

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

ILA2E572PB1A0

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 | 163.8 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 | 1600 rpm at 24 V 3400 rpm at 48 V |
| Nominal Torque | 0.78 N.m |

Complementary

| Transmission Rate | 100 Mbits |
|---------------------------------------|--------------------------|
| Mounting Support | Flange |
| Motor Flange Size | 57 mm |
| Number Of Motor Stacks | 2 |
| 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 | 7000 mA maximum continuous 8500 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 | -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 Overload of output voltage Safe torque off |
| Peak Stall Torque | 1.62 N.m |
| Continuous Stall Torque | 0.78 N.m |
| Speed Feedback Resolution | 16384 points/turn |
| Accuracy Error | +/- 0.05 ° |
| Rotor Inertia | 0.173 kg.cm² |
| Maximum Radial Force Fr | 107 N |
| Maximum Axial Force Fa | 104 N (force pressure) 104 N (tensile force) |
| Service Life In Hours | 20000 h bearing |
| | CE |
| Type Of Cooling | Natural convection |
| Net Weight | 1.7 kg |

Environment

| Standards | IEC 60072-1 EN 61800-3 : 2001-02 EN/IEC 61800-3 EN/IEC 50178 EN 61800-3:2001, second environment EN 50347 IEC 61800-3, Ed 2 |
|--|---|
| 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 | 11.5 cm |
| Package 1 Width | 19 cm |
| Package 1 Length | 39.5 cm |
| Package 1 Weight | 2.234 kg |
| Unit Type Of Package 2 | S04 |
| Number Of Units In Package 2 | 8 |
| Package 2 Height | 30 cm |
| Package 2 Width | 40 cm |
| Package 2 Length | 60 cm |
| Package 2 Weight | 19.124 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 >

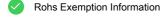




Transparency RoHS/REACh

Well-being performance





Yes



Pvc Free

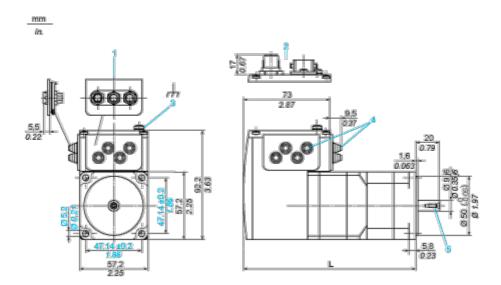
Certifications & Standards

| 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 without Holding Brake

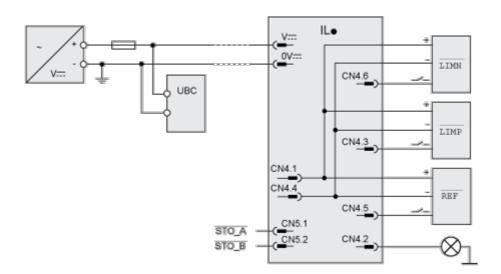
Dimensions



- 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 163.8 mm/6.45 in.

Connections and Schema

Connection Example with 4 I/O Signals

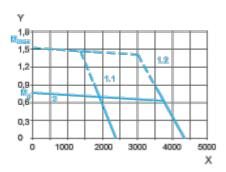


Product data sheet

ILA2E572PB1A0

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