



TEXTRO ELECTRONICS

(TECHNOLOGY FOR LIFE)

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TEXTRO ELECTRONICS STARTED AS A HOME GROWN MANUFACTURING ORGANIZATION, NEEDS OF DOMESTIC ENGINEERING, TEXTILE, ELECTRICAL AND ELECTRONIC INDUSTRIES IN COIMBATORE AND GROWN RAPIDLY IN THE SPACE. TEXTRO ELECTRONICS IS PROUD TO HAVE PIONEERED IN MANUFACTURING OF DC DRIVES AND AC DRIVES IN INDIA WAY BACK 2005.

THE COMPANY WAS CERTIFIED UNDER TUV SUD SOUTH ASIA ISO IAS MSCB-119 QUALITY MANAGEMENT SYSTEMS. THE MAJOR PRODUCTS OF OUR COMPANY ARE AC DRIVES, DC DRIVES, DIGITAL UNITS, AND PANELS.

SAFETY INFORMATION

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

DANGER! - Ignoring the following may result in injury

- This equipment can endanger life by exposure to rotating machinery and high voltages.
- The equipment must be permanently earthed due to the high earth leakage current, and the drive motor must be connected to an appropriate safety earth.
 - Ensure all incoming supplies are isolated before working

on the equipment. Be aware that there may be more than one supply connection to the drive.

4. There may still be dangerous voltages present at power terminals (motor output, supply input phases, DC bus and the brake, where fitted) when the motor is at standstill or is stopped.

5. For measurements use only a meter to IEC 61010 (CAT III or higher)

6. Allow at least 10 minutes for the drive's capacitors to discharge to safe voltage levels. Use the specified meter capable of measuring up to 1000V dc & ac rms to confirm that less than 50V is present between all power terminals and between power terminals and earth.

7. Unless otherwise stated, this product must NOT be dismantled. In the event of a fault the drive must be returned. Refer to "Routine Maintenance and Repair"

FEATURES:

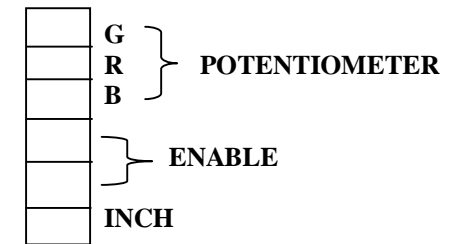
3HP DIGITAL DRIVE:

- ❖ Input: 230V AC, 50 HZ
- ❖ Output: Armature voltage - 0 - 220VDC
- ❖ Field voltage - 220VDC
- ❖ HP : 3 HP
- ❖ Current limit : Up to 20 A
- ❖ Control input is isolated to interface with external devices like PLC.
- ❖ Isolated field and armature output voltage.
- ❖ Output voltage and current can be displayed.
- ❖ Max and min speed limits.
- ❖ Easy installation and service.
- ❖ Available in customized input and output voltages.
- ❖ Able to control with external 0 - 10VDC.
- ❖ Compact in size

DIGITAL CONNECTION TERMINALS

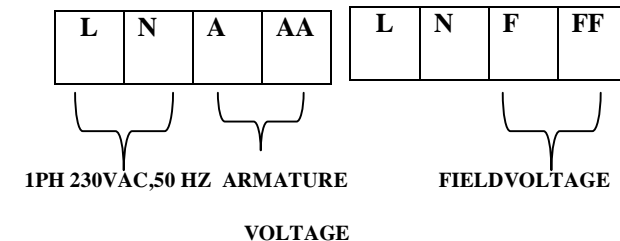
DETAILS:

POTENTIOMETER DETAILS:



POWER CONNECTION:

- ❖ Give to two separate input supply to armature and field .



