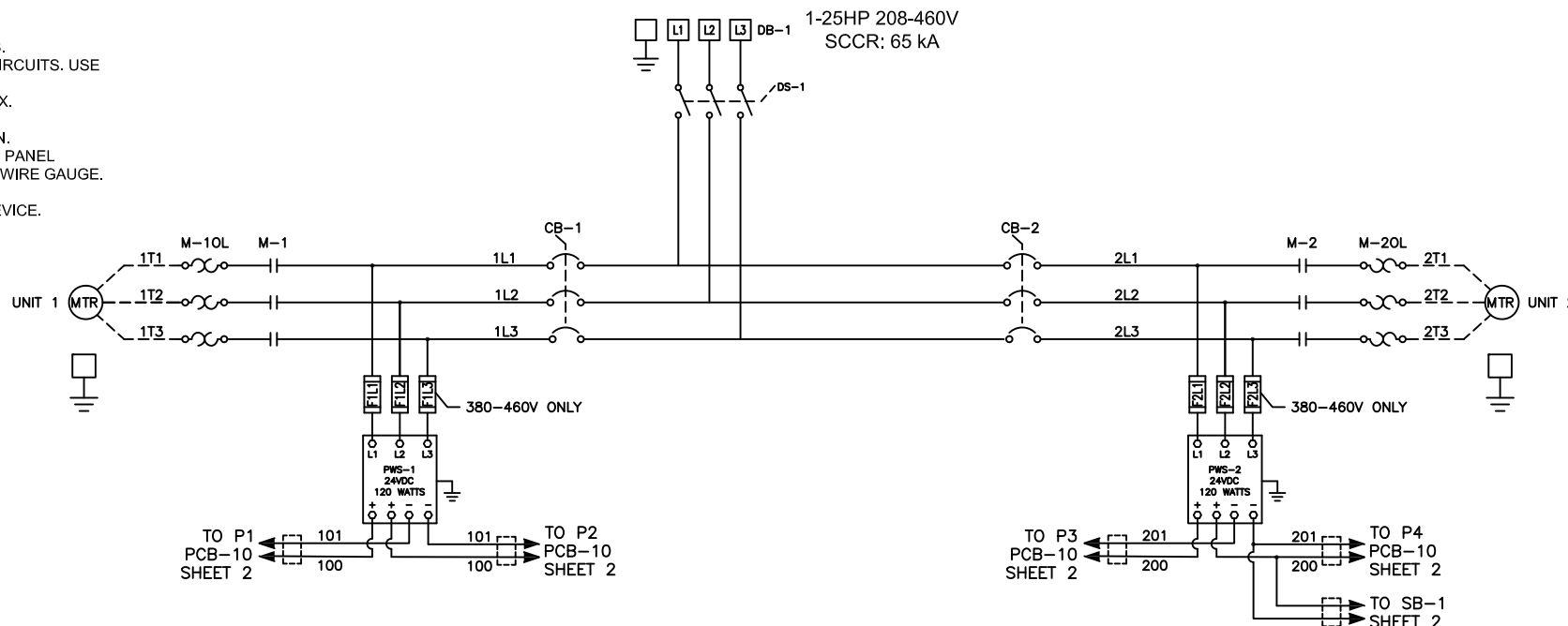


1. MAIN DISCONNECT PROVIDED BY OTHER.
2. FIELD WIRING TO BE COPPER RATED FOR 75°C MINIMUM.
3. - - - - INDICATES FIELD WIRING OUTSIDE OF CABINET.
4. * INDICATES DATA FOR HORIZONTAL TANK MOUNT SYSTEMS.
5. AUXILIARY CONTACTS ON PCB-12 ARE "CLASS 1 CONTROL CIRCUITS. USE CLASS 1 CONDUCTORS."
6. AUXILIARY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



MINIMUM CIRCUIT AMPACITY (MCA)

