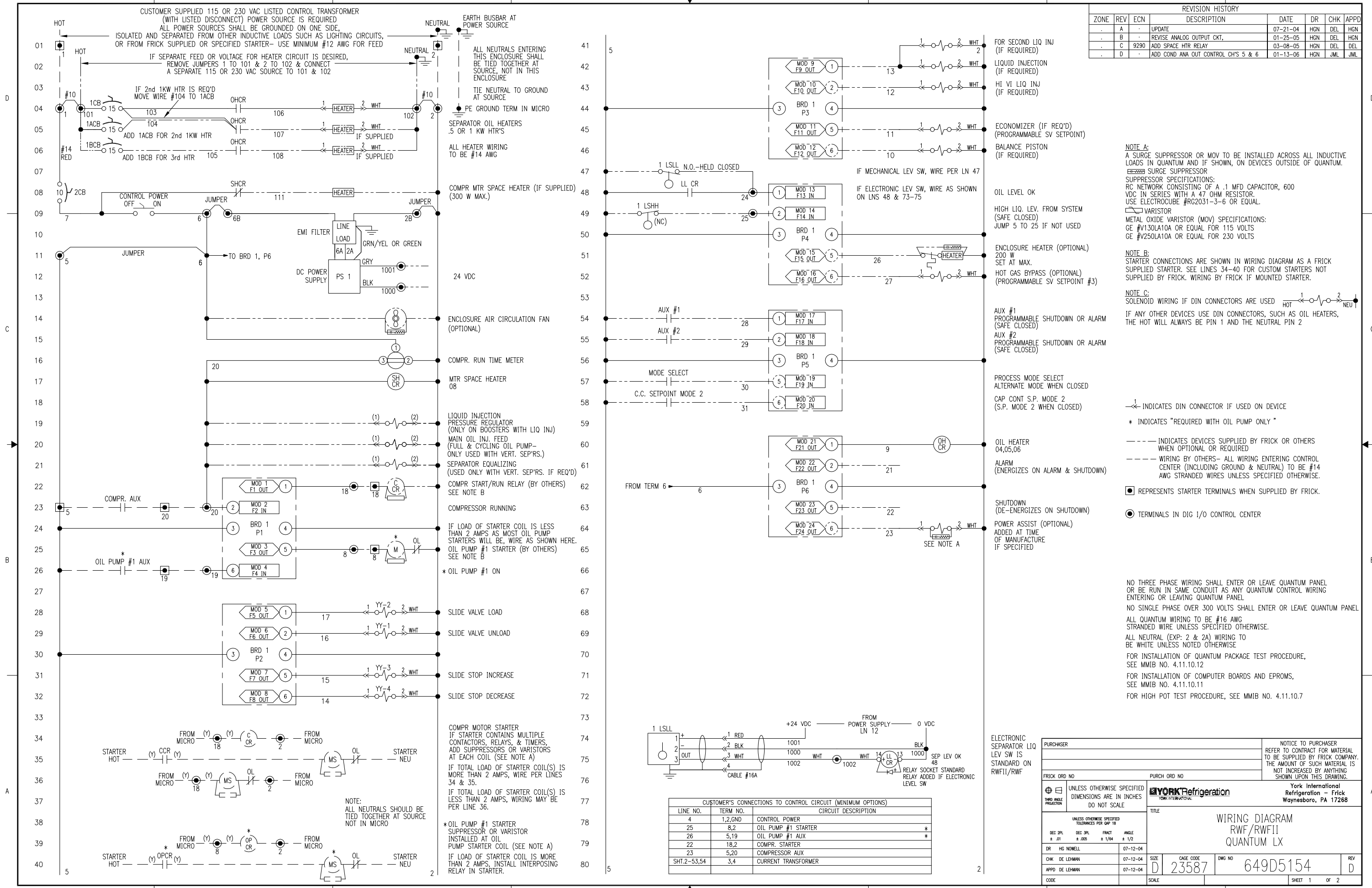


REVISION HISTORY						
ZONE	REV	ECN	DESCRIPTION	DATE	DR	CHK
	A		UPDATE	07-21-04	HGN	DEL
	B		REVISE ANALOG OUTPUT CKT.	01-25-05	HGN	DEL
	C	9290	ADD SPACE HTR RELAY	03-08-05	HGN	DEL
	D		ADD COND ANA OUT CONTROL CH'S 5 & 6	01-13-06	HGN	JML



