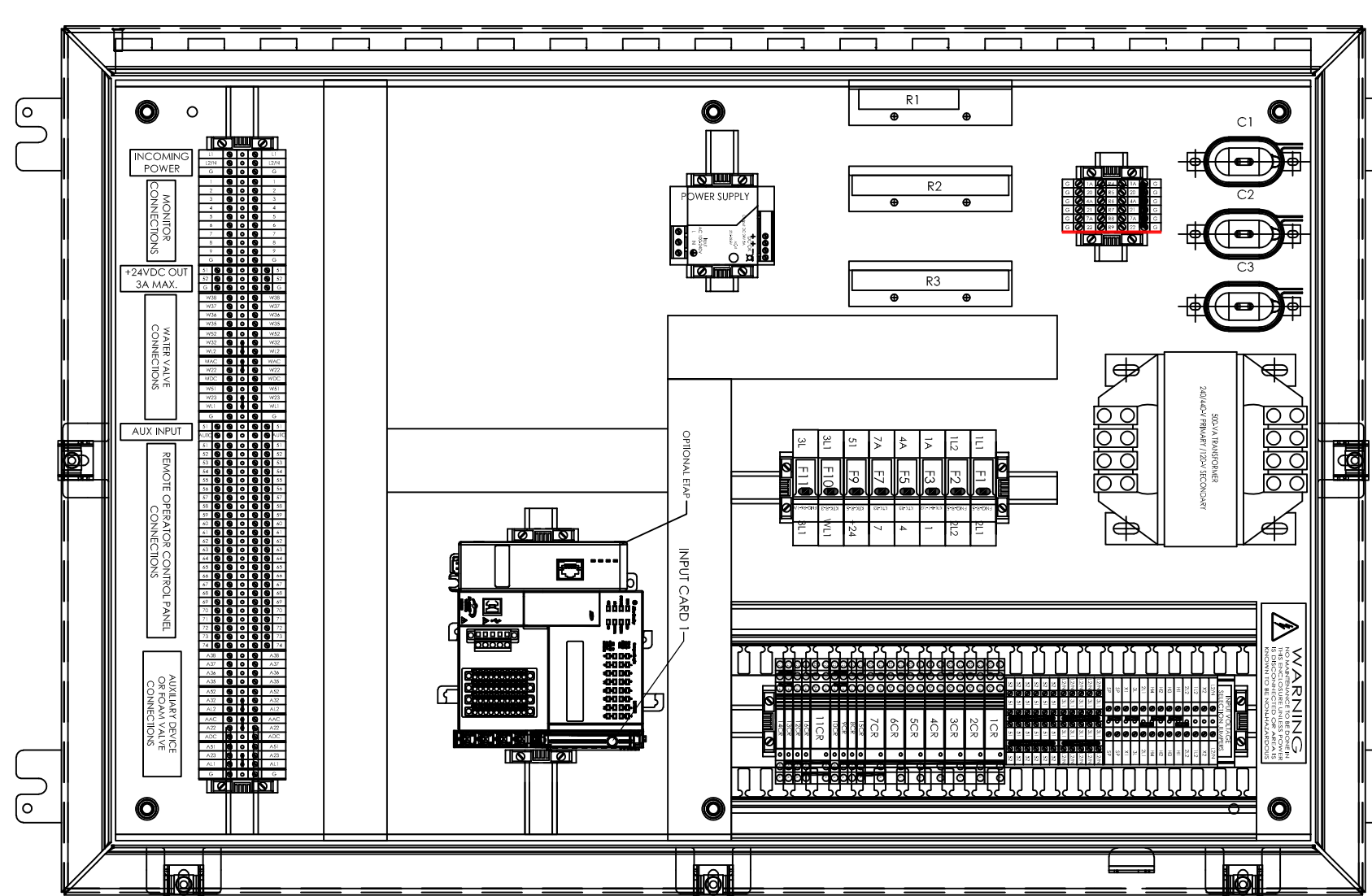
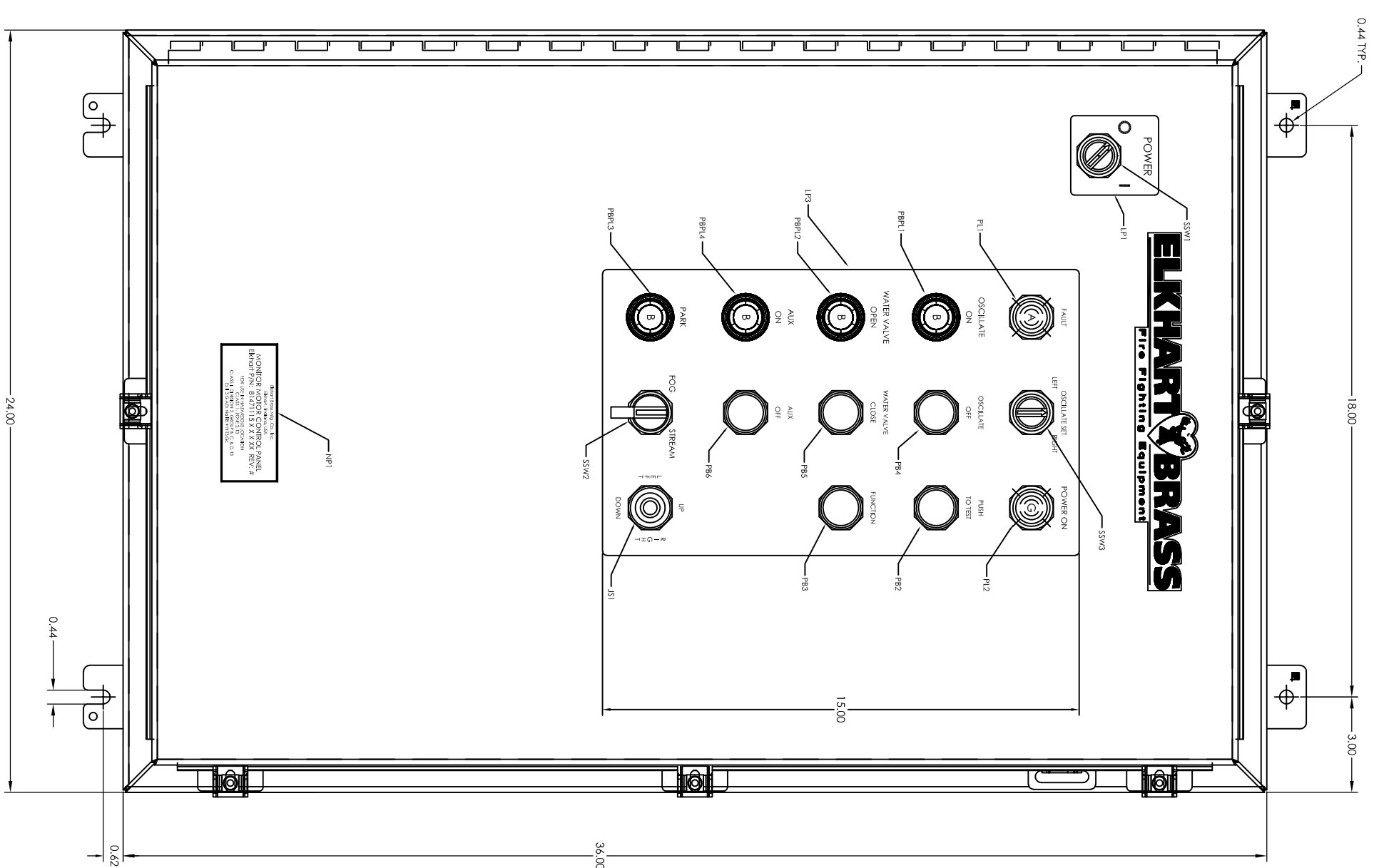
