

Intuitive Motion Systems

MC-CQ-B DC Motor Controller



Works with

IMS Motion Console Software
 DC Brush Motors Available from IMS
 Motorized Stages Available from NAI

Parameter			
1	Supply voltage	12 to 30, 15 typical	V
2	PWM switching frequency	78.12	kHz
3	Efficiency	95	%
4	Max Continuous Motor Current	6 (with sufficient motor connection conductors and contacts) 1 (with 28 gauge ribbon cable)	A
5	Max Peak Motor Current	10 (with sufficient motor connection conductors and contacts) 2 (with 28 gauge ribbon cable)	A
6	Controller current, no output load	0.06	A
7	Combined load, Enc Vcc and Lim Vcc	0.05 max	A
8	Limit switch configuration	switches to ground (controller has internal 1k pull-ups to 5V)	
9	Limit and encoder logic thresholds	low 0 to 0.5, high 4.0 to 5.0	V
10	Encoder input max frequency	400	kHz
11	Max motor speed	30,000	rpm
12	Communication interface type	RS-232	
13	Baud rates	600, 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200	
14	Serial EEPROM Program Memory	6656	bytes
15	Operating temperature	0 to 70	deg C
16	Storage temperature	-25 to +85	deg C

Motor/Enc/Lim Mating Connector Type

ITW Pancon 050-010-415A or Equivalent

Pin	Function
1	Motor -
2	Encoder Vcc (5V)
3	Encoder A
4	Encoder B
5	Encoder Gnd
6	Motor +
7	Limit Gnd
8	Limit Vcc (5V)
9	Reverse Limit (external switch to ground)
10	Forward Limit (external switch to ground)

DC Power Mating Connector Type

Switchcraft 760 K (center positive)

Recommended Serial Cable

L-com CSNULL9FF-10 or equivalent

Serial Mating Connector Type

9 pin female dsub (null modem config)

Pin	Function
1	
2	RS-232 Rx
3	RS-232 Tx
4	
5	Ground
6	
7	
8	
9	

Includes

- Compact 4 A universal power supply & cord
- Serial Cable (null modem)
- Fuse assortment for various motor types
- Power cords for UK and Europe available