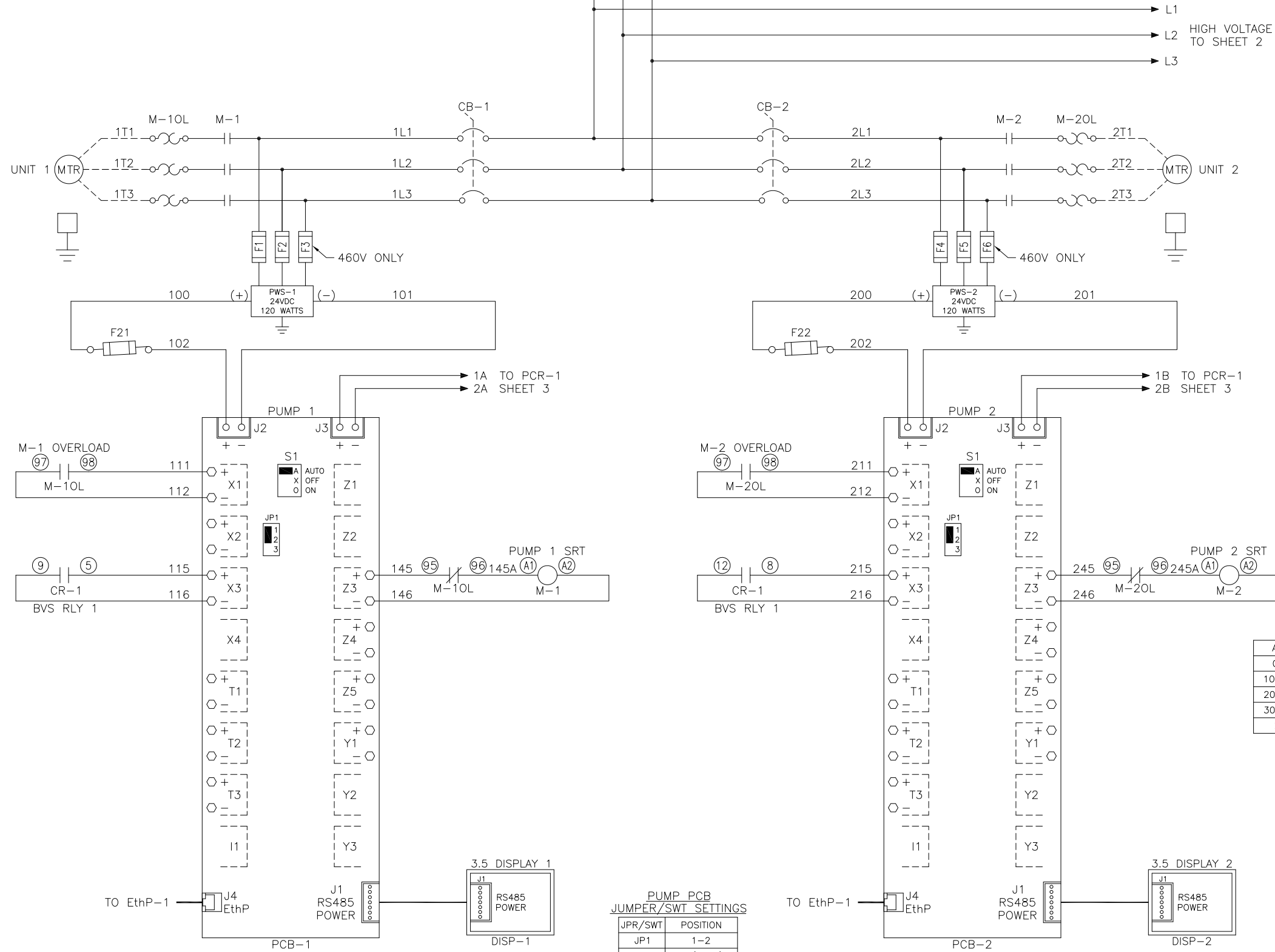
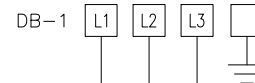


