

### 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 EtherCAT                        |
| Length                    | 229 mm                                     |
| Winding type              | Medium speed of rotation and medium torque |
| Electrical connection     | Industrial connector                       |
| Holding brake             | Without                                    |
| Gear box type             | Worm gear, 3 stages                        |
| Reduction ratio           | 54:1 (1715:32)                             |
| Nominal speed             | 75 rpm at 24 V<br>75 rpm at 48 V           |
| Nominal torque            | 6 N.m at 48 V<br>6 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 | 36 mm     |
| Number of mounting holes | 2         |

|                            |                                                                                                                                   |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Mounting holes diameter    | 4.4 mm                                                                                                                            |
| Feedback type              | BLDC encoder                                                                                                                      |
| Shaft end                  | Hole                                                                                                                              |
| Second shaft               | Without second shaft end                                                                                                          |
| 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: 2.7 A, 48 V<br>Supply: 6.8 A, 24 V                                                 |
| Nominal output power       | 45 W at 24 V<br>47 W at 48 V                                                                                                      |
| Peak stall torque          | 13.93 N.m at 48 V<br>13.93 N.m at 24 V                                                                                            |
| Continuous stall torque    | 8 N.m                                                                                                                             |
| Detent torque              | 6.5 N.m                                                                                                                           |
| Speed feedback resolution  | 12 points/turn (motor)<br>0.56° (gearbox output)                                                                                  |
| Accuracy error             | +/- 1 point                                                                                                                       |
| Rotor inertia              | 430 kg.cm <sup>2</sup>                                                                                                            |
| Maximum mechanical speed   | 93 rpm                                                                                                                            |
| Maximum radial force Fr    | 200 N                                                                                                                             |
| Maximum axial force Fa     | 80 N                                                                                                                              |
| Service life in hours      | 6000 h of bearing :                                                                                                               |
| Marking                    | CE                                                                                                                                |
| Type of cooling            | Natural convection                                                                                                                |
| Product weight             | 2.3 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<br>IEC 61800-3, Ed 2 |
| 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

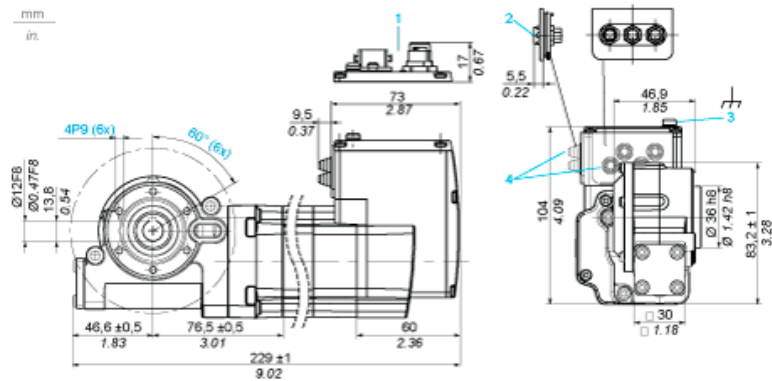
|                                  |                                                                                                                                       |
|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| 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 Worm Gear

Dimensions

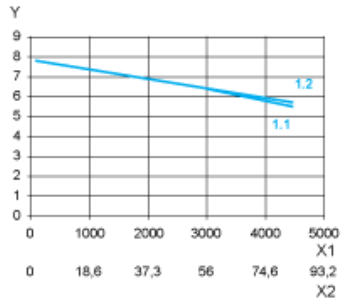


- 1 Option: industrial connectors
- 2 Accessories: I/O signal insert with industrial connectors
- 3 Earth (ground) terminal
- 4 Accessories: cable entries  $\varnothing = 3 \dots 9$  mm /  $0.12 \dots 0.35$  in.

## 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 48 V