

**CONTROL TRANSFORMER PRIMARY CONNECTIONS**

INPUT VOLTS	TERMINALS	JUMPER LOCATION
208	(H1) (H2)	NONE
230/240	(H1) (H4)	(H1) TO (H3)
460/480	(H1) (H4)	(H2) TO (H3)
600	(H1) (H2)	NONE

**NOTES:**

- CONNECTED TO THE CABINET. CUSTOMER TO CONNECT THE CABINET GROUND LUGS TO EARTH GROUND AND UTILITY GROUND.
- CONDUIT FITTINGS/HUBS SHALL COMPLY WITH THE "STANDARD FOR CONDUIT, TUBING, AND CABLE FITTINGS, UL 514B", OR CONDUIT FITTINGS HAVING THE SAME ENVIRONMENTAL RATING AS THE ENCLOSURE SHALL BE USED.
- LIGHTNING PROTECTION OPTION P2 IS TO BE INSTALLED ON THE VOLTAGE TAP OFFS AT THE BREAKER IF REQUIRED.
- BRANCH CIRCUIT PROTECTION TO BE SUPPLIED BY THE CUSTOMER WHEN NOTED ON THE CABINET DATA NAMEPLATE.
- INSULATED TWISTED SHIELDED WIRE IS REQUIRED. SHIELD TO CONNECT TO PROPER TERMINALS AS SHOWN, CONNECT THE SHIELD ONLY AT THIS END, STUB AND ISOLATE THE OTHER END, DO NOT RUN THESE WIRES IN THE SAME CONDUIT AS THE AC POWER AND AC CONTROL WIRES. KEEP ALL WIRING UNDER 50mm IN LENGTH.
- CUSTOMER TO ADJUST THE THERMOSTAT ON THE SPACE HEATER HRT1 FOR THE MINIMUM DESIRED TEMPERATURE INSIDE THE DRIVE CABINET. THIS SET TEMPERATURE IS NORMALLY SELECTED TO BE SLIGHTLY HIGHER THAN THE MINIMUM AMBIENT TEMPERATURE OF THE AIR SURROUNDING THE CABINET, AND IS THE TEMPERATURE AT WHICH THE SPACE HEATER HRT1 WILL SHUT OFF.
- FOR A CONTROL TRANSFORMER T1 POWER RATING OF 350VA OR GREATER, SECONDARY FUSE F6 IS ADDED.
- IF AC MOTOR IS FURNISHED WITH A N.C. THERMAL SWITCH THEN SET DRIVE PARAMETER H1-08 TO 27. THIS WILL CAUSE THE DRIVE TO COAST TO STOP UPON AN AC MOTOR THERMAL FAULT.
- ALONG WITH THIS, ADD THE FOLLOWING CUSTOMER WIRING:
  - WIRE THE N.C. THERMAL SWITCH BETWEEN TERMINAL S8 OF THE 120VAC INTERFACE CARD AND ONE SIDE OF THE 120VAC SOURCE.
- OPTIONS TD, TG, TH, TL, TO, OR TU CONTROL. (SEE UDE00453 FOR MORE INFORMATION)
- CUSTOMER TO REPLACE THE JUMPER WITH NORMALLY CLOSED SAFETY INTERLOCKS, IF APPLICABLE.
- CUSTOMER MUST PROVIDE PROPER SHORT CIRCUIT PROTECTION AND MEANS OF DISCONNECT.