Notes:

1. MAIN DISCONNECT PROVIDED BY OTHER.
2. FIELD WIRING TO BE COPPER RATED FOR 75°C MINIMUM.
3. - - - - INDICATES FIELD WIRING OUTSIDE OF CABINET.
4. AUXILIARY CONTACTS LIST AND OPERATION NOTES ON SHEET 3.
5. THE AMPACITY OF CONDUCTORS SUPPLYING THE CONTROL PANEL TO BE ROUNDED UP TO THE NEXT SIZE LARGER STANDARD WIRE GAUGE.
6. MOP VALUES TO BE ROUNDED DOWN TO THE NEAREST STANDARD RATING OF THE OVERCURRENT PROTECTION DEVICE.
7. SHORT CIRCUIT CURRENT RATING (SCCR): 5 kA

208 - 460 V
3 ϕ
60 Hz

SCCR: 5 kA



MINIMUM CIRCUIT AMPACITY (MCA)

SYSTEM HP	208 V	230 V	460 V
7.5 HP	106.4 AMPS	96.7 AMPS	48.8 AMPS
10 HP	127.2 AMPS	117.4 AMPS	58.2 AMPS

MAXIMUM OVERCURRENT PROTECTION (MOP)

SYSTEM HP	208 V	230 V	460 V
7.5 HP	127.1 AMPS	115.5 AMPS	57.8 AMPS
10 HP	161.7 AMPS	147.0 AMPS	73.5 AMPS

QUADRUPLEX SYSTEM FULL LOAD AMPERES

SYSTEM HP	208 V	230 V	460 V
7.5 HP	86.8 AMPS	80.9 AMPS	40.9 AMPS
10 HP	116.8 AMPS	105.7 AMPS	53.3 AMPS

INDIVIDUAL FULL LOAD AMPERES

SYSTEM HP	208 V	230 V	460 V
7.5 HP	21.0 AMPS	19.6 AMPS	9.8 AMPS
10 HP	28.5 AMPS	25.8 AMPS	12.9 AMPS

FUSE SELECTION CHART (MAX FUSE SIZES SHOWN)

FUSES	208 V	230 V	460 V
F1/F2/F4/F5/F7/F8/F10/F11	6.0 AMPS	6.0 AMPS	6.0 AMPS
F3/F6/F9/F12	---	---	6.0 AMPS
F21-F24	2.5 AMPS	2.5 AMPS	2.5 AMPS
F33	1.0 AMP	1.0 AMP	1.0 AMP
F35	0.5 AMP	0.5 AMP	0.5 AMP

F1-F12 ARE LITTELFUSE KLDLR 600V TYPE
F21-F24/F33/F35 ARE LITTELFUSE 2AG 250V TYPE

RELIEF VALVE SETTINGS ("HgV)

ALTITUDE	7.5HP	8.6HP
0-1000'	21.5	23
1001-2000'	20.5	22
2001-3000'	19.5	21
3001-4000'	18.5	20
>4000'	CONSULT FACTORY	

DEFAULT VACUUM SETTINGS ("HgV)

ALTITUDE	LEAD CUT-OFF	LAG CUT-ON	MAXIMUM LIMITS	MINIMUM LIMITS
0-1000'	21	16	25 18	21 16
1001-2000'	20	16	24 18	21 16
2001-3000'	19	16	23 18	21 16
3001-4000'	18	16	22 18	21 16
>4,000'	CONSULT FACTORY			

BACKUP VACUUM SWITCH ("HgV)

