND NUMBER
- XX = WIRE NUMBER
- (X/X) = WIRE COLOR AND AWG
- <<(XX) = PLUG/RECP TERMINAL NUMBER
- PTT = PUSH TO TEST PILOT LIGHT
- = WIRE EXTERNAL TO ENCLOSURE



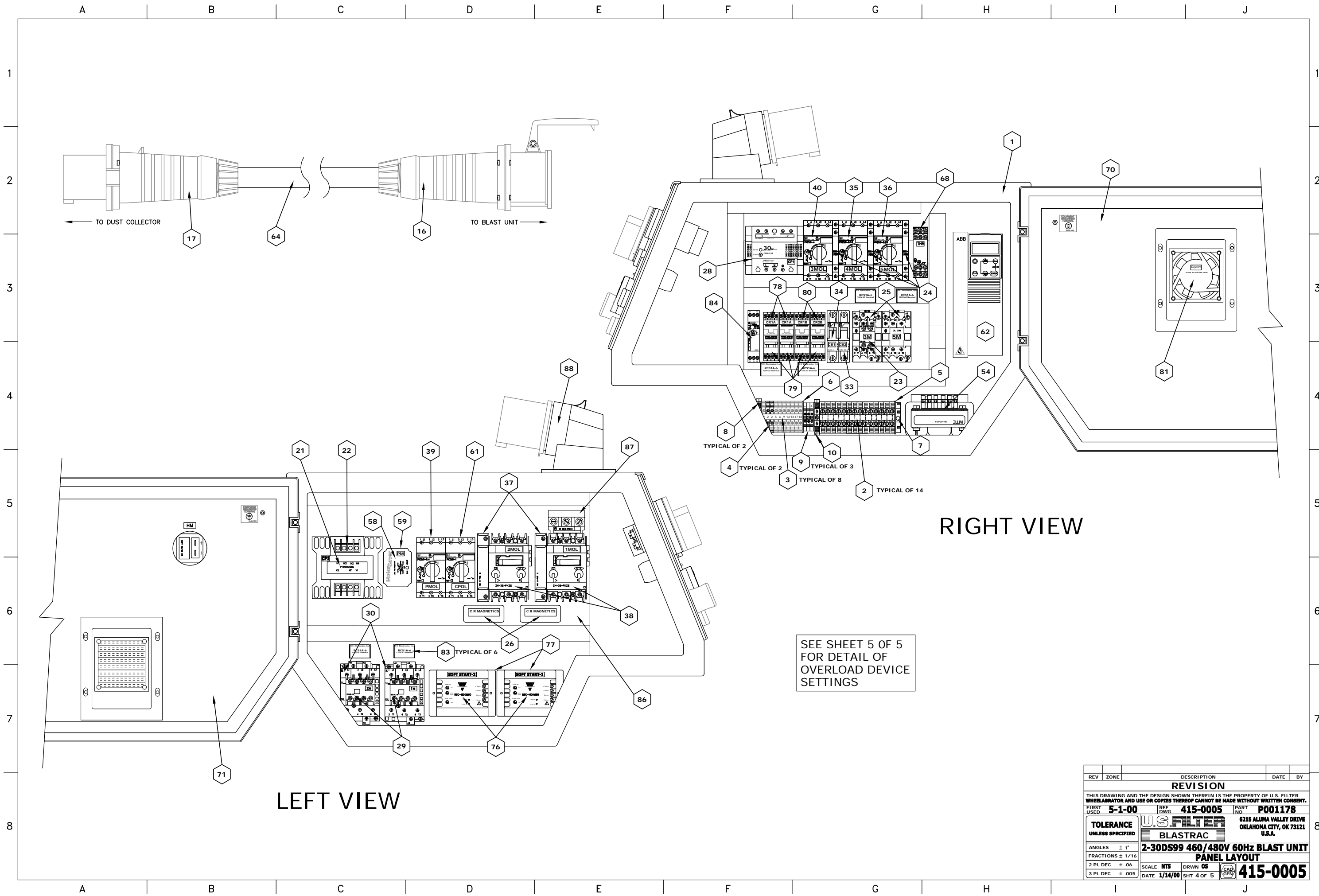
- GENERAL NOTES:**
- MAIN DISCONNECT AND BRANCH CIRCUIT PROTECTION MUST BE PROVIDED BY INSTALLER PER NEC 430-53(c)
  - INSTALL ONLY COPPER FIELD CONDUCTORS RATED AT 75°C.
  - THIS MACHINE MUST BE EFFECTIVELY GROUNDED FOR OPERATOR SAFETY. SEE NATIONAL ELECTRIC CODE ARTICLE 250.

