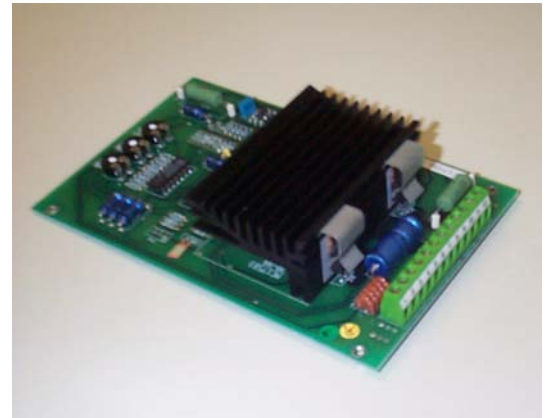


MC series

The MC series amplifiers are low cost electronic speed controllers to drive DC brush type permanent magnet motors. Due to pulse width modulation a very high efficiency is achieved. They require only a single unregulated DC power supply. Several settings such as loop gain, current limit, offset, etc. can be set by onboard potentiometers.



MC175

The MC175 is a single quadrant motor controller (only one direction) for DC motors with a nominal current of up to 4 Amps. The output voltage is suitable for motors with nominal voltages ranging from 12 to 24 VDC. With a maximum output voltage of 33 VDC, an output power of 132 Watt can be achieved. Using an Ixr, or a tacho feedback to stabilize the motor speed. The MC175 is equipped with soft-start to prevent excessive peak currents at motor start.

Typical applications

- Mixers
- Ventilation motors
- Rotation tables
- Pumps
- Conveyors
- Etc.

	Connector type		Tacho	12 VDC-version
	Screw terminal	Plug connector		
MC175BA	•			
MC175BB	•		•	
MC175BC		•		
MC175BD		•	•	
MC175BE		•	•	
MC175BI	•			•
MC175BT	•		•	•
	X			

Specifications

Powersupply	12 or 18 - 35 VDC
Powercurrent	50 mA (without load, at 24 VDC)
Motor current	4 A continuous 9 A peak
Current limiting	adjustable from 0 A to 9 A
Switching frequency	20 kHz
Minimum load inductance	150 µH
Feedback	Ixr adjustable in relation to motor resistance
	Tacho 2-15 VDC per 1000 rpm
	Voltage 0-10 VDC
Dimensions (w x h x d)	160 x 100 x 35 mm
Weight	0,225 kg

Features

- Automatic switch at overload
- Soft-start ramping
- Speedcontrol by potentiometer
- Start/stop input
- Direction input



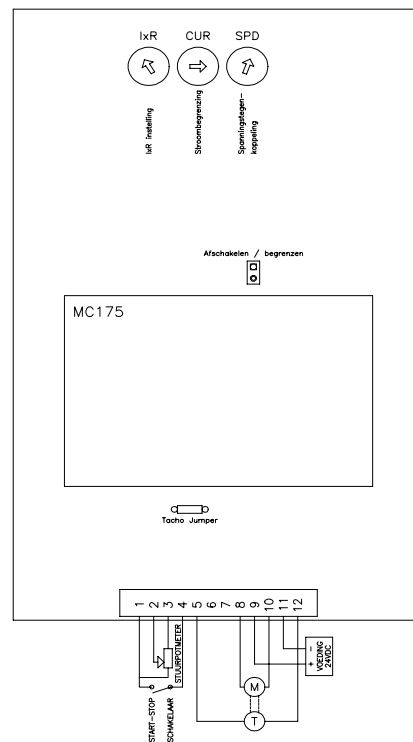
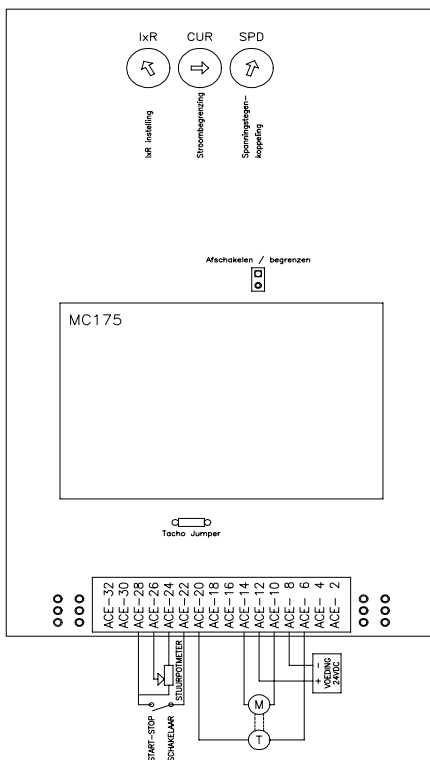
Elmeq Nederland B.V.
 Broeikweg 25
 2871 RM Schoonhoven
 The Netherlands

Tel +31(0)182 30 34 56
 Fax +31(0)182 38 69 20
 E-mail info@elmeq.nl
 Internet www.elmeq.nl

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 Availability and right to change reserved

Connections

Screw Terminal MC175BA MC175BB MC175BI MC175BT	Plug Connector MC175BC MC175BD	Signal	Input Output GND	Description
NC	32	GND	GND	GND
NC	30	GND	GND	GND
1	28	GND	GND	GND for command signals
2	26	EXT.AN	I	External analog speedcontrol voltage
3	24	REF.SP	O	Reference supply for analog command signals
4	22	START	I	Digital input for start/stop function and to reset in case of overload
5	20	TACHPOS	I	Tacho connection (+)
6	18	NC	-	Not connected
7	16	NC	-	Not connected
8	14	UMPOS	O	Motor connection (+)
9	12	+UB	I	Powersupply positive connection
10	10	UMNEG	O	Motor connection (-)
11	8	GND	GND	Powersupply negative connection
12	6	TACHNEG	GND	Tacho connection (-)
NC	4	GND	GND	GND
NC	2	GND	GND	GND



ELMEQ
Member of the ERIKS group

Elmeq Nederland B.V.
Broeikweg 25
2871 RM Schoonhoven
The Netherlands

Tel +31(0)182 30 34 56
Fax +31(0)182 38 69 20
E-mail info@elmeq.nl
Internet www.elmeq.nl