

## 415-0015 2-30DMKIII BLAST UNIT

ITEM NO.	PN.	QTY	DESCRIPTION
1	P001058	1	ENCLOSURE/CUSTOM FOR 2-30D/2-20D
2	717053	14	TERMINAL BLOCK, BLACK
3	717051	8	TERMINAL BLOCK, RED
4	717052	2	TERMINAL BLOCK, WHITE
5	717048	1	TERMINAL BLOCK, END BARRIER, KBL6-10 TERMINAL BLOCK
6	717049	1	TERMINAL BLOCK, ISOLATION PARTITION
7	717045	1	TERMINAL BLOCK, END ANCHOR, TERMINAL BLOCK, 35 MM
8	717050	2	TERMINAL BLOCK/GROUND SL4/35
9	P002537	3	TERMINAL/RK35/TERMINAL BLOCK, NEUTRAL (INCOMING POWER)
10	P002538	1	TERMINAL/ END BARRIER, FOR RK35 TERMINAL BLOCK
11			NOT USED
12			NOT USED
13			NOT USED
14	P000144	1	HOUR METER/ 120V, 50/60 HZ ( HM ) W/ GASKET
15			NOT USED
16	P002532	2	AMMETER, AC, 2.5", 30 AMP, CT RATED, 30:5
17	716843	1	PLUG, CABLE END, 4 WIRE, 3 POLE, 600V, 60 AMP
18	P002219	4	PILOT LIGHT, RED LENS RED LED, 120VAC, 02
19			NOT USED
20	P002217	2	PILOT LIGHT, GREEN LENS GREEN LED, 120VAC, 02
21	P000407	1	TRANSFORMER, 200VA, 230/480X120 ( CP1 )
22	P000147	2	TRANSFORMER, TERMINAL COVER
23	P000198	1	CONTACT AUX, 2NO, TOP MOUNTED (3M) OBSOLETE
23A			NOT REQUIRED WITH 23A SEE REV. C
24	716826	3	CONTACT AUX, (1 NO/1 NC) FOR EACH MCP (FOR 3MOL 4MOL 5MOL)
25	P000198	2	CONTACTOR (DRIVE FAN/BRAKE) 120 VOLT, 50/60 HZ ( 3M, 5M ) OBSOLETE
25A	P003817	2	CONTACTOR (DRIVE FAN/BRAKE) 120 VOLT, 50/60 HZ ( 3M, 5M ) SEE REV. C
26	P002534	2	CURRENT TRANSFORMER, AC, 80:5 RATIO W 24" LEADS ( CT1, CT2 )
27			NOT USED
28	P000342	1	POWER SUPPLY, 24 VDC, 30 W ( PS1 )
29	P000215	2	AUX CONTACTS FOR BLAST CONTACTOR (2NO/2NC) (1M,2M) OBSOLETE
29A	P004222	2	AUX CONTACTS FOR INTC, TOP MOUNTED, NEW SERIES FOR USE WITH CONTACTOR P003819 (1M,2M) SEE REV. C
30	P000948	2	CONTACTOR (BLAST) (1M, 2M) OBSOLETE
30A	P003819	2	CONTACTOR, 39 AMP, 120 VOLT, 50/60 HZ, W/ 1NC AUX CONTACT, NEW SERIES REPLACES P000948. NOTE: REPLACEMENTS REQUIRE AUX CONTACT P004222 (BLAST) (1M, 2M) SEE REV. C
31	P000168	1	LIMIT SWITCH ( LS1 )
32	P000220	1	SWITCH/ MAIN DISCONNECT W/ HANDLE, 100 AMP (MAIN)
33	P000202	1	CIRCUIT BREAKER/ POWER SUPPLY SECONDARY, 0.5 AMP ( CB2 )
34	P000416	1	CIRCUIT BREAKER (XFMR SEC.) ( CB1 )
35	P000949	1	MCP FOR DRIVE MOTOR FAN, 0.1-0.16 AMP ( 4MOL )
36	P000950	1	MCP FOR DRIVE MOTOR BRAKE, 0.16-0.25 AMP ( 5MOL )
37	P000171	2	CONTACT AUX, (1 NO/1 NC) FOR BLAST OL (1MOL,2MOL)
38	P000343	2	MCP/ CIRCUIT PROTECTOR, 16-27 AMP
39	P000207	1	MCP/ CIRCUIT PROTECTOR, 0.25 - 0.4 AMP, HIGH INRUSH (PMOL)
40	716824	1	VFD PRIMARY PROTECTION, 2.5-4 AMP ( 3MOL )
41	P002211	3	SWITCH, DOUBLE PB OPERATOR W/ 1NO & 1 NC CONTACT, 02
42	P002223	1	SWITCH, ESTOP, LATCHING, PULL TO RELEASE, 1 NC 02
43	P001042	12	FLEXIBLE CONDUIT FOR PG29 & 1" NPT
44	P001048	2	FITTING-STRAIGHT, 1" NPT (PANEL FOR BLAST MOTORS)
45	P001049	2	FITTING-ELBOW, 1" NPT (BLAST MOTORS) 2-20D/2-30D ONLY
45	P001053	2	FITTING-ELBOW, PG29 (BLAST MOTORS) 2-30DS ONLY
46			NOT USED
47	P001054	2	FITTING-STRAIGHT, 1/2" (PANEL FOR DRIVE MOTOR & FAN)
48	P003771	2	FITTING-ELBOW, M20 (DRIVE MOTOR / BRAKE & COOLING FAN)
49	P003772	1	M20 TO M16 THREAD REDUCER (DRIVE MOTOR COOLING FAN)
50	P003773	1	M20 TO M25 THREAD ENLARGER (DRIVE MOTOR / BRAKE)
51	P001040	8	FLEXIBLE CONDUIT FOR PG13.5/ PG16
52	P000330		WIRE, 600V, 14 AWG
53	P000158	1	CORD GRIP, 0.88"-1.28", 1/2" NPT, (INPUT POWER)
54	P000362	1	REACTOR/ 460V, 2 HP, 5% ( INPUT REACTOR )
55	P000368	1	POTENTIOMETER, 2 W, 10K
56	P000181	1	CORD GRIP, 0.20"-0.35", 13.5PG, ( LS-1)
57	P003096	1	CORD GRIP, 0.24"-0.47", 1/2" NPT
58	P002246	1	RELAY, PHASE MONITOR, 208-480 VOLT, AUTORANGING
59			NOT USED
60	P000392	1	POTENTIOMETER KNOB, SCALED 1-10
61	P002021	1	MCP/ CIRCUIT PROTECTOR, .63 - 1 AMP, HIGH INRUSH (CPOL)
62	P004288	1	VFD, 2 HP, 460 V, 4.1 AMP OUTPUT
63	P000328		WIRE, #10 AWG, THIN, STRANDED (BLAST MTR/PANEL) 7'
64	P000333	75	WIRE, CABLE, 4 AWG, 4 CONDUCTOR, TYPE W
65	891949	2	STRAIN RELIEF, DOUBLE EYELET, 1-1.25" (ONE END EACH POWER CORD)
66	P000336	2	SWITCH, PUSH BUTTON (REVERSE & OVERDRIVE)
67	P000329	2	LINK, QUICK, 5/16, SPRING CLIP
68	P000951	1	THERMISTOR INTERFACE RELAY ( THR )
69	P001065	1	LEGEND PLATE, BLAST CURRENT
70	P001060	1	DOOR/ENCLOSURE R.H. SIDE
71	P001059	1	DOOR/ENCLOSURE L.H. SIDE
72			NOT USED
73	P000349	2	CONNECTOR/MALE, 4 POLE, 300V
74	P000350	2	CONNECTOR/FEMALE, 4 POLE, 300V, W/STRAIN RELIEF
75	P000430	8	WIRE, 18/4, 300V, SHIELDED (2-8" TO HANDLE)
76	P000954	2	SOFT-START CONTROL MODULE
77	P000952	2	SOFT-START OUTPUT MODULE, 480 VOLT / 90 AMP
78	P000958	2	RELAY, DPDT, 120 VAC COIL ( CR1A,CR2A )
79	P000959	4	RELAY SOCKET
80	P001035	2	RELAY, SPDT, 24 VDC COIL ( CR1B,CR2B )
81	P001068	1	FAN, AXIAL, 120 VAC, 3 1/8"

