

CONTROL TRANSFORMER PRIMARY CONNECTIONS

INPUT VOLTS	TERMINALS	JUMPER LOCATION
208	A (H1)	B (H2)
460/480	(H1)	(H4) (H2) TO (H3)

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

ELECTRONIC BYPASS CONTROL PCB
P/N UTC00046x
A2

CONTROL BOARD
(Factory Defaults Shown)

DIP Switch S1
Analog Input Selection

A1 A2 A3

DIP Switch S2
Terminating Resistor
(OFF) [] [] [] On

Jumper S5
Terminal AM/FM
FM/AM

Shield Ground (G)
Power supply, +10.5 Vdc, max. 25 mA

Common
Input +24VDC
Common

Analog Input 1
(Freq. Ref. Bias)

Analog Input 2
(Freq. Ref. Bias)

Analog Input 3
(Freq. Ref. Bias)

Analog Output 1
(Output Frequency)

Analog Output 2
(Output Current)

Analog Common

FM MONITOR OUTPUT
0-10VDC (2MA)
OR
4-20MA

AUTO MODE SPEED REFERENCE
0-10VDC (20 KOhm)
OR
4-20MA (250 Ohm)

TO DRIVE BYPASS CONTROL PCB CONNECTOR CN6

RS485 SERIAL COMMUNICATION SELECTIONS AVAILABLE:

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



REVISIONS

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

REVISIONS

REV.	DESCRIPTION	ECO #	DATE
00	INITIAL RELEASE	-	2/22/14

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

SCHEMATIC DIAGRAM
P1000 ELECTRONIC BYPASS
2-MTR OR
OPTION PY

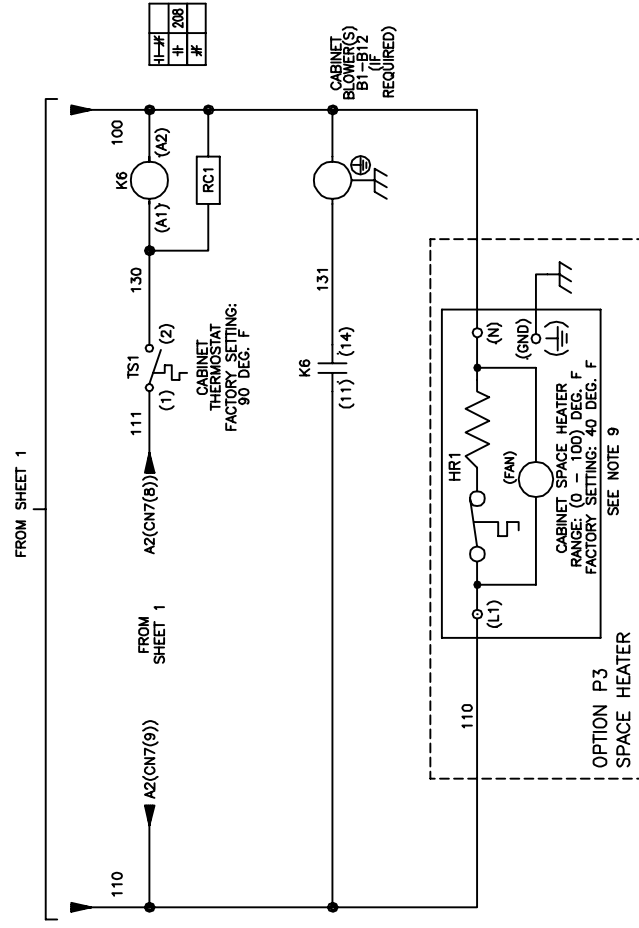
DATE: 2/22/14
DRAWN BY: D. PACKER
CHECKED BY: D.R. CMELEK

DATE: 2/24/14
DRAWN BY: K. FLIERL
CHECKED BY: D. PACKER

DATE: 2/22/14
DRAWN BY: D. PACKER
CHECKED BY: D. PACKER

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. SET Z1-11 TO 4 AND Z2-06 TO 27.
7. FOR 208VAC APPLICATIONS, SET E1-01 TO 208, AND SET E1-05 TO 208.
8. 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.
9. 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.



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1	2/22/14	OPTION PY	D	00	2 of 2
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SCHEMATIC DIAGRAM
P1000 ELECTRONIC BYPASS
2-MTR FOR
DRAWING # DS.P1B.3R.10