DIGITAL POST 1
DIP 1 TML T14
0.01% 0.00%
HI VALUE PIN 310
LO VALUE PIN 311
DIP GO TO
PIN 296 LOW
296) DIGITAL POST VALUE
PIN 297
PIN 296

MULTIFUNCTION BLOCK 1
AUX GET FROM
MAIN GET FROM   MFB GO TO   PIN 563
AND GATE ENABLED
544) MULTIFUN MODE
545) MULTIFUN OP SEL

DIGITAL POST 2
DIP 2 TML T15
0.01% 0.00%
HI VALUE PIN 312
LO VALUE PIN 313
DIP GO TO
PIN 297 HIGH
297) DIGITAL POST VALUE
PIN 297
PIN 698

PIN 698 DRIVE HEALTHY

MULTIFUNCTION BLOCK 3
AUX GET FROM
MAIN GET FROM   MFB GO TO   PIN 298
AND ENABLED
548) MULTIFUN MODE
549) MULTIFUN OP SEL

DIGITAL POST 3
298) DIGITAL POST VALUE
HIGH

MULTIFUNCTION BLOCK 2
AUX GET FROM
MAIN GET FROM   MFB GO TO   PIN 564
INVERT ENABLED
546) MULTIFUN MODE
547) MULTIFUN OP SEL
PIN 400
PIN 298

LATCH
LOW 561) DATA IP
LOW 562) CLOCK
LOW 563) SET
LOW 564) RESET
0.01% 565) VALUE FOR HI
0.00% 566) VALUE FOR LO
GO TO
560) OP MON
PIN 307

T31 RUN   166) DRIVE START
167) DRIVE RUN
T32 JOG   689) JOG FLAG
699) READY FLAG
T33 START
T34 CSTOP

CONTACTOR CONTROL
SOFTWARE TERMINALS
HIGH 305) ANDED RUN
HIGH 306) ANDED JOG
LOW 307) ANDED START
LOW 308) INTERNAL RUN
DRIVE HEALTHY
ENABLE FROM ZERO INTERLOCK
DROP OUT DELAY

DIP 1 PB START 14 | DIP 2 PB STOP 15 | CIP RUN 31 | CIP START 33 | CIP CSTOP 34 | PWR 24 VDC 35
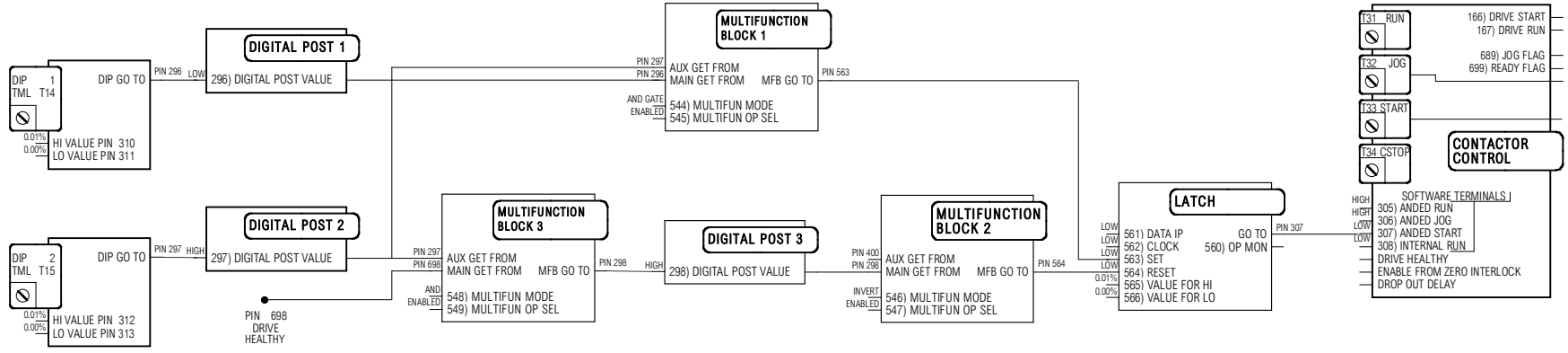
START STOP

COAST

PROGRAMMING AND TEST PROCEDURE

Step 1 - Mode Change
===================
Put the drive in program mode. Navigate to the Configuration Menu.

....CONFIGURATION   2
......ENABLE GOTO,GETFROM =   ENABLED

Step 2 - Programming
===================
To program the functionality, navigate to the Digital Input Menu and then configure the Start Input.