415-0015 2-30DMKIII BLAST UNIT

82			NOT USED
83	P000956	6	RC NETWORK
84	P000957		NOT USED
85	P001036	4	VIBRATION MOUNT, 1" HIGH X 1.375 DIA., 5/16 - 18 STUDS
86	P001037	1	BACKPANEL
87	P001039	1	TERMINAL BUS CONNECT
88			NOT USED
89	P003015	1	FEEDER BUS FOR FKZ2
90	P003774	2	BUSHING, REDUCING 1 1/4 X 1"
91	P002017	4	ENCLOSURE, LATCH ASSBY C/O CASEMENT FASTENER, PN 3070-7933-19-03, LATCH PN 3070-0303-00-15 AND O-RING SLOTTED BOLT HAWA PN 3070-0385-12-42
92	P002018	4	ENCLOSURE, HINGE KIT
93	P002829	2	FAN BAFFLE
94	P001188	1	POT POD COVER, TOP
95	P001189	1	POT POD COVER, BOTTOM
96	P002925	2	FAN FILTER, 3 1/8"
97	P003091	1	FACEPLATE 220D/230DMKII
98	P004269	1	FUSE BLOCK, 3 POLE FINGER SAFE, FOR CLASS CC FUSES

# BLASTRAC 2-20DMKIII/ 2-30DMKIII/ 2-30DSMKIII BLAST UNIT CONTROL PANEL FOR 460/480V - 60 HZ WITH VOLTAGE/PHASE ROTATION VERIFICATION

**\* TABLE A**

MODEL	H.P.	VOLTAGE / AMP	O/L SETTING
2-20DMKIII	20.11 HP	460V - 17.0 AMP	17 AMP
2-30DMKIII	30.11 HP	460V - 25.0 AMP	25 AMP

