

## ELECTROMEN - EM-115-48

DC motor 4Q drive 24-48Vdc, 25A

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- 20-60 Vdc, 25A continuous, 50A peak
- Speed control without losing torque
- Wide range of adjustable motor control functions
- Compact, DIN rail mountable

### PRODUCT DESCRIPTION

EM-115-48 motor control unit is designed for big permanent magnet DC-motors. The power control is done with PWM method (Pulse Width Modulation). This facilitates high efficiency and small temperature losses. Thanks to a high switching frequency the unit operates quietly. A battery or a filtered DC-supply will do as a power source.

The maximum output given by the unit depends on the installation. When operating at maximum power output sufficient air ventilation has to be taken care of. The unit operates in 4-quadrants so it drives and brakes in both directions. The braking is done with regenerative way feeding braking energy back to power supply. When a battery is not used as a power source the braking energy will be fed to the internal resistance of the motor. The motor rpm can be set either with potentiometer, trim or external voltage signal. The output acceleration ramp and current limit are set with trims, the current limit is indicated with a red LED. A load affecting the motor rpm can be eliminated with a compensation trim. The power stage is protected against voltage peaks, overload and temporary shortcuts. Even the incorrect polarity does not damage the unit as long as a fuse of recommended value is used.

#### FEATURES:

- Small size
- Four quadrant drive
- High efficiency >92%
- Motor range 50-500W
- Rail mounting base fittable
- Adjustable current limit
- Adjustable ramp

### TECHNICAL DATA

Analogue input	0-5V or 0-10V
Control type	Speed, Braking, Direction, Torque, Soft start / stop
Current setting range	4-50 A
Dimensions length x width x height	107x107x45mm
Logic input high	>4V = ON
Logic input low	<1V = OFF
Max continuous current	25 A
Mounting	DIN rail
Operating temperature	-10°C...+50°C
Peak current	50

<b>PWM frequency</b>	21kHz
<b>Suitable engine</b>	DC
<b>Supplier</b>	Electromen
<b>Supply voltage</b>	24 V DC, 36 V DC, 48 V DC
<b>Weight</b>	270 g

