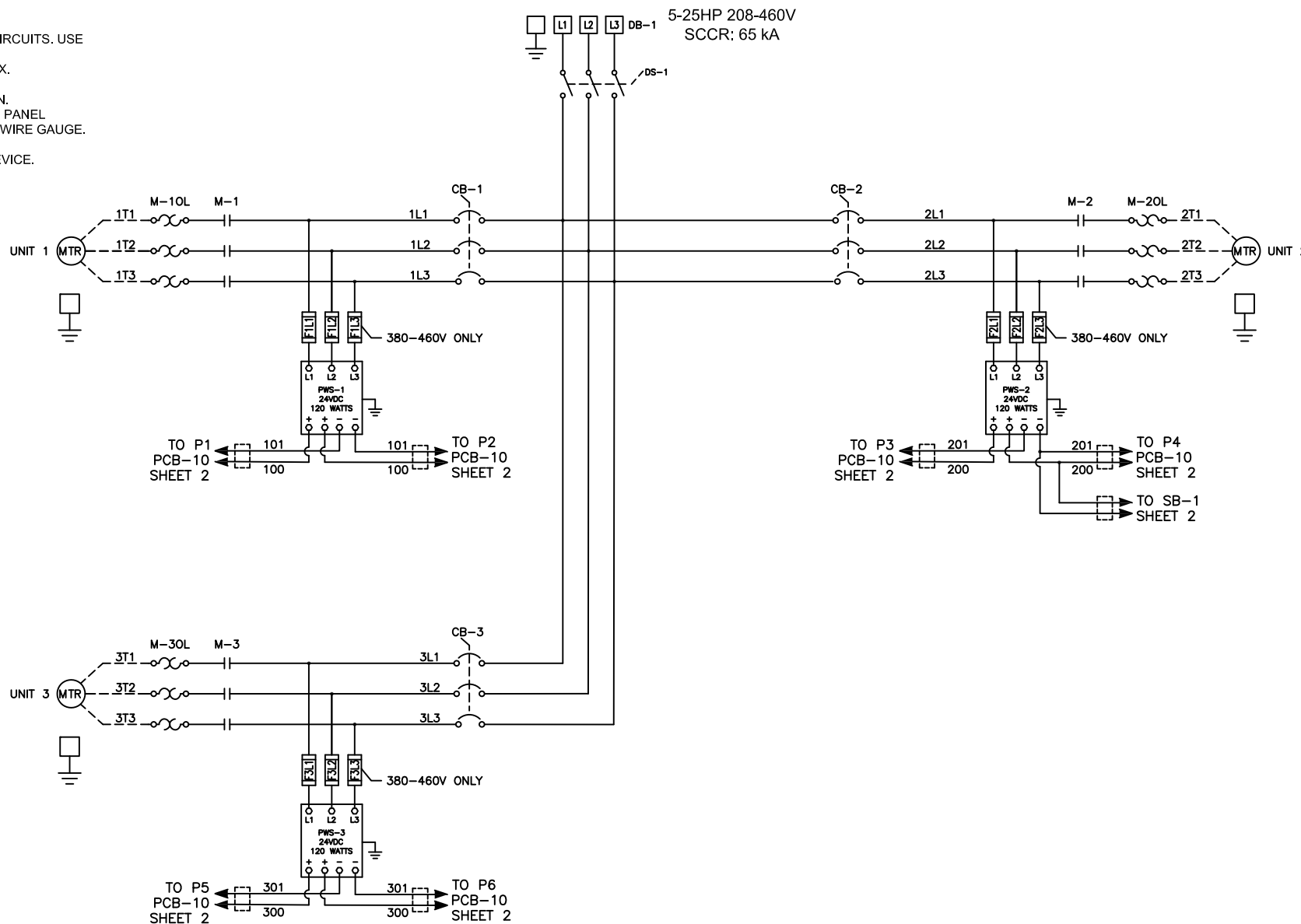


1. MAIN DISCONNECT PROVIDED BY OTHER.
2. FIELD WIRING TO BE COPPER RATED FOR 75°C MINIMUM.
3. - - - - INDICATES FIELD WIRING OUTSIDE OF CABINET.
4. AUXILIARY CONTACTS ON PCB-12 ARE "CLASS 1 CONTROL CIRCUITS. USE CLASS 1 CONDUCTORS."
5. AUXILIARY CONTACTS ARE RATED 0.7 Adc/0.7Arms @ 24V MAX. UNLESS OTHERWISE 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	56.9 AMPS	51.8 AMPS	33.4 AMPS	26.2 AMPS
7.5 HP	81.3 AMPS	73.9 AMPS	47.4 AMPS	37.3 AMPS
10 HP	102.7 AMPS	93.4 AMPS	60.4 AMPS	47.0 AMPS
15 HP	152.8 AMPS	138.9 AMPS	89.6 AMPS	69.8 AMPS
20 HP	195.7 AMPS	177.9 AMPS	112.4 AMPS	89.3 AMPS
25 HP	245.7 AMPS	223.4 AMPS	144.9 AMPS	112.0 AMPS

**MAXIMUM OVERCURRENT PROTECTION (MOP)**

SYSTEM HP	208 V	230 V	380 V	460 V
5 HP	71.0 AMPS	64.6 AMPS	41.2 AMPS	32.3 AMPS
7.5 HP	102.9 AMPS	93.5 AMPS	59.5 AMPS	46.8 AMPS