**WARRANTY CIRCUIT BREAKER**

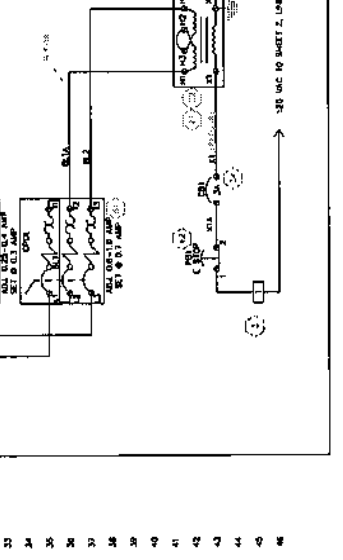
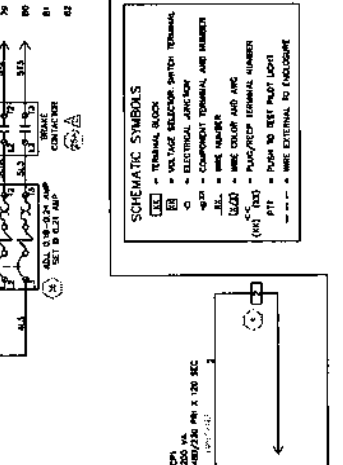
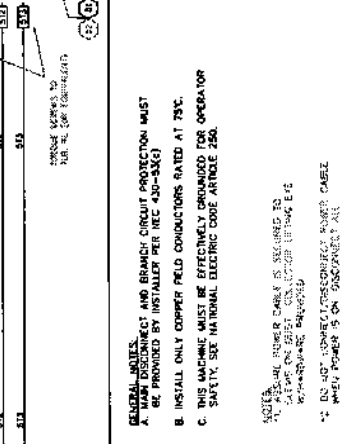
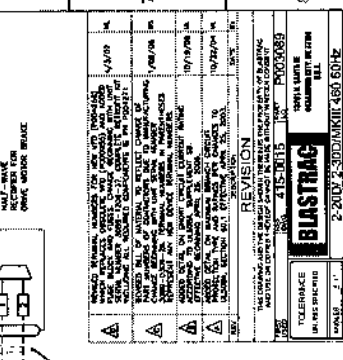
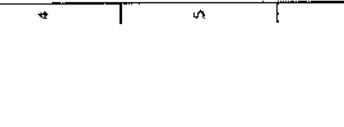
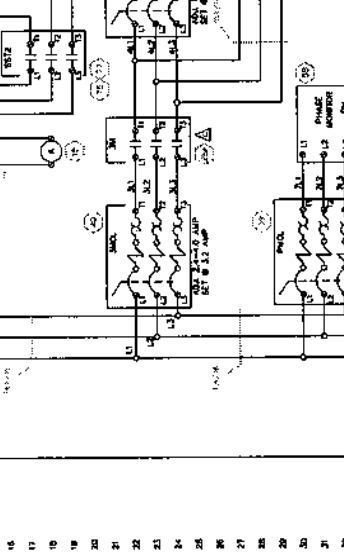
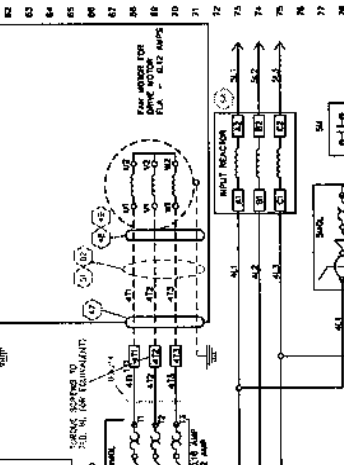
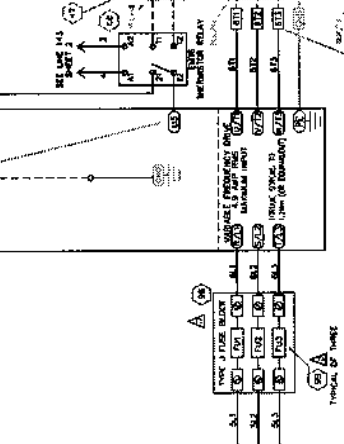
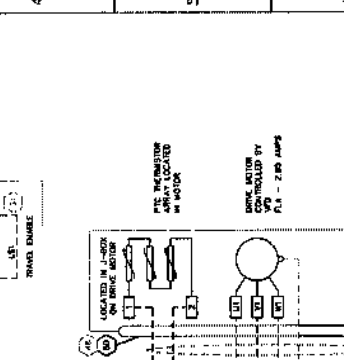
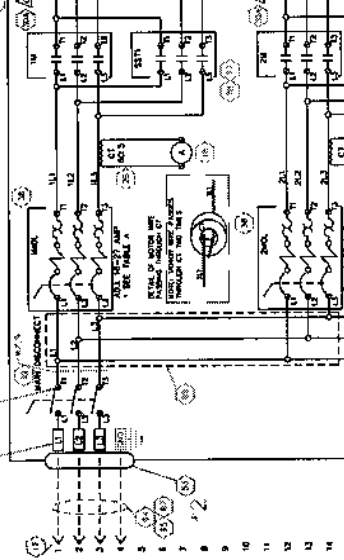
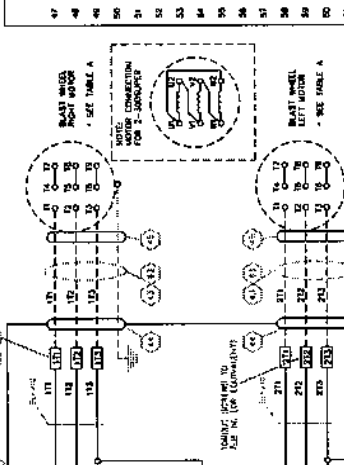
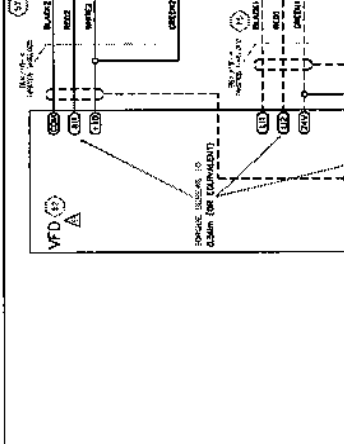
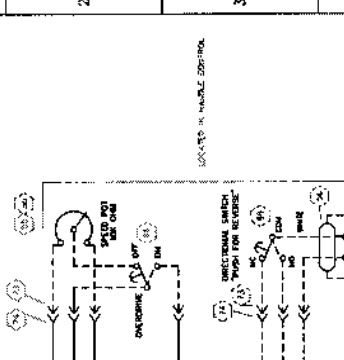
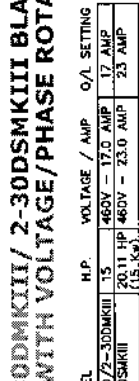
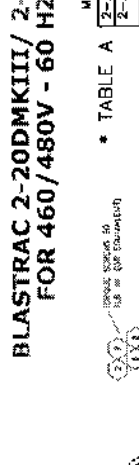
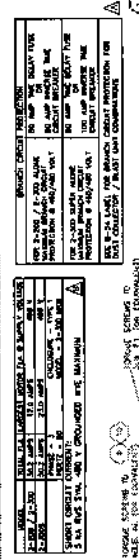
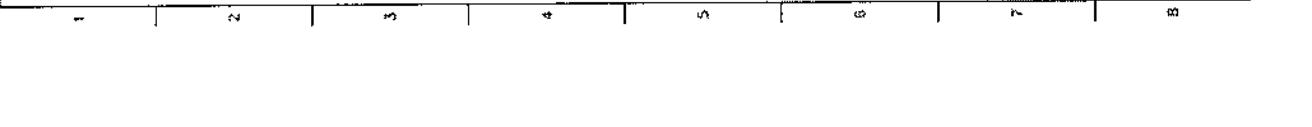
MODEL	H.P.	VOLTAGE / AMP	O/L SETTING
2-20DMKIII	20.11 HP	460V - 17.0 AMP	17 AMP
2-30DMKIII	30.11 HP	460V - 25.0 AMP	25 AMP

