

# Product data sheet

## Characteristics

# ILS2T852PC1A0

integrated drive ILS with stepper motor - 24..48 V  
- Modbus TCP - 5 A



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

Price\*: 1600.00 USD



### 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                                          |
| Phase                     | Single phase                               |
| [Us] rated supply voltage | 48 V<br>24 V                               |
| Network type              | DC                                         |
| Communication interface   | Modbus TCP, Integrated                     |
| Length                    | 6.72 In (170.6 mm)                         |
| Winding type              | Medium speed of rotation and medium torque |
| Electrical connection     | Industrial connector                       |
| Holding brake             | Without                                    |
| Gear box type             | Without                                    |
| Nominal speed             | 180 rpm 24 V<br>360 rpm 48 V               |
| Nominal torque            | 35.40 Lbf.In (4 N.m)                       |
| Holding torque            | 35.40 Lbf.In (4 N.m)                       |

### Complementary

|                                       |                  |
|---------------------------------------|------------------|
| Transmission rate                     | 10, 100 Mbits    |
| Mounting support                      | Flange           |
| Motor flange size                     | 3.35 In (85 mm)  |
| Number of motor stacks                | 2                |
| Centring collar diameter              | 2.36 In (60 mm)  |
| Centring collar depth                 | 0.08 In (2 mm)   |
| Number of mounting holes              | 4                |
| Mounting holes diameter               | 0.26 In (6.5 mm) |
| Circle diameter of the mounting holes | 3.90 In (99 mm)  |

|                            |                                                                                      |
|----------------------------|--------------------------------------------------------------------------------------|
| Feedback type              | Index pulse                                                                          |
| Shaft end                  | Untapped                                                                             |
| Second shaft               | Without second shaft end                                                             |
| Shaft diameter             | 0.47 In (12 mm)                                                                      |
| Shaft length               | 1.18 In (30 mm)                                                                      |
| Supply voltage limits      | 18...55 V                                                                            |
| Current consumption        | 5000 mA maximum continuous                                                           |
| 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 safety input<br>2 MA at 24 V 24 V signal interface                     |
| Discrete output voltage    | 23...25 V                                                                            |
| Maximum switching current  | 100 MA per output<br>200 MA total                                                    |
| Protection type            | Overload of output voltage<br>Safe torque off<br>Short circuit of the output voltage |
| Peak stall torque          | 35.40 Lbf.In (4 N.m)                                                                 |
| Continuous stall torque    | 35.40 Lbf.In (4 N.m)                                                                 |
| Speed feedback resolution  | 20000 points/turn                                                                    |
| Accuracy error             | +/- 6 arc min                                                                        |
| Rotor inertia              | 2.2 Kg.Cm <sup>2</sup>                                                               |
| Maximum mechanical speed   | 3000 Rpm                                                                             |
| Maximum radial force Fr    | 100 N                                                                                |
| Maximum axial force Fa     | 170 N tensile force)<br>30 N force pressure)                                         |
| Service life in hours      | 20000 H bearing                                                                      |
| Marking                    | CE                                                                                   |
| Type of cooling            | Natural convection                                                                   |
| Net weight                 | 7.94 Lb(US) (3.6 kg)                                                                 |

## Environment

|                                                       |                                                                                                                                               |
|-------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| Standards                                             | EN/IEC 61800-3<br>EN 50347<br>EN/IEC 50178<br>IEC 60072-1<br>EN 61800-3:2001, second environment<br>EN 61800-3 : 2001-02<br>IEC 61800-3, Ed 2 |
| Product certifications                                | TÜV<br>CUL<br>UL                                                                                                                              |
| Ambient air temperature for operation                 | 104...131 °F (40...55 °C) with power derating of 2 % per °C)<br>32...104 °F (0...40 °C) without derating)                                     |
| Permissible ambient air temperature around the device | 221 °F (105 °C) power amplifier<br>230 °F (110 °C) motor                                                                                      |
| Ambient air temperature for storage                   | -13...158 °F (-25...70 °C)                                                                                                                    |
| Operating altitude                                    | <= 1000 m without derating                                                                                                                    |
| Relative humidity                                     | 15...85 % without condensation                                                                                                                |
| Vibration resistance                                  | 20 m/s <sup>2</sup> 10...500 Hz) 10 cycles EN/IEC 60068-2-6                                                                                   |
| Shock resistance                                      | 150 m/s <sup>2</sup> 1000 shocks EN/IEC 60068-2-29                                                                                            |
| IP degree of protection                               | Shaft bushing IP41 EN/IEC 60034-5<br>Total except shaft bushing IP54 EN/IEC 60034-5                                                           |

