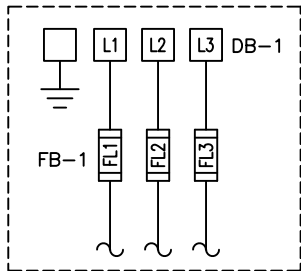


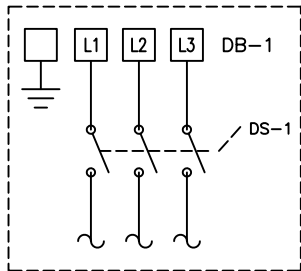
Notes:

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 2.
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): 65kA

1.5-3HP 208-460V
5HP 380-460V
7.5HP 460V
SCCR: 65 kA



5 & 7.5HP 208-230V
10HP 208-460V
SCCR: 65 kA



PUMP PCB JUMPER/SWT SETTINGS

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

MINIMUM CIRCUIT AMPACITY (MCA)

SYSTEM HP	208 V	230 V	380 V	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	---	25.8 AMPS
10 HP	71.1 AMPS	64.6 AMPS	---	32.5 AMPS

MAXIMUM OVERCURRENT PROTECTION (MOP)

SYSTEM HP	208 V	230 V	380 V	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	---	35.8 AMPS
10 HP	100.1 AMPS	91.0 AMPS	---	45.5 AMPS

DUPLEX SYSTEM FULL LOAD AMPERES

SYSTEM HP	208 V	230 V	380V/50Hz	460 V
1.5 HP	11.8 AMPS	11.3 AMPS	7.2 AMPS	6.2 AMPS
2 HP	15.6 AMPS	14.3 AMPS	7.6 AMPS	7.4 AMPS
3 HP	21.0 AMPS	20.1 AMPS	10.4 AMPS	10.2 AMPS
5 HP	36.0 AMPS	34.9 AMPS	19.4 AMPS	15.8 AMPS
7.5 HP	43.4 AMPS	40.5 AMPS	---	20.4 AMPS
10 HP	58.4 AMPS	52.9 AMPS	---	26.6 AMPS

INDIVIDUAL FULL LOAD AMPERES

SYSTEM HP	208 V	230 V	380V/50Hz	460 V
1.5 HP	5.2 AMPS	5.0 AMPS	3.1 AMPS	2.7 AMPS
2 HP	7.1 AMPS	6.5 AMPS	3.3 AMPS	3.3 AMPS
3 HP	9.8 AMPS	9.4 AMPS	4.7 AMPS	4.7 AMPS
5 HP	17.3 AMPS	16.8 AMPS	9.2 AMPS	7.5 AMPS
7.5 HP	21.0 AMPS	19.6 AMPS	---	9.8 AMPS
10 HP	28.5 AMPS	25.8 AMPS	---	12.9 AMPS

FUSE SELECTION CHART (MAX FUSE SIZES SHOWN)

SYSTEM HP	FUSES	208 V	230 V	380 V	460 V
1.5 HP	FL1/FL2/FL3	15 AMPS	15 AMPS	12 AMPS	12 AMPS
2 HP		20 AMPS	20 AMPS	12 AMPS	12 AMPS
3 HP		30 AMPS	30 AMPS	15 AMPS	15 AMPS
5 HP		---	---	25 AMPS	20 AMPS
7.5 HP		---	---	---	30 AMPS
10 HP	---	---	---	---	
ALL	F1/F2/F4/F5	6 AMP	6 AMP	6 AMP	6 AMP
	F3/F6	---	---	6 AMP	6 AMP
	F21/F22	2.5 AMP	2.5 AMP	2.5 AMP	2.5 AMP
	F33	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

FL1/FL2/FL3 ARE LITTELFUSE JTD 600V TYPE
F1-F6 ARE LITTELFUSE KLDK 600V TYPE
F21/F22/F33/F35 ARE LITTELFUSE 2AG 250V TYPE

RELIEF VALVE SETTINGS ("HgV)