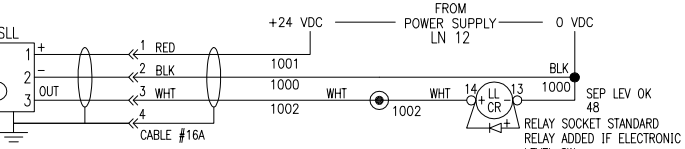
**NOTE A:**  
A SURGE SUPPRESSOR OR MOV TO BE INSTALLED ACROSS ALL INDUCTIVE LOADS IN QUANTUM AND IF SHOWN, ON DEVICES OUTSIDE OF QUANTUM.  
SURGE SUPPRESSOR SPECIFICATIONS:  
RC NETWORK CONSISTING OF A .1 MFD CAPACITOR, 600 VDC IN SERIES WITH A 47 OHM RESISTOR.  
USE ELECTROCUBE #RG2031-3-6 OR EQUAL.  
VARISTOR SPECIFICATIONS:  
METAL OXIDE VARISTOR (MOV) SPECIFICATIONS:  
GE #V130LA10A OR EQUAL FOR 115 VOLTS  
GE #V250LA10A OR EQUAL FOR 230 VOLTS

**NOTE B:**  
STARTER CONNECTIONS ARE SHOWN IN WIRING DIAGRAM AS A FRICK SUPPLIED STARTER. SEE LINES 34-40 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 WILL 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
- INDICATES WIRING 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 MMIB NO. 4.11.10.12  
FOR INSTALLATION OF COMPUTER BOARDS AND EPROMS, SEE MMIB NO. 4.11.10.11  
FOR HIGH POT TEST PROCEDURE, SEE MMIB NO. 4.11.10.7

