

ZONE	REV	ECN	DESCRIPTION	DATE	DR	CHK	APPD
A	..	..	REVERSE ANALOG OUTPUT CIRCUITS	01-25-06	HKN	DEL	DEL
B	..	9290	ADD SPACE HEATER RELAY, INQUIRE RFG 12-50	05-27-06	HKN	DEL	HKN
C	..	..	ADD COND. ANA. OUT CONTROL CH'S 5 & 6 (IF REQUIRED)	01-16-06	HKN	ML	ML
D	..	..	RE-DEFINE DIG CHS 19,20-ANA. OUT CHS 5,6 (IF REQUIRED)	07-17-07	HKN	BSH	HKN
E	..	..	RE-NUMBER DEVICES AS NEEDED	11-16-07	HKN	ML	HKN

REVISION HISTORY

NOTE A:  
A SURGE SUPPRESSOR OR MOV TO BE INSTALLED ACROSS ALL INDUCTIVE LOADS IN QUANTUM AND IF SHOWN ON DEVICES OUTSIDE OF QUANTUM.  
SURGE SUPPRESSOR:  
RC NETWORK CONSISTING OF A .1 MFD CAPACITOR, 600 VDC IN SERIES WITH A 47 OHM RESISTOR.  
USE ELECTROLYTE #R2031-3-6 OR EQUAL.  
VARISTOR  
METAL OXIDE VARISTOR (MOV) SPECIFICATIONS:  
OE #1501A104 OR EQUAL FOR 115 VOLTS  
OE #2501A104 OR EQUAL FOR 230 VOLTS

NOTE B:  
STARTER CONNECTIONS ARE SHOWN IN WIRING DIAGRAM AS A FRICK SUPPLIED STARTER. SEE LINES 35-40 FOR CUSTOM STARTERS NOT SUPPLIED BY FRICK. WIRING BY FRICK IF MOUNTED STARTER.

