

Product data sheet

Characteristics

ILS1W853TB1A0

integrated drive ILS with stepper motor - 24..36V - pulse/direction 5V RS422- 6A



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

Price*: 1150.00 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 | 36 V 24 V |
| Network type | DC |
| Communication interface | Pulse/Direction 5 V RS422, Integrated |
| Length | 7.90 In (200.6 mm) |
| Winding type | High speed of rotation and medium torque |
| Electrical connection | Printed circuit board connector |
| Holding brake | Without |
| Gear box type | Without |
| Nominal speed | 100 rpm 24 V 300 rpm 36 V |
| Nominal torque | 39.83 Lbf.In (4.5 N.m) |
| Holding torque | 39.83 Lbf.In (4.5 N.m) |

Complementary

| | |
|---------------------------------------|------------------|
| Mounting support | Flange |
| Motor flange size | 3.35 In (85 mm) |
| Number of motor stacks | 3 |
| 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 | 0.55 In (14 mm) |
| Shaft length | 1.18 In (30 mm) |
| Supply voltage limits | 18...40 V |
| Current consumption | 6000 mA maximum continuous |
| 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 safety input |
| Discrete output voltage | 23...25 V |
| Maximum switching current | 100 MA per output 200 MA total |
| Protection type | Safe torque off Short circuit of the output voltage Overload of output voltage |
| Peak stall torque | 39.83 Lbf.In (4.5 N.m) |
| Continuous stall torque | 39.83 Lbf.In (4.5 N.m) |
| Speed feedback resolution | 1.8°, 0.9°, 0.72°, 0.36°, 0.18°, 0.09°, 0.072°, 0.036° 200, 400, 500, 1000, 2000, 4000, 5000, 10000 steps |
| Accuracy error | +/- 6 arc min |
| Rotor inertia | 3.3 Kg.Cm ² |
| Maximum mechanical speed | 2000 Rpm |
| Maximum radial force Fr | 110 N |
| Maximum axial force Fa | 170 N tensile force) 30 N force pressure) |
| Service life in hours | 20000 H bearing |
| Marking | CE |
| Type of cooling | Natural convection |
| Net weight | 10.36 Lb(US) (4.7 kg) |

Environment

| | |
|---|---|
| Standards | EN/IEC 50178 EN 61800-3 : 2001-02 EN/IEC 61800-3 EN 61800-3:2001, second environment EN 50347 IEC 61800-3, Ed 2 IEC 60072-1 |
| Product certifications | CUL UL TÜV |
| Ambient air temperature for operation | 122...149 °F (50...65 °C) with power derating of 2 % per °C) 32...122 °F (0...50 °C) without derating) |
| Permissible ambient air temperature around the device | 221 °F (105 °C) power amplifier 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 ² 10...500 Hz) 10 cycles EN/IEC 60068-2-6 |
| Shock resistance | 150 m/s ² 1000 shocks EN/IEC 60068-2-29 |
| IP degree of protection | Shaft bushing IP41 EN/IEC 60034-5 Total except shaft bushing IP54 EN/IEC 60034-5 |

Ordering and shipping details

| | |
|-----------------------|-------------------------------------|
| Category | 18288 - LEXIUM INTEGRATED DRIVES II |
| Discount Schedule | PC56 |
| GTIN | 03389119227902 |
| Nbr. of units in pkg. | 1 |
| Package weight(Lbs) | 11.24 Lb(US) (5.1 kg) |
| Returnability | No |
| Country of origin | DE |

Packing Units

| | |
|------------------------|-------------------|
| Unit Type of Package 1 | PCE |
| Package 1 Height | 4.13 In (10.5 cm) |
| Package 1 width | 7.48 In (19 cm) |
| Package 1 Length | 15.35 In (39 cm) |

Offer Sustainability

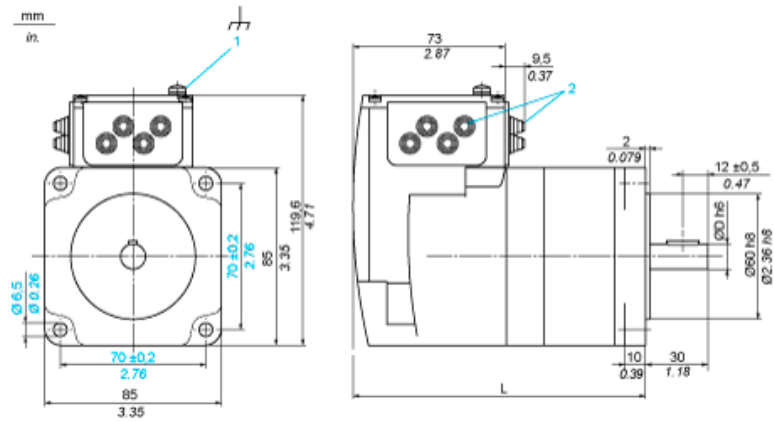
| | |
|----------------------------|---|
| Sustainable offer status | Green Premium product |
| California proposition 65 | WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov |
| REACH Regulation | REACH Declaration |
| EU RoHS Directive | Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration |
| Mercury free | Yes |
| RoHS exemption information | Yes |
| China RoHS Regulation | China RoHS Declaration |
| Environmental Disclosure | Product Environmental Profile |
| Circularity Profile | End Of Life Information |
| 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

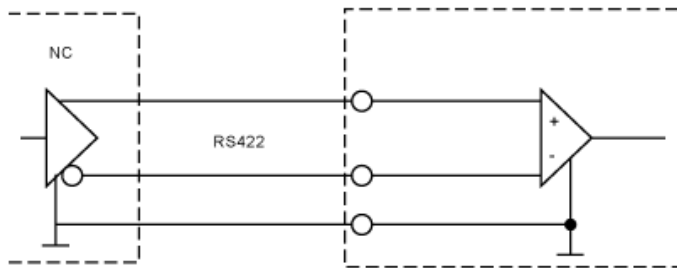
Dimensions



- 1 Earth (ground) terminal
- 2 Accessories: cable entries $\varnothing = 3 \dots 9 \text{ mm} / 0.12 \dots 0.35 \text{ in.}$
- L 200.6 mm / 7.90 in.
- D 14 mm / 0.55 in.

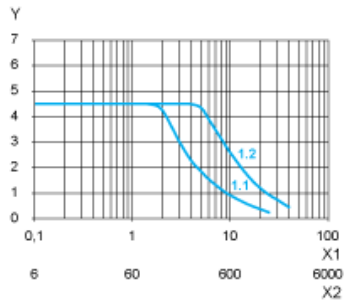
Multifunction Interface

Input Wiring Diagram



The reference pulses are supplied via two of the signal inputs, either as pulse/ direction signals or as A/B signals. The other signal inputs have the functions "power amplifier enable/pulse blocking" and "step size switching/PWM motor current control".

Torque Characteristics



- X1 Frequency in kHz
- X2 Speed of rotation in rpm
- Y Torque in Nm
- 1.1 Max. torque at 24 V
- 1.2 Max. torque at 36 V

Product Life Status : **Commercialised**