



## 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 | 48 V<br>24 V                             |
| Network type              | DC                                       |
| Communication interface   | Modbus TCP, integrated                   |
| Length                    | 200.6 mm                                 |
| Winding type              | High speed of rotation and medium torque |
| Electrical connection     | Industrial connector                     |
| Holding brake             | Without                                  |
| Gear box type             | Without                                  |
| Nominal speed             | 200 rpm at 24 V<br>400 rpm at 48 V       |
| Nominal torque            | 4.5 N.m                                  |
| Holding torque            | 4.5 N.m                                  |

## Complementary

|                                       |                                                                          |
|---------------------------------------|--------------------------------------------------------------------------|
| Transmission rate                     | 10, 100 Mbits                                                            |
| 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                   | 6000 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         | 4.5 N.m                                                                              |
| Continuous stall torque   | 4.5 N.m                                                                              |
| Speed feedback resolution | 20000 points/turn                                                                    |
| Accuracy error            | +/- 6 arc min                                                                        |
| Rotor inertia             | 3.3 kg.cm <sup>2</sup>                                                               |
| Maximum mechanical speed  | 3000 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                                                                      |
| Marking                   | CE                                                                                   |
| Type of cooling           | Natural convection                                                                   |
| Net weight                | 4.7 kg                                                                               |

## Environment

|                                                       |                                                                                                                                          |
|-------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| Standards                                             | EN 61800-3 : 2001-02<br>IEC 50178<br>IEC 61800-3<br>IEC 60072-1<br>EN 61800-3:2001, second environment<br>IEC 50347<br>IEC 61800-3, Ed 2 |
| Product certifications                                | UL[RETURN]cUL[RETURN]TÜV                                                                                                                 |
| 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             | 5.2 kg  |

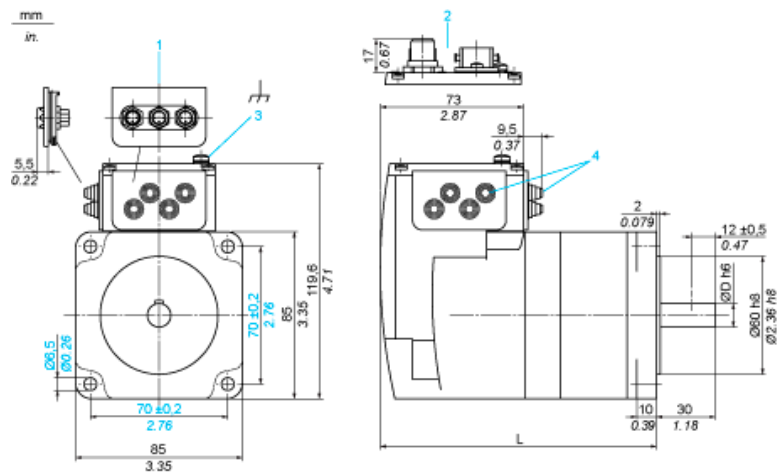
## Offer Sustainability

|                            |                                                                                                                                   |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| 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 |  <a href="#">Yes</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 |
| <b>Contractual warranty</b> |                                                                                                                             |
| Warranty                    | 18 months                                                                                                                   |

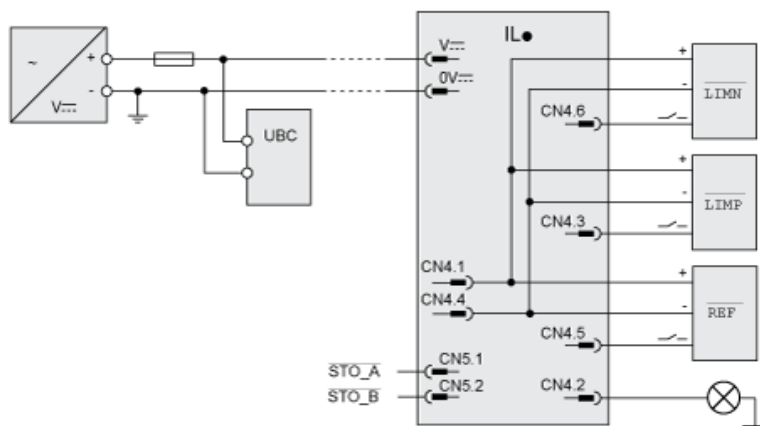
## Integrated Drive without Holding Brake

## 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 200.6 mm/7.90 in.  
D 14 mm/0.55 in.

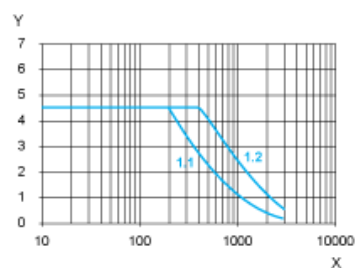
Connection Example with 4 I/O Signals



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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