

ELECTROMEN - EM-324C

DC motor 2Q drive 12-24Vdc, 4A

EM-324C

DC motor control 12-24V 3A



- 12-24Vdc, 4A continuous, 7A peak
- Speed, direction, current limiting, soft start/stop and auto-reverse control
- Limit switch inputs for end of travel
- Compact, DIN rail mountable

PRODUCT DESCRIPTION

EM-324 is brushed DC motor drive with a 4A 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 impulse mode the drive only needs a momentary command 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 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

* Motor current cont. max. 3A, peak 7A (@ 16kHz Ta >50°C)

Motor current cont. max. 4A, peak 7A (@ 2kHz Ta >50°C)

TECHNICAL DATA

2053_Current limit (A)	0,1-7
2421_Peak current (A)	7
5646_Dimensions length x width x height (mm)	32.5x73x18mm
Analogue input	0-5V

Control type	Speed, Direction, Torque, Soft start / stop
Current setting range	0.1-5 A
Functions	Currenttrip autoreversing, Brake output, Speed settings, Impulse/continuous mode, Softstart/stop, Potentiometer adjustable speed, RS485/Modbus, Stop at limit position, Speedregulator, Change direction of rotation (CW/CCW)
Logic input high	>4V = ON
Logic input low	<1V = OFF
Max continuous current	*4 A
Mounting	DIN rail
Operating temperature	-40°C...+60°C
PWM frequency	2kHz/16kHz
Suitable engine	DC
Supplier	Electromen
Supply voltage	12 V DC, 24 V DC
Weight	25 g

