

# Product data sheet

Specifications



motion servo drive, Lexium 32,  
4.5A, single phase, supply voltage  
115 to 230V, 0.15 to 0.3kW

LXM32MU45M2

Product availability: Non-Stock - Not normally stocked in  
distribution facility

**Price\*: 965.32 USD**

## Main

Range of Product	Lexium 32
Device short name	LXM32M
Product or Component Type	Motion servo drive
Format of the drive	Book
Phase	Single phase
[Us] rated supply voltage	100...120 V - 15...10 % 200...240 V - 15...10 %
Supply voltage limits	85...132 V 170...264 V
Supply frequency	50/60 Hz - 5...5 %
Network Frequency	47.5...63 Hz
EMC filter	Integrated
Continuous output current	1.5 A 8 kHz
Output current 3s peak	3 A 115 V 5 s 4.5 A 230 V 5 s
maximum continuous power	200 W 115 V 500 W 230 V
Nominal power	0.15 kW 115 V 8 kHz 0.3 kW 230 V 8 kHz
Line current	2.6 A 85 % 115 V, with external line choke 5 mH 3.4 A 100 % 230 V, with external line choke 5 mH 2.9 A 173 % 115 V, without line choke 2.9 A 181 % 230 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
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)

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

<b>Tightening torque</b>	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)
<b>Discrete input number</b>	2 capture 2 safety 4 logic
<b>Discrete input type</b>	Capture CAP Logic DI Safety compliment of STO_A, compliment of STO_B
<b>Sampling duration</b>	DI 0.25 ms discrete 0.25 ms
<b>Discrete input voltage</b>	24 V DC capture 24 V DC logic 24 V DC safety
<b>Discrete input logic</b>	Positive compliment of STO_A, compliment of STO_B) < 5 V > 15 V EN/IEC 61131-2 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
<b>Response time</b>	<= 5 ms compliment of STO_A, compliment of STO_B
<b>Discrete output number</b>	3
<b>Discrete output type</b>	Logic DO) 24 V DC
<b>Discrete output voltage</b>	<= 30 V DC
<b>Discrete output logic</b>	Positive or negative DO) EN/IEC 61131-2
<b>Contact bounce time</b>	<= 1 ms compliment of STO_A, compliment of STO_B 2 µs CAP 0.25 µs...1.5 ms DI
<b>Braking current</b>	50 mA
<b>Response time on output</b>	250 µs DO) discrete
<b>Control signal type</b>	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)
<b>Protection type</b>	Against reverse polarity inputs signal Against short-circuits outputs signal
<b>Safety function</b>	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 SOS (safe operating stop), with separated eSM safety card
<b>Safety level</b>	SIL 3 EN/IEC 61508 PL = e ISO 13849-1
<b>Communication interface</b>	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
<b>Connector type</b>	RJ45 (labelled CN7) Modbus
<b>commissioning port</b>	2-wire RS485 multidrop Modbus
<b>Transmission rate</b>	9600, 19200, 38400 bps 131.2 ft (40 m) Modbus
<b>Number of addresses</b>	1...247 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 BSH 2.2 in (55 mm), 1
Width	2.7 in (68 mm)
Height	10.6 in (270 mm)
Depth	9.3 in (237 mm)
Net Weight	3.7 lb(US) (1.7 kg)

## Environment

Electromagnetic compatibility	<p>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</p>
Standards	<p>EN/IEC 61800-5-1  EN/IEC 61800-3</p>
Product Certifications	<p>CSA  UL  TÜV</p>
IP degree of protection	<p>IP20 conforming to EN/IEC 60529  IP20 conforming to EN/IEC 61800-5-1</p>
Vibration resistance	<p>1 gn 13...150 Hz)EN/IEC 60068-2-6  1.5 mm peak to peak 3...13 Hz)EN/IEC 60068-2-6</p>
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	32.0000000000...122.0000000000 °F (0...50 °C) UL
Ambient Air Temperature for Storage	-13.0000000000...158.0000000000 °F (-25...70 °C)
Type of cooling	Natural convection
Operating altitude	<p>&lt;= 3280.84 ft (1000 m) without derating  &gt; 3280.84...9842.52 ft (&gt; 1000...3000 m) with conditions</p>

