

Product data sheet

Specifications



brushless DC motor, Lexium ILE ILS, 24 to 48V, EtherNet IP interface, industrial connector, 174mm, 115:1

ILE2K661PC1A8

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
Network number of phases	Single phase
[Us] rated supply voltage	48 V 24 V
Network type	DC
Communication interface	Ethernet/IP, integrated
Length	229 mm
Winding type	Medium speed of rotation and medium torque
Electrical connection	Industrial connector
Holding brake	Without
Gear box type	Worm gear, 3 stages
Reduction ratio	115:1 (3675:32)
Nominal speed	35 rpm at 24 V 35 rpm at 48 V
Nominal torque	10.6 N.m at 24 V 10.6 N.m at 48 V

Complementary

Transmission rate	125, 250, 500 kbauds
Mounting support	Flange
Motor flange size	66 mm
Number of motor stacks	1
Centring collar diameter	36 mm
Number of mounting holes	2
Mounting holes diameter	4.4 mm
Feedback type	BLDC encoder
Shaft end	Hole
Second shaft	Without second shaft end
Supply voltage limits	18...55.2 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	-3...4.5 V
Voltage state 1 guaranteed	15...30 V
Discrete input current	10 mA at 24 V on/STO_A for safety input 3 mA at 24 V on/STO_B for safety input 2 mA at 24 V for 24 V signal interface
Discrete output voltage	23...25 V
Maximum switching current	100 mA per output 200 mA total
Protection type	Overload of output voltage Safe torque off Short circuit of the output voltage
Maximum supply current	0.1 A (power stage disabled) 6.8 A at 24 V 2.9 A at 48 V
Nominal output power	37 W at 24 V 39 W at 48 V
Peak stall torque	24.72 N.m at 24 V 24.72 N.m at 48 V
Continuous stall torque	14 N.m
Detent torque	16.7 N.m
Speed feedback resolution	12 points/turn motor 0.26° gearbox output
Accuracy error	+/- 1 point
Rotor inertia	1980 kg.cm ²
Maximum mechanical speed	44 rpm
Maximum radial force Fr	200 N
Maximum axial force Fa	80 N
Service life in hours	9000 h bearing
Marking	CE
Type of cooling	Natural convection
Net weight	2.3 kg

Environment

Standards	IEC 50178 EN 61800-3:2001, second environment IEC 60072-1 EN 61800-3 : 2001-02 IEC 50347 IEC 61800-3 IEC 61800-3, Ed 2
Product certifications	TÜV UL cUL
Ambient air temperature for operation	40...55 °C (with power derating of 2 % per °C) 0...40 °C (without derating)

Permissible ambient air temperature around the device	105 °C power amplifier 110 °C motor
Ambient air temperature for storage	-25...70 °C
Operating altitude	<= 1000 m without derating
Relative humidity	15...85 % without condensation
Vibration resistance	20 m/s ² (f= 10...500 Hz) 10 cycles conforming to IEC 60068-2-6
Shock resistance	150 m/s ² 1000 shocks conforming to 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

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	11.0 cm
Package 1 Width	19.0 cm
Package 1 Length	39.5 cm
Package 1 Weight	2.646 kg

Contractual warranty

Warranty	18 months
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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

Total lifecycle Carbon footprint 420

Environmental Disclosure [Product Environmental Profile](#)

Use Better

Materials and Substances

Packaging made with recycled cardboard Yes

Packaging without single use plastic No

[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 Again

Repack and remanufacture

End of life manual availability [End of Life Information](#)

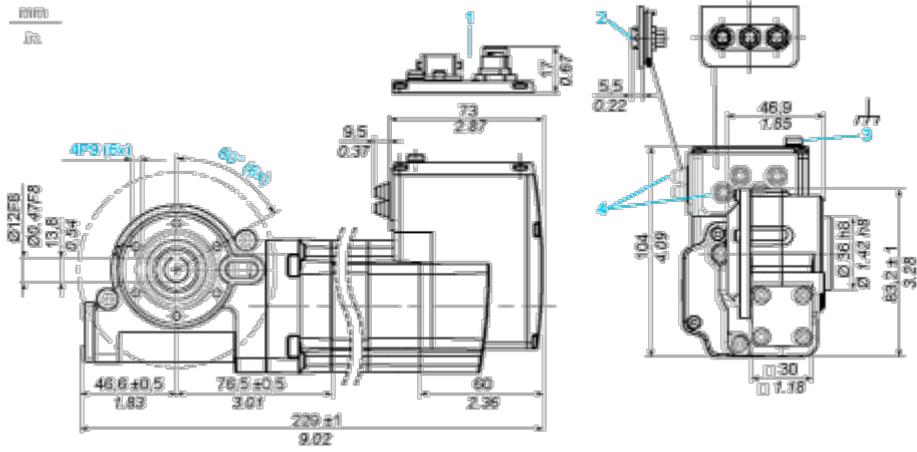
Take-back No

WEEE Label  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 Worm Gear

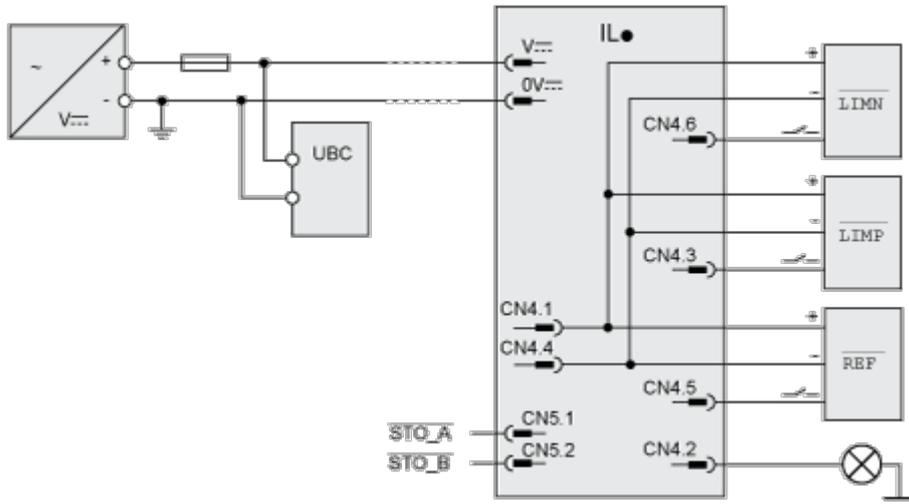
Dimensions



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

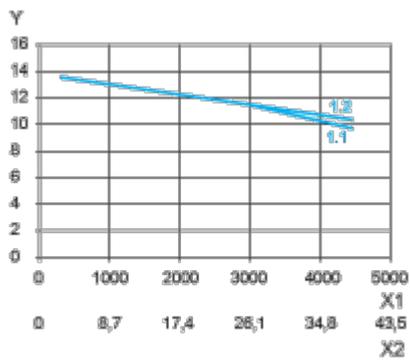
Connections and Schema

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 48 V