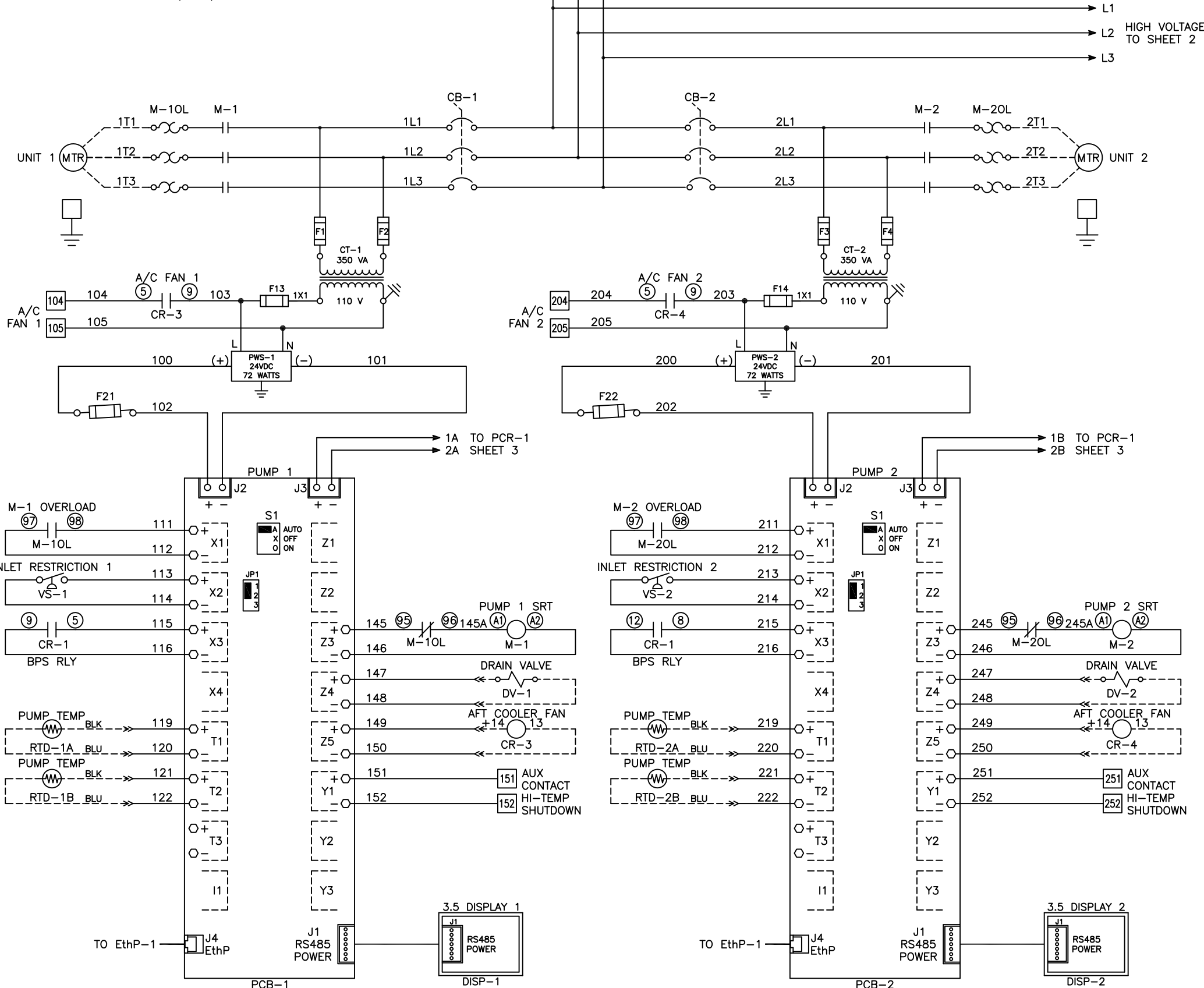


Notes:

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 CONTACT LIST 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): 65 kA

20HP 208-460V
SCCR: 65 kA



MINIMUM CIRCUIT AMPACITY (MCA)

SYSTEM HP	208 V	230 V	380 V	460 V
20 HP	256.0 AMPS	232.7 AMPS	147.0 AMPS	116.8 AMPS

MAXIMUM OVERCURRENT PROTECTION (MOP)

