

MOVECAT OMK fixed-speed chain hoists compliant with BGV C1 and DIN 56950

OMK electric chain hoists were developed in direct connection with Movecat's MPC EC1 and IC1 control systems so as to form with them a single unit offering the maximum in operational safety and functional versatility for professional BGV C1 point hoist applications. The high degree of functional safety, such as the targeted monitoring and supervision of the operational and emergency limit positions, underload and overload* (*optional), power supply and duty cycle of every individual hoist ensures reliable operation. The field of application is assistance with setting-up and dismantling operations in fixed installations and simple stage runs and scene changes, including the suspension of loads over human heads. In the basic configuration, the safety equipment com-

prises two independent DC brakes, an adjustable underload cut-out, a four-track geared limit switch, and a patented overload system for the protection of the drive and the chain. Continuous force and form closure without interruption between the brakes and the load as well as the safe suspension of the load are guaranteed under all circumstances and at all times.

OMK hoists are equipped with an internal status and test board. This employs Movecat's 'traffic light' principle to indicate without ambiguity the current operating status and contains the testing equipment required by DIN 56950 for the operating and emergency limit switches, load-measuring system and brakes. The standard version of the OMK hoists is equipped with

a single eyelet suspension, with an integrated underload cut-out on the motor side, and with a hook on the chain side. The use of a special gear in connection with a chain-bag wheel plus five or more chain-link bags makes smooth and quiet operation possible. Incremental and absolute encoders, thermal overload protection, dynamic load measuring systems, additional chain storage capacity and trolleys are available as options for OMK hoists. The modular component set permits cost-efficient, project-specific adjustments even in the case of complex and highly exacting application and safety demands.

The requisite control contactors and the power electronics are accommodated in the external controllers. Freely scalable, powerful integrated systems in accor-



dance with BGV C1 can be realized even in mounting locations that are hard to access. The operating statuses are indicated by the relevant MPC controller and on the remote controls.

OMK hoists are ready for use with Movecat MPC EC1 and IC1 controllers in accordance with DIN 60204-32 and EN 13849-1 and when used accordingly are certified as CE compliant, provided the instructions set out in the user manual are adhered to.

A UVV specialist factory inspection and the VDE 0701/0702 first inspection are also included.

OMK hoists are the first choice for professional use in theatres and studios as well as conference, trade fair and multi-function halls, clubs, trade fair booths, shows and events.

Basic configuration:

- Hoisting height: up to 30 m
- Convertible to dual chainfall operation (twice the load-bearing capacity, half the speed)
- Standard installation position (optionally as climbing hoist)
- Compact, light construction
- Smooth, quiet operation
- Long duty cycle
- Precision-milled, specially hardened chain-bag wheel with at least 5 bags
- High-quality, specially hardened gear mechanism
- Overload protection by means of a patented friction clutch
- Braking system with two independent DC brakes, individually testable
- BG-tested geared limit switch for raising and lowering, operation and emergency limit
- Underload/slack chain shutdown
- Status board with 'traffic light' display and test board for the independent testing of brakes and limit switches
- Basicplate chain guide
- Highly robust, roundsteel link chain acc. DIN 5684
- Chain hook, rotatable
- Permanently installed, textile chain bag
- Robust, light alloy cast housing closed on all sides (LMK 125 with plastic cap)
- Black, low-reflective finish RAL 9005
- Protection rating: IP 54 / Class F
- Connection via an internal terminal strip (optional hybrid connected cable with C8/24 multi-pin plug)

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TECHNICAL DATA	OMK 500-4	OMK 500-8	OMK 800-4	OMK 800-8	OMK 1000-4
SWL (*1 upgradable to 2 chainfalls)	500 kg (*11000 kg)	500 kg (*11000 kg)	800 kg (*11600 kg)	800 kg (*11600 kg)	1000 kg *3
Hoisting speed at 50 Hz c.	4 m/min (*12 m/min)	8 m/min (*14 m/min)	4 m/min (*12 m/min)	8 m/min (*14 m/min)	4 m/min
Number of chainfalls	1 (*2)	1 (*2)	1 (*2)	1 (*2)	1
Motor power	0.84 kW	0.84 kW	2.20 kW	3.00 kW	2.20 kW
Duty cycle/Starts per hour	40% / 240	40% / 240	40% / 240	40% / 240	40% / 240
Load chain acc. DIN 5684-8	7x22 mm	7x22 mm	9x27 mm	9x27 mm	9x27 mm
Weight without chain	41 kg	41 kg	80 kg	80 kg	80 kg
Chain weight/m	1.10 kg	1.10 kg	1.80 kg	1.80 kg	1.80 kg
Dimensions (LxWxH) w/o chain hook (mm)	512x361x311	512x361x311	569x480x360	569x480x360	569x480x360

TECHNICAL DATA	OMK 1250-4	OMK 1250-8
SWL (*1 upgradable to 2 chainfalls)	1250 kg (*12500 kg)	1250 kg (*12500 kg)
Hoisting speed at 50 Hz c.	4 m/min (*12 m/min)	8 m/min (*14 m/min)
Number of chainfalls	1 (*2)	1 (*2)
Motor power	3.00 kW	3.00 kW
Duty cycle/Starts per hour	40% / 240	40% / 240
Load chain acc. DIN 5684-8	11x31 mm	11x31 mm
Weight without chain	95 kg	95 kg
Chain weight/m	2.70 kg	2.70 kg
Dimensions (LxWxH) w/o chain hook (mm)	599x486x382	599x486x382

*3 DIN 56950-1:2012-05, Chain safety factor dyn.8

Options / Accessories:

Suspension	motor hook, swivel adapter with eyelet and hook block for dual-chainfall operation
Hoisting height	up to 60 m (1 chainfall)
Speeds	2 (depending on model and controller)
Connector cable	hybrid multi-core cable with 8/24-pole multi-pin plug
Limit switching	2-channel incremental encoder*2 high-resolution absolute encoder*2 29-bit resolution
Load-sensing	dynamic LME/LMS real-time load measuring system*2 (strain gauge principle)
Motor protection	protections against thermal overload (self-resetting)
Running gear	manual and electric trolleys
Controllers	MPC EC1 or IC1 series
Miscellaneous	carrier handles, climbing hoist kit, transport case, rain cover (*2 I-Controller and additional equipment)



Subject to technical modifications and typographical errors.