Product data sheet Characteristics

LXM32SD30N4

motion servo drive - Lexium 32 - three-phase supply voltage 208/480V - 3 kW





Main			
Range of product	Lexium 32		
Product or component type	Motion servo drive		
Device short name	LXM32S		
Format of the drive	Book		
Network number of phases	Three phase		
[Us] rated supply volt- age	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 cur- rent	10 A (f = 8 kHz)		
Output current 3s peak	30 A for 5 s		
Maximum continuous power	2600 W at 230 V		
Nominal power	2 kW at 230 V (f = 8 kHz)		
Line current	11.6 A, THDI of 74 % at 380 V, with external line choke of 1 mH 9.6 A, THDI of 85 % at 480 V, with external line choke of 1 mH 7 A, THDI of 152 % at 480 V, without line choke		

Complementary

Complementary		
Switching frequency	8 kHz	
Overvoltage category	III	
Leakage current	< 30 mA	
Output voltage	<= power supply voltage	
Electrical isolation	Between power and control	
Type of cable	Single-strand IEC cable (for θ = 50 °C) conductor material: copper 90 °C ,wire in- sulation material: XLPE/EPR	
Electrical connection	Terminal cable 3 mm ² AWG 12 (CN8)	
Tightening torque	0.5 N.m (CN8)	
Discrete input number	2 capture	
Discrete input type	Capture (CAP)	
Sampling duration	0.25 ms	
Discrete input voltage	24 V DC for capture	
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	
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) conforming to EN/IEC 61131-2	
Contact bounce time	<= 1 ms (compliment of STO_A, compliment of STO_B)	
Braking current	50 mA	



Response time on output	250 μs (DO) discrete	
Safety function	STO (safe torque off), integrated	
Safety level	SIL 3 conforming to EN/IEC 61508	
Communication interface	Integrated Modbus Integrated SERCOS III	
Type of connector	RJ45 (labelled CN7) :Modbus	
Commissioning port	2-wire RS485 multidrop Modbus	
Transmission rate	9600, 19200, 38400 bps for bus length of <= 40 m Modbus	
Number of addresses	1247 Modbus	
Status LED	1 LED (red) servo drive voltage	
Signalling function	Display of faults in 7 segments	
Marking	CE	
Operating position	Vertical +/- 10 degree	
Product compatibility	Servo motor BMH (100 mm, 3 motor stacks)	
Width	68 mm	
Height	270 mm	
Depth	237 mm	
Product weight	2.7 kg	

Environment

Electromagnetic compatibility	Conducted EMC conforming to EN 55011 class A group 1	
Standards	EN/IEC 61800-3	
Product certifications	CSA	
IP degree of protection	IP20 conforming to EN/IEC 60529	
Vibration resistance	1 gn (f = 13150 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	

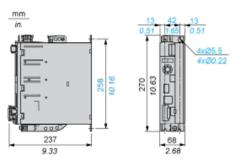
Offer Sustainability

Sustainable offer status	Green Premium product	
RoHS (date code: YYWW)	Compliant - since 1427 - 🖾 Schneider Electric declaration of conformity	
REACh	Reference not containing SVHC above the threshold	
Product environmental profile	Available 🗟 Download Product Environmental	
Product end of life instructions	Available 🗟 Download End Of Life Manual	

LXM32SD30N4

Lexium 32 Servo Drive

Dimensions

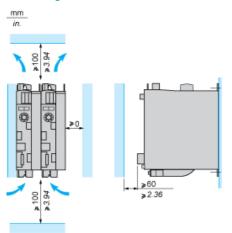




LXM32SD30N4

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

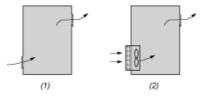
NOTE: For cables that are connected via the underside of the servo drive, a free space \geq 200 mm/7.87 in. is required under the unit to comply with the bending radius of the connection cables.

Ambient temperature	Mounting distances	Instructions to be followed
0°C+ 50°C	d ≥ 0 mm	-
+ 50°C+ 60°C		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.