10 HP	130.9 AMPS	119.0 AMPS	76.5 AMPS	59.5 AMPS
15 HP	196.4 AMPS	178.5 AMPS	114.8 AMPS	89.3 AMPS
20 HP	252.5 AMPS	229.5 AMPS	144.5 AMPS	114.8 AMPS
25 HP	317.9 AMPS	289.0 AMPS	187.0 AMPS	144.5 AMPS

**TRIPLEX SYSTEM FULL LOAD AMPERES**

SYSTEM HP	208 V	230 V	380V/50Hz	460 V
5 HP	45.0 AMPS	40.6 AMPS	24.9 AMPS	20.7 AMPS
7.5 HP	80.7 AMPS	64.6 AMPS	37.5 AMPS	32.7 AMPS
10 HP	98.1 AMPS	94.3 AMPS	55.2 AMPS	47.4 AMPS
15 HP	152.1 AMPS	119.2 AMPS	67.8 AMPS	60.0 AMPS
20 HP	188.1 AMPS	157.9 AMPS	85.5 AMPS	79.2 AMPS
25 HP	218.1 AMPS	207.1 AMPS	118.8 AMPS	103.8 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-F3L1 F1L2-F3L2	6.0 AMPS	6.0 AMPS	6.0 AMPS	6.0 AMPS
	F1L3-F3L3	---	---	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-F3L1/F1L2-F3L2/F1L3-F3L3 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.

