ILA1F571PB1A0

integrated drive ILA with servo motor - 24..36 V - CANopen - PCB connector





Main

Range of Product	Lexium integrated drive
Product or Component Type	Motion integrated drive
Device short name	ILA
Motor Type	AC Synchronous Servo Motor
Number of motor poles	6
Phase	Single phase
[Us] rated supply voltage	24 V 36 V
Network type	DC
Communication interface	CANopen DS301, Integrated
Length	5.72 in (145.3 mm)
Winding type	Medium speed of rotation and medium torque
Electrical Connection	Printed circuit board connector
Holding brake	Without
Gear box type	Without
Nominal speed	3200 rpm 24 V 5500 rpm 36 V
Nominal torque	2.30 lbf.in (0.26 N.m)

Complementary

Complementary	
Transmission Rate	50, 100, 125, 250, 500, 800 and 1000 kbauds
Mounting Support	Flange
Motor flange size	2.24 in (57 mm)
Number of motor stacks	1
Centring collar diameter	1.97 in (50 mm)
Centring collar depth	0.06 in (1.6 mm)
Number of mounting holes	4
Mounting holes diameter	0.20 in (5.2 mm)
Circle diameter of the mounting holes	2.62 in (66.6 mm)
Feedback type	Single turn encoder
Shaft end	Untapped
Second shaft	Without second shaft end
Shaft diameter	0.35 in (9 mm)
Shaft length	0.79 in (20 mm)
Supply voltage limits	1840 V
Current consumption	5000 mA maximum continuous 7000 mA peak
Associated fuse rating	10 A
Input/output type	4 signals (each be used as input or output)
Voltage state 0 guaranteed	-34.5 V
Voltage state 1 guaranteed	1530 V
Discrete input current	10 MA at 24 V on/STO_A safety input 3 MA at 24 V on/STO_B safety input 2 mA at 24 V 24 V signal interface
Discrete output voltage	2325 V
Maximum switching current	100 MA per output 200 mA total

Protection Type	Short circuit of the output voltage
	Overload of output voltage
	Safe torque off
Peak stall torque	5.31 lbf.in (0.6 N.m)
Continuous stall torque	2.30 lbf.in (0.26 N.m)
Speed feedback resolution	16384 points/turn
Accuracy error	+/- 0.05 °
Rotor inertia	0.1 kg.cm²
Maximum radial force Fr	89 N
Maximum axial force Fa	104 N force pressure)
	104 N tensile force)
Service life in hours	20000 h bearing
Marking	CE
Type of cooling	Natural convection
Net Weight	3.09 lb(US) (1.4 kg)

Environment

Standards	IEC 61800-3 IEC 60072-1 EN 61800-3:2001, second environment IEC 50178 IEC 50347 IEC 61800-3, Ed 2 EN 61800-3 : 2001-02
Product Certifications	TÜV[RETURN]cUL[RETURN]UL
Ambient air temperature for operation	122149 °F (5065 °C) with power derating of 2 % per °C) 32122 °F (050 °C) without derating)
Permissible ambient air temperature around the device	221 °F (105 °C) power amplifier 230 °F (110 °C) motor
Ambient Air Temperature for Storage	-13158 °F (-2570 °C)
Operating altitude	<= 3280.84 ft (1000 m) without derating
Relative humidity	1585 % without condensation
Vibration resistance	20 m/s² 10500 Hz) 10 cycles IEC 60068-2-6
Shock resistance	150 m/s² 1000 shocks IEC 60068-2-29
IP degree of protection	Shaft bushing IP41 IEC 60034-5 Total except shaft bushing IP54 IEC 60034-5

Ordering and shipping details

Category	18288-LEXIUM INTEGRATED DRIVES II
Discount Schedule	PC56
GTIN	3389119225380
Returnability	No
Country of origin	DE

Packing Units

3	
Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	4.13 in (10.5 cm)
Package 1 Width	6.69 in (17 cm)
Package 1 Length	9.45 in (24 cm)
Package 1 Weight	3.79 lb(US) (1.721 kg)
Unit Type of Package 2	S04
Number of Units in Package 2	8
Package 2 Height	11.81 in (30 cm)
Package 2 Width	15.75 in (40 cm)
Package 2 Length	23.62 in (60 cm)
Package 2 Weight	33.11 lb(US) (15.02 kg)

Offer Sustainability

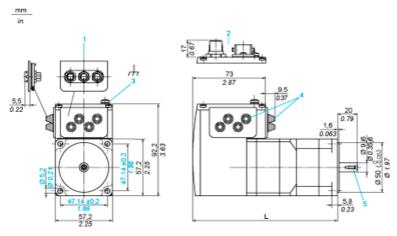
Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov
REACh Regulation	☑ REACh Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
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
Contractual warranty	
Warranty	18 months

Product data sheet Dimensions Drawings

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Integrated Drive without Holding Brake

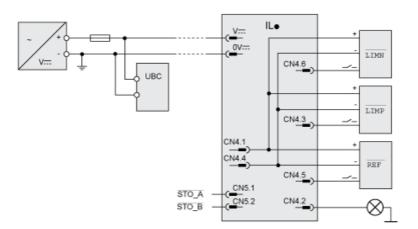
Dimensions



- 1 Accessories: I/O signal insert with industrial connectors
- 2 Option: industrial connectors
- 3 Earth (ground) terminal
- 4 Accessories: cable entries $\emptyset = 3 \dots 9 \text{ mm/0.12} \dots 0.35 \text{ in.}$
- 5 Centring hole DIN 332 DS M3
- L 145.3 mm/5.72 in.

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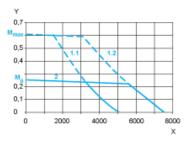
Connection Example with 4 I/O Signals



Product data sheet Performance Curves

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Torque Characteristics



- X Y Speed of rotation in rpm
- Torque in Nm
- 1.1 Max. torque at 24 V
- 1.2 Max. torque at 36 V
- Continuous torque