**WARRANTY CIRCUIT BREAKER**

MODEL	H.P.	VOLTAGE / AMP	O/L SETTING
2-20DMKIII	20.11 HP	460V - 17.0 AMP	17 AMP
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**WARRANTY CIRCUIT BREAKER**

MODEL	H.P.	VOLTAGE / AMP	O/L SETTING
2-20DMKIII	20.11 HP	460V - 17.0 AMP	17 AMP
2-30DMKIII	30.11 HP	460V - 25.0 AMP	25 AMP



**GENERAL NOTES:**

- BE DISCONNECTED AND BRANCH CIRCUIT PROTECTION MUST BE PROVIDED BY INSTALLER PER NEC (400-540)
- 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:**

- RESERVE POWER CABLE IS REQUIRED TO REMAIN ON UNIT. CONSULT LISTING E-2 FOR REQUIREMENTS.
- DO NOT CONNECT/RECONNECT POWER CABLE WHEN POWER IS ON. DISCONNECT ALL POWER BEFORE WORKING ON ANY ELECTRICAL PARTS.

**SCHEMATIC SYMBOLS**

- - TERMINAL BLOCK
- ⊞ - VOLTAGE SELECTOR SWITCH TERMINAL
- ⊞ - ELECTRICAL JUNCTION
- ⊞ - COMPONENT TERMINAL AND NUMBER
- ⊞ - WIRE NUMBER
- ⊞ - WIRE COLOR AND GAGE
- ⊞ - BUS/PIPER TERMINAL NUMBER (SEE LIST)
- ⊞ - POINT TO BE PULSED LIGHT
- - WIRE EXTERNAL TO ENCLOSURE

**REVISION**

NO.	DATE	DESCRIPTION
1	11/15/85	ISSUE
2	11/15/85	ISSUE

**BLASTRAC**

2-20DMKIII/ 2-30DMKIII/ 2-30DSMKIII

BLAST UNIT SCHEMATIC (T B Z)

415-0015

**BLASTRAC**

2-20DMKIII/ 2-30DMKIII/ 2-30DSMKIII

BLAST UNIT SCHEMATIC (T B Z)

