Product data sheet

Specifications



motion servo drive, Lexium 32, 72A, three phase, supply voltage 208 to 480V, 7kW, modbus

LXM32CD72N4

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

Main

Range of Product	Lexium 32
Device short name	LXM32C
Product or Component Type	Motion servo drive
Format of the drive	Book
Phase	Three phase
[Us] rated supply voltage	200...240 V - 15...10 % 380...480 V - 15...10 %
Supply voltage limits	170…264 V 323…528 V
Supply frequency	50/60 Hz - 5...5 %
Network Frequency	47.5...63 Hz
EMC filter	Integrated
Continuous output current	24 A 8 kHz
Output current 3s peak	72 A 208 V 5 s 72 A 480 V 5 s
Continuous power	6500 W 208 V 13000 W 400 V 13000 W 480 V
Nominal power	5 kW 208 V 8 kHz 7 kW 400 V 8 kHz 7 kW 480 V 8 kHz
Line current	21.1 A 34 % 208 V, with external line choke 1 mH 22.5 A 45 % 400 V, with external line choke 1 mH 19.5 A 55 % 480 V, with external line choke 1 mH 21.9 A 106 % 208 V, without line choke 17.3 A 126 % 400 V, without line choke 14.6 A 129 % 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 °F (50 °C)) copper 90 °C XLPE/EPR
Electrical connection	Terminal 3 mm², 12 AWG CN8) Terminal 5 mm², 10 AWG CN1) Terminal 5 mm², 10 AWG CN10)

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

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

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 safety 6 logic
Discrete input type	Logic DI Safety compliment of STO_A, compliment of STO_B
Sampling duration	ANA1+/ANA1-, ANA2+/ANA2- 0.25 ms analog DI 0.25 ms discrete
Discrete input voltage	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 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	5
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 0.25 µs...1.5 ms DI
Braking current	50 mA
Analogue input number	2
Response time on output	250 µs DO)discrete
Absolute accuracy error	< +/- 0.5 %
Linearity error	< +/- 0.1 %
Analogue input type	ANA1+/ANA1-, ANA2+/ANA2- analog input differential +/- 10 V >= 20 Ohm 14 bits
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
Safety level	SIL 3 EN/IEC 61508 PL = e ISO 13849-1
Communication interface	Digital I/O, Integrated Analog 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 5.5 in (140 mm), 2 Servo motor BMH 5.5 in (140 mm), 3 Servo motor BMH 7.5 in (190 mm), 1 Servo motor BMH 7.5 in (190 mm), 2 Servo motor BMH 7.5 in (190 mm), 3 Servo motor BMH 8.07 in (205 mm), 3 Servo motor BSH 5.5 in (140 mm), 2 Servo motor BSH 5.5 in (140 mm), 3 Servo motor BSH 5.5 in (140 mm), 4
Width	4.3 in (108 mm)
Height	10.6 in (270 mm)
Depth	9.3 in (237 mm)
Net Weight	10.6 lb(US) (4.8 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 61800-5-1 EN/IEC 61800-3
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= 13…150 Hz) conforming to EN/IEC 60068-2-6 1.5 mm peak to peak (f= 3…13 Hz) conforming to 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 conforming to IEC 60721-3-3
Relative humidity	Class 3K3 (5 to 85 %) without condensation IEC 60721-3-3
Ambient air temperature for operation	32…122 °F (0…50 °C) UL
Ambient Air Temperature for Storage	-13…158 °F (-25…70 °C)
Type of cooling	Integrated fan
Operating altitude	<= 3280.84 ft (1000 m) without derating > 3280.84...9842.52 ft (> 1000...3000 m) with conditions

Ordering and shipping details

Category	US1PC5118261
Discount Schedule	PC51
GTIN	3606480216220
Returnability	No
Country of origin	ID