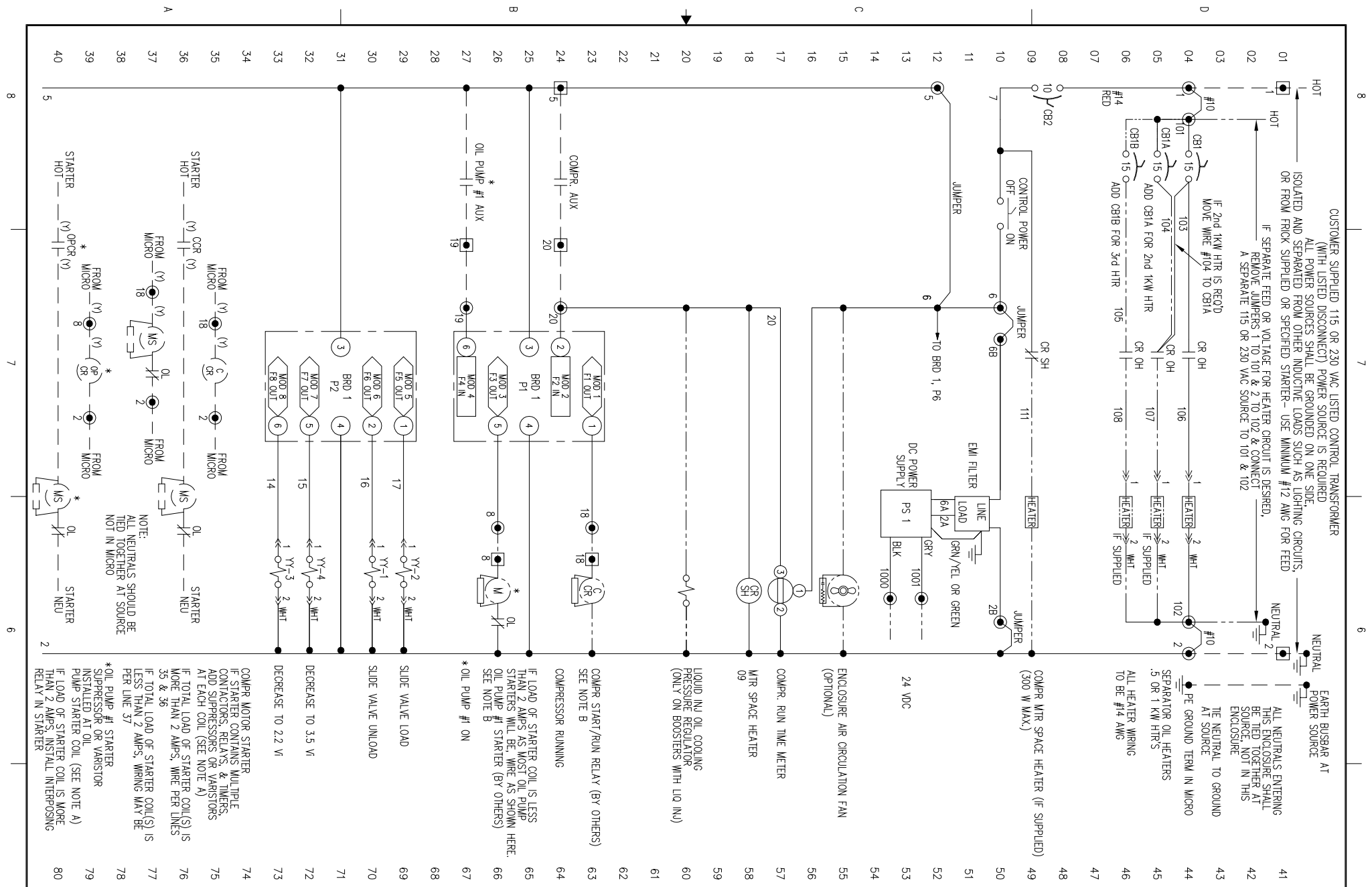
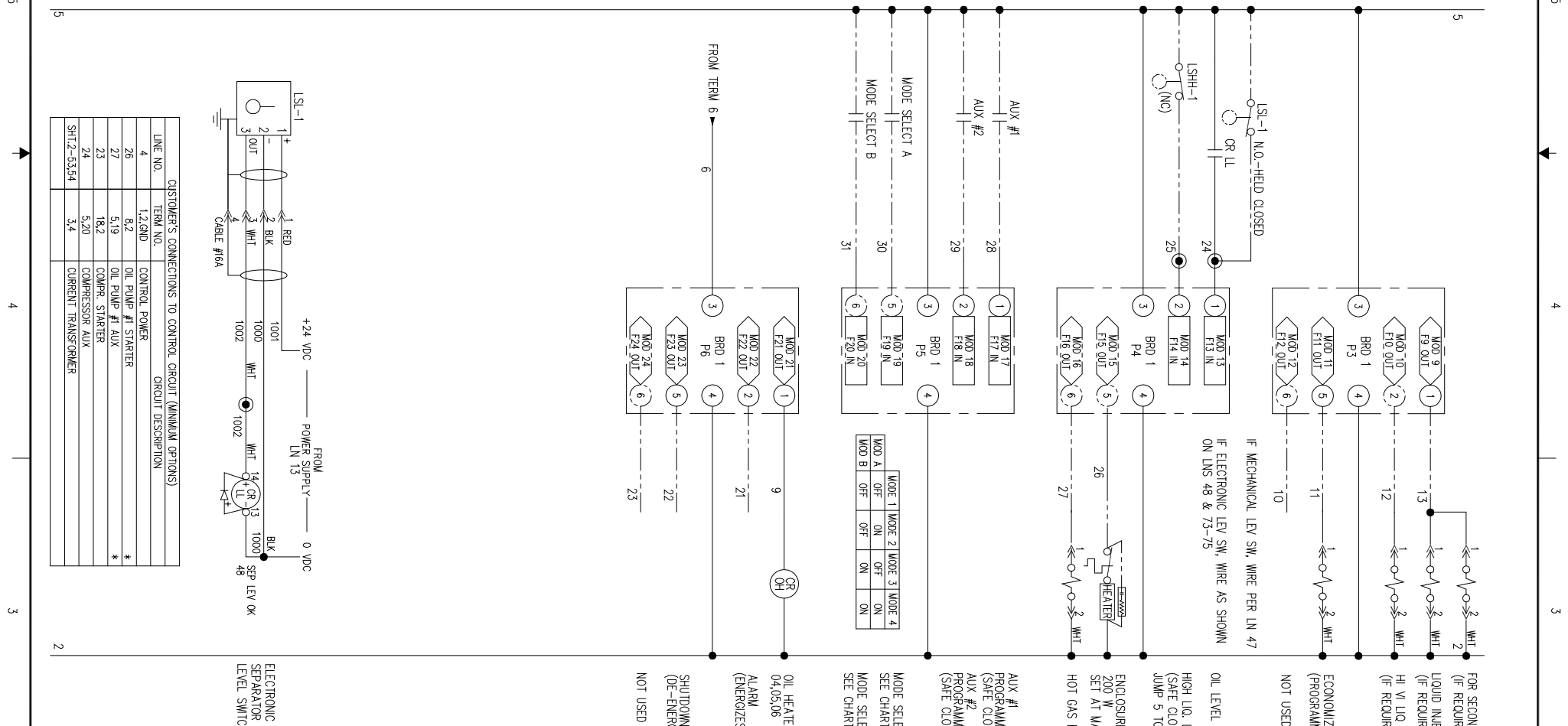
NOTE C:  
SOLENOID WIRING IF DIN CONNECTORS ARE USED  
IF ANY OTHER DEVICES USE DIN CONNECTORS, SUCH AS OIL HEATERS, THE HOT WIRE ALWAYS BE PIN 1 AND THE NEUTRAL PIN 2