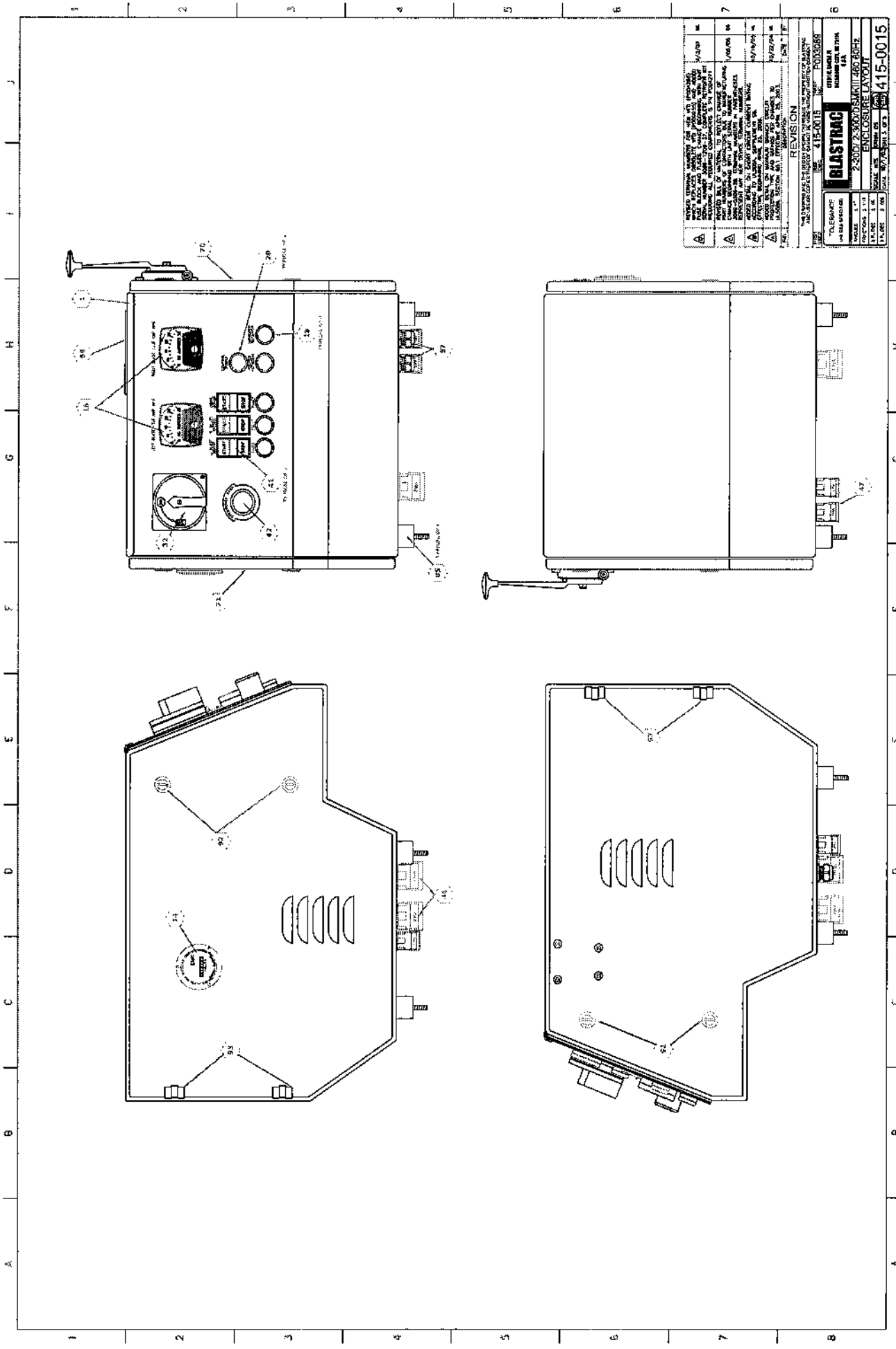
415-0015

**BLASTRAC**

2-20DMKIII/ 2-30DMKIII/ 2-30DSMKIII

BLAST UNIT SCHEMATIC (T B Z)

415-0015



REV	DESCRIPTION	DATE	BY	CHKD
1	INITIAL DESIGN	12/10/00	J. J. J.	J. J. J.
2	REVISED TO ADD...	12/10/00	J. J. J.	J. J. J.
3	REVISED TO ADD...	12/10/00	J. J. J.	J. J. J.
4	REVISED TO ADD...	12/10/00	J. J. J.	J. J. J.
5	REVISED TO ADD...	12/10/00	J. J. J.	J. J. J.
6	REVISED TO ADD...	12/10/00	J. J. J.	J. J. J.
7	REVISED TO ADD...	12/10/00	J. J. J.	J. J. J.
8	REVISED TO ADD...	12/10/00	J. J. J.	J. J. J.