FACTORS TO BE CONSIDERD:

Before installing the drive

- From motor side check the armature coil ohms the range should be around 0.1 ohm to 5 ohm.
- Check the field coil ohms the range should be around 50 ohm to 600 ohm.
- Confirm that, the field and armature should not be shorted with the body.
- From drive side Confirm that, the enable is at closed condition. Confirm that, the Potentiometer is connected at the Potentiometer terminal.
- Connect the lamps at the field and armature terminals respectively.
- For single phase, connect around 100w bulb at field and armature terminals.
- The lamp which is connected at the field terminal should glow continuously.
- The lamp which is connected at the armature terminal should glow by varying the Potentiometer without any flickering. Now the drive is ready to connect with the motor. Remove the lamps and connect the field of the motor to the field terminal and armature of the motor to the armature terminal.

3HP DIGITAL DRIVE:



PARAMETERS DETAILS IN DRIVE:

S.NO	PARAMETER	DESCRIPTION	RANGE	FACTORY
1	P-00	Armature ohm (read only)	0 to 12.0 ohm	
2	P-01	Acceleration time	0 to 99.9 seconds	10.0
3	P-02	Deceleration time	0 to 99.9 seconds	10.0
4	P-03	Pot reference. 0-Means internal mode use UP & DOWN key to adjust 1-Means external ref Pot or 0 to 10 V.	0 to 1	1
5	P-04	Minimum speed	0 to 99.9 %	0
6	P-05	Maximum speed	0 to 99.9%	80.0
7	P-06	Motor rated current	0 to 8.0 Amps	8.0
8	P-07	Display monitor 0-show % speed 1-Armature voltage 0-Armature current	0 to 2	1
09	P- 08	Inch speed	0 to 99.9%	25.0
10	P-09	Motor HP 0-0.5HP and below	0 to 3 HP	3

		1-1 HP 2-2 HP 3-3 HP		
11	P-10	Assign default 0-No function 1-Assign default values	0 to 1	0
12	P-11	Proportional gain of PID	0 to 250	200
13	P-12	Pot Gain	0 to 100	80
14	P-13	Current control mode 0-current trip mode 1-current control mode	0 to 1	0

CURRENT TRIP MODE:

- If armature current exceeds the current set in parameter p-13, drive will OFF, AND E4 will displayed

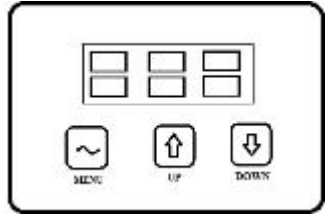
CURRENT CONTROL MODE:

- Drive will works as constant voltage source or constant current source.
- If motor current < set current, then it works as constant voltage source.
- If motor current > set current, then it works as constant current source.

ERRORS:

- E-4 - Over current indication, Motor utilize more current
- Once this error is occurs, drive is hold in stop mode.
- This can be reset by open ENABLE terminals or power OFF/ON.

HOW TO SET PARAMETERS:



- We should open ENABLE terminal to enter parameter list;
- Display should BLINK when we open ENABLE.
- Then, use MENU key (Hand symbol) to go parameters list and UP key to increase the value and DOWN key to decrease the value.
- To return from parameters setting goes to p-0 and press the MENU key to save and return.

FOLLOWING EXAMPLES SHOWS HOW TO CHANGE THE VOLATAGE & CURRENT:

1. To increase and decrease use UP & DOWN keys respectively
2. Keep on pressing the MENU key for 4 sec, then p-7 will appear
3. After that press the MENU button then 1 will display, according to that select the desire value as given in above tabular column as shown in parameters list and press the MENU button to enter and return
4. Now decrease the parameter to p-0 and press MENU button to return and save the parameters.

5. Now the display will show END and return to main function.
6. Now close ENABLE connection and ready to use.

APPLICATION:

- ❖ Printing Industries
- ❖ Lathe Machine
- ❖ Rubber Industries
- ❖ Pet Bottle Making Machinery
- ❖ Conveyor
- ❖ Ball Throwing Machines
- ❖ Fasteners machines
- ❖ Food processing
- ❖ Asphalt drums hot mix plant..
- ❖ Synchronized for multi motor application.
- ❖ Used For Customized Application.

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