INDICATES DIN CONNECTOR IF USED ON DEVICE  
\* INDICATES REQUIRED WITH OIL PUMP ONLY \*  
INDICATES DEVICES SUPPLIED BY FRICK OR OTHERS WHEN OPTIONAL OR REQUIRED  
WRING BY OTHERS- ALL WIRING ENTERING CONTROL CENTER (INCLUDING GROUND & NEUTRAL) TO BE #14 AWG STRANDED WIRES UNLESS SPECIFIED OTHERWISE.  
REPRESENTS STARTER TERMINALS WHEN SUPPLIED BY FRICK.  
TERMINALS IN DIG I/O CONTROL CENTER

NO THREE PHASE WIRING SHALL ENTER OR LEAVE QUANTUM PANEL OR BE RUN IN SAME CONDUIT AS ANY QUANTUM CONTROL WIRING ENTERING OR LEAVING QUANTUM PANEL.  
NO SINGLE PHASE OVER 300 VOLTS SHALL ENTER OR LEAVE QUANTUM PANEL.  
ALL QUANTUM WIRING TO BE #16 AWG STRANDED WIRE UNLESS SPECIFIED OTHERWISE.  
ALL NEUTRAL (EXP. 2 & 2A) WIRING TO BE WHITE UNLESS NOTED OTHERWISE.  
FOR INSTALLATION OF QUANTUM PACKAGE TEST PROCEDURE, SEE MMB NO. 4.11.10.12  
FOR INSTALLATION OF COMPUTER BOARDS AND EPROMS, SEE MMB NO. 4.11.10.11  
FOR HIGH POT TEST PROCEDURE, SEE MMB NO. 4.11.10.17  
FOR QUANTUM ASSEMBLY AND TEST PROCEDURE, SEE MMB NO. 4.11.10.14

PURCHASER		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES DO NOT SCALE	
FRICK ORD NO.	YORK Refrigeration	NOTICE TO PURCHASER	REFER TO CONTRACT FOR MATERIAL TO BE SUPPLIED BY FRICK COMPANY. THE AMOUNT OF SUCH MATERIAL IS NOT INCREASED BY ANYTHING SHOWN UPON THIS DRAWING.
YORK REF #	WIRING DIAGRAM	YORK International	York Refrigeration - Frick Wynnsboro, PA 17268
BR	NO. WIRETEL	DATE CODE	SIZE
OK	DE. ETEAM	08-05-04	D
APPD	DE. ETEAM	08-05-04	23587
CORE		SCALE	ONE NO
			649D5153
			REV E

