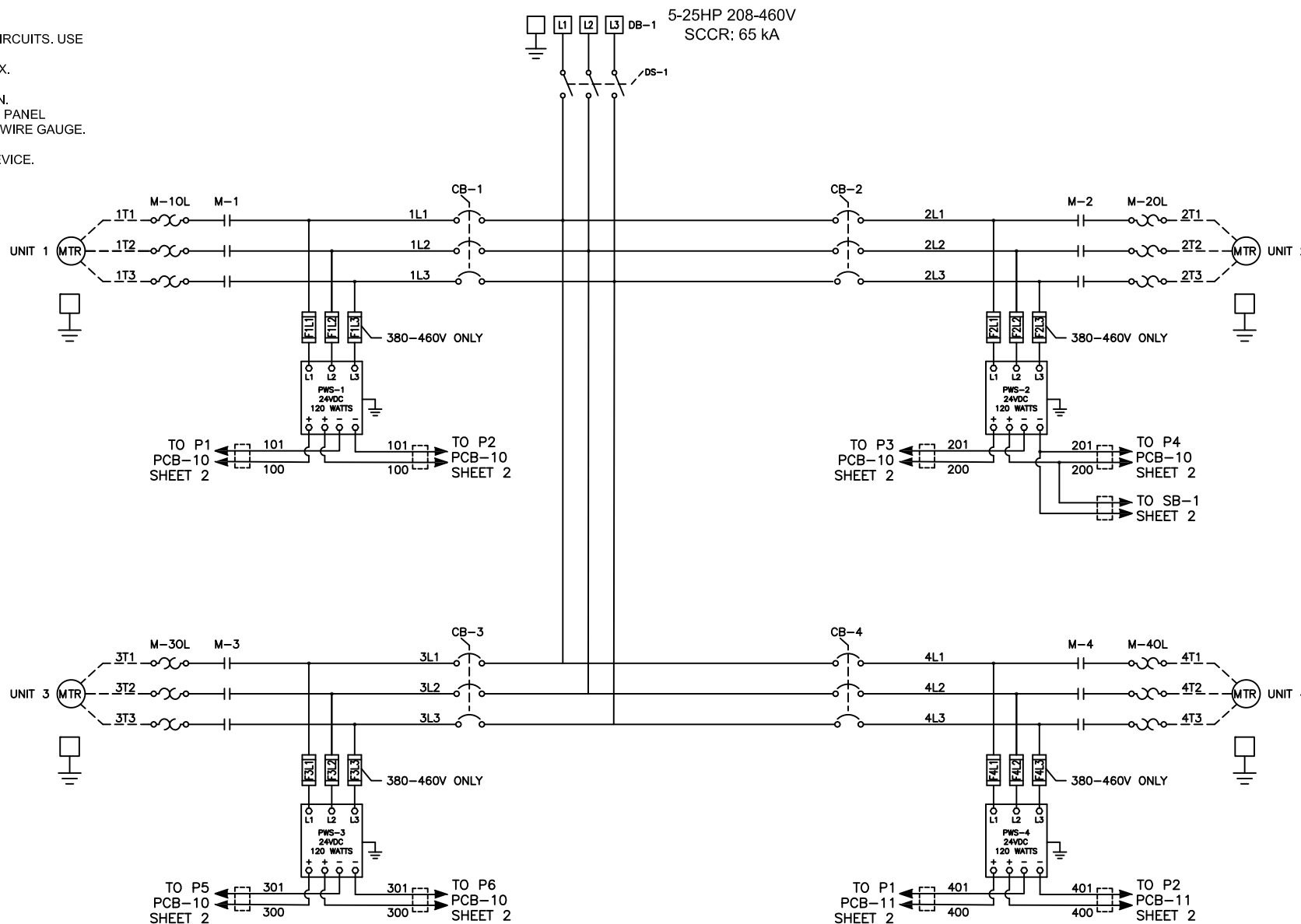


1. MAIN DISCONNECT PROVIDED BY OTHER.
2. FIELD WIRING TO BE COPPER RATED FOR 75°C MINIMUM.
3. - - - - INDICATES FIELD WIRING OUTSIDE OF CABINET.
4. AUXILIARY CONTACTS ON PCB-12 ARE "CLASS 1 CONTROL CIRCUITS. USE CLASS 1 CONDUCTORS."
5. AUXILIARY CONTACTS ARE RATED 0.7 Adc/0.7Arms @ 24V MAX. UNLESS OTHERWISE NOTED.
6. AUXILIARY CONTACTS CLOSED DURING NORMAL OPERATION.
7. THE AMPACITY OF CONDUCTORS SUPPLYING THE CONTROL PANEL TO BE ROUNDED UP TO THE NEXT SIZE LARGER STANDARD WIRE GAUGE.
8. MOP VALUES TO BE ROUNDED DOWN TO THE NEAREST STANDARD RATING OF THE OVERCURRENT PROTECTION DEVICE.
9. SHORT CIRCUIT CURRENT RATING (SCCR): 65 kA



MINIMUM CIRCUIT AMPACITY (MCA)

SYSTEM HP	208 V	230 V	380 V	460 V
5 HP	74.5 AMPS	67.8 AMPS	43.7 AMPS	34.4 AMPS
7.5 HP	106.4 AMPS	96.7 AMPS	62.0 AMPS	48.8 AMPS
10 HP	134.4 AMPS	122.2 AMPS	79.0 AMPS	61.6 AMPS
15 HP	199.9 AMPS	181.7 AMPS	117.3 AMPS	91.3 AMPS
20 HP	256.0 AMPS	232.7 AMPS	147.0 AMPS	116.8 AMPS
25 HP	321.4 AMPS	292.2 AMPS	189.5 AMPS	146.6 AMPS

MAXIMUM OVERCURRENT PROTECTION (MOP)

SYSTEM HP	208 V	230 V	380 V	460 V
5 HP	87.7 AMPS	79.8 AMPS	50.9 AMPS	39.9 AMPS
7.5 HP	127.1 AMPS	115.5 AMPS	73.5 AMPS	57.8 AMPS
