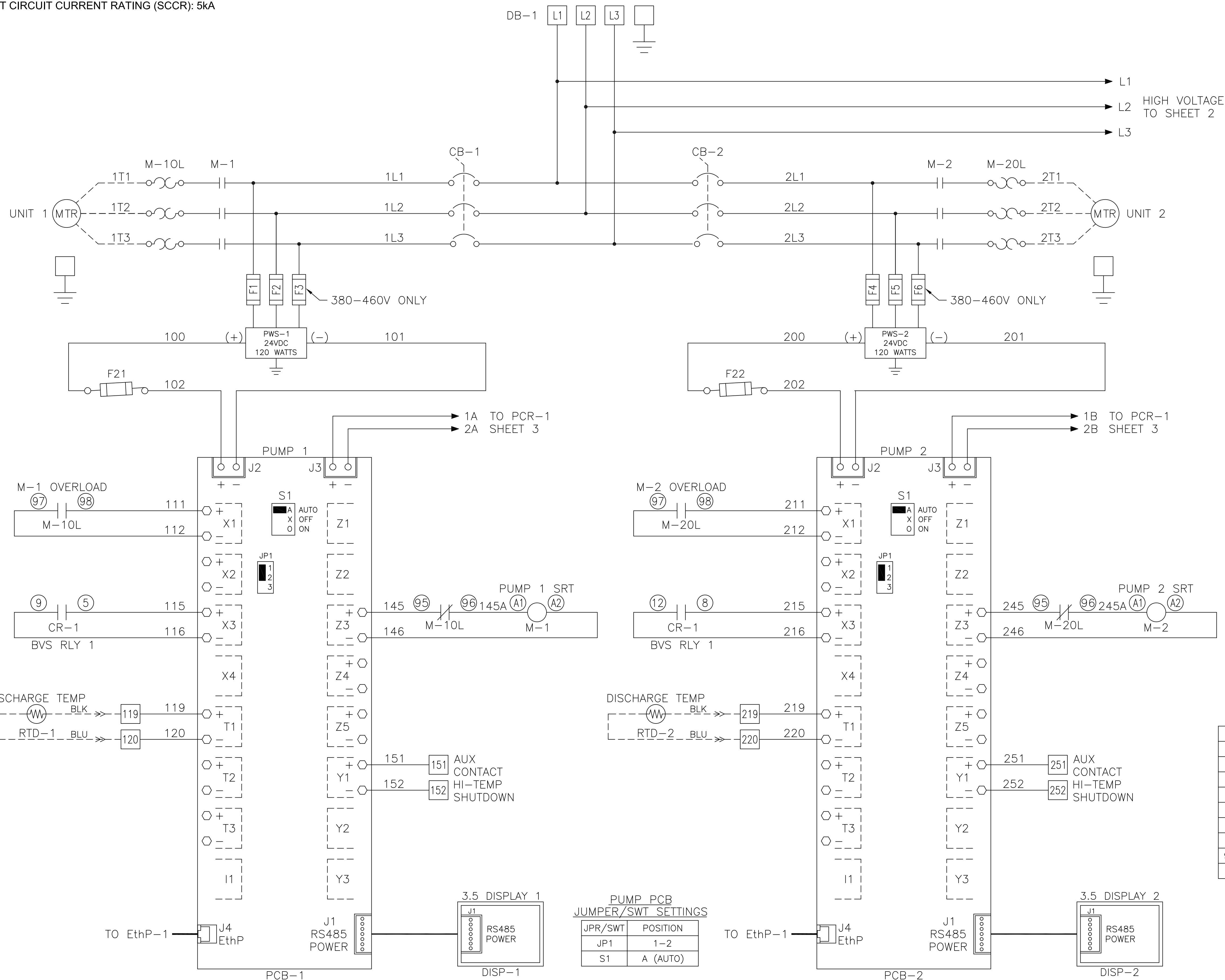


Notes:

1. MAIN DISCONNECT PROVIDED BY OTHERS.
2. FIELD WIRING TO BE COPPER RATED FOR 75°C MINIMUM.
3. ----- INDICATES FIELD WIRING OUTSIDE OF BOX.
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): 5kA

208-460V  
3Ø  
50/60 Hz

SCCR: 5kA



MINIMUM CIRCUIT AMPACITY (MCA)

SYSTEM HP	208 V	230 V	380/400 V	460 V
5 HP	77.9 AMPS	67.8 AMPS	43.7 AMPS	34.4 AMPS
7.5 HP	111.1 AMPS	96.7 AMPS	62.0 AMPS	48.8 AMPS
10 HP	140.4 AMPS	122.2 AMPS	79.0 AMPS	61.6 AMPS
15 HP	208.8 AMPS	181.7 AMPS	117.3 AMPS	91.3 AMPS
20 HP	---	---	147.0 AMPS	116.8 AMPS
25 HP	---	---	189.5 AMPS	146.6 AMPS

MAXIMUM OVERCURRENT PROTECTION (MOP)

SYSTEM HP	208 V	230 V	380/400 V	460 V
5 HP	91.8 AMPS	79.8 AMPS	50.9 AMPS	39.9 AMPS
7.5 HP	132.8 AMPS	115.5 AMPS	73.5 AMPS	57.8 AMPS
10 HP	169.0 AMPS	147.0 AMPS	94.5 AMPS	73.5 AMPS
15 HP	253.5 AMPS	220.5 AMPS	141.8 AMPS	110.3 AMPS
20 HP	---	---	178.5 AMPS	141.8 AMPS
25 HP	---	---	231.0 AMPS	178.5 AMPS

QUADRAPLEX SYSTEM FULL LOAD AMPERES

SYSTEM HP	208 V	230 V	380V/50Hz	460 V
5 HP	60.0 AMPS	54.2 AMPS	32.8 AMPS	27.7 AMPS
7.5 HP	88.4 AMPS	89.8 AMPS	47.6 AMPS	45.3 AMPS
10 HP	108.4 AMPS	105.0 AMPS	56.4 AMPS	52.9 AMPS
15 HP	164.4 AMPS	152.2 AMPS	91.2 AMPS	76.5 AMPS
20 HP	218.8 AMPS	210.6 AMPS	114.0 AMPS	105.7 AMPS
25 HP	290.8 AMPS	250.6 AMPS	150.0 AMPS	125.7 AMPS

INDIVIDUAL FULL LOAD AMPERES

SYSTEM HP	208 V	230 V	380V/50Hz	460 V
5 HP	14.3 AMPS	12.9 AMPS	7.7 AMPS	6.5 AMPS
7.5 HP	21.4 AMPS	21.8 AMPS	11.4 AMPS	10.9 AMPS
10 HP	26.4 AMPS	25.6 AMPS	13.6 AMPS	12.8 AMPS
15 HP	40.4 AMPS	37.4 AMPS	22.3 AMPS	18.7 AMPS
20 HP	54.0 AMPS	52.0 AMPS	28.0 AMPS	26.0 AMPS
25 HP	72.0 AMPS	62.0 AMPS	37.0 AMPS	31.0 AMPS

FUSE SELECTION CHART (MAX FUSE SIZES SHOWN)

HP	FUSES	208 V	230 V	380 V	460 V
ALL	F1/F2/F4/F5/F7/F8/F10/F11	6.0 AMPS	6.0 AMPS	6.0 AMPS	6.0 AMPS
5-15HP	F3/F6/F9/F12	---	---	6.0 AMPS	6.0 AMPS
20-25HP	F21-F24	2.5 AMPS	2.5 AMPS	2.5 AMPS	2.5 AMPS
ALL	F33	1.0 AMP	1.0 AMP	1.0 AMP	1.0 AMP
ALL	F35	0.5 AMP	0.5 AMP	0.5 AMP	0.5 AMP

