ILA1F572PB1F0

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	8.24 in (209.3 mm)
Winding type	Medium speed of rotation and medium torque
Electrical Connection	Printed circuit board connector
Holding brake	With
Gear box type	Without
Nominal speed	2600 rpm 24 V 4300 rpm 36 V
Nominal torque	3.98 lbf.in (0.45 N.m)
Holding torque	10.62 lbf.in (1.2 N.m) holding brake

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	2
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	7000 mA maximum continuous 8500 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	Safe torque off
	Short circuit of the output voltage
	Overload of output voltage
Peak stall torque	6.37 lbf.in (0.72 N.m)
Continuous stall torque	3.98 lbf.in (0.45 N.m)
Speed feedback resolution	16384 points/turn x 4096 turns
Accuracy error	+/- 0.05 °
Rotor inertia	0.25 kg.cm²
Maximum radial force Fr	107 N
Maximum axial force Fa	104 N force pressure)
	104 N tensile force)
Service life in hours	20000 h bearing
Brake pull-in power	10 W
Brake release time	14 ms
Brake application time	13 ms
Marking	CE
Type of cooling	Natural convection
Net Weight	3.75 lb(US) (1.7 kg)

Environment

IEC 60072-1 IEC 61800-3, Ed 2 EN 61800-3:2001, second environment IEC 61800-3 EN 61800-3:2001-02 IEC 50347 IEC 50178
UL[RETURN]TÜV[RETURN]cUL
122149 °F (5065 °C) with power derating of 2 % per °C) 32122 °F (050 °C) without derating)
221 °F (105 °C) power amplifier 230 °F (110 °C) motor
-13158 °F (-2570 °C)
<= 3280.84 ft (1000 m) without derating
1585 % without condensation
20 m/s² 10500 Hz) 10 cycles IEC 60068-2-6
150 m/s² 1000 shocks IEC 60068-2-29
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	3389119225519
Returnability	No
Country of origin	DE

Packing Units

1 doking office		
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	14.96 in (38 cm)	
Package 1 Length	7.09 in (18 cm)	
Package 1 Weight	5.69 lb(US) (2.583 kg)	
Unit Type of Package 2	S04	
Number of Units in Package 2	4	
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	24.81 lb(US) (11.252 kg)
Unit Type of Package 3	P06
Number of Units in Package 3	12
Package 3 Height	30.31 in (77 cm)
Package 3 Width	31.50 in (80 cm)
Package 3 Length	23.62 in (60 cm)
Package 3 Weight	87.07 lb(US) (39.496 kg)

Offer Sustainability

Contractual warranty

Warranty

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

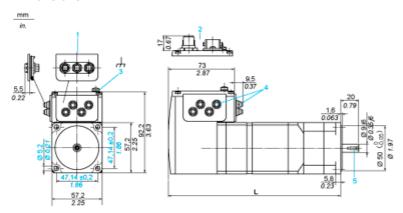
18 months

Product data sheet **Dimensions Drawings**

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Integrated Drive with Holding Brake

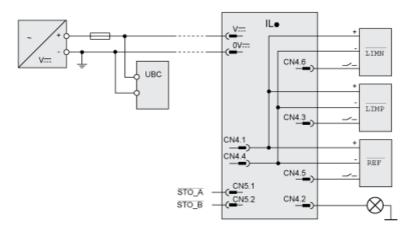
Dimensions



- Accessories: I/O signal insert with industrial connectors
- 2 Option: industrial connectors
- 3 Earth (ground) terminal
- Accessories: cable entries \emptyset = 3 ... 9 mm/0.12 ... 0.35 in. Centring hole DIN 332 DS M3 4 5 L
- 209.3 mm/8.24 in.

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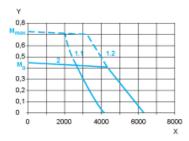
Connection Example with 4 I/O Signals



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