

Product datasheet

Specifications



integrated drive ILA with servo
motor - 24..48 V - EtherCAT - indus
connector

ILA2E571TC1F0

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	EtherCAT, integrated
Length	190.8 mm
Winding type	High speed of rotation and medium torque
Electrical connection	Industrial 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

Transmission rate	100 Mbits
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	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	-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 Safe torque off Overload of 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	0.165 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	IEC 61800-3, Ed 2 EN 50347 EN/IEC 61800-3 IEC 60072-1 EN/IEC 50178 EN 61800-3:2001, second environment EN 61800-3 : 2001-02
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	18.5 cm
Package 1 Length	35.5 cm
Package 1 Weight	2.1 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

Total lifecycle Carbon footprint	625 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile
Carbon footprint of the manufacturing phase [A1 to A3]	26 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.4 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	599 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	0.4 kg CO2 eq.

Use Better



Materials and Substances

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
REACH Regulation	REACH Declaration
PVC free	Yes

Use Longer



Lifetime extension

Repair	No
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Use Again



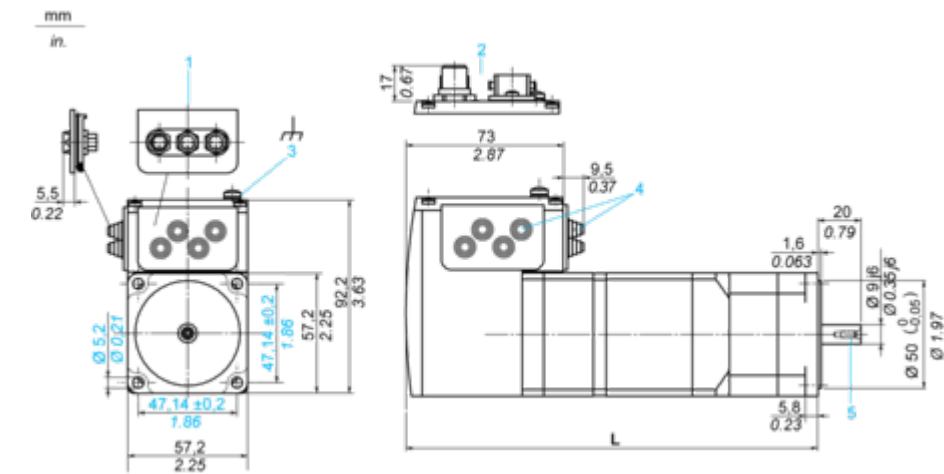
Repack and remanufacture

End of life manual availability	End of Life Information
Take-back	No

Dimensions

Integrated Drive with Holding Brake

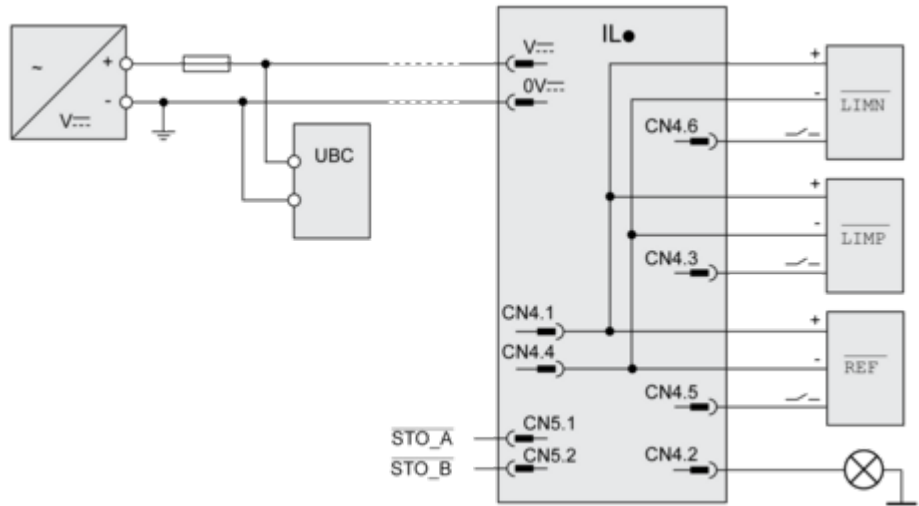
Dimensions



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

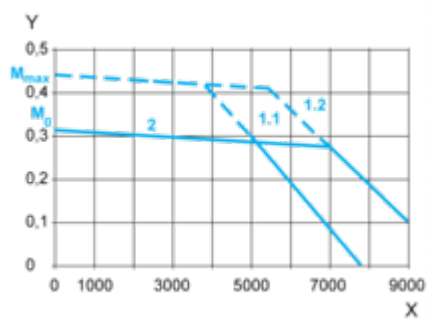
Wiring

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 48 V
2 Continuous torque