

# Motion servo drive, Lexium 32, three phase supply voltage 208/480 V, 9 kW

LXM32MD85N4

! Discontinued on: 9 Feb 2023

① Discontinued

EAN Code: 3606485402413

### Main

Range of product	Lexium 32	
Device short name	LXM32M	
Product or component type	Motion servo drive	
Format of the drive	Book	
Network number of phases	Three phase	
[Us] rated supply voltage	380480 V - 1510 %	
Supply voltage limits	323528 V	
Supply frequency	50/60 Hz - 55 %	
Network frequency	47.563 Hz	
EMC filter	Integrated	
Continuous output current	32 A at 4 kHz	
Output current 3s peak	85 A at 480 V for 5 s	
Continuous power	1600 W at 400 V 9000 W at 230 V 9000 W at 480 V	
Nominal power	9 kW at 400 V 8 kHz 5 kW at 230 V 4 kHz 9 kW at 480 V 8 kHz	
Line current	3.5 A 88 % at 380 V, with external line choke of 2 mH 2.9 A 98 % at 480 V, with external line choke of 2 mH 3.6 A 174 % at 480 V, without line choke 19.9 A 145 % at 480 V, without line choke	

# Complementary

Switching frequency	4 kHz	
Overvoltage category	III	
Maximum leakage current	30 mA	
Output voltage	<= power supply voltage	
Electrical isolation	Between power and control	
Type of cable	Single-strand IEC cable (temperature: 50 °C) copper 90 °C XLPE/EPR	
Electrical connection	Terminal, clamping capacity: 5 mm², AWG 10 (CN1) Terminal, clamping capacity: 5 mm², AWG 10 (CN10) Terminal, clamping capacity: 8 mm², AWG 8 (CN8)	
Tightening torque	CN1: 0.7 N.m CN10: 0.7 N.m CN8: 3.8 N.m	

Discrete input number	2 capture discrete input(s) 2 safety discrete input(s) 4 logic discrete input(s)	
Discrete input type	Capture (CAP terminals) Logic (DI terminals) Safety (compliment of STO_A, compliment of STO_B terminals)	
Sampling duration	DI: 0.25 ms discrete 0.25 ms	
Discrete input voltage	24 V DC for capture 24 V DC for logic 24 V DC for safety	
Discrete input logic	Positive (compliment of STO_A, compliment of STO_B) at State 0: < 5 V at State 1: > 15 V conforming to EN/IEC 61131-2 type 1 Positive (DI) at State 0: > 19 V at State 1: < 9 V conforming to EN/IEC 61131-2 type 1 Positive or negative (DI) at State 0: < 5 V at State 1: > 15 V conforming to EN/IEC 61131-2 type 1	
Response time	<= 5 ms compliment of STO_A, compliment of STO_B	
Discrete output number	3	
Discrete output type	Logic output(s) (DO)24 V DC	
Discrete output voltage	<= 30 V DC	
Discrete output logic	Positive or negative (DO) conforming to EN/IEC 61131-2	
Contact bounce time	<= 1 ms for compliment of STO_A, compliment of STO_B 2 µs for CAP 0.25 µs1.5 ms for DI	
Braking current	50 mA	
Response time on output	250 µs (DO) for discrete output(s)	
Control signal type	Pulse train output (PTO) RS422 <500 kHz <100 m  Pulse/direction (P/D), A/B, CW/CCW 5 V, 24 V link (open collector) <10 kHz <1 m  Pulse/direction (P/D), A/B, CW/CCW 5 V, 24 V link (push-pull) <200 kHz <10 m  Pulse/direction (P/D), A/B, CW/CCW RS422 <1000 kHz <100 m	
Protection type	Against reverse polarity: inputs signal Against short-circuits: outputs signal	
Safety function	STO (safe torque off), integrated SS1 (safe stop 1), with separated eSM safety card SS2 (safe stop 2), with separated eSM safety card SLS (safe limited speed), with separated eSM safety card	
Safety level	SIL 3 conforming to EN/IEC 61508 PL = e conforming to ISO 13849-1	
Communication interface	Modbus TCP, with separated communication card CANopen, with separated communication card CANmotion, with separated communication card Ethernet/IP, with separated communication card EtherCAT, with separated communication card Profibus, with separated communication card Profinet, with separated communication card Analog I/O, with separated communication card Digital I/O, integrated	
Status LED	1 LED (red) servo drive voltage	
Signalling function	Display of faults 7 segments	
Marking	CE	
Operating position	Vertical +/- 10 degree	
Product compatibility	Servo motor BMH (190 mm, 1 motor stacks) Servo motor BMH (190 mm, 2 motor stacks) Servo motor BMH (190 mm, 3 motor stacks) Servo motor BMH (205 mm, 3 motor stacks)	
Width	180 mm	

