

# integrated drive ILS with stepper motor - 24..36 V - Profibus DP - 3.5 A

ILS1B573PB1A0

- ! Discontinued on: Feb 1, 2023
- ! To be end-of-service on: Dec 31, 2026

#### Main

| 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<br>24 V                               |
| Network Type              | DC   |
| Communication Interface   | Profibus DP, integrated                    |
| Length                    | 138.9 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             | 200 rpm at 24 V<br>500 rpm at 36 V         |
| Nominal Torque            | 1.5 N.m                                    |
| Holding Torque            | 1.7 N.m                                    |

## Complementary

| Transmission Rate                     | 9.6, 19.2, 45.45, 93.75, 187.5, 500, 1500, 3000, 6000 and 12000 kbauds |
|---------------------------------------|--|
| Mounting Support                      | Flange   |
| Motor Flange Size                     | 57 mm  |
| Number Of Motor Stacks                | 3  |
| 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             | 8 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<br>3 mA at 24 V on/STO_B for safety input<br>2 mA at 24 V for 24 V signal interface |
| Discrete Output Voltage    | 2325 V  |
| Maximum Switching Current  | 100 mA per output<br>200 mA total   |
| Protection Type            | Short circuit of the output voltage<br>Overload of output voltage<br>Safe torque off  |
| Peak Stall Torque          | 1.5 N.m   |
| Continuous Stall Torque    | 1.5 N.m   |
| Speed Feedback Resolution  | 20000 points/turn   |
| Accuracy Error             | +/- 6 arc min   |
| Rotor Inertia              | 0.38 kg.cm²   |
| Maximum Mechanical Speed   | 3000 rpm  |
| Maximum Radial Force Fr    | 50 N  |
| Maximum Axial Force Fa     | 100 N (tensile force)<br>8.4 N (force pressure)   |
| Service Life In Hours      | 20000 h bearing   |
| Marking                    | CE  |
| Type Of Cooling            | Natural convection  |
| Net Weight                 | 2 kg  |
| Environment                |   |
| Standards                  | EN 61800-3:2001, second environment   |

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|--|---|
| Product Certifications                                   | cUL<br>TÜV<br>UL  |
| Ambient Air Temperature For Operation                    | 5065 °C (with power derating of 2 % per °C) 050 °C (without derating)   |
| Permissible Ambient Air<br>Temperature Around The Device | 105 °C power amplifier<br>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               |

# **Packing Units**

| Unit Type Of Package 1       | PCE       |
|------------------------------|-----------|
| Number Of Units In Package 1 | 1         |
| Package 1 Height             | 11 cm     |
| Package 1 Width              | 17 cm     |
| Package 1 Length             | 24 cm     |
| Package 1 Weight             | 2.134 kg  |
| Unit Type Of Package 2       | P06       |
| Number Of Units In Package 2 | 9         |
| Package 2 Height             | 77 cm     |
| Package 2 Width              | 80 cm     |
| Package 2 Length             | 60 cm     |
| Package 2 Weight             | 27.706 kg |
| Package 3 Height             | 77.0 cm   |

# **Contractual warranty**

Warranty 18 months

## Sustainability

**Green Premium<sup>TM</sup> 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-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

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Transparency RoHS/REACh

## Well-being performance

Mercury Free

Rohs Exemption Information

Yes



Pvc Free

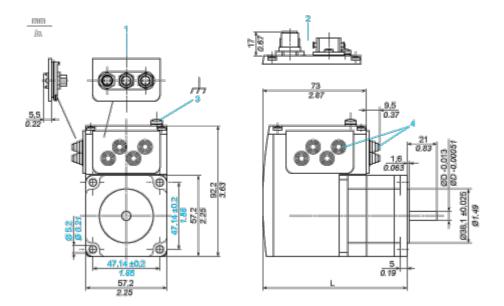
#### **Certifications & Standards**

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

#### **Dimensions Drawings**

#### **Integrated Drive**

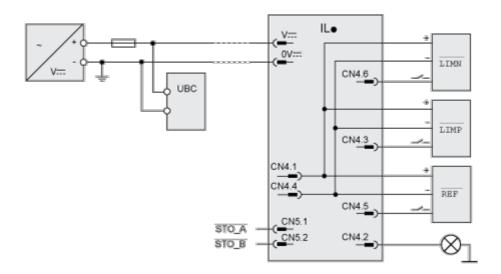
#### **Dimensions**



- 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 138.9 mm/5.47 in.
- D 8.00 mm/0.31 in.

Connections and Schema

### Connection Example with 4 I/O Signals

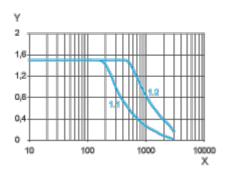


# **Product data sheet**

# ILS1B573PB1A0

#### 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