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	5.591 in (14.200 cm)
Package 1 Width	10.827 in (27.500 cm)
Package 1 Length	12.795 in (32.500 cm)
Package weight(Lbs)	12.229 lb(US) (5.547 kg)
Unit Type of Package 2	S03
Number of Units in Package 2	2
Package 2 Height	11.811 in (30.000 cm)
Package 2 Width	11.811 in (30.000 cm)
Package 2 Length	15.748 in (40.000 cm)
Package 2 Weight	26.050 lb(US) (11.816 kg)

Contractual warranty

Warranty (in months)	18

Environmental Data

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

Total lifecycle Carbon footprint	**52 kg CO2 eq.**
Carbon footprint of the manufacturing phase [A1 to A3]	**43 kg CO2 eq.**
Carbon footprint of the distribution phase [A4]	**8 kg CO2 eq.**
Carbon footprint of the installation phase [A5]	**0 kg CO2 eq.**
Carbon footprint of the use phase [B2, B3, B4, B6]	**0 kg CO2 eq.**
Carbon footprint of the end-of-life phase [C1 to C4]	**0.8 kg CO2 eq.**

Use Better

Materials and Substances

Packaging made with recycled cardboard	**Yes**
Packaging without single use plastic	**Yes**
SCIP Number	**C0961927-b9e6-4f64-bd63-334df07b6de6**
EU RoHS Directive	**Compliant By Exemption**
REACh Regulation	**Reference contains Substances of Very High Concern above the threshold**
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**
PVC free	**Yes**

Use Again

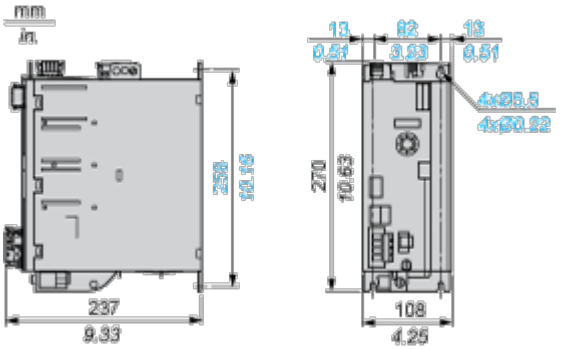
Repack and remanufacture

Recyclability potential, in %	**3**
Circularity Profile	**End of Life Information**
Take-back	**No**
WEEE Label	**The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.**

Dimensions Drawings

Lexium 32 Servo Drive

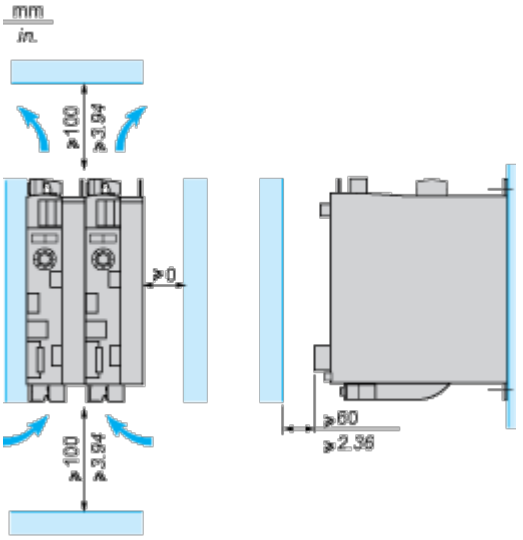
Dimensions



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 (± 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 ≥ 200 mm/7.87 in. is required under the unit to comply with the bending radius of the connection cables.

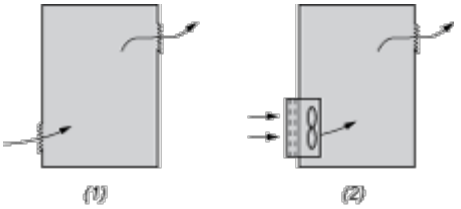
Ambient temperature	Mounting distances	Instructions to be followed
0°C…+ 50°C	d ≥ 0 mm	–
+ 50°C…+ 60°C	d ≥ 0 mm	Reduce the output current by 2.2% per °C above 50°C

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.



(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.