# MDX90A-0025-5E3-4-S00

SEW-EURODRIVE GmbH & Co KG · MOVIDRIVE® modular Single-Axis Inverter (MDX90A)

## FEATURES

Single-axis application inverter, 2.5 A rated output at 4 kHz PWM, direct 3~AC line connection.

### Hardware

**Control modes:**
U/f, VFCplus, CFC (field-oriented current controller), ELSM (extended synchronous motor control)

### Communication

**Built-in ports:**
System bus to MOVI-C CONTROLLER (MOVIDRIVE system variant)

**Protocols:**
Controlled via MOVI-C CONTROLLER (UHX.. family); EtherCAT/CiA402 internal system bus

**Communication expansion:**
Option cards: /CES11A multi-encoder, /CID21A encoder interface, /CIO21A I/O expansion, /CS..A MOVISAFE safety card, /L conformal-coated PCB

### Electrical

**Supply voltage:**
3 x AC 380-500 V nominal, 50-60 Hz

**Line frequency tolerance:**
50-60 Hz ±10%

**Nominal line current:**
2.25 A

**Rated output current (at f_PWM = 4 kHz):**
2.5 A

**Recommended motor power ASM:**
0.75 kW

**Apparent output power S_N:**
2.3 kVA

**Overload capacity:**
200% of I_N for 3 s at f_PWM = 4 kHz; continuous 100% x I_N at f_PWM = 4 kHz

**Continuous output current at f = 0 Hz:**
I_N x 0.9

**PWM frequency:**
4, 8, 16 kHz adjustable

**Max output frequency:**
U/f 599 Hz; VFCplus 250 Hz; CFC 500 Hz; ELSM 500 Hz

**Nominal DC link voltage:**
DC 560 V

**Minimum braking resistance R_BRmin:**
95 Ω

**Brake chopper continuous power:**
2.3 kW; peak power 200% x S_N

**Power section nominal power loss:**
20 W

**EMC variant:**
integrated EMC filter, limit value class C2 acc. to EN 61800-3

## Environmental

**Operating temperature:**
0 to +40 °C without derating; +40 to +60 °C with derating

**Storage temperature:**
-25 to +70 °C (EN 60721-3-1 class 1K2, non-condensing)

**Transport temperature:**
-25 to +70 °C (EN 60721-3-2 class 2K3, non-condensing)

**Relative humidity:**
non-condensing, no moisture condensation (EN 60721-3-3 class 3K3)

**Protection rating:**
IP20 (EN 60529)

**Pollution class:**
2 (IEC 60664-1); overvoltage category III

**Installation altitude:**
up to 1000 m without restriction; 1000-3800 m with I_N derating 1% per 100 m

## Physical

**Dimensions (H×W×D):**
479×95×215 mm (height with shield plates)

**Weight:**
4.1 kg

## Lifecycle

**Current SEW-EURODRIVE product line; part of MOVI-C platform (MOVIDRIVE system / MOVIDRIVE technology); official product manual active (Last verified:**
2026-09)