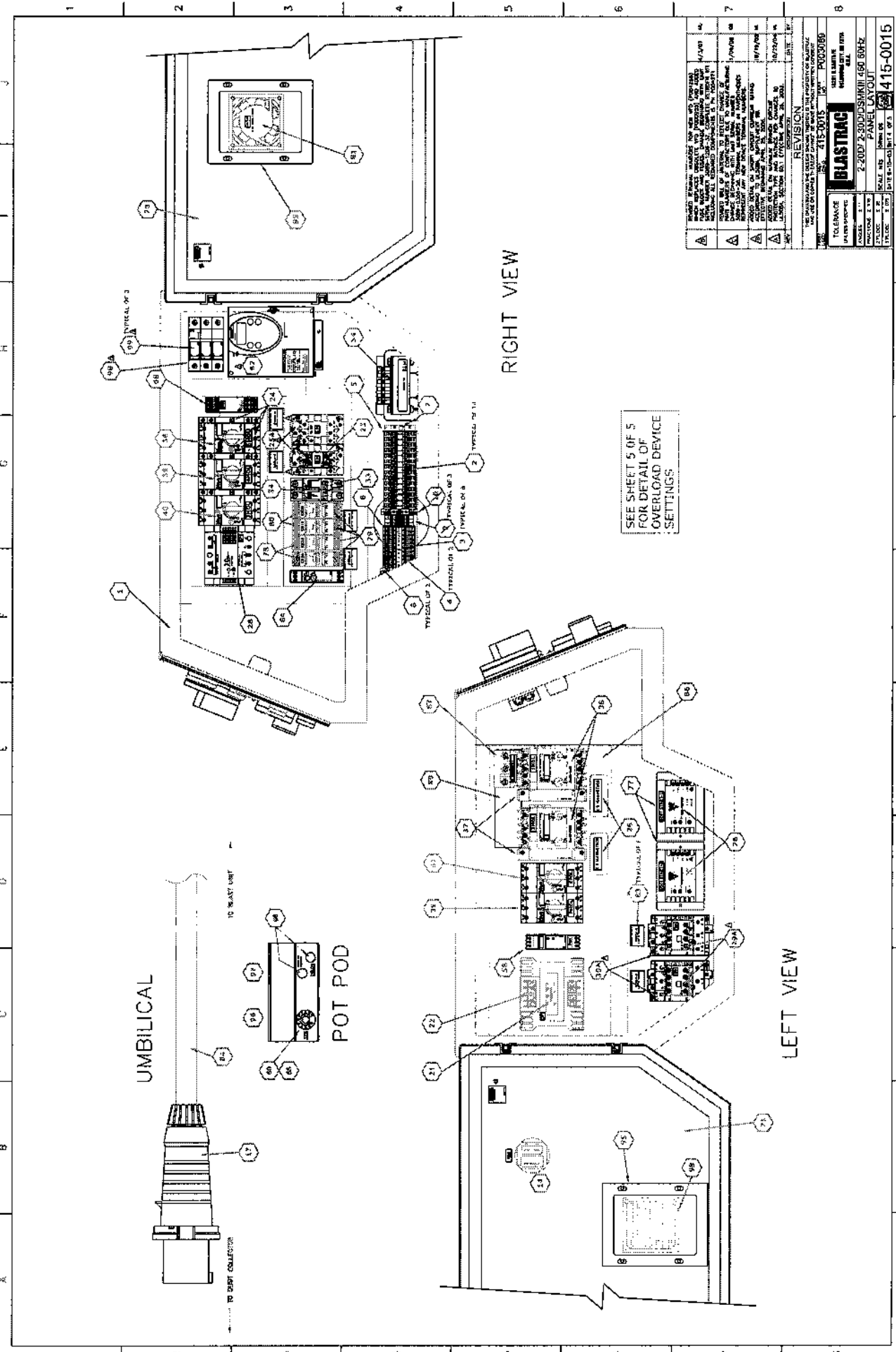
**REVISION**

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**BLASTRAC**  
 230072300705SM11280 80HZ  
 ENCLOSURE LAYOUT

DATE: 12/10/00  
 DRAWN BY: J. J. J.  
 CHECKED BY: J. J. J.  
 SCALE: 1" = 1'-0"