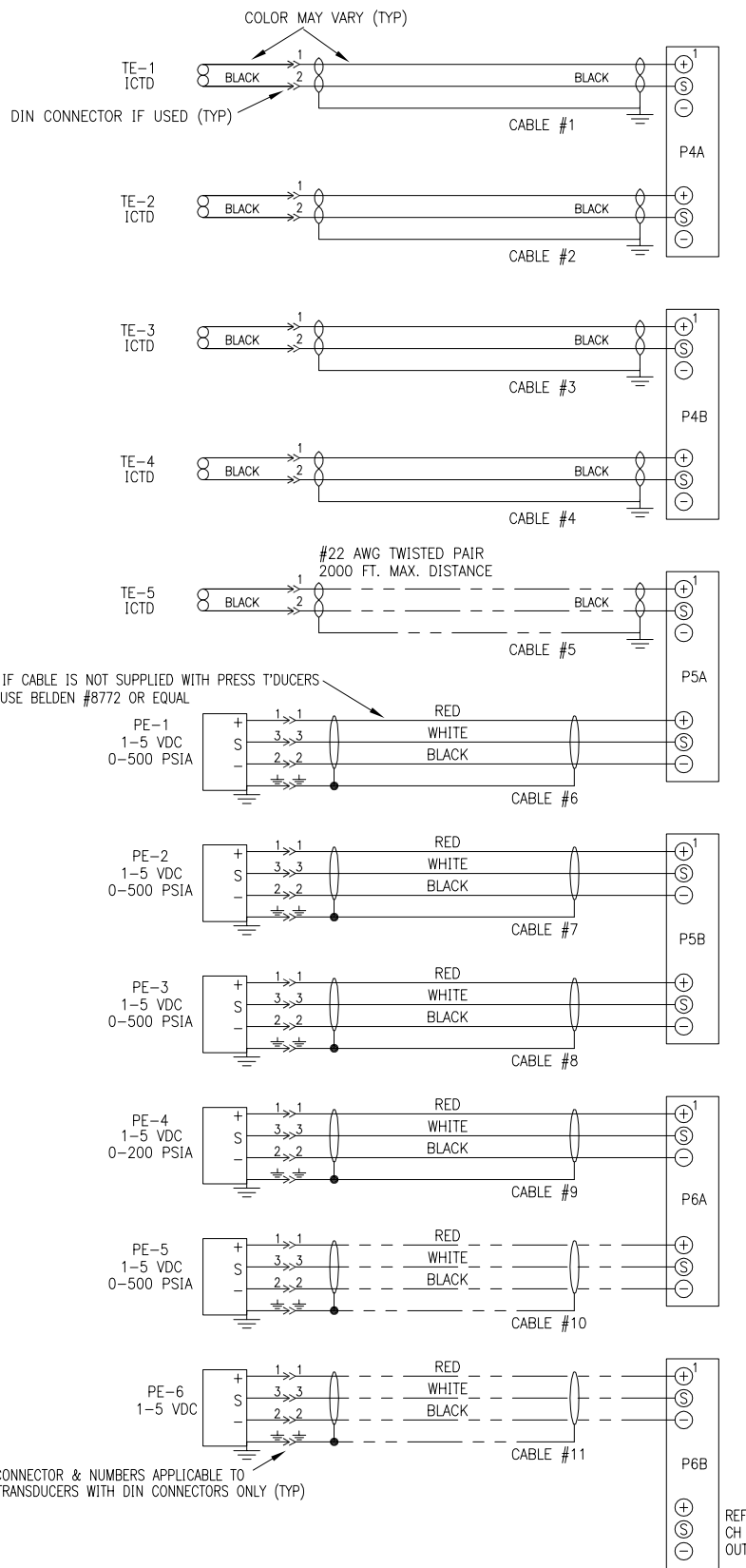


CUSTOMER'S CONNECTIONS TO CONTROL CIRCUIT (MINIMUM OPTIONS)			
LINE NO.	TERM NO.	CONTROL POWER	CIRCUIT DESCRIPTION
4	1,2,GND		
25	8,2		OIL PUMP #1 STARTER *
26	5,19		OIL PUMP #1 AUX *
22	18,2		COMPR. STARTER
23	5,20		COMPRESSOR AUX
SHT.2-53,54	3,4		CURRENT TRANSFORMER