LINE NO.	TERMINAL NO.	CONTROL POWER	CIRCUIT DESCRIPTION
4	1,2,3,ND	CONTROL POWER	*
26	8,2	OIL PUMP #1 STARTER	*
27	5,19	OIL PUMP #1 AUX	*
23	18,2	COMPR. STARTER	*
24	5,20	COMPR. STARTER AUX	*
34	3,4	CURRENT TRANSFORMER	



ZONE	REV	ECN	DESCRIPTION	DATE	DR	CHK	APPD

REVISION HISTORY

NOTE 1A:  
ALL ANALOG LOW VOLTAGE WIRING TO BE RUN IN SEPARATE CONDUIT FROM ALL OTHER WIRING. ALL DRAIN WIRES TO BE INSULATED EITHER TOGETHER OR SEPARATELY WITHIN 2" OR CLOSER OF TERMINATION IF NOT CONFIRMED OTHERWISE.

NOTE 2A:  
TEMPERATURE WIRING SPECIFICATIONS:  
MINIMUM CABLE SIZE FOR SENSOR WIRING TO BE 22 AWG TWISTED PAIR - BELDEN #9320 (20/2) OR EQUAL TWISTED PAIR SUGGESTED IF CABLE HAS A DRAIN WIRE. GROUND DRAIN WIRE AT ONE END ONLY AND INSULATE OTHER END. 2000 FT. MAX. DISTANCE

NOTE 3A:  
SPECIFICATIONS FOR TEMPERATURE CAPACITY CONTROL:  
-SETPPOINT RANGE: -50F. TO 100F.  
-TEMPERATURE ASSEMBLY FOR NON-HAZARDOUS LOCATION (FRICK P/N 6394015)032 WITH 1/2"NPT OR 6394015)032 FOR CABLE STRAIN RELIEF  
-WIRE AS SHOWN IN SEPARATE CONDUIT FROM ALL OTHER WIRING. USE BELDEN #9320(20/2) CABLE OR EQUAL

CHANNEL 13  
REMOTE SLIDE VALVE POSITION  
0-20 MA

CHANNEL 14  
SLIDE VALVE  
0-20 MA  
OR  
CHANNEL 14  
POT  
CHANNEL 15  
NOT USED

CHANNEL 16  
MOTOR AMPS  
LK2 (OUT)  
ALTERNATE METHOD USING  
0-20 MA  
OR

CHANNEL 16  
MOTOR AMPS  
CUR TRM  
SEE QUANTUM IOM MANUAL  
FOR C.T. WIRE SIZING TO MOTOR  
LK2 (IN)

PHD CONNECTORS P9A & P9B  
COMPRESSOR & GPR MOTOR  
VIBRATION & TEMPERATURE MONITORING  
-FOR 7 CHANNELS DEDICATED TO PHD  
SEE DRAWING 649D5050

CHANNEL 1 (EZ COOL PID LOOP IF REQ'D)  
PID LOOP OR  
PROGRAMMABLE SELECTABLE OUTPUT  
TO RE-TRANSMIT ANALOG INPUT  
4-20 MA

