



### Main

|                           |  |
|---------------------------|--|
| Range of product          | Lexium integrated drive                    |
| Product or component type | Motion integrated drive                    |
| Device short name         | ILE  |
| Motor type                | Brushless dc 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   | Integrated Ethernet Powerlink              |
| Length                    | 174 mm                                     |
| Winding type              | Medium speed of rotation and medium torque |
| Electrical connection     | Industrial connector                       |
| Holding brake             | Without                                    |
| Gear box type             | Straight teeth gear, 4 stages              |
| Reduction ratio           | 115:1 (3675:32)                            |
| Nominal speed             | 35 rpm at 24 V<br>44 rpm at 48 V           |
| Nominal torque            | 12 N.m at 48 V<br>12 N.m at 24 V           |

### Complementary

|                          |           |
|--------------------------|-----------|
| Transmission rate        | 100 Mbits |
| Mounting support         | Flange    |
| Motor flange size        | 66 mm     |
| Number of motor stacks   | 1         |
| Centring collar diameter | 16 mm     |
| Centring collar depth    | 4 mm      |

|                                       |   |
|---------------------------------------|---|
| Number of mounting holes              | 4   |
| Mounting holes diameter               | 4.4 mm  |
| Circle diameter of the mounting holes | 73.54 mm  |
| Feedback type                         | BLDC encoder  |
| Shaft end                             | Keyed   |
| Second shaft                          | Without second shaft end  |
| Shaft diameter                        | 10 mm   |
| Shaft length                          | 25 mm   |
| Key width                             | 16 mm   |
| Supply voltage limits                 | 18...55.2 V   |
| Current consumption                   | 7000 mA (peak)<br>5500 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 on/STO_A for safety input<br><= 3 mA at 24 V on/STO_B 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                       | Overload of output voltage<br>Safe torque off<br>Short circuit of the output voltage  |
| Supply current                        | Supply: 0.1 A, power stage disabled<br>Supply: 3.8 A, 48 V<br>Supply: 6.8 A, 24 V   |
| Nominal output power                  | 54 W at 24 V<br>68 W at 48 V  |
| Peak stall torque                     | 24.72 N.m at 24 V<br>24.72 N.m at 48 V  |
| Continuous stall torque               | 14 N.m  |
| Detent torque                         | 9.19 N.m  |
| Speed feedback resolution             | 12 points/turn (motor)<br>0.26° (gearbox output)  |
| Accuracy error                        | +/- 0.5 point   |
| Torsional backlash                    | <= 1 °  |
| Rotor inertia                         | 1962 kg.cm <sup>2</sup>   |
| Maximum mechanical speed              | 44 rpm  |
| Maximum radial force Fr               | 200 N (long-term operation)<br>200 N (short-term operation)   |
| Maximum axial force Fa                | 10 N (long-term operation)<br>80 N (short-term operation)   |
| Service life in hours                 | 2500 h of bearing : (short-term operation)<br>15000 h of bearing : (long-term operation)  |
| Marking                               | CE  |
| Type of cooling                       | Natural convection  |
| Product weight                        | 1.85 kg   |

## Environment

|           |  |
|-----------|--|
| Standards | EN 50347<br>EN 61800-3:2001, second environment<br>EN 61800-3 : 2001-02<br>EN/IEC 50178<br>EN/IEC 61800-3<br>IEC 60072-1 |
|-----------|--|

|   |   |
|---|---|
| Product certifications                                | CUL<br>TÜV<br>UL  |
| Ambient air temperature for operation                 | 0...40 °C without derating<br>> 40...55 °C with power derating of 2 % per °C                                    |
| 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) for 10 cycles conforming to EN/IEC 60068-2-6                              |
| Shock resistance                                      | 150 m/s <sup>2</sup> for 1000 shocks conforming to EN/IEC 60068-2-29  |
| IP degree of protection                               | IP41 shaft bushing conforming to EN/IEC 60034-5<br>IP54 total except shaft bushing conforming to EN/IEC 60034-5 |

### Offer Sustainability

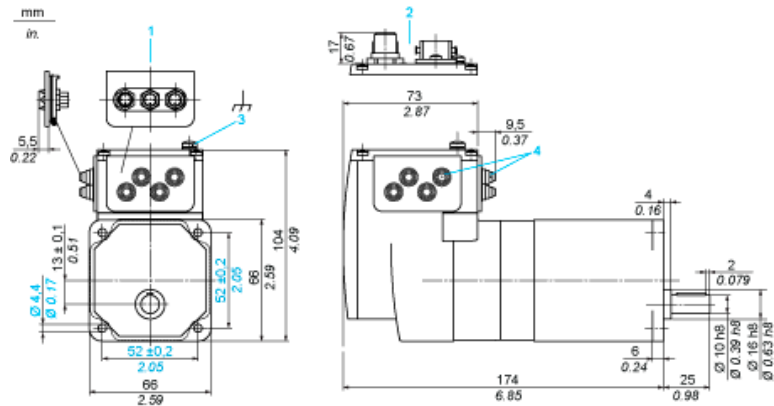
|                                  |   |
|----------------------------------|---|
| Sustainable offer status         | Green Premium product   |
| RoHS (date code: YYWW)           | Compliant - since 0910 - Schneider Electric declaration of conformity<br><a href="#">Schneider Electric declaration of conformity</a> |
| REACH                            | Reference not containing SVHC above the threshold<br><a href="#">Reference not containing SVHC above the threshold</a>                |
| Product environmental profile    | Available<br><a href="#">Product Environmental Profile</a>  |
| Product end of life instructions | Available<br><a href="#">End of Life Information</a>  |

### Contractual warranty

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

Integrated Drive with Straight Teeth Gear

Dimensions

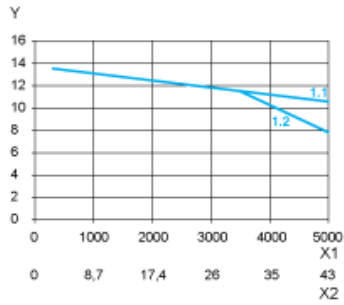


- 1 Accessories: I/O signal insert with industrial connectors
- 2 Option: industrial connectors
- 3 Earth (ground) terminal
- 4 Accessories: cable entries  $\varnothing = 3 \dots 9 \text{ mm} / 0.12 \dots 0.35 \text{ in.}$

## Connection Example with 4 I/O Signals



Torque Characteristics



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