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

DEFAULT VACUUM SETTINGS

ALTITUDE	LEAD CUT-OFF ("Hg)	LAG CUT-ON ("Hg)	Maximum Limits ("Hg)	Minimum Limits ("Hg)
0-3000'	25	19	25	21
3001-4000'	24	19	25	21
4001-5000'	23	18	25	21
5001-6000'	22	18	24	20
6001-7000'	21	17	23	20
7001-8000'	20	17	22	20
8001-9000'	19	16	21	19
9001-10,000'	18	16	20	18
>10,000'	CONSULT FACTORY			

BACKUP VACUUM SWITCH

BVS-1	CUT-ON	15"
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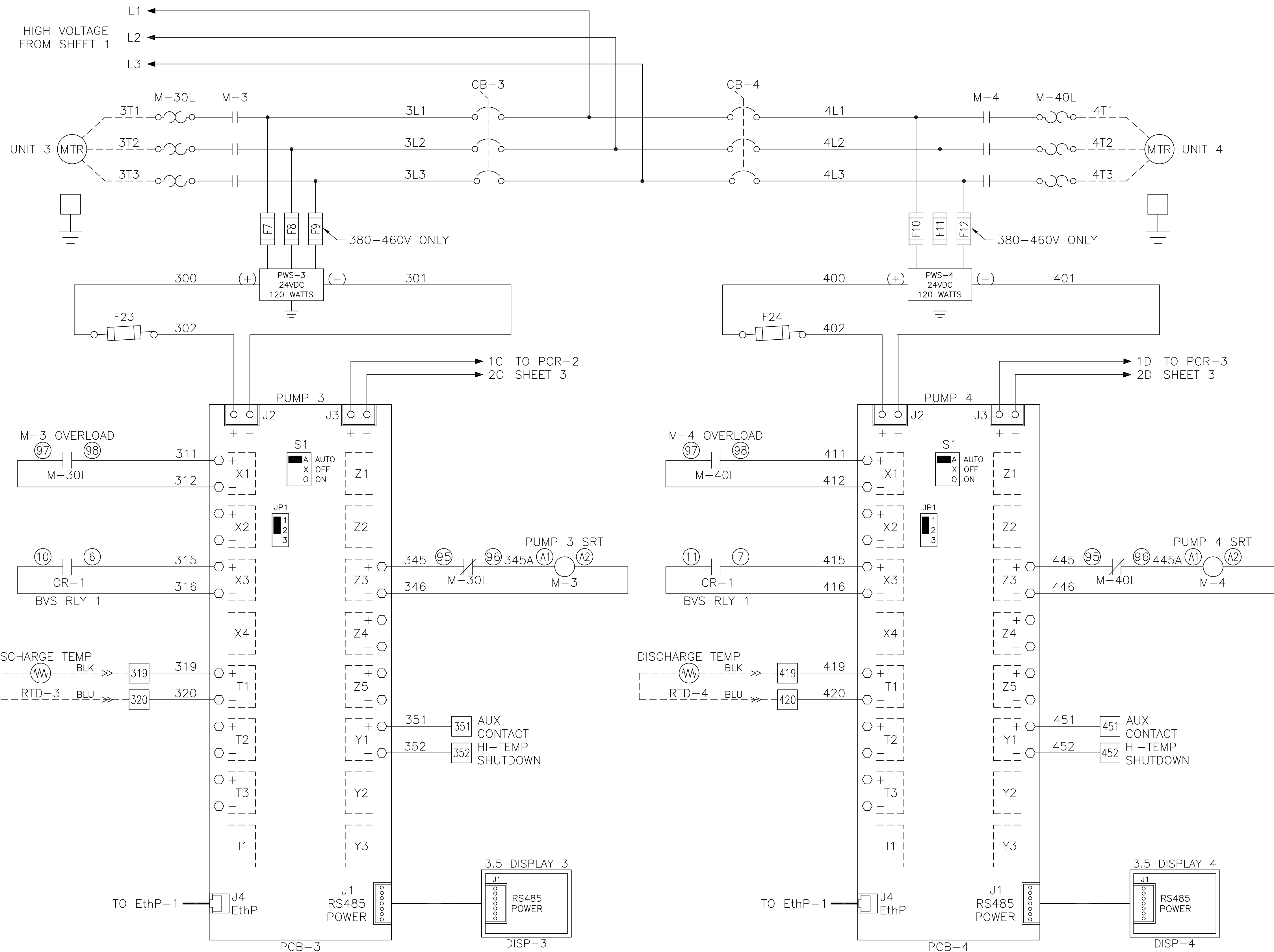
PUMP PCB JUMPER/SWT SETTINGS

