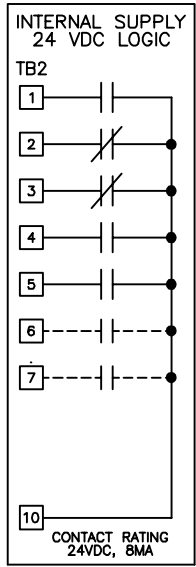


CONTROL TRANSFORMER PRIMARY CONNECTIONS				
INPUT VOLTS	TERMINALS		JUMPER LOCATION	
	A	B	(H1)	(H2)
208	(H1)	(H2)	NONE	
460/480	(H1)	(H4)	(H2) TO (H3)	



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

- DI-1 RUN (AUTO MODE)
- DI-2 RUN ENABLE (SAFETY)
- DI-3 RUN INTERLOCK (BAS)
- DI-4 REMOTE TRANSFER
- DI-5 SMOKE PURGE BYPASS
- DI-6 SPARE
- DI-7 OPTION PW S7
- DI-8 S8
- DI-9 S9
- DI-10 24V COMMON
- DI-11 SHIELD GROUND
- DI-12 SHIELD GROUND

OPTION PW S7

S8

S9

24V COMMON

SHIELD GROUND

SHIELD GROUND

OPTION PW 24

25

PROGRAMMABLE RELAYS DO-7/8/9/10

AS SELECTED BY ELECTRONIC BYPASS CONTROL PARAMETERS Z2-24 TO Z2-26

CONTACTS FOR CUSTOMER USE

RATED: 2A, 24VDC/120VAC +/- 15% MAX.

CUSTOMER MUST PROVIDE PROPER SHORT CIRCUIT PROTECTION AND MEANS OF DISCONNECT.

RS485 SERIAL COMMUNICATION SELECTIONS AVAILABLE:

- 1. MODBUS
- 2. N2 / METASYS
- 3. FLN / APOGEE
- 4. BACNET (FACTORY SETTING)

TXRX+ TXRX- SHIELD

TXRX+ TXRX- SHIELD

TXRX+ TXRX- SHIELD

TXRX+ TXRX- SHIELD

YASKAWA		DRAWN BY: N. LAWS	DATE: 12/9/14	TITLE: SCHEMATIC DIAGRAM Z1000U ELECTRONIC BYPASS
THIS DOCUMENT AND INFORMATION CONTAINED IN IT ARE CONFIDENTIAL, AND CANNOT BE COPIED OR DISCLOSED IN WHOLE OR IN PART WITHOUT THE EXPRESS WRITTEN CONSENT OF YASKAWA AMERICA INC.		CHECKED: D. CMELAK	DATE: 12/10/14	SIZE: D
		APPROVED: K. FLIERL	DATE: 12/11/14	REVISION: 13
		ORIGINAL DESIGN: N. LAWS	DATE: 12/9/14	PAGE: 2 of 2
		DRAWING #: DS.Z1D1.01		

- NOTES:
1. CONNECTED TO THE CABINET. CUSTOMER TO CONNECT THE CABINET GROUND LUGS TO EARTH GROUND AND UTILITY GROUND.
 2. 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.
 3. WITH A CONTROL TRANSFORMER, T1, POWER RATING 350VA OR GREATER, SECONDARY FUSE F6 IS ADDED.
 4. CHANGING Z1-01 TO "1" WILL PROGRAM THE DRIVE AND BYPASS PARAMETERS TO THEIR FACTORY DEFAULT SETTINGS.
 5. FOR 208VAC APPLICATIONS, SET Z1000U DRIVE PARAMETER E1-05 TO 208.
 6. THE MOTOR OVERLOAD RELAY IS FACTORY SET FOR MANUAL RESET. CUSTOMER TO ADJUST THE MOTOR OVERLOAD RELAY TRIP SETTING FOR THE ACTUAL AC MOTOR'S FULL LOAD AMPS.
 7. 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.
 8. FOR APPLICATIONS WITH SOFT STARTER BYPASS OPTION PW, SET PARAMETERS Z2-07 TO 36, Z2-15 TO 1, Z2-23 TO 24 AND Z1-42 TO 1. THIS WILL CAUSE THE Z1000U DRIVE KEYPAD TO EXHIBIT AN "EFB" FAULT WHEN THE SOFT STARTER FAULTS, AND THE AC MOTOR COASTS TO A STOP. CUSTOMER TO ALSO SET SOFT STARTER PARAMETER In (IN THE SETTINGS MENU) FOR THE ACTUAL AC MOTOR'S FULL LOAD AMPS.
 9. THE SOFT STARTER R1A-R1C FAULT CONTACT IS A FAIL-SAFE CONTACT. THE SCHEMATIC SHOWS IT IN ITS DE-ENERGIZED STATE. CONTACT STATUS IS:
 - A. OPEN WITH NO POWER APPLIED TO THE LINE SIDE OF THE SOFT STARTER.
 - B. CLOSED WITH POWER APPLIED TO THE LINE SIDE OF THE SOFT STARTER AND NO FAULT PRESENT.
 - C. OPEN WITH POWER APPLIED TO THE LINE SIDE OF THE SOFT STARTER AND A FAULT IS PRESENT.
 10. FOR APPLICATIONS WITH SPEED POT R1, SET PARAMETERS Z1-41 TO 1 & H3-06 TO 1F.
 11. WHEN USING OPTION T3, ATTACH TO CN5 ON DRIVE BYPASS BOARD AND TO MAKE SURE THE DIP SWITCHES ARE CONFIGURED TO BACnet/IP SETTINGS, SEE APPROPRIATE TECHNICAL MANUAL FOR EXTERNAL CONNECTIONS AND SETTINGS