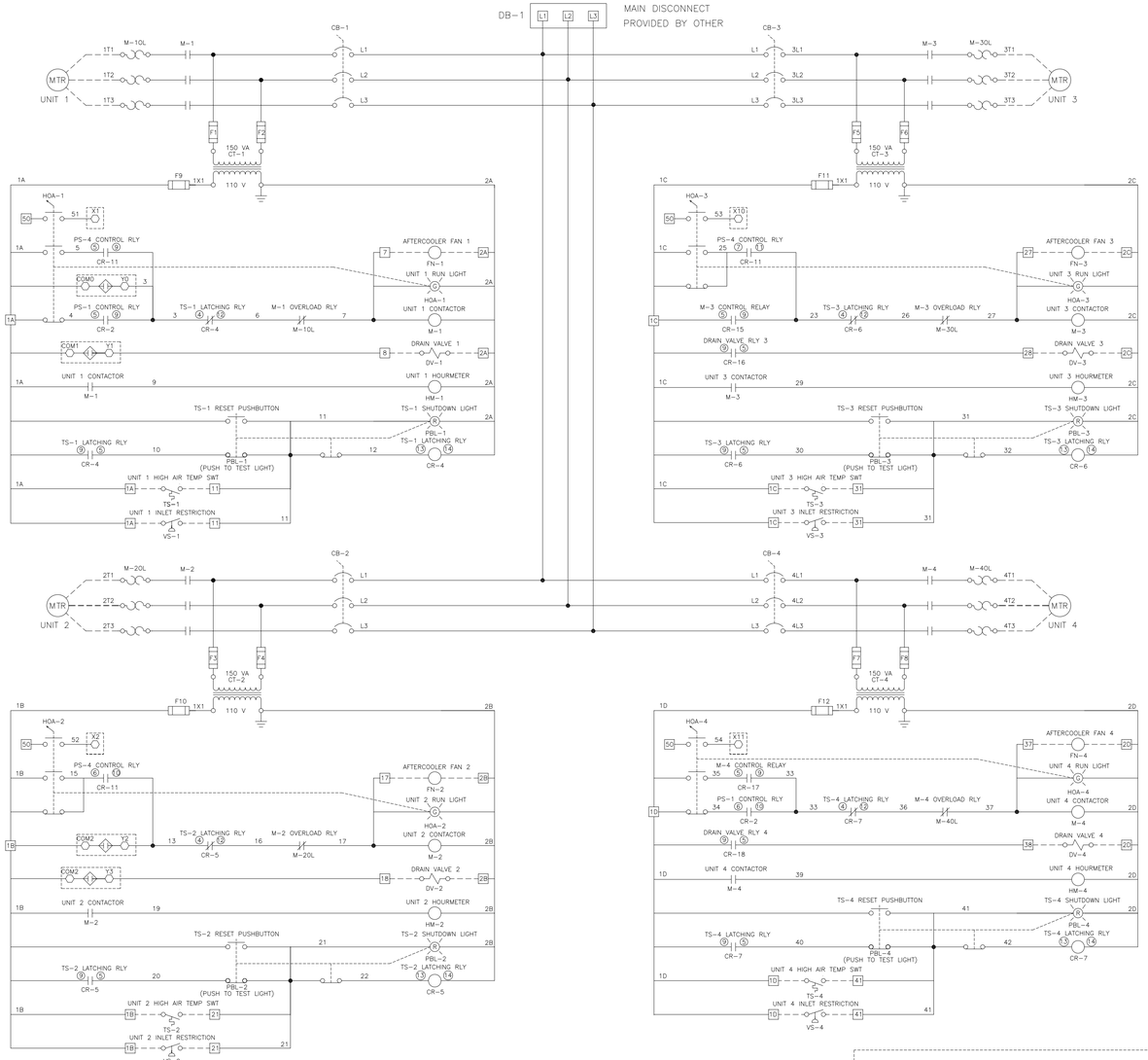
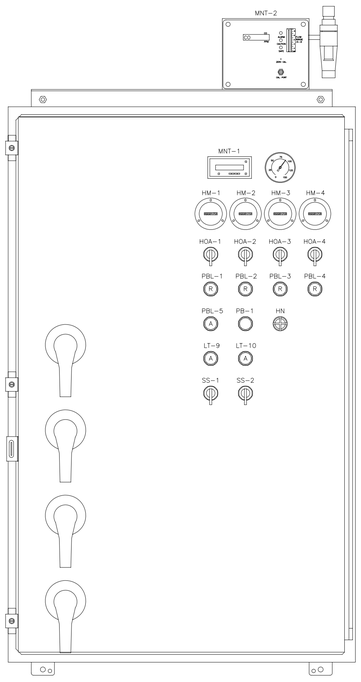
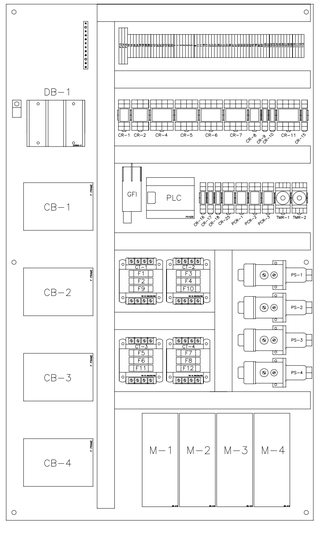
- - - - - - INDICATES FIELD WIRING OUTSIDE OF BOX