BVS-1	CUT-ON	15
-------	--------	----

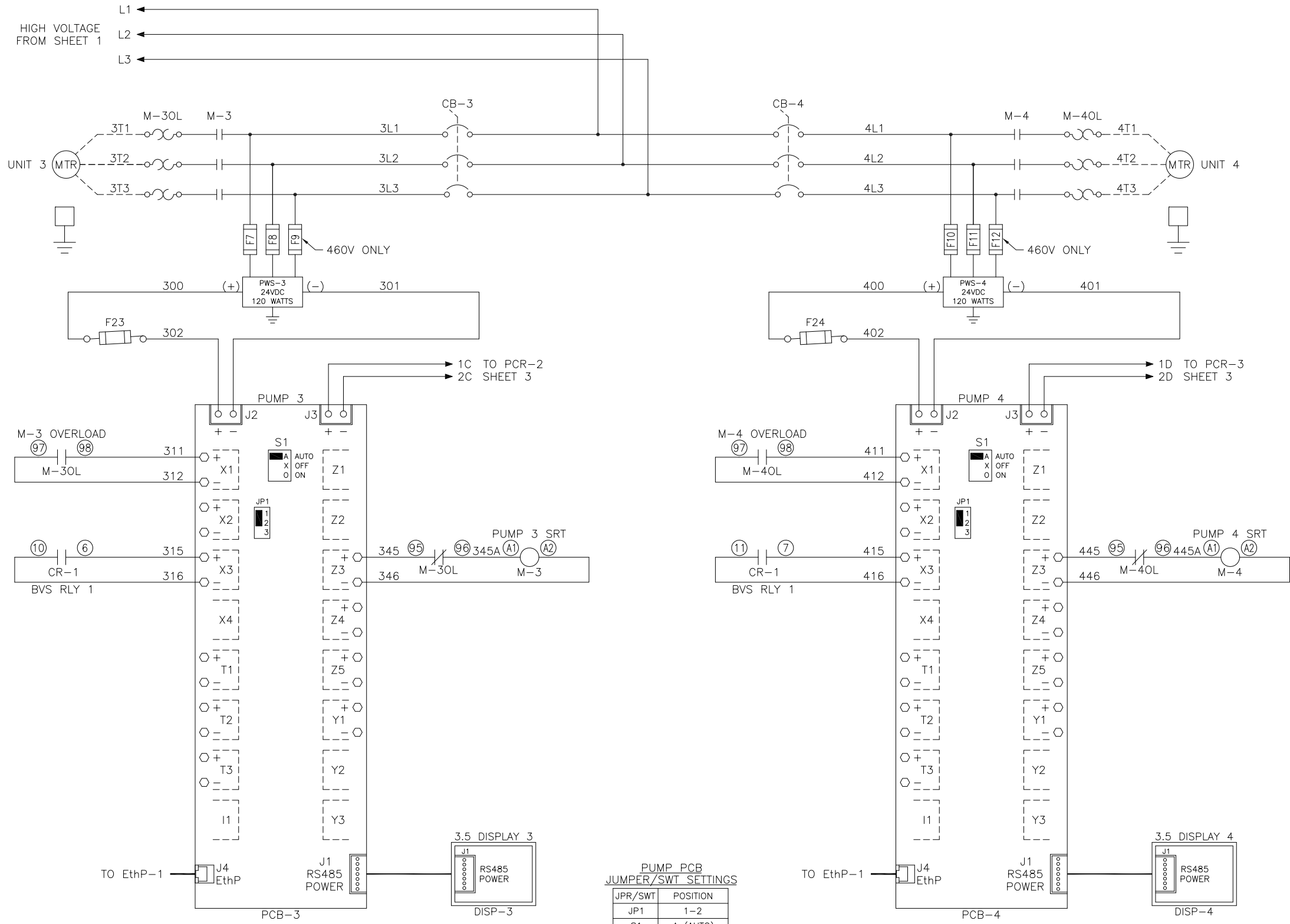
PUMP PCB JUMPER/SWT SETTINGS

JPR/SWT	POSITION
JP1	1-2
S1	A (AUTO)

Revised: BKW	Date: 03/05/18	Drawn: JWO	Date: 05/05/15
		Scale: NTS D	
Description: DWG WIRING CONTROL QX DRY VAC 7.5-10HP 208-460/3/60		Part Number: 4107 8554 00 DN: HOP180218 Rev: 02 Sheet 1 of 3	

Notes:

- 1. FIELD WIRING TO BE COPPER RATED FOR 75°C MINIMUM.
- 2. - - - - - INDICATES FIELD WIRING OUTSIDE OF CABINET.



