# Product data sheet

Specifications





() Discontinued

## integrated drive ILA with servo motor - 24..36 V - Profibus DP indus connector

ILA1B572PC1F0

() Discontinued on: Sep 15, 2023

() To be end-of-service on: Dec 31, 2024

# Product availability: Non-Stock - Not normally stocked in distribution facility

### 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                                          |  |
| Phase                     | Single phase                               |  |
| [Us] rated supply voltage | 24 V<br>36 V                               |  |
| Network type              | DC                                         |  |
| Communication interface   | Profibus DP, Integrated                    |  |
| Length                    | 8.2 in (209.3 mm)                          |  |
| Winding type              | Medium speed of rotation and medium torque |  |
| Electrical Connection     | Industrial connector                       |  |
| Holding brake             | With                                       |  |
| Gear box type             | Without                                    |  |
| Nominal speed             | 2600 rpm 24 V<br>4300 rpm 36 V             |  |
| Nominal torque            | 3.98 lbf.in (0.45 N.m)                     |  |
| Holding torque            | 10.6 lbf.in (1.2 N.m) holding brake        |  |
|                           |                                            |  |

### 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        | 2.2 in (57 mm)                                                         |  |
| Number of motor stacks   | 2                                                                      |  |
| Centring collar diameter | 2.0 in (50 mm)                                                         |  |
| Centring collar depth    | 0.06 in (1.6 mm)                                                       |  |
| Number of mounting holes | 4                                                                      |  |
| Mounting holes diameter  | 0.2 in (5.2 mm)                                                        |  |

Price is "List Price" and may be subject to a trade discount - check with your local distributor or retailer for actual price.

| Circle diameter of the mounting holes | 2.6 in (66.6 mm)                                                                                                |  |
|---------------------------------------|-----------------------------------------------------------------------------------------------------------------|--|
| Feedback type                         | Single turn encoder                                                                                             |  |
| Shaft end                             | Untapped                                                                                                        |  |
| Second shaft                          | Without second shaft end                                                                                        |  |
| Shaft diameter                        | 0.4 in (9 mm)                                                                                                   |  |
| Shaft length                          | 0.8 in (20 mm)                                                                                                  |  |
| Supply voltage limits                 | 1840 V                                                                                                          |  |
| Current consumption                   | 7000 mA maximum continuous<br>8500 mA peak                                                                      |  |
| 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 safety input<br>3 mA at 24 V on/STO_B safety input<br>2 mA at 24 V 24 V signal interface |  |
| Discrete output voltage               | 2325 V                                                                                                          |  |
| Maximum switching current             | 100 mA per output<br>200 mA total                                                                               |  |
| Protection Type                       | Overload of output voltage<br>Short circuit of the output voltage<br>Safe torque off                            |  |
| Peak stall torque                     | 6.37 lbf.in (0.72 N.m)                                                                                          |  |
| Continuous stall torque               | 3.98 lbf.in (0.45 N.m)                                                                                          |  |
| Speed feedback resolution             | 16384 points/turn x 4096 turns                                                                                  |  |
| Accuracy error                        | +/- 0.05 °                                                                                                      |  |
| Rotor inertia                         | 0.25 kg.cm <sup>2</sup>                                                                                         |  |
| Maximum radial force Fr               | 107 N                                                                                                           |  |
| Maximum axial force Fa                | 104 N force pressure)<br>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                            | 3.7 lb(US) (1.7 kg)                                                                                             |  |