SYSTEM HP	208 V	230 V	380 V	460 V
20 HP	311.9 AMPS	283.5 AMPS	178.5 AMPS	141.8 AMPS

QUADRUPLEX SYSTEM FULL LOAD AMPERES

SYSTEM HP	208 V	230 V	380V/50Hz	460 V
20 HP	202.8 AMPS	190.5 AMPS	114.0 AMPS	95.6 AMPS

INDIVIDUAL FULL LOAD AMPERES

SYSTEM HP	208 V	230 V	380V/50Hz	460 V
20 HP	50.0 AMPS	47.0 AMPS	28.0 AMPS	23.5 AMPS

FUSE SELECTION CHART (MAX FUSE SIZES SHOWN)

FUSES	208 V	230 V	380 V	460 V
F1-F8	5.0 AMPS	4.0 AMPS	3.5 AMPS	2.0 AMPS
F13-F16	4.0 AMPS	4.0 AMPS	4.0 AMPS	4.0 AMPS
F21-F24	3.0 AMPS	3.0 AMPS	3.0 AMPS	3.0 AMPS
F31/F32/ F33/F34	1.0 AMP	1.0 AMP	1.0 AMP	1.0 AMP
F35	0.5 AMP	0.5 AMP	0.5 AMP	0.5 AMP

F1-F8 ARE LITTELFUSE KLDR 600V TYPE
F13-F16 ARE LITTELFUSE FLM 250V TYPE
F21-F24/F31-F35 ARE LITTELFUSE 2AG 250V TYPE

DEFAULT PUMP PSI SETTINGS

PUMP SEQUENCE	PSI
LEAD CUT-OFF	110
LAG CUT-ON	85

PUMP/DRYER PCB JUMPER/SWT SETTINGS

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

BACKUP PRESSURE SWT SETTINGS

BPS-1 CUT-OFF	105
BPS-1 CUT-ON	80

AUTO OPERATION:

DURING NORMAL OPERATION, THE MASTER PCB WILL SIGNAL THE LEAD COMPRESSOR TO START WHEN THE PRESSURE FALLS BELOW THE SET-POINT FOR THE LEAD PUMP. IF ONE PUMP CAN CARRY THE LOAD, THE PRESSURE WILL RISE TO 110 PSI. THE MASTER PCB WILL THEN SIGNAL THE PUMP PCB TO TURN OFF THE LEAD COMPRESSOR. WHEN THE SYSTEM PRESSURE DROPS AGAIN BELOW THE LEAD SET-POINT, THE MASTER PCB WILL SEQUENCE THE LEAD ROLE TO THE NEXT COMPRESSOR AND IT WILL START. IF ANY LEAD COMPRESSOR RUNS FOR MORE THAN 17 MINUTES AND CANNOT REACH 110 PSI, THE MASTER PCB WILL TURN OFF THE COMPRESSOR THAT IS RUNNING AND SEQUENCE TO THE NEXT COMPRESSOR. IF DURING OPERATION THE PRESSURE FALLS BELOW 85 PSI, THE LAG COMPRESSOR 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 START AND STOP ON THE BACK UP PRESSURE SWITCH (BPS-1).