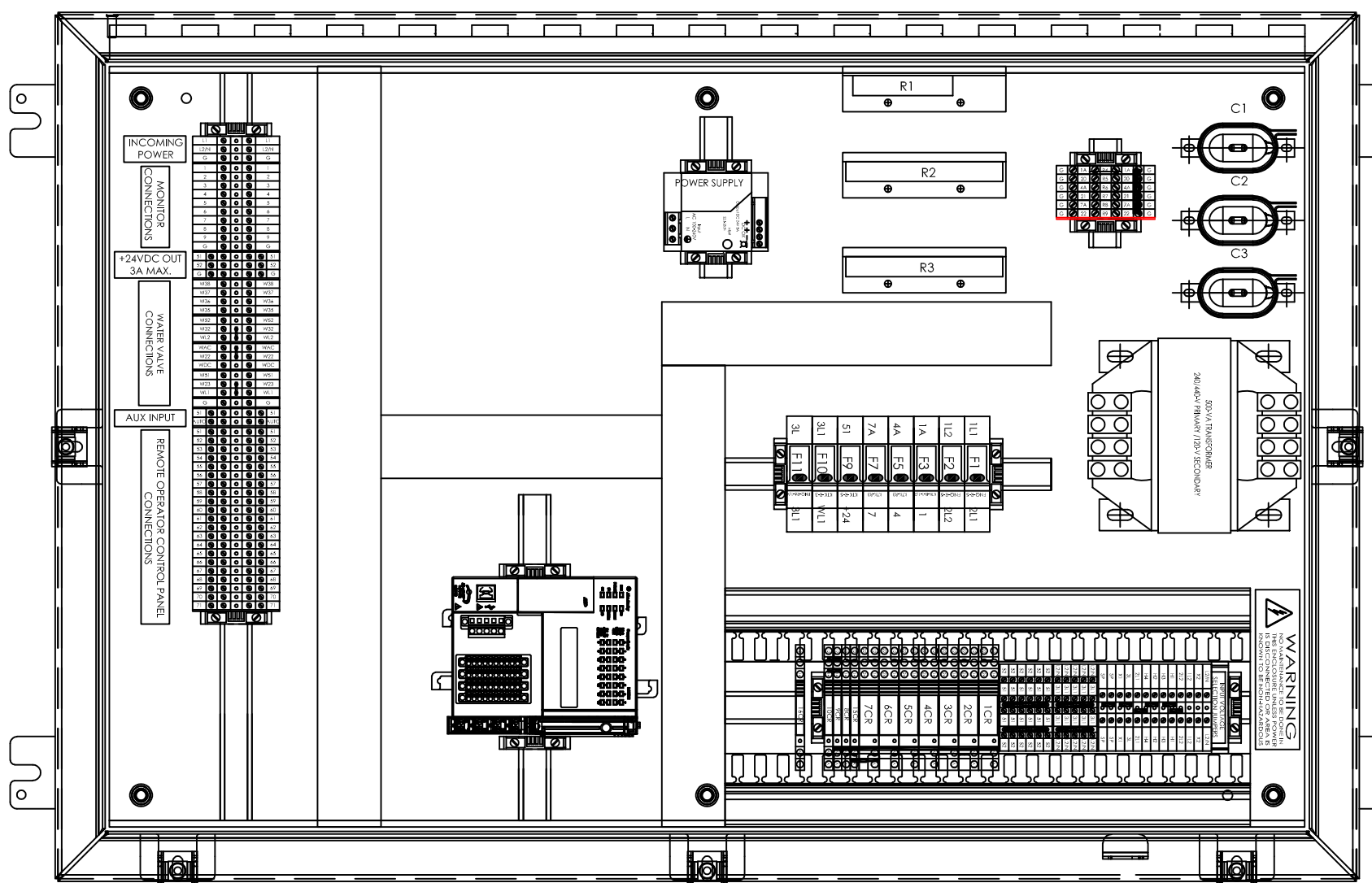
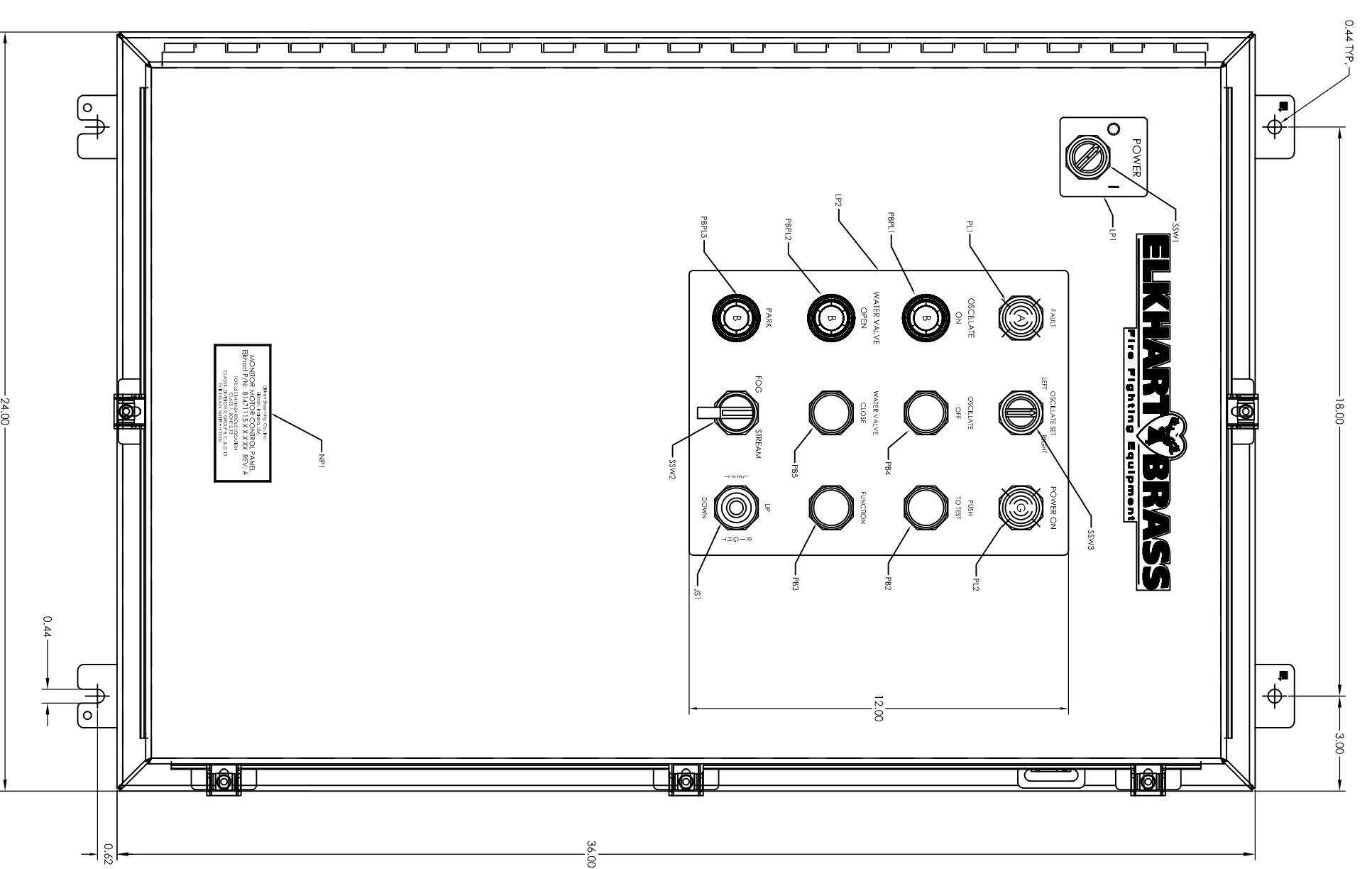


