MM 05D-503-00

SEW-EURODRIVE GmbH & Co KG · MOVIMOT® Gearmotor with Integrated Inverter

FEATURES

Integrated gearmotor-inverter, 380-500 V, 0.55 kW, size 1.

Hardware

Communication

Built-in ports:
Binary control (CW/stop, CCW/stop, setpoint switching, isolated relay, fixed setpoints, ramps); integrated T-distributor for hybrid cable

Protocols:
Binary/analog standard; optional via mini-controller/bus module: PROFIBUS/PROFIsafe, INTERBUS, EtherNet/IP, DeviceNet, CANopen, AS-Interface, PROFINET IO, SBusPLUS/EtherCAT

Communication expansion:
Fieldbus modules; 3-color LED status indicator

Electrical

Supply voltage:
3 x AC 380/400/415/460/500 V, -10% to +10%

Motor rated power S1:
0.55 kW

Rated output current:
2.0 A

Apparent power S_N:
1.4 kVA

Power factor cos phi:
0.99

Output voltage:
0 to V_line

Output frequency:
2-120 Hz (resolution 0.01 Hz)

PWM frequency:
4 kHz factory / 8 / 16 kHz (16 kHz activated via DIP S1/7, auto-derates by temperature)

Current limit:
160% (motoring/regenerative)

Short-circuit current withstand:
5 kA (EN 61800-5-1)

Maximum rated current:
25 A

External brake resistor minimum:
150 Ω (size 1); 68 Ω (size 2/2L)

EMC:
EN 61800-3, emission category C2 (EN 55011/EN 55014 limit A)

Environmental

Operating temperature:
-25 °C (some motors -30 °C) to +40 °C; derating 3% I_N per K above, maximum +60 °C

Storage temperature:
-30 to +85 °C (EN 60721-3-3 class 3K3); power-on for at least 5 min every 2 years

Relative humidity:
Not published by manufacturer (climate class EN 60721-3-3 class 3K3)

Protection rating:
IP54 / IP55 / IP65 / IP66 selectable at order (IP67 only with junction box); overall rating limited by motor rating

Physical

Dimensions (H × W × D):
Not published as standalone value (varies with gearmotor configuration; official text states 'See MOVIMOT Gearmotors catalog')

Weight:
Not published as standalone value (varies with gearmotor configuration)

Lifecycle

Status unverified:
possible phase-out per SEW Generation B to MOVI-C transition (Generation C MOVIMOT successors announced 2025-06); public EOS notice not confirmed; manual revision 05/2025 active (Last verified: 2026-09)