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

Revised: BJM Date: 08/28/18 Drawn: JAH Date: 05/10/11  
 Scale: NTS  
 Description: DWG WIRING CONTROL QX LUBE 5-15HP 208-460V & 20-25HP 380-460V  
 Part Number: 4107 8523 65  
 DN: HOP 180701 Rev: 08  
 Sheet 1 of 3

Notes:

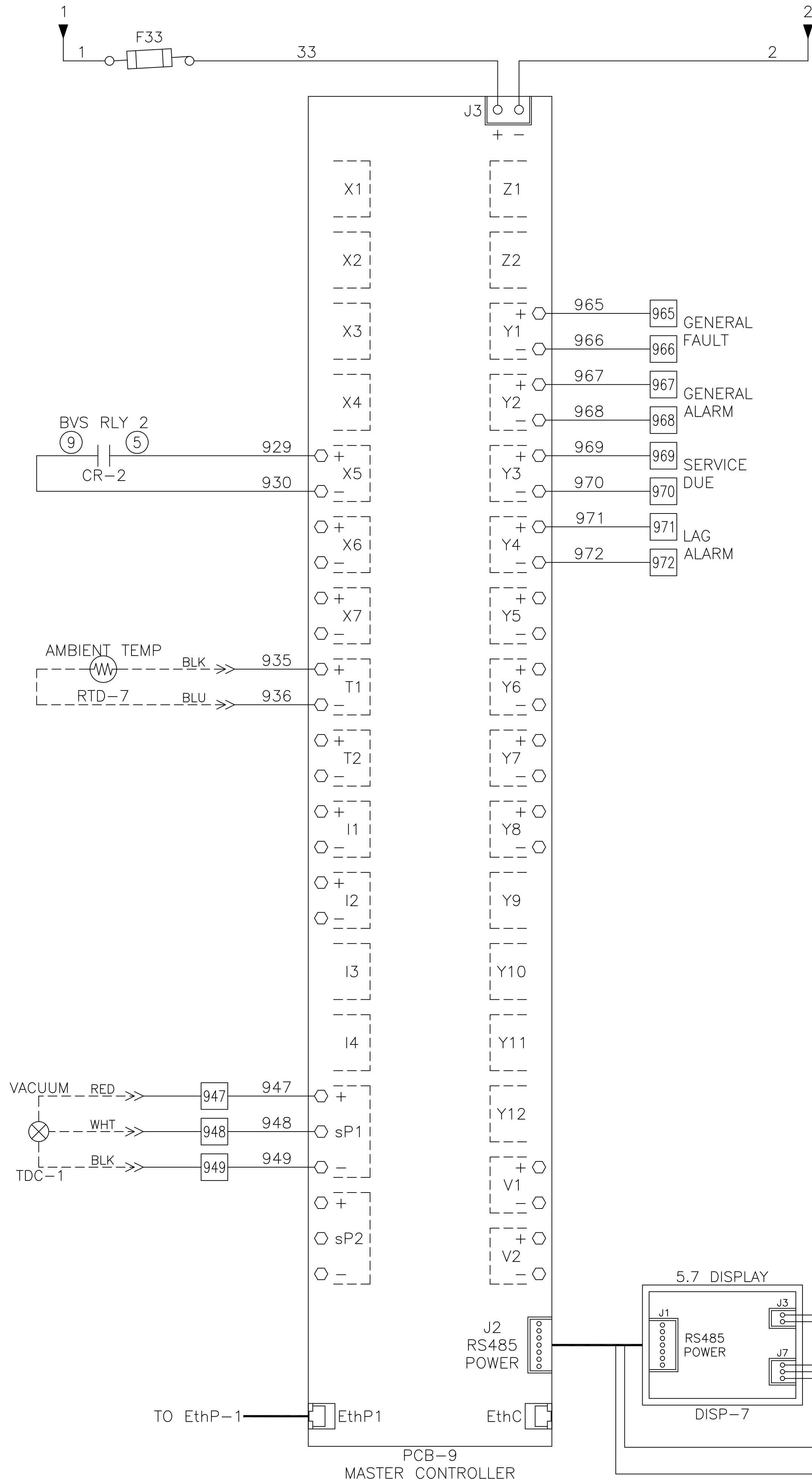
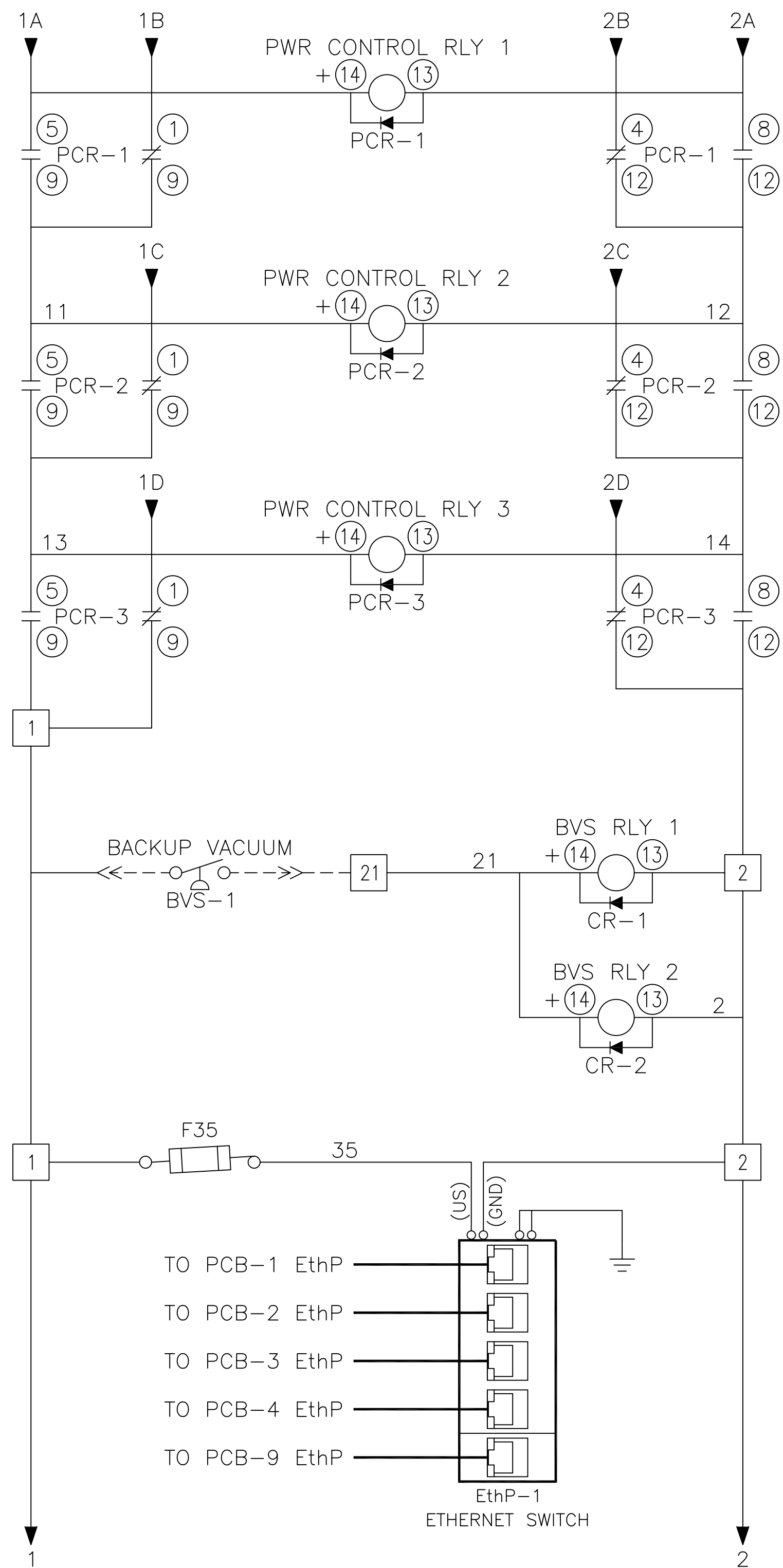
1. FIELD WIRING TO BE COPPER RATED FOR 75°C MINIMUM.



