Product data sheet

Specification





brushless DC motor, Lexium ILA ILE ILS, 24 to 48V, EtherNet IP interface, industrial connector, 174mm, straight teeth gear, 54:1

ILE2K661PC1A3

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

Price*: 1,740.00 USD

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 48 V |
| Network Type | DC |
| Communication Interface | Ethernet/IP, Integrated |
| Length | 6.85 in (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 | 54:1 (490:9) |
| Nominal Speed | 73 rpm 24 V 92 rpm 48 V |
| Nominal Torque | 88.51 lbf.in (10 N.m) 24 V 88.51 lbf.in (10 N.m) 48 V |

Complementary

| Transmission Rate | 125, 250, 500 kbauds |
|--------------------------|----------------------|
| Mounting Support | Flange |
| Motor Flange Size | 2.60 in (66 mm) |
| Number Of Motor Stacks | 1 |
| Centring Collar Diameter | 0.63 in (16 mm) |
| Centring Collar Depth | 0.16 in (4 mm) |
| Number Of Mounting Holes | 4 |
| Mounting Holes Diameter | 0.17 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.

| 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 | 0.39 in (10 mm) |
| Shaft Length | 0.98 in (25 mm) |
| Key Width | 0.63 in (16 mm) |
| Supply Voltage Limits | 1855.2 V |
| Current Consumption | 7000 mA peak 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 | -34.5 V |
| Voltage State 1 Guaranteed | 1530 V |
| Discrete Input Current | 10 mA at 24 V on/STO_A safety input 3 mA at 24 V on/STO_B safety input 2 mA at 24 V 24 V signal interface |
| Discrete Output Voltage | 2325 V |
| Maximum Switching Current | 100 mA per output 200 mA total |
| Protection Type | Overload of output voltage Short circuit of the output voltage Safe torque off |
| Maximum Supply Current | 0.1 A power stage disabled) 6.8 A 24 V 3.8 A 48 V |
| Nominal Output Power | 112 W 48 V 90 W 24 V |
| Peak Stall Torque | 184.98 lbf.in (20.9 N.m) 24 V 184.98 lbf.in (20.9 N.m) 48 V |
| Continuous Stall Torque | 102.67 lbf.in (11.6 N.m) |
| Detent Torque | 38.59 lbf.in (4.36 N.m) |
| Speed Feedback Resolution | 12 points/turn motor 0.55° gearbox output |
| Accuracy Error | +/- 0.5 point |
| Maximum Torsional Backlash | 1° |
| Rotor Inertia | 441 kg.cm² |
| Maximum Mechanical Speed | 92 rpm |
| Maximum Radial Force Fr | 200 N long-term operation) 200 N short-term operation) |
| Maximum Axial Force Fa | 10 N long-term operation) 80 N short-term operation) |
| Service Life In Hours | 2500 h bearing short-term operation 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 IEC 50347 EN 61800-3:2001, second environment IEC 60072-1 IEC 61800-3 IEC 50178 EN 61800-3:2001-02 |
|--|--|
| Product Certifications | cUL TÜV UL |
| Ambient Air Temperature For Operation | 104131 °F (4055 °C) with power derating of 2 % per °C) 32104 °F (040 °C) without derating) |
| Permissible Ambient Air Temperature Around The Device | 221 °F (105 °C) power amplifier 230 °F (110 °C) motor |
| Ambient Air Temperature For Storage | -13158 °F (-2570 °C) |
| Operating Altitude | <= 3280.84 ft (1000 m) without derating |
| Relative Humidity | 1585 % without condensation |
| Vibration Resistance | 20 m/s² 10500 Hz) 10 cycles IEC 60068-2-6 |
| Shock Resistance | 150 m/s² 1000 shocks IEC 60068-2-29 |
| Ip Degree Of Protection | IP41 shaft bushing: conforming to IEC 60034-5 IP54 total except shaft bushing: conforming to IEC 60034-5 |

Ordering and shipping details

| Category | US1PC5618288 |
|-------------------|---------------|
| Discount Schedule | PC56 |
| Gtin | 3606485204796 |
| Returnability | Yes |
| Country Of Origin | US |

Packing Units

| Unit Type Of Package 1 | PCE |
|------------------------------|-----------------------|
| Number Of Units In Package 1 | 1 |
| Package 1 Height | 3.15 in (8.0 cm) |
| Package 1 Width | 7.28 in (18.5 cm) |
| Package 1 Length | 14.37 in (36.5 cm) |
| Package 1 Weight | 4.74 lb(US) (2.15 kg) |

Contractual warranty

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

Sustainability Green Premium"

Green PremiumTM **label** is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO₂ products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >





Transparency RoHS/REACh

Well-being performance

| Ø | Mercury Free | |
|----------|----------------------------|-----|
| | Rohs Exemption Information | Yes |
| ② | Pvc Free | |

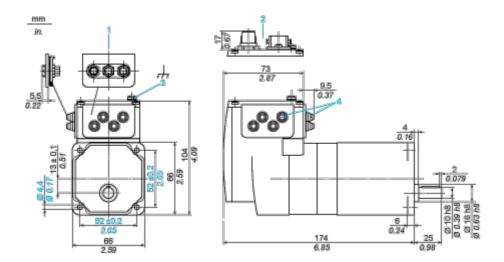
Certifications & Standards

| Reach Regulation | REACh Declaration |
|---------------------------|---|
| Eu Rohs Directive | Pro-active compliance (Product out of EU RoHS legal scope) |
| China Rohs Regulation | China RoHS declaration |
| Environmental Disclosure | Product Environmental Profile |
| Weee | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins. |
| Circularity Profile | End of Life Information |
| 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 |
| | |

Dimensions Drawings

Integrated Drive with Straight Teeth Gear

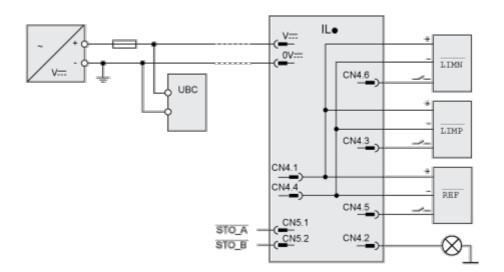
Dimensions



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

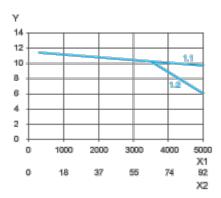
Connections and Schema

Connection Example with 4 I/O Signals



Performance Curves

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