

Elife-Drive M4896-16 Type



This technical review shows the main features and technical information of Elife-Drive M4896-16 Type. For further information about this model and its applications, or to define an evaluation of your needs, please refer to our website to contact us.

The main **key features** include:

- Designed to drive **traction** Brushless, Brushed and AC Motors.
- The different types of feedback are supported: **Absolute Resolver**, *SinCos*, *Hall Sensors*, *Sensorless*, *Incremental Encoder*, *Tachometer*.
- Advanced algorithms for predictive speed and torque control.
- Telemetry of the Internal functions
- CANopen[®] communication protocol¹: CiA[®] DS301 and CiA[®] DSP402 (Interface Profile Velocity, Profile Position Mode and Torque Profile Mode)
- Electromagnetic Holding Brake Output with DPR System (Dynamic Power Reduction)
- Designed for high voltage applications.
- European Conformity **CE**, and designed and tested in accordance with the **EMC** emission (EN 61000-6-4) and immunity (EN 61000-6-2) standards.
- Elife-Drive M Series is compliant with EN 60950-1 safety requirements.

Specification:

- Four Quadrant Regenerative Operation
- Space Vector Modulation Technology
- Sinusoidal and Trapezoidal Commutation Methods
- Programmable Gain Setting
- Fully Configurable Velocity and Position Limits
- On-the-fly Mode and Gain Set Switching
- Emergency Ramp and Safe Torque Off (STO) Input

Programmable Input/Output:

- 2 Programmable High Powered Digital Outputs
- 1 Programmable 0÷10 V 12-bit Analog Output
- 2 Programmable 0÷10 V 12-bit Analog Inputs
- 8 Programmable Digital Inputs Single Ended
- 5 Programmable Digital Outputs Singled Ended

Electrical Box Version:



It's also available a configuration with Cooling Fan.

Table 1: Description of Elife-Drive M4896-16 Type.

| | VALUE |
|---|--|
| Nominal Power Supply Voltage: (Operating Range) | 96 V (from 43 to 150 V) |
| Continuous RMS Motor Output Current ^a : | up to 300 A |
| Available Power: | up to 16 kW |
| PWM Operating Frequency ^b : | 6103 / 16000 Hz |
| Electrical Insulation at Heat Sink: | 500 V (minimum) |
| Digital Input Pin Voltage: | up to 36 V |
| Digital Input Pin Current: | 1.0 mA @24 V |
| Digital Output Pin Voltage: | up to 36 V |
| Digital Output Pin Current: | up to 250 mA |
| Power Output Voltage: (for brake and power relay) | From 6 to 30 V |
| Power Output Current: (for brake and power relay) | up to 2 A |
| Analog Input/Output Voltage: | From 0 to 10 V |
| Package Environmental Rating: | IP 66 |
| Weight: | 4.1 kg |
| Dimensions H x W x D: | 250x150x90 mm (Electrical Box Version) 250x190x150 mm (with Fan Cooler) |

^{a)} The value of the maximum continuous (60 min) RMS phase current is ensured with an appropriate heat sink.

^{b)} The PWM frequency can be chosen by the user.



www.elifeinternational.com

+39.0565.944121 info@elifeinternational.com