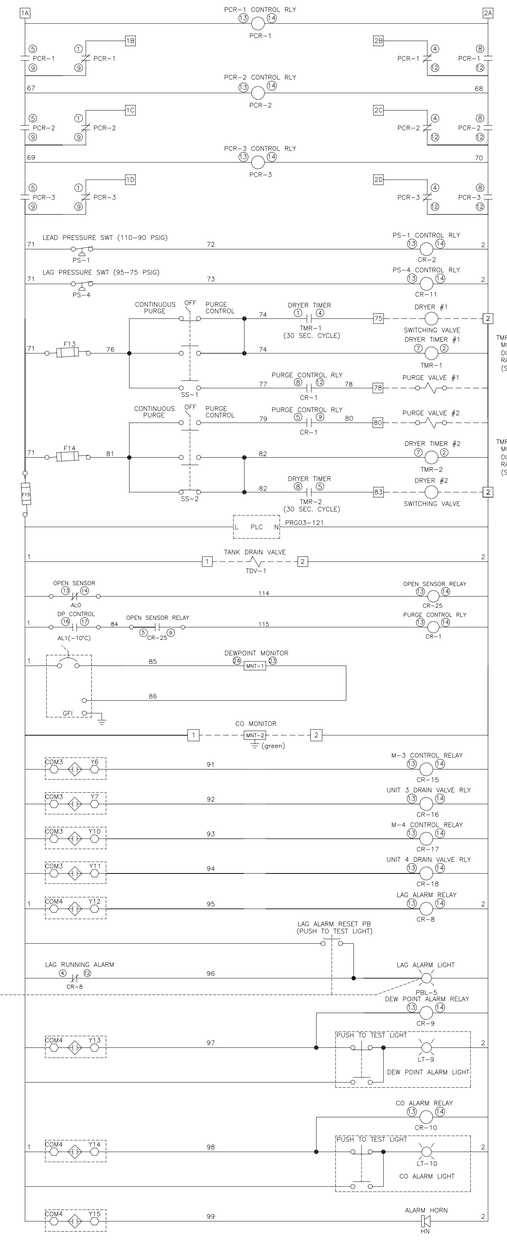
FIELD WIRING TO BE COPPER WIRE RATED FOR 75° C MINIMUM

208–575 VOLTS
3Ø
60 HZ





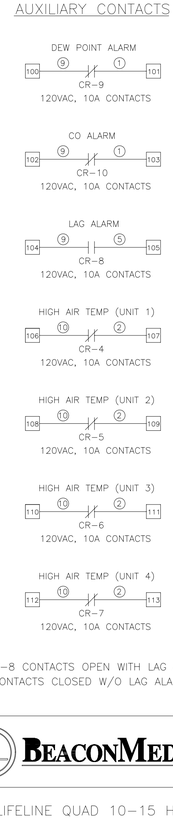




NOTE:
AUXILIARY CONTACTS 100–113 ARE "CLASS 1 CONTROL CIRCUITS, USE CLASS 1 CONDUCTORS"

ALL OTHERS ARE "CLASS 2 CONTROL CIRCUITS, USE CLASS 2 CONDUCTORS"

AUXILIARY CONTACTS



(CR-8 CONTACTS OPEN WITH LAG ALARM)
(CONTACTS CLOSED W/O LAG ALARM)

FUSE SELECTION CHART (MAX FUSE SIZES SHOWN)

FUSE	208 V	230 V	460 V	575 V
F1/F2/F3/F4	2.0 AMPS	2.0 AMPS	1.0 AMPS	0.8 AMPS
F5/F6/F7/F8	2.0 AMPS	2.0 AMPS	1.0 AMPS	0.8 AMPS
F9/F10/F11/F12	2.0 AMPS	2.0 AMPS	2.0 AMPS	2.0 AMPS
F13/F14	0.7 AMPS	0.7 AMPS	0.7 AMPS	0.7 AMPS
F15	1.25 AMPS	1.25 AMPS	1.25 AMPS	1.25 AMPS

