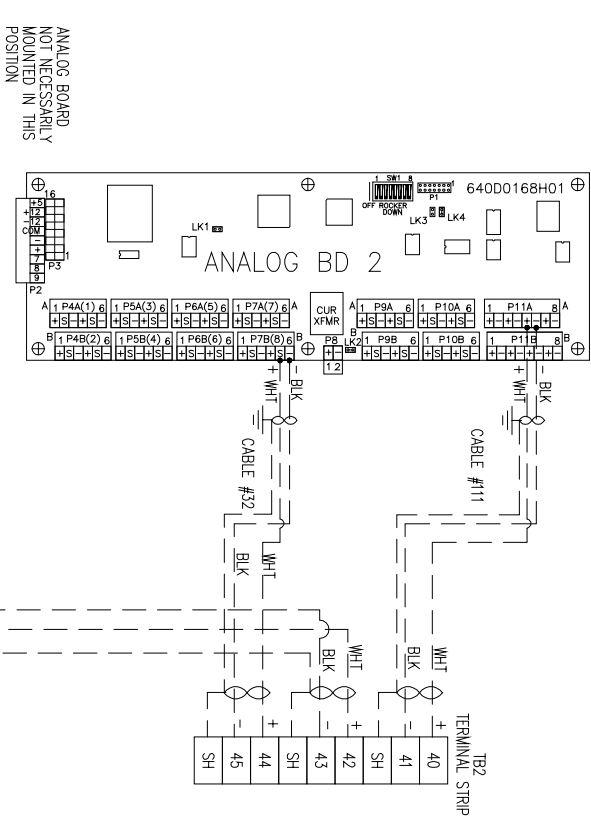


POINT TO POINT ANALOG WIRING

ANALOG BOARDS LOCATED IN QUANTUM CONTROL PANEL

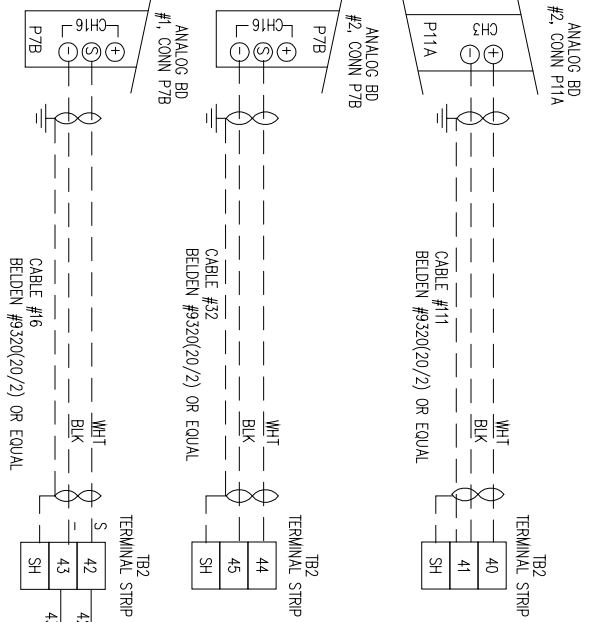


CHANNEL 3, ANA BD 2  
VARIABLE SPEED MOTOR DRIVE  
4-20 MA OUT  
0-100% OF 0 TO HIGHEST MOTOR RPM

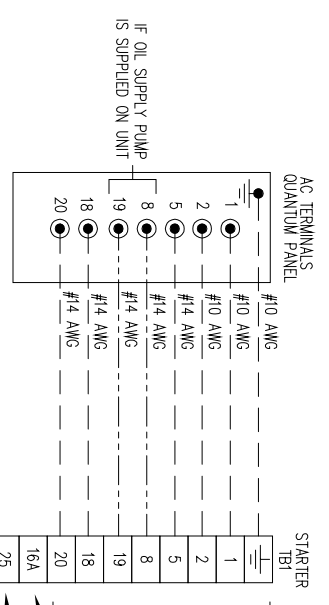
CHANNEL 16, ANA BD 2  
KW MONITORING OR  
OPR. DRIVE SPEED  
0-20 MA OR 0-10 VDC  
LK 2 (OUT)

CHANNEL 16, ANA BD 1  
MOTOR AMPS  
0-20 mA  
LK2 (OUT)

