Product datasheet

Specifications

motion servo drive, Lexium 28, single and three phase 200...230V, 1kW

LXM28AU10M3X

Main

Range of product	Lexium 28
Product or component type	Motion servo drive
Device short name	LXM28A
Format of the drive	Compact housing
Line current	8.5 A 176.3 % at 220 V, single phase 8.5 A 155.5 % at 220 V, three phase

Complementary

Network number of phases	Single phase Three phase
[Us] rated supply voltage	220 V (- 10...15 %) for three phase 220 V (- 20...15 %) for single phase
Supply voltage limits	200…255 V three phase 170…255 V single phase
Supply frequency	50/60 Hz - 5...5 %
Network frequency	47.5...63 Hz
EMC filter	Without EMC filter
Continuous output current	7 A at 16 kHz
Output current 3s peak	21 A at 220 V
Continuous power	1000 W at 220 V
Nominal power	1 kW at 220 V 16 kHz
Switching frequency	16 kHz
Overvoltage category	III
Maximum leakage current	4.5 mA
Output voltage	<= power supply voltage
Electrical isolation	Between power and control
Type of cable	Shielded motor cable (temperature: 0…55 °C) copper
Electrical connection	Spring terminal, clamping capacity: 1.3...1.5 mm², AWG 16 (L1-L2) Spring terminal, clamping capacity: 1.3...1.5 mm², AWG 16 (R, S, T) Spring terminal, clamping capacity: 1.3...1.5 mm², AWG 16 (U, V, W, PE) Spring terminal, clamping capacity: 1.3...1.5 mm², AWG 16 (PA/+, PBe)
Discrete input number	8 programmable (CN1) 1 pulse train input (PTI) (CN1) 2 fast capture (CN1) 1 safety function STO (CN9)

Discrete input voltage	24 V DC for logic
Discrete input logic	Positive or negative (CN1)
Discrete output number	5 logic output (CN1) at 12...24 V DC 1 pulse train output (PTO) (CN1)
Discrete output voltage	12...24 V DC
Discrete output logic	Positive or negative (CN1)
Analogue input number	2
Absolute accuracy error	0.1 %
Analogue input type	V_REF voltage analog input: - 10...10 V, impedance: 10 kOhm, resolution: 14 bits T_REF voltage analog input
Control signal type	Servo motor encoder feedback CN2
Protection type	Against reverse polarity: inputs signal Against short-circuits: outputs signal Overcurrent: motor Overvoltage: motor Undervoltage: motor Overheating: motor Overload: motor Overspeed: motor
Safety function	STO (safe torque off), integrated
Safety level	SIL 2 conforming to IEC 61800-5-2: 2007 SIL 2 conforming to IEC 61508-1: 2010 PL d/category 3 conforming to EN/ISO 13849-1: 2008 SIL 2 conforming to EN/ISO 13849-1: 2009/AC SIL 2 conforming to EN 60204-1: 2006 SIL 2 conforming to EN 60204-1: 2009/A1 SIL 2 conforming to EN 60204-1: 2010/AC SIL 2 conforming to IEC 62061: 2012
Communication interface	CANopen, integrated CANmotion, integrated
Connector type	RJ45 (CN4) for CANopen, CANmotion
Method of access	Slave
Transmission rate	250 kbit/s for bus length of 100…250 m for CANopen, CANmotion 500 kbit/s for bus length of 4…100 m for CANopen, CANmotion 1 Mbit/s for bus length of 4 m for CANopen, CANmotion
Number of addresses	1…127 for CANopen, CANmotion
Physical interface	RS485 for Modbus Serial line slave
Status LED	1 LED (red) charge 1 LED (green) RUN 1 LED (red) error
Signalling function	Servo status and fault codes five 7-segment display units
Marking	CE CULus CSA
Type of cooling	Integrated fan
Operating position	Vertical
Product compatibility	Servo motor BCH2 (130 mm, 1 motor stacks) at 1000 W Servo motor BCH2 (100 mm, 1 motor stacks) at 1000 W Servo motor BCH2 (130 mm, 2 motor stacks) at 900 W Servo motor BCH2 (130 mm, 4 motor stacks) at 850 W
Width	55 mm
Height	150 mm
Depth	170 mm
Net weight	1.2 kg
Output current 3s peak 2	21 A at 220 V
Output current 3s peak 3	21 A at 220 V

Environment

Electromagnetic compatibility	Conducted emission - test level: level 3 category C3 conforming to EN/IEC 61800-3
Standards	EN/IEC 61800-5-1
Product certifications	CE CSA cULus
IP degree of protection	IP20
Vibration resistance	3M4 amplitude = 3 mm (f = 9…200 Hz) conforming to IEC 60721-3-3
Shock resistance	10 gn, type I conforming to IEC 60721-3-3
Relative humidity	5…95 % without condensation
Ambient air temperature for operation	0…55 °C
Ambient air temperature for storage	-25…65 °C
Operating altitude	<= 1000 m without derating > 1000...2000 m 1 % per 100 m

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	7.555 cm
Package 1 Width	22.89 cm
Package 1 Length	23.756 cm
Package 1 Weight	1.5 kg
Unit Type of Package 2	S03
Number of Units in Package 2	5
Package 2 Height	30 cm
Package 2 Width	30 cm
Package 2 Length	40 cm
Package 2 Weight	8.387 kg

Offer Sustainability

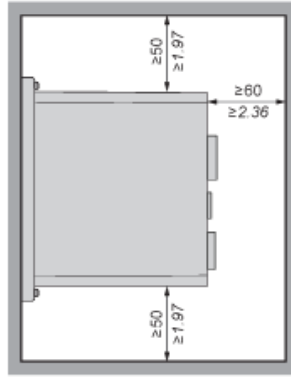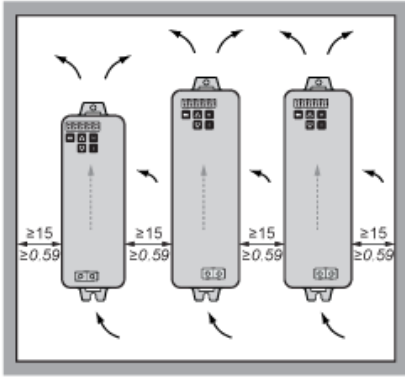|	
Sustainable offer status	Green Premium product
REACh Regulation	REACh Declaration
REACh free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Mercury free	Yes
China RoHS Regulation	China RoHS declaration
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
PVC free	Yes

Dimensions

Dimensions of Drive
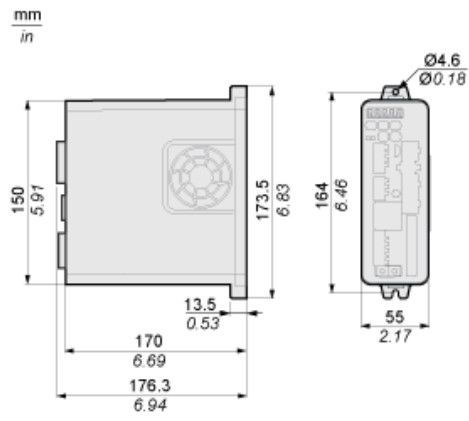
Mounting Clearance

Mounting Distances and Air Circulation

Recommended replacement(s)