PROJECT: 415-0015

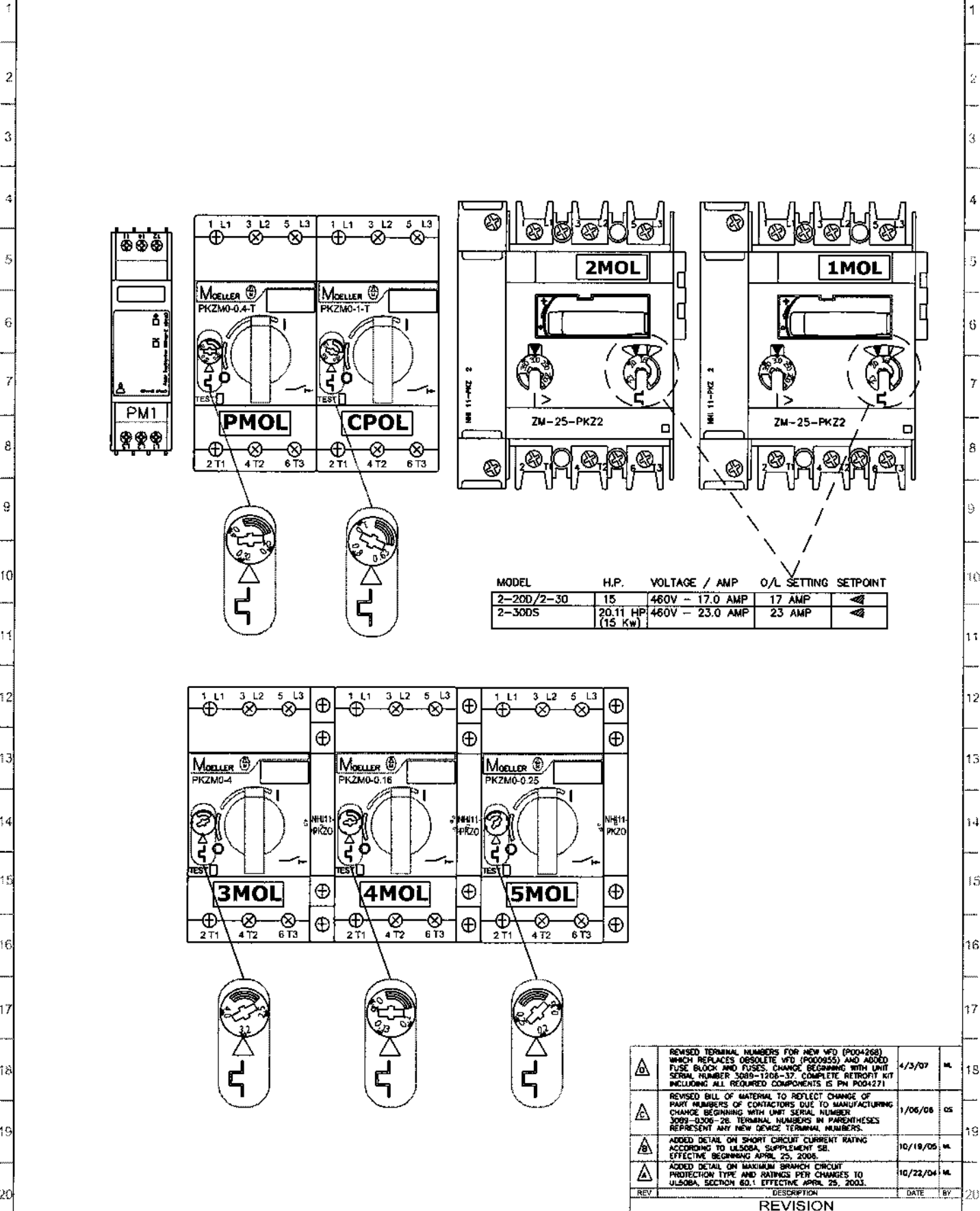


REVISION	DATE	BY	CHKD.
1	11/10/07	WJW	WJW
2	11/10/07	WJW	WJW
3	11/10/07	WJW	WJW
4	11/10/07	WJW	WJW
5	11/10/07	WJW	WJW
6	11/10/07	WJW	WJW
7	11/10/07	WJW	WJW

TOLERANCE	UNLESS SPECIFIED
FRACTIONS	1/16" MINIMUM
DECIMALS	0.005" MINIMUM
ANGLES	1/4° MINIMUM
SCALE	AS SHOWN
DATE	11/10/07
DRAWN BY	WJW
CHECKED BY	WJW
PROJECT NO.	415-0015
SHEET NO.	5 OF 5