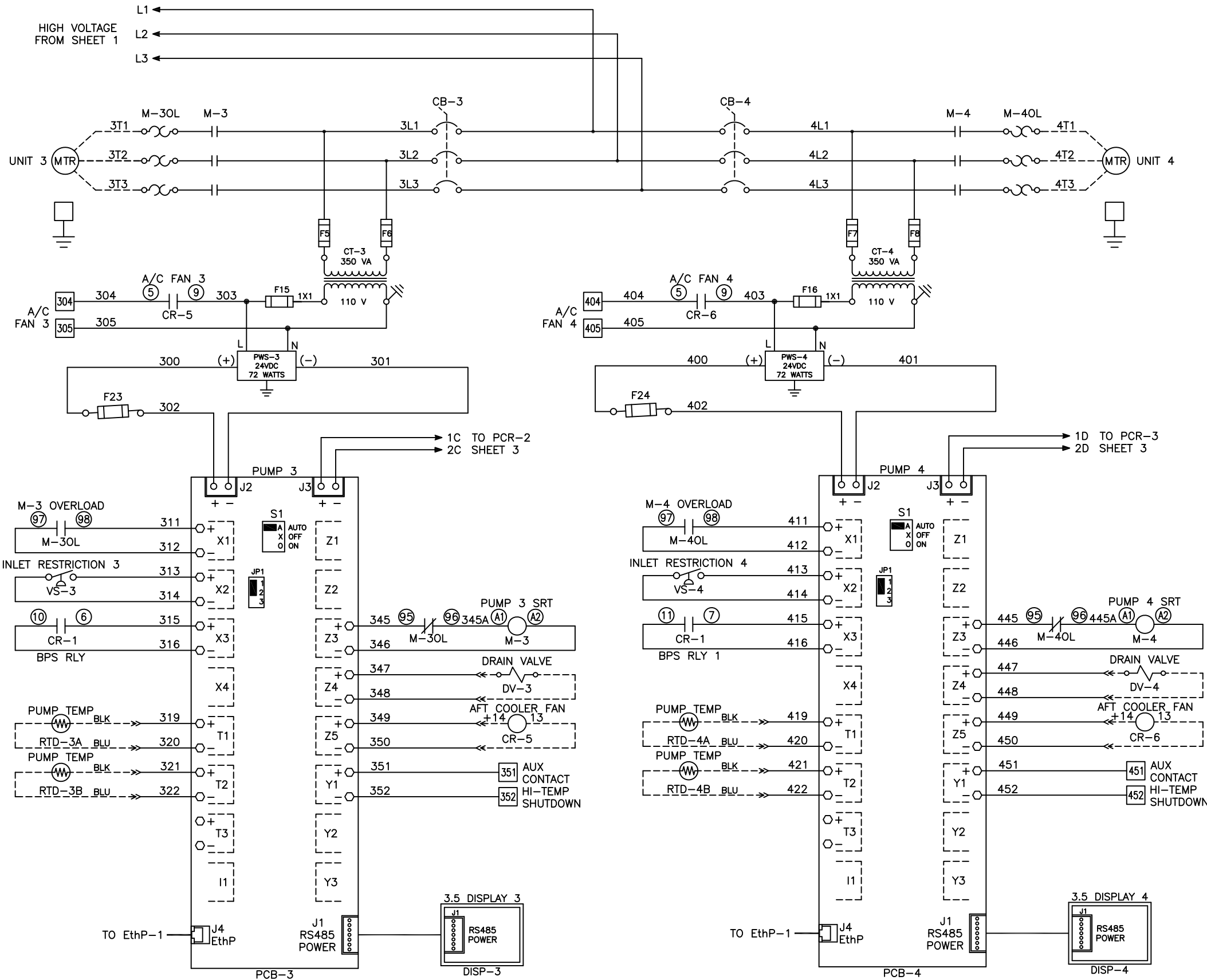
PCB FAULT:

IF A PUMP PCB ETHERNET FAULT OR A TRANSDUCER FAULT OCCURS, THE PUMP PCB WILL AUTOMATICALLY SWITCH TO MANUAL MODE. COMPRESSORS WILL START WHEN BPS-1 (BACKUP PRESSURE 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.

Revised: BM	Date: 01/19/22	Drawn: TAR	Date: 04/07/21
		Scale: NTS D	
Description: DWG WIRING CONTROL QX SCROLL 20HP 208-460/3/50-60, 65kA		Part Number: 4107 8569 20 DN: HOP211246 Rev: 01	
Sheet 1 of 3		DO NOT SCALE THIS DOCUMENT	

Notes:

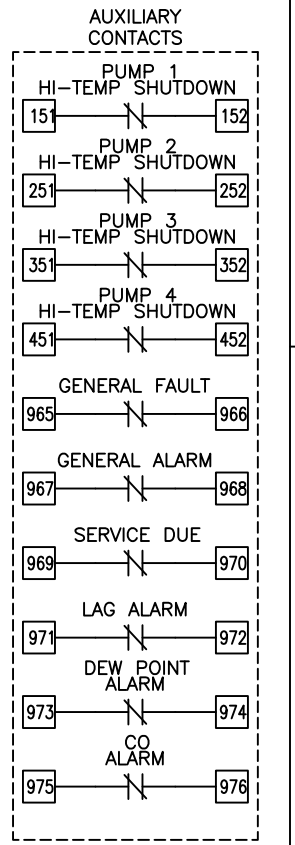
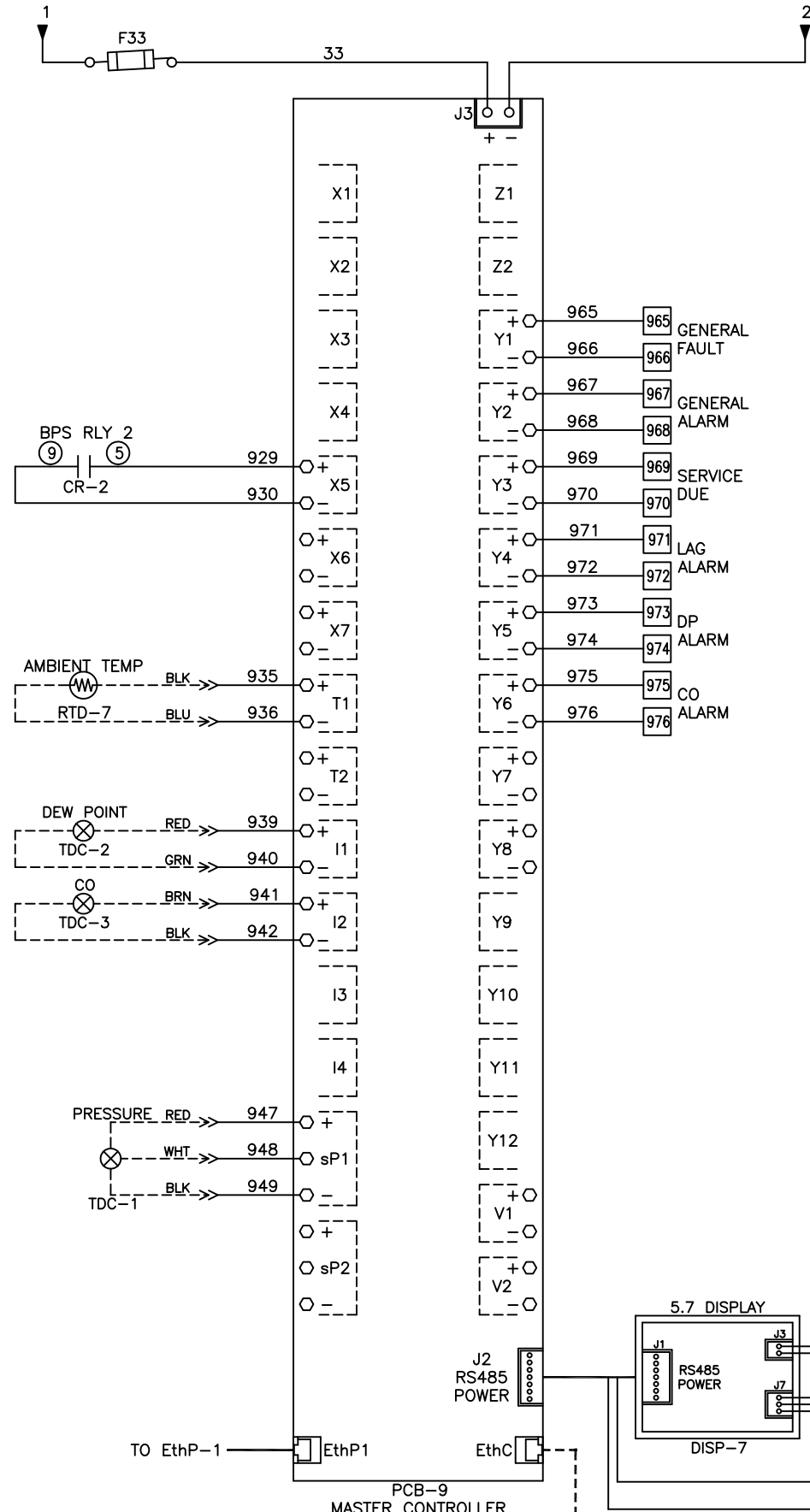
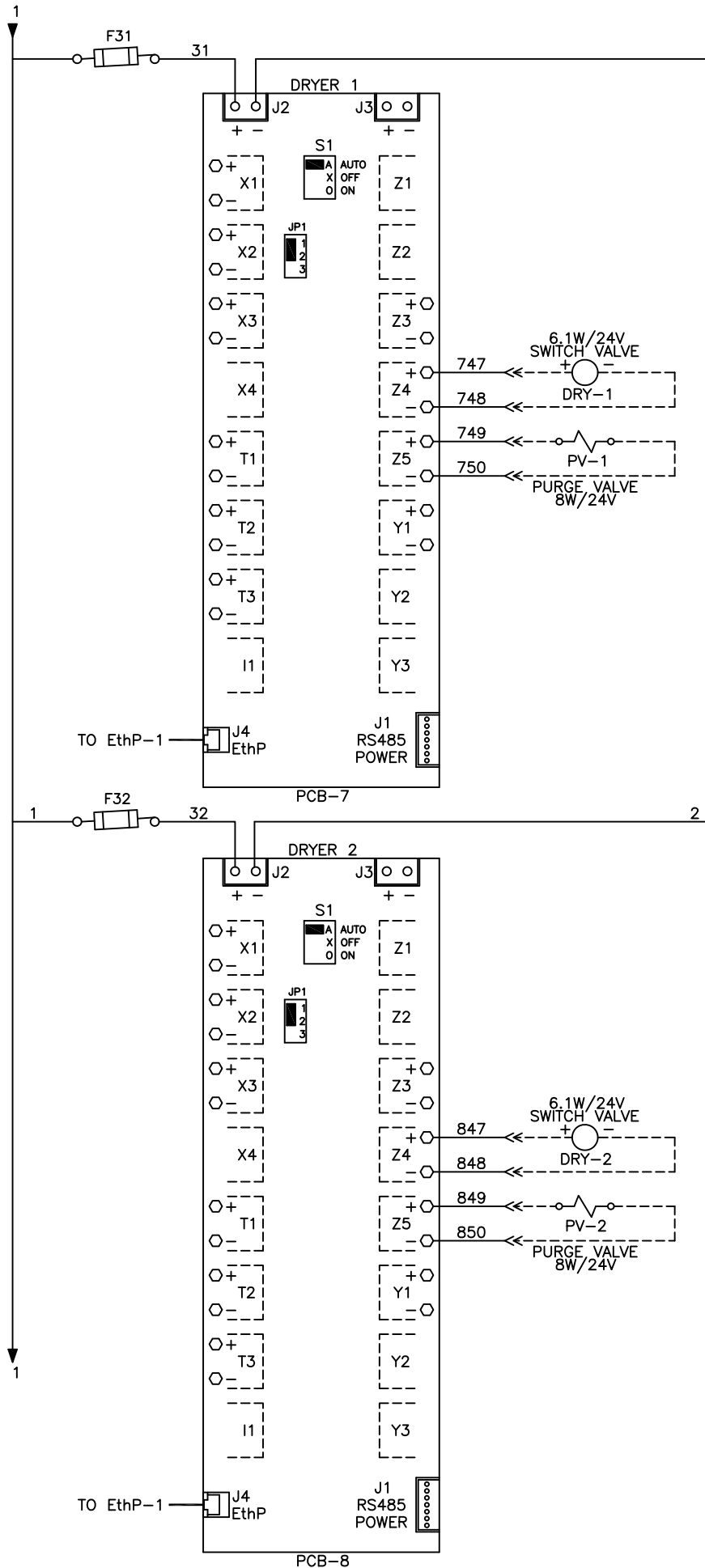