REV.	DESCRIPTION	ECO #	DRAWN BY	DATE	DATE	DATE	DATE	DATE
02	ADD MISSING REF NUMBERS 201-241 ON PAGE 2	6330	DJP	6/12/15	1/30/14	1/30/14	1/30/14	1/30/14
01	CORRECTED CONTACT LOCATION REFERENCE	5186	NSL	4/01/14	1/30/14	1/30/14	1/30/14	1/30/14
00	INITIAL RELEASE	-	NSL	1/30/14	1/30/14	1/30/14	1/30/14	1/30/14

**REVISIONS**

**YASKAWA**

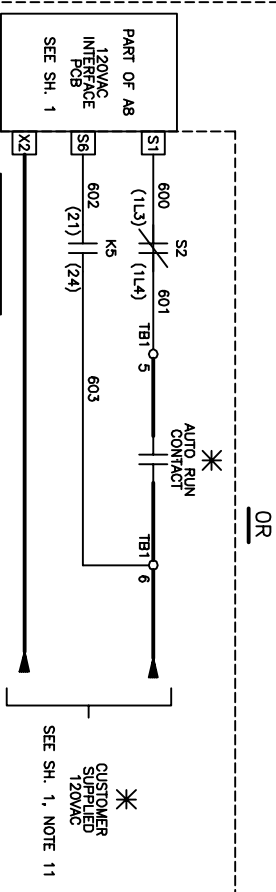
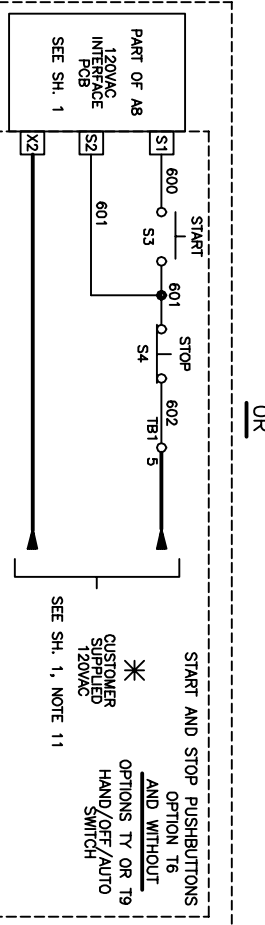
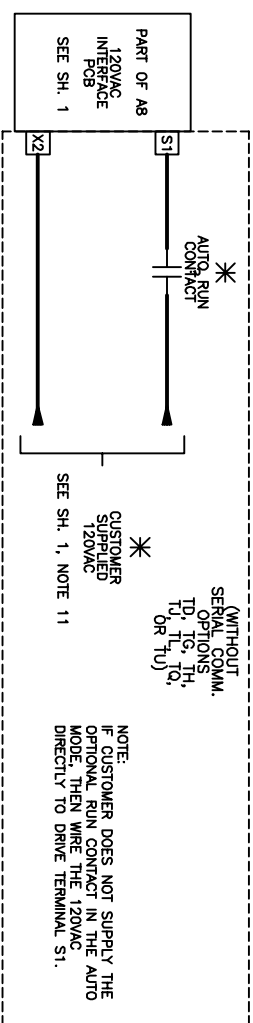
DRIVEN BY: N. LAWS  
 CHECKED: D. PACKER  
 DATE: 1/30/14  
 DATE: 1/30/14  
 DATE: 1/30/14  
 DATE: 1/30/14

SCHEMATIC DIAGRAM  
 IQPUMP1000 CONFIGURED  
 TYPE 3R - F2 ENCL.  
 IMPEDANCE READY

SIZE: D  
 REVISION: 02  
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RUN/STOP CONTROL WITH OPTION TV (FROM SHEET 1)

