



### REVISION HISTORY

ZONE	REV	ECN	DESCRIPTION	DATE	DR	CHK	APPD
A			REVERSE ANALOG OUTPUT CIRCUITS	01-25-06	HKN	DEL	DEL
B			ADD SPACE HEATER RELAY, INDUCE REF 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	HKN
D			RE-DEFINE DIG CH'S 19,20-ANA OUT CH'S 5,6 (IF REQUIRED)	07-17-07	HKN	BSH	HKN
E			RE-NUMBER DEVICES AS NEEDED	11-16-07	HKN	ML	HKN

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:  
GE #V150L10A OR EQUAL FOR 115 VOLTS  
OR #V250L10A 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 MMW NO. 4.11.10.12  
FOR INSTALLATION OF COMPUTER BOARDS AND EPROMS, SEE MMW NO. 4.11.10.11  
FOR HIGH POT TEST PROCEDURE, SEE MMW NO. 4.11.10.17  
FOR QUANTUM ASSEMBLY AND TEST PROCEDURE, SEE MMW NO. 4.11.10.14

PURCHASER		NOTICE TO PURCHASER
FRICK ORJ 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		
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