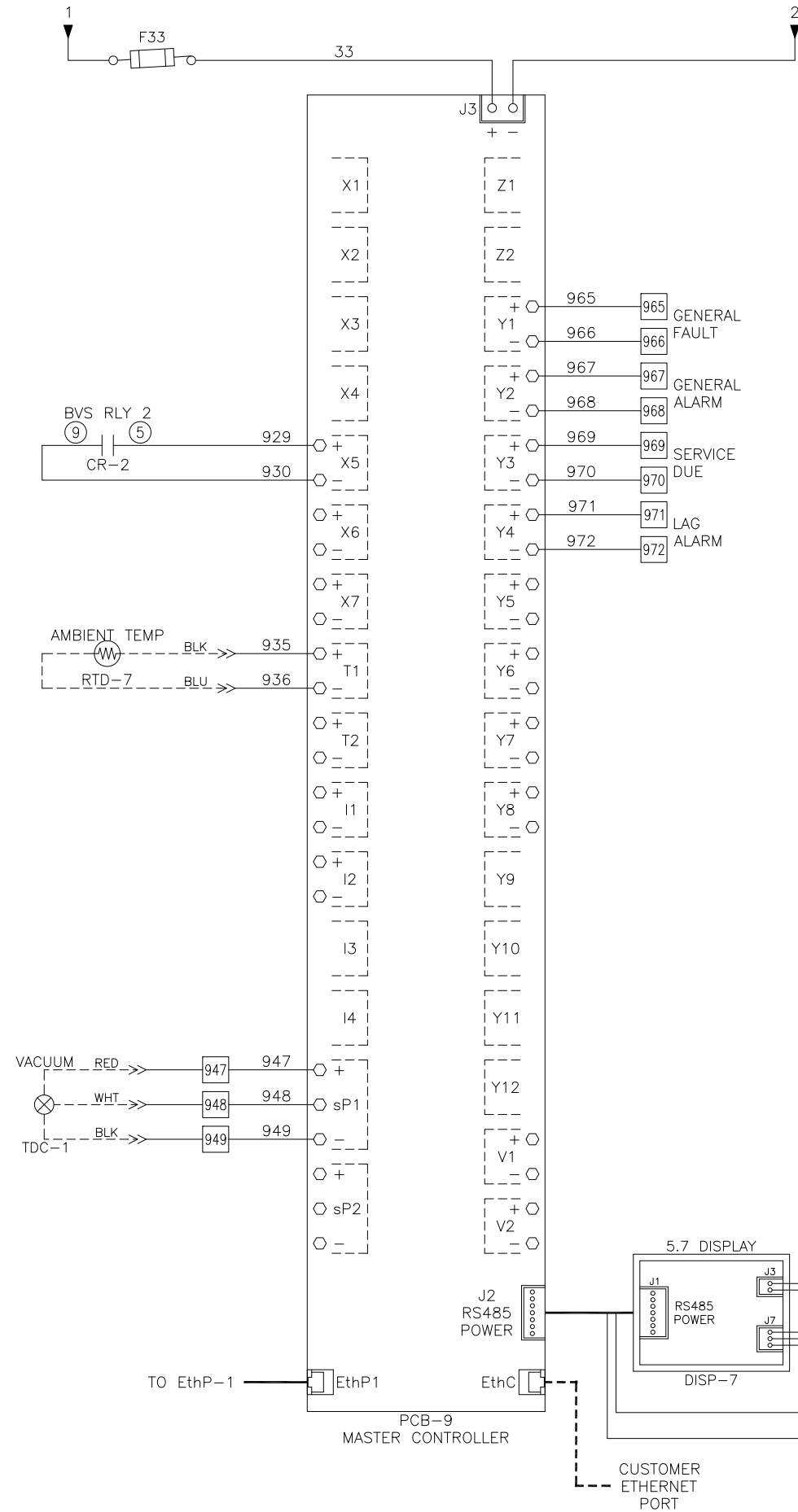