....CONFIGURATION   2
......DIGITAL INPUTS   3
........DIP1 (T14) SETUP   4
..........GOTO   = 296)DIGITAL POST 1

Then, the Stop Input.

....CONFIGURATION   2
......DIGITAL INPUTS   3
........DIP2 (T15) SETUP   4
..........GOTO   = 297)DIGITAL POST 2

Now, connect the latch to the Anded Start

....CONFIGURATION   2
......BLOCK OP CONFIG   3
........LATCH GOTO   = 307)ANDED START

Finally, program the logic associated with the inputs.

....APPLICATION BLOCKS 2
......MULTI-FUNCTION 1   3
........544)MULTIFUN1 MODE =   AND GATE
........545)MULTIFUN1 OP SEL =   ENABLED
........GET FROM   = 296)DIGITAL POST 1
........AUX GET FROM   = 297)DIGITAL POST 2
........GOTO   = 563)LATCH SET IP

......MULTI-FUNCTION 2   3
........546)MULTIFUN2 MODE =   INVERT
........547)MULTIFUN2 OP SEL =   ENABLED
........GET FROM   = 298)DIGITAL POST 3
........AUX GET FROM   = 400)Block Disconnect
........GOTO   = 564)LATCH RESET IP

......MULTI-FUNCTION 3   3
........548)MULTIFUN3 MODE =   AND GATE
........549)MULTIFUN3 OP SEL =   ENABLED
........GET FROM   = 698)HEALTHY FLAG
........AUX GET FROM   = 297)DIGITAL POST 2
........GOTO   = 298)DIGITAL POST 3

Step 3 - Mode Change
===================
Put the drive back into normal run mode. Navigate to the Configuration Menu.

....CONFIGURATION   2
......ENABLE GOTO,GETFROM =   DISABLED

Step 4 - Save Parameters
======================
Save your program to the drive's EEPROM.

....PARAMETER SAVE   2
.....UP KEY TO CONTINUE

Press the up key and the bottom line will indicate:

..........SAVING

Step 5 - Test Your Program
======================
To test your program, remove the wire from Terminal 31 (Run) to prevent the drive from generating current.

If Terminal 15 (DIP2) and 35 (Coast Stop) are ON, when Terminal 14 (DIP1) is energized the contactor will close and the internal LATCH will turn ON (Output = 0.01%). Also, the ANDED START will go HIGH.

....DIAGNOSTICS   2
......BLOCK OP MONITOR 3
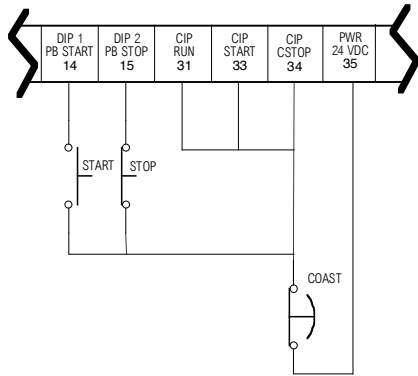........560)LATCH OUTPUT MON =   0.01 %

....CONFIGURATION   2
......SOFTWARE TERMINALS 3
........307)ANDED START   =   HIGH

When Terminal 15 (DIP2) is de-energized the contactor will open. The LATCH will turn OFF (Output = 0.00%) and the ANDED START will go LOW.

....DIAGNOSTICS   2
......BLOCK OP MONITOR 3
........560)LATCH OUTPUT MON =   0.00 %

....CONFIGURATION   2
......SOFTWARE TERMINALS 3
........307)ANDED START   =   LOW

If satisfied, replace the wire on Terminal 31.

ISS	DATE	APPROVED
A	15 AUG 01	T. COURNOW
B	10 MAY 04	T. COURNOW
C	24 AUG 04	T. COURNOW
D		
E		

Bardac
40 Log Canoe Circle, Stevensville, MD 21666
phone (410) 604-3400 fax: (410) 604-3500
email: info@bardac.com

SHT. TITLE	THREE WIRE CONTROL CONFIGURATION	CUST.	BARDAC CORPORATION	DRN.	T. COURNOW	DWG. NO.	APP02
DWG. TYPE	PLX APPLICATION NOTES	DIST.	N/A	DESIGN	T. COURNOW	DWG. ISS.	C
JOB TITLE	APPLICATION MANUAL	P.O.	N/A	SCALE	NONE	JOB NO.	APP02
LOCATION			USA	SIZE	A4	SHT. 1 OF 1	

form: engr/cad/cadlib/form/asize