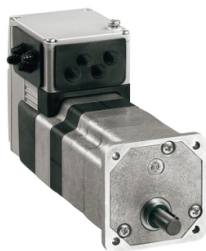


# Product data sheet

Specifications



## brushless dc motor 24..48 V - DeviceNet interface - L = 174 mm - 18:1

ILE2D661PB1A1

⚠ Discontinued - Service only

⚠ Discontinued on: Sep 30, 2023

⚠ To be end-of-service on: Dec 31, 2026

**Product availability: Non-Stock - Not normally stocked in  
distribution facility**

### 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 | 48 V<br>24 V                                             |
| Network type              | DC                                                       |
| Communication interface   | DeviceNet, Integrated                                    |
| Length                    | 6.9 in (174 mm)                                          |
| Winding type              | Medium speed of rotation and medium torque               |
| Electrical Connection     | Printed circuit board connector                          |
| Holding brake             | Without                                                  |
| Gear box type             | Straight teeth gear, 3 stages                            |
| Reduction ratio           | 18:1 (160:9)                                             |
| Nominal speed             | 225 rpm 24 V<br>281 rpm 48 V                             |
| Nominal torque            | 31.0 lbf.in (3.5 N.m) 24 V<br>31.0 lbf.in (3.5 N.m) 48 V |

### Complementary

|                          |                      |
|--------------------------|----------------------|
| Transmission Rate        | 125, 250, 500 kbauds |
| Mounting Support         | Flange               |
| Motor flange size        | 2.6 in (66 mm)       |
| Number of motor stacks   | 1                    |
| Centring collar diameter | 0.6 in (16 mm)       |
| Centring collar depth    | 0.2 in (4 mm)        |
| Number of mounting holes | 4                    |
| Mounting holes diameter  | 0.2 in (4.4 mm)      |

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

Disclaimer: 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

|                                       |                                                                                                                 |
|---------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| Circle diameter of the mounting holes | 2.90 in (73.54 mm)                                                                                              |
| Feedback type                         | BLDC encoder                                                                                                    |
| Shaft end                             | Keyed                                                                                                           |
| Second shaft                          | Without second shaft end                                                                                        |
| Shaft diameter                        | 0.4 in (10 mm)                                                                                                  |
| Shaft length                          | 1.0 in (25 mm)                                                                                                  |
| Key width                             | 0.6 in (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 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                       | Short circuit of the output voltage<br>Safe torque off<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                  | 119 W 48 V<br>95 W 24 V                                                                                         |
| Peak stall torque                     | 54.79 lbf.in (6.19 N.m) 24 V<br>54.79 lbf.in (6.19 N.m) 48 V                                                    |
| Continuous stall torque               | 38.06 lbf.in (4.3 N.m)                                                                                          |
| Detent torque                         | 12.57 lbf.in (1.42 N.m)                                                                                         |
| Speed feedback resolution             | 1.667° gearbox output<br>12 points/turn motor                                                                   |
| Accuracy error                        | +/- 0.5 point                                                                                                   |
| Maximum torsional backlash            | 1 °                                                                                                             |
| Rotor inertia                         | 48 kg.cm²                                                                                                       |
| Maximum mechanical speed              | 281 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 bearing short-term operation<br>15000 h bearing long-term operation                                      |
| Marking                               | CE                                                                                                              |
| Type of cooling                       | Natural convection                                                                                              |

|            |                       |
|------------|-----------------------|
| Net Weight | 4.08 lb(US) (1.85 kg) |
|------------|-----------------------|

## Environment

|                                                       |                                                                                                                                               |
|-------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| Standards                                             | IEC 61800-3, Ed 2<br>EN 61800-3:2001, second environment<br>EN/IEC 61800-3<br>EN 50347<br>EN 61800-3 : 2001-02<br>EN/IEC 50178<br>IEC 60072-1 |
| Product Certifications                                | cUL<br>UL<br>TÜV                                                                                                                              |
| 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/s² 10...500 Hz) 10 cycles EN/IEC 60068-2-6                                                                                               |
| Shock resistance                                      | 150 m/s² 1000 shocks 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                             |

## Ordering and shipping details

|                   |               |
|-------------------|---------------|
| Category          | US1PC5618288  |
| Discount Schedule | PC56          |
| GTIN              | 3389119222679 |
| Returnability     | No            |

## Packing Units

|                        |                       |
|------------------------|-----------------------|
| Unit Type of Package 1 | PCE                   |
| Nbr. of units in pkg.  | 1                     |
| Package 1 Height       | 3.1 in (8.0 cm)       |
| Package 1 Width        | 7.3 in (18.5 cm)      |
| Package 1 Length       | 14.0 in (35.5 cm)     |
| Package weight(Lbs)    | 4.96 lb(US) (2.25 kg) |

## Contractual warranty

|                      |    |
|----------------------|----|
| Warranty (in months) | 18 |
|----------------------|----|



## Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)



### Environmental footprint

[Environmental Disclosure](#)

[Product Environmental Profile](#)

## Use Better



### Materials and Substances

[EU RoHS Directive](#)

Pro-active compliance (Product out of EU RoHS legal scope)

SCIP Number

C2ce416c-ac1e-4e66-863f-bde9b6d94d11

REACH Regulation

[REACH Declaration](#)

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 [www.P65Warnings.ca.gov](#)

PVC free

Yes

## Use Longer



### Lifetime extension

Repair

No

## Use Again



### Repack and remanufacture

[Circularity Profile](#)

[End of Life Information](#)

WEEE Label

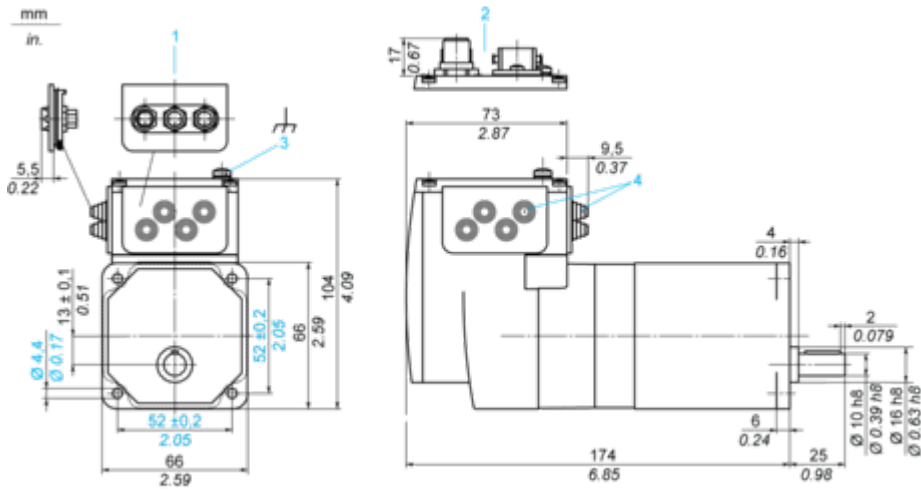


The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

## Dimensions

### Integrated Drive with Straight Teeth Gear

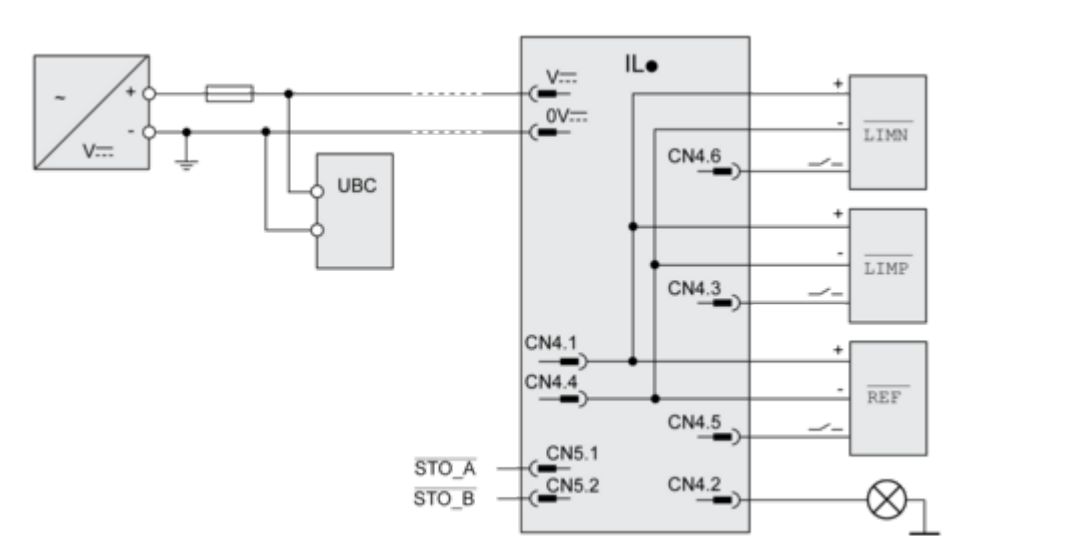
## Dimensions



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

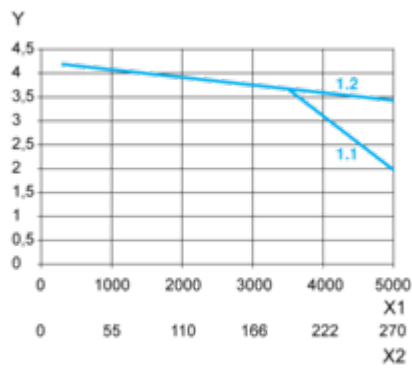
Wiring

Connection Example with 4 I/O Signals



PerformanceCurves

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