



V / I CONVERTER

MODEL L776

Before installing this module, a TECHNICALLY QUALIFIED INDIVIDUAL who is familiar with this type of equipment and the hazards involved, should READ this ENTIRE INSTRUCTION SHEET.

INTRODUCTION

The V/I Converter module, Model L776, converts a DC voltage to a 4-20mA current signal, which is used to feed instruments.

RECEIVING

All equipment is tested against defect at the factory. Report any damages or shortages evident when the equipment is received immediately to the commercial carrier who transported the equipment. Assistance, if required, is available from the nearest MagneTek Drives & Systems Office.

INSTALLATION

WARNING

HAZARDOUS VOLTAGE CAN CAUSE SEVERE INJURY OR DEATH.

LOCK ALL POWER SOURCES FEEDING DRIVE IN "OFF" POSITION.

1. Disconnect all electrical power to drive.
2. Remove drive front cover.
3. Verify that voltage has been disconnected by using a voltmeter to check for voltage at incoming power terminals.

CHANGE RECORD					DWG. NO. 02Y00025-0280
					SHEET 1 OF 7
					EFF. 2/15/89 (0)

Table 1. Specifications and Characteristics of V/I Converter

AC Power Supply	220 VAC (180 to 242 VAC), 50/60HZ across terminals 2 and 4. 200 VAC (170 to 220 VAC), 50/60HZ across terminals 3 and 4.	
AC Power Supply Capacity	Approx. 4VA	
DC Reference		
Input	6V/100% across terminals 9 (+) and 6 (-).	
Characteristics	10V/100% across terminals 11 (+) and 8 (-).	
	12V/100% across terminals 12 (+) and 6 (-).	
Output Characteristics	Output Current Signal	4-20mA at terminals 15 and 13
	Max Output Current	30mA max
	Max Output Voltage	12V at terminals 15 (+) and 10 (-)
	Output Voltage Signal	±10V, 2.5mA at terminals 14 (+) and 10 (-)
Operation Temperature	-10 to +55°C	
Storage Temperature	-40 to +85°C	

DWG. NO. 02Y00025-0280
SHEET 2 OF 7
EFF. 2/15/89 (0)