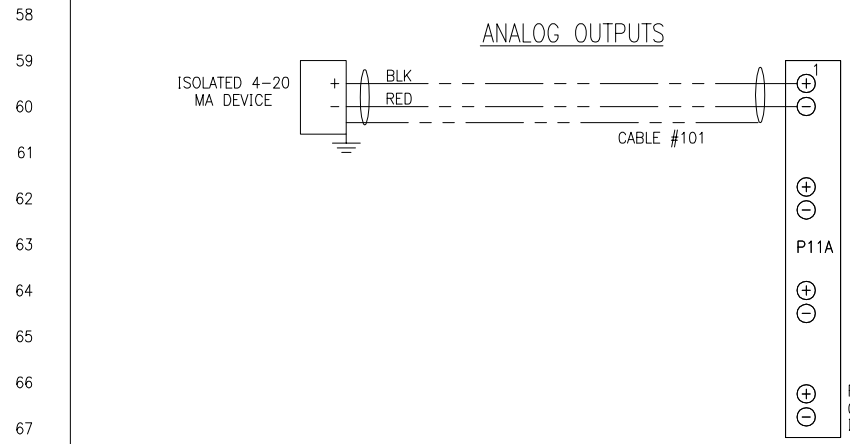
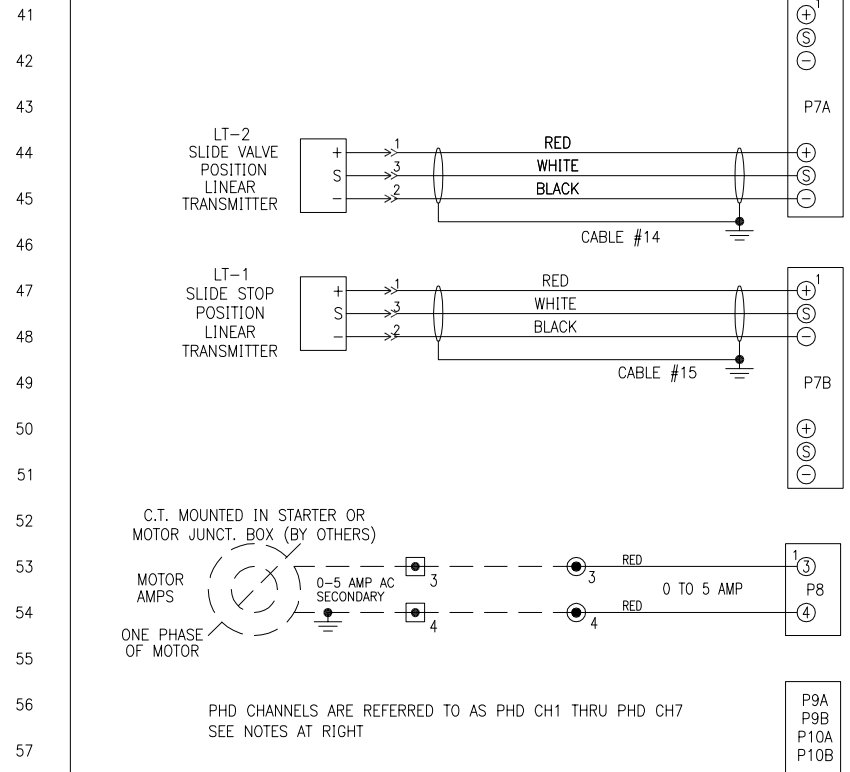
PURCHASER		NOTICE TO PURCHASER REFER TO CONTRACT FOR MATERIAL TO BE SUPPLIED BY FRICK COMPANY. THE AMOUNT OF SUCH MATERIAL IS NOT INCREASED BY ANYTHING SHOWN UPON THIS DRAWING.	
FRICK ORD NO.	PURCH ORD NO.	York International Refrigeration - Frick Waynesboro, PA 17268	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES DO NOT SCALE		YORK International	
TITLE: WIRING DIAGRAM RWF/RWF11 QUANTUM LX			
UNLESS OTHERWISE SPECIFIED TOLERANCES PER QAP 18		CAGE CODE	
DEC 2PL ± .01	DEC SPL ± .005	FRACT ± 1/64	ANGLE ± 1/2
DR: HG NOWELL	07-12-04	SIZE: D	CAGE CODE: 23587
CHK: DE LEHMAN	07-12-04	DWG NO: 649D5154	REV: D
APPD: DE LEHMAN	07-12-04	SCALE:	SHEET 1 OF 2

REVISION HISTORY						
ZONE	REV	ECN	DESCRIPTION	DATE	DR	CHK

ANALOG BOARD #1



- CHANNEL 1 SUCTION TEMP ICTD
- CHANNEL 2 DISCHARGE TEMP ICTD
- CHANNEL 3 OIL TEMP ICTD
- CHANNEL 4 SEPARATOR OIL TEMP ICTD
- CHANNEL 5 LEAVING PROCESS TEMPERATURE ICTD CAPACITY CONTROL (OPTIONAL) WIRING BY OTHERS SEE NOTE 2A
- CHANNEL 6 OIL PRESS 0-5 VDC
- CHANNEL 7 FILTER PRESS 0-5 VDC
- CHANNEL 8 DISCHARGE PRESS 0-5 VDC
- CHANNEL 9 SUCTION PRESS 0-5 VDC
- CHANNEL 10 BALANCE PISTON (IF REQ'D) 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