**BLASTRAC**  
 2-2007 2-300/DSMIII 460 60HZ  
 PANEL LAYOUT



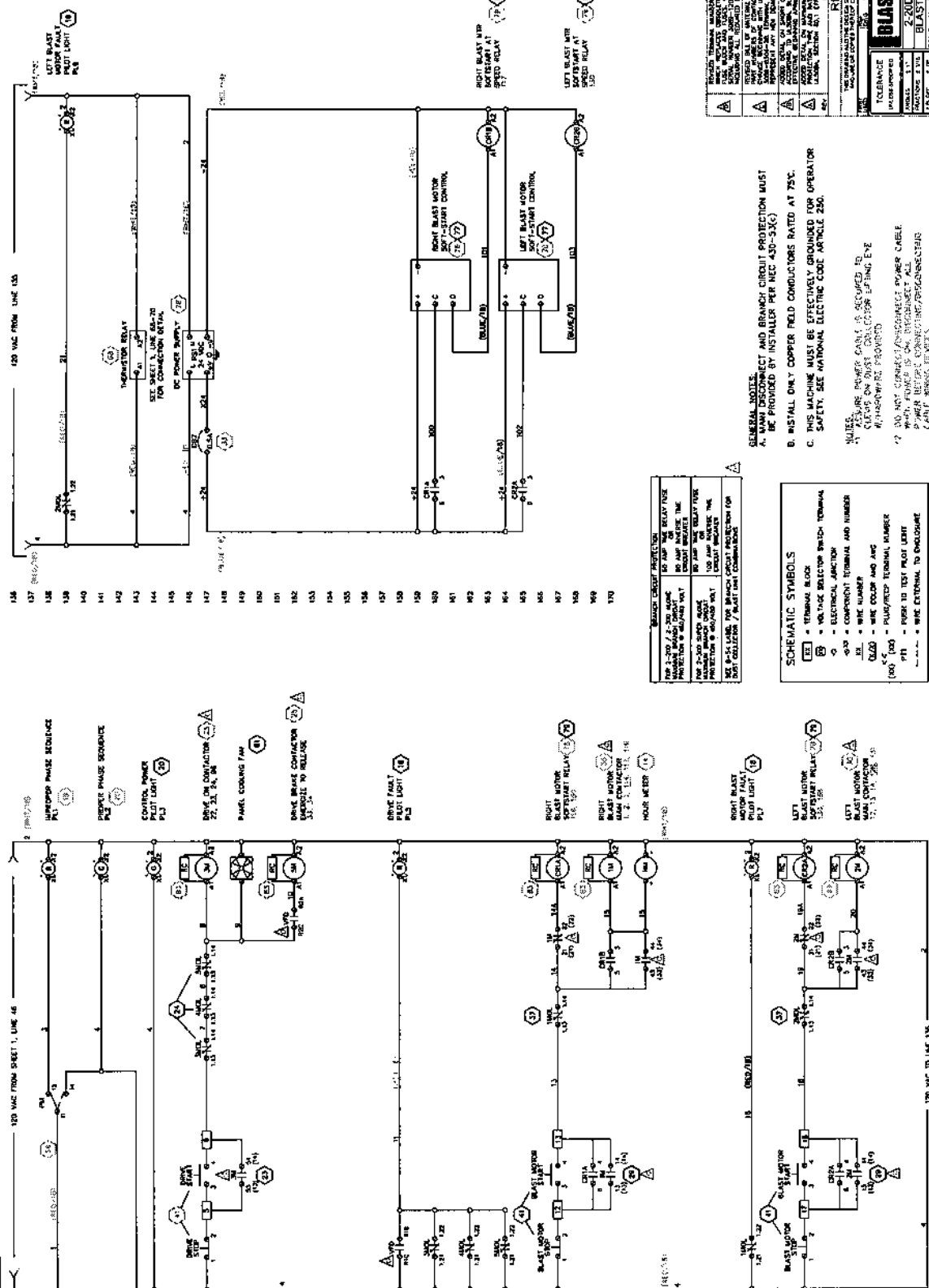
REV	DESCRIPTION	DATE	BY
1	REVISED TERMINAL NUMBERS FOR NEW MFD (P004268) WHICH REPLACES OBSOLETE MFD (P000255) AND ADDED FUSE BLOCK AND FUSES. CHANGE BEGINNING WITH UNIT SERIAL NUMBER 3089-1208-37. COMPLETE RETROFIT KIT INCLUDING ALL REQUIRED COMPONENTS IS PN P004271	4/3/07	ML
2	REVISED BILL OF MATERIAL TO REFLECT CHANGE OF PART NUMBERS OF CONTACTORS DUE TO MANUFACTURING CHANGE BEGINNING WITH UNIT SERIAL NUMBER 3089-0306-26. TERMINAL NUMBERS IN PARENTHESES REPRESENT ANY NEW DEVICE TERMINAL NUMBERS.	1/06/06	OS
3	ADDED DETAIL ON SHORT CIRCUIT CURRENT RATING ACCORDING TO UL508A, SUPPLEMENT 5B, EFFECTIVE BEGINNING APRIL 25, 2005.	10/18/05	ML
4	ADDED DETAIL ON MAXIMUM SHORT CIRCUIT PROTECTION TYPE AND RATINGS PER CHANGES TO UL508A, SECTION 60.1 EFFECTIVE APRIL 25, 2003.	10/22/04	ML

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

	13201 N. SANTA FE OKLAHOMA CITY, OK 73114 U.S.A.	DATE 9-10-03	DWG. 415-0015	NO. P003089	SCALE NTS	DRWN OS
		2-20DMKIII/ 2-30DMKIII/2-30DSMKIII 460V 60Hz			SHEET 5	OF 5

# BLASTRAC 2-20DMKIII / 2-30DMSMKIII BLAST UNIT CONTROL PANEL FOR 460/480V - 60 HZ WITH VOLTAGE/PHASE ROTATION VERIFICATION

REV.	DATE	BY	DESCRIPTION
1	12-28-77	...	...
2	...	...	...
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- 157 150V AC FROM LINE 150
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**GENERAL NOTES:**  
 A. MAIN DISCONNECT AND BRANCH CIRCUIT PROTECTION MUST BE PROVIDED BY INSTALLER PER NEC 430-31(C).  
 B. INSTALL ONLY COPPER FIELD CONDUCTORS RATED AT 75C.  
 C. SAFETY: SEE NATIONAL ELECTRIC CODE ARTICLE 250.  
 NOTES:  
 1. INSURE POWER CABLE IS SECURED TO CLEAR ON BUS CONTACTOR LIFTING EYE. #14-16 AWG COPPER WIRE REQUIRED.  
 2. DO NOT CONNECT/RECONNECT POWER CABLE WHEN POWER IS ON. RECONNECT ALL POWER BEFORE CONNECTING/RECONNECTING CABLE. VERIFY ALL CONNECTIONS.

**SCHEMATIC SYMBOLS**

□	TERMINAL BLOCK
○	VOLAGE SELECTOR SWITCH TERMINAL
○	ELECTRICAL JUNCTION
○	COMPONENT TERMINAL AND NUMBER
○	WIRE NUMBER
○	WIRE COLOR AND GAGE
○	PLUG/RECP TERMINAL NUMBER
○	PILOT LIGHT
○	WIRE TERMINAL TO ENCLOSURE

**REVISION**

NO.	DESCRIPTION	DATE
1	...	...
2	...	...
3	...	...
4	...	...
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**BLASTRAC**  
 2-20DMKIII / 2-30DMSMKIII 480V 60HZ  
 SCALE: 1/8" = 1'-0"  
 DATE: 12-28-77  
 DRAWING NO.: 415-00-15