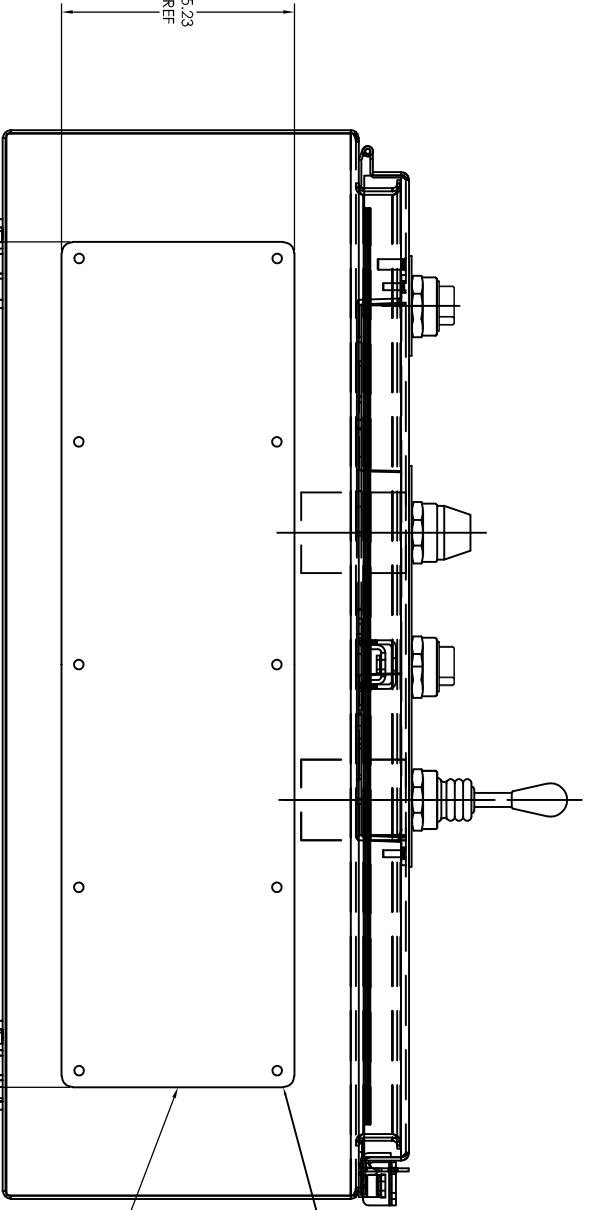
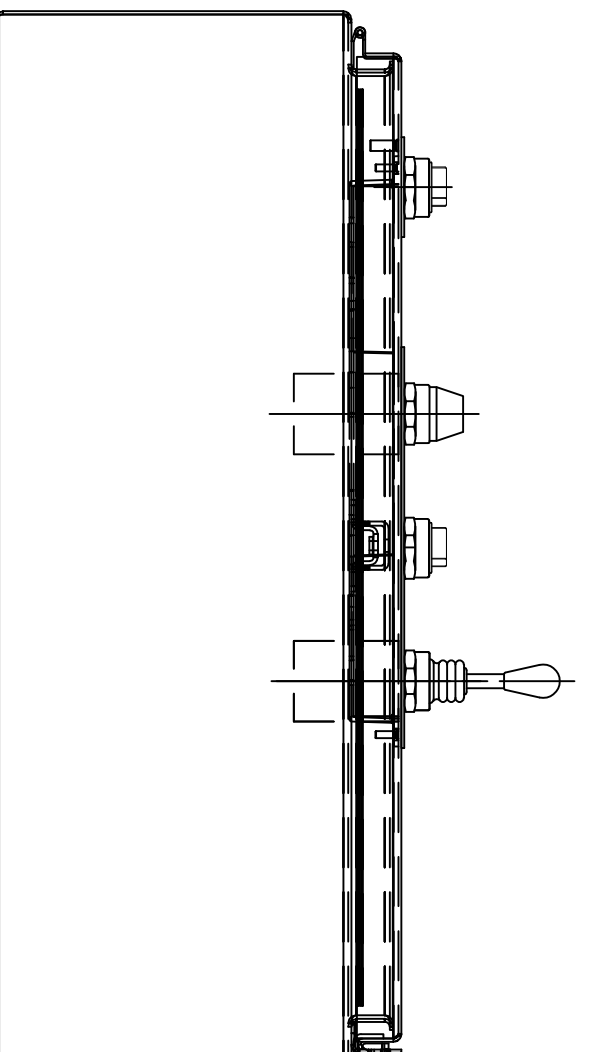
BASE PANEL

