

#### **OEM Automatic Ltd**

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# **ELECTROMEN - EM-175**

DC motor 2Q drive 12-24 V dc, 10 A

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- 12-24Vdc, 10A continuous, 15A peak
- · Speed and braking control
- · Adjustable start ramp and current limit
- Compact, din rail mountable



#### PRODUCT DESCRIPTION

EM-175 motor driver is designed for DC-motor speed control. The unit regulates motor voltage so non regulated supply voltage is well suited. A load affecting the motor rpm can be compensated with an adjustble load compensation (RxI). Potentiometer or direct voltage signal can be used to give the speed control value. The current limit can be set with a trim or direct voltage signal to protect the

motor and mechanics in jam situations. Startup speed can be limited with so called ramp, which slowly rises the motor voltage in a desired way. Ramp time is set with a trim. The unit also features a brake input which can be used to rapidly brake motor (dynamic braking). There are two diffirent dynamic braking options available: in the first one even very short braking resets the set value and ramp time, that is after braking motor starts from zero rpm. The second braking method reduces ramp value during braking according to ramp

time, in other words motor starts from ramp value after braking. When the unit is battery-operated,

regenerative braking can be used. This method feeds the braking energy back to battery.

Regenerative braking automatically activates when motor voltage exceeds set value, for example in

a situation where set value is rapidly being reduced. The freewheel command sets motor free from control. Freewheel overrides all other controls. EM-175 can be optimised for 12 or 24 V supply use.

### FEATURES:

- Unidirectional
- 2-quadrant, drive and brake
- Dynamic and regenerative braking
- Smooth startup ramp
- · Adjustable current limit
- Load compensation
- High efficiency
- · High peak loading capacity
- Rail mountable

# **TECHNICAL DATA**

Analogue input	0-5V or 0-10V
Control type	Speed, Braking, Torque, Soft start / stop
Current setting range	0-15 A
Dimensions length x width x height	43x73x30mm
Logic input high	>4V = ON
Logic input low	<1V = OFF
Max continuous current	10 A

Mounting	DIN rail
Operating temperature	-20°C+70°C
Peak current	15
PWM frequency	25kHz
Suitable engine	DC
Supplier	Electromen
Supply voltage	12 V DC, 24 V DC
Weight	80 g