## Ordering and shipping details

|                       |                                     |
|-----------------------|-------------------------------------|
| Category              | 18288 - LEXIUM INTEGRATED DRIVES II |
| Discount Schedule     | PC56                                |
| GTIN                  | 03606485189956                      |
| Nbr. of units in pkg. | 1                                   |
| Package weight(Lbs)   | 9.04 Lb(US) (4.1 kg)                |
| Returnability         | No                                  |
| Country of origin     | DE                                  |

## Packing Units

|                        |                    |
|------------------------|--------------------|
| Unit Type of Package 1 | PCE                |
| Package 1 Height       | 4.09 In (10.4 cm)  |
| Package 1 width        | 7.09 In (18 cm)    |
| Package 1 Length       | 14.37 In (36.5 cm) |

## Offer Sustainability

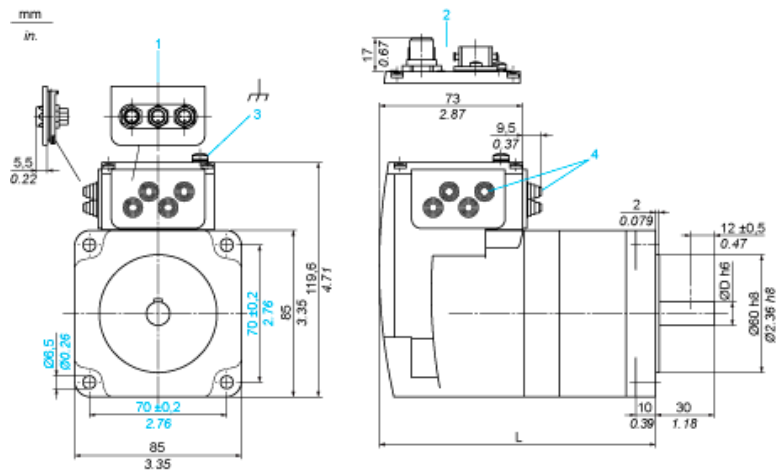
|                            |                                                                                                                                                                                                                                                                                             |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status   | Green Premium product                                                                                                                                                                                                                                                                       |
| California proposition 65  | WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> |
| REACH Regulation           | <a href="#">REACH Declaration</a>                                                                                                                                                                                                                                                           |
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>                                                                                                                                                                                              |
| Mercury free               | Yes                                                                                                                                                                                                                                                                                         |
| RoHS exemption information | <a href="#">Yes</a>                                                                                                                                                                                                                                                                         |
| China RoHS Regulation      | <a href="#">China RoHS Declaration</a>                                                                                                                                                                                                                                                      |
| Environmental Disclosure   | <a href="#">Product Environmental Profile</a>                                                                                                                                                                                                                                               |
| Circularity Profile        | <a href="#">End Of Life Information</a>                                                                                                                                                                                                                                                     |
| WEEE                       | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.                                                                                                                                                                |
| PVC free                   | Yes                                                                                                                                                                                                                                                                                         |

## Contractual warranty

|          |           |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|

Integrated Drive without Holding Brake

Dimensions

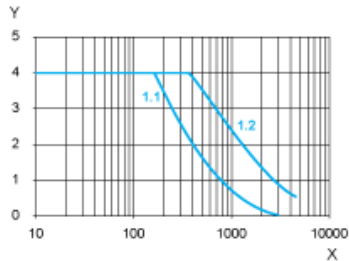


- 1 Accessories: I/O signal insert with industrial connectors
- 2 Option: industrial connectors
- 3 Earth (ground) terminal
- 4 Accessories: cable entries  $\text{Ø} = 3 \dots 9 \text{ mm} / 0.12 \dots 0.35 \text{ in.}$
- L 170.6 mm/6.72 in.
- D 12 mm/0.47 in.

## Connection Example with 4 I/O Signals



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

Product Life Status : Commercialised