ALL OPTIONS SHOWN



BILL OF MATERIAL

PART NUMBER	QTY	DESCRIPTION
32903010	1	PILOT LIGHT WITH AMBER LENS, MODEL 444113, 2.0W/24VDC
32903010	2	PILOT LIGHT WITH GREEN LENS, MODEL 444113, 2.0W/24VDC
04303010	1	ROTOR SWITCH, 1/2 TURN, 1/2 TURN, 1/2 TURN, 1/2 TURN, 1/2 TURN, 1/2 TURN
04303010	2	ROTOR SWITCH, 1/2 TURN, 1/2 TURN, 1/2 TURN, 1/2 TURN, 1/2 TURN, 1/2 TURN
04303010	3	ROTOR SWITCH, 1/2 TURN, 1/2 TURN, 1/2 TURN, 1/2 TURN, 1/2 TURN, 1/2 TURN
04303010	4	ROTOR SWITCH, 1/2 TURN, 1/2 TURN, 1/2 TURN, 1/2 TURN, 1/2 TURN, 1/2 TURN
04303010	5	ROTOR SWITCH, 1/2 TURN, 1/2 TURN, 1/2 TURN, 1/2 TURN, 1/2 TURN, 1/2 TURN
04303010	6	ROTOR SWITCH, 1/2 TURN, 1/2 TURN, 1/2 TURN, 1/2 TURN, 1/2 TURN, 1/2 TURN
04303010	7	ROTOR SWITCH, 1/2 TURN, 1/2 TURN, 1/2 TURN, 1/2 TURN, 1/2 TURN, 1/2 TURN
04303010	8	ROTOR SWITCH, 1/2 TURN, 1/2 TURN, 1/2 TURN, 1/2 TURN, 1/2 TURN, 1/2 TURN
04303010	9	ROTOR SWITCH, 1/2 TURN, 1/2 TURN, 1/2 TURN, 1/2 TURN, 1/2 TURN, 1/2 TURN
04303010	10	ROTOR SWITCH, 1/2 TURN, 1/2 TURN, 1/2 TURN, 1/2 TURN, 1/2 TURN, 1/2 TURN
04303010	11	ROTOR SWITCH, 1/2 TURN, 1/2 TURN, 1/2 TURN, 1/2 TURN, 1/2 TURN, 1/2 TURN
04303010	12	ROTOR SWITCH, 1/2 TURN, 1/2 TURN, 1/2 TURN, 1/2 TURN, 1/2 TURN, 1/2 TURN
04303010	13	ROTOR SWITCH, 1/2 TURN, 1/2 TURN, 1/2 TURN, 1/2 TURN, 1/2 TURN, 1/2 TURN
04303010	14	ROTOR SWITCH, 1/2 TURN, 1/2 TURN, 1/2 TURN, 1/2 TURN, 1/2 TURN, 1/2 TURN
04303010	15	ROTOR SWITCH, 1/2 TURN, 1/2 TURN, 1/2 TURN, 1/2 TURN, 1/2 TURN, 1/2 TURN



MONITOR MOTOR CONTROL PANEL
Ekhart P/N: 81471115 X X X X REV: #
 FOR USE IN HAZARDOUS LOCATION
 CLASS 1, DIVISION 2, GROUP B, C & D, T3
 EX II 3 G AEX Na IIB + H T3 GC

NAME PLATE DETAIL

PRODUCTION APPROVAL PENDING

REV.	DESCRIPTION	BY	E.C.N.
REL	NOTE: APPROVALS ARE SUBJECT TO BE COMPLETED AND REVISIONS MADE. PLEASE CONTACT BWE FOR MORE INFORMATION.	BWE	19032

PART NUMBER	DESCRIPTION	QTY	REVISIONS
81471115	MONITOR MOTOR CONTROL PANEL	1	
81471115 X	CLASS 1, DIVISION 2, GROUP B, C & D, T3	1	
81471115 X X	EX II 3 G AEX Na IIB + H T3 GC	1	
81471115 X X X	WITH TERMINAL BLOCK OPTION	1	
81471115 X X X X	WITH TERMINAL BLOCK OPTION AND THE FOLLOWING TO BASE PANEL	1	

JUMPER CONFIGURATIONS FOR DIFFERENT INPUT POWERS

120 VAC, 60 HZ WHEN U2 IS HOT / UNGROUNDED

240 VAC, 50/60 HZ WHEN U2 IS GROUNDED

240 VAC, 50/60 HZ WHEN U2 IS GROUNDED

480 VAC, 60 HZ

WATER VALVE JUMPER CONFIGURATIONS

AUXILIARY DEVICE JUMPERS ARE IDENTICAL

JUMPER FOR ZONE C OPERATION

JUMPER FOR ZONE B OPERATION

- NOTES:
1. NEMA 4 OR 4X (IP-64) ENCLOSURE. CONTINUOUS HINGE WITH CLAMPS. REFER TO PANEL PART NUMBER FOR ENCLOSURE MATERIAL.
- NO CONDUIT HUBS/GLANDS OR KNOCK-OUTS ARE PROVIDED IN THIS ENCLOSURE BY ELKHART. NEMA 4 HUBS/GLANDS & KNOCK-OUT HOLES TO BE SUPPLIED BY OTHERS. OPTIONAL REMOVABLE GLAND PLATE CAN BE SPECIFIED WHEN ORDERING PANEL.
- APPROX. WEIGHT = 105 LBS.
- ONLY ONE WIRE PER CONNECTION ON THE P.I.C. DC POWER SUPPLY AND ETHERNET SWITCH. MAXIMUM OF TWO CONDUCTORS MAY BE TERMINATED IN EACH TERMINAL BLOCK. FUSE HOLDER, PUSHBUTTON CONTACT BLOCK, OR PILOT LIGHT CONTACT BLOCK.
- TERMINATE ALL WIRES THAT CONNECT TO SCREW TERMINALS OF CONTACT BLOCKS AND OTHER DEVICES BY TINNING OR WITH TERLSUES TO PREVENT WHISKERS AND UNRAVELING.
- INSTALLATION NOTE: THIS PANEL PROVIDES SUPPLEMENTARY PROTECTION, INSTALLER TO PROVIDE DISCONNECT AND BRANCH CIRCUIT PROTECTION, ENCLOSEES INTERNAL POWER SWITCH IS NOT LOCKABLE AND DOES NOT QUALIFY AS DISCONNECT.
- TERMINALS SUPPLIED ARE RATED FOR 60°C CONDUCTORS.
- WIRE SPECIFICATION
120V VAC WIRING: 18 AWG 800V MTW, COLOR: RED.
AC NEUTRAL WIRING: 18 AWG 600V MTW, COLOR: WHITE.
+24VDC WIRING: 18 AWG 600V MTW, COLOR: BLUE.
DC COMMON WIRING: 18 AWG 600V MTW, COLOR: BLUE WITH WHITE STRIPE.
GROUND WIRE: 16 AWG 600V MTW, COLOR: GREEN OR GREEN WITH YELLOW STRIPE.
CIRCUIT CONDUCTORS THAT REMAIN ENERGIZED WHEN THE POWER SWITCH IS IN THE OFF POSITION SHALL BE YELLOW.
- PANEL INTERRUPTING RATING OF 200,000 AMPS SYMMETRICAL.
- MONITOR MOTOR CONTROL PANEL TO BE UL LABELED PER UL 203, ISEA 12.1201 FOR USE IN CLASS 1, (GROUP B, C & D), DIVISION 2 HAZARDOUS LOCATION.
- LABEL ALL WIRES WITH WRAP AROUND WIRE LABELS. WHITE WITH BLACK TEXT. FONT SHALL BE LEGIBLE AND APPROPRIATE FOR GIVEN WIRE SIZE.
- THE ALL GROUND POINTS MARKED (★) BACK TO COMMON GROUND LUG.
- RESISTORS R1, R2, AND R3 SHALL BE MOUNTED SO THE WIRE LEADS ARE FACING DOWN.

