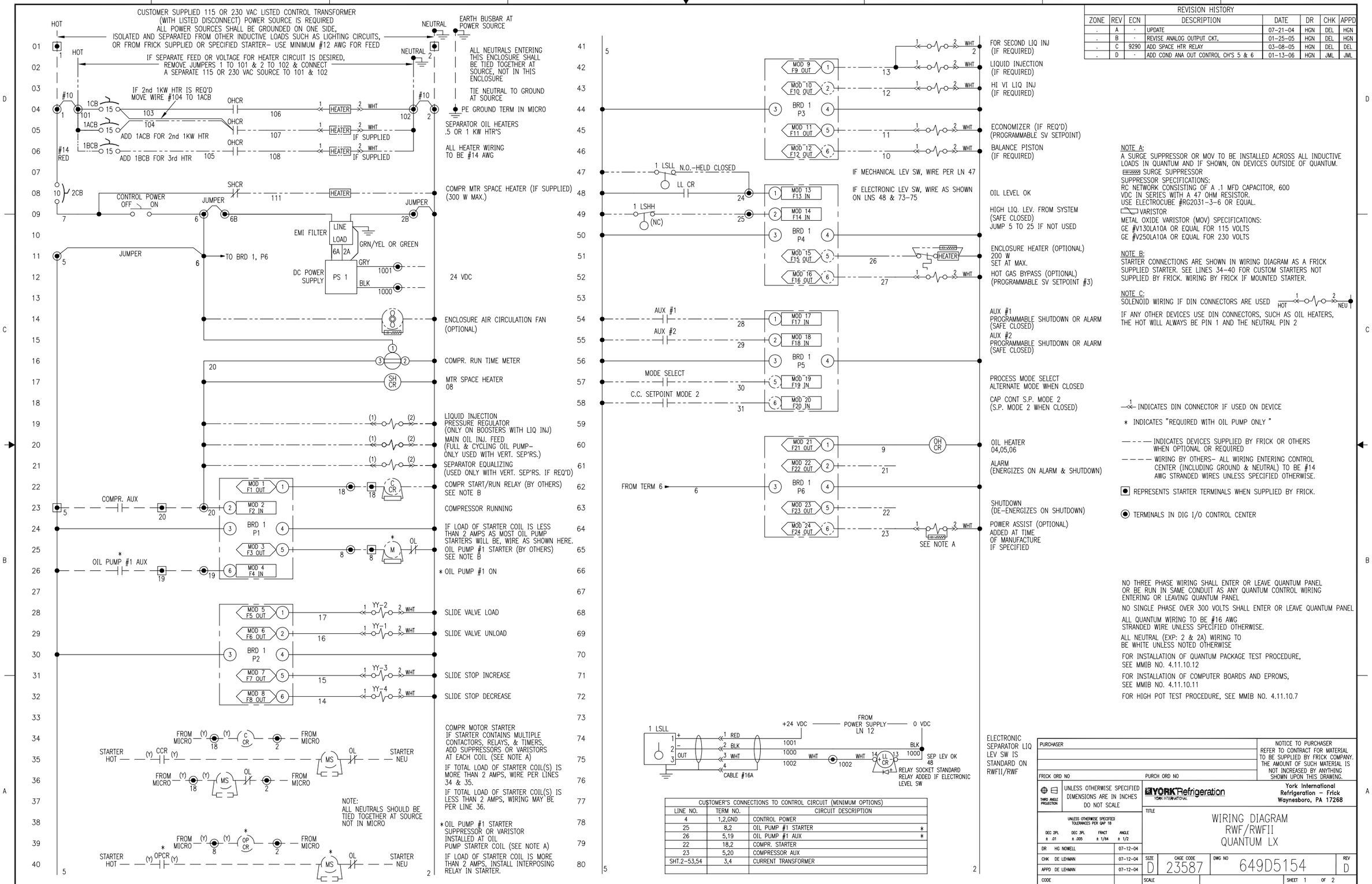


REVISION HISTORY							
ZONE	REV	ECN	DESCRIPTION	DATE	DR	CHK	APPD
.	A	·	UPDATE	07–21–04	HGN	DEL	HGN
.	B	·	REVISE ANALOG OUTPUT CKT,	01–25–05	HGN	DEL	HGN
.	C	9290	ADD SPACE HTR RELAY	03–08–05	HGN	DEL	DEL
.	D	·	ADD COND ANA OUT CONTROL CH'S 5 & 6	01–13–06	HGN	JML	JML

