

# Product data sheet

Specifications



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

## 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	6.9 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	88.5 lbf.in (10 N.m) 24 V 88.5 lbf.in (10 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)
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.

<b>Feedback type</b>	BLDC encoder
<b>Shaft end</b>	Keyed
<b>Second shaft</b>	Without second shaft end
<b>Shaft diameter</b>	0.4 in (10 mm)
<b>Shaft length</b>	1.0 in (25 mm)
<b>key width</b>	0.6 in (16 mm)
<b>Supply voltage limits</b>	18...55.2 V
<b>Current consumption</b>	7000 mA peak 5500 mA maximum continuous
<b>Associated fuse rating</b>	16 A
<b>Commissioning interface</b>	RS485 Modbus TCP 9.6, 19.2 and 38.4 kbauds)
<b>Input/output type</b>	4 signals (each be used as input or output)
<b>Voltage state 0 guaranteed</b>	-3...4.5 V
<b>Voltage state 1 guaranteed</b>	15...30 V
<b>Discrete input current</b>	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
<b>Discrete output voltage</b>	23...25 V
<b>Maximum switching current</b>	100 mA per output 200 mA total
<b>Protection Type</b>	Overload of output voltage Short circuit of the output voltage Safe torque off
<b>Maximum supply current</b>	0.1 A power stage disabled) 6.8 A 24 V 3.8 A 48 V
<b>Nominal output power</b>	112 W 48 V 90 W 24 V
<b>Peak stall torque</b>	185.0 lbf.in (20.9 N.m) 24 V 185.0 lbf.in (20.9 N.m) 48 V
<b>Continuous stall torque</b>	102.7 lbf.in (11.6 N.m)
<b>Detent torque</b>	38.59 lbf.in (4.36 N.m)
<b>Speed feedback resolution</b>	12 points/turn motor 0.55° gearbox output
<b>Accuracy error</b>	+/- 0.5 point
<b>Maximum torsional backlash</b>	1 °
<b>Rotor inertia</b>	441 kg.cm <sup>2</sup>
<b>Maximum mechanical speed</b>	92 rpm
<b>Maximum radial force Fr</b>	200 N long-term operation) 200 N short-term operation)
<b>Maximum axial force Fa</b>	10 N long-term operation) 80 N short-term operation)
<b>Service life in hours</b>	2500 h bearing short-term operation 15000 h bearing long-term operation
<b>Marking</b>	CE
<b>type of cooling</b>	Natural convection
<b>Net Weight</b>	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	104...131 °F (40...55 °C) (with power derating of 2 % per °C) 32...104 °F (0...40 °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	-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 IEC 60068-2-6
Shock resistance	150 m/s <sup>2</sup> 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	No
Country of origin	DE

## Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	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 weight(Lbs)	4.74 lb(US) (2.15 kg)

## Contractual warranty

Warranty	18 months
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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

Carbon footprint (kg CO2 eq, Total Life cycle)	1043
Environmental Disclosure	<a href="#">Product Environmental Profile</a>

## Use Better

### Materials and Substances

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No
<a href="#">EU RoHS Directive</a>	Pro-active compliance (Product out of EU RoHS legal scope)
SCIP Number	C2ce416c-ac1e-4e66-863f-bde9b6d94d11
REACH Regulation	<a href="#">REACH Declaration</a>
California proposition 65	<b>WARNING:</b> 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="#">www.P65Warnings.ca.gov</a>
PVC free	Yes

## Use Again

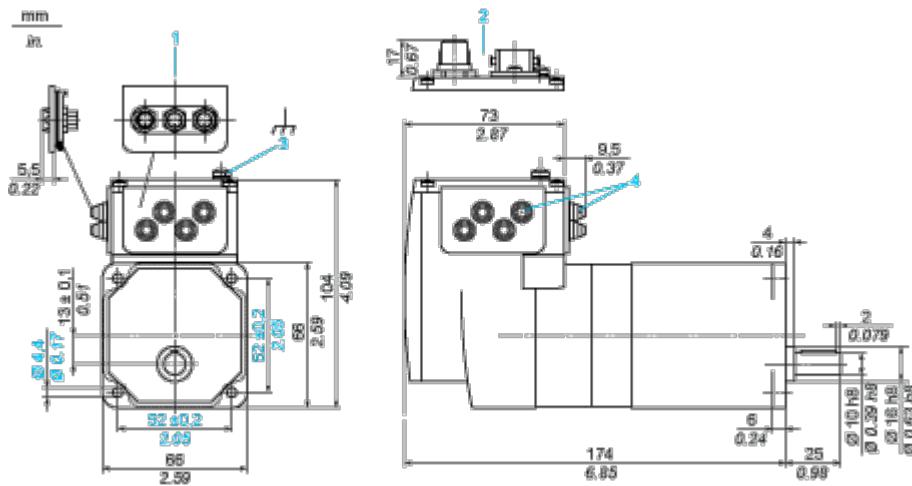
### Repack and remanufacture

Circularity Profile	<a href="#">End of Life Information</a>
Take-back	No
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

## Dimensions Drawings

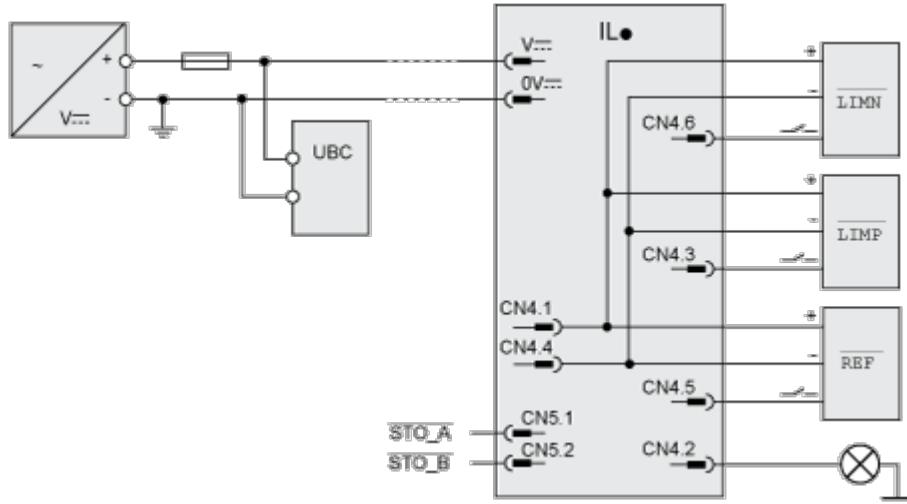
Integrated Drive with Straight Teeth Gear

## Dimensions

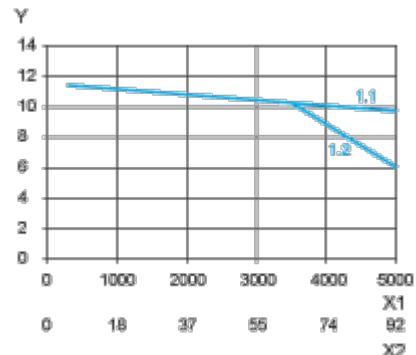


- 1 Accessories: I/O signal insert with industrial connectors
- 2 Option: industrial connectors
- 3 Earth (ground) terminal
- 4 Accessories: cable entries Ø = 3 ... 9 mm/0.12 ... 0.35 in.

## 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