REV.	DESCRIPTION	BY	E.C.N.
REL	NOTE: APPROVALS ARE SUBJECT TO BE COMPLETED AND REVISIONS MADE. PLEASE CONTACT BWE FOR MORE INFORMATION.	BWE	19032

PART NUMBER	DESCRIPTION	QTY	REVISIONS
81471115	MONITOR MOTOR CONTROL PANEL	1	
81471115 X	CLASS 1, DIVISION 2, GROUP B, C & D, T3	1	
81471115 X X	EX II 3 G AEX Na IIB + H T3 GC	1	
81471115 X X X	WITH TERMINAL BLOCK OPTION	1	
81471115 X X X X	WITH TERMINAL BLOCK OPTION AND THE FOLLOWING TO BASE PANEL	1	

ELKHART BRASS
 The Fighting Equipment

DESCRIPTION: GEN II - NETWORKED mmCP PANEL LAN/OUT

CAT. NO.: INDUSTRIAL SYSTEMS

SIZE: PART NUMBER

81471115

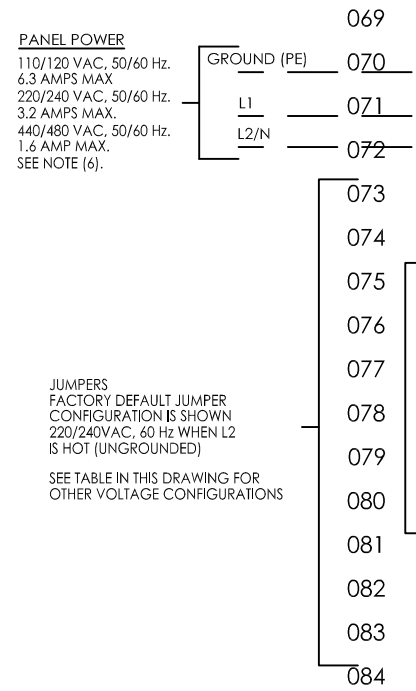
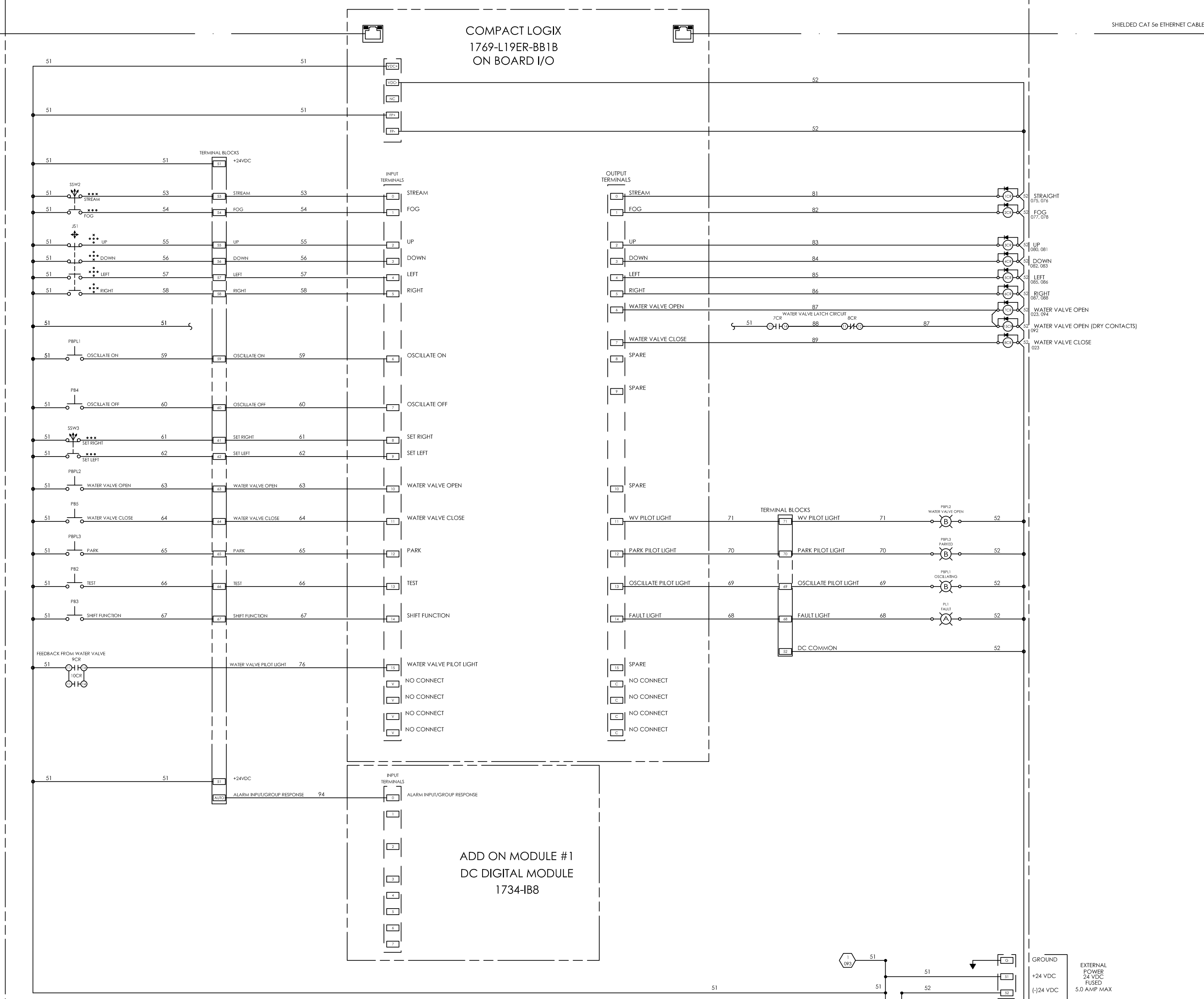
REV. REL

SHEET 1 OF 2

REV.	DESCRIPTION	BY	E. C. N.
REL	RELEASED FOR PRODUCTION	BWE	19032

MMCP

RUNG NUMBER
001
002
003
004
005
006
007
008
009
010
011
012
013
014
015
016
017
018
019
020
021
022
023
024
025
026
027
028
029
030
031
032
033
034
035
036
037
038
039
040
041
042
043
044
045
046
047
048
049
050
051
052
053
054
055
056
057
058
059
060
061
062
063
064
065
066
067
068
069
070
071
072
073
074
075
076
077
078
079
080
081
082
083
084
085
086
087
088
089
090
091
092
093
094
095
096
097
098
099
100
101
102
103
104
105
106
107
108
109
110
111
112
113
114
115
116
117
118
119
120
121
122
123
124
125
126
127
128
129
130
131
132
133