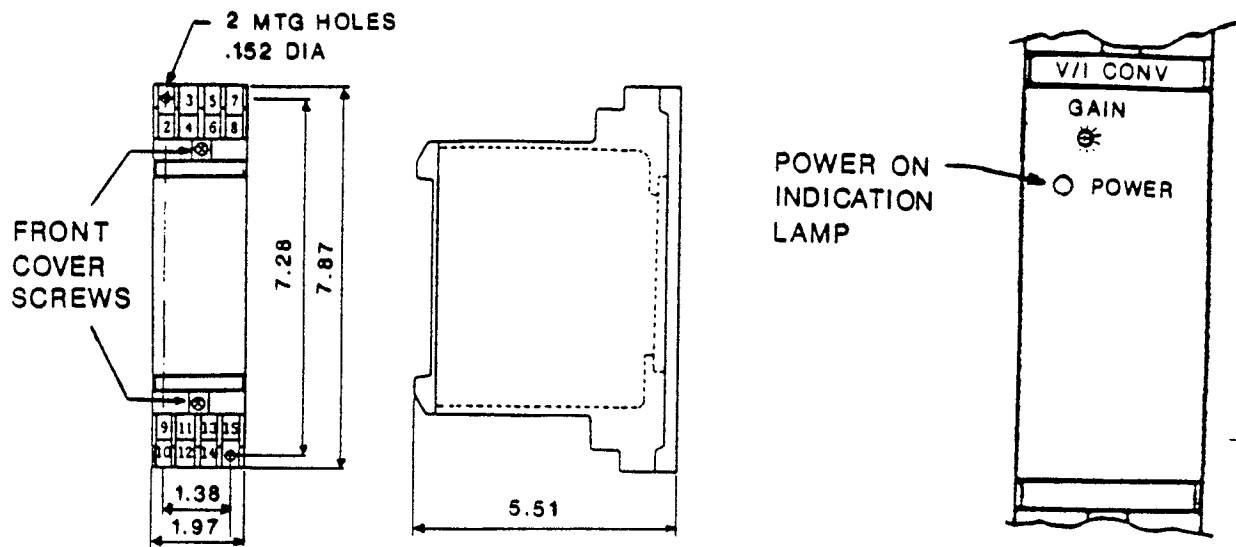


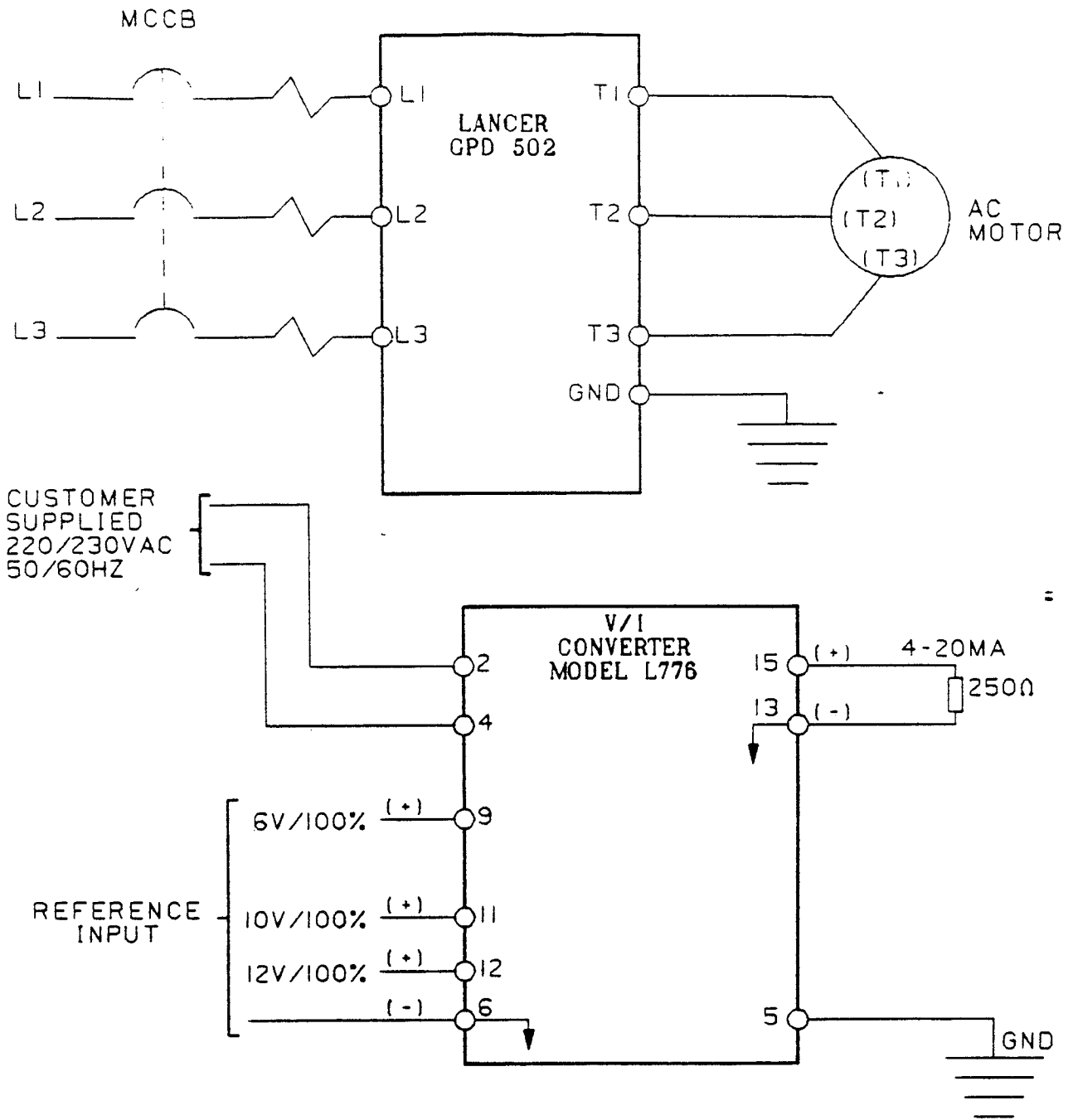
Figure 1. V/I Controller Module

IMPORTANT

This instruction sheet describes direct interconnection with Lancer GPD drives. Other applications are possible; interconnection should be modified as necessary for the specific installation.

4. Mount the V/I Converter module in the desired location (see dimensions in Figure 1). Then make connections according to the appropriate connection diagram, Figure 2 or 3.