**SYSTEM/PUMP PCB JUMPER/SWT SETTINGS**

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

**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					

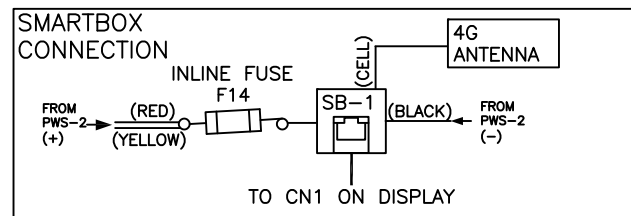
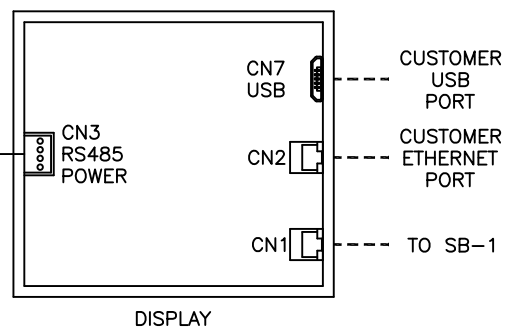
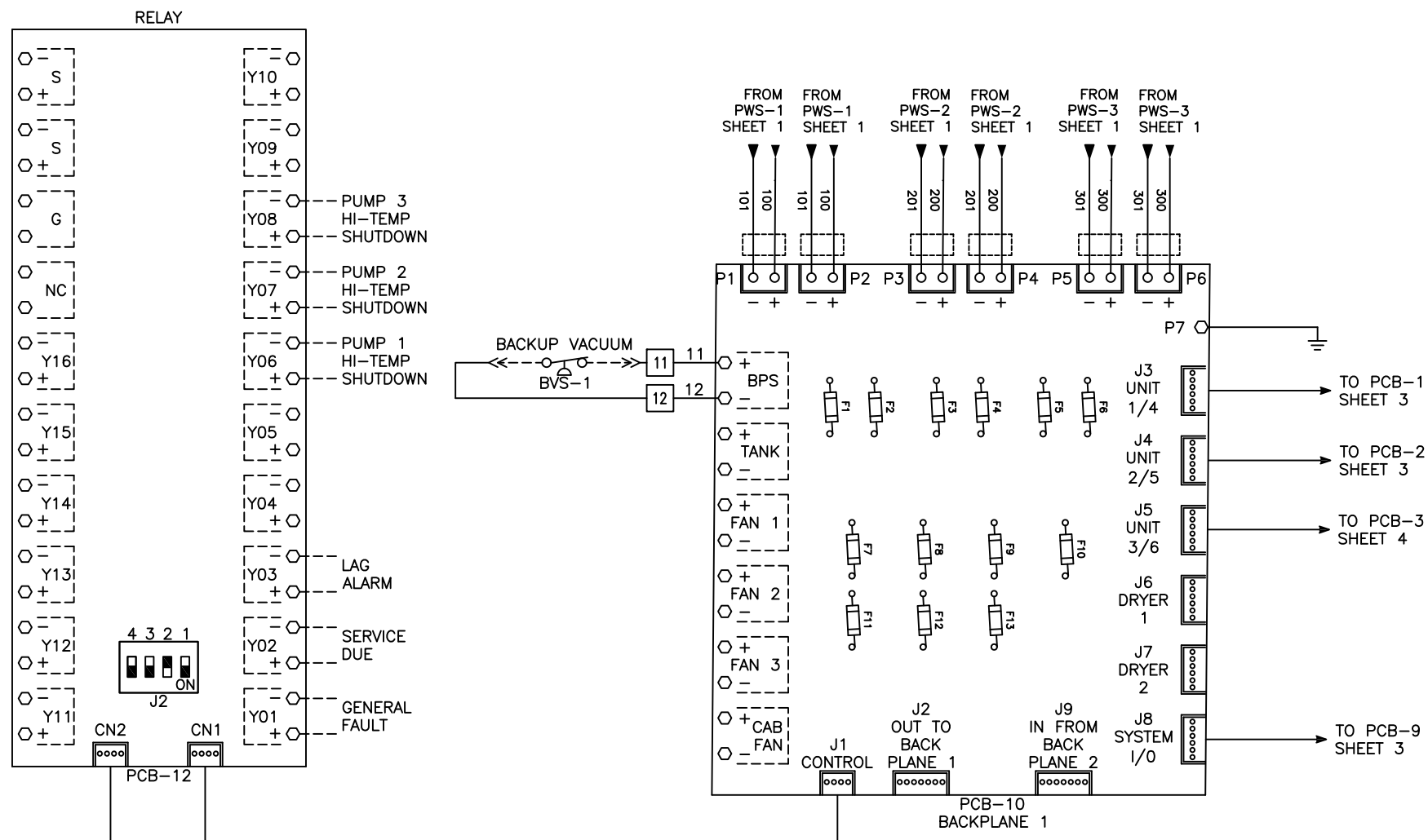
**BACKUP VACUUM SWITCH ("HgV)**

