

# PM-04B

## HIGH FREQUENCY ELECTRONIC CONTROL UNIT WITH MICROPROCESSOR AND ENERGY RECOVERY

The high frequency bidirectional electronic control unit with energy recovery type PM-04B has been added to the newest range of products aided by microprocessor. Designed by ELEKTROSISTEM for permanent magnet motors according to the mosfet technology and in compliance with the safety regulations for the application on EC-vehicles, the control unit PM-04B ensures an automatic regenerative braking by pedal release, during deceleration or in reverse. The microprocessor ensures a higher performance when compared

with the traditional analogic systems along with the possibility to modify the running parameters by means of a programming display (ITS) or a PC interface that may be supplied with the relative software. The control unit PM-04B is available in the power range included between 150 and 270 Amp. and in the voltages 12, 24, 36 and 48 V.

### MAIN TECHNICAL FEATURES

- Control unit aided by microprocessor.
- Operation parameters adjustable through a programming display or a PC-interface.
- Total protection against battery polarity inversion.
- Proportional action thermal limiter.
- Recovery braking system acting by pedal release or in reverse.
- Intervention of the safety block in case of short circuit of the mos units.
- Intervention of the safety block in case of potentiometer breakdown.
- Intervention of the safety block when, turning the key, the potentiometer is not on the value 0.
- Possibility to connect and drive an electromagnetic brake.
- Control system by a 5K potentiometer that may be connected to 2 or 3 wires.
- Control system by a smaller section of the potentiometer in order to reduce the adjusting angle.
- Personalization of operation parameters:
  - Slow starting through adjustable acceleration slope
  - Limiter of the acceleration current
  - Limiter of the braking current
  - "Under voltage" device for battery protection
  - "Over voltage" device for equipment protection
  - Limiter of the max. voltage applied to the motor separated for forward and reverse running.

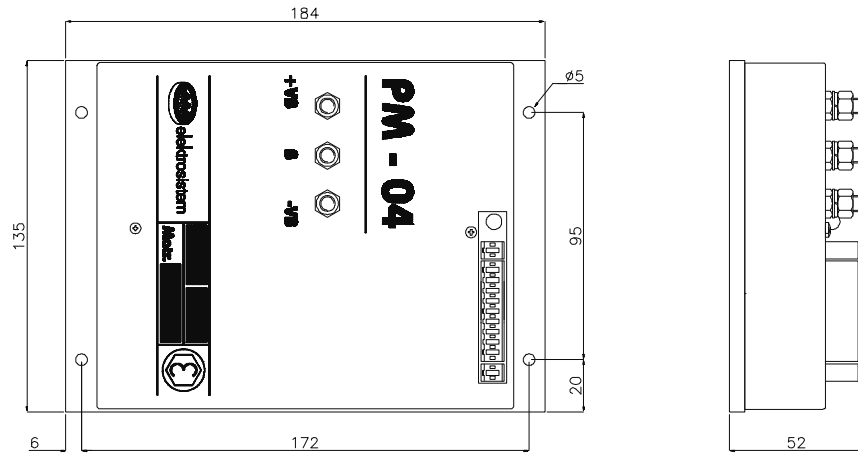
### TECHNICAL SPECIFICATIONS

- Voltage rating .....	12-24-36-48V
- Standard nominal current .....	150/350A
- Operation frequency .....	17KHz
- Operation temperature .....	-20°C / +40°C
- Thermal limiter action .....	from 70° to 80°C
- Weight .....	800 gr.

MODELS

Size	Starting current	Current/Min	Current/hour
150 A	150 A	120 A	50 A
180 A	180 A	150 A	60 A
200 A	200 A	170 A	65 A
250 A	250 A	210 A	85 A
350 A	350 A	280 A	110 A

DIMENSIONS



CONNECTION DIAGRAM