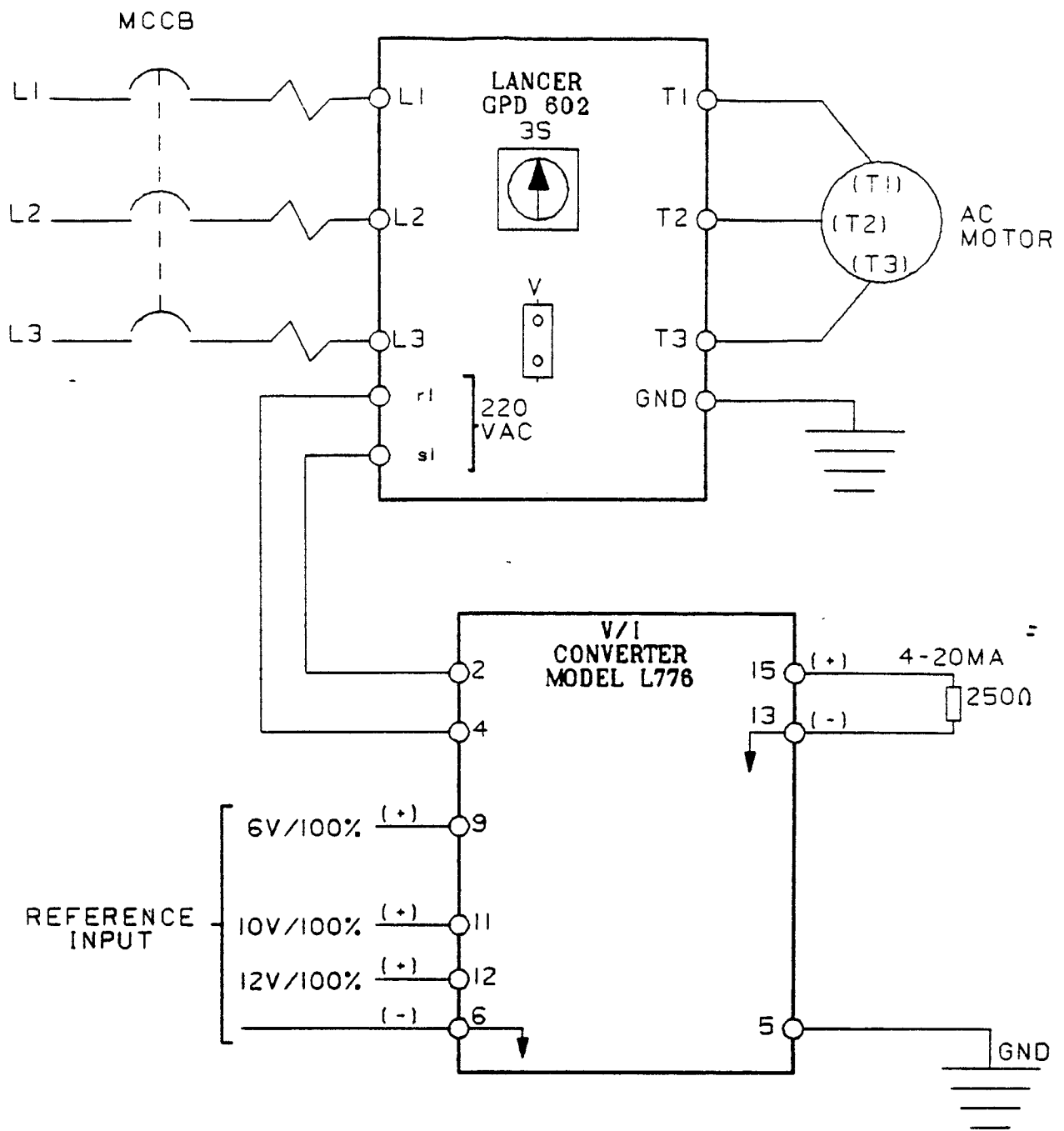
DWG. NO. 02Y00025-0280
 SHEET 3 OF 7
 EFF. 2/15/89 (0)



TD.I.2Y25.280.FIG2

Figure 2. Connection of V/I Converter With GPD 502

DWG. NO. 02Y00025-0280
 SHEET 4 OF 7
 EFF. 2/15/89 (0)



TD.I.2Y25.280.FIG3

Figure 3. Connection of V/I Converter With GPD 602

DWG. NO. 02Y00025-0280
 SHEET 5 OF 7
 EFF. 2/15/89 (0)

ADJUSTMENTS

5. Description of V/I Converter Operation (Ref. Figure 4)

The DC reference input is applied to terminal 9 (+) for 6V/100%, terminal 11 (+) for 10V/100%, or terminal 12 (+) for 12V/100%, with respect to terminal 6 (-). Amplifier 1IC produces a 0-10V DC signal directly proportional to the reference input. The DC voltage signal is converted to a current signal of 4-20mA. The current signal is outputted at terminal 15.

