



## 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  |
| Network number of phases  | Single phase                               |
| [Us] rated supply voltage | 24 V<br>48 V                               |
| Network type              | DC   |
| Communication interface   | Ethernet/IP, integrated                    |
| Length                    | 247.3 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             | 100 rpm at 24 V<br>200 rpm at 48 V         |
| Nominal torque            | 6 N.m                                      |
| Holding torque            | 6 N.M holding brake<br>6 N.m               |

## Complementary

|                                       |  |
|---------------------------------------|--|
| Transmission rate                     | 125, 250, 500 kbauds   |
| Mounting support                      | Flange   |
| Motor flange size                     | 85 mm  |
| Number of motor stacks                | 3  |
| 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                        | 14 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<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         | 6 N.m  |
| Continuous stall torque   | 6 N.m  |
| Speed feedback resolution | 20000 points/turn  |
| Accuracy error            | +/- 6 arc min  |
| Rotor inertia             | 3.5 kg.cm <sup>2</sup>   |
| Maximum mechanical speed  | 2000 rpm   |
| Maximum radial force Fr   | 110 N  |
| Maximum axial force Fa    | 170 N (tensile force)<br>30 N (force pressure)                                       |
| Service life in hours     | 20000 h bearing  |
| Brake pull-in power       | 22 W   |
| Brake release time        | 40 ms  |
| Brake application time    | 20 ms  |
| Marking                   | CE   |
| Type of cooling           | Natural convection   |
| Net weight                | 6.5 kg   |

## Environment




|   |  |
|---|--|
| Standards   | IEC 61800-3<br>IEC 61800-3, Ed 2<br>IEC 60072-1<br>EN 61800-3:2001, second environment<br>IEC 50178<br>EN 61800-3 : 2001-02<br>IEC 50347 |
| Product certifications                                | TÜV[RETURN]cUL[RETURN]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/s <sup>2</sup> (f= 10...500 Hz) 10 cycles conforming to IEC 60068-2-6   |
| Shock resistance                                      | 150 m/s <sup>2</sup> 1000 shocks conforming to IEC 60068-2-29  |
| IP degree of protection                               | IP41 shaft bushing: conforming to IEC 60034-5<br>IP54 total except shaft bushing: conforming to IEC 60034-5                              |

## Packing Units

|                              |         |
|------------------------------|---------|
| 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             | 6.0 kg  |

## Offer Sustainability

|                          |  |
|--------------------------|--|
| Sustainable offer status | Green Premium product  |
| REACH Regulation         |  <a href="#">REACH Declaration</a>      |
| EU RoHS Directive        | Pro-active compliance (Product out of EU RoHS legal scope)   |
| Mercury free             | Yes  |
| China RoHS Regulation    |  <a href="#">China RoHS Declaration</a> |

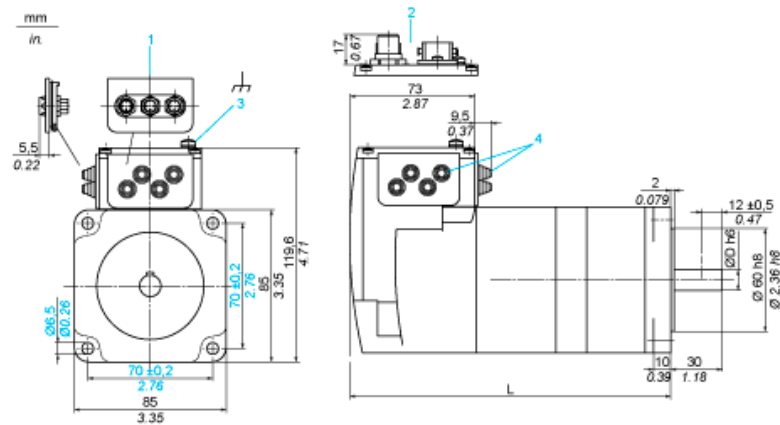
|                            |   |
|----------------------------|---|
| RoHS exemption information |  Yes  |
| Environmental Disclosure   |  <a href="#">Product Environmental Profile</a> |
| Circularity Profile        |  <a href="#">End Of Life Information</a>       |
| WEEE                       | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins     |

### Contractual warranty

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

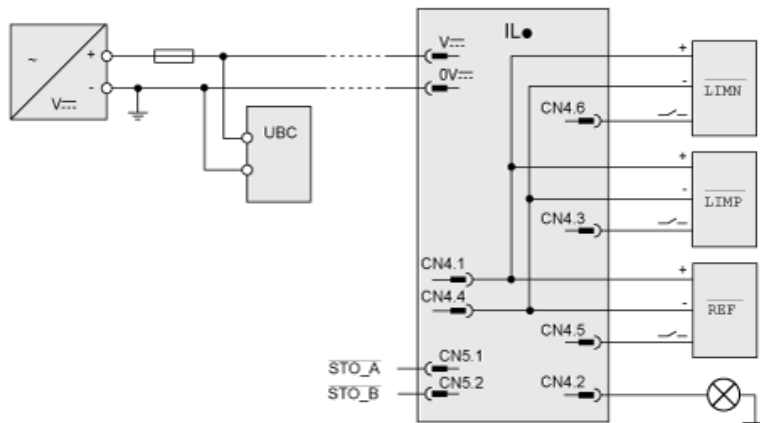
Integrated Drive with Holding Brake

Dimensions



- 1 Accessories: I/O signal insert with industrial connectors
- 2 Option: industrial connectors
- 3 Earth (ground) terminal
- 4 Accessories: cable entries  $\varnothing = 3 \dots 9 \text{ mm}/0.12 \dots 0.35 \text{ in.}$
- L 247.3 mm/9.74 in.
- D 14 mm/0.55 in.

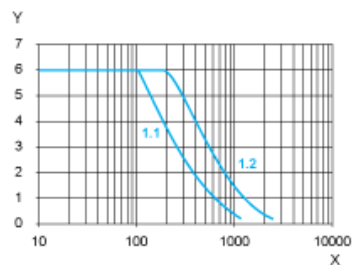
Connection Example with 4 I/O Signals



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## Torque Characteristics

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X Speed of rotation in rpm

Y Torque in Nm

1.1 Max. torque at 24 V

1.2 Max. torque at 48 V