ANALOG WIRING SHOWN SCHEMATICALLY



SINGLE PHASE CONTROL WIRING-QUANTUM TO STARTER



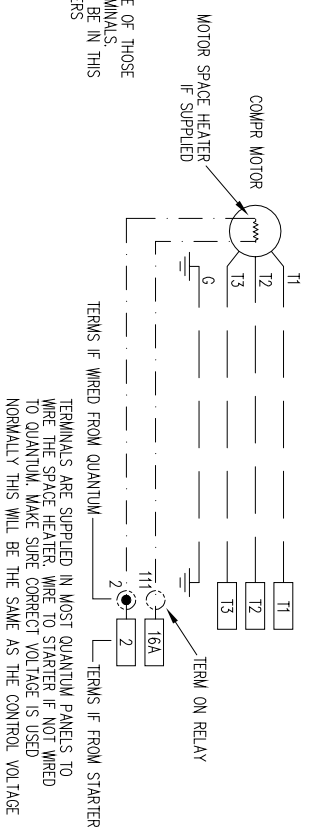
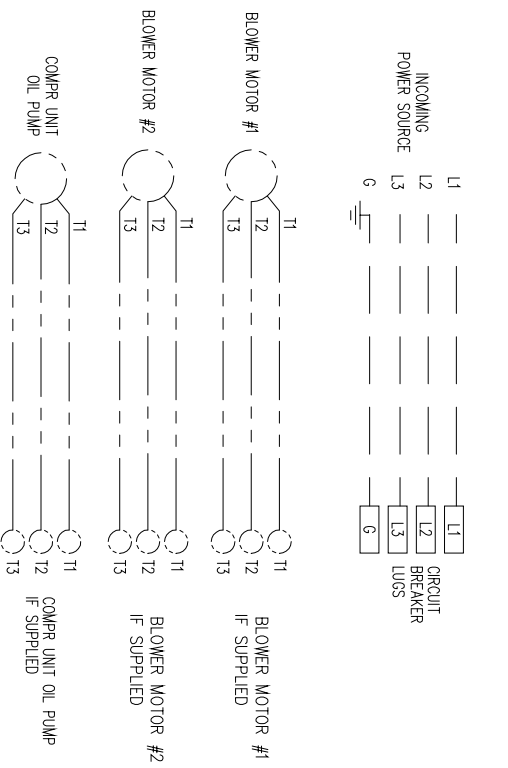
THE TERMINAL NUMBERS HERE ARE REPRESENTATIVE OF THOSE THAT ARE REQUIRED TO MATCH THE QUANTUM TERMINALS. HOWEVER, THE TERMINAL STRIP NUMBERS MAY NOT BE IN THIS ORDER OR MAY CONTAIN OTHER AND EXTRA NUMBERS.

TERM 16A FOR MOTOR SPACE HEATER IF SUPPLIED AND NOT WIRED TO QUANTUM-SEE STARTER SCHEMATIC.

ALTERNATE MOTOR STATOR THERMISTOR WIRING IF SUPPLIED-SEE STARTER SCHEMATIC.

IF COMPRESSOR MOTOR IS MOUNTED AT FACTORY, THE STATOR PROTECTION IS WIRED TO QUANTUM PANEL PER ONE OF THE METHODS BELOW--IF THE THERMISTOR IS USED, WIRING THE MODULE CONTACT TO THE AN AUX INPUT IN THE QUANTUM WILL GIVE A SPECIFIC FUNCTION FOR THE SHUTDOWN WHEREAS WIRING TO THE STARTER WOULD GIVE A COMPRESSOR AUX SHUTDOWN WHICH IS NOT THE SPECIFIC CAUSE.

