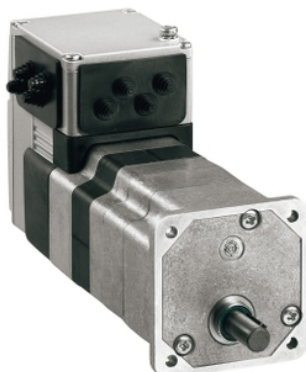


# ILE2E661PB1A0

brushless DC motor, Lexium ILA ILE ILS,  
24..48 V, EtherCAT interface, L = 122mm, w/o  
gearbox



## 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   | EtherCAT, Integrated                                       |
| Length                    | 4.80 in (122 mm)   |
| Winding type              | Medium speed of rotation and medium torque                 |
| Electrical Connection     | Printed circuit board connector                            |
| Holding brake             | Without  |
| Gear box type             | Without  |
| Reduction ratio           | 1:1  |
| Nominal speed             | 4800 rpm 24 V<br>6000 rpm 48 V                             |
| Nominal torque            | 2.30 Lbf.in (0.26 N.m) 24 V<br>2.30 lbf.in (0.26 N.m) 48 V |

## Complementary

|                                       |   |
|---------------------------------------|---|
| Transmission Rate                     | 100 Mbits                                   |
| Mounting Support                      | Flange                                      |
| Motor flange size                     | 2.60 in (66 mm)                             |
| Number of motor stacks                | 1   |
| Centring collar diameter              | 1.57 in (40 mm)                             |
| Centring collar depth                 | 0.08 in (2 mm)                              |
| Number of mounting holes              | 4   |
| Mounting holes diameter               | 0.17 in (4.4 mm)                            |
| Circle diameter of the mounting holes | 2.90 in (73.54 mm)                          |
| Feedback type                         | BLDC encoder                                |
| Shaft end                             | Untapped                                    |
| Second shaft                          | Without second shaft end                    |
| Shaft diameter                        | 0.31 in (8 mm)                              |
| Shaft length                          | 0.98 in (25 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                                   |

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

|                           |   |
|---------------------------|---|
| Discrete input current    | 10 MA at 24 V on/STO_A safety input<br>3 MA at 24 V on/STO_B safety input<br>2 mA at 24 V 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                            |
| Maximum supply current    | 0.1 A power stage disabled)<br>6.8 A 24 V<br>3.8 A 48 V   |
| Nominal output power      | 131 W 24 V<br>163 W 48 V  |
| Peak stall torque         | 3.81 lbf.in (0.43 N.m) 24 V<br>3.81 lbf.in (0.43 N.m) 48 V  |
| Continuous stall torque   | 2.48 lbf.in (0.28 N.m)  |
| Detent torque             | 0.71 lbf.in (0.08 N.m)  |
| Speed feedback resolution | 12 points/turn  |
| Accuracy error            | +/- 0.5 °   |
| Rotor inertia             | 0.17 kg.cm <sup>2</sup>   |
| Maximum mechanical speed  | 6500 Rpm<br>7000 rpm  |
| Maximum radial force Fr   | 80 N  |
| Maximum axial force Fa    | 30 N force pressure)<br>30 N tensile force)   |
| Service life in hours     | 20000 h bearing   |
| Marking                   | CE  |
| Type of cooling           | Natural convection  |
| Net Weight                | 3.09 lb(US) (1.4 kg)  |

## Environment

|   |   |
|---|---|
| Standards   | IEC 61800-3, Ed 2<br>EN/IEC 61800-3<br>IEC 60072-1<br>EN 61800-3 : 2001-02<br>EN 61800-3:2001, second environment<br>EN 50347<br>EN/IEC 50178 |
| Product Certifications                                | TÜV<br>UL<br>cUL  |
| Ambient air temperature for operation                 | 104...131 °F (40...55 °C) with power derating of 2 % per °C)<br>32...104 °F (0...40 °C) without derating)                                     |
| 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> 10...500 Hz) 10 cycles EN/IEC 60068-2-6   |
| Shock resistance                                      | 150 m/s <sup>2</sup> 1000 shocks EN/IEC 60068-2-29  |
| IP degree of protection                               | Shaft bushing IP41 EN/IEC 60034-5<br>Total except shaft bushing IP54 EN/IEC 60034-5   |

## Ordering and shipping details

|                   |                                   |
|-------------------|-----------------------------------|
| Category          | 18288-LEXIUM INTEGRATED DRIVES II |
| Discount Schedule | PC56                              |
| GTIN              | 3606485188799                     |
| Returnability     | No                                |
| Country of origin | DE                                |

## Packing Units

|                              |                          |
|------------------------------|--------------------------|
| Unit Type of Package 1       | PCE                      |
| Number of Units in Package 1 | 1                        |
| Package 1 Height             | 4.13 in (10.5 cm)        |
| Package 1 Width              | 6.69 in (17 cm)          |
| Package 1 Length             | 9.45 in (24 cm)          |
| Package 1 Weight             | 3.68 lb(US) (1.668 kg)   |
| Unit Type of Package 2       | S03                      |
| Number of Units in Package 2 | 4                        |
| Package 2 Height             | 11.81 in (30 cm)         |
| Package 2 Width              | 11.81 in (30 cm)         |
| Package 2 Length             | 15.75 in (40 cm)         |
| Package 2 Weight             | 16.27 lb(US) (7.381 kg)  |
| Unit Type of Package 3       | S04                      |
| Number of Units in Package 3 | 8                        |
| Package 3 Height             | 11.81 in (30 cm)         |
| Package 3 Width              | 15.75 in (40 cm)         |
| Package 3 Length             | 23.62 in (60 cm)         |
| Package 3 Weight             | 32.18 lb(US) (14.596 kg) |

## Offer Sustainability

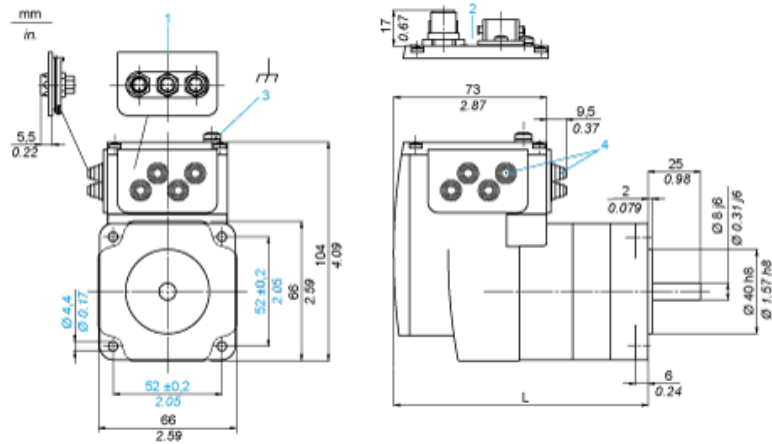
|                            |   |
|----------------------------|---|
| Sustainable offer status   | Green Premium product   |
| California proposition 65  | WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> |
| REACH Regulation           | <a href="#">REACH Declaration</a>   |
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>  |
| 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.  |
| PVC free                   | Yes   |

## Contractual warranty

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

Integrated Drive without Gearing

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 122 mm / 4.80 in.

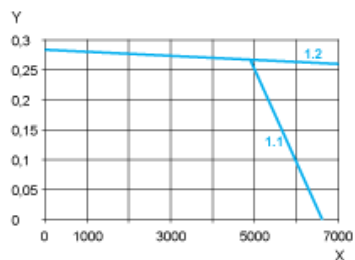
## Connection Example with 4 I/O Signals



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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