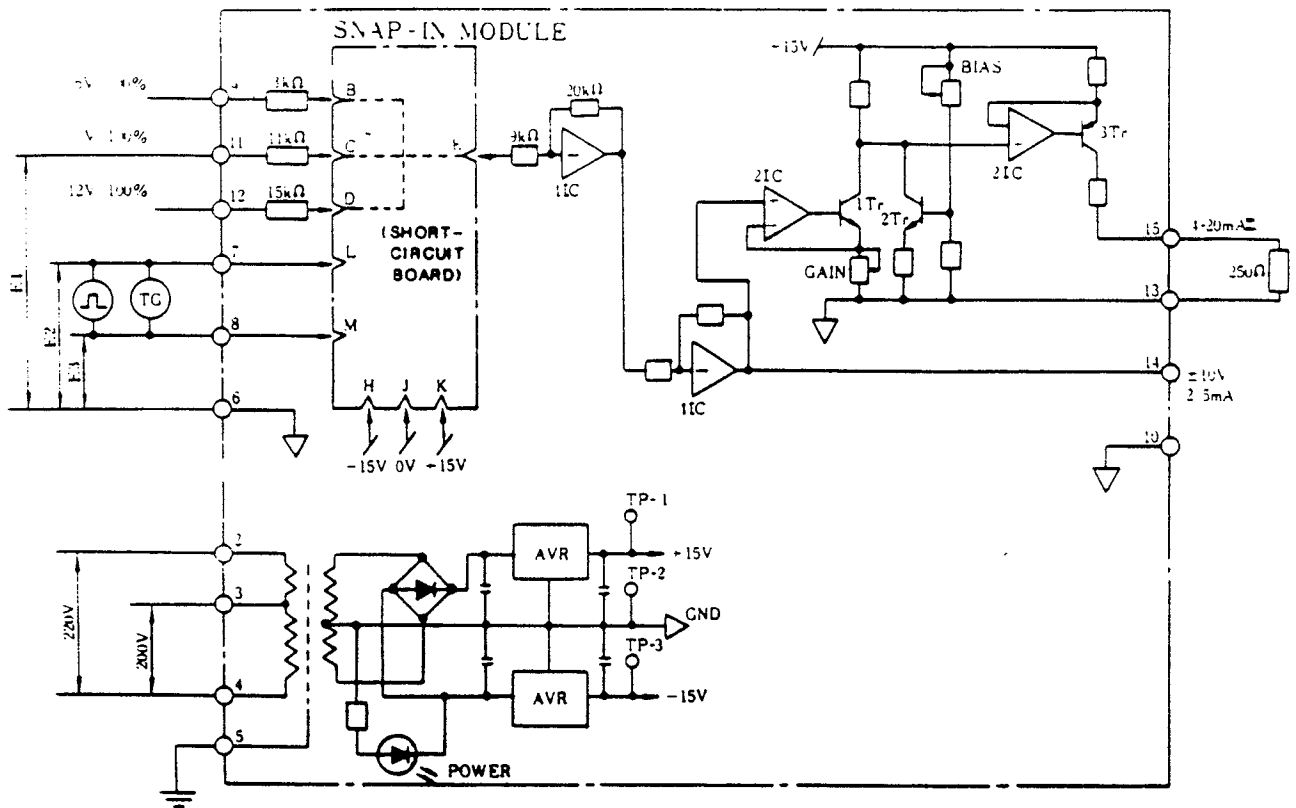


Figure 4. V/I Converter Schematic

DWG. NO. 02Y00025-0280
 SHEET 6 OF 7
 EFF. 2/15/89 (0)

6. Setting Bias

The BIAS potentiometer (2RH, inside the module) has been preset at the factory so that the output current is 4mA at 0V input (i.e. 0V output of LIC).

7. Setting Gain

The GAIN potentiometer has been preset at the factory so that the output current is 20mA at 10V output of LIC (i.e. input reference at 100%).

8. Reinstall and secure front cover on drive.

9. Place this instruction sheet with your drive Technical Manual.

This completes installation of this module.

DWG. NO. 02Y00025-0280
SHEET 7 OF 7
EFF. 2/15/89 (0)