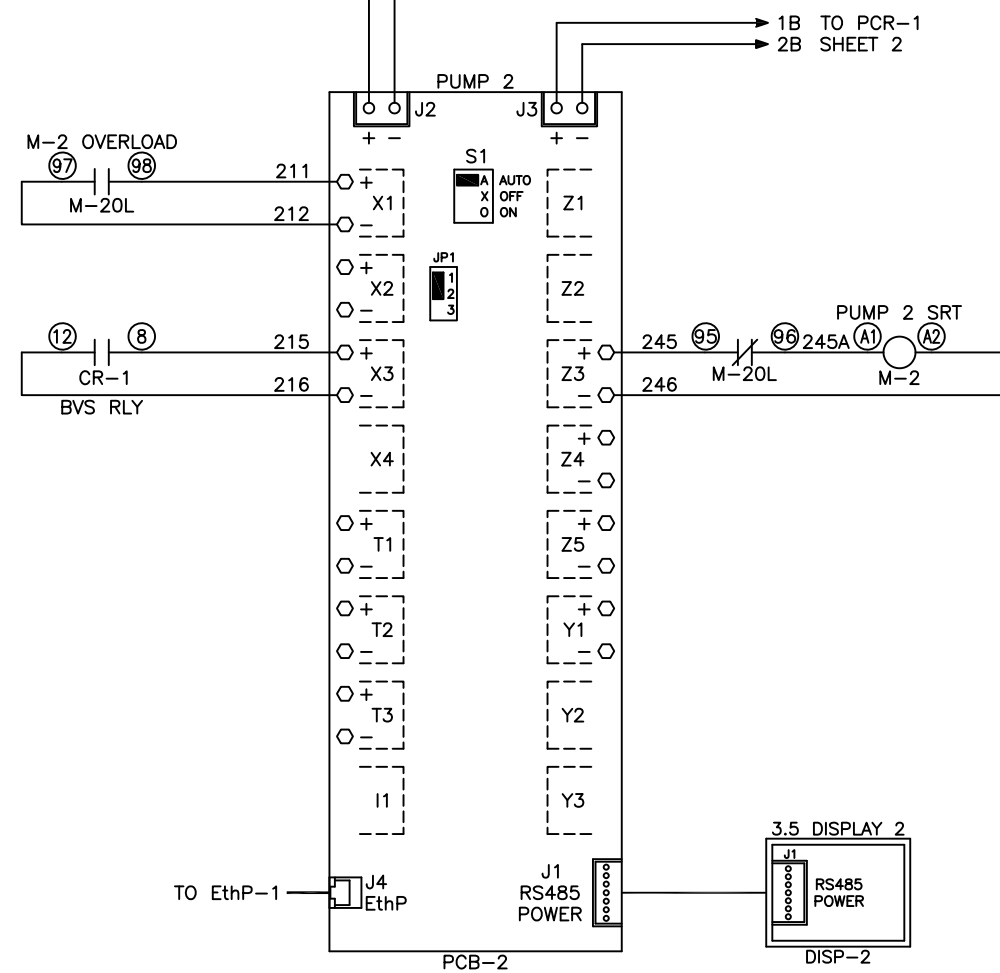
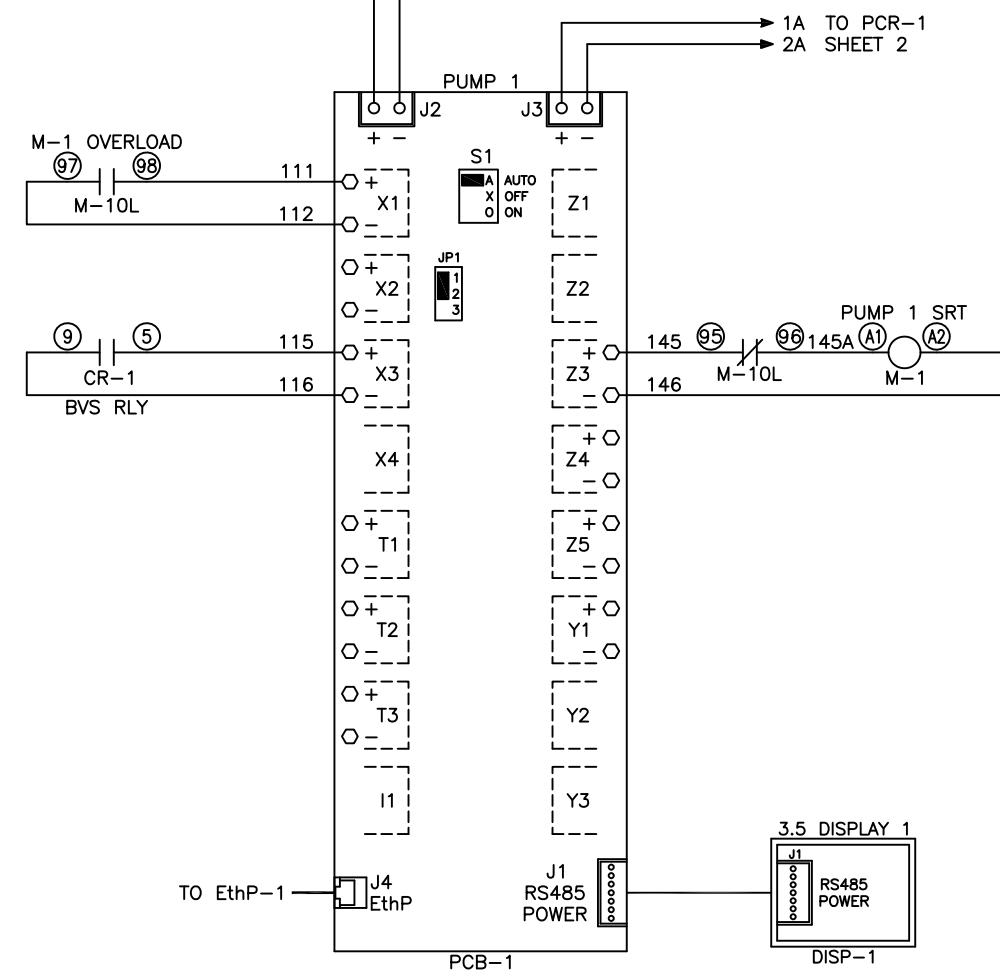
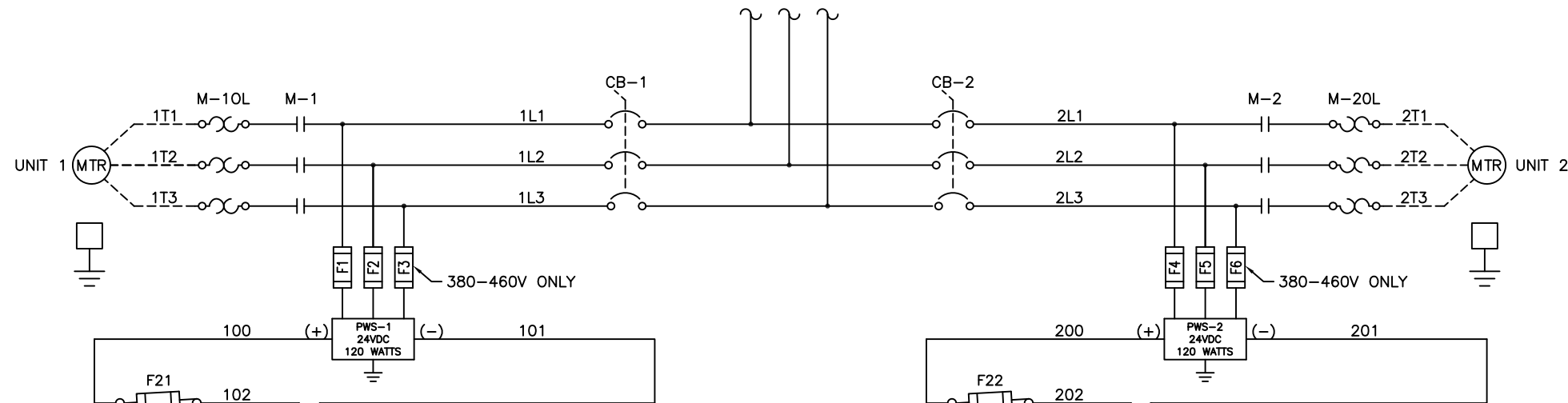
ALTITUDE	1.5-2HP	3-5HP	7.5HP	8.6HP
0'-1000'	25	26	21.5	23
1001'-2000'	24	25	20.5	22
2001'-3000'	23	24	19.5	21
3001'-4000'	22	23	18.5	20
>4000'	CONSULT FACTORY			

