



MC-40 MC-60

HIGH FREQUENCY ELECTRONIC CONTROL UNIT

The bidirectional high frequency electronic control units type MC40 and MC60 aided by microprocessor and with automatic pedal release braking have been conceived for series excited motors with 2, 3 and 4 terminals. Built according to the *mosfet* technology, in compliance with the most recent security provisions for the application on EC vehicles, these choppers represent the newest range of DC control units manufactured by ELEKTROSISTEM.

The acceleration adjusting device allows the vehicle to gradually and regularly reach the maximum speed. The current limiter enables the operator to adjust the max. current supplied to the motor.

These control units are provided with a braking system acting by pedal release and during reverse that may be directly adjusted by foot accelerator. The max. braking value can be set by the operator according to his needs.

The operation parameters of the vehicle may be entered and adjusted by connecting the control unit to the display type ITS that is even used for trouble shooting.

The choppers type MC40 and MC60 are produced with high technology components such as high power and voltage mosfets, high frequency switching diodes, high power and temperature filter capacitors and are available at 400 A (MC40) and 600 A (MC60) in the standard voltages of 12, 24, 36, 48, 60, 72, 80V.

MAIN TECHNICAL FEATURES

- Control unit aided by microprocessor.
- Operation parameters adjustable through a programming display.
- Possibility to use the software and a PC interface instead of the display ITS.
- Slow starting through adjustable acceleration slope.
- Settable limiter of the max. current supplied to the motor.
- Proportional action thermal limiter.
- Braking system acting by pedal release and during reverse.
- Settable limiter of the max. braking current.
- Control system by a 5 K or 10 K potentiometer connected to 3 wires.
- Safety block action in case of short circuit of the mos units.
- Safety block action in case of potentiometer breakdown.
- Safety block action when turning the key, the potentiometer is not on the value 0.
- Disabling of the safety block by resetting the potentiometer to the value 0.
- Anti-rollback function.
- Driver for control of electromagnetic brake, or enabling second speed or control of timed hydrosteering.
- Possibility of control by potentiometer at central 0 with or without running microswitch.
- Possibility to pre-set the potentiometer adjusting angle.

TECHNICAL SPECIFICATIONS

- Voltage rating 12-24-36-48-60-72-80V
- Nominal current 400A (MC40) or 600A (MC60)
- Allowed power supply variation from 85% to 125%
- Operation frequency 17 KHz
- Operation temperature -20°C/+40°C
- Relative humidity at 25°C 90%
- Thermal limiter action at from 70 to 80°C
- Weight 2.5Kg (MC40) - 3.5Kg (MC60)

MODELS

Model	Size	Starting current	Current / min.	Current / hour
MC-40	400A	400A	340A	130A
MC-60	600A	600A	530A	200A