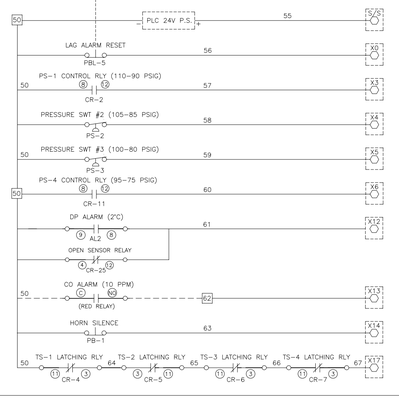
F1/F2/F3/F4/F5/F6/F7/F8 ARE LITTLEFUSE KLDR 600V TYPE
F9/F10/F11/F12 ARE LITTLEFUSE FLM 250V TYPE
F13/F14/F15 ARE LITTLEFUSE 2AG 250V TYPE

AUTO OPERATION;

DURING NORMAL OPERATION ALL HOA SWITCHES SHOULD BE IN THE AUTO POSITION. THE PLC WILL SIGNAL THE LEAD COMPRESSOR TO START WHEN PS–1 CLOSES AT 90 PSI. IF ONE PUMP CAN CARRY THE LOAD, THEN THE PRESSURE WILL RISE TO 110 PSI AND PS–1 WILL OPEN. AT THIS POINT THE PLC WILL TURN OFF THE LEAD COMPRESSOR. WHEN THE SYSTEM PRESSURE DROPS AGAIN AND PS–1 CLOSES THE PLC WILL SEQUENCE THE LEAD ROLE TO THE NEXT COMPRESSOR AND IT WILL START. IF LEAD COMPRESSOR RUNS FOR MORE THAN 17 MINUTES AND CANNOT REACH THE PS–1 SETTING OF 110 PSI, THEN THE PLC WILL TURN OFF THE COMPRESSOR THAT IS RUNNING AND SEQUENCE TO THE NEXT COMPRESSOR. IF DURING OPERATION PS–2 CLOSES AT 85 PSI A SECOND COMPRESSOR WILL START. IF PRESSURE CONTINUES TO DROP TO THE PS–3 SETTING OF 80 PSI THE THIRD COMPRESSOR WILL START, IF THE PRESSURE CONTINUES TO DROP TO THE PS–4 SETTING OF 75 PSI THE FOURTH COMPRESSOR WILL START AND A LAG ALARM WILL OCCUR.
IF ONLY 2 OR 3 HOA SWITCHES ARE IN THE AUTO POSITION THE SYSTEM WILL OPERATE AS A DUPLEX OR TRIPLEX.

HAND OPERATION; (EMERGENCY/TROUBLE SHOOTING MODE ONLY) WITH COMPRESSORS IN THE HAND POSITION UNITS 1 & 4 WILL START WHEN PS–1 CLOSES AND STOP WHEN PS–1 OPENS, UNITS 2 & 3 WILL START WHEN PS–4 CLOSES AND STOP WHEN PS–4 OPENS.

PLC FAULT; IF A PLC FAULT OCCURS, AND ALL COMPRESSORS ARE IN AUTO, COMPRESSORS 1, 2 & 3 WILL START WHEN PS–4 CLOSES AND STOP WHEN PS–4 OPENS, A LAG ALARM WILL ALSO OCCUR. IF PLC FAULT SHOULD OCCUR, TURN COMPRESSOR 1,2 & 3 TO HAND IF 3 COMPRESSORS ARE NEEDED TO SATISFY THE DEMAND. COMPRESSORS WILL NOT SEQUENCE IN THIS CONDITION BUT WILL OPERATE IN A LEAD/LAG CONDITION. IF COMPRESSORS 1, 2 OR 3 ARE TURNED OFF FOR REPAIRS TURN COMPRESSOR 4 TO HAND POSITION, COMPRESSORS CAN OPERATE IN THIS CONDITION UNTIL PLC FAULT IS REPAIRED.



QUADRUPLEX SYSTEM FULL LOAD AMPERES

SYSTEM HP	208 V	230 V	460 V	575 V
10 HP	120 AMPS	104 AMPS	52 AMPS	42 AMPS
15 HP	171 AMPS	148 AMPS	74 AMPS	60 AMPS

INDIVIDUAL MOTOR FULL LOAD AMPERES

SYSTEM HP	208 V	230 V	460 V	575 V
10 HP	29.2 AMPS	25.4 AMPS	12.7 AMPS	10.1 AMPS
15 HP	41.9 AMPS	36.4 AMPS	18.2 AMPS	14.5 AMPS

BEACONMEDAES

TITLE
LIFELINE QUAD 10–15 HP SCROLL
SPC CONTROLS (208/230/460/575 VOLTS)

DRAWN BY T. HORNBUCKLE	DATE 10/28/02	This drawing and the information contained thereon remain the property of BeaconMedaes and may not be used for other than the purpose for which it is loaned without the expressed written permission from BeaconMedaes Engineering.
CHECKED BY	DATE	
REVISED BY J. HOLLAND	DATE 10/07/08	DRAWING NO. DIA 02 703
SCALE NTS D		REV. M