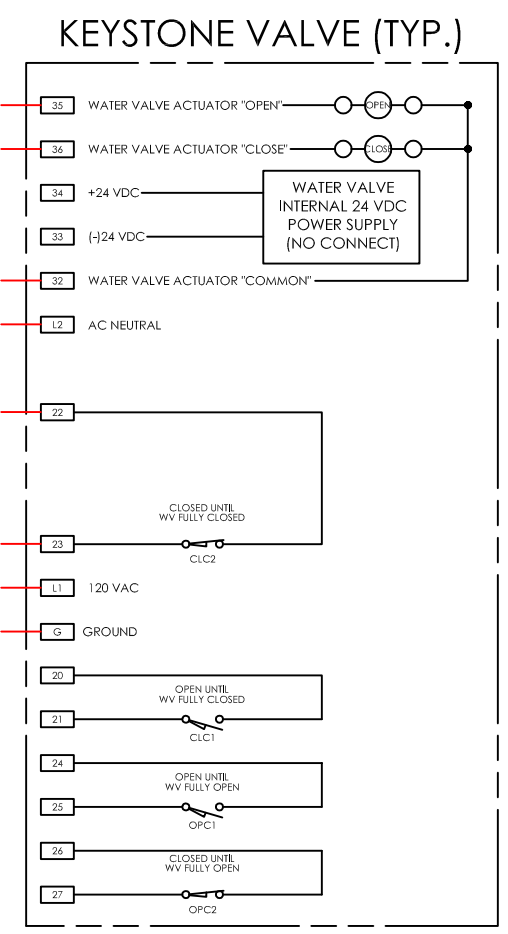
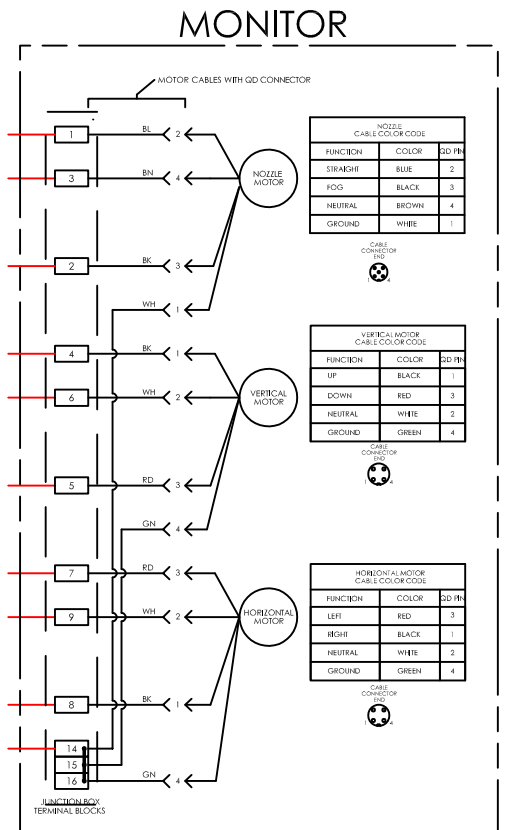
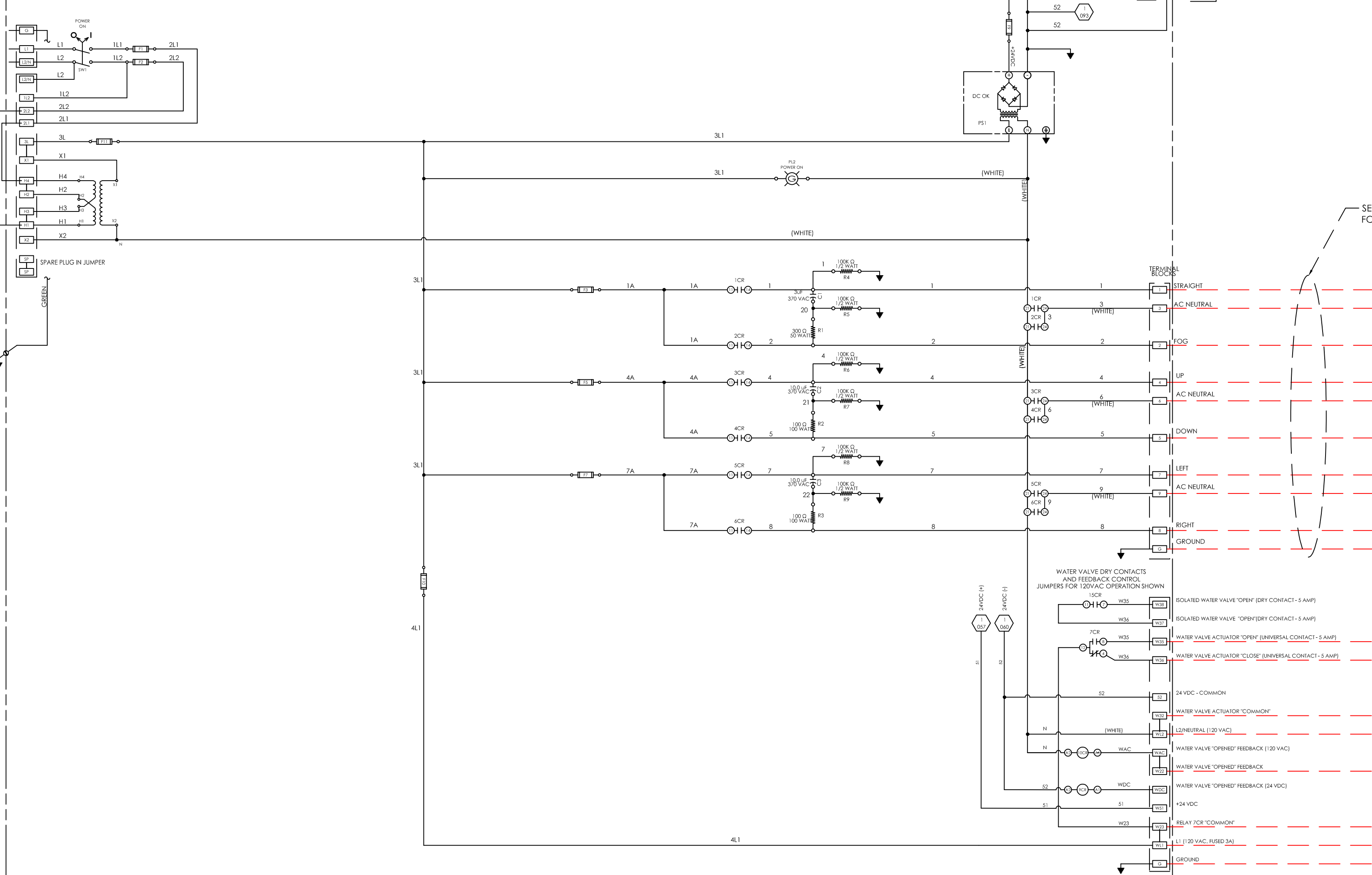
JUMPERS
FACTORY DEFAULT JUMPER
CONFIGURATION IS DOWN
220VAC, 50/60 Hz WHEN L2
IS NOT ENERGIZED
SEE TABLE IN THIS DRAWING FOR
OTHER VOLTAGE CONFIGURATIONS