CUSTOMER'S CONNECTIONS TO CONTROL CIRCUIT (MINIMUM OPTIONS)			
LINE NO.	TERM NO.	CIRCUIT DESCRIPTION	
4	1,2,GND	CONTROL POWER	
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

THIRD ANGLE PROJECTION

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES DO NOT SCALE

UNLESS OTHERWISE SPECIFIED TOLERANCES PER QAP 18
DEC 2PL ± .01 | DEC 3PL ± .005 | FRACT ± 1/64 | ANGLE ± 1/2

DR	HG NOWELL	07–12–04
CHK	DE LEHMAN	07–12–04
APPD	DE LEHMAN	07–12–04
CODE		

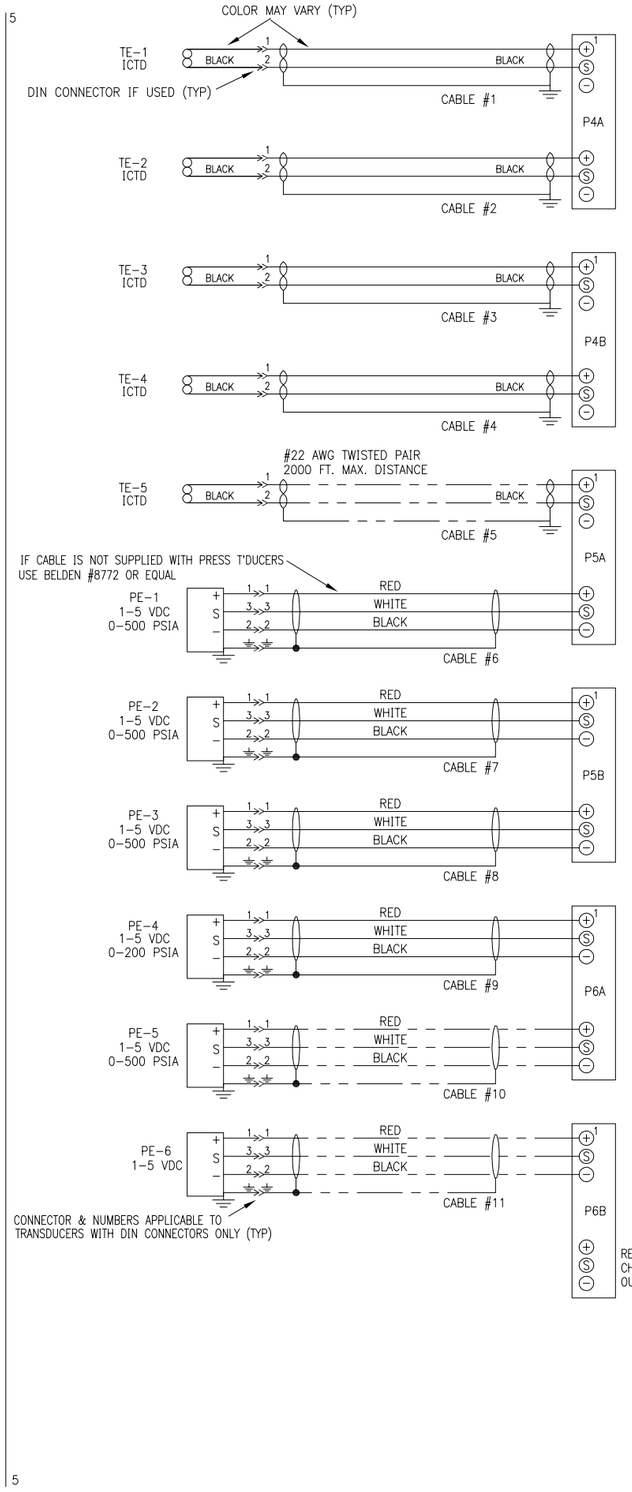
York International Refrigeration – Frick
Waynesboro, PA 17268

TITLE
WIRING DIAGRAM
RWF/RWFII
QUANTUM LX

SIZE D | CAGE CODE 23587 | DWG NO 649D5154 | REV D
SCALE | SHEET 1 OF 2

REVISION HISTORY							
ZONE	REV	ECN	DESCRIPTION	DATE	DR	CHK	APPD
.	.	.	.	.	.	.	.