CHANNEL 2  
PID LOOP OR  
PROGRAMMABLE SELECTABLE OUTPUT  
TO RE-TRANSMIT ANALOG INPUT  
4-20 MA

CHANNEL 3  
PROGRAM SELECTABLE OUTPUT  
TO RE-TRANSMIT ANALOG INPUT  
SLIDE VALVE POSITION/CAPACITY  
4-20 MA

CHANNEL 4  
PID, RE-XMIT  
ANALOG INPUT  
CHANNEL

CHANNEL 5  
CONDENSER ANALOG OUTPUT A  
LOCATE PRESS. TRANSDUCER  
ON CHANNEL 11,  
ANA BD. 1

CHANNEL 6  
CONDENSER ANALOG OUTPUT B  
LOCATE PRESS. TRANSDUCER  
ON CHANNEL 11,  
ANA BD. 1

CHANNEL 7  
PID, RE-XMIT  
ANALOG INPUT  
CHANNEL

CHANNEL 8  
PID, RE-XMIT  
ANALOG INPUT  
CHANNEL

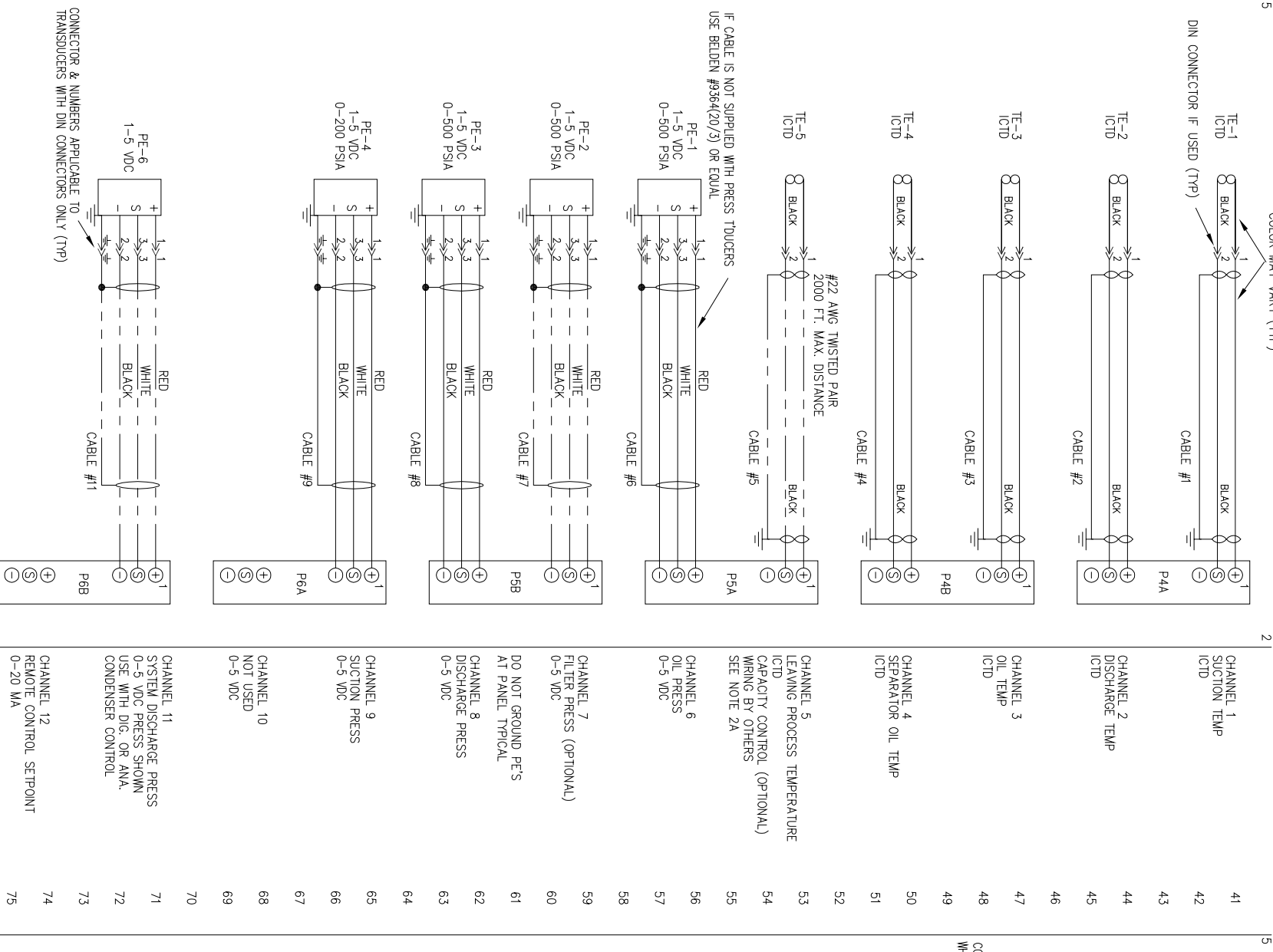
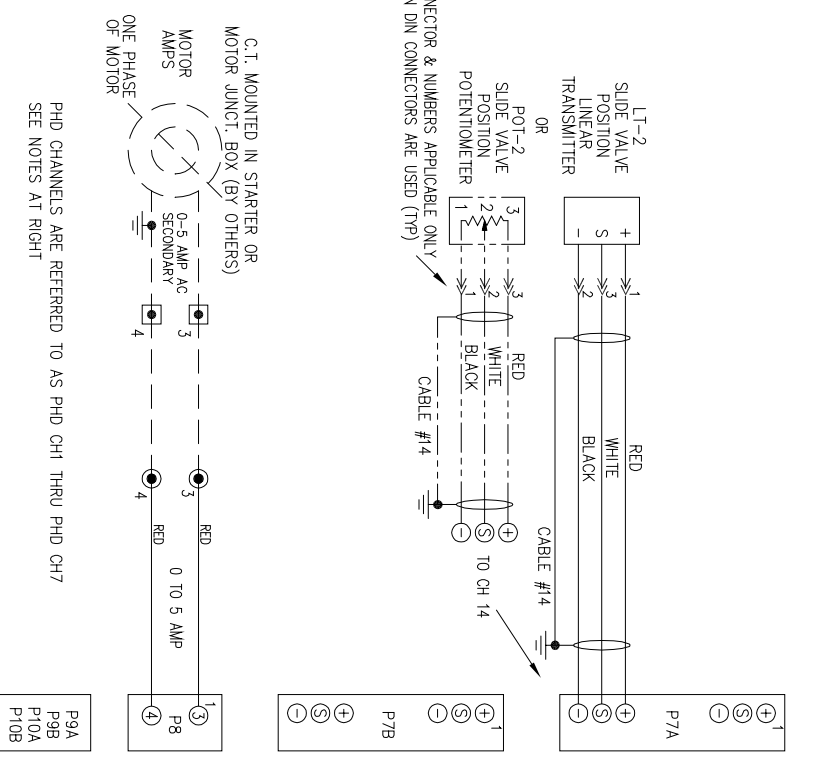
CHANNEL 9  
SUCTION PRESS  
0-5 VDC