Revised:	BJM	Date:	08/28/10	Drawn:	JAH	Date:	05/10/11
This drawing and the information contained thereon remain 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.							
Description:						Part Number:	
DWG WIRING CONTROL						4107 8523 65	
QX LUBE 5-15HP 208-460V & 20-25HP 380-460V						Rev: 08	
Sheet 2 of 3						DO NOT SCALE THIS DOCUMENT	

Notes:

1. FIELD WIRING TO BE COPPER RATED FOR 75°C MINIMUM.



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 NOT RUNNING 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:

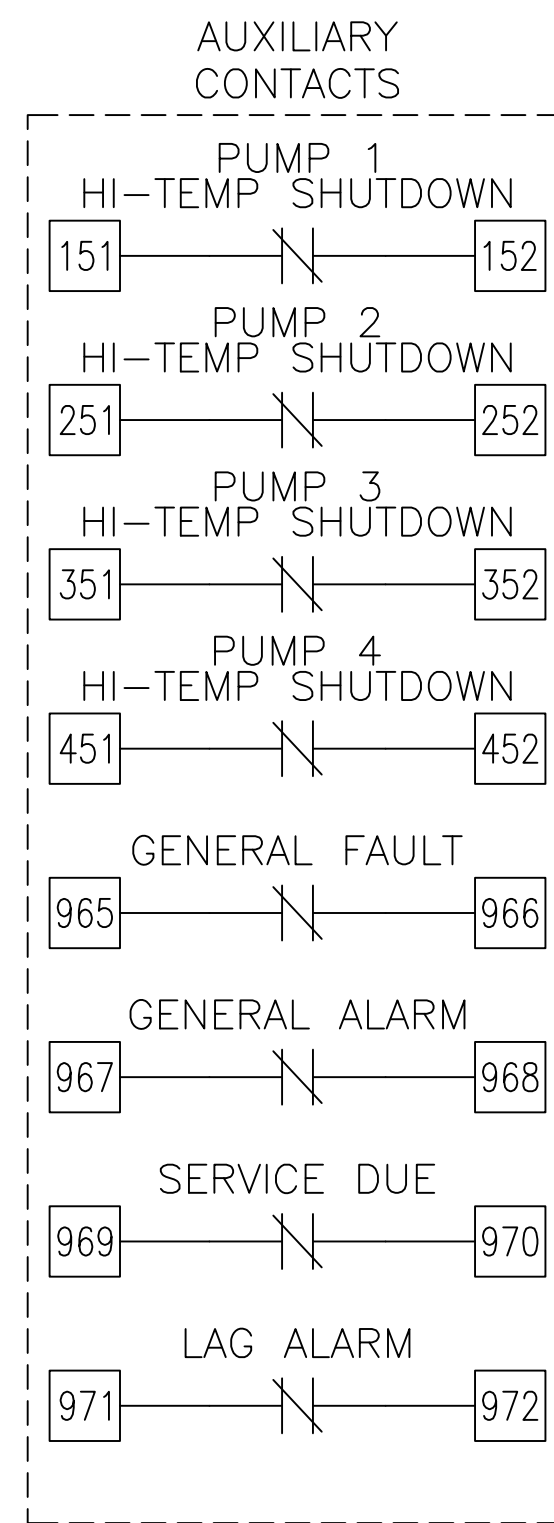
THE PUMP IS DISABLED FROM RUNNING.

