Product datasheet

Specifications





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

ILA1B572PB1F0

! Discontinued on: 19 May 2023

! To be end-of-service on: 31 Dec 2026

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
Network number of phases	Single phase
[Us] rated supply voltage	24 V 36 V
network type	DC
Communication interface	Profibus DP, integrated
Length	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 at 24 V 4300 rpm at 36 V
Nominal torque	0.45 N.m
Holding torque	1.2 N.m holding brake

Complementary

•	
Transmission rate	9.6, 19.2, 45.45, 93.75, 187.5, 500, 1500, 3000, 6000 and 12000 kbauds
mounting support	Flange
Motor flange size	57 mm
Number of motor stacks	2
Centring collar diameter	50 mm
Centring collar depth	1.6 mm
Number of mounting holes	4
Mounting holes diameter	5.2 mm
Circle diameter of the mounting holes	66.6 mm

Feedback type	Single turn encoder
Shaft end	Untapped
Second shaft	Without second shaft end
Shaft diameter	9 mm
Shaft length	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 for safety input 3 mA at 24 V on/STO_B for safety input 2 mA at 24 V for 24 V signal interface
Discrete output voltage	2325 V
Maximum switching current	100 mA per output 200 mA total
Protection type	Safe torque off Overload of output voltage Short circuit of the output voltage
Peak stall torque	0.72 N.m
Continuous stall torque	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 pull-in power Brake release time	<u> </u>
	10 W
Brake release time	10 W 14 ms
Brake release time Brake application time	10 W 14 ms 13 ms

Environment

Standards	EN/IEC 61800-3 IEC 60072-1 EN 61800-3 : 2001-02 EN 61800-3:2001, second environment EN 50347 EN/IEC 50178 IEC 61800-3, Ed 2
Product certifications	TÜV cUL UL

Ambient air temperature for operation	5065 °C (with power derating of 2 % per °C) 050 °C (without derating)	
Permissible ambient air temperature around the device	105 °C power amplifier 110 °C motor	
Ambient air temperature for storage	-2570 °C	
Operating altitude	<= 1000 m without derating	
Relative humidity	1585 % without condensation	
Vibration resistance	20 m/s² (f= 10500 Hz) 10 cycles conforming to EN/IEC 60068-2-6	
Shock resistance	150 m/s² 1000 shocks conforming to EN/IEC 60068-2-29	
IP degree of protection	IP41 shaft bushing: conforming to EN/IEC 60034-5 IP54 total except shaft bushing: conforming to EN/IEC 60034-5	

Packing Units

Unit Time of Books and 4	
Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	8.2 cm
Package 1 Width	19.5 cm
Package 1 Length	38.5 cm
Package 1 Weight	2.597 kg
Unit Type of Package 2	S04
Number of Units in Package 2	4
Package 2 Height	30 cm
Package 2 Width	40 cm
Package 2 Length	60 cm
Package 2 Weight	11.252 kg
Package 3 Height	30.0 cm

Contractual warranty

Warranty 18 months



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Transparency RoHS/REACh

Well-being performance

	Mercury Free	
②	Rohs Exemption Information	Yes
	Pvc Free	

Certifications & Standards

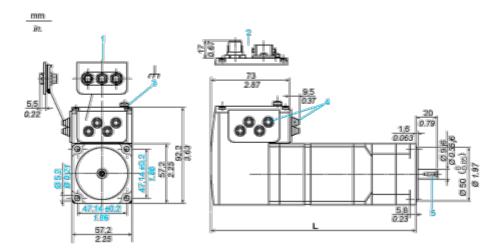
Reach Regulation	REACh Declaration
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)
China Rohs Regulation	China RoHS declaration
Environmental Disclosure	Product Environmental Profile
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
Circularity Profile	End of Life Information

14 Aug 2024

Dimensions Drawings

Integrated Drive with Holding Brake

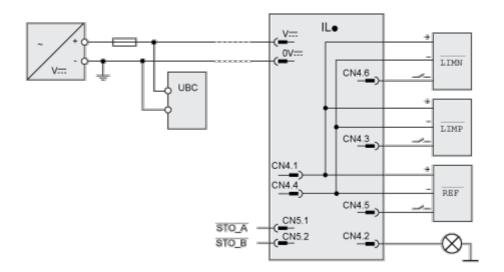
Dimensions



- 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 209.3 mm/8.24 in.

Connections and Schema

Connection Example with 4 I/O Signals

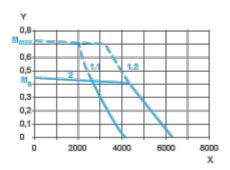


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Performance Curves

Torque Characteristics



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