

0116 284 9900 | Orders@oem.co.uk | www.oem.co.uk

# **ELECTROMEN - EM-241C**

DC motor 2Q drive 12-48Vdc, 10-15A

EM-241C 48V DC motor 2Q drive 24-48 V dc, 10 A

- 12-48Vdc, 10-15A continuous, 25-30A peak
- · Speed, direction, current limiting, soft start/stop and autoreverse control
- · Limit switch inputs for end of travel
- · Compact, DIN rail mountable





### PRODUCT DESCRIPTION

EM-241C is brushed DC motor drive with a 10/15A nominal output and offers a number of special functions.

There are adjustable acceleration and deceleration ramps to ensure smooth motion and adjustable current limits to protect the motor against overcurrent damage - this feature can also be used as an end-stop limiter. The device has also two settable speeds, which can be useful in positioning applications.

Control inputs FW and BW start the forward and backward motion, STOP will shut the motor down, and there are also available limit switch inputs for both directions. The SPEED-2 input by default activates preset speed-2, although it can also be used for analog speed control with 0-5V signal. FAULT terminal pin can be used to signal fault conditions, or pulled down to ground to disable the drive - for example, several fault pins could be linked together on multiple units and ensure a synchronised stop.

There are two selectable control modes - continuous and impulse. In continuous mode the motor runs as long as the control is active, in impluse mode the drive only needs a momentary comand start the motor, and further impulse to change the status. Additionally, there are user adjustable 'starting kick' and auto reverse settings, as well as selectable NPN or PNP input logics. The C-version includes two new parameters: freewheel options for release of the rotor and PWM frequency selection - 16kHz PWM is silent, although the output capacity current is lower.

The parameters can be set with the EM-236 stand-alone interface unit or the EM-328 programming cable (with free PC software), both the software and programmer allow for monitoring and diagnostics of some of the functional values on the unit.

## Features

- Small size with high current output
- Current limit
- Zero current limit
- Overvoltage brake
- Speed setting
- Flexible control inputs
- Impulse / continuous mode
- DIN rail base mountable
- 2kHz or 16kHz PWM frequency
- Suited to 5-50W DC motors
- Digital parameter setting
- Freewheel options ( new )
- C-version replaces A and B versions
- C-firmware can be loadad B ver. card
- C.version available with molex connector
- \* Continuous current output when ambient temp is <50°C

12-24Vdc version drive =

15A at 100% speed / 10A at 5-99% speed PWM=2kHz 10A at 100% speed / 5A at 5-99% speed PWM=16kHz Peak (5secs) 30A at 2khz PWM and 25A at 16kHz PWM

# **TECHNICAL DATA**

Analogue input	0-5V
Control type	Speed, Direction, Torque, Soft start / stop
Current setting range	0.1-25A
Dimensions length x width x height	72x42x25mm
Logic input high	>4V = ON
Logic input low	<1V = OFF
Max continuous current	*10 A
Mounting	DIN rail
Operating temperature	-40°C+60°C
Peak current	*25
PWM frequency	2kHz/16kHz
Supply voltage	24 V DC, 36 V DC, 48 V DC
Weight	75 g