POSITION (O) - MANUAL:

THE PUMP WILL RUN CONTINUOUSLY.

PCB FAULT:

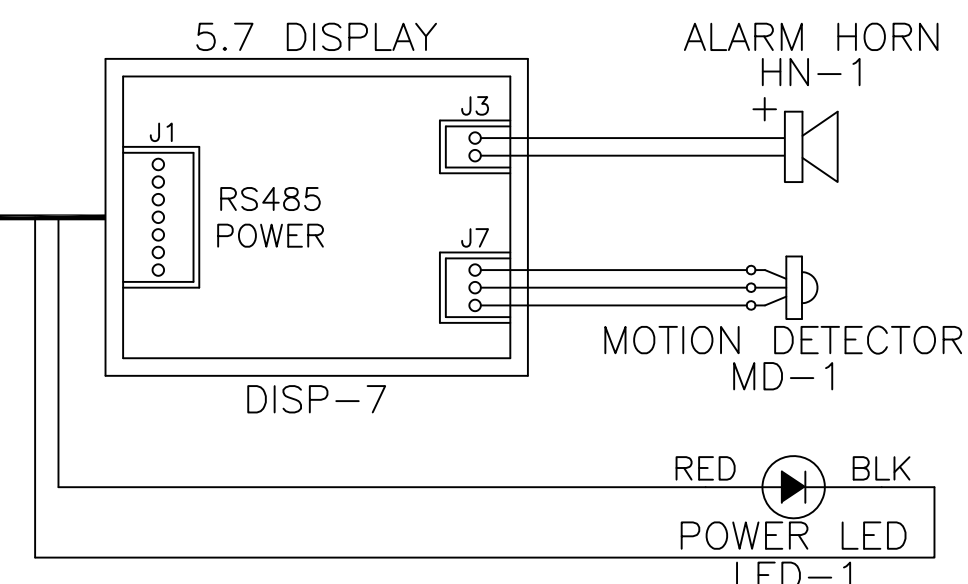
IF A PUMP PCB ETHERNET FAULT OR A TRANSDUCER FAULT OCCURS, THE PUMP PCB WILL AUTOMATICALLY SWITCH TO MANUAL MODE. VACUUM PUMPS WILL START WHEN BVS-1 (BACKUP VACUUM SWITCH) CLOSSES AND STOP WHEN IT OPENS. COMPRESSORS WILL NOT SEQUENCE IN THIS CONDITION AND CAN OPERATE UNTIL THE ETHERNET OR TRANSDUCER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



NOTE: AUXILIARY CONTACTS 151-152, 251-252, 351-352, 451-452, & 965-972 ARE "CLASS 1 CONTROL CIRCUITS. USE CLASS 1 CONDUCTORS."

AUX CONTACTS ARE RATED 0.7Adc/0.7Arms @ 24V MAX. UNLESS OTHERWISE NOTED.

AUX CONTACTS CLOSED DURING NORMAL OPERATION.



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

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DWG WIRING CONTROL OX LUBE 5-15HP 208-460V & 20-25HP 380-460V			Part Number: 4107 8523 65 Rev: HOP 180701 08 Sheet 3 of 3 DO NOT SCALE THIS DOCUMENT