

Product datasheet

Specifications



integrated drive ILA with servo motor - 24..48 V - DeviceNet - PCB connector

ILA2D571PB1A0

! Discontinued - Service only

! Discontinued on: 15 Jun 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	48 V 24 V
Network type	DC
Communication interface	DeviceNet, 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 5100 rpm at 48 V
Nominal torque	0.44 N.m

Complementary

Transmission rate	125, 250, 500 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

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

Second shaft	Without second shaft end
Shaft diameter	9 mm
Shaft length	20 mm
Supply voltage limits	18...55.2 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	-3...4.5 V
Voltage state 1 guaranteed	15...30 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	23...25 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	0.62 N.m
Continuous stall torque	0.44 N.m
Speed feedback resolution	16384 points/turn
Accuracy error	+/- 0.05 °
Rotor inertia	0.095 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
Marking	CE
Type of cooling	Natural convection
Net weight	1.4 kg

Environment

Standards	EN 50347 EN/IEC 50178 IEC 60072-1 EN/IEC 61800-3 EN 61800-3 : 2001-02 EN 61800-3:2001, second environment IEC 61800-3, Ed 2
Product certifications	cUL TÜV UL
Ambient air temperature for operation	40...55 °C (with power derating of 2 % per °C) 0...40 °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	1.8 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)

REACH Regulation

[REACH Declaration](#)

Use Longer



Lifetime extension

Repair

No

Use Again



Repack and remanufacture

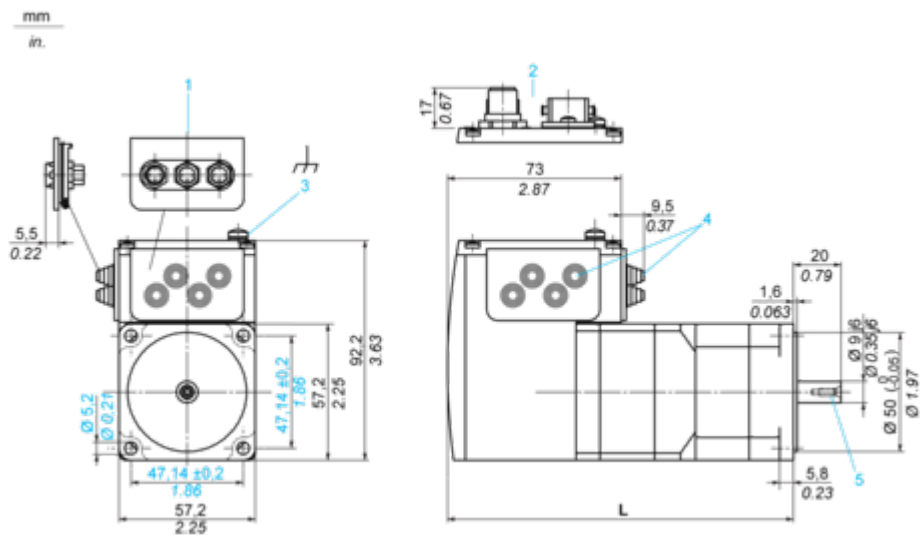
End of life manual availability

[End of Life Information](#)

Dimensions

Integrated Drive without Holding Brake

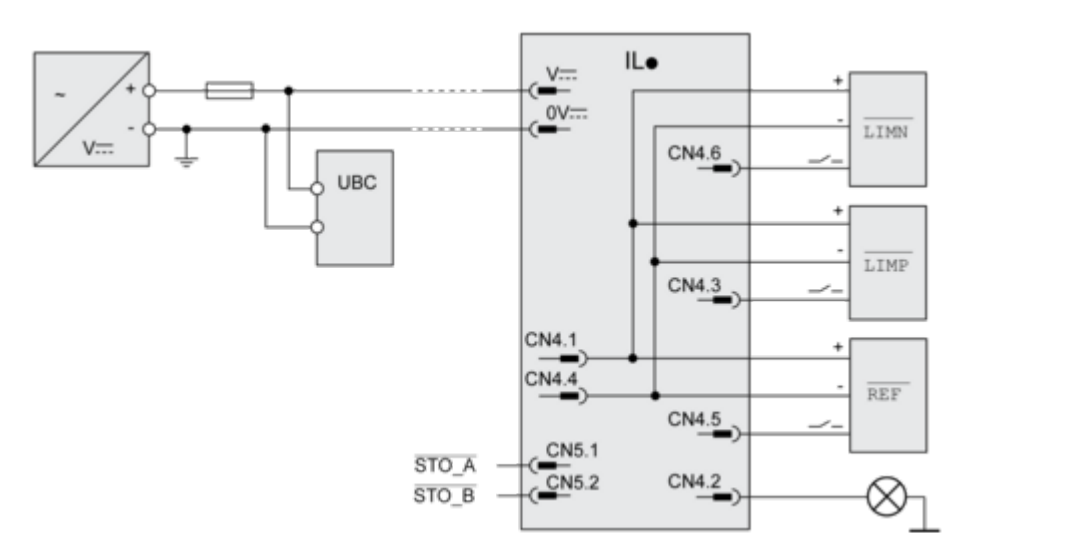
Dimensions



- 1 Accessories: I/O signal insert with industrial connectors
 - 2 Option: industrial connectors
 - 3 Earth (ground) terminal
 - 4 Accessories: cable entries $\varnothing = 3 \dots 9 \text{ mm}/0.12 \dots 0.35 \text{ in.}$
 - 5 Centring hole DIN 332 - DS M3
- L 145.3 mm/5.72 in.

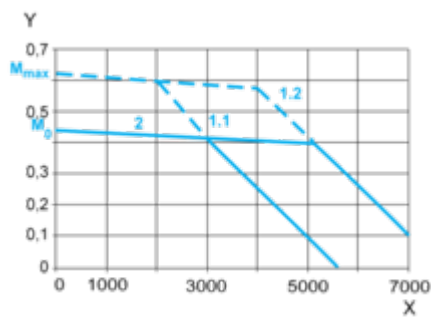
Wiring

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 48 V
2 Continuous torque