Height	385 mm
Depth	240 mm
Net weight	9.6 kg

# **Environment**

Electromagnetic compatibility	Conducted EMC, class A group 1 conforming to EN 55011 Conducted EMC, class A group 2 conforming to EN 55011 Conducted EMC, environment 2 category C3 conforming to EN/IEC 61800-3 Conducted EMC, category C2 conforming to EN/IEC 61800-3 Susceptibility to electromagnetic fields, level 3 conforming to EN/IEC 61000-4-3 1.2/50 µs shock waves immunity test, level 3 conforming to EN/IEC 61000-4-5 Electrical fast transient/burst immunity test, level 4 conforming to EN/IEC 61000-4-4 Radiated EMC, class A group 2 conforming to EN 55011 Radiated EMC, category C3 conforming to EN/IEC 61800-3	
Standards	EN/IEC 61800-3 EN/IEC 61800-5-1	
Product certifications	CSA TÜV UL	
IP degree of protection	IP20 conforming to EN/IEC 60529 IP20 conforming to EN/IEC 61800-5-1	
Vibration resistance	1 gn (f= 13150 Hz) conforming to EN/IEC 60068-2-6 1.5 mm peak to peak (f= 313 Hz) conforming to EN/IEC 60068-2-6	
Shock resistance	15 gn for 11 ms conforming to EN/IEC 60028-2-27	
Pollution degree	2 conforming to EN/IEC 61800-5-1	
Environmental characteristic	Classes 3C1 conforming to IEC 60721-3-3	
Relative humidity	Class 3K3 (5 to 85 %) without condensation conforming to IEC 60721-3-3	
Ambient air temperature for operation	050 °C conforming to UL	
Ambient air temperature for storage	-2570 °C	
type of cooling	Integrated fan	
Operating altitude	<= 1000 m without derating > 10003000 m with conditions	

# **Packing Units**

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	26.000 cm
Package 1 Width	56.000 cm
Package 1 Length	34.000 cm
Package 1 Weight	10.506 kg
Unit Type of Package 2	S06
Number of Units in Package 2	2
Package 2 Height	75.000 cm
Package 2 Width	60.000 cm
Package 2 Length	80.000 cm
Package 2 Weight	29.512 kg

# **Contractual warranty**

Warranty

18 months



Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing "Use Better, Use Longer, Use Again" campaign to extend product lifetimes and recyclability.

#### Environmental Data explained >

How we assess product sustainability >

∇ Environmental footprint	
Carbon footprint (kg.eq.CO2 per CR, Total Life cycle)	13107
Environmental Disclosure	Product Environmental Profile

#### **Use Better**

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
SCIP Number	C0961927-b9e6-4f64-bd63-334df07b6de6
REACh Regulation	REACh Declaration
PVC free	Yes

### Use Again

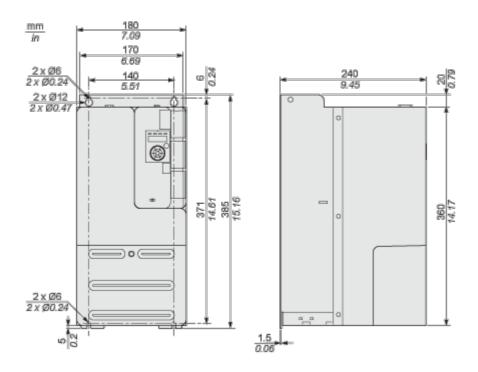
○ Repack and remanufacture	
Circularity Profile	End of Life Information
Take-back	No
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

# LXM32MD85N4

### **Dimensions Drawings**

# Lexium 32 Servo Drive

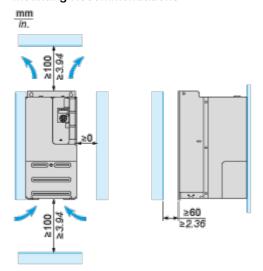
#### **Dimensions**



Mounting and Clearance

#### **Lexium 32 Motion Control Servo Drives**

#### **Mounting Recommendations**



LXM32MD85N4, LXM32MC10N4 servo drives have an integrated fan.

When selecting the position of the device in the control cabinet, note the following:

- Mount the device in a vertical position (±10¯). This is required for cooling the device.
- Adhere to the minimum installation distances for required cooling. Avoid heat accumulations.
- Do not mount the device close to heat sources.
- Do not mount the device on flammable materials.
- The heated airflow from other devices and components must not heat up the air used for cooling the device.
- If the thermal limits are exceeded during operation, the drive switches off (overtemperature).

NOTE: For cables that are connected via the underside of the servo drive, a free space ≥ 200 mm/7.87 in. is required under the unit to comply with the bending radius of the connection cables.

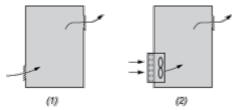
Ambient temperature	Mounting distances	Instructions to be followed
0°C+ 50°C	d ≥ 0 mm	_

NOTE: Do not use insulated enclosures, as they have a poor level of conductivity.

#### Recommendations for Mounting in an Enclosure

To ensure good air circulation in the servo drive:

- Fit ventilation grilles on the enclosure.
- Ensure that ventilation is adequate, otherwise install a forced ventilation unit with a filter.



- (1) Natural convection
- (2) Forced ventilation

## **Product datasheet**

## LXM32MD85N4

- Any apertures and/or fans must provide a flow rate at least equal to that of the servo drive fans (refer to characteristics).
- Use special filters with IP 54 protection.

#### Mounting in Metal Enclosure (IP 54 Degree of Protection)

The servo drive must be mounted in a dust and damp proof enclosure in certain environmental conditions, such as dust, corrosive gases, high humidity with risk of condensation and dripping water, splashing liquid, etc. In these cases, Lexium 32 servo drives can be installed in an enclosure where the internal temperature must not exceed 60°C.