# **Product datasheet**

Specifications





# Motion servo drive, Lexium 32, three phase supply voltage 208/480 V, 3 kW

LXM32CD30N4

EAN Code: 3606480076718

### Main

Range of product	Lexium 32	
Device short name	LXM32C	
product or component type	Motion servo drive	
Format of the drive	Book	
Network number of phases	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	10 A at 8 kHz	
Output current 3s peak	30 A at 208 V for 5 s 30 A at 480 V for 5 s	
maximum continuous power	2800 W at 208 V 5600 W at 400 V 5600 W at 480 V	
Nominal power	2 kW at 208 V 8 kHz 3 kW at 400 V 8 kHz 3 kW at 480 V 8 kHz	
Line current	<ul> <li>9.2 A 59 % at 208 V, with external line choke of 1 mH</li> <li>11.1 A 77 % at 400 V, with external line choke of 1 mH</li> <li>9.6 A 85 % at 480 V, with external line choke of 1 mH</li> <li>9.8 A 128 % at 208 V, without line choke</li> <li>8.3 A 148 % at 400 V, without line choke</li> <li>7 A 152 % at 480 V, without line choke</li> </ul>	

## 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 (temperature: 50 °C) copper 90 °C XLPE/EPR	
Electrical connection	Terminal, clamping capacity: 3 mm², AWG 12 (CN8) Terminal, clamping capacity: 5 mm², AWG 10 (CN1) Terminal, clamping capacity: 5 mm², AWG 10 (CN10)	

Tightening torque	CN8: 0.5 N.m CN1: 0.7 N.m	
	CN1: 0.7 N.m CN10: 0.7 N.m	
Discrete input number	2 safety discrete input(s) 6 logic discrete input(s)	
Discrete input type	Logic (DI terminals) Safety (compliment of STO_A, compliment of STO_B terminals)	
Sampling duration	ANA1+/ANA1-, ANA2+/ANA2-: 0.25 ms analog DI: 0.25 ms discrete	
Discrete input voltage	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	5	
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 0.25 μs1.5 ms for DI	
Braking current	50 mA	
Analogua insut sumber	2	
Analogue input number	2	
Analogue input number  Response time on output	2 250 µs (DO) for discrete output(s)	
Response time on output	250 μs (DO) for discrete output(s)	
Response time on output Absolute accuracy error	250 μs (DO) for discrete output(s) < +/- 0.5 %	
Response time on output Absolute accuracy error Linearity error	250 μs (DO) for discrete output(s) < +/- 0.5 % < +/- 0.1 % ANA1+/ANA1-, ANA2+/ANA2- analog input: differential +/- 10 V, impedance: >= 20	
Response time on output Absolute accuracy error Linearity error Analogue input type	250 μs (DO) for discrete output(s)         < +/- 0.5 %	
Response time on output Absolute accuracy error Linearity error Analogue input type Control signal type	250 μs (DO) for discrete output(s)         < +/- 0.5 %	
Response time on output         Absolute accuracy error         Linearity error         Analogue input type         Control signal type         Protection type	250 μs (DO) for discrete output(s)         < +/- 0.5 %	
Response time on output         Absolute accuracy error         Linearity error         Analogue input type         Control signal type         Protection type         Safety function	250 μs (DO) for discrete output(s)         < +/- 0.5 %	
Response time on output         Absolute accuracy error         Linearity error         Analogue input type         Control signal type         Protection type         Safety function         Safety level	250 μs (DO) for discrete output(s)         < +/- 0.5 %	
Response time on output         Absolute accuracy error         Linearity error         Analogue input type         Control signal type         Protection type         Safety function         Safety level         Communication interface	250 µs (DO) for discrete output(s)         < +/- 0.5 %	
Response time on output         Absolute accuracy error         Linearity error         Analogue input type         Control signal type         Protection type         Safety function         Safety level         Communication interface         Connector type	250 µs (DO) for discrete output(s)         < +/- 0.5 %	
Response time on output         Absolute accuracy error         Linearity error         Analogue input type         Control signal type         Protection type         Safety function         Safety level         Connector type         communication interface         Connector type         commissioning port	250 μs (DO) for discrete output(s)         < +/- 0.5 %	
Response time on output         Absolute accuracy error         Linearity error         Analogue input type         Control signal type         Protection type         Safety function         Safety level         Communication interface         Connector type         commissioning port         Transmission rate	250 μs (DO) for discrete output(s)         < +/- 0.5 %	
Response time on output         Absolute accuracy error         Linearity error         Analogue input type         Control signal type         Protection type         Safety function         Safety level         Communication interface         Connector type         commissioning port         Transmission rate         Number of addresses	250 μs (DO) for discrete output(s)         < +/- 0.5 %	
Response time on output         Absolute accuracy error         Linearity error         Analogue input type         Control signal type         Control signal type         Safety function         Safety level         Connector type         commissioning port         Transmission rate         Number of addresses         Status LED	250 µs (DO) for discrete output(s)         < +/- 0.5 %	

Product compatibility	Servo motor BMH (100 mm, 3 motor stacks)	
	Servo motor BMH (140 mm, 1 motor stacks)	
	Servo motor BSH (100 mm, 3 motor stacks)	
	Servo motor BSH (100 mm, 4 motor stacks)	
	Servo motor BSH (140 mm, 1 motor stacks)	
Width	68 mm	
Height	270 mm	
Depth	237 mm	
net weight	2.6 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 Electrostatic discharge immunity test, level 3 conforming to EN/IEC 61800-4-2 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	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 (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	10.5 cm
Package 1 Width	27.5 cm
Package 1 Length	33 cm
Package 1 Weight	3.21 kg
Unit Type of Package 2	S03
Number of Units in Package 2	2
Package 2 Height	30 cm

Package 2 Width	30 cm
Package 2 Length	40 cm
Package 2 Weight	7.133 kg
Unit Type of Package 3	P06
Number of Units in Package 3	16
Package 3 Height	80 cm
Package 3 Width	80 cm
Package 3 Length	60 cm
Package 3 Weight	65.564 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

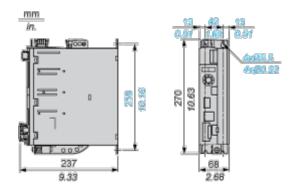
#### **Certifications & Standards**

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	

**Dimensions Drawings** 

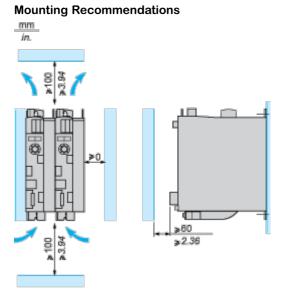
#### Lexium 32 Servo Drive

#### 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
- 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  $\ge 200 \text{ mm}/7.87$  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

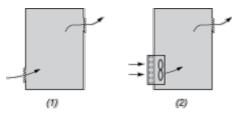
NOTE: Do not use insulated enclosures, as they have a poor level of conductivity.

#### **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 datasheet**



(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.