

Product datasheet

Specifications



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

ILA1R571PB1F0

⚠ Discontinued on: 30 Jun 2023

⚠ Discontinued

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	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 5500 rpm at 36 V
Nominal torque	0.26 N.m
Holding torque	1.2 N.m holding brake

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

Excluding VAT and subject to change. Please check with your local distributor through "Where to buy"

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

Shaft end	Untapped
Second shaft	Without second shaft end
Shaft diameter	9 mm
Shaft length	20 mm
Supply voltage limits	18...40 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	-3...4.5 V
Voltage state 1 guaranteed	15...30 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	23...25 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	0.6 N.m
Continuous stall torque	0.26 N.m
Speed feedback resolution	16384 points/turn x 4096 turns
Accuracy error	+/- 0.05 °
Rotor inertia	0.17 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
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	1.4 kg

Environment

Standards	EN/IEC 61800-3 EN 50347 EN 61800-3:2001, second environment EN/IEC 50178 EN 61800-3 : 2001-02 IEC 60072-1 IEC 61800-3, Ed 2
Product certifications	cUL UL TÜV
Ambient air temperature for operation	50...65 °C (with power derating of 2 % per °C) 0...50 °C (without derating)

Permissible ambient air temperature around the device	105 °C power amplifier 110 °C motor
Ambient air temperature for storage	-25...70 °C
Operating altitude	<= 1000 m without derating
Relative humidity	15...85 % without condensation
Vibration resistance	20 m/s² (f= 10...500 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 Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	8.0 cm
Package 1 Width	19.0 cm
Package 1 Length	39.0 cm
Package 1 Weight	2.2 kg

Contractual warranty

Warranty (in months)	18
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Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)



Environmental footprint

Environmental Disclosure

[Product Environmental Profile](#)

Use Better



Materials and Substances

[EU RoHS Directive](#)

Pro-active compliance (Product out of EU RoHS legal scope)

PVC free

Yes

Use Longer



Lifetime extension

Repair

No

Use Again



Repack and remanufacture

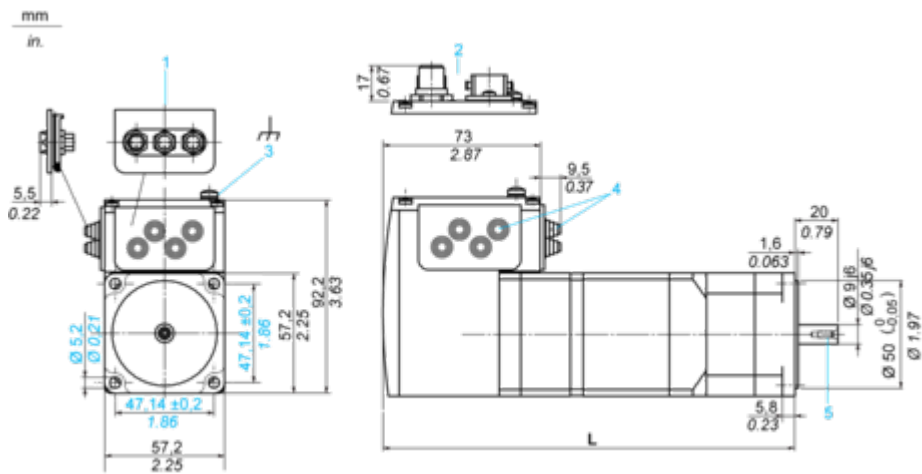
End of life manual availability

[End of Life Information](#)

Dimensions

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 $\varnothing = 3 \dots 9 \text{ mm} / 0.12 \dots 0.35 \text{ in.}$
 - 5 Centring hole DIN 332 - DS M3
- L 190.8 mm/7.51 in.

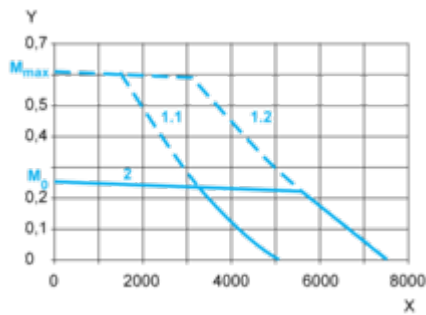
Wiring

Connection Example with 4 I/O Signals



PerformanceCurves

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