10 HP	161.7 AMPS	147.0 AMPS	94.5 AMPS	73.5 AMPS
15 HP	242.6 AMPS	220.5 AMPS	141.8 AMPS	110.3 AMPS
20 HP	311.9 AMPS	283.5 AMPS	178.5 AMPS	141.8 AMPS
25 HP	392.7 AMPS	357.0 AMPS	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	54.1 AMPS	33.2 AMPS	27.5 AMPS
7.5 HP	107.6 AMPS	86.1 AMPS	50.0 AMPS	43.5 AMPS
10 HP	130.8 AMPS	125.7 AMPS	73.6 AMPS	63.1 AMPS
15 HP	202.8 AMPS	158.9 AMPS	90.4 AMPS	79.9 AMPS
20 HP	250.8 AMPS	210.5 AMPS	114.0 AMPS	105.5 AMPS
25 HP	290.8 AMPS	276.1 AMPS	158.4 AMPS	138.3 AMPS

INDIVIDUAL FULL LOAD AMPERES

SYSTEM HP	208 V	230 V	380V/50Hz	460 V
5 HP	14.3 AMPS	12.9 AMPS	7.8 AMPS	6.5 AMPS
7.5 HP	26.2 AMPS	20.9 AMPS	12.0 AMPS	10.5 AMPS
10 HP	32.0 AMPS	30.8 AMPS	17.9 AMPS	15.4 AMPS
15 HP	50.0 AMPS	39.1 AMPS	22.1 AMPS	19.6 AMPS
20 HP	62.0 AMPS	52.0 AMPS	28.0 AMPS	26.0 AMPS
25 HP	72.0 AMPS	68.4 AMPS	39.1 AMPS	34.2 AMPS

FUSE SELECTION CHART (MAX FUSE SIZES SHOWN)

SYSTEM HP	FUSES	208 V	230 V	380 V	460 V
ALL	F1L1-F4L1 F1L2-F4L2	6.0 AMPS	6.0 AMPS	6.0 AMPS	6.0 AMPS
	F1L3-F4L3	---	---	6.0 AMPS	6.0 AMPS
	F1/F2/F3/F4 F5/F6	4.0 AMPS	4.0 AMPS	4.0 AMPS	4.0 AMPS
	F7/F8/F9/F10 F11/F12/F13	1.0 AMP	1.0 AMP	1.0 AMP	1.0 AMP
	F14	3.0 AMP	3.0 AMP	3.0 AMP	3.0 AMP

