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## ELECTROMEN - EM-174

DC motor 2Q drive 12-24 V dc, 8 A

EM-174A\* DC motor 2Q drive 12-24 V dc, 8 A

- 12-24Vdc, 8A continuous, 12A peak
- Speed and direction control
- Adjustable start ramp and current limit
- Compact, DIN rail mountable
- Symmetrical control ±5V (rev-stop-fwd)



### PRODUCT DESCRIPTION

EM-174A 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 (Rxl). Potentiometer or direct voltage signal can be used to give the speed control value. Rotation direction changes when control value turns negative or if control signal is applied to direction input. The unit has reference positive and negative signal for potentiometer use, in other words potentiometer can also be used to drive both direction, motor stops at potentiometer middle position. Set value range can be scaled with range trim. At direction change the controller waits for motor to stop before driving in opposite direction. This avoids current peaks at direction change. 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. EM-174A can be optimised for 12 or 24 V supply use.

- FEATURES:
- Bidirectional
- No brake
- · Controlled direction change
- ± 10 V or 0...10 V control
- · Soft start ramp
- · Adjustable current limit
- Load compensation
- High efficiency
- · High peak loading
- Rail base fittable

# **TECHNICAL DATA**

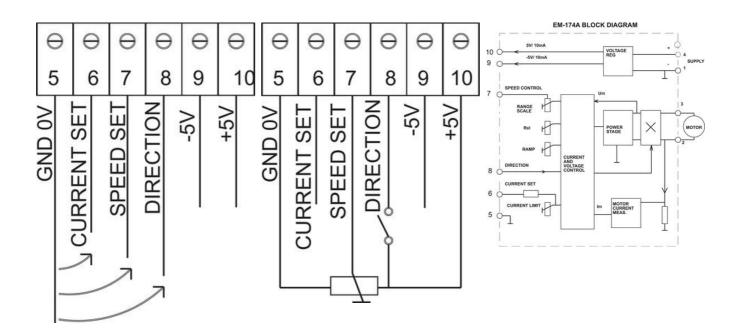
| Control type          | Speed, Direction, Torque, Soft start / stop |
|-----------------------|---|
| Current limit         | 0,1-12                                      |
| Current setting range | 0-12 A                                      |
| Mounting              | DIN rail                                    |
| Operating temperature | -20°C+70°C                                  |
| Peak current          | 12  |
| PWM frequency         | 25kHz                                       |
| Supplier              | Electromen                                  |

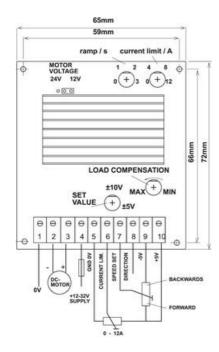
#### Supply voltage

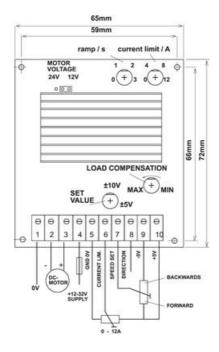
12 V DC, 24 V DC

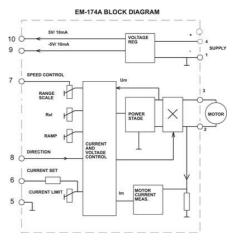
80 g

## Weight









| θ      | θ           | θ         | θ         | θ   | θ   | θ      | θ           | θ         | θ | θ   | θ   |
|--------|-------------|-----------|-----------|-----|-----|--------|-------------|-----------|---|-----|-----|
| 5      | 6           | 7         | 8         | 9   | 10  | 5      | 6           | 7         | 8 | 9   | 10  |
| GND 0V | CURRENT SET | SPEED SET | DIRECTION | -5V | +5V | GND 0V | CURRENT SET | SPEED SET |   | -2/ | +5V |