

ELECTROMEN - EM-241-SPF

DC motor positioning drive 12-24Vdc, 15A, pulse feedback

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DC motor positioning drive 12-24 V dc, 15 A, pulse FB



- 12-24Vdc, 15A continuous, 30A peak
- Set value 0-5V, 0-11V, 0-20mA & feedback input from encoder/hall sensor
- Positioning accuracy max. 0.2%
- Speed, direction, current limiting, soft start/stop and range adjustment control
- Compact, DIN rail mountable

PRODUCT DESCRIPTION

EM-241-SPF is a positioning driver to be used with DC-motors. The solid state power stage operates with high efficiency and as its realized with FET-transistors. Its literally everlasting compared to relay solutions. Feedback is done with one or two line pulse signal. Although position feedback can be done with one pulse line it is always preferred and more secure to do it with two 0°/90° pulse lines. This driver includes an analog control with three signal ranges, 0-5,5V, 0-11V or 4-20mA. Input is freely scalable inside the range. The max. electrical accuracy of the driver and feedback is 0.2% which is adequate for most actuator positioning applications. The settings and adjustments are done with parameters as in all new generation Electromen products. Included in the parameters is also the learn routine which will help to determine the full movement range fast and easily. Additively the movement range can be modified from both ends with SW-limit parameters. Possible cumulating pulse count errors can be avoided with manually or automatically triggerable home drive. Current limits and driving speeds can be set individually for both directions. Driver includes also many other dynamic adjustment features like parameter for load compensation, dead-zone setting (positioning window), start and stop ramps for smooth direction change and braking zone for well operating positioning. The parameter setting and status monitoring is done with EM-236 Interface Unit. With EM-236 the right parameters can also be copied easily to other driver units. The on-board LED-light indicates the possible fault situations with blinking codes. If needed, the fault alarm can be also given out through combiport (pin. 13). This port can be set as "position OK." output or it can work as an analog position signal output. Additively it can work also as disable input. Device is EMC tested for industrial and household environment and operating temperature range is quite wide. There are also same housing options available for EM-241-SPF driver card as for the standard EM-241.

FEATURES

- quadrature pulse counting
- multiple dynamic settings
- solid state power stage
- one or two pulse feedback
- voltage or mA control
- position accuracy max. 0.2%
- versatile setting options
- digitally settable parameters
- housing options available
- CE marked product

TECHNICAL DATA

| | |
|---|---|
| Analogue input | 0-5V or 0-11V or 0-20mA |
| Control type | Speed, Direction, Torque, Position, Soft start / stop |
| Current setting range | 0.1-20 A |
| Dimensions length x width x height | 72x42x25mm mm |

| | |
|-------------------------------|------------------|
| Logic input high | >4V = ON |
| Logic input low | <1V = OFF |
| Max continuous current | 15 A |
| Mounting | DIN rail |
| Operating temperature | -40°C...+60°C |
| Peak current | 30 A |
| PWM frequency | 2kHz |
| Suitable engine | DC |
| Supplier | Electromen |
| Supply voltage | 12 V DC, 24 V DC |
| Weight | 80 g |

