Product datasheet

Specifications





integrated drive ILA with servo motor - 24..48 V - EtherNet/IP -PCB connector

ILA2K571TB1A0

Main

Range of productLexium integrated driveProduct or component typeMotion integrated driveDevice short nameILAMotor typeAC synchronous servo motorNumber of motor poles6Network number of phasesSingle phase[Us] rated supply voltage24 V 48 Vnetwork typeDCCommunication interfaceEthernet/IP, integratedLength145.3 mmWinding typeHigh speed of rotation and medium torqueElectrical connectionPrinted circuit board connectorHolding brakeWithoutGear box typeWithoutNominal speed5000 rpm at 24 V 7000 rpm at 48 V		
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 Ethernet/IP, integrated Length 145.3 mm Winding type High speed of rotation and medium torque Electrical connection Printed circuit board connector Holding brake Without Gear box type Without Nominal speed 5000 rpm at 24 V	e of product Lexiu	m integrated drive
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Holding brake Without Gear box type Without Nominal speed 5000 rpm at 24 V	i ng type High	speed of rotation and medium torque
Gear box type Without Nominal speed 5000 rpm at 24 V	rical connection Printe	ad circuit board connector
Nominal speed 5000 rpm at 24 V	ng brake Witho	put
•	box type Witho	out
	•	
Nominal torque 0.31 N.m	nal torque 0.31	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
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	Safe torque off Overload of output voltage Short circuit of the output voltage
Peak stall torque	0.45 N.m
Continuous stall torque	0.31 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	IEC 50347 IEC 50178 EN 61800-3:2001, second environment IEC 60072-1 EN 61800-3 : 2001-02 IEC 61800-3, Ed 2 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/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	8.0 cm
Package 1 Width	18.5 cm
Package 1 Length	35.5 cm
Package 1 Weight	1.7 kg

Contractual warranty

Warranty

18 months

Sustainability Screen Premium

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.

Yes

Learn more about Green Premium >

Guide to assess a product's sustainability >



Transparency RoHS/REACh

Well-being performance



Rohs Exemption Information

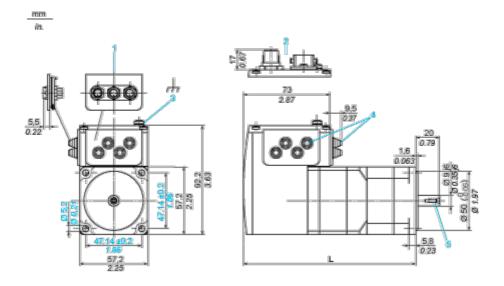
Certifications & Standards

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

Dimensions Drawings

Integrated Drive without Holding Brake

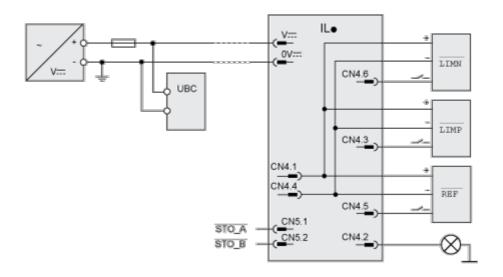
Dimensions



- 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.

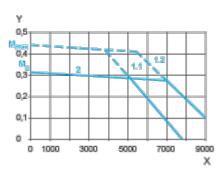
Connections and Schema

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 48 V
- 2 Continuous torque