

LXM32AD30N4

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	LXM32A
Format of the drive	Book
Network number of phases	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	10 A (f = 8 kHz)
Output current 3s peak	30 A for 5 s
Continuous power	2600 W at 230 V 5600 W at 400 V
Nominal power	2 kW at 230 V (f = 8 kHz) 3 kW at 400 V (f = 8 kHz)
Line current	7 A, THDI of 152 % at 480 V, without line choke 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 9.8 A, THDI of 146 % at 380 V, without line choke

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 $\theta = 50$ °C) conductor material: copper 90 °C ,wire insulation material: XLPE/EPR
Electrical connection	Terminal cable 3 mm ² AWG 12 (CN8) Terminal cable 5 mm ² AWG 10 (CN1) Terminal cable 5 mm ² AWG 10 (CN10)
Tightening torque	0.5 N.m (CN8) 0.7 N.m (CN1) 0.7 N.m (CN10)
Discrete input number	1 capture 2 safety 4 logic
Discrete input type	Capture (CAP) Logic (DI) Safety (compliment of STO_A, compliment of STO_B)
Sampling duration	0.25 ms (DI) for discrete
Discrete input voltage	24 V DC for capture 24 V DC for logic 24 V DC for safety

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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	2
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) 2 µs (CAP) 0.25 µs...1.5 ms (DI)
Braking current	50 mA
Response time on output	250 µs (DO) discrete
Control signal type	Servo motor encoder feedback
Protection type	Against reverse polarity :inputs signal Against short-circuits :outputs signal
Safety function	STO (safe torque off), integrated
Safety level	SIL 3 conforming to EN/IEC 61508 PL = e conforming to ISO 13849-1
Communication interface	Integrated CANopen Integrated Modbus Integrated CANmotion
Connector type	RJ45 (labelled CN4 or CN5) :CANmotion RJ45 (labelled CN4 or CN5) :CANopen RJ45 (labelled CN7) :Modbus
Method of access	Slave
Physical interface	2-wire RS485 multidrop Modbus
Transmission rate	1 Mbps for bus length of <= 4 m CANopen, CANmotion 125 kbps for bus length of <= 500 m CANopen, CANmotion 250 kbps for bus length of <= 250 m CANopen, CANmotion 50 kbps for bus length of <= 1000 m CANopen, CANmotion 500 kbps for bus length of <= 100 m CANopen, CANmotion 9600, 19200, 38400 bps for bus length of <= 40 m Modbus
Number of addresses	1...247 Modbus 1...127 CANopen, CANmotion
Communication service	1 receive SDO CANmotion 1 transmit SDO CANmotion 2 PDOs conforming to DSP 402 CANmotion 2 SDOs receive CANopen 2 SDOs send CANopen 4 configurable mapping PDOs CANopen CANopen device profile drives and motion control CANopen, CANmotion Display of faults on integrated display terminal Modbus Emergency CANopen, CANmotion Event-triggered, time-triggered, remotely requested, sync (cyclic), sync(acyclic) CANopen Node guarding, heartbeat CANopen Position control mode CANmotion Position control, speed profile, torque profile and homing mode CANopen Sync CANmotion
Status LED	1 LED error 1 LED RUN 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) Servo motor BMH (140 mm, 1 motor stacks) Servo motor BSH (100 mm, 3 motor stacks) Servo motor BSH (140 mm, 1 motor stacks) Servo motor BSH (100 mm, 4 motor stacks)
Width	68 mm
Height	270 mm
Depth	237 mm
Product weight	2.6 kg

Environment

electromagnetic compatibility	<p>Conducted EMC at class A group 1 conforming to EN 55011</p> <p>Conducted EMC at class A group 2 conforming to EN 55011</p> <p>Conducted EMC at environment 2 category C3 conforming to EN/IEC 61800-3</p> <p>Conducted EMC at category C2 conforming to EN/IEC 61800-3</p> <p>Conducted EMC at environments 1 and 2 conforming to EN/IEC 61800-3</p> <p>Electrostatic discharge immunity test at level 3 conforming to EN/IEC 61000-4-2</p> <p>Susceptibility to electromagnetic fields at level 3 conforming to EN/IEC 61000-4-3</p> <p>1.2/50 μs shock waves immunity test at level 3 conforming to EN/IEC 61000-4-5</p> <p>Electrical fast transient/burst immunity test at level 4 conforming to EN/IEC 61000-4-4</p> <p>Radiated EMC at class A group 2 conforming to EN 55011</p> <p>Radiated EMC at category C3 conforming to EN/IEC 61800-3</p>
standards	<p>EN/IEC 61800-3</p> <p>EN/IEC 61800-5-1</p>
product certifications	<p>CSA</p> <p>RoHS</p> <p>TÜV</p> <p>UL</p>
IP degree of protection	<p>IP20 conforming to EN/IEC 60529</p> <p>IP20 conforming to EN/IEC 61800-5-1</p>
vibration resistance	<p>1.5 mm peak to peak (f = 3...13 Hz) conforming to EN/IEC 60068-2-6</p> <p>1 gn (f = 13...150 Hz) conforming to EN/IEC 60068-2-6</p>
shock resistance	<p>15 gn for 11 ms conforming to EN/IEC 60028-2-27</p>
pollution degree	<p>2 conforming to EN/IEC 61800-5-1</p>
environmental characteristic	<p>Classes 3C1 conforming to IEC 60721-3-3</p>
relative humidity	<p>Class 3K3 (5 to 85 %) without condensation conforming to IEC 60721-3-3</p>
ambient air temperature for operation	<p>0...50 °C conforming to UL</p>
ambient air temperature for storage	<p>-25...70 °C</p>
type of cooling	<p>Integrated fan</p>
operating altitude	<p><= 1000 m without derating</p> <p>> 1000...3000 m with conditions</p>

Offer Sustainability

Sustainable offer status	<p>Green Premium product</p>
RoHS (date code: YYWW)	<p>Compliant - since 0930 - Schneider Electric declaration of conformity</p>
REACH	<p>Reference not containing SVHC above the threshold</p>
Product environmental profile	<p>Available</p>
Product end of life instructions	<p>Available</p>