

MPC 4ID8

MOVEKET MPC 4ID8 Motion Power Controller (DC and RC model)
compliant with BGV D8 and igww SQ P2 D8 Plus



The Motion Power Controller 4ID8 is based on the established industry standard MPC 4ED8 controllers and represents an intelligent control unit for the governance of asynchronous three-phase drives such as the MOVEKET ECO, PLUS, Compact and Plus-C chain hoists and their Lite counterparts compliant with D8 and D8 Plus. This is an independent control platform by means of which up to four hoists or drives series in direct control 400 V AC or remote control 24 V DC version can be directly operated in an operationally secure and user-safe fashion without any additional control devices. A large, back-lit LCD

displays the operating states and parameters. The integrated operating and safety processors monitor all functions, whereby the general evaluation of all safety-relevant parameters, including all run states, is implemented as a superordinate safety chain. Any operating error therefore leads invariably to the shutting-down of the connected drives. The relays and safety circuits required for the operation of up to four chain hoists are integrated.

The system corresponds in its basic configuration to the stipulations of BGV D8 and D8 Plus in accordance with igww SQ P2. A modular concept

adaptable to the prevailing functional and safety requirements has been realized.

The MPC 4ID8 is system-compatible with the existing MPC 4ED8 controllers and can be operated by means of the established MOVEKET Link system both within a group and also with the well-known MRC controllers. Furthermore, it is ready for I-Motion network operation, and up to 8 devices can be operated in direct link mode or up to 60 devices via I-Motion network in decentralized group mode in combination with a central controller e.g. a controller from the I-Motion series.

The clearly identifiable input buttons in combination with a rotary/push-button encoder permit the simple and intuitive configuration and handling of the controller. The user is guided by a logically structured and intuitive interface with display output. Even target* and group* runs (*depending upon the drive configuration) can be programmed and executed by this means.

The MPC 4ID8 solution is recommended for use with the ECO, PLUS and Compact Plus-C hoists, as well as their respective Lite counterparts series in direct control 400 V AC or remote control 24 V DC version, in particular for professional rigging applications in the trade fair, events, studio and touring sectors.

Technical data

- input: 16 A CEE 5-pin phase-changing plug with 1.5 m H07RN-F connector cable (32 A CEE 5-pin HP version)
- XLR MX7 and XLR FX6 M-Link system incl. shut-off dummy connector
- drive output connector: HAN E16 16-pin at DC models and 24-pin at RC models (every four motor outputs), optional 19-pin EU-Socapex compatible plug-in connector (DC models)
- MRC input connector HAN 36 modular
- I-Motion-Network NDC-C14FC input connector
- I/A- encoder input, SUB-D25 male
- I/O inputs and outputs, SUB-D25 female
- load measurement system input, SUB-D15 female
- Versions*: SP/HP/HP1
- dimensions: 19"/3U, D 470 mm (without plug-in connector)
- weight 16.4 kg (16.6 kg HP version)
- complies with, BGV D8 and D8 Plus (in accordance with igww SQ P2)



* SP = 2.5 - 4.0 A/0.75 - 1.5 kW
HP = 4.0 - 6.3 A/1.5 - 2.2 kW
HP1 = 6.3 - 10 A/2.2 - 3.0 kW

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FEATURES:

- implementation according to BGV D8 and D8 Plus in compliance with igww SQ P2
- controls and supervises up to four direct-drive hoists such as ECO, PLUS, Compact, Plus-C and their Lite implementations or else asynchronous three-phase drives
- direct control 400 V AC or remote control 24 V DC
- self-testing of relevant functions prior to system enabling
- night-design, buttons and input devices as well as LCD illuminated
- simple, intuitive operation, basic functions (e.g. raising and lowering hoists) possible without time-consuming configuration
- supervision and display of operating states such as operating voltage and phase, motor protection switch, run direction and main contactor on „stick“, correct run direction, link system, position*, operating* and emergency limit*, temperature* as well as dynamic load analysis*~
- supervision of the run direction and target speed when encoder-operated*~
- selection of possible Movecat drive parameters from stored database
- management of drive groups*~
- group-transcending error supervision in M-Link mode up to 8 and in I-Motion network up to 60 MPC 4ID8 controllers
- input of software operating limit positions* for raising and lowering · simple encoder reference run* for calibration
- way-synchronous group run*, permitted tolerance of the individual hoists and groups programmable*~
- „group-synchronous“ run (central up/down movement of previously selected hoists)
- „target runs“* on position
- complementary overload ascertainment through evaluation of the nominal speed when encoder-operated*~
- simple set-up possibility for underload and overload definition*, analysis
- targeted service runs in connection with by-pass switch
- retention of all parameters even in the event of power failure
- error warning by means of the display
- integration into the I-Motion network buss system
- configured* via external PC with 100 Mbit network card

*optional, functions depend upon the controller- and drive-configuration

Technical equipment

- backlit LCD
- backlit buttons and encoders
- LED status display of the device
- four adjustable motor protection switches
- E-Stop button, function-illuminated
- GO button backlit (enabling)
- main switch for central start-up incl. by-pass function
- function keys (1-4) for simple, intuitive handling and direct selection of drives as well as their run directions
- high-resolution rotary encoder with button function for data input
- incremental encoder input*: dual-channel with run-direction detection, high-resolution*~
- load measurement cell input* (LMS + LME)
- eight digital inputs and four outputs for ancillary functions e.g. limit switch
- I-Motion network input, network address software-determinable
- robust metal housing with two handles

Versions

- variants: SP/HP/HPI
- load measurement
- position detection

Options / Accessories

- MRC D8 series remote control
- I-Motion Controller series
- transport case