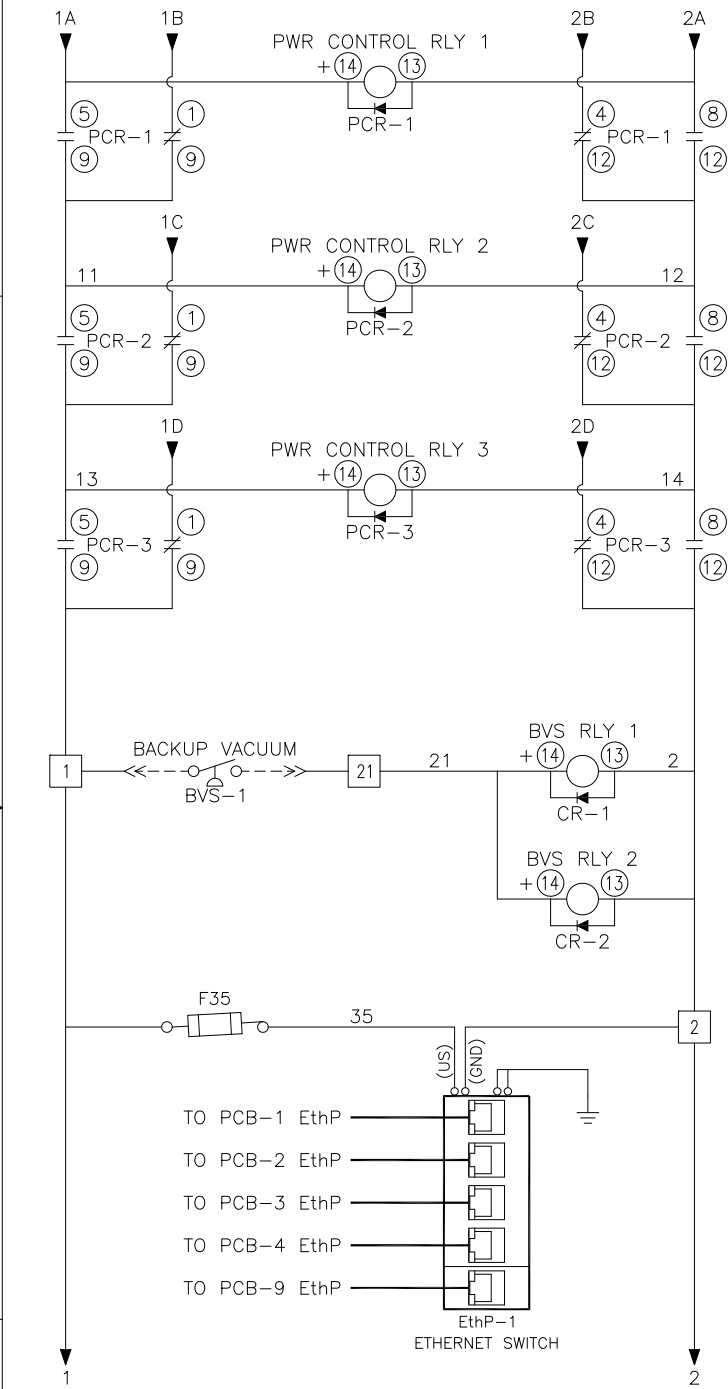
PUMP PCB JUMPER/SWT SETTINGS