- NOTES:**
- ASSURE POWER CABLE IS SECURED TO CLEVIS ON DUST COLLECTOR LIFTING EYE W/HARDWARE PROVIDED.
  - DO NOT CONNECT/DISCONNECT POWER CABLE WHEN POWER IS ON. DISCONNECT ALL POWER BEFORE CONNECTING/DISCONNECTING CABLE WIRING DEVICES.

REV	ZONE	DESCRIPTION	DATE	BY
<b>REVISION</b>				
<small>THIS DRAWING AND THE DESIGN SHOWN THEREIN IS THE PROPERTY OF U.S. FILTER WHEELABRATOR AND USE OR COPIES THEREOF CANNOT BE MADE WITHOUT WRITTEN CONSENT.</small>				
FIRST USED	5-1-00	REF. DWG.	415-0005	PART NO.
				P001178
<b>TOLERANCE</b>		 6215 ALUMA VALLEY DRIVE OKLAHOMA CITY, OK 73121 U.S.A.		
UNLESS SPECIFIED				
ANGLES ± 1° FRACTIONS ± 1/16 2 PL DEC ± .06 3 PL DEC ± .005				
SCALE NTS DATE 1/14/00				
DRWN OS SHT 2 OF 5		<b>2-30DS99 460/480V 60Hz BLAST UNIT</b> <b>SCHEMATIC (page 2 of 2)</b> <b>415-0005</b>		



REV	ZONE	DESCRIPTION	DATE	BY
<b>REVISION</b>				
THIS DRAWING AND THE DESIGN SHOWN THEREIN IS THE PROPERTY OF U.S. FILTER WHEELABRATOR AND USE OR COPIES THEREOF CANNOT BE MADE WITHOUT WRITTEN CONSENT.				
FIRST USED	5-1-00	REF DWG	415-0005	PART NO. P001178
<b>TOLERANCE</b>		<b>U.S. FILTER</b>		
UNLESS SPECIFIED		6215 ALUMA VALLEY DRIVE OKLAHOMA CITY, OK 73121 U.S.A.		
ANGLES ± 1°		<b>BLASTRAC</b>		
FRACTIONS ± 1/16		<b>2-30DS99 460/480V 60Hz BLAST UNIT</b>		
2 PL DEC ± .06		<b>ENCLOSURE LAYOUT</b>		
3 PL DEC ± .005		SCALE	NTS	DRWN
		DATE	1/14/00	SHT 3 OF 5
		<b>415-0005</b>		

