



Main

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| 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 |
| Network number of phases | Single phase |
| [Us] rated supply voltage | 48 V 24 V |
| Network type | DC |
| Communication interface | EtherCAT, integrated |
| Length | 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 at 24 V 360 rpm at 48 V |
| Nominal torque | 4 N.m |
| Holding torque | 4 N.m |

Complementary

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| Transmission rate | 100 Mbits |
| Mounting support | Flange |
| Motor flange size | 85 mm |
| Number of motor stacks | 2 |
| Centring collar diameter | 60 mm |
| Centring collar depth | 2 mm |
| Number of mounting holes | 4 |
| Mounting holes diameter | 6.5 mm |
| Circle diameter of the mounting holes | 99 mm |
| Feedback type | Index pulse |
| Shaft end | Untapped |
| Second shaft | Without second shaft end |
| Shaft diameter | 12 mm |
| Shaft length | 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 for safety input 2 mA at 24 V for 24 V signal interface |

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|---------------------------|--|
| Discrete output voltage | 23...25 V |
| Maximum switching current | 100 mA per output 200 mA total |
| Protection type | Short circuit of the output voltage Safe torque off Overload of output voltage |
| Peak stall torque | 4 N.m |
| Continuous stall torque | 4 N.m |
| Speed feedback resolution | 20000 points/turn |
| Accuracy error | +/- 6 arc min |
| Rotor inertia | 2.2 kg.cm ² |
| Maximum mechanical speed | 3000 rpm |
| Maximum radial force Fr | 100 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 | 3.6 kg |


Environment


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| Standards | EN 61800-3 : 2001-02 IEC 61800-3, Ed 2 IEC 50178 IEC 50347 IEC 61800-3 EN 61800-3:2001, second environment IEC 60072-1 |
| Product certifications | cUL[RETURN]TÜV[RETURN]UL |
| Ambient air temperature for operation | 40...55 °C (with power derating of 2 % per °C) 0...40 °C (without derating) |
| Permissible ambient air temperature around the device | 105 °C power amplifier 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/s ² (f= 10...500 Hz) 10 cycles conforming to IEC 60068-2-6 |
| Shock resistance | 150 m/s ² 1000 shocks conforming to IEC 60068-2-29 |
| IP degree of protection | IP41 shaft bushing: conforming to IEC 60034-5 IP54 total except shaft bushing: conforming to IEC 60034-5 |

Packing Units

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|------------------------------|---------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 10.4 cm |
| Package 1 Width | 18.0 cm |
| Package 1 Length | 36.5 cm |
| Package 1 Weight | 4.1 kg |

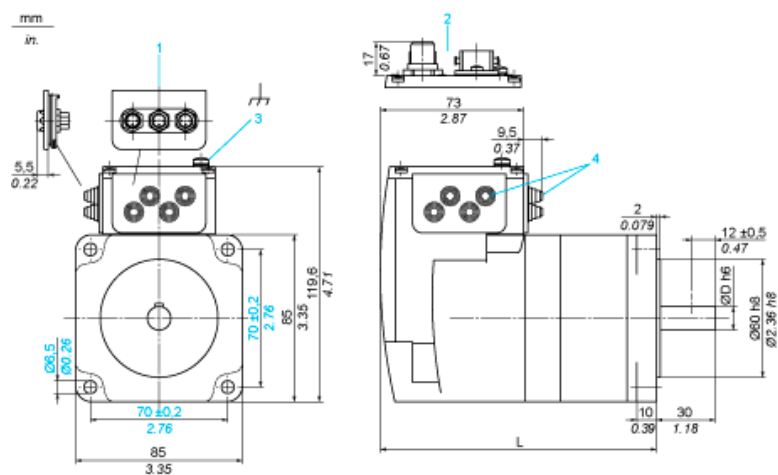
Offer Sustainability

| | |
|----------------------------|---|
| Sustainable offer status | Green Premium product |
| REACH Regulation |  REACH Declaration |
| EU RoHS Directive | Pro-active compliance (Product out of EU RoHS legal scope) |
| Mercury free | Yes |
| China RoHS Regulation |  China RoHS Declaration |
| RoHS exemption information |  Yes |
| 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

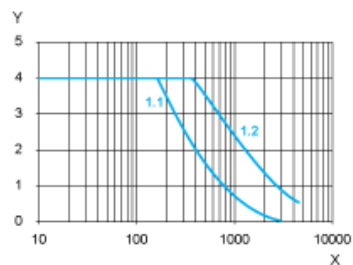


- 1 Accessories: I/O signal insert with industrial connectors
- 2 Option: industrial connectors
- 3 Earth (ground) terminal
- 4 Accessories: cable entries $\varnothing = 3 \dots 9 \text{ mm}/0.12 \dots 0.35 \text{ in.}$
- L 170.6 mm/6.72 in.
- D 12 mm/0.47 in.

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