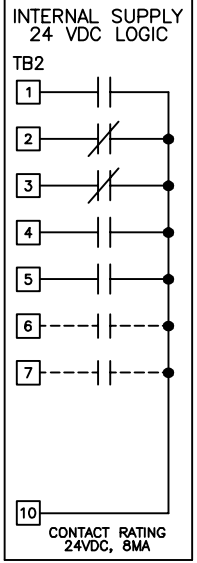


| INPUT VOLTS | TERMINALS | | JUMPER LOCATION |
|-------------|-----------|------|-----------------|
| | A | B | |
| 208 | (H1) | (H2) | NONE |
| 460/480 | (H1) | (H4) | (H2) TO (H3) |



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

PROGRAMMABLE RELAYS DO-7/8/9/10 AS SELECTED BY ELECTRONIC BYPASS CONTROL PARAMETERS Z2-23 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)

HOA OPERATOR PART NUMBER JVOP-183

| YASKAWA | | DATE | TITLE |
|----------------------------|-----------------------------|---|------------|
| DRAWN BY: K. MALUSIC | 6/19/12 | SCHEMATIC DIAGRAM Z1000 ELECTRONIC BYPASS | |
| CHECKED BY: K. FLIERL | 6/19/12 | DATE | SIZE |
| APPROVED BY: K. FLIERL | 6/19/12 | DATE | REVISION |
| ORIGINAL DESIGN: K. FLIERL | 8/9/11 | DATE | PAGE |
| REV. DESCRIPTION | | ECO # | DRAWN BY |
| 10 | ADDED NOTE 8 | 15062 | K. MALUSIC |
| 09 | ADDED UDE00349 DRAWING NOTE | 7462 | K. MALUSIC |

- NOTES:
1. CUSTOMER TO CONNECT THE CABINET GROUND LUG TO EARTH 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. WITHOUT THE INPUT CIRCUIT BREAKER OPTION PM, BRANCH CIRCUIT PROTECTION MUST BE SUPPLIED BY THE INSTALLER.
 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 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.
 8. THE CONTACTORS MAY INCLUDE BUILT-IN SURGE SUPPRESSION OR USE AN EXTERNAL SURGE SUPPRESSION COMPONENT.

- * - INDICATES COMPONENTS NOT SUPPLIED BY YASKAWA.
 - - INDICATES CUSTOMER WIRING.
 - ⏏ - CONNECTED TO THE CABINET OR PANEL.
- SEE DRAWING UDE00349 FOR CUSTOMER CONNECTION TABLES.