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

DO NOT GROUND PE'S
AT PANEL TYPICAL

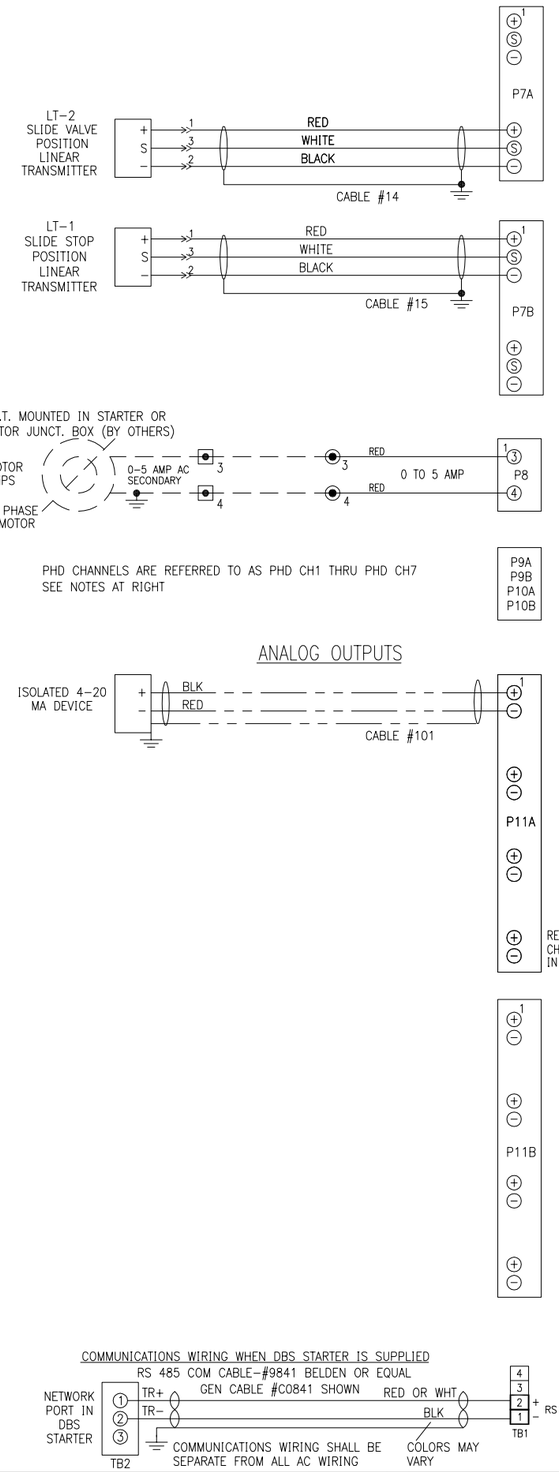
CHANNEL 8
DISCHARGE PRESS
0-5 VDC

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

OR

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

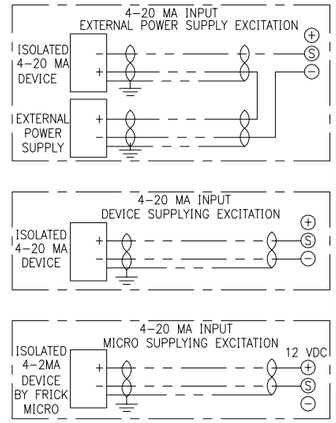
CHANNEL 5
CONDENSER ANALOG CONTROL
LOCATE PRESS. TRANSDUCER
ON CHANNEL 11,
ANA BD. 1

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

TB1 ON TOP
BOARD OF CPU
COMM 1 PORT
LK16 MUST BE
IN "B" POSITION



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

FRICK ORD NO | PURCH ORD NO

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.

THIRD ANGLE PROJECTION

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES DO NOT SCALE

UNLESS OTHERWISE SPECIFIED TOLERANCES PER GAP 18

DEC 3PL ± .01	DEC 3PL ± .005	FRACT ± 1/64	ANGLE ± 1/2

DR	HG NOWELL	07-12-04
CHK	DE LEHMAN	07-12-04
APPD	DE LEHMAN	07-12-04
CODE		

YORK Refrigeration
YORK INTERNATIONAL

York International Refrigeration - Frick
Waynesboro, PA 17268

TITLE
WIRING DIAGRAM
RWFII / RWF
QUANTUM LX

SIZE	CAGE CODE	DWG NO	REV
D	23587	649D5154	D

SCALE | SHEET 2 OF 2