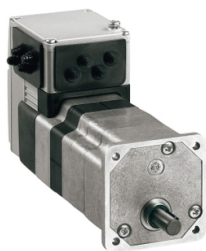


Product datasheet

Specifications



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

ILE2E661PC1A1

⚠ Discontinued on: 23 Jan 2021

⚠ Discontinued

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	24 V 48 V
Network type	DC
Communication interface	EtherCAT, integrated
Length	174 mm
Winding type	Medium speed of rotation and medium torque
Electrical connection	Industrial connector
Holding brake	Without
Gear box type	Straight teeth gear, 3 stages
Reduction ratio	18:1 (160:9)
Nominal speed	225 rpm at 24 V 281 rpm at 48 V
Nominal torque	3.5 N.m at 24 V 3.5 N.m at 48 V

Complementary

Transmission rate	100 Mbits
Mounting support	Flange
Motor flange size	66 mm
Number of motor stacks	1
Centring collar diameter	16 mm
Centring collar depth	4 mm
Number of mounting holes	4
Mounting holes diameter	4.4 mm
Circle diameter of the mounting holes	73.54 mm
Feedback type	BLDC encoder

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

Shaft end	Keyed
Second shaft	Without second shaft end
Shaft diameter	10 mm
Shaft length	25 mm
Key width	16 mm
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	Short circuit of the output voltage Safe torque off Overload of output voltage
Maximum supply current	0.1 A (power stage disabled) 6.8 A at 24 V 3.8 A at 48 V
Nominal output power	119 W at 48 V 95 W at 24 V
Peak stall torque	6.19 N.m at 24 V 6.19 N.m at 48 V
Continuous stall torque	4.3 N.m
Detent torque	1.42 N.m
Speed feedback resolution	1.667° gearbox output 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) 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	1.85 kg

Environment

Standards	EN/IEC 61800-3 EN 50347 IEC 61800-3, Ed 2 EN 61800-3 : 2001-02 EN 61800-3:2001, second environment EN/IEC 50178 IEC 60072-1
Product certifications	cUL TÜV UL
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/s² (f= 10...500 Hz) 10 cycles conforming to EN/IEC 60068-2-6
Shock resistance	150 m/s² 1000 shocks conforming to EN/IEC 60068-2-29
IP degree of protection	IP41 shaft bushing: conforming to EN/IEC 60034-5 IP54 total except shaft bushing: conforming to EN/IEC 60034-5

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	8 cm
Package 1 Width	18.5 cm
Package 1 Length	35.5 cm
Package 1 Weight	2.3 kg

Contractual warranty

Warranty (in months)	18
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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

Environmental Disclosure

[Product Environmental Profile](#)

Use Better



Materials and Substances

SCIP Number

C2ce416c-ac1e-4e66-863f-bde9b6d94d11

EU RoHS Directive

[Compliant By Exemption](#)

PVC free

Yes

Use Longer



Lifetime extension

Repair

No

Use Again



Repack and remanufacture

End of life manual availability

[End of Life Information](#)

WEEE Label