BACKUP VACUUM SWITCH

BVS-1	CUT-ON	15"
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DEFAULT VACUUM SETTINGS

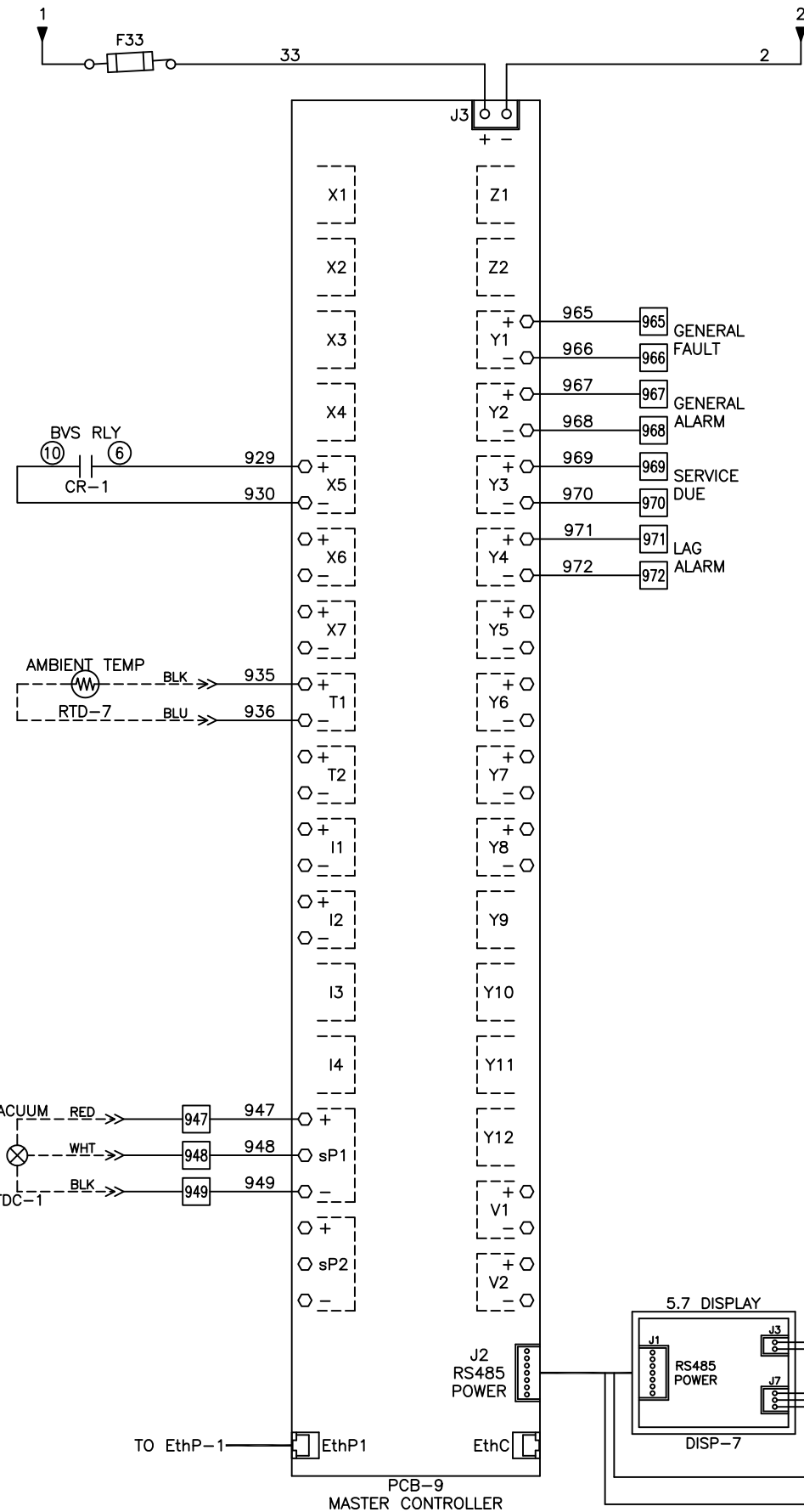
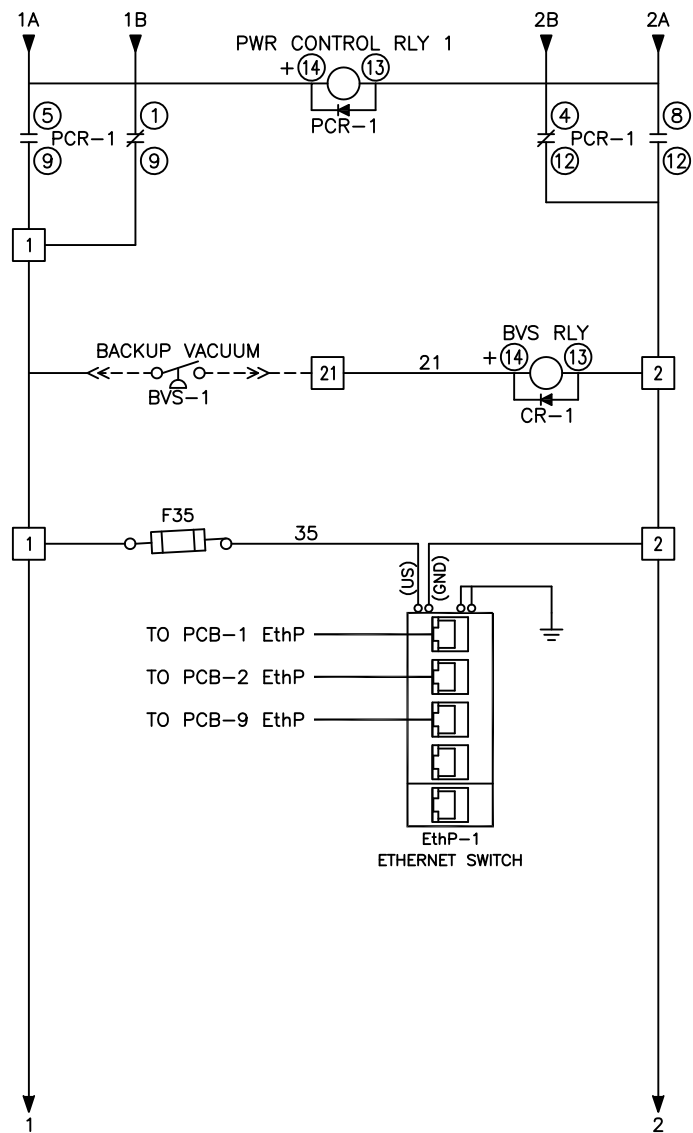
ALTITUDE	LEAD CUT-OFF ("Hg)	LAG CUT-ON ("Hg)	Maximum Limits ("Hg)	Minimum Limits ("Hg)
0'-1000'	21"	16"	25"	17"
1001'-2000'	20"	16"	24"	17"
2001'-3000'	19"	16"	23"	17"
3001'-4000'	18"	16"	22"	17"
>4,000'	CONSULT FACTORY			



