OEM Automatic Ltd
Address: Whiteacres, Whetstone Leicester, LE8 6ZG
0116 284 9900 | Orders@oem.co.uk | www.oem.co.uk

ELECTROMEN - EM-240 BLDC MOTOR 4Q DRIVE 12-24 V DC, 1.5A

EM-240
BLDC motor 4Q drive 12-24 V dc, 1.5A

- 12-24 V dc, 1.5 A continuous, 2 A peak
- Open & closed loop (hall sensor feedback) control operation
- Speed, direction, current limiting, soft start/stop and braking control
- Compact, small size

PRODUCT DESCRIPTION

EM-240 controller is designed for small brushless DC-motors. The unit is suitable for three phase hall transducer brushless motors. There are two operating modes: in open loop operating mode the motor voltage is proportional to control value with the characteristics of a common DC-motor with brushes. In closed loop operation hall transducer signal is used to regulate motor speed. Through the feedback, a precise motor rpm in relation to control value can be achieved. The motor operating speed and running direction can be adjusted and the motor may be braked in both operating modes. The power stage uses PWM princible and is highly efficient.
Speed control value is given as analog voltage signal. The auxiliary voltage signal is regulated and may be used as reference value for control potentiometer. The acceleration speed can be adjusted with acceleration and deceleration ramp. Deceleration ramp can also be bypassed when rapid braking is desired. Additionally the unit is equipped with speed2-feature, which can be activated individually. This is especially practical in positioning applications.
Current limit can be used to restrict motor torque and is dip-switch settable. Control inputs work with positive (NPN) logic. EM-170 is EMC-tested in accordance with industrial standards.

FEATURES:
• Hall sensor supply and input
• Open or closed loop activity
• Controlled direction change
• Braking
• Settable current limit
• Settable start and stop ramp
• Dip-switch settable
• EMC tested

TECHNICAL DATA

2421_Peak current (A)	2
5646_Dimensions length x width x height (mm)	60x60x20mm
Analogue input	0-10V
Control type	Speed, Braking, Direction, Torque, Soft start / stop
Current setting range	0.2-2 A
Logic input high	>4V = ON
Logic input low	<1V = OFF
Max continuous current	1.5 A
Mounting	DIN rail

Operating temperature	0°C...+60°C
PWM frequency	16kHz
Suitable engine	BLDC
Supplier	Electromen
Supply voltage	12 V DC, 24 V DC
Weight	30 g