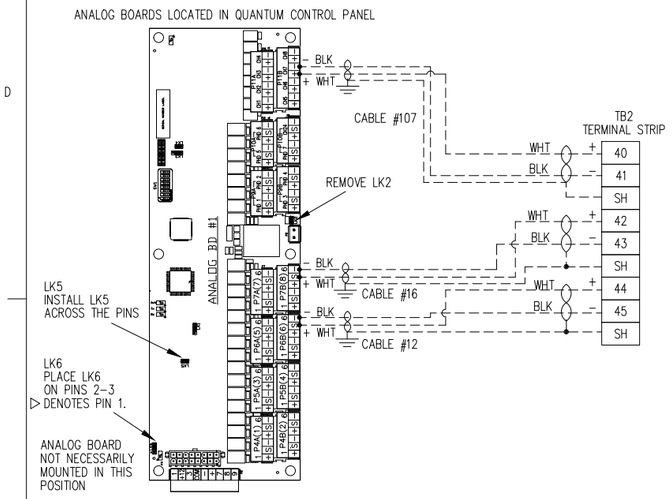
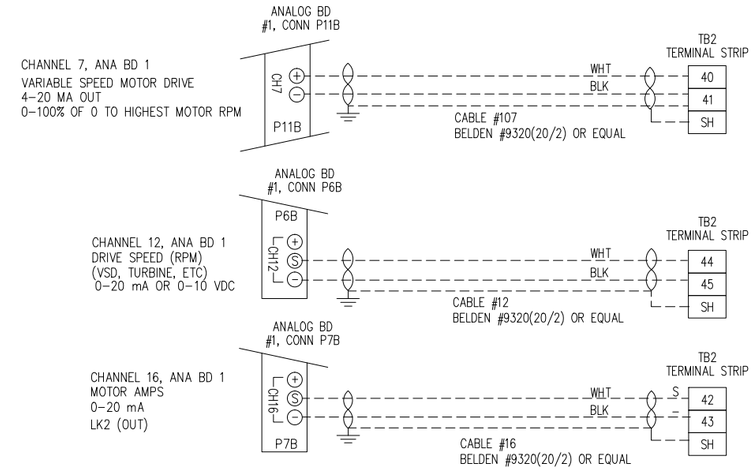
POINT TO POINT ANALOG WIRING



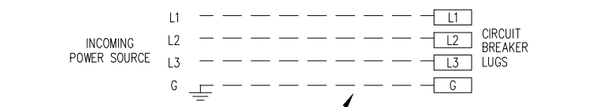
ANALOG WIRING SHOWN SCHEMATICALLY



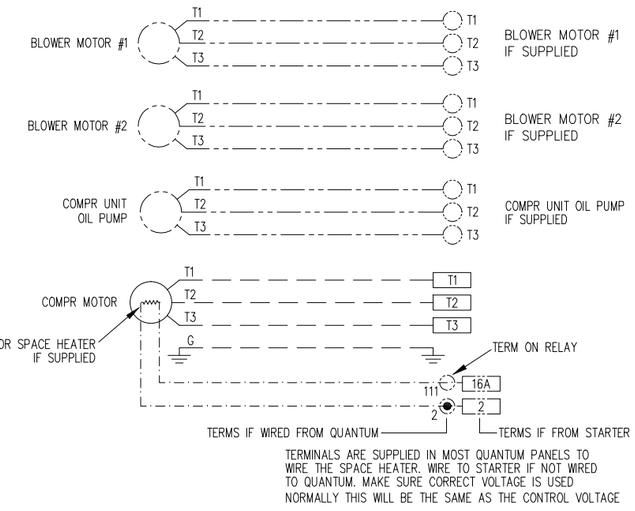
ADD ON COMMUNICATION DEVICES THAT MAY BE ADDED TO STARTER ARE NOT INCLUDED ON THIS DRAWING, REFER TO STARTER DRAWINGS

- INDICATES DIN CONNECTOR IF USED ON DEVICE
- INDICATES DEVICES SUPPLIED BY FRICK OR OTHERS WHEN OPTIONAL OR REQUIRED
- WIRING BY OTHERS– ALL WIRING FROM STARTER TO QUANTUM AND ASSOCIATED DEVICES BY OTHERS IF STARTER IS SHIPPED LOOSE UNLESS SPECIFIED OTHERWISE. SOME OPTIONAL DEVICES WILL BE WIRED IF MOUNTED ON UNIT ALL 3 PHASE WIRING SHALL BE SIZED PER PRESENT NEC CODE
- INDICATES WIRING AT FACTORY IF STARTER AND/OR DEVICES ARE MOUNTED & SHIPPED ON UNIT
- REPRESENTS VYPER STARTER TERMINALS
- TERMINALS IN QUANTUM CONTROL PANEL

3 PHASE WIRING



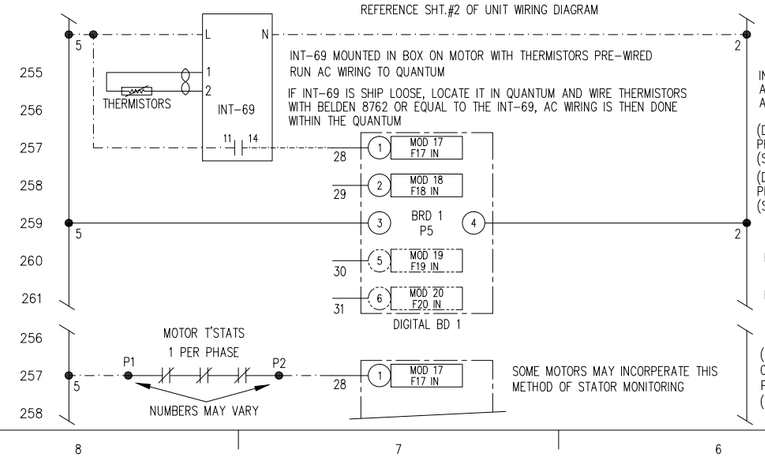
NOTE:
DUE TO THE EMI/RFI EFFECTS ASSOCIATED WITH THE USE OF VFD'S, THE GROUND CONDUCTOR SHALL BE COPPER AND TWO SIZES LARGER THAN REQUIRED BY APPLICABLE CODES



