



## 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                                                                |
| Phase                     | Single phase                                                     |
| [Us] rated supply voltage | 24 V<br>48 V                                                     |
| Network type              | DC                                                               |
| Communication interface   | Integrated Modbus TCP                                            |
| Length                    | 9.02 in (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           | 92:1 (735:5)                                                     |
| Nominal speed             | 44 rpm at 24 V<br>44 rpm at 48 V                                 |
| Nominal torque            | 81.42 lbf.in (9.2 N.m) at 48 V<br>81.42 lbf.in (9.2 N.m) at 24 V |

## Complementary

|                            |                                                                                                                                   |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Transmission rate          | 10, 100 Mbits                                                                                                                     |
| Mounting support           | Flange                                                                                                                            |
| Motor flange size          | 2.6 in (66 mm)                                                                                                                    |
| Number of motor stacks     | 1                                                                                                                                 |
| Centring collar diameter   | 1.42 in (36 mm)                                                                                                                   |
| Number of mounting holes   | 2                                                                                                                                 |
| Mounting holes diameter    | 0.17 in (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                                              |

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|                           |                                                                                   |
|---------------------------|-----------------------------------------------------------------------------------|
| Supply current            | Supply: 0.1 A, power stage disabled<br>Supply: 2.6 A, 48 V<br>Supply: 6.8 A, 24 V |
| Nominal output power      | 41 W at 24 V<br>42 W at 48 V                                                      |
| Peak stall torque         | 175.04 lbf.in (19.78 N.m) at 24 V<br>175.04 lbf.in (19.78 N.m) at 48 V            |
| Continuous stall torque   | 102.65 lbf.in (11.6 N.m)                                                          |
| Detent torque             | 108.85 lbf.in (12.3 N.m)                                                          |
| Speed feedback resolution | 12 points/turn (motor)<br>0.33° (gearbox output)                                  |
| Accuracy error            | +/- 1 point                                                                       |
| Rotor inertia             | 1270 kg.cm <sup>2</sup>                                                           |
| Maximum mechanical speed  | 54 rpm                                                                            |
| Maximum radial force Fr   | 200 N                                                                             |
| Maximum axial force Fa    | 80 N                                                                              |
| Service life in hours     | 9000 h of bearing:                                                                |
| Marking                   | CE                                                                                |
| Type of cooling           | Natural convection                                                                |
| Product weight            | 5.07 lb(US) (2.3 kg)                                                              |

## Environment

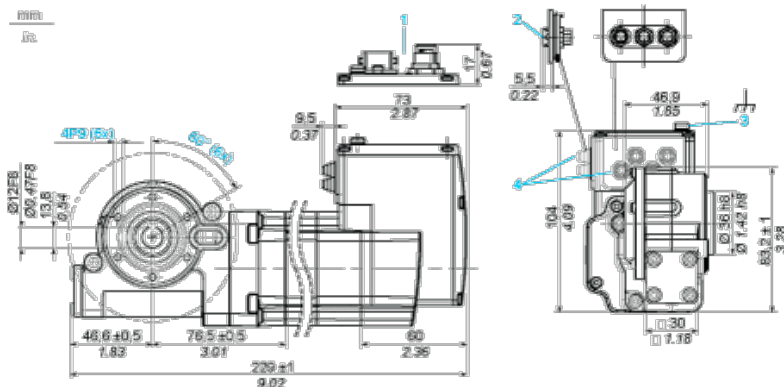
|                                                       |                                                                                                                                               |
|-------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| 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                 | 32...104 °F (0...40 °C) without derating<br>> 104...131 °F (> 40...55 °C) with power derating of 2 % per °C                                   |
| permissible ambient air temperature around the device | 221 °F (105 °C) (power amplifier)<br>230 °F (110 °C) (motor)                                                                                  |
| ambient air temperature for storage                   | -13...158 °F (-25...70 °C)                                                                                                                    |
| operating altitude                                    | <= 3280.84 ft (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> 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

|                                                                       |                                                                       |
|-----------------------------------------------------------------------|-----------------------------------------------------------------------|
| Green Premium product                                                 | Green Premium product                                                 |
| Compliant - since 0910 - Schneider Electric declaration of conformity | Compliant - since 0910 - Schneider Electric declaration of conformity |
| Reference not containing SVHC above the threshold                     | Reference not containing SVHC above the threshold                     |
| Available                                                             | Available                                                             |
| Available                                                             | Available                                                             |

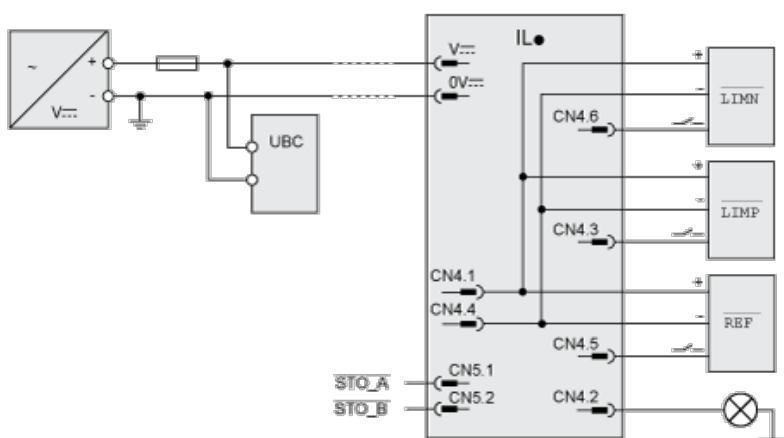
## Integrated Drive with Worm Gear

### Dimensions

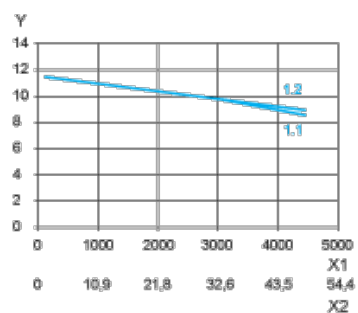


- 1 Option: industrial connectors
- 2 Accessories: I/O signal insert with industrial connectors
- 3 Earth (ground) terminal
- 4 Accessories: cable entries  $\varnothing = 3 \dots 9 \text{ mm} / 0.12 \dots 0.35 \text{ in.}$

## 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 48 V