ELEKTROSISTEM s.r.l. Bollettino informativo 68A





MC-40B/BR MC-60B/BR

HIGH FREQUENCY CONTROL UNIT

MC-40B and MC-60B high frequency, bidirectional electronic control units are aided by microprocessor and can perform automatic pedal release braking. They have been conceived for series excited motors with 2, 3 or 4 terminals and can perform reverse current braking or regenerative braking. Built according to the *MOSFET* technology and in compliance with security directives for use on CE marked vehicles, these control units represent a brand new product joining the wide range of units manufactured by ELEKTROSISTEM. Acceleration setting allows the vehicle to gradually reach

maximum speed. The current limiting device enables the operator to set the maximum current supplied to the motor.

Braking acts at pedal release and during reverse and can be set by the accelerator pedal. Maximum braking current can be set by the operator according to the use.

MC-40B ed MC-60B control units have been manufactured with high technology components such as high power and voltage MOSFETs, high frequency switching diodes and high power and temperature filter capacitors.

MAIN TECHNICAL FEATURES

- Control unit aided by microprocessor.
- Reverse current braking or regenerative braking.
- Adjustable operating voltage (24-36-48-60-72-80-96 volts).
- Parameter programming by PC and RS-2001 interface.
- Speed control by 5K three-wire potentiometer.
- Potentiometer min. and max. current adjustable.
- Control by central 0 potentiometer.
- Control by PLC.
- Slow starting through adjustable acceleration slope.
- Current limit in case of overheating.
- Braking at accelerator release and during reverse, and braking current increase by brake pedal.
- Operation frequency 17KHz.
- Error file.
- Max. speed for forward and reverse adjustable.
- Outputs with coil overheating and reverse polarity protection for:

Forward contactor.

Reverse contactor.

Regenerative braking contactor / main contactor.

- Outputs with reverse polarity protection for:

1st weakening contactor.

2nd weakening contactor / power steering contactor / brake contactor.

- Three auxiliary inputs available for:

Pedal brake / emergency reverse.

Seat switch / tiller switch / parking brake switch.

Speed reduction.

- 0-5 volt analogue input with adjustable value.
- Error LED.
- Protection against reverse polarity, motor overloads or short circuits, wires or potentiometer cut off or breaking, wrong battery voltage, high temperature and defective coil or contact and in case of unit failure.



MODELS

Model	Size	Voltage	Peak current	Current for 1 min.	Current for 1 hour
MC-40B MC-40BR	400A	24/80V	400A	340A	130A
MC-41B MC-41BR	360A	84/96V	360A	300A	100A
MC-45B MC-45BR	400A	24/48V	600A	500A	130A
MC-60B MC-60BR	600A	24/80V	600A	530A	200A
MC-61B MC-61BR	550A	84/96V	550A	480A	160A

DIMENSIONS