## Ordering and shipping details

Category	US1PC5118261
Discount Schedule	PC51
GTIN	3606480076824
Returnability	No
Country of origin	ID

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	4.134 in (10.500 cm)
<b>Package 1 Width</b>	10.827 in (27.500 cm)
<b>Package 1 Length</b>	12.992 in (33.000 cm)
<b>Package 1 Weight</b>	5.258 lb(US) (2.385 kg)
<b>Unit Type of Package 2</b>	S03
<b>Number of Units in Package 2</b>	2
<b>Package 2 Height</b>	11.811 in (30.000 cm)
<b>Package 2 Width</b>	11.811 in (30.000 cm)
<b>Package 2 Length</b>	15.748 in (40.000 cm)
<b>Package 2 Weight</b>	11.391 lb(US) (5.167 kg)
<b>Unit Type of Package 3</b>	P06
<b>Number of Units in Package 3</b>	16
<b>Package 3 Height</b>	29.528 in (75.000 cm)
<b>Package 3 Width</b>	31.496 in (80.000 cm)
<b>Package 3 Length</b>	23.622 in (60.000 cm)
<b>Package 3 Weight</b>	108.767 lb(US) (49.336 kg)

## Contractual warranty

<b>Warranty</b>	18 months
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## Sustainability

**Green Premium™ label** is Schneider Electric's commitment to delivering products with best-in-class 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](#)

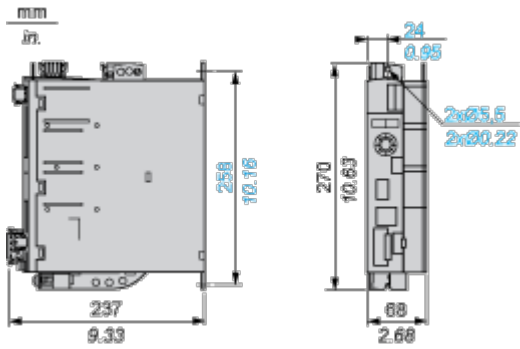
California Proposition 65 **WARNING:** This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

Dimensions Drawings

Lexium 32 Servo Drive

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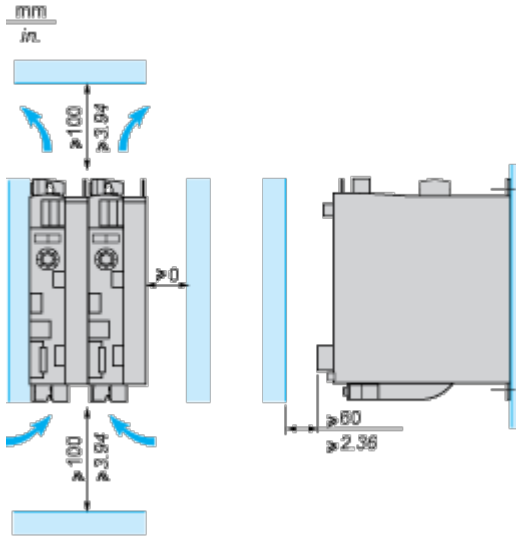
Dimensions



Mounting and Clearance

Lexium 32 Motion Control Servo Drives

Mounting Recommendations



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
- 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 ( $\pm 10\%$ )
- 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.

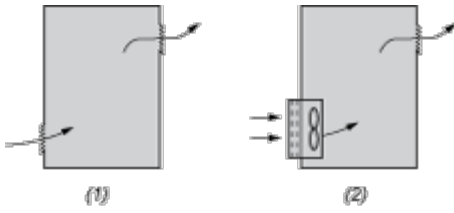
Ambient temperature	Mounting distances	Instructions to be followed
0°C...+ 50°C	$d \geq 0$ mm	–
+ 50°C...+ 60°C	$d \geq 0$ mm	Reduce the output current by 2.2% per °C above 50°C

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.



- (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.