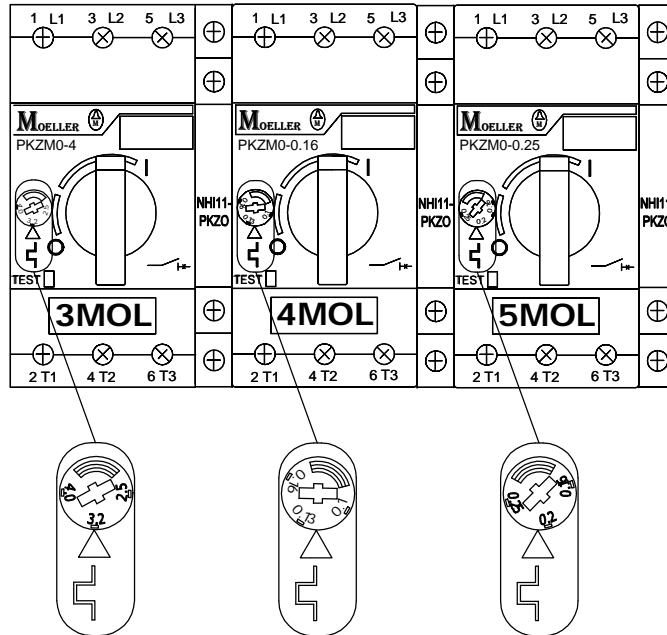
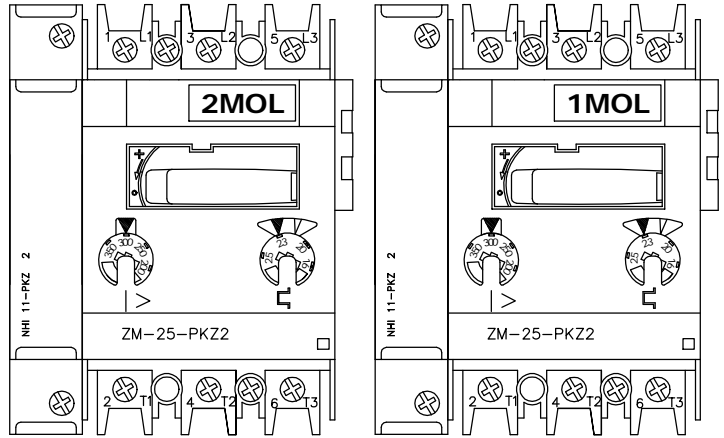
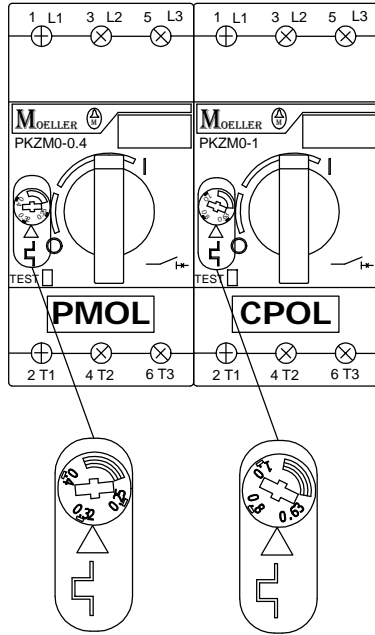
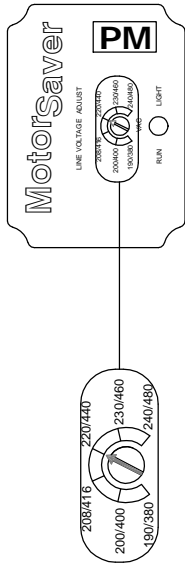


RIGHT VIEW

LEFT VIEW

SEE SHEET 5 OF 5  
FOR DETAIL OF  
OVERLOAD DEVICE  
SETTINGS

REV	ZONE	DESCRIPTION	DATE	BY	
<b>REVISION</b>					
THIS DRAWING AND THE DESIGN SHOWN THEREIN IS THE PROPERTY OF U.S. FILTER WHEELABRATOR AND USE OR COPIES THEREOF CANNOT BE MADE WITHOUT WRITTEN CONSENT.					
FIRST USED	5-1-00	REF DWG	415-0005	PART NO. P001178	
<b>TOLERANCE</b> UNLESS SPECIFIED		  6215 ALUMA VALLEY DRIVE OKLAHOMA CITY, OK 73121 U.S.A.			
ANGLES ± 1°		<b>2-30DS99 460/480V 60Hz BLAST UNIT</b> <b>PANEL LAYOUT</b>			
FRACTIONS ± 1/16					
2 PL DEC ± .06					
3 PL DEC ± .005		SCALE	NTS	DRWN	OS
		DATE	1/14/00	SHT	4 OF 5
				<b>415-0005</b>	



THIS DRAWING AND THE DESIGN SHOWN THEREIN IS THE PROPERTY OF U.S. FILTER WHEELABRATOR AND USE OR COPIES THEREOF CANNOT BE MADE WITHOUT WRITTEN CONSENT.

U.S. FILTER  
BLASTRAC

OKLAHOMA CITY,  
OK 73121  
U.S.A.

DATE 1/14/00 DWG. 415-0005 NO. P001178  
2-30DS99 460V 60Hz BLAST UNIT  
DEVICE SETTINGS

SCALE NTS  
SHEET 5  
OF 5



DRWN OS  
415-0005