DC3 User Guide

Compumotor Division Parker Hannifin Corporation p/n 88-007167-01



Table Of Contents

	0.1.	<u>Description</u>	•	•	•	•	•	•	•	•	•	•	1
	0.2.	Specifications											1
		0.2.1. <u>Input Power</u>			•		•		•	٠	•	•	1
		0.2.2. <u>Outputs</u>			•								1
		0.2.2.1. +24 to +90 VDC.								•			1 2
		0.2.2.2. +12 VDC											2
		0.2.3. <u>Dimensions</u>	•	•	•	•	•	•	•	•	٠	•	2
	0.3.	Pinouts				•	•				•		2
	0.4.	Input Voltage Select	•			•					•		3
	0.5.	Fusing			•					•		•	3
. •	0.6.	Selecting +24, +48, or +90VDC											4

DC3 Power Supply Operators Manual

0.1 Description

The DC3 is an open frame power supply designed to power Compumotor C, CX, CT, CXT, and DB¹ series drives. The DC3 is equipped with dual DC outputs (12VDC and a selectable 24, 48, or 90VDC output), and operates at either 120VAC or 230VAC. The DC3 is designed to comply with "VDE" specifications. Please refer to the motor driver operator's manual BEFORE connecting the drive to the DC3. Power should never be applied to the DC3 when being connected to a drive, or when changing the selectable voltage output (see section 0.6).

0.2 Specifications

0.2.1 Input Power

115VAC (+/-10VAC) Frequency = 50-60Hz.

230VAC (+/-20VAC) Frequency = 50-60Hz.

0.2.2 Outputs

The DC3 has 2 DC outputs, +24 to +90VDC and +12VDC. The +24 to +90 volt output is user selectable. See section 0.6.

	Voltage	Current (max)	Ripple (Pk to PK)
Full Load	90VDC	2 Amps	4.5 Volts
11 11	48VDC	2 Amps	4.5 Volts
11 11	24VDC	2 Amps	4.5 Volts
No Load	12VDC	1.2 Amps Nominal	.5 Volts

 $l_{\mbox{The DB}}$ drive cannot be operated at the 90VDC setting, and does not require the use of the 12VDC logic supply. The CT and CXT drives can only be operated off of the 12VDC logic supply.

Minimum Voltage Output at Low Line and Full Load.

Voltage Setting	Voltage Out
24VDC	22VDC
48VDC	42VDC
90VDC	75VDC

Maximum Voltage Output at High Line and No Load.

	Voltage Setting		Voltage Out		
	24VDC		22VDC		
	48VDC		42VDC		
	90VDC		75VDC		
0.2.2.1	<u>+12VDC</u>				
	Voltage_	Current	(max)	Ripple (pk to PK)
No Load	12.5VDC			500mV	
Full Load	11.5VDC	1.2 Amps		500mV	

0.2.3 Dimensions

10.00 in long 4.50 in wide 5.30 in high

0.3 Pinouts

All voltage outputs are taken from the front of the DC3 from the 4 , pin Entrelec connector. Pinouts are as follows:

Pin	Function					
A	+90VDC	Out				
В	+90VDC	Gnd				
С	+12VDC	Out				
D	+12VDC	Gnd				

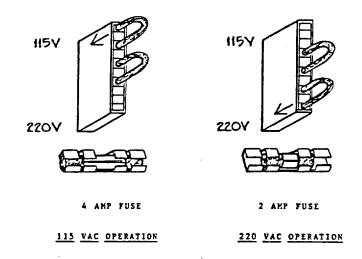
Figure 1-1 DC Output Connector

90 12 VDC VDC + - + - DC Power connections are in a different order than on the drives. Carefully read the drive operator's manual to insure proper connections.

0.4. Input Voltage Select

The DC3 may be configured for either 115 or 230 VAC operation. The voltage select jumper must be set to match the available input power. Configure the jumper connector, and install the proper fuse as indicated in Figure 1-2.

Figure 1-2 <u>Input Voltage Jumper Select</u>



0.5. Fusing

115 VAC: 3AG, 4 Amp, 250 V, Slow Blow, Littlefuse P/N

313004

230 VAC: 5 x 20 mm, 2 Amp, 250 V, Slow Blow, Schurter P/N

034.3120

0.6. <u>Selecting +24. +48. or +90VDC</u>

There are three Faston tabs on the upper right hand side of the transformer (see figure 1-3). They are used for selecting +24, +48 and +90 VDC accordingly. The center-tap of the transformer is externalized via a grey wire with a Faston connector soldered to its' end. When received from the factory the grey center-tap wire will be connected to the +24VDC tab. To select either +48, or +90 VDC, simply remove the grey wire from tab #1 and place it on tab #2 for +48 VDC operation, or, on tab #3 for +90 VDC operation.

Tab #	Selected Output Voltage
1	+24VDC
2	+48VDC
3	+90VDC

Figure 1-3 Output Voltage Select