F1L1-F4L1/F1L2-F4L2/F1L3-F4L3 ARE LITTELFUSE KLDR 600V TYPE
 F1-F13 ARE SCHURTER UMT 250 TIME-LAG 250 VAC TYPE
 F14 IS LITTELFUSE 2AG 250V TYPE

AUTO OPERATION:

DURING NORMAL OPERATION, THE SYSTEM PCB WILL SIGNAL THE LEAD VACUUM PUMP TO START WHEN THE VACUUM FALLS BELOW THE SET-POINT. IF ONE PUMP CAN CARRY THE LOAD, THEN THE VACUUM WILL RISE TO THE SET-POINT. THE PUMP PCB WILL THEN TURN OFF THE LEAD VACUUM PUMP WHEN ITS RUN TIMER EXPIRES. WHEN THE SYSTEM VACUUM FALLS AGAIN, THE SYSTEM PCB WILL SEQUENCE THE LEAD ROLE TO THE NEXT PUMP PCB AND IT WILL START. IF DURING OPERATION THE SYSTEM VACUUM FALLS BELOW 15"Hg, THE LAG PUMP WILL START AND A LAG ALARM WILL OCCUR.

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 FAULT OR A TRANSDUCER FAULT OCCURS, THE PUMP PCB WILL AUTOMATICALLY SWITCH TO MANUAL MODE. COMPRESSORS WILL START WHEN BVS-1 (BACKUP VACUUM SWITCH) CLOSSES AND STOP WHEN IT OPENS AND THE RUN TIMER EXPIRES.

DEFAULT VACUUM SETTINGS

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

SYSTEM/PUMP PCB JUMPER/SWT SETTINGS

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

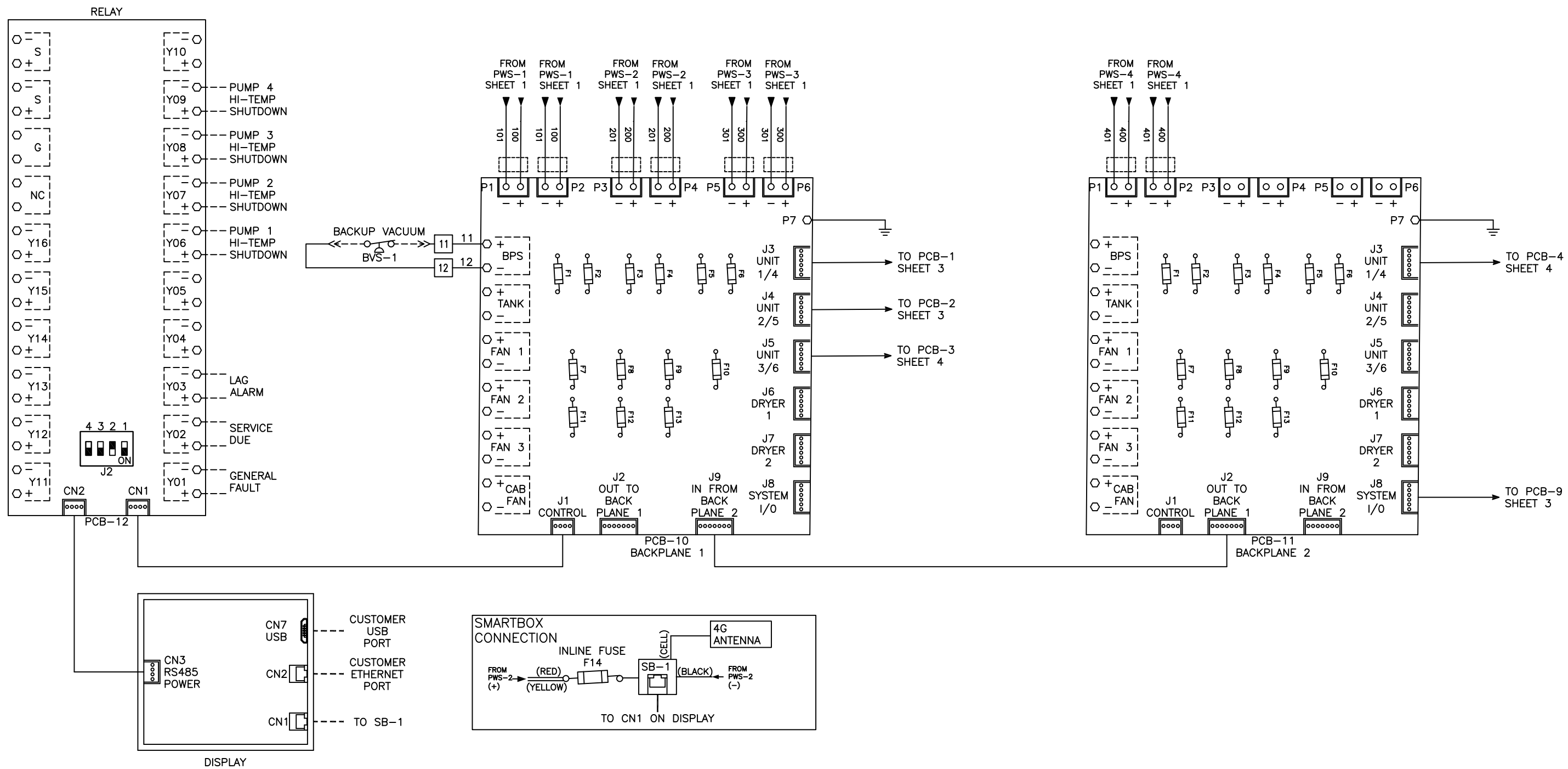
BACKUP VACUUM SWITCH ("HgV)