TABLE 1
WIRE SIZE FOR CONDUCTORS BETWEEN
MONITOR MOTOR CONTROL PANEL AND
OPERATOR CONTROL PANEL

CONDUCTOR SIZE	WIRE SIZE
10 FT TO 200 FT (3.05 m)	18 AWG (0.75 mm ²)
200 FT TO 300 FT (61 m)	16 AWG (1.5 mm ²)
300 FT TO 500 FT (91.4 m)	14 AWG (2.0 mm ²)
500 FT TO 1000 FT (304.8 m)	12 AWG (3.3 mm ²)

TABLE 2
WIRE SIZE FOR CONDUCTORS BETWEEN
MONITOR MOTOR CONTROL PANEL AND
MONITOR JUNCTION BOX

CONDUCTOR SIZE	WIRE SIZE
10 FT TO 200 FT (3.05 m)	18 AWG (0.75 mm ²)
200 FT TO 300 FT (61 m)	16 AWG (1.5 mm ²)
300 FT TO 500 FT (91.4 m)	14 AWG (2.0 mm ²)
500 FT TO 1000 FT (304.8 m)	12 AWG (3.3 mm ²)



PRODUCTION APPROVAL PENDING

ELKHART BRASS MFG. CO., INC. 1300 West Broadway Ave. Bristol, RI 02809, USA <small>This print and all data contained hereon is the sole and exclusive property of Elkhart Brass Mfg. Co., Inc. and will not be disclosed to others without the consent of Elkhart Brass Mfg. Co., Inc. This print must be returned to Elkhart Brass Mfg. Co., Inc. Copyright © 2013 by Elkhart Brass Mfg. Co., Inc.</small>		DRAWN BY: BWE CHECKED BY: BWE DATE: 03/01/2019	ELKHART BRASS Fire Fighting Equipment
MATERIAL: N/A	CAT. NO.: INDUSTRIAL SYSTEMS	WEIGHT (LBS): DESCRIPTION: GEN II - NETWORKED MMCP WIRING DIAGRAM - BASE PANEL	SIZE: D PART NUMBER: 81471115 REV.: REL
TOLERANCE UNLESS OTHERWISE SPECIFIED: 2 PLACE DEC. ± .060" 3 PLACE DEC. ± .030" ANGLES ± 1°	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES ALL TILES AND ROUNDS R.030 DO NOT SCALE PRINT INTERPRET DIMENSIONS AND TOLERANCES PER ASME Y14.5M-1994 CAD MODEL:	THRD ANGLE PROJECTION	CAD SCALE: SHEET 2 OF 3

MMCP

RUNG NUMBER
001
002
003
004
005
006
007
008
009
010
011
012
013
014
015
016
017
018
019
020
021
022
023
024
025
026
027
028
029
030
031
032
033
034
035
036
037
038
039
040
041
042
043
044
045
046
047
048
049
050
051
052
053
054
055
056
057
058
059
060
061
062
063
064
065
066
067
068
069
070
071
072
073
074
075
076
077
078
079
080
081
082
083
084
085
086
087
088
089
090
091
092
093
094
095
096
097
098
099
100
101
102
103
104
105
106
107
108
109
110
111
112
113
114
115
116
117
118
119
120
121
122
123
124
125
126
127
128
129
130
131
132
133
134
135
136
137
138
139
140