BVS-1	CUT-ON	15
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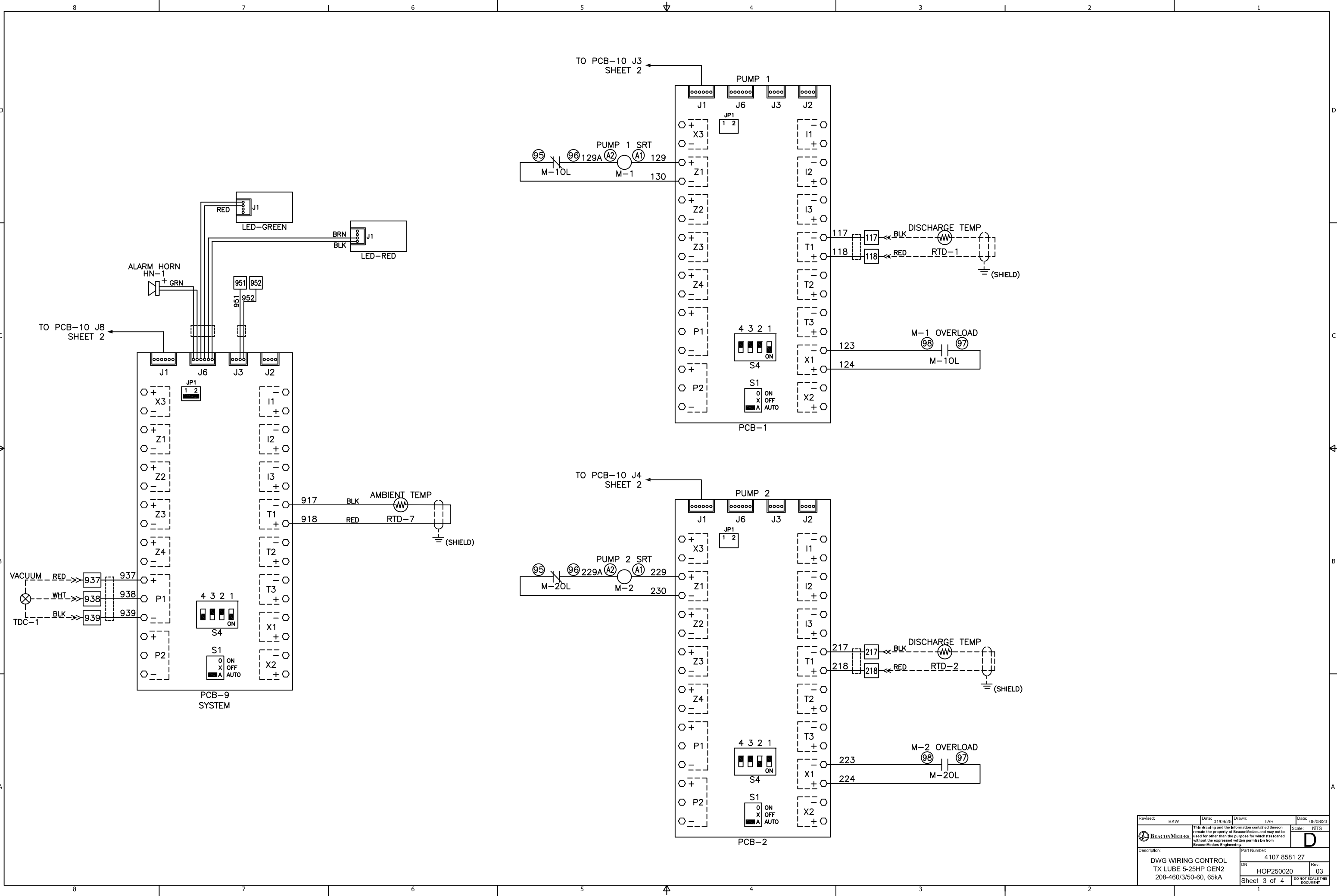
Revised: BKW Date: 01/09/25 Drawn: TAR Date: 06/08/23  
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 Description: DWG WIRING CONTROL TX LUBE 5-25HP GEN2 208-460/3/50-60, 65KA Part Number: 4107 8581 27  
 Scale: NTS  
 DN: HOP250020 Rev: 03  
 Sheet 1 of 4 DO NOT SCALE THIS DOCUMENT

Notes:

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



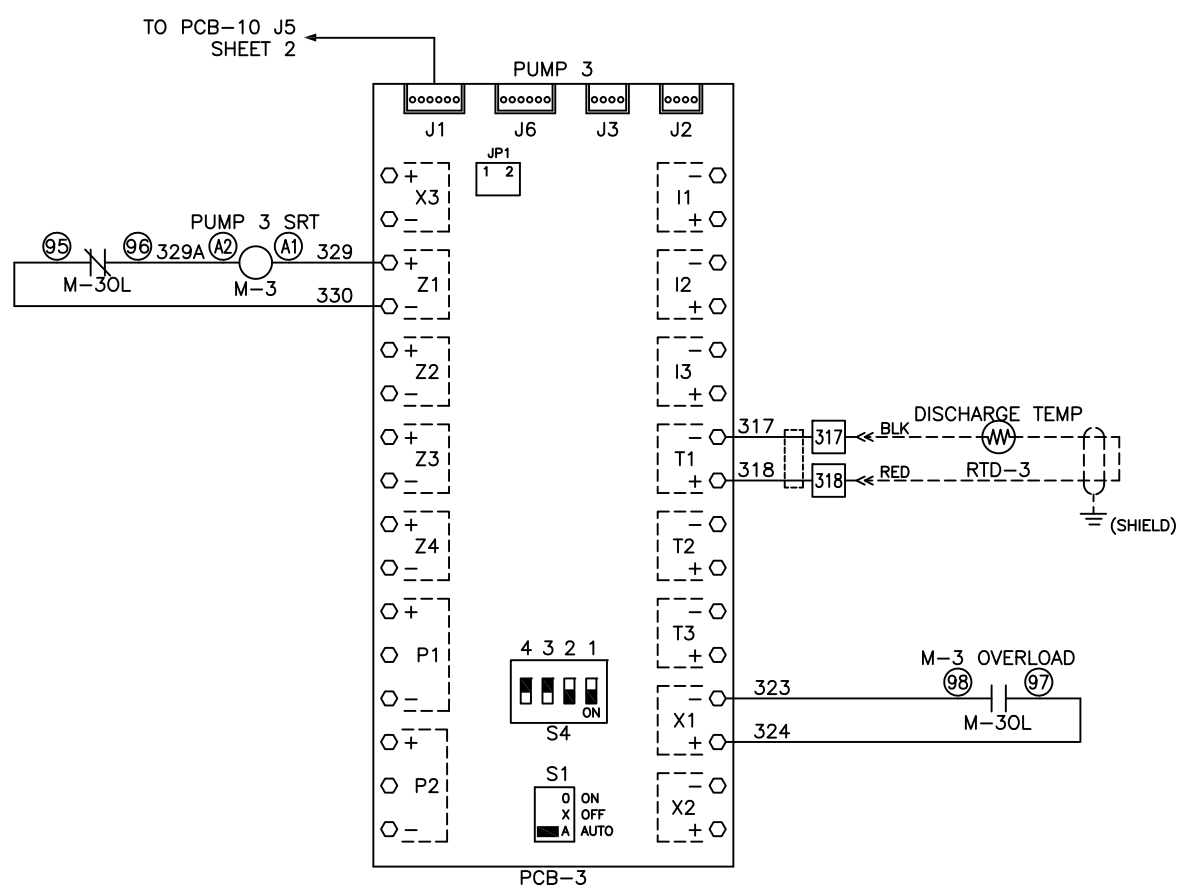
Revised: BKW	Date: 01/09/25	Drawn: TAR	Date: 06/08/23
BEACONMEDES <small>This drawing and the information contained therein remain the property of BeaconMedes and may not be used for other than the purpose for which it is loaned without the expressed written permission from BeaconMedes Engineering.</small>			Scale: NTS
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<b>BEACONMEDICS</b>							<b>D</b>	Part Number: 4107 8581 27
Description: DWG WIRING CONTROL TX LUBE 5-25HP GEN2 208-460/3/50-60, 65kA								
Sheet 3 of 4							DO NOT SCALE THIS DOCUMENT	

Notes:

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



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Sheet 4 of 4						<small>DO NOT SCALE THIS DOCUMENT</small>	