Product data sheet

Specifications



integrated drive ILA with servo motor - 24..36 V - RS485 - PCB connector

ILA1R571PB1A0

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	36 V 24 V
Network Type	DC
Communication Interface	RS485, integrated
Length	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 at 24 V 5500 rpm at 36 V
Nominal Torque	0.26 N.m

Complementary

Transmission Rate	9.6, 19.2 and 38.4 kbauds
Mounting Support	Flange
Motor Flange Size	57 mm
Number Of Motor Stacks	1
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	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 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	Overload of output voltage Safe torque off Short circuit of the output voltage
Peak Stall Torque	0.6 N.m
Continuous Stall Torque	0.26 N.m
Speed Feedback Resolution	16384 points/turn
Accuracy Error	+/- 0.05 °
Rotor Inertia	0.1 kg.cm ²
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	1.4 kg

Environment

Standards	IEC 61800-3 EN 61800-3:2001, second environment IEC 60072-1 IEC 50347 EN 61800-3 : 2001-02 IEC 50178 IEC 61800-3, Ed 2
Product Certifications	cUL TÜV 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/s ² (f= 10500 Hz) 10 cycles conforming to IEC 60068-2-6
Shock Resistance	150 m/s ² 1000 shocks conforming to IEC 60068-2-29
Ip Degree Of Protection	IP41 shaft bushing: conforming to IEC 60034-5 IP54 total except shaft bushing: conforming to IEC 60034-5

Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	10.5 cm
Package 1 Width	17 cm
Package 1 Length	24 cm
Package 1 Weight	1.718 kg
Unit Type Of Package 2	S04
Number Of Units In Package 2	8
Package 2 Height	30 cm
Package 2 Width	40 cm
Package 2 Length	60 cm
Package 2 Weight	14.996 kg

Contractual warranty

Warranty

18 months

Sustainability

Green PremiumTM label is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO₂ products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >



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Transparency RoHS/REACh

Well-being performance



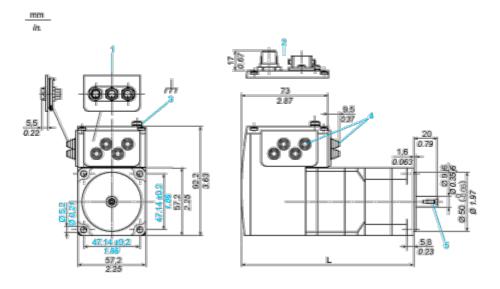
Certifications & Standards

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
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

Dimensions Drawings

Integrated Drive without Holding Brake

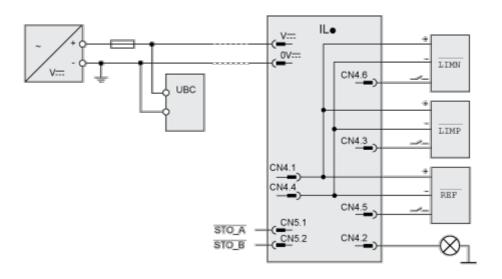
Dimensions



- 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.

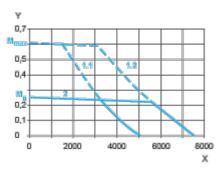
Connections and Schema

Connection Example with 4 I/O Signals



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