# Product data sheet

Specifications





# brushless DC motor, Lexium ILA ILE ILS, 24 to 48V, EtherCAT interface, 122mm, without gearbox

ILE2E661PB1A0

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

### Price\*: 1,140.00 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	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 6000 rpm 48 V	
Nominal Torque	2.30 lbf.in (0.26 N.m) 24 V 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)

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

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	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	Safe torque off Short circuit of the output voltage Overload of output voltage	
Maximum Supply Current	0.1 A power stage disabled) 6.8 A 24 V 3.8 A 48 V	
Nominal Output Power	131 W 24 V 163 W 48 V	
Peak Stall Torque	3.81 lbf.in (0.43 N.m) 24 V 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 7000 rpm	
Maximum Radial Force Fr	80 N	
Maximum Axial Force Fa	30 N force pressure) 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 IEC 61800-3 IEC 60072-1 EN 61800-3 : 2001-02 EN 61800-3:2001, second environment IEC 50347 IEC 50178
Product Certifications	TÜV UL cUL
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	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)

## **Contractual warranty**

Warranty

18 months

# Sustainability Screen Premium

**Green Premium<sup>TM</sup> 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-CO<sub>2</sub> 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

Mercury Free
Rohs Exemption Information Yes
Pvc Free

### **Certifications & Standards**

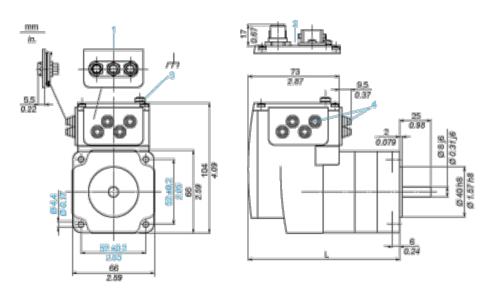
Reach Regulation	REACh Declaration
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)
China Rohs Regulation	China RoHS declaration
Environmental Disclosure	Product Environmental Profile
Weee	The product must be disposed on European Union markets following specific waste collection 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

## Product data sheet

#### **Dimensions Drawings**

#### Integrated Drive without Gearing

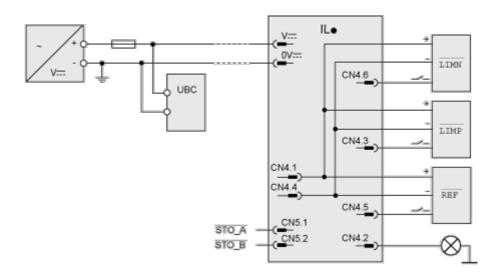
#### Dimensions



- 1 Accessories: I/O signal insert with industrial connectors
- 2 Option: industrial connectors
- 3 Earth (ground) terminal
- 4 Accessories: cable entries  $\emptyset = 3 \dots 9 \text{ mm/0.12} \dots 0.35 \text{ in.}$
- L 122 mm/4.80 in.

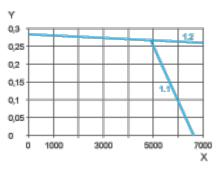
Connections and Schema

### Connection Example with 4 I/O Signals



#### Performance Curves

#### Torque Characteristics



- X Speed of rotation in rpm
- Y Torque in Nm
- 1.1 Max. torque at 24 V
- 1.2 Max. torque at 48 V