

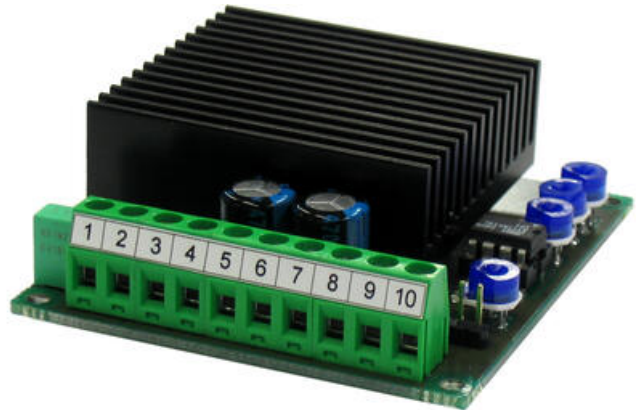
## ELECTROMEN - EM-176

DC motor 4Q drive 12-24Vdc, 10A

EM-176

DC motor 4Q drive 12-24 V dc, 10 A

- 12-24Vdc, 10A continuous, 15A peak
- Speed, direction and braking control
- Adjustable start ramp and current limit
- Compact, DIN rail mountable
- EM-A1 card slot option for symmetrical control  $\pm 5V$  or  $\pm 10V$  (rev-stop-fwd)



### PRODUCT DESCRIPTION

EM-176 is designed for DC-motor speed control. The unit can be used with unregulated DC supply. Motor loading can be compensated with inbuilt Rxl-type adjustment. EM-176 utilizes PWM driven H-bridge, thus achieves high efficiency and extensive controlling options. Speed control value can be set with voltage signal or with potentiometer, there is an auxiliary voltage signal output for potentiometer use. The scale trimmer can be used to scale set value to correspond better the motor rpm. An auxiliary card can be fitted into EM-176 for bipolar input controlling with voltage signal or potentiometer. The ramp feature is used to limit the motor start and brake speed, in other words soften the operation and prevent the occurrence of current spikes. The current limit limits motor torque that is current; this protects the motor and the mechanics. The unit has separate inputs for brake, freewheel and reverse. Brake short-circuits the motor poles and produces powerful braking. Freewheel detaches the power stage from the motor and leaves motor rotating freely. Reverse changes motor rotating direction, this is done using the set ramp times. Brake and freewheel bypass the ramp feature.

#### FEATURES:

- 4 Quadrants
- Braking
- Freewheeling
- Reversal
- 0...10V control
- Optional  $\pm 10V$  control
- Soft start ramp
- Adjustable current limit
- Load compensation ( Rxl )
- High efficiency
- High peak loading capacity
- Rail mountable

### TECHNICAL DATA

<b>2421_Peak current (A)</b>	15
<b>5646_Dimensions length x width x height (mm)</b>	65x73x30mm
<b>Analogue input</b>	+/-0-5V or +/-0-10V or 0-5V or 0-10V
<b>Control type</b>	Speed, Braking, Direction, Torque, Soft start / stop
<b>Current setting range</b>	0-15 A
<b>Logic input high</b>	>4V = ON
<b>Logic input low</b>	<1V = OFF

Max continuous current

10 A

Mounting

DIN rail

Operating temperature

-20°C...+70°C

PWM frequency

25kHz

Suitable engine

DC

Supplier

Electromen

Supply voltage

12 V DC, 24 V DC

Weight

100 g