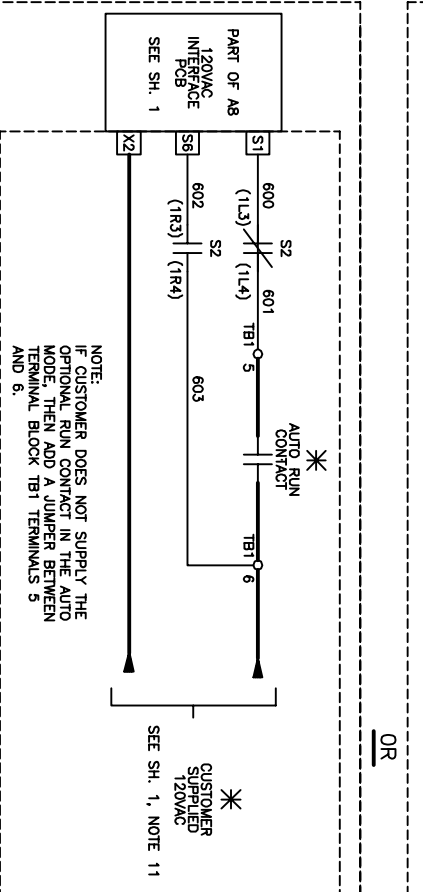


CONTACT SEQUENCE CHART FOR S2  
X - INDICATES CONTACT CLOSED

CONTACT	HAND	OFF	AUTO*	MANUF. LOCATION /TYPE
1	X			1R0
2			X	1L0

\* SCHEMATIC SHOWS THIS POSITION.

OPTION T6  
START AND STOP PUSHBUTTONS  
AND WITH  
OPTION T9, OR PART OF OPTION T9  
HAND/OFF/AUTO SWITCH

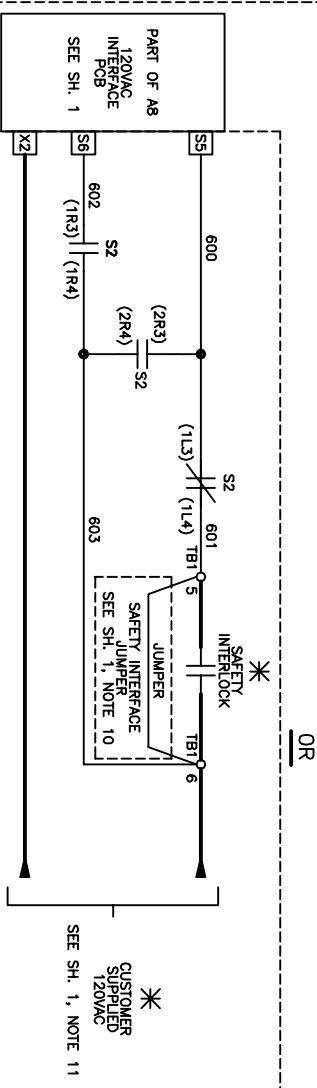


CONTACT SEQUENCE CHART FOR S2  
X - INDICATES CONTACT CLOSED

CONTACT	HAND	OFF	AUTO*	MANUF. LOCATION /TYPE
1	X			1R0
2			X	1L0

\* SCHEMATIC SHOWS THIS POSITION.

OPTION T9, OR PART OF OPTION T9  
HAND/OFF/AUTO SWITCH  
AND WITH  
OPTIONS TD, TG, TH, TJ, TL, TO OR TU  
SERIAL COMMUNICATIONS



CONTACT SEQUENCE CHART FOR S2  
X - INDICATES CONTACT CLOSED

CONTACT	HAND	OFF	AUTO*	MANUF. LOCATION /TYPE
1	X			1R0
2			X	1L0
3		X		ZR0

\* SCHEMATIC SHOWS THIS POSITION.

OPTION T9, OR PART OF OPTION T9  
HAND/OFF/AUTO SWITCH  
AND WITH  
OPTIONS TD, TG, TH, TJ, TL, TO OR TU  
SERIAL COMMUNICATIONS

FOR ALL WIRE CONNECTION TO 120VAC INTERFACE PCB AB:  
WIRE RANGE: (24 - 17) AWG  
WIRE TORQUE: (1.95 - 2.21) LB-IN

SEE SHEET 1 FOR NOTES.

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DESIGNED BY N. LAWS	DATE 1/30/14	TITLE SCHEMATIC DIAGRAM
CHECKED BY D. PACKER	DATE 1/30/14	TYPE IQUMPT1000 CONFIGURED
APPROVED BY K. FLIERL	DATE 1/31/14	IMPEDANCE READY
DESIGNED BY N. LAWS	DATE 1/30/14	DRAWING # DS-Q1C3R.25

SIZE: D REVISION: 02 PAGE: 2 of 2