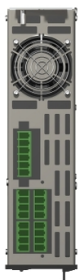


Product datasheet

Specifications



motion servo drive LXM15M - 5.7 kW - 208..480 V - 3-phase- with EMC filter

LXM15MD28N4

 **Discontinued on:** Jan 23, 2021

 **Discontinued**

Main

Range Of Product	Lexium 15
Product Or Component Type	Motion servo drive
Component Name	LXM15M
Network Number Of Phases	Three phase
Power Supply Voltage	208...480 V - 10...10 %
Emc Filter	Integrated
Continuous Output Current	10 A three phase
Transient Rms Output Current	20 A for 5 s three phase
Peak Output Current	28 A three phase
Nominal Power	5.7 kW three phase
Line Current	12.6 A at 480 V three phase 9.7 A at 208 V three phase
Apparent Power	7 kVA
Earthing System	Compatible TN Compatible IT with additional isolation transformer on the power supply Compatible TT

Complementary

Power Supply Voltage Limits	187.2...528 V
Power Supply Frequency	50/60 Hz - 5...5 %
Power Supply Frequency Limits	47.5...63 Hz
Switching Frequency	8 kHz
Output Voltage	<= power supply voltage
Electrical Isolation	Between power and control
Electrical Connection	Terminal, clamping capacity: 2.5 mm², AWG 14 (+ 24 VDC, 0 VDC) Terminal, clamping capacity: 1.5 mm², AWG 14 (PA/+, PC/-, PBi, PBe) Terminal, clamping capacity: 1.5 mm², AWG 14 (R/L1, S/L2, T/L3) Terminal, clamping capacity: 2.5 mm², AWG 14 (R1A,R1C,LI1,LI2,LI3,LI4,ENABLE,LO1,LO2,PWRI+/PWRI-,AI1+/AI1-,AI2+/AI2-,AO1,AO2)
Tightening Torque	+ 24 VDC, 0 VDC: 0.5...0.6 N.m PA/+, PC/-, PBi, PBe: 0.5...0.6 N.m R/L1, S/L2, T/L3: 0.5...0.6 N.m R1A, R1C, LI1, LI2, LI3, LI4, ENABLE, LO1, LO2, PWR, AI1+/AI1-, AI2+/AI2-: 0.5...0.6 N.m
Protection Type	Against reverse polarity: inputs signal Against short-circuits: outputs signal

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

Discrete Input Number	2 safety discrete input(s) 5 logic including ENABLE discrete input(s)
Discrete Input Type	Logic (LI1, LI2, LI3, LI4, ENABLE terminals) Safety (PWRI+, PWRI- terminals)
Input Sampling Time	AI1+/AI1-, AI2+/AI2: 0.0625 ms analog LI1, LI2, LI3, LI4: 0.25 ms discrete
Discrete Input Voltage	20...30 V DC for logic 24 V DC for safety
Discrete Input Logic	Positive logic (sink) state 0 if < 7 V or input not wired state 1 if > 12 V for logic Positive logic (sink) state 0 if < 7 V or input not wired state 1 if > 12 V for safety PWR function active at state 0
Safety Input Response Time	<= 1.5 ms
Discrete Output Number	1 for relay 2 for logic
Discrete Output Type	Logic LO1, LO2 Relay R1A, R1C NO
Discrete Output Voltage	24 V DC <= 30 V
Discrete Output Logic	Negative logic (sink)
Analogue Input Number	2
Analogue Input Type	AI1+/AI1- analog input differential +/- 10 V, resolution 14 bits, input impedance 20000 Ohm AI2+/AI2- analog input differential +/- 10 V, resolution 12 bits, input impedance 20000 Ohm
Output Response Time	Discrete LO1, LO2 0.25 ms Discrete R1A, R1C <= 4 ms
Analogue Output Number	2
Analogue Output Type	+/- 10 V analog output, resolution 10 bits, impedance: 2200 Ohm (Analog Out 1, Analog Out 2)
Breaking Capacity	0.00001 kA logic
Relay Output Maximum Switching Current	R1A, R1C on resistive load 500 mA for 125 V AC, cos phi = 1 R1A, R1C on resistive load 500 mA for 30 V DC, cos phi = 1
Feedback Type	1 encoder feedback input, 15-way female SUB-D connector (X1) 1 resolver feedback input, 9-way female SUB-D connector (X2)
Feedback Power Supply	Encoder: 10 V DC, 100 mA Resolver: 4.75 V AC, <= 35 mA
Feedback Input Signal	Encoder: 1 V with 2.5 V offset Resolver: 7 V DC +/- 10 % Encoder: 0.5 V at 100 kHz
Control Signal Type	1 ESIM (Encoder SIMulation) output, 9-way female SUB-D connector (X5) 1 pulse/direction or A/B encoder input, 9-way female SUB-D connector (X5) RS422 and RS485 link compatible input RS422 and RS485 link compatible output
Control Signal Frequency	A/B encoder input <= 1.5 MHz ESIM output <= 1.5 MHz Pulse direction input <= 100 kHz
Communication Port Protocol	RS232 serial link CANopen
Connector Type	1 common for both CANopen and RX 232 9-way male SUB-D connector (X6)
Method Of Access	Slave CANopen, CANopen Motionbus
Transmission Rate	1 Mbps <20 m 125 kbps <115 m
Number Of Addresses	1...127

Communication Service	1 configurable mapping PDO for CANopen 3 PDO (position control and speed profile modes) for CANopen ASCII command for RS232
Safety Function	PWR protection of machine:stops or prevents unintended operation of servo motor conforming to IEC/EN 61800-5-2 PWR protection of machine:stops or prevents unintended operation of servo motor conforming to ISO 13849-1 level d
Marking	CE
Sampling Repetition Time	Position control loop: 250 µs Speed control loop: 250 µs Torque control loop: 62.5 µs
Type Of Cooling	Fan
Operating Position	Vertical +/- 10 degree
Net Weight	4 kg

Environment

Electromagnetic Compatibility	Conducted and radiated emissions conforming to IEC/EN 61800-3 category C3 EMC immunity level 3 conforming to EN/IEC 61000-6-2 EMC immunity level 3 conforming to IEC/EN 61000-6-1
Standards	EN/IEC 61439-1 EN 292 EN/IEC 60204-1 EN/IEC 50178
Product Certifications	cUL UL
Ip Degree Of Protection	IP20
Vibration Resistance	1 gn (f= 57...150 Hz) conforming to EN/IEC 60068-2-6 1.5 mm peak to peak (f= 10...57 Hz) conforming to EN/IEC 60068-2-6
Shock Resistance	4 gn for 22 ms conforming to EN/IEC 60068-2-27
Pollution Degree	2 conforming to EN 50178 2 conforming to EN 60204
Environmental Characteristic	Category 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	45...55 °C (with derating of the motor output current by 2.5 % per °C) 0...45 °C (without derating)
Ambient Air Temperature For Storage	-25...70 °C
Operating Altitude	<= 1000 m without derating > 1000...2000 m with derating of the motor output current by 1.5 % per additional 100 m

Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	12.5 cm
Package 1 Width	35 cm
Package 1 Length	41.5 cm
Package 1 Weight	5.428 kg
Unit Type Of Package 2	S06
Number Of Units In Package 2	8
Package 2 Height	73.5 cm

Package 2 Width	80 cm
Package 2 Length	60 cm
Package 2 Weight	56.424 kg

Contractual warranty

Warranty	18 months
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