Product data sheet
Characteristics

ILA2K571PC1A0
integrated drive ILA with servo motor - 24..48 V - EtherNet/IP - indus connector

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	Ethernet/IP, integrated
Length	145.3 mm
Winding type	Medium speed of rotation and medium torque
Electrical connection	Industrial 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
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	Short circuit of the output voltage Overload of output voltage Safe torque off
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 61800-3:2001, second environment IEC 50178 IEC 50347 IEC 61800-3 IEC 61800-3, Ed 2 IEC 60072-1 EN 61800-3 : 2001-02
Product certifications	cUL[RETURN]TÜV[RETURN]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 IEC 60068-2-6
Shock resistance	150 m/s² 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

Offer Sustainability

Sustainable offer status	Green Premium product
REACh Regulation	REACh Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
Mercury free	Yes
China RoHS Regulation	China RoHS Declaration
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End Of Life Information

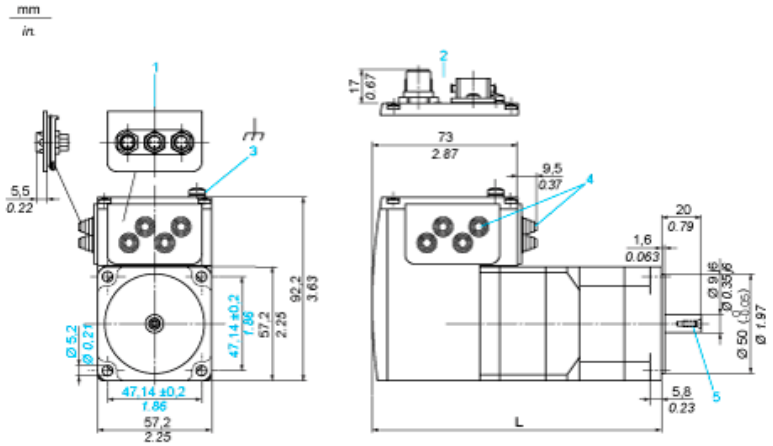
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
PVC free	Yes

Contractual warranty

Warranty	18 months

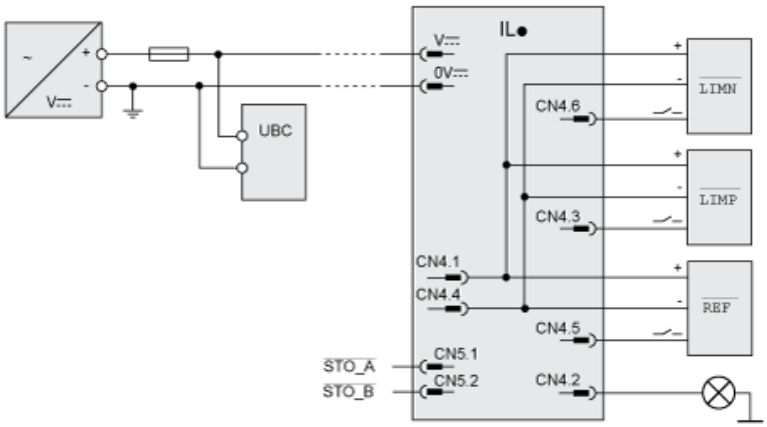
Integrated Drive without Holding Brake

Dimensions



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

Connection Example with 4 I/O Signals



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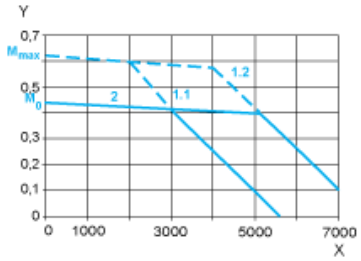
Torque Characteristics



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