BVS-1	CUT-ON	15
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Revised: BKW	Date: 01/09/25	Drawn: TAR	Date: 06/08/23
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Description: DWG WIRING CONTROL QX LUBE 5-25HP GEN2 208-460/3/50-60, 65KA		Part Number: 4107 8581 28 DN: HOP250020 Rev: 03 Sheet 1 of 4 DO NOT SCALE THIS DOCUMENT	

Notes:

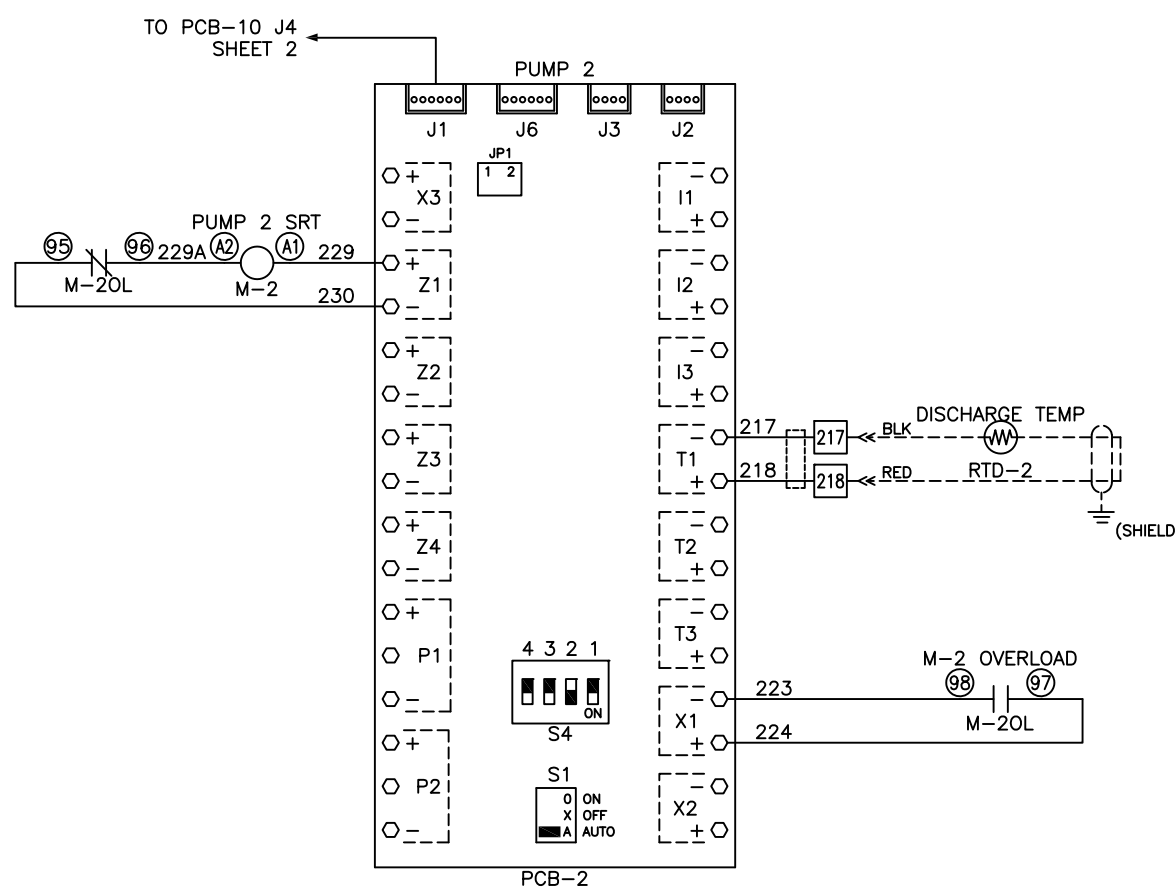
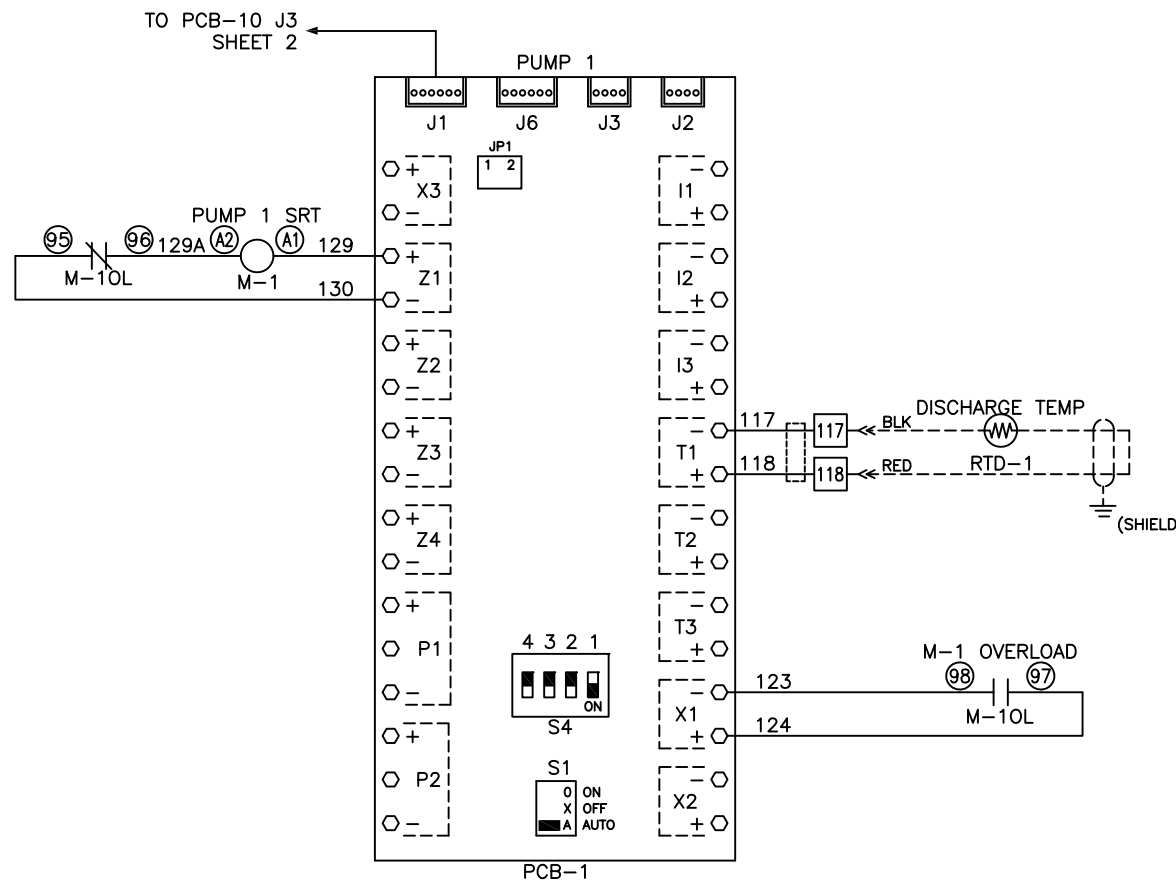
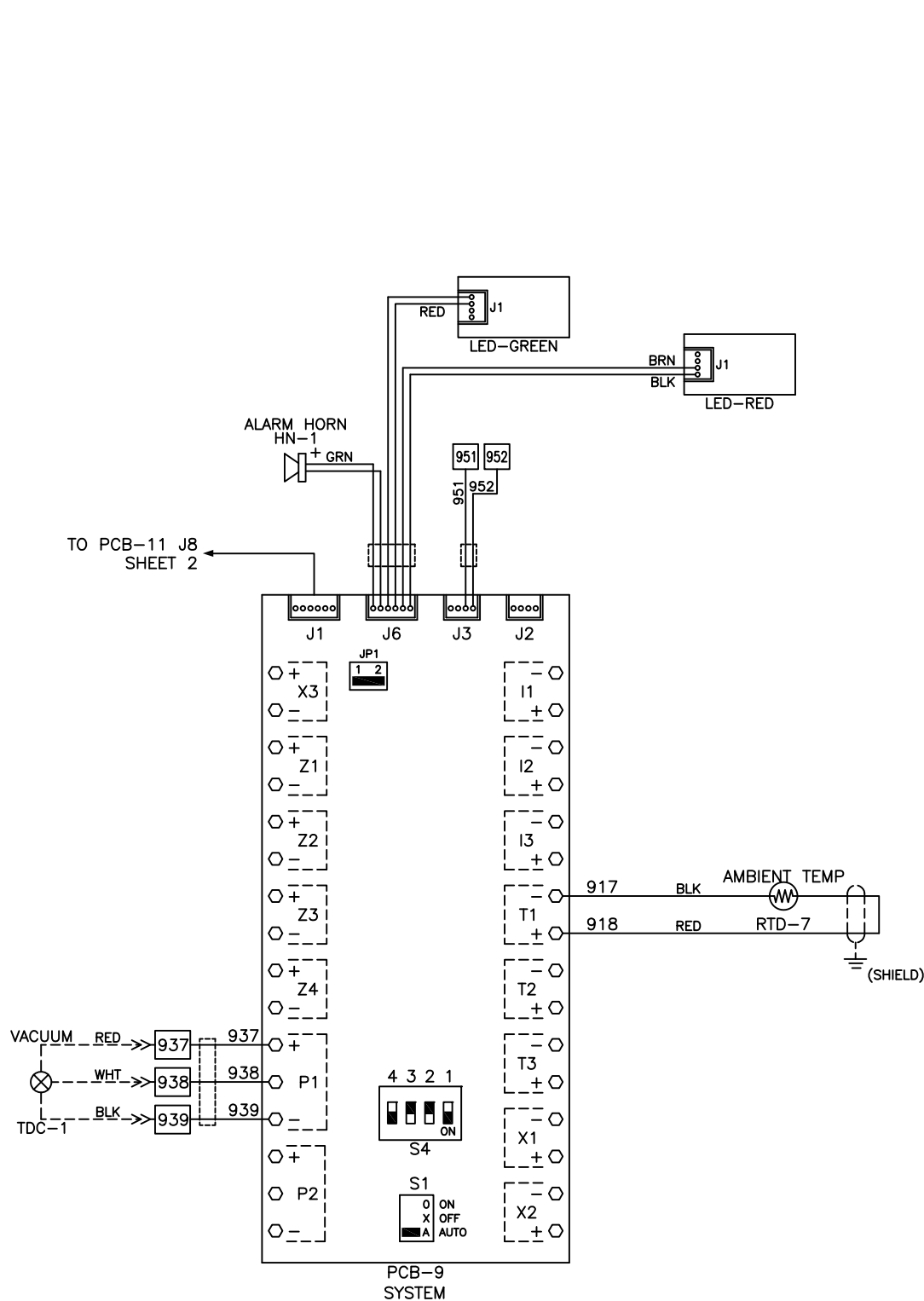
1. FIELD WIRING TO BE COPPER RATED FOR 75°C MINIMUM.