SYSTEM HP	208 V	230 V	380V/50Hz	415V/50Hz	460 V
1.5 HP	16.6 AMPS	15.1 AMPS	8.7 AMPS	----	7.8 AMPS
2 HP	18.6 AMPS	16.9 AMPS	10.9 AMPS	----	8.7 AMPS
3 HP	25.6 AMPS	23.2 AMPS	15.0 AMPS	----	11.8 AMPS
5 HP	39.3 AMPS	35.8 AMPS	23.1 AMPS	----	18.1 AMPS
7.5 HP	56.2 AMPS	51.1 AMPS	32.8 AMPS	----	25.8 AMPS
10 HP	71.1 AMPS	64.6 AMPS	41.8 AMPS	----	32.5 AMPS
15 HP	105.7 AMPS	96.1 AMPS	62.0 AMPS	62.0 AMPS	48.3 AMPS
20 HP	135.4 AMPS	123.1 AMPS	77.8 AMPS	----	61.8 AMPS
25 HP	170.1 AMPS	154.6 AMPS	100.3 AMPS	100.3 AMPS	77.5 AMPS

MAXIMUM OVERCURRENT PROTECTION (MOP)

SYSTEM HP	208 V	230 V	380V/50Hz	460 V
1.5 HP	21.5 AMPS	19.5 AMPS	10.7 AMPS	9.8 AMPS
2 HP	24.4 AMPS	22.1 AMPS	14.0 AMPS	11.1 AMPS
3 HP	34.5 AMPS	31.2 AMPS	19.8 AMPS	15.6 AMPS
5 HP	54.3 AMPS	49.4 AMPS	31.5 AMPS	24.7 AMPS
7.5 HP	78.7 AMPS	71.5 AMPS	45.5 AMPS	35.8 AMPS
10 HP	100.1 AMPS	91.0 AMPS	58.5 AMPS	45.5 AMPS
15 HP	150.2 AMPS	136.5 AMPS	87.8 AMPS	68.3 AMPS
20 HP	193.1 AMPS	175.5 AMPS	110.5 AMPS	87.8 AMPS
25 HP	243.1 AMPS	221.0 AMPS	143.0 AMPS	110.5 AMPS

DUPLEX SYSTEM FULL LOAD AMPERES

SYSTEM HP	208 V	230 V	380V/50Hz	460 V
1.5 HP	10.4 AMPS	10.1 AMPS	6.0 AMPS	5.2 AMPS
2 HP	12.6 AMPS	12.1 AMPS	7.2 AMPS	6.2 AMPS
3 HP	19.4 AMPS	16.9 AMPS	10.2 AMPS	8.6 AMPS
*5 HP	31.4 AMPS	27.9 AMPS	16.2 AMPS	14.2 AMPS
5 HP	30.0 AMPS	27.1 AMPS	16.6 AMPS	13.8 AMPS
7.5 HP	53.8 AMPS	43.1 AMPS	25.0 AMPS	21.8 AMPS
10 HP	65.4 AMPS	62.9 AMPS	36.8 AMPS	31.6 AMPS
15 HP	101.4 AMPS	79.5 AMPS	45.2 AMPS	40.0 AMPS
20 HP	125.4 AMPS	105.3 AMPS	57.0 AMPS	52.8 AMPS
25 HP	145.4 AMPS	138.1 AMPS	79.2 AMPS	69.2 AMPS

INDIVIDUAL FULL LOAD AMPERES

SYSTEM HP	208 V	230 V	380V/50Hz	460 V
1.5 HP	4.5 AMPS	4.4 AMPS	2.5 AMPS	2.2 AMPS
2 HP	5.6 AMPS	5.4 AMPS	3.1 AMPS	2.7 AMPS
3 HP	9.0 AMPS	7.8 AMPS	4.6 AMPS	3.9 AMPS
*5 HP	15.0 AMPS	13.3 AMPS	7.6 AMPS	6.7 AMPS
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-F2L1 F1L2-F2L2	6.0 AMPS	6.0 AMPS	6.0 AMPS	6.0 AMPS
	F1L3-F2L3	----	----	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-F2L1/F1L2-F2L2/F1L3-F2L3 ARE LITTELFUSE KLDLR 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) CLOSES 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					