3 PHASE WIRING



TERMS IF WIRED FROM QUANTUM

TERMS IF FROM STARTER

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

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

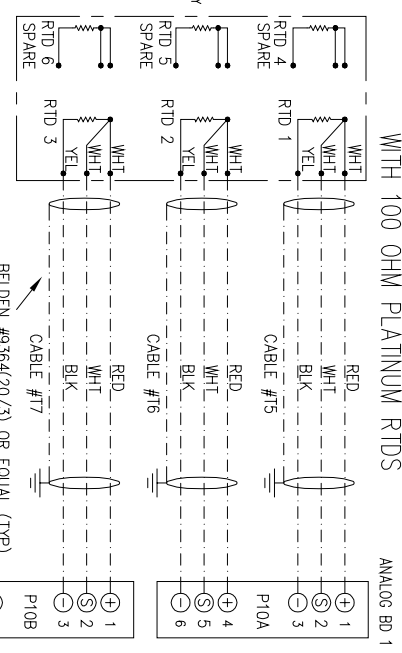
ALL 3 PHASE WIRING SHALL BE SIZED PER PRESENT NEC CODE

--- INDICATES WIRING AT FACTORY IF STARTER AND/OR DEVICES ARE MOUNTED & SHIPPED ON UNIT

□ REPRESENTS VSD STARTER TERMINALS

● TERMINALS IN QUANTUM CONTROL PANEL

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



REFERENCE 649D5050 PWD WIRING DIAGRAM

PHD CH 5 MOTOR STATOR #1 TEMP DEFAULT SETPOINTS: 100 OHM PLATINUM 00385 TOR

PHD CH 6 MOTOR STATOR #2 TEMP DEFAULT SETPOINTS: 100 OHM PLATINUM 00385 TOR

PHD CH 7 MOTOR STATOR #3 TEMP DEFAULT SETPOINTS: 100 OHM PLATINUM 00385 TOR

FUTURE

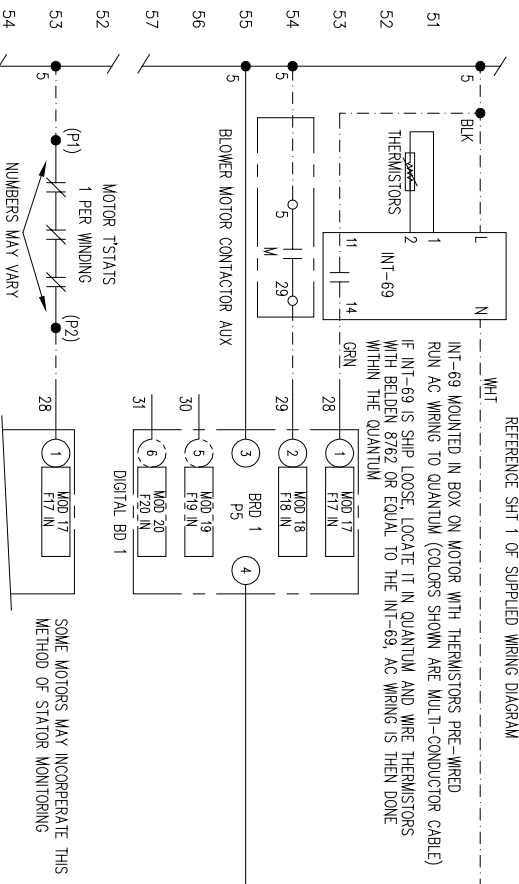
PER NEC CODE-- VFD DRIVE MOTORS MUST HAVE STATOR HI-TEMP PROTECTION.

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

OR

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

REFERENCE SH1 1 OF SUPPLIED WIRING DIAGRAM



NT-69 MOUNTED IN BOX ON MOTOR WITH THERMISTORS PRE-WIRED RUN AC WIRING TO QUANTUM (COLORS SHOWN ARE MULTI-CONDUCTOR CABLE)

IF NT-69 IS SHIP LOOSE, LOCATE IT IN QUANTUM AND WIRE THERMISTORS WITH BELDEN 8762 OR EQUAL TO THE NT-69, AC WIRING IS THEN DONE WITHIN THE QUANTUM

(AUX #1) COMPRESSOR MOTOR STATOR HI-TEMP PROGRAM "SHUTDOWN", RUNNING, 5 SEC DELAY (SAFE CLOSED)

(AUX #2) BLOWER MOTORS ON PROGRAM "SHUTDOWN", RUNNING, 5 SEC DELAY (SAFE CLOSED)

PROCESS MODE SELECT ALTERNATE MODE WHEN CLOSED CAP CONT SP. MODE 2 (SP. MODE 2 WHEN CLOSED)

(AUX #3) COMPRESSOR MOTOR HI-TEMP SHUTDOWN PROGRAM "SHUTDOWN", RUNNING, 5 SEC DELAY (SAFE CLOSED)

SOME MOTORS MAY INCORPORATE THIS METHOD OF STATOR MONITORING

ZONE	REV	ECN	DESCRIPTION	DATE	DR	CHK	APPD

PURCHASER		NOTICE TO PURCHASER	
FRICK ORD NO		REFER TO CONTACT FOR MATERIAL TO BE SUPPLIED BY FRICK COMPANY. THE AMOUNT OF SUCH MATERIAL IS NOT INCREASED BY ANYTHING SHOWN UPON THIS DRAWING.	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		York International Refrigeration - Frick Weyersboro, PA 17268	
UNLESS OTHERWISE SPECIFIED DO NOT SCALE		TITLE	
UNLESS OTHERWISE SPECIFIED TOLERANCES PER ASME Y14.5		STARTER TO QUANTUM WIRING CONNECTIONS	
DR. HO. NOMEL		DATE CODE	
CHK. J.M. LONG		D 23587	
APPD. HO. NOMEL		DWG NO	
		649D56659	
CODE		SCALE	
		SHEET 1 OF 1	