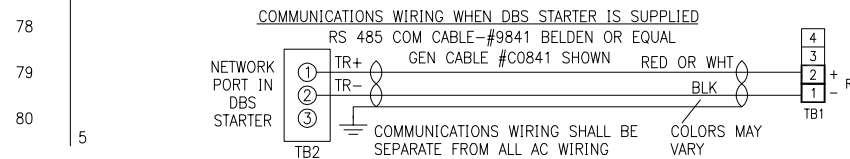
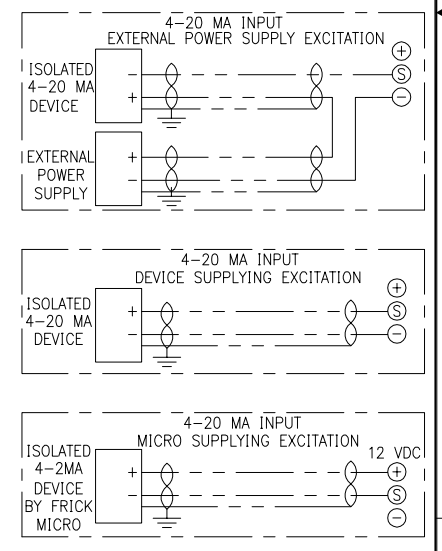


- CHANNEL 13 REMOTE SLIDE VALVE POSITION. 0-20 MA
- CHANNEL 14 SLIDE VALVE 0-20 MA
- CHANNEL 15 SLIDE STOP 0-20 MA
- CHANNEL 16 MOTOR AMPS LK2 (OUT) ALTERNATE METHOD USING 0-20 MA
- CHANNEL 16 MOTOR AMPS CUR TRAN SEE QUANTUM IOM MANUAL FOR C.T. WIRE SIZING TO MOTOR LK2 (IN)
- PHD CONNECTORS P9A & P9B COMPRESSOR & CPR 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 REMOTE CONTROL SETPOINT 4-20 MA
- CHANNEL 5 CONDENSER ANALOG CONTROL LOCATE PRESS. TRANSDUCER ON CHANNEL 11, ANA BD. 1
- CHANNEL 6 CONDENSER ANALOG CONTROL LOCATE PRESS. TRANSDUCER ON CHANNEL 11, ANA BD. 1
- CHANNEL 7 PID, RE-XMITT ANALOG INPUT CHANNEL
- CHANNEL 8 PID, RE-XMITT ANALOG INPUT CHANNEL

**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 CONFINED OTHERWISE.

**NOTE 2A:**  
TEMPERATURE WIRING SPECIFICATIONS:  
MINIMUM CABLE SIZE FOR SENSOR WIRING TO BE 22 AWG, TWISTED PAIR - BELDEN #8762 OR EQUAL 20/2 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:  
-SETPOINT RANGE: -50°F. TO 100°F.  
-TEMPERATURE ASSEMBLY FOR NON-HAZARDOUS LOCATION (FRICK P/N 639A0151G03 WITH 1/2" NPT OR 639A0151G02 FOR CABLE STRAIN RELIEF  
-WIRE AS SHOWN IN SEPARATE CONDUIT FROM ALL OTHER WIRING, USE BELDEN #8761 CABLE OR EQUAL



PURCHASER		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.	
FRICK ORD NO	PURCH ORD NO	York International Refrigeration - Frick Waynesboro, PA 17268	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES DO NOT SCALE		TITLE WIRING DIAGRAM RWF11 / RWF QUANTUM LX	
UNLESS OTHERWISE SPECIFIED TOLERANCES PER QAP 18		DR	DATE
DEC 2PL ± .01	DEC 3PL ± .005	HG NOWELL	07-12-04
FRACK ± 1/64		CHK	DATE
ANGLE ± 1/2		DE LEHMAN	07-12-04
APPD DE LEHMAN		APPD	DATE
07-12-04		DE LEHMAN	07-12-04
SIZE	CAGE CODE	DWG NO	REV
D	23587	649D5154	D
SCALE	SHEET 2 OF 2		