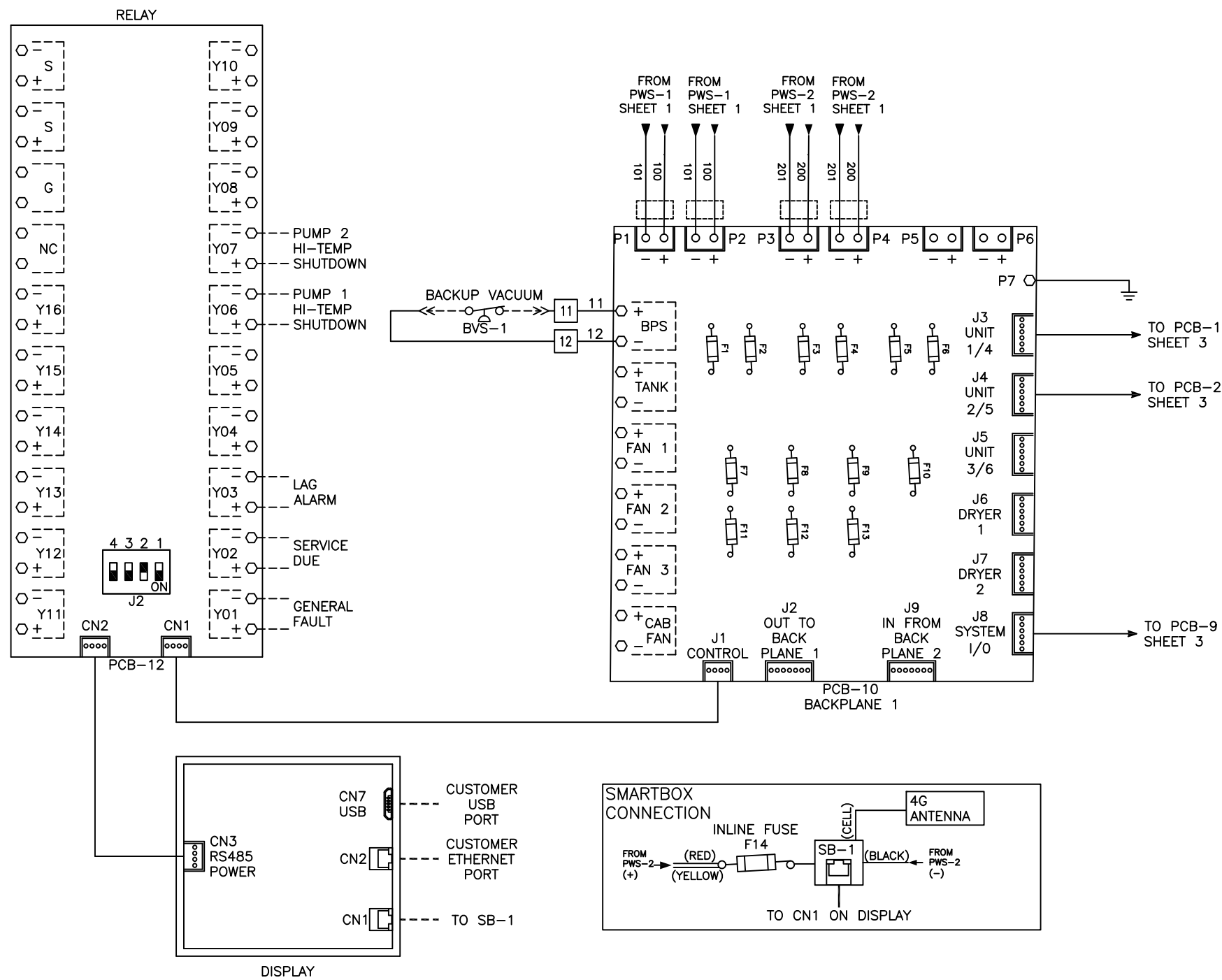
BACKUP VACUUM SWITCH ("HgV)

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 DX LUBE 1-25HP GEN2 208-460/3/50-60, 65KA		Part Number: 4107 8581 26	
DN: HOP250020		Rev: 03	Sheet 1 of 3
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Notes:

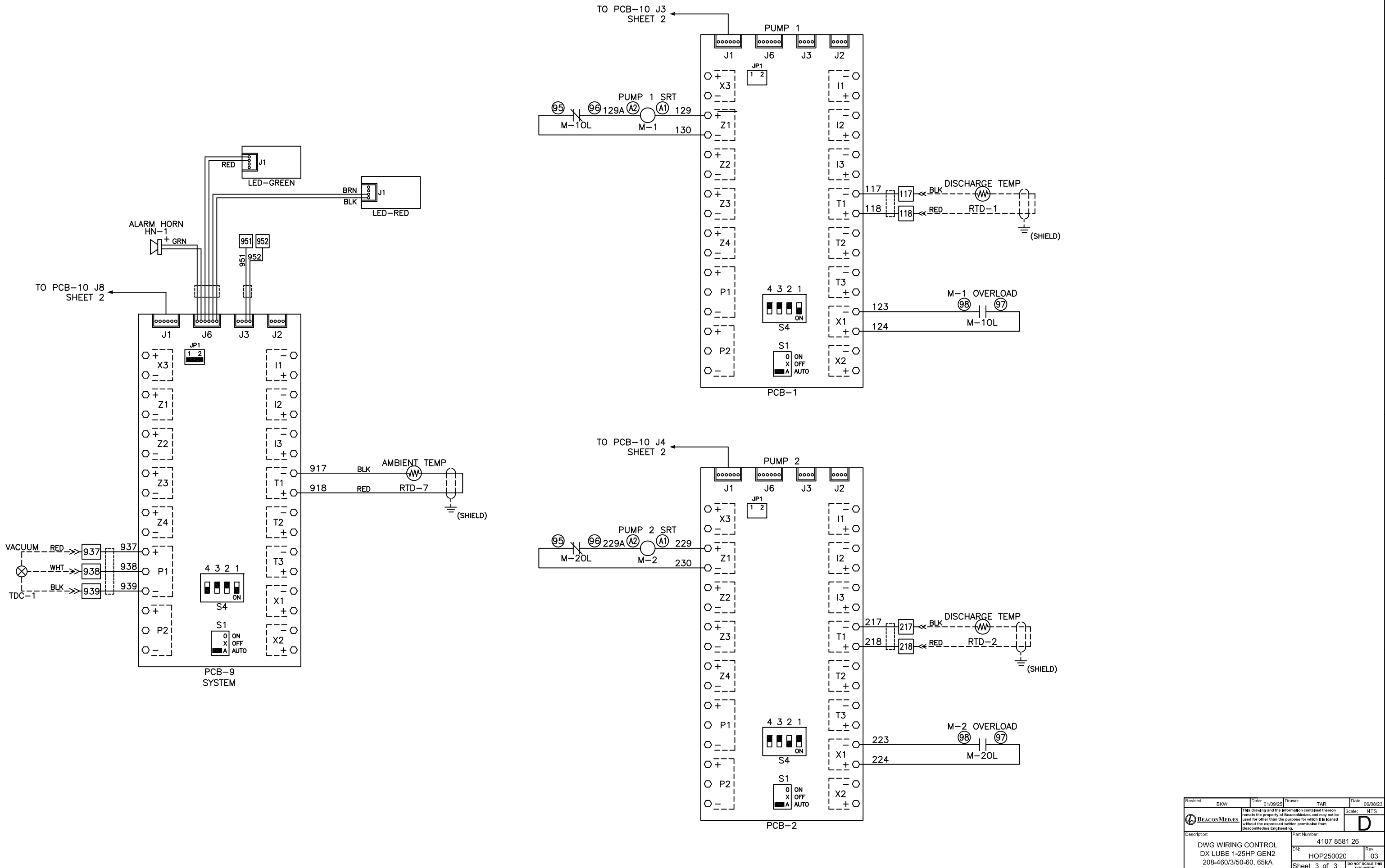
1. FIELD WIRING TO BE COPPER RATED FOR 75°C MINIMUM.



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			D
Description: DWG WIRING CONTROL DX LUBE 1-25HP GEN2 208-460/3/50-60, 65kA		Part Number: 4107 8581 26 DNE: HOP250020 Rev: 03	
Sheet 2 of 3		DO NOT SCALE THIS DOCUMENT	

Notes:

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



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