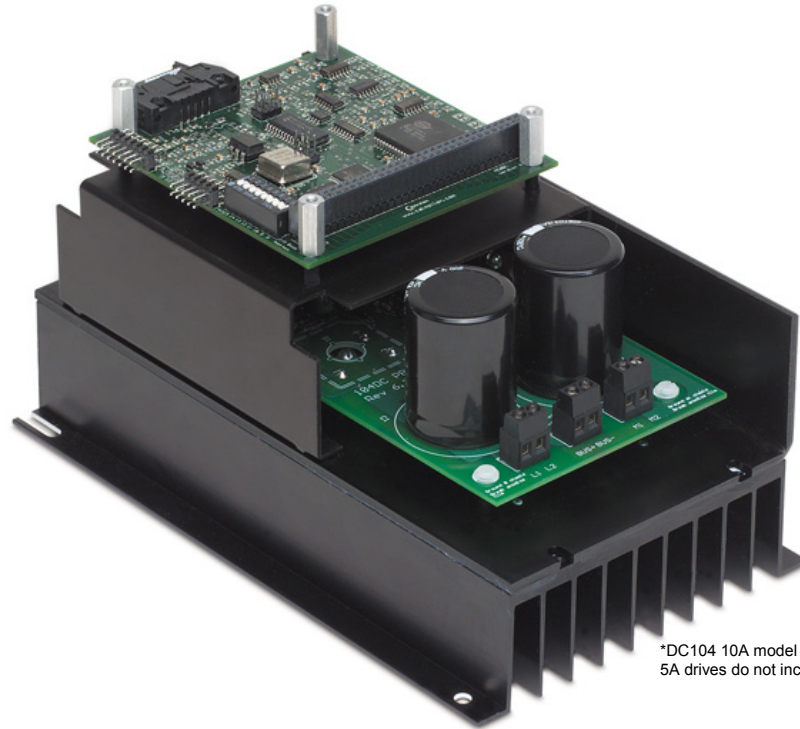


DC104

PC/104 DC Motor Drive

2 Amp, 5 Amp or 10 Amp Models



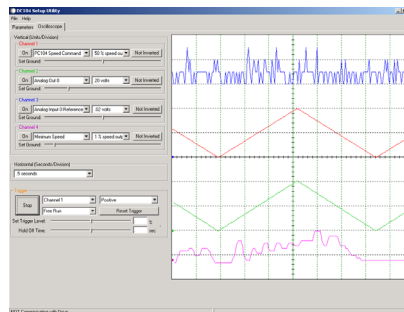
3077587
Conforms to ANSI/UL Std. 508C

*DC104 10A model shown. 2A and 5A drives do not incorporate heat sink.

The Calmotion™ DC104 drive is a PC/104 compatible brush DC drive with all of its parameters and commands accessible with any PC/104 compatible controller. Digital and analog I/O of all types can be integrated using the rugged and proven PC/104 platform. The open standard PC/104 platform allows engineers to add wired and wireless networks to create custom drive solutions quickly without dependence on proprietary software and hardware. By embedding the drive into the control bus, analog conversion time and noise issues are eliminated. Embedding the control into the drive also saves valuable panel space compared to a separately mounted PLC and drive. A Windows™ and Palm OS™ Setup utility are included with the drive to configure, program, or run diagnostics on the drive. With these utilities, the drives parameters can also be displayed or plotted on an oscilloscope screen and saved or loaded from a file.



Optional quadrature Encoder feedback is jumper selectable to accept either 5 or 12 volt encoder signals. Differential or single ended encoder signals can be incorporated into your design.



Windows™ DC104 Setup Utility provides a software scope and ability to monitor/change parameters. The software connects to the drive with a serial port or USB adaptor. It also has features to upload/download parameter files.

File View Help	
Load Factory Defaults	
Load parameters from EEPROM	
Load parameters from file	
Save parameters to EEPROM	
Save parameters to file	
Minimum Speed	0.00 % spe
Accel Time	60.00 secon
Decel Time	60.00 secon
Drive Command	0.00 bit cod
Drive Configuration	0.00
Drive Status	128.00 bit cod
Speed Control Refer	0.00

Palm OS™ DC104 Setup Utility provides a software scope and ability to monitor/change parameters. The software connects to the drive with a serial port or USB adaptor. It also has features to upload/download parameter files.

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DC104

PC/104 DC Motor Drive 2 Amp, 5 Amp or 10 Amp Models

Technical Specifications

PWM Carrier Frequency	16 KHZ	PC/104 Bus	8 bit ISA
Max Armature voltage	0 – 130 VDC @115VAC Input 0 – 240 VDC @230VAC Input	IRQs	4, 5, 6 and 7
Acceleration range	.1 – 6000 seconds	I/O Range	0000h to FFFFh
Deceleration range	.1 – 6000 seconds	5V Power Consumption	80 ma @ 5V
Number of Analog Inputs	2	5V Power Supply	+5 Volts \pm 0.25 V
Analog input range	\pm 10VDC	12V Power Supply**	+12 Volts \pm 0.25 V
Analog input resolution	10 bits	I/O Connector	14 pin male IDC
Analog input impedance	500 Ohms	Ambient Environment	5°C to 40° C
Number of Analog Outputs**	1	Non-Condensing Humidity	5 to 95%
Analog Output range	0-10VDC	Length	8 inches \pm 0.1 (204 mm)
Analog Output resolution	10 bit	Width	4 inches \pm 0.1 (102 mm)
Analog Load Impedance	> 4K Ohms	Mounting	conventional/bookshelf
Enable circuit	5, 12 or 24 VDC @ 22mA		
Over-voltage Fault	375 Volts		
Serial Interface	RS-232 (10 pin IDC)		

DC104-2A DC104NR-2A

Input current	2A
Output current	2A
Peak Output current	3A
Input Voltage	85 - 255 VAC
Input Frequency	42 - 62 HZ
HP range (approx.) @ 115 VAC	1/16 – ¼ HP
HP range (approx.) @ 230 VAC	1/8 – ½ HP
Heat Dissipation*	21 Watts

DC104-5A DC104NR-5A

Input current	5A
Output current	5A
Peak Output current	7.5A
Input Voltage	85 - 255 VAC
Input Frequency	42 - 62 HZ
HP range (approx.) @ 115 VAC	1/8 – ½ HP
HP range (approx.) @ 230 VAC	¼ - 1 HP
Heat Dissipation*	41 Watts

DC104-10A DC104NR-10A

Input current	10A
Output current	10A
Peak Output current	15A
Input Voltage	85 - 145 VAC
Input Frequency	42 - 62 HZ
HP range (approx.) @ 115 VAC	¼ - 1 HP
HP range (approx.) @ 230 VAC	n/a
Heat Dissipation*	82 Watts

Optional Equipment

- **Quadrature Encoder input for closed loop velocity control and 16 bit position counter**
- **Terminal Board breakout with/without DIN rail mount**
- **Null modem Serial Cables to interface PC with drive**
- **USB to Serial adaptor for PCs that do not have a RS-232 serial port**

All mentioned trademarks are the property of their respective holders.
Specifications are subject to change without notice.

*If the enclosure housing the DC104 drive cannot maintain the specified ambient operating temperature range, additional airflow may be required

**Analog output require that +12VDC be applied to the PC/104 stack. 12V not required for drive operation.

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