JPR/SWT	POSITION
JP1	1-2
S1	A (AUTO)

Revised: BKW	Date: 03/09/16	Drawn: JWO	Date: 05/05/15
<small>This drawing and the information contained thereon remains the property of BeaconMedes and may not be used for other than the purpose for which it is loaned without the expressed written permission from BeaconMedes Engineering.</small>			Scale: NTS
		D	
Description: DWG WIRING CONTROL QX DRY VAC 7.5-10HP 208-460/3/60		Part Number: 4107 8554 00	
DN: HOP180218		Rec: 02	
Sheet 2 of 3		DO NOT SCALE THIS DOCUMENT	

Notes:

1. FIELD WIRING TO BE COPPER RATED FOR 75°C MINIMUM.
2. - - - - - INDICATES FIELD WIRING OUTSIDE OF CABINET.



AUTO OPERATION:

THE MASTER PCB WILL CONTROL THE ADAPTIVE FUNCTIONALITY OF THE SYSTEM. THE ADAPTIVE CONTROL CAUSES THE VACUUM PUMPS TO START BASED ON THE VACUUM LEVEL. THE SIGNAL TO STOP IS BASED ON THE LENGTH OF TIME THE VACUUM SYSTEM WAS NOT RUNNING. THE MASTER PCB DETERMINES THE MINIMUM RUN TIME OF A PUMP ONCE IT HAS STOPPED. IF THE VACUUM SYSTEM IS STOPPED FOR A LONG PERIOD OF TIME, THE MINIMUM RUN TIME AFTER A RESTART WILL BE SHORT. IF THE VACUUM SYSTEM IS STOPPED FOR A SHORT PERIOD OF TIME, THE MINIMUM RUN TIME WILL BE LONGER. SEE O&M MANUAL FOR SPECIFIC VARIATIONS. IF DURING OPERATION THE FOURTH VACUUM PUMP IS REQUIRED TO TURN ON, THE MASTER CONTROLLER WILL SET A LAG ALARM CONDITION.

PUMP PCB S1 POSITION:

POSITION (A) - AUTO (DEFAULT):

THE PUMP WILL OPERATE NORMALLY AS DESCRIBED ABOVE IN "AUTO OPERATION".

POSITION (X) - OFF:

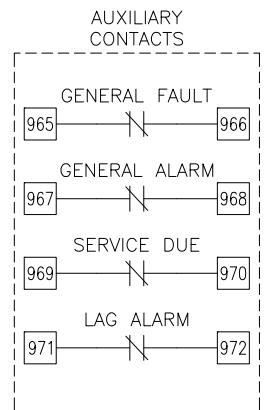
THE PUMP IS DISABLED FROM RUNNING.

POSITION (O) - MANUAL:

THE PUMP WILL RUN CONTINUOUSLY.

PCB FAULT:

IF A PUMP PCB ETHERNET FAULT OR A TRANSDUCER FAULT OCCURS, THE PUMP PCB WILL AUTOMATICALLY SWITCH TO MANUAL MODE. VACUUM PUMPS WILL START WHEN BVS-1 (BACKUP VACUUM SWITCH) CLOSSES AND STOP WHEN IT OPENS. COMPRESSORS WILL NOT SEQUENCE IN THIS CONDITION AND CAN OPERATE UNTIL THE ETHERNET OR TRANSDUCER FAULT IS REPAIRED.



NOTE:
AUXILIARY CONTACTS 965-972 ARE "CLASS 1 CONTROL CIRCUITS. USE CLASS 1 CONDUCTORS."

AUX CONTACTS ARE RATED 0.7A_{dc}/0.7A_{rms} @ 24V MAX. UNLESS OTHERWISE NOTED.

AUX CONTACTS CLOSED DURING NORMAL OPERATION.

NOTE:
RED WIRE TO GOLD TERMINAL ON LED-1.

Revised: BKW	Date: 03/09/18	Drawn: JWO	Date: 05/05/15
		This drawing and the information contained therein remain the property of BeaconMedics and may not be used for other than the purpose for which it is loaned without the expressed written permission from BeaconMedics Engineering.	
Description: DWG WIRING CONTROL QX DRY VAC 7.5-10HP 208-460/3/60		Part Number: 4107 8554 00	
DN: HOP180218		Rev: 02	
Sheet 3 of 3		DO NOT SCALE THIS DOCUMENT	