# Product data sheet

Specifications





## motion servo drive, Lexium 32, 18A, three phase, supply voltage 208 to 480V, 1.8kW

LXM32MD18N4

Product availability: Stock - Normally stocked in distribution facility

### Price\*: 1,480.46 USD

### Main

Range of Product	Lexium 32	
Device short name	LXM32M	
Product or Component Type	Motion servo drive	
Format of the drive	Book	
Phase	Three phase	
[Us] rated supply voltage	200240 V - 1510 % 380480 V - 1510 %	
Supply voltage limits	170264 V 323528 V	
Supply frequency	50/60 Hz - 55 %	
Network Frequency	47.563 Hz	
EMC filter	Integrated	
Continuous output current	6 A 8 kHz	
Output current 3s peak	18 A 208 V 5 s 18 A 480 V 5 s	
maximum continuous power	1700 W 208 V 3300 W 400 V 3300 W 480 V	
Nominal power	1.2 kW 208 V 8 kHz 1.8 kW 400 V 8 kHz 1.8 kW 480 V 8 kHz	
Line current	6 A 78 % 208 V, with external line choke 1 mH 6.9 A 90 % 400 V, with external line choke 1 mH 6 A 98 % 480 V, with external line choke 1 mH 6.2 A 140 % 208 V, without line choke 5.2 A 161 % 400 V, without line choke 4.5 A 165 % 480 V, without line choke	

## Complementary

switching frequency	8 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 122.0000000000 °F (50 °C)) copper 90 °C XLPE/EPR	

Price is "List Price" and may be subject to a trade discount - check with your local distributor or retailer for actual price.

Electrical connection	Terminal 3 mm <sup>2</sup> , AWG 12 CN8)	
	Terminal 5 mm <sup>2</sup> , AWG 10 CN1)	
	Terminal 5 mm <sup>2</sup> , AWG 10 CN10)	
Tightening torque	CN8 4.4 lbf.in (0.5 N.m)	
	CN1 6.2 lbf.in (0.7 N.m)	
	CN10 6.2 lbf.in (0.7 N.m)	
Discrete input number	2 capture	
	2 safety	
	4 logic	
Discrete input type	Capture CAP	
	Logic DI	
	Safety compliment of STO_A, compliment of STO_B	
Sampling duration	DI 0.25 ms discrete	
	0.25 ms	
Discrete input voltage	24 V DC capture	
	24 V DC logic	
	24 V DC safety	
Discrete input logic	Positive compliment of STO_A, compliment of STO_B)< 5 V > 15 V EN/IEC 61131-2	
Discrete input logic	type 1	
	Positive DI)> 19 V < 9 V EN/IEC 61131-2 type 1	
	Positive or negative DI)< 5 V > 15 V 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 DO)24 V DC	
Discrete output voltage	<= 30 V DC	
Discrete output logic	Positive or negative DO)EN/IEC 61131-2	
Contact bounce time <= 1 ms compliment of STO_A, compliment of STO_B		
	2 µs CAP	
	0.25 μs1.5 ms DI	
Braking current	1.7 A	
Response time on output	250 μs DO)discrete	
Control signal type	Servo motor encoder feedback	
	Pulse train output (PTO) RS422 <500 kHz <328.08 ft (100 m)	
	Pulse/direction (P/D), A/B, CW/CCW 5 V, 24 V link (open collector) <10 kHz <3.3 ft (1 m)	
	Pulse/direction (P/D), A/B, CW/CCW 5 V, 24 V link (push-pull) <200 kHz <32.8 ft (10	
	m)	
	Pulse/direction (P/D), A/B, CW/CCW RS422 <1000 kHz <328.08 ft (100 m)	
Protection type	Against reverse polarity inputs signal	
	Against short-circuits outputs signal	
Safety function	STO (safe torque off), Integrated	
	SST (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	
	SOS (safe operating stop), with separated eSM safety card	
Safety level	SIL 3 EN/IEC 61508	
	PL = e ISO 13849-1	
Communication interface	Modbus, Integrated	
	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	
	DeviceNet, with separated communication card	
	I/O, with separated communication card	
	Profinet, with separated communication card	
Connector type	RJ45 (labelled CN7) Modbus	
commissioning port	2-wire RS485 multidrop Modbus	

Transmission rate	9600, 19200, 38400 bps 131.2 ft (40 m) Modbus	
Number of addresses	1247 Modbus	
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 3.9 in (100 mm), 1 Servo motor BSH 2.8 in (70 mm), 2 Servo motor BMH 2.8 in (70 mm), 3 Servo motor BSH 3.9 in (100 mm), 1 Servo motor BMH 3.9 in (100 mm), 2 Servo motor BSH 3.9 in (100 mm), 2 Servo motor BMH 3.9 in (100 mm), 3 Servo motor BMH 5.5 in (140 mm), 1	
Width	2.7 in (68 mm)	
Height	10.6 in (270 mm)	
Depth	9.3 in (237 mm)	
Net Weight	4.6 lb(US) (2.1 kg)	