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BEACONMEDDES <small>This drawing and the information contained therein remain the property of BeaconMeddes and may not be used for other than the purpose for which it is loaned without the expressed written permission from BeaconMeddes Engineering.</small>			Scale: NTS
Description: DWG WIRING CONTROL QX LUBE 5-25HP GEN2 208-460/3/50-60, 65kA		Part Number: 4107 8581 28 DNE: HOP250020 Rev: 03 Sheet 2 of 4 <small>DO NOT SCALE THIS DOCUMENT</small>	

Notes:

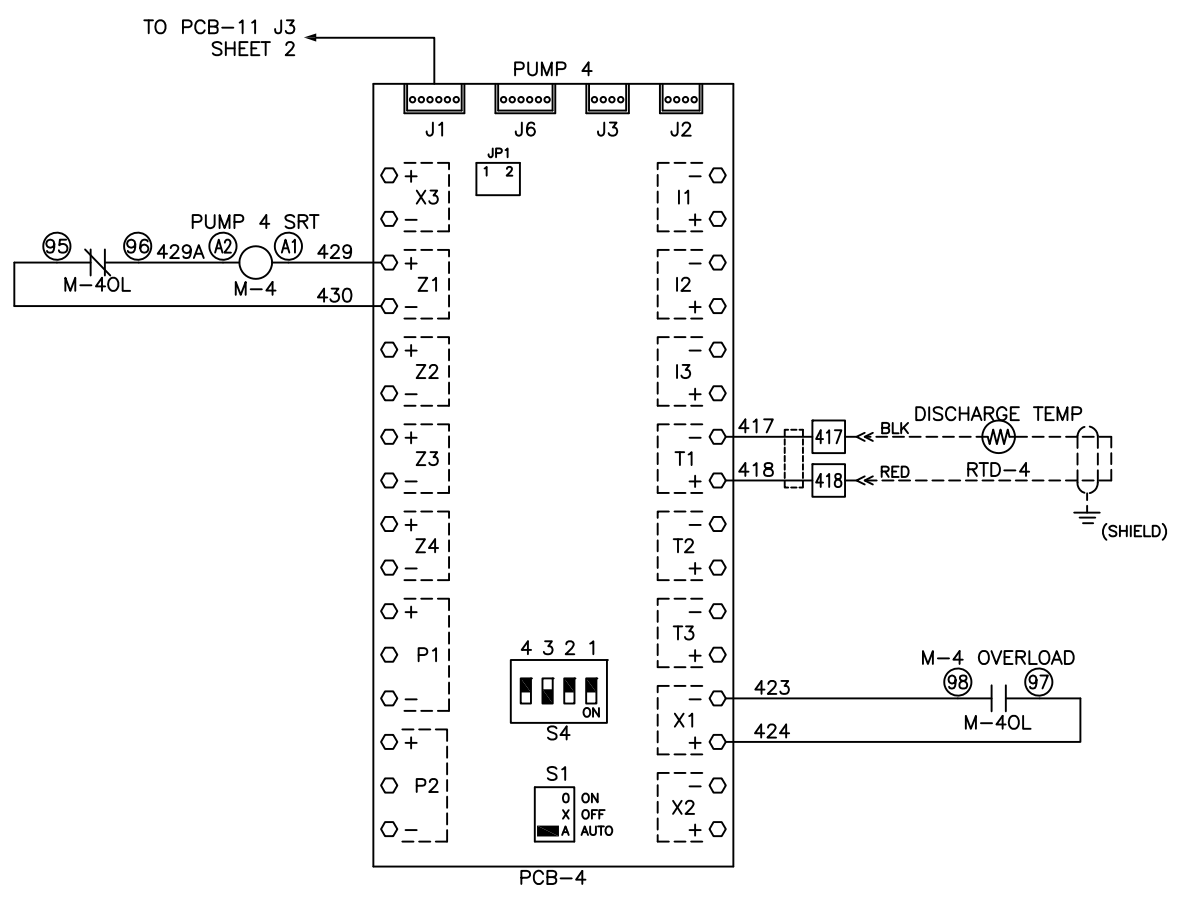
