Product datasheet

Specifications





integrated drive ILS with stepper motor - 24..36 V - RS485 - 3.5 A

ILS1R571PB1A0

Main

| mann | |
|---------------------------|--|
| Range of product | Lexium integrated drive |
| Product or component type | Motion integrated drive |
| Device short name | ILS |
| Motor type | 3-phase stepper motor |
| Number of motor poles | 6 |
| Network number of phases | Single phase |
| [Us] rated supply voltage | 36 V 24 V |
| network type | DC |
| Communication interface | RS485, integrated |
| Length | 101.9 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 | 1000 rpm at 36 V 500 rpm at 24 V |
| Nominal torque | 0.45 N.m |
| Holding torque | 0.51 N.m |
| | |

Complementary

| Transmission rate | 9.6, 19.2 and 38.4 kbauds |
|---------------------------------------|---------------------------|
| mounting support | Flange |
| Motor flange size | 57 mm |
| Number of motor stacks | 1 |
| Centring collar diameter | 38.1 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 | Index pulse |
| Shaft end | Untapped |

| Second shaft | Without second shaft end |
|----------------------------|---|
| Shaft diameter | 6.35 mm |
| Shaft length | 21 mm |
| Supply voltage limits | 1840 V |
| Current consumption | 3500 mA maximum |
| Associated fuse rating | 10 A |
| 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 on/STO_A for safety input 3 mA at 24 V on/STO_B 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 Short circuit of the output voltage Overload of output voltage |
| Peak stall torque | 0.45 N.m |
| Continuous stall torque | 0.45 N.m |
| Speed feedback resolution | 20000 points/turn |
| Accuracy error | +/- 6 arc min |
| Rotor inertia | 0.1 kg.cm ² |
| Maximum mechanical speed | 3000 rpm |
| Maximum radial force Fr | 24 N |
| Maximum axial force Fa | 100 N (tensile force) 8.4 N (force pressure) |
| Service life in hours | 20000 h bearing |
| marking | CE |
| Type of cooling | Natural convection |
| Net weight | 1.3 kg |
| | |

Environment

| Standards | IEC 60072-1 EN 61800-3:2001, second environment EN/IEC 50178 EN 61800-3 : 2001-02 EN 50347 EN/IEC 61800-3 IEC 61800-3, Ed 2 |
|---|---|
| Product certifications | cUL UL TÜV |
| Ambient air temperature for operation | 5065 °C (with power derating of 2 % per °C) 050 °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/s ² 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 | 10.5 cm |
| Package 1 Width | 19.0 cm |
| Package 1 Length | 39.0 cm |
| Package 1 Weight | 2.1 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.

Learn more about Green Premium >

Guide to assess a product's sustainability >



Transparency RoHS/REACh

Well-being performance



Certifications & Standards

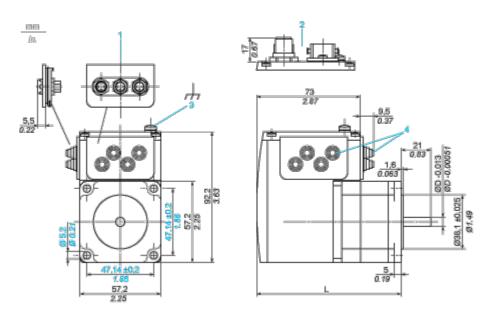
| Reach Regulation | REACh Declaration |
|--------------------------|---|
| Eu Rohs Directive | Pro-active compliance (Product out of EU RoHS legal scope) |
| China Rohs Regulation | China RoHS declaration |
| Environmental Disclosure | Product Environmental Profile |
| Weee | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |
| Circularity Profile | End of Life Information |

Product datasheet

Dimensions Drawings

Integrated Drive

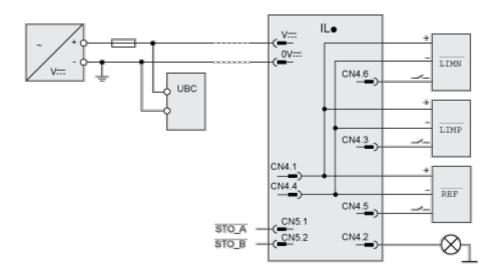
Dimensions



- 1 Accessories: I/O signal insert with industrial connectors
- 2 Option: industrial connectors
- 3 Earth (ground) terminal
- 4 Accessories: cable entries $\emptyset = 3 \dots 9 \text{ mm}/0.12 \dots 0.35 \text{ in}.$
- L 101.9 mm/4.01 in.
- D 6.35 mm/0.25 in.

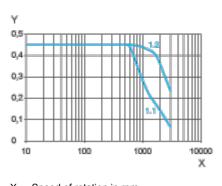
Connections and Schema

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 36 V