Revised:	Date:	Drawn:	MDB	Date:	10/30/18
		This drawing and the information contained therein remain 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.			
Description: DWG WIRING CONTROL DX DRY 1.5-10HP 208-460/3/50-60, 65kA		Part Number: 4107 8568 40		Scale: NTS	
DN: HOP 180863		Rev: 00		Sheet 1 of 2	

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 SECOND 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:

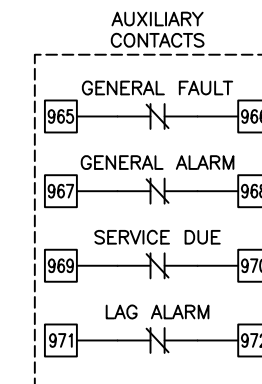
THE PUMP IS DISABLED FROM RUNNING.

POSITION (O) – MANUAL:

THE PUMP WILL RUN CONTINUOUSLY.

PCB FAULT:

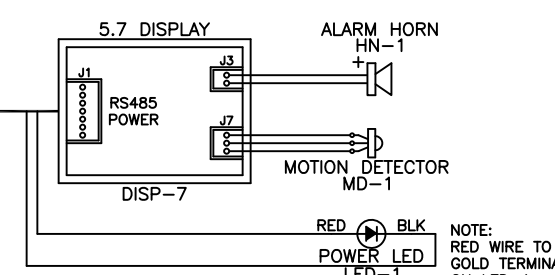
IF A PUMP PCB ETHERNET FAULT OR A TRANSDUCER FAULT OCCURS, THE PUMP PCB WILL AUTOMATICALLY SWITCH TO EMERGENCY MANUAL MODE. VACUUM PUMPS WILL START WHEN BVS-1 (BACKUP VACUUM SWITCH) CLOSSES AND STOP WHEN IT OPENS. COMPRESSORS WILL NOT SEQUENCE IN THIS CONDITION AND CAN OPERATE UNTIL THE ETHERNET OR TRANSDUCER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



NOTE:
AUXILIARY CONTACTS
965-972 ARE "CLASS 1
CONTROL CIRCUITS. USE
CLASS 1 CONDUCTORS."

AUX CONTACTS ARE RATED
0.7A_{dc}/0.7A_{rms} @ 24V
MAX. UNLESS OTHERWISE
NOTED.

AUX CONTACTS CLOSED
DURING NORMAL
OPERATION.



Revised:	Date:	Drawn:	MDB	Date:	10/30/18
		<small>This drawing and the information contained thereon remain 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>			
Description:		Part Number:			
DWG WIRING CONTROL		4107 8568 40			
DX DRY 1.5-10HP		DN:	HOP 180863	Rev:	00
208-460/3/50-60, 65KA		Sheet 2 of 2		DO NOT SCALE THIS DOCUMENT	