TERMINALS ARE SUPPLIED IN MOST QUANTUM PANELS TO WIRE THE SPACE HEATER. WIRE TO STARTER IF NOT WIRED TO QUANTUM. MAKE SURE CORRECT VOLTAGE IS USED NORMALLY THIS WILL BE THE SAME AS THE CONTROL VOLTAGE

SINGLE PHASE CONTROL WIRING–QUANTUM TO STARTER

STATOR WIRING IF DRIVE MOTOR IS SUPPLIED WITH THERMISTOR OR OTHER DEVICE USING ISOLATED CONTACT TO INDICATE FAULT



PER NEC CODE– VFD DRIVE MOTORS MUST HAVE STATOR HI–TEMP PROTECTION.

THIS PROTECTION WILL BE DONE EITHER WAY SHOWN BELOW IF MOTOR IS SUPPLIED BY FRICK

OR

INT–69 CONTACT CAN BE WIRED TO ALTERNATIVE AUX INPUT IF AUX 1 IS ALREADY BEING USED

(DIG AUX A) COMPR MOTOR STATOR HI–TEMP PROGRAM "SHUTDOWN", RUNNING, 5 SEC DELAY (SAFE CLOSED)

(DIG AUX B) PROGRAMMABLE SHUTDOWN OR ALARM (SAFE CLOSED)

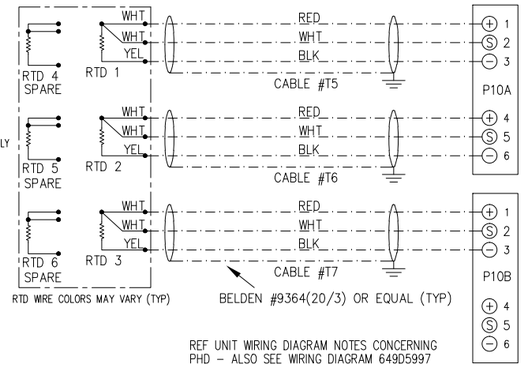
REMOTE START/RUN/STOP

PERMISSIVE START

(DIG AUX A) COMPRESSOR MOTOR HI–TEMP SHUTDOWN PROGRAM "SHUTDOWN", RUNNING, 5 SEC DELAY (SAFE CLOSED)

CPR MOTOR STATOR TEMPERATURE
100 OHM PLATINUM RTD'S ONLY

STATOR WIRING IF DRIVE MOTOR IS SUPPLIED WITH 100 OHM PLATINUM RTDS



REFERENCE 649D5997 PHD WIRING DIAGRAM

PHD CH 5
MOTOR STATOR #1 TEMP
DEFAULT SETPOINTS:
100 OHM PLATIUM .00385 TCR

PHD CH 6
MOTOR STATOR #2 TEMP
DEFAULT SETPOINTS:
100 OHM PLATIUM .00385 TCR

PHD CH 7
MOTOR STATOR #3 TEMP
DEFAULT SETPOINTS:
100 OHM PLATIUM .00385 TCR

FUTURE

REF UNIT WIRING DIAGRAM NOTES CONCERNING PHD – ALSO SEE WIRING DIAGRAM 649D5997

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100 DV AVE
P.O. BOX 996
Waynesboro, PA 17268

Frick BY JOHNSON CONTROLS
Johnson Controls

REVISIONS

REV	ECN	DESCRIPTION	DATE	DR	APP
A	.	CORRECTED CABLE #32 TO CHANNEL 12, ANALOG BD #1	04/17/12	BSH	HGN
B	.	REMOVED ANALOG BD #2 AND REWIRED CPR DR SPEED TO ANALOG BD #1	05/08/12	BSH	HGN
C	.	CABLE #107 WAS 111; CABLE #12 WAS 32.	03/29/13	BSH	HGN

PURCHASER

NOTICE TO PURCHASER
REFER TO CONTRACT FOR MATERIAL TO BE SUPPLIED BY YORK/JCI. THE AMOUNT OF SUPPLIED MATERIAL IS NOT INCREASED BY ANYTHING SHOWN UPON THIS DRAWING.

YORK ORD NO | PURCH ORD NO

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES DO NOT SCALE

UNLESS OTHERWISE SPECIFIED TOLERANCES PER QAP 19

DR	B. HESS	DEC XPL ±	DEC XPL ±	FRACT ±	ANGLE ±
CHK	H. NOWELL			01/17/12	
APPD	T. CLARK			01/17/12	
CODE				01/17/12	

TITLE: WIRING CONNECTIONS DIAGRAM FOR RAM ENHANCER VSD STARTER QUANTUM HD

SHEET DETAIL: RAM ENHANCER VSD STARTER

SIZE	CAGE CODE	DWG NO	REV
D	23587	649D6004	C

SCALE: NONE | SHEET 01 OF 01