### Environment

Standards

EN/IEC 50178 EN 61800-3:2001, second environment IEC 61800-3, Ed 2 EN 61800-3 : 2001-02 EN/IEC 61800-3 EN 50347 IEC 60072-1

| Product Certifications                                   | TÜV<br>UL<br>cUL                                                                                                  |  |
|----------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|--|
| Ambient air temperature for operation                    | 122149 °F (5065 °C) with power derating of 2 % per °C)<br>32122 °F (050 °C) without derating)                     |  |
| Permissible ambient air<br>temperature around the device | 221 °F (105 °C) power amplifier<br>230 °F (110 °C) motor                                                          |  |
| Ambient Air Temperature for<br>Storage                   | -13158 °F (-2570 °C)                                                                                              |  |
| Operating altitude                                       | <= 3280.84 ft (1000 m) without derating                                                                           |  |
| Relative humidity                                        | 1585 % without condensation                                                                                       |  |
| Vibration resistance                                     | 20 m/s² 10…500 Hz) 10 cycles EN/IEC 60068-2-6                                                                     |  |
| Shock resistance                                         | 150 m/s² 1000 shocks EN/IEC 60068-2-29                                                                            |  |
| IP degree of protection                                  | IP41 shaft bushing: conforming to EN/IEC 60034-5<br>IP54 total except shaft bushing: conforming to EN/IEC 60034-5 |  |

# Ordering and shipping details

| Category          | US1PC5618288  |  |
|-------------------|---------------|--|
| Discount Schedule | PC56          |  |
| GTIN              | 3389119225304 |  |
| Returnability     | No            |  |
| Country of origin | DE            |  |

### **Packing Units**

| Unit Type of Package 1       | PCE                 |
|------------------------------|---------------------|
| Number of Units in Package 1 | 1                   |
| Package 1 Height             | 3.1 in (8.0 cm)     |
| Package 1 Width              | 7.5 in (19.0 cm)    |
| Package 1 Length             | 15.4 in (39.0 cm)   |
| Package 1 Weight             | 5.5 lb(US) (2.5 kg) |

## **Contractual warranty**

Warranty

18 months

# Sustainability Screen Premium

**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.

Learn more about Green Premium >

Guide to assess a product's sustainability >



Transparency RoHS/REACh

### Well-being performance

Mercury Free
Rohs Exemption Information Yes
Pvc Free

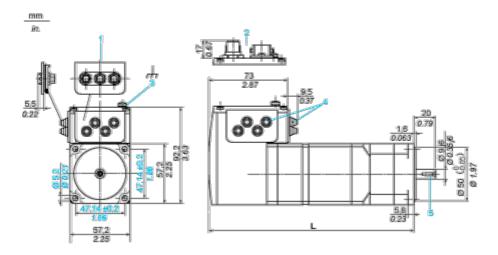
### **Certifications & Standards**

| Reach Regulation          | REACh Declaration                                                                                                                                                                                                                                        |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Eu Rohs Directive         | Pro-active compliance (Product out of EU RoHS legal scope)                                                                                                                                                                                               |
| China Rohs Regulation     | China RoHS declaration                                                                                                                                                                                                                                   |
| Environmental Disclosure  | Product Environmental Profile                                                                                                                                                                                                                            |
| Weee                      | The product must be disposed on European Union markets following specific waste<br>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<br>compounds, which is known to the State of California to cause cancer and birth<br>defects or other reproductive harm. For more information go to<br>www.P65Warnings.ca.gov |

### **Dimensions Drawings**

### Integrated Drive with Holding Brake

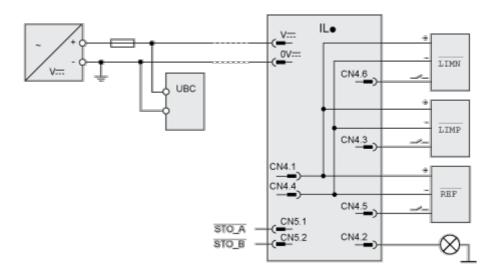
### Dimensions



- 1 Accessories: I/O signal insert with industrial connectors
- 2 Option: industrial connectors
- 3 Earth (ground) terminal
- 4 Accessories: cable entries  $\emptyset$  = 3 ... 9 mm/0.12 ... 0.35 in.
- 5 Centring hole DIN 332 DS M3
- L 209.3 mm/8.24 in.

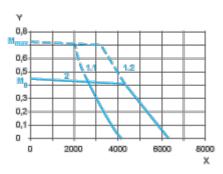
Connections and Schema

#### 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
- 2 Continuous torque