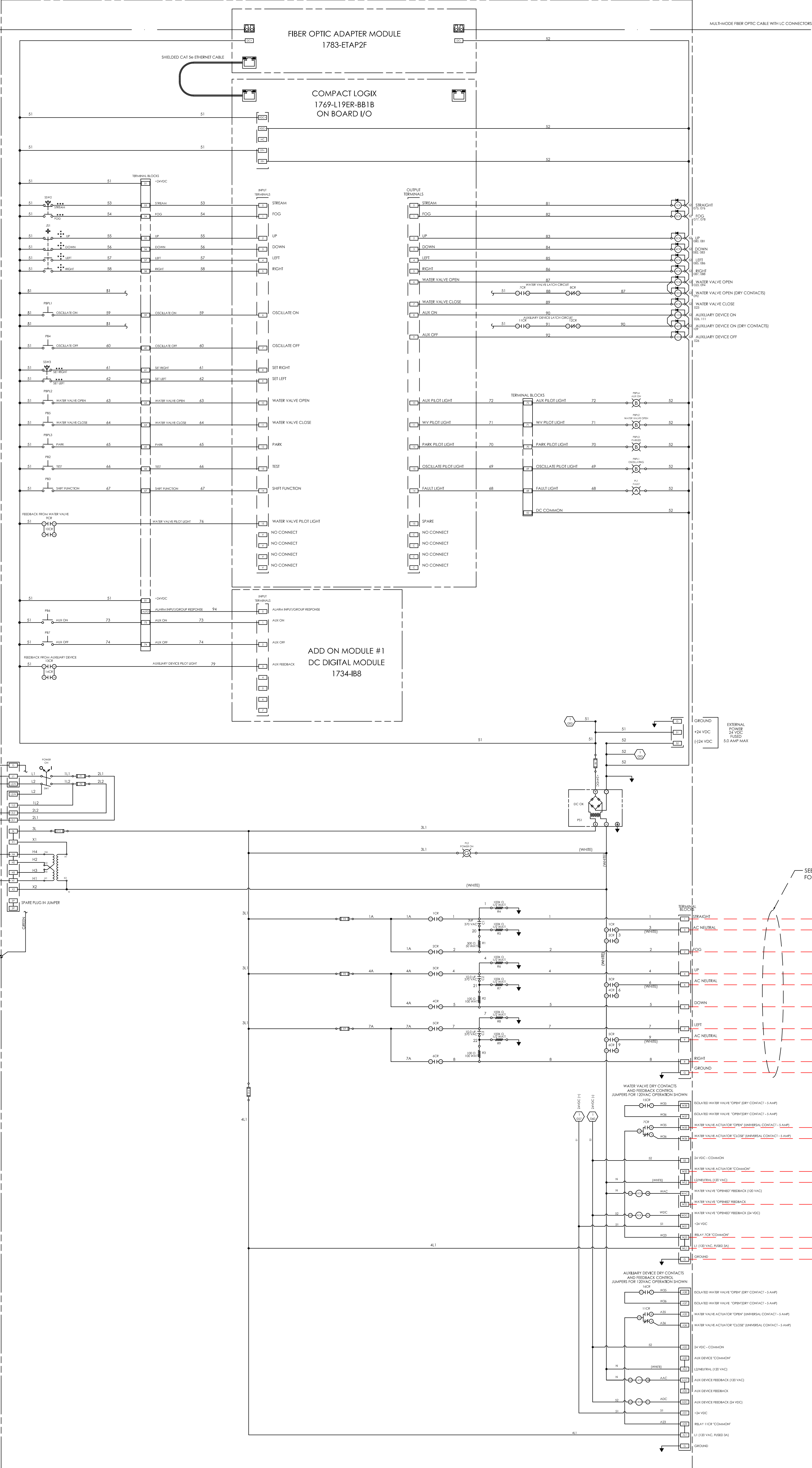
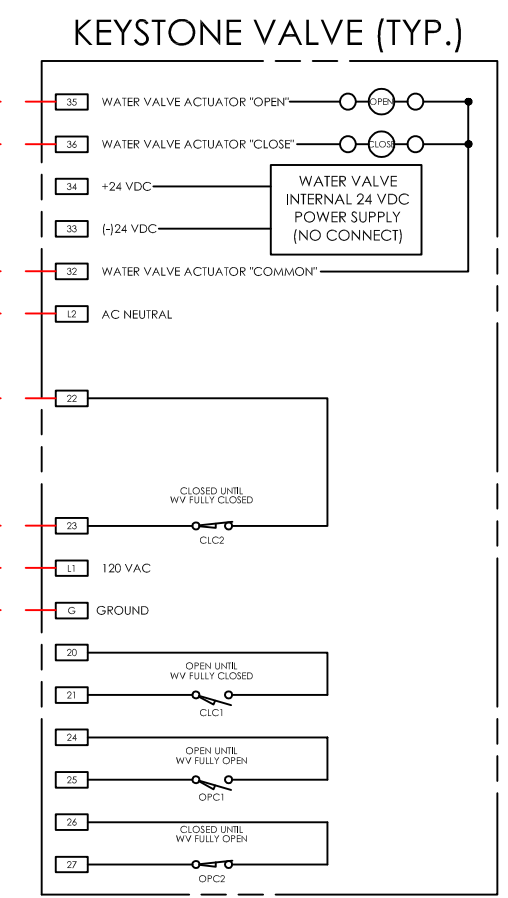
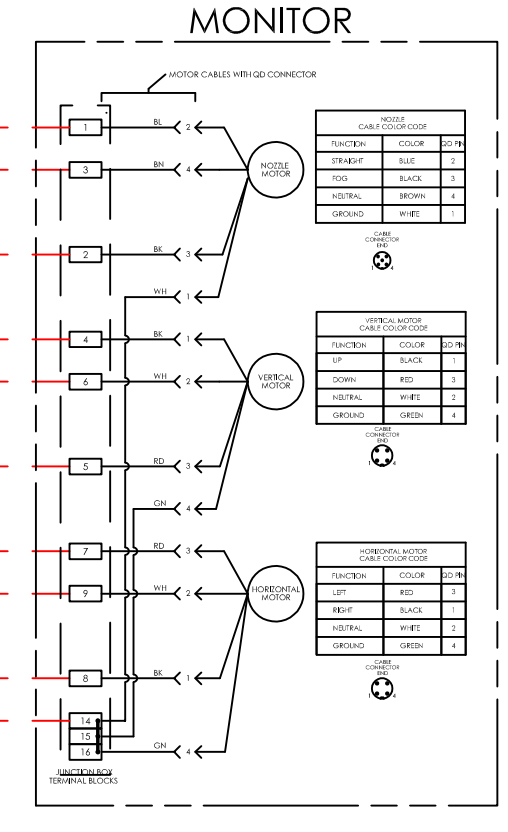
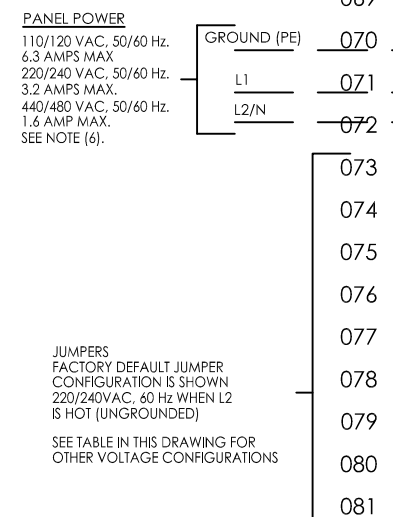


TABLE 1
WIRE SIZE FOR CONDUCTORS BETWEEN MONITOR MOTOR CONTROL PANEL AND OPERATOR CONTROL PANEL

CONDUCTOR LENGTH	WIRE SIZE
UP TO 75 FEET (23 M)	18 AWG (0.75 AMP)
76 TO 100 FEET (23 M)	16 AWG (1.0 AMP)
101 TO 150 FEET (30 M)	14 AWG (1.5 AMP)
151 TO 200 FEET (46 M)	12 AWG (2.0 AMP)

TABLE 2
WIRE SIZE FOR CONDUCTORS BETWEEN MONITOR MOTOR CONTROL PANEL AND MONITOR FUNCTION BOX

CONDUCTOR LENGTH	WIRE SIZE
UP TO 75 FEET (23 M)	18 AWG (0.75 AMP)
76 TO 100 FEET (23 M)	16 AWG (1.0 AMP)
101 TO 150 FEET (30 M)	14 AWG (1.5 AMP)
151 TO 200 FEET (46 M)	12 AWG (2.0 AMP)



PRODUCTION APPROVAL PENDING

ELKHART BRASS MFG. CO., INC. 1300 WEST BROADWAY AVENUE, BRIDGEVILLE, PA 15103, USA <small>This print and all data contained hereon is the sole and exclusive property of Elkhart Brass Mfg. Co., Inc. and will not be disclosed to others without the consent of Elkhart Brass Mfg. Co., Inc. This print must be returned to Elkhart Brass Mfg. Co., Inc. Copyright © 2013 by Elkhart Brass Mfg. Co., Inc.</small>		DRAWN BY: BWE CHECKED BY: BWE DATE: 03/01/2019	ELKHART BRASS Fire Fighting Equipment
MATERIAL: N/A	CAT. NO. INDUSTRIAL SYSTEMS	WEIGHT (LBS):	DESCRIPTION: GEN II - NETWORKED MMCP WIRING DIAGRAM - ALL OPTIONS
TOLERANCE UNLESS OTHERWISE SPECIFIED: 2 PLACE DEC. ± .060" 3 PLACE DEC. ± .030" ANGLES ± 1°	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. ALL TITLES AND FONDS 8.006 DO NOT SCALE PRINT. INTERPRET DIMENSIONS AND TOLERANCES PER ASME Y14.5M 1994 CAD MODEL:	SIZE: D PART NUMBER: 81471115 SHEET 3 OF 3	REV. REL CAD SCALE: