

ELECTROMEN - EM-151B BLDC MOTOR 4Q DRIVE 12-24 V DC, 20 A

EM-151B
BLDC motor 4Q drive 12-24 V dc, 25 A

- 12-24 V dc, 20 A continuous, 40 A peak
- Open & closed loop (hall sensor feedback) control operation
- Speed, direction, current limiting, soft start/stop and braking control
- Compact, din rail mountable
- EM-A1 card slot option for symmetrical control $\pm 5V$ to $\pm 30V$ (rev-stop-fwd)



PRODUCT DESCRIPTION

EM-151B is a DC-motor driver for brushless dc-motor with hall-sensors. The commutation angle can be 60 or 120 deg.

It has two modes for speed control. In open loop mode driver works like normal dc-motor speed controller. In closed loop mode the hall pulses are used as speed feedback. Closed loop mode offers a high accuracy in speed control.

The speed control input signal can be scaled with zero and range trims. Card includes also an acceleration and deceleration ramp adjustment for smooth starts and stops. The ramp is used also in direction change, that way it can be done controlled and smoothly. Current limit is also adjustable with trimmer. Regenerative braking can be used when power is supplied from a battery. In this case the current limit adjustment works also in braking. In overcurrent the driver activates the fault output.

FEATURES

- Three phase output
- Open or Closed loop speed cont.
- Controlled direction change
- Dynamic or Regenerative braking
- 60° or 120° commutation
- $\pm 10V$ control option
- Fault output
- High efficiency
- Thermal protection
- Rail base mountable

TECHNICAL DATA

Analogue input	$\pm 0-5V$ or $\pm 0-30V$ or $0-5V$ or $0-30V$
Control type	Speed, Braking, Direction, Torque, Soft start / stop
Current setting range	0-40 A
Dimensions length x width x height	108x91x40mm
Logic input high	$>4V = ON$
Logic input low	$<1V = OFF$
Max continuous current	20 A
Mounting	DIN rail
Operating temperature	$-30^{\circ}C \dots +60^{\circ}C$

Peak current	40
PWM frequency	18 kHz
Suitable engine	BLDC
Supplier	Electromen
Supply voltage	12 V DC, 24 V DC
Weight	230 g

