

**CONTROL TRANSFORMER PRIMARY CONNECTIONS**

INPUT VOLTS	TERMINALS	JUMPER LOCATION
208	A (H1)	NONE
480/480	(H1) (H4)	(H2) TO (H3)

**PROGRAMMABLE CONTACT INPUTS**  
DI-1/2/3/4/5/6/7/8

**PROGRAMMABLE CONTACT OUTPUTS**  
DO-1 to DO-10

**CONTACT RATINGS**  
24VDC, 8MA

**RS485 SERIAL COMMUNICATION SELECTIONS AVAILABLE:**

- MODBUS
- N2 / METASYS
- FLN / APOGEE
- BACKNET (FACTORY SETTING)



**REVISIONS**

REV.	DESCRIPTION	ECO #	DATE	DRAWN BY
00	INITIAL RELEASE	-	2/22/14	D. PACKER

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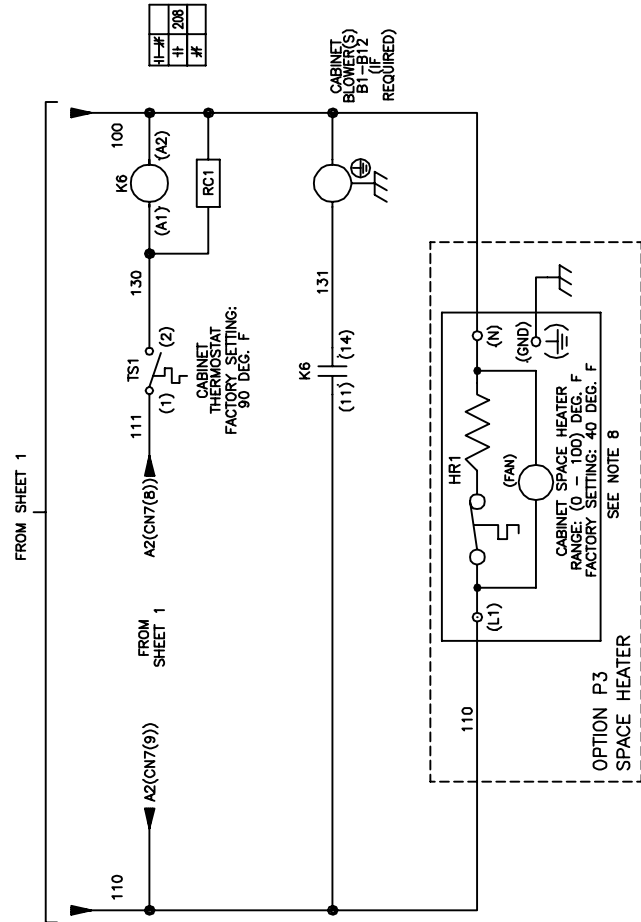
**SCHEMATIC DIAGRAM P1000 ELECTRONIC BYPASS 2-MTR AND OPTION PA**

DATE	BY	REV.	DESCRIPTION
2/22/14	D. PACKER	00	INITIAL RELEASE
2/23/14	D.R. CMELEK	01	REVISED
2/24/14	K. FLIERL	02	REVISED
2/22/14	D. PACKER	03	REVISED

\* - INDICATES COMPONENTS NOT SUPPLIED BY YASKAWA.  
 - - INDICATES CUSTOMER WIRING.  
 // - CONNECTED TO THE CABINET OR PANEL.  
 SEE SHEET 2 FOR NOTES.

NOTES:

1. CUSTOMER TO CONNECT THE CABINET GROUND LUGS TO EARTH GROUND AND UTILITY GROUND.
2. 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.
3. INSULATED TWISTED SHIELDED WIRE IS REQUIRED. SHIELD TO CONNECT TO PROPER TERMINAL 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 THE AC CONTROL WIRES.
4. WITH A CONTROL TRANSFORMER, T1, POWER RATING 350VA OR GREATER, SECONDARY FUSE F6 IS ADDED.
5. CHANGING Z1-01 TO "1" WILL PROGRAM THE DRIVE AND BYPASS PARAMETERS TO THEIR FACTORY DEFAULT SETTINGS.
6. FOR 208VAC APPLICATIONS, SET E1-01 TO 208, AND SET E1-05 TO 208.
7. THE MOTOR OVERLOAD RELAYS ARE FACTORY SET FOR MANUAL RESET. CUSTOMER TO ADJUST THE MOTOR OVERLOAD RELAYS TRIP SETTINGS FOR THE ACTUAL AC MOTOR'S FULL LOAD AMPS.
8. CUSTOMER TO ADJUST THE THERMOSTAT ON THE SPACE HEATER HR1 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 HR1 WILL SHUT OFF.



OPTION P3  
SPACE HEATER

CABINET SPACE HEATER  
RANGE: 100 DEG. F  
FACTORY SETTING: -40 DEG. F  
SEE NOTE B

CABINET  
BLOWER(S)  
B1-B12  
(REQUIRED)

CABINET  
THERMOSTAT  
FACTORY SETTING:  
90 DEG. F

REV	DATE	BY	CHKD
1	2/22/14	D. PACKER	D.R. CMELAK
2	2/24/14	K. FLIERL	D. PACKER



DRAWN BY	DATE	TITLE
D. PACKER	2/22/14	SCHEMATIC DIAGRAM
DESIGNED	DATE	P1000 ELECTRONIC BYPASS
D.R. CMELAK	2/24/14	2-MTR AND
TECH	DATE	OPTION PA
PROVISED	DATE	SIZE
K. FLIERL	2/24/14	D
REVISION	DATE	REVISION
D. PACKER	2/22/14	00
DRAWING #	DRAWING #	PAGE
DS.P1B.3R.06	DS.P1B.3R.06	2 of 2

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