

# Product datasheet

Specifications



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

ILA2D571PB1F0

! Discontinued - Service only

! Discontinued on: 15 Jun 2023

! To be end-of-service on: 31 Dec 2026

Price: 61,874.00 ZAR

### 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 | 24 V<br>48 V                               |
| Network type              | DC                                         |
| Communication interface   | DeviceNet, integrated                      |
| Length                    | 190.8 mm                                   |
| Winding type              | Medium speed of rotation and medium torque |
| Electrical connection     | Printed circuit board connector            |
| Holding brake             | With                                       |
| Gear box type             | Without                                    |
| Nominal speed             | 3200 rpm at 24 V<br>5100 rpm at 48 V       |
| Nominal torque            | 0.44 N.m                                   |
| Holding torque            | 1.2 N.m holding brake                      |

### Complementary

|                                       |                      |
|---------------------------------------|----------------------|
| Transmission rate                     | 125, 250, 500 kbauds |
| 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              |

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

|                            |                                                                                      |
|----------------------------|--------------------------------------------------------------------------------------|
| 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      | 18...55.2 V                                                                          |
| Current consumption        | 5000 mA maximum continuous<br>7000 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 | -3...4.5 V                                                                           |
| Voltage state 1 guaranteed | 15...30 V                                                                            |
| Discrete input current     | 10 mA at 24 V for safety input<br>2 mA at 24 V for 24 V signal interface             |
| Discrete output voltage    | 23...25 V                                                                            |
| Maximum switching current  | 100 mA per output<br>200 mA total                                                    |
| Protection type            | Safe torque off<br>Overload of output voltage<br>Short circuit of the output voltage |
| Peak stall torque          | 0.62 N.m                                                                             |
| Continuous stall torque    | 0.44 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)<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                 | 1.4 kg                                                                               |

## Environment

|                        |                                                                                                                                               |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| Standards              | EN 61800-3:2001, second environment<br>IEC 61800-3, Ed 2<br>EN/IEC 61800-3<br>EN 50347<br>EN/IEC 50178<br>EN 61800-3 : 2001-02<br>IEC 60072-1 |
| Product certifications | cUL<br>TÜV<br>UL                                                                                                                              |

|                                                       |                                                                                                                   |
|-------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
| Ambient air temperature for operation                 | 40...55 °C (with power derating of 2 % per °C)<br>0...40 °C (without derating)                                    |
| Permissible ambient air temperature around the device | 105 °C power amplifier<br>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<br>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              | 19.0 cm |
| Package 1 Length             | 39.0 cm |
| Package 1 Weight             | 2.2 kg  |

## Contractual warranty

|                      |    |
|----------------------|----|
| Warranty (in months) | 18 |
|----------------------|----|



## 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

Environmental Disclosure

[Product Environmental Profile](#)

## Use Better



### Materials and Substances

[EU RoHS Directive](#)

Pro-active compliance (Product out of EU RoHS legal scope)

REACH Regulation

[REACH Declaration](#)

## Use Longer



### Lifetime extension

Repair

No

## Use Again



### Repack and remanufacture

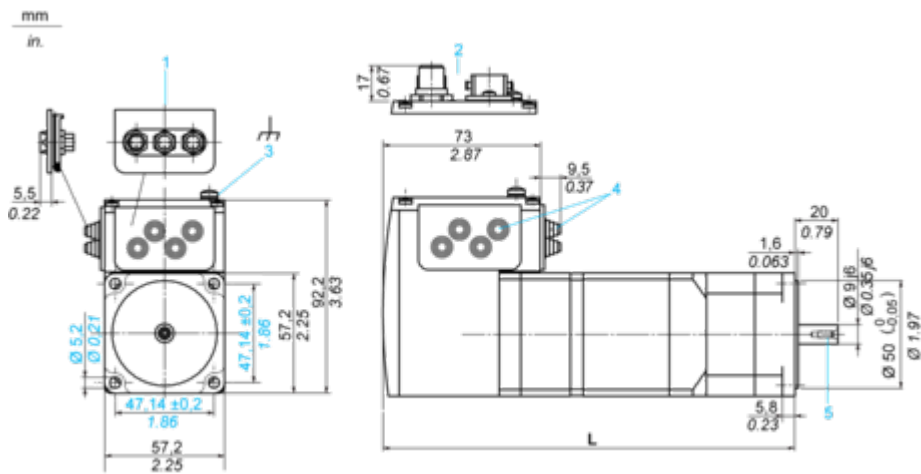
End of life manual availability

[End of Life Information](#)

## Dimensions

### Integrated Drive with Holding Brake

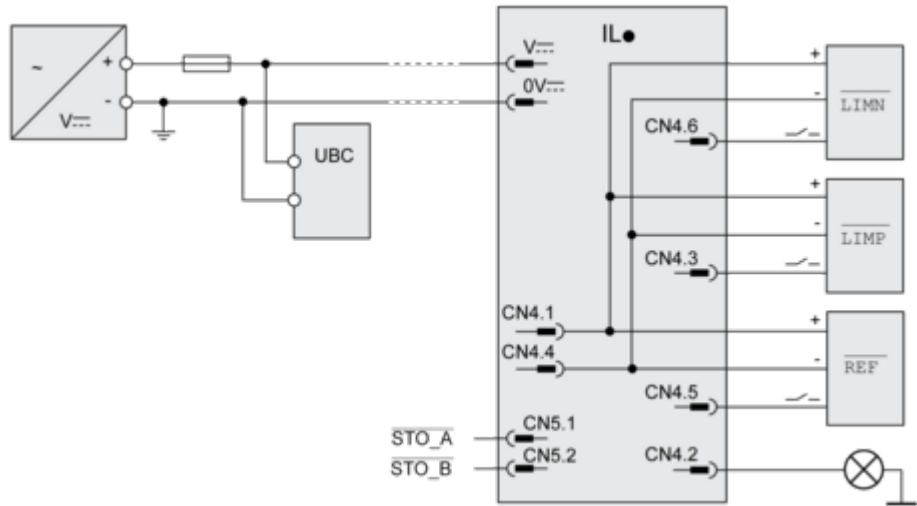
## Dimensions



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

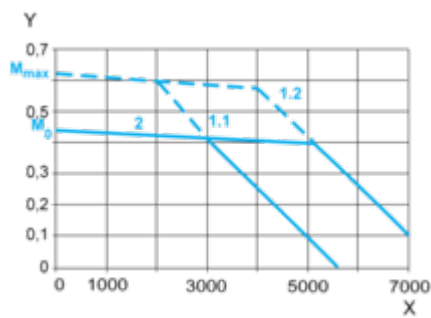
Wiring

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