

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

ILA2D571TB1F0

- ! Discontinued on: Mar 31, 2023
- ! To be end-of-service on: Dec 31, 2026

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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 48 V
Network Type	DC
Communication Interface	DeviceNet, integrated
Length	190.8 mm
Winding Type	High speed of rotation and medium torque
Electrical Connection	Printed circuit board connector
Holding Brake	With
Gear Box Type	Without
Nominal Speed	5000 rpm at 24 V 7000 rpm at 48 V
Nominal Torque	0.31 N.m
Holding Torque	1.2 N.m holding brake

Complementary

20 mpromortary	
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
Second Shaft	Without second shaft end
Shaft Diameter	9 mm
Shaft Length	20 mm
Supply Voltage Limits	1855.2 V
Current Consumption	11000 mA peak 7500 mA maximum continuous
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	Short circuit of the output voltage Safe torque off Overload of output voltage
Peak Stall Torque	0.45 N.m
	0.45 N.III
Continuous Stall Torque	0.31 N.m
Continuous Stall Torque Speed Feedback Resolution	
	0.31 N.m
Speed Feedback Resolution	0.31 N.m 16384 points/turn
Speed Feedback Resolution Accuracy Error	0.31 N.m 16384 points/turn +/- 0.05 °
Speed Feedback Resolution Accuracy Error Rotor Inertia	0.31 N.m 16384 points/turn +/- 0.05 ° 0.165 kg.cm²
Speed Feedback Resolution Accuracy Error Rotor Inertia Maximum Radial Force Fr	0.31 N.m 16384 points/turn +/- 0.05 ° 0.165 kg.cm² 89 N 104 N (force pressure)
Speed Feedback Resolution Accuracy Error Rotor Inertia Maximum Radial Force Fr Maximum Axial Force Fa	0.31 N.m 16384 points/turn +/- 0.05 ° 0.165 kg.cm² 89 N 104 N (force pressure) 104 N (tensile force)
Speed Feedback Resolution Accuracy Error Rotor Inertia Maximum Radial Force Fr Maximum Axial Force Fa Service Life In Hours	0.31 N.m 16384 points/turn +/- 0.05 ° 0.165 kg.cm² 89 N 104 N (force pressure) 104 N (tensile force) 20000 h bearing
Speed Feedback Resolution Accuracy Error Rotor Inertia Maximum Radial Force Fr Maximum Axial Force Fa Service Life In Hours Brake Pull-In Power	0.31 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
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	0.31 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
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	0.31 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 61800-3, Ed 2		
	EN 61800-3 : 2001-02		
	EN 50347		
	EN/IEC 50178		
	IEC 60072-1		
	EN 61800-3:2001, second environment		
	EN/IEC 61800-3		
Product Certifications	TÜV		
	UL		
	cUL		

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/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 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 >





Transparency RoHS/REACh

Well-being performance



Mercury Free



Rohs Exemption Information

Yes

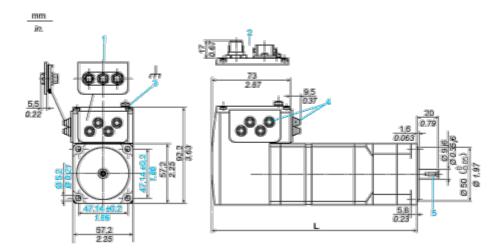
Certifications & Standards

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

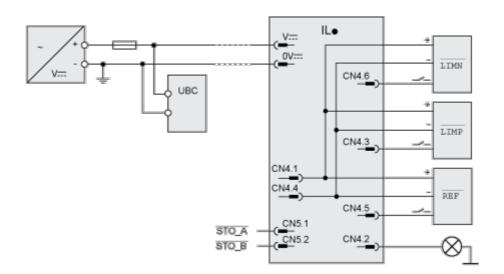
Dimensions



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

Connections and Schema

Connection Example with 4 I/O Signals

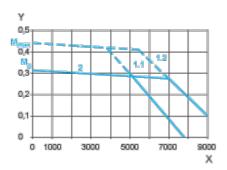


Product data sheet

ILA2D571TB1F0

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