



FEATURES

- One direction, 1 quarant drive
- Good speed regulation
- Current limit
- RxI load compensation
- Low cost

EM-323 is a 1-quadrant power controller. The controller uses PWM principle with high efficiency. The PWM frequency mode can be set to high or low. High frequency is used with inductive (motor) load and low with resistive (lamp) load. The output of the device is compensated against power supply changes and there is also load compensation (RxI), which improves speed regulation at low speeds.

The device is controlled with an analog voltage signal 0-5V or 0-10V. Output range is adjustable. EM-323 also includes start and stop ramps for smooth operating.

Settings can be done with the serial interface unit EM-236. Connect interface unit to the red on-board connector of the device. EM-236 displays the number and version of the device. Select LOAD & EDIT with the select button and you will enter parameter editing mode. Select desired parameter with arrow buttons and change value with (+) and (-) buttons. When you're done editing the parameters, you can save them with long push of the save button.

PARAMETER LIST EM-323 prog v1.2

- 1. Pwm frequency 0/1 0=2khz / 1=16kHz (1)
- 2. Speed input range 0/1 0=0-5V / 1=0-10V (0) 3. Start ramp 0-2.5s 0-25 (10) 4. Stop ramp 0-2.5s 0-25 (10)

- 5. Current limit 0.1-8A 1-80 (20) 6. Load compensation 0-250 (0)

- 7. Current trip 0=off / 1=on 8. Output scale 5-33V (50-330) (280)

TECHNICAL DATA (PCB vrsion v2)

Supply voltage 10-35V Overvoltage shutdown 38V Motor current cont. max 4A (Ta<50 ℃) Motor current peak max 8A (10s.) Voltage drop 0.3V at 4A PWM frequency 2kHz or 16kHz Start ramp 0..2.5 s. setable Stop ramp 0..2.5 s. setable Current limit 0.1 -8A setable Control range 0-5V or 0-10V, adjustable Output range 0-5V ... 0-33V, setable Control input impedances 100kohm Fault output NPN max. 50mA with sw1 can be connect 2.2k pull up res. Connectors supply and power 1.5mm² Dimensions 72x20x17mm Dimensions in rail base 90x23x48 Connectors control 1mm² EMC EN-50081-2 & EN-50082-2 (industrial) Operating temp (Ta) -40...70 ℃

SPECIFICATIONS	CONTRACT NO.	DATE	TITLE
DWG NO. / FILE NAME 323	DRAWN BY:	17.6.24	PRELIMINARY DATASHEET DC -motor driver 1-quadrant 3-4A
	CHECKED BY:		COMPANY ELECTROMEN OY