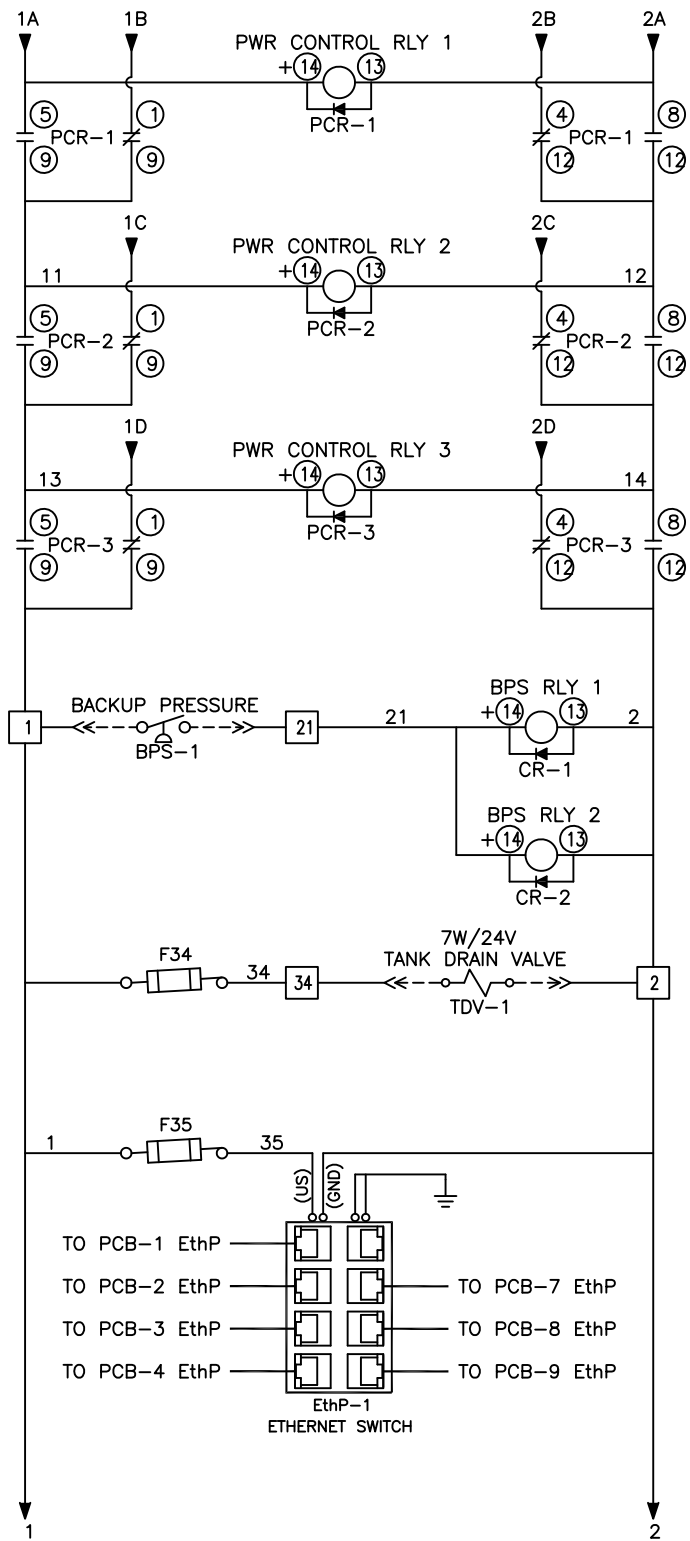
- 1. FIELD WIRING TO BE COPPER RATED FOR 75°C MINIMUM.
- 2. - - - - - INDICATES FIELD WIRING OUTSIDE OF CABINET.



