

# Product datasheet

Specifications



## integrated drive ILA with servo motor - 24..36 V - RS485 - industrial connector

ILA1R572TC1F0

⚠ Discontinued on: 30 Jun 2023

⚠ Discontinued

### 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 | 36 V<br>24 V                             |
| Network type              | DC                                       |
| Communication interface   | RS485, integrated                        |
| Length                    | 209.3 mm                                 |
| Winding type              | High speed of rotation and medium torque |
| Electrical connection     | Industrial connector                     |
| Holding brake             | With                                     |
| Gear box type             | Without                                  |
| Nominal speed             | 3100 rpm at 24 V<br>5000 rpm at 36 V     |
| Nominal torque            | 0.41 N.m                                 |
| Holding torque            | 1.2 N.m holding brake                    |

### Complementary

|                                       |                           |
|---------------------------------------|---------------------------|
| Transmission rate                     | 9.6, 19.2 and 38.4 kbauds |
| 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       |

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

|                            |                                                                                                                             |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Shaft end                  | Untapped                                                                                                                    |
| Second shaft               | Without second shaft end                                                                                                    |
| Shaft diameter             | 9 mm                                                                                                                        |
| Shaft length               | 20 mm                                                                                                                       |
| Supply voltage limits      | 18...40 V                                                                                                                   |
| Current consumption        | 7500 mA maximum continuous<br>9000 mA peak                                                                                  |
| Associated fuse rating     | 10 A                                                                                                                        |
| 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 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    | 23...25 V                                                                                                                   |
| Maximum switching current  | 100 mA per output<br>200 mA total                                                                                           |
| Protection type            | Safe torque off<br>Short circuit of the output voltage<br>Overload of output voltage                                        |
| Peak stall torque          | 0.61 N.m                                                                                                                    |
| Continuous stall torque    | 0.41 N.m                                                                                                                    |
| Speed feedback resolution  | 16384 points/turn x 4096 turns                                                                                              |
| Accuracy error             | +/- 0.05 °                                                                                                                  |
| Rotor inertia              | 0.25 kg.cm²                                                                                                                 |
| 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                 | 1.7 kg                                                                                                                      |

## Environment

|                                       |                                                                                                                                               |
|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| Standards                             | EN/IEC 61800-3<br>EN/IEC 50178<br>EN 61800-3 : 2001-02<br>EN 61800-3:2001, second environment<br>IEC 61800-3, Ed 2<br>IEC 60072-1<br>EN 50347 |
| Product certifications                | cUL<br>TÜV<br>UL                                                                                                                              |
| Ambient air temperature for operation | 50...65 °C (with power derating of 2 % per °C)<br>0...50 °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             | 2.5 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)

PVC free

Yes

## Use Longer



### Lifetime extension

Repair

No

## Use Again



### Repack and remanufacture

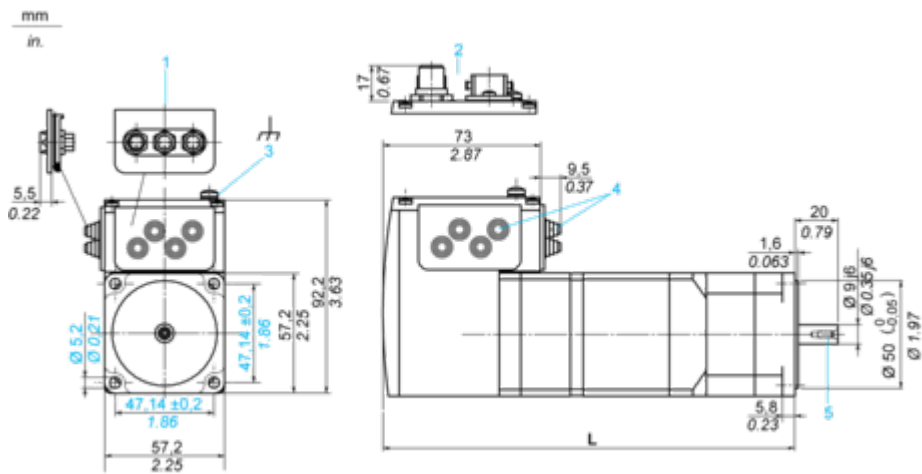
End of life manual availability

[End of Life Information](#)

## Dimensions

### Integrated Drive with Holding Brake

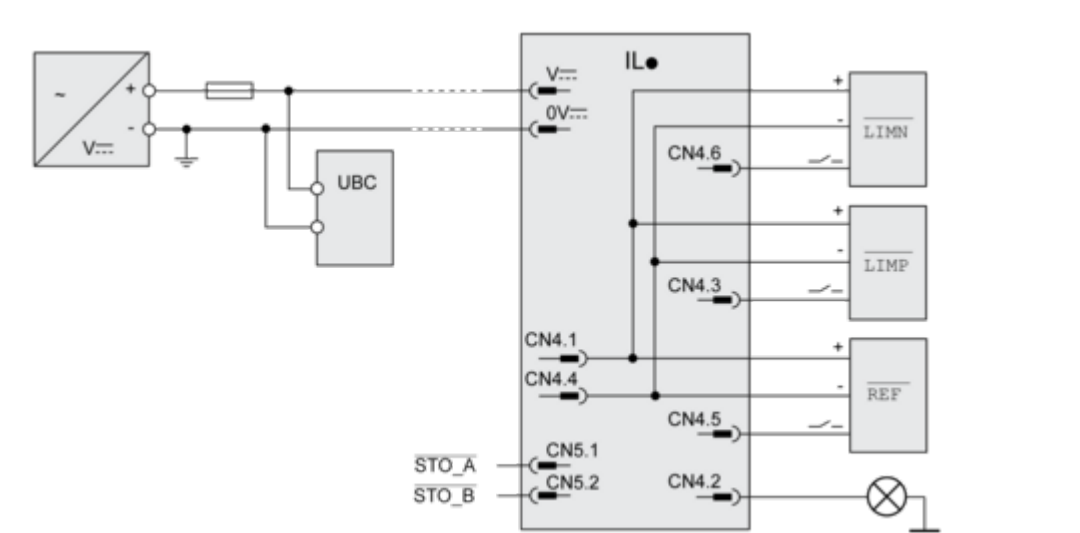
## Dimensions



- 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 209.3 mm/8.24 in.

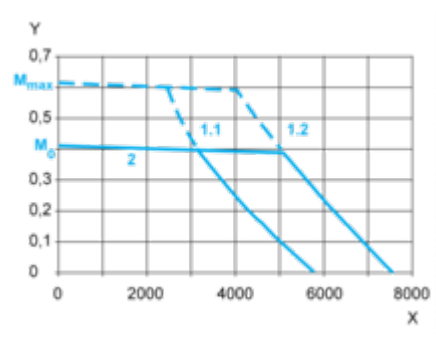
Wiring

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 36 V  
2 Continuous torque