# Product data sheet

Specifications



() Discontinued - Service only

## integrated drive ILA with servo motor - 24..48 V - Ethernet Powerlink - PCB conn

#### ILA2P571PB1F0

- () Discontinued on: Mar 31, 2023
- () To be end-of-service on: Dec 31, 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	48 V 24 V
Network Type	DC
Communication Interface	Ethernet Powerlink, integrated
Length	190.8 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	3200 rpm at 24 V 5100 rpm at 48 V
Nominal Torque	0.44 N.m
Holding Torque	1.2 N.m holding brake

### Complementary

Transmission Rate	100 Mbits
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

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

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	1855.2 V
Current Consumption	5000 mA maximum continuous 7000 mA peak
Associated Fuse Rating	16 A
Commissioning Interface	RS485 Modbus TCP (9.6, 19.2 and 38.4 kbauds)
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 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	0.62 N.m
Peak Stall Torque Continuous Stall Torque	0.62 N.m 0.44 N.m
Continuous Stall Torque	0.44 N.m
Continuous Stall Torque Speed Feedback Resolution	0.44 N.m 16384 points/turn
Continuous Stall Torque Speed Feedback Resolution Accuracy Error	0.44 N.m 16384 points/turn +/- 0.05 °
Continuous Stall Torque Speed Feedback Resolution Accuracy Error Rotor Inertia	0.44 N.m 16384 points/turn +/- 0.05 ° 0.165 kg.cm <sup>2</sup>
Continuous Stall Torque Speed Feedback Resolution Accuracy Error Rotor Inertia Maximum Radial Force Fr	0.44 N.m 16384 points/turn +/- 0.05 ° 0.165 kg.cm <sup>2</sup> 89 N 104 N (force pressure)
Continuous Stall Torque Speed Feedback Resolution Accuracy Error Rotor Inertia Maximum Radial Force Fr Maximum Axial Force Fa	0.44 N.m 16384 points/turn +/- 0.05 ° 0.165 kg.cm <sup>2</sup> 89 N 104 N (force pressure) 104 N (tensile force)
Continuous Stall Torque Speed Feedback Resolution Accuracy Error Rotor Inertia Maximum Radial Force Fr Maximum Axial Force Fa Service Life In Hours	0.44 N.m   16384 points/turn   +/- 0.05 °   0.165 kg.cm²   89 N   104 N (force pressure)   104 N (tensile force)   20000 h bearing
Continuous Stall Torque Speed Feedback Resolution Accuracy Error Rotor Inertia Maximum Radial Force Fr Maximum Axial Force Fa Service Life In Hours Brake Pull-In Power	0.44 N.m   16384 points/turn   +/- 0.05 °   0.165 kg.cm²   89 N   104 N (force pressure)   104 N (tensile force)   20000 h bearing   10 W
Continuous Stall Torque Speed Feedback Resolution Accuracy Error Rotor Inertia Maximum Radial Force Fr Maximum Axial Force Fa Service Life In Hours Brake Pull-In Power Brake Release Time	0.44 N.m   16384 points/turn   +/- 0.05 °   0.165 kg.cm²   89 N   104 N (force pressure)   104 N (tensile force)   20000 h bearing   10 W   14 ms
Continuous Stall Torque Speed Feedback Resolution Accuracy Error Rotor Inertia Maximum Radial Force Fr Maximum Axial Force Fa Service Life In Hours Brake Pull-In Power Brake Release Time Brake Application Time	0.44 N.m   16384 points/turn   +/- 0.05 °   0.165 kg.cm²   89 N   104 N (force pressure)   104 N (tensile force)   20000 h bearing   10 W   14 ms   13 ms

## Environment

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

Ambient Air Temperature For Operation	4055 °C (with power derating of 2 % per °C) 040 °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/s <sup>2</sup> 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 Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	8.0 cm
Package 1 Width	18.5 cm
Package 1 Length	35.5 cm
Package 1 Weight	2.1 kg

## **Contractual warranty**

Warranty

18 months

### Sustainability

**Green Premium<sup>TM</sup> 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-CO<sub>2</sub> products.

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Guide to assess a product's sustainability >



Transparency RoHS/REACh

### Well-being performance



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Rohs Exemption Information Yes

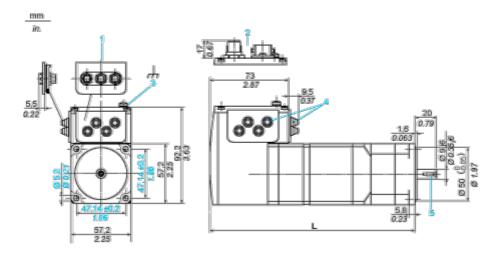
## **Certifications & Standards**

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 with Holding Brake

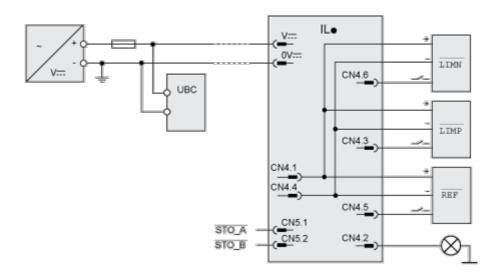
#### Dimensions



- 1 Accessories: I/O signal insert with industrial connectors
- 2 Option: industrial connectors
- 3 Earth (ground) terminal
- 4 Accessories: cable entries  $\emptyset$  = 3 ... 9 mm/0.12 ... 0.35 in.
- 5 Centring hole DIN 332 DS M3
- L 190.8 mm/7.51 in.

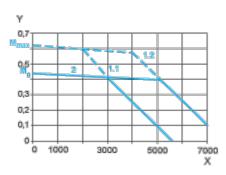
Connections and Schema

#### 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 48 V
- 2 Continuous torque