CHANNEL 10  
NOT USED  
0-5 VDC

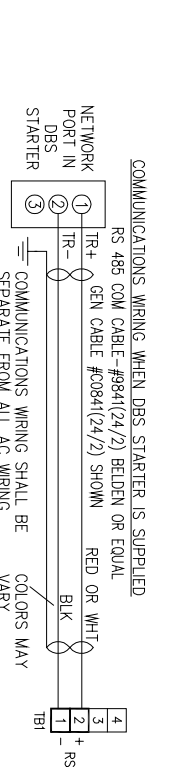
CHANNEL 11  
SYSTEM DISCHARGE PRESS  
0-5 VDC PRESS SHOWN  
USE WITH DIG. OR ANA.  
CONDENSER CONTROL

CHANNEL 12  
REMOTE CONTROL SETPOINT  
0-20 MA

ANALOG OUTPUTS



COMMUNICATIONS WIRING WHEN DBS STARTER IS SUPPLIED



YORK Refrigeration

<p>FRICK DRD NO. _____</p> <p>UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES</p> <p>DO NOT SCALE</p> <p>YORK Refrigeration York International Refrigeration - Frick Waynesboro, PA 17268</p>	<p>NOTICE TO PURCHASER</p> <p>REFER TO CONTRACT FOR MATERIAL TO BE SUPPLIED BY FRICK COMPANY. THE AMOUNT OF SUCH MATERIAL IS NOT INCREASED BY ANYTHING SHOWN UPON THIS DRAWING.</p>
<p>FRICK DRD NO. _____</p> <p>DATE CODE</p> <p>SIZE</p> <p>SCALE</p>	<p>WIRING DIAGRAM</p> <p>RXF</p> <p>QUANTUM LX</p> <p>649D5153</p> <p>REV E</p>