Revised: BM	Date: 01/19/22	Drawn: TAR	Date: 04/07/21
		Scale: NTS D	
Description: DWG WIRING CONTROL QX SCROLL 20HP 208-460/3/50-60, 65kA		Part Number: 4107 8569 20 DN: HOP211246 Rev: 01 Sheet 2 of 3	

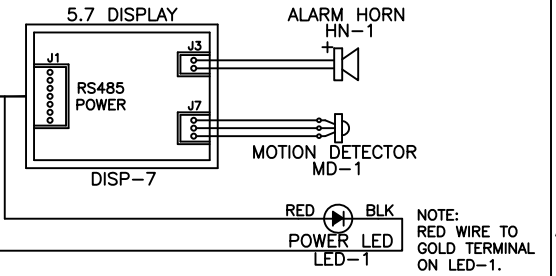
Notes:

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



NOTE:
AUXILIARY CONTACTS 151-152, 251-252, 351-352, 451-452, & 965-976 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.



Revised: BM	Date: 01/19/22	Drawn: TAR	Date: 04/07/21
<small>This drawing and the information contained therein remains 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.</small>		Scale: NTS	Part Number: 4107 8569 20
Description: DWG WIRING CONTROL QX SCROLL 20HP 208-460/3/50-60, 65kA		DN: HOP211246	Rev: 01
Sheet 3 of 3		DO NOT SCALE THIS DOCUMENT	