### Environment

Electromagnetic compatibility	Conducted EMC, class A group 1 EN 55011 Conducted EMC, class A group 2 EN 55011 Conducted EMC, environment 2 category C3 EN/IEC 61800-3 Conducted EMC, category C2 EN/IEC 61800-3 Conducted EMC, environments 1 and 2 EN/IEC 61800-3 Electrostatic discharge immunity test, level 3 EN/IEC 61000-4-2 Susceptibility to electromagnetic fields, level 3 EN/IEC 61000-4-3 1.2/50 µs shock waves immunity test, level 3 EN/IEC 61000-4-5 Electrical fast transient/burst immunity test, level 4 EN/IEC 61000-4-4 Radiated EMC, class A group 2 EN 55011 Radiated EMC, category C3 EN/IEC 61800-3	
Standards	EN/IEC 61800-3 EN/IEC 61800-5-1	
Product Certifications	UL TÜV CSA	
IP degree of protection	IP20 conforming to EN/IEC 60529 IP20 conforming to EN/IEC 61800-5-1	
Vibration resistance	1 gn 13…150 Hz)EN/IEC 60068-2-6 1.5 mm peak to peak 3…13 Hz)EN/IEC 60068-2-6	
Shock resistance	15 gn 11 ms EN/IEC 60028-2-27	
Pollution degree	2 EN/IEC 61800-5-1	
Environmental characteristic	Classes 3C1 IEC 60721-3-3	
Relative humidity	Class 3K3 (5 to 85 %) without condensation IEC 60721-3-3	
Ambient air temperature for operation	32.000000000122.0000000000 °F (050 °C) UL	
Ambient Air Temperature for Storage	-13.000000000158.0000000000 °F (-2570 °C)	
Type of cooling	Integrated fan	
Operating altitude	<= 3280.84 ft (1000 m) without derating > 3280.849842.52 ft (> 10003000 m) with conditions	

## Ordering and shipping details

Category

US1PC5118261

Discount Schedule	PC51
GTIN	3606480076886
Returnability	Yes
Country of origin	ID

## **Packing Units**

V		
Unit Type of Package 1	PCE	
Number of Units in Package 1	1	
Package 1 Height	4.2 in (10.6 cm)	
Package 1 Width	10.8 in (27.5 cm)	
Package 1 Length	13.0 in (33 cm)	
Package 1 Weight	5.794 lb(US) (2.628 kg)	
Unit Type of Package 2	S03	
Number of Units in Package 2	2	
Package 2 Height	11.8 in (30 cm)	
Package 2 Width	11.8 in (30 cm)	
Package 2 Length	15.7 in (40 cm)	
Package 2 Weight	13.087 lb(US) (5.936 kg)	
Unit Type of Package 3	P06	
Number of Units in Package 3	16	
Package 3 Height	31.5 in (80 cm)	
Package 3 Width	31.5 in (80 cm)	
Package 3 Length	23.6 in (60 cm)	
Package 3 Weight	124.226 lb(US) (56.348 kg)	

## **Contractual warranty**

Warranty

18 months

## Sustainability Screen Premium

**Green Premium<sup>TM</sup> label** is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >



Transparency RoHS/REACh

#### Well-being performance

Mercury Free
Rohs Exemption Information Yes
Pvc Free

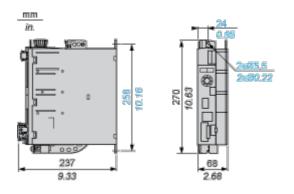
### **Certifications & Standards**

Reach Regulation	REACh Declaration	
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)	
China Rohs Regulation	China RoHS declaration	
Environmental Disclosure	Product Environmental Profile	
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.	
Circularity Profile	End of Life Information	
California Proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov	

**Dimensions Drawings** 

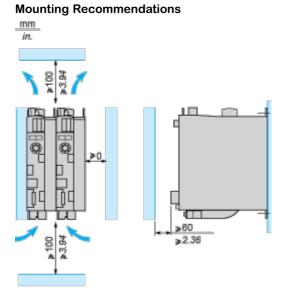
#### Lexium 32 Servo Drive

#### Dimensions



Mounting and Clearance

#### Lexium 32 Motion Control Servo Drives



LXM32•U45M2, •U90M2 and LXM32•U60N4 servo drives are cooled by natural convection. LXM32•D18M2, •D30M2, LXM32 •D12N4, •D18N4, •D30N4 and •D72N4servo drives have an integrated fan. When installing the servo drive in the enclosure, follow the instructions below with regard to the temperature and protection index:

- Provide sufficient cooling of the servo drive
- Do not mount the servo drive near heat sources
- $_{\bullet}\,$  Do not mount the servo drive on flammable materials
- Do not heat the servo drive cooling air by currents of hot air from other equipment and components, for example from an external braking resistor
- Mount the servo drive vertically (± 10%)
- If the servo drive is used above its thermal limits, control stops due to overtemperature

NOTE: For cables that are connected via the underside of the servo drive, a free space  $\geq$  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	-
+ 50°C+ 60°C	d ≥ 0 mm	Reduce the output current by 2.2% per °C above 50°C

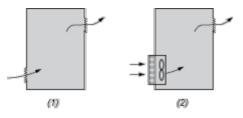
NOTE: Do not use insulated enclosures, as they have a poor level of conductivity.

#### **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.

### Product data sheet



(1) Natural convection

(2) Forced ventilation

- 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.