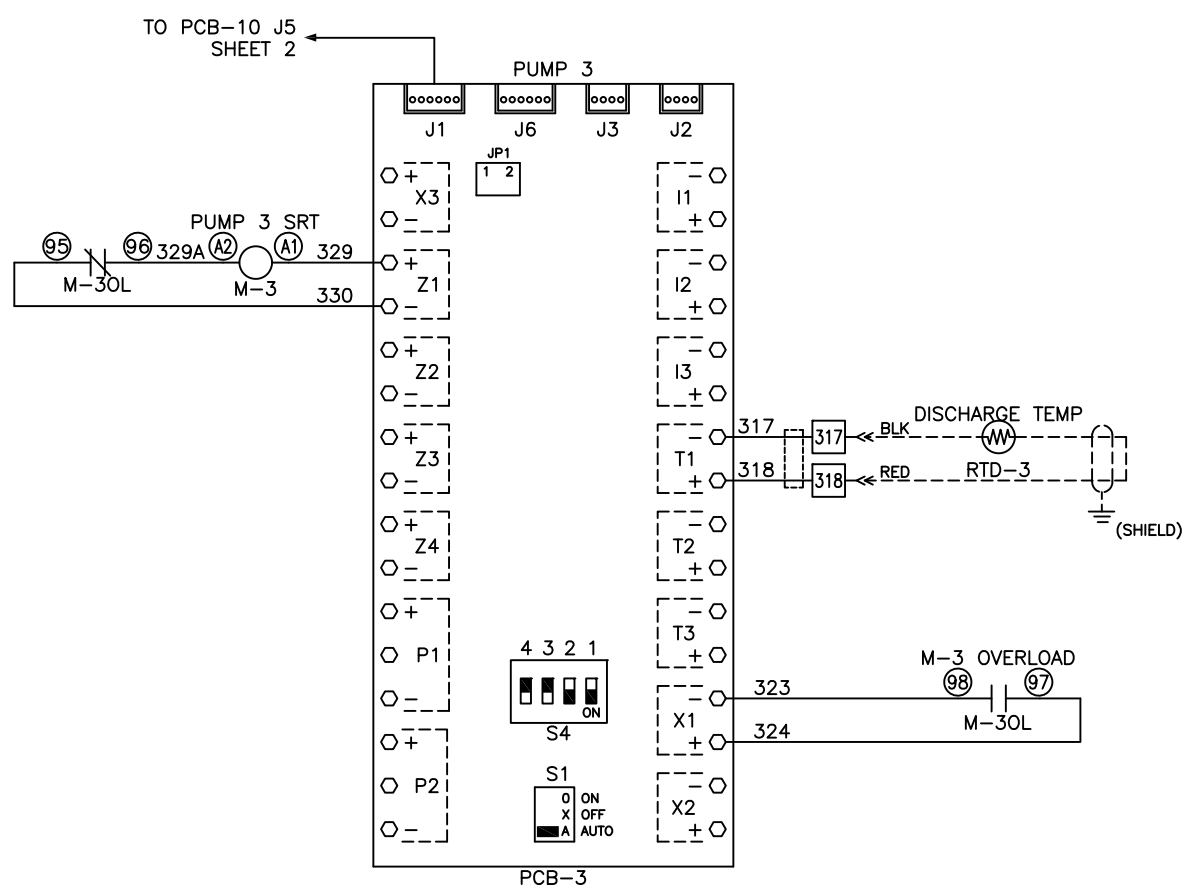
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D			
Description: DWG WIRING CONTROL QX LUBE 5-25HP GEN2 208-460/3/50-60, 65kA		Part Number: 4107 8581 28 Rev: HOP250020 03 Sheet 3 of 4	

Notes:

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



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			Scale: NTS
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Description: DWG WIRING CONTROL QX LUBE 5-25HP GEN2 208-460/3/50-60, 65kA		Part Number: 4107 8581 28 Rev: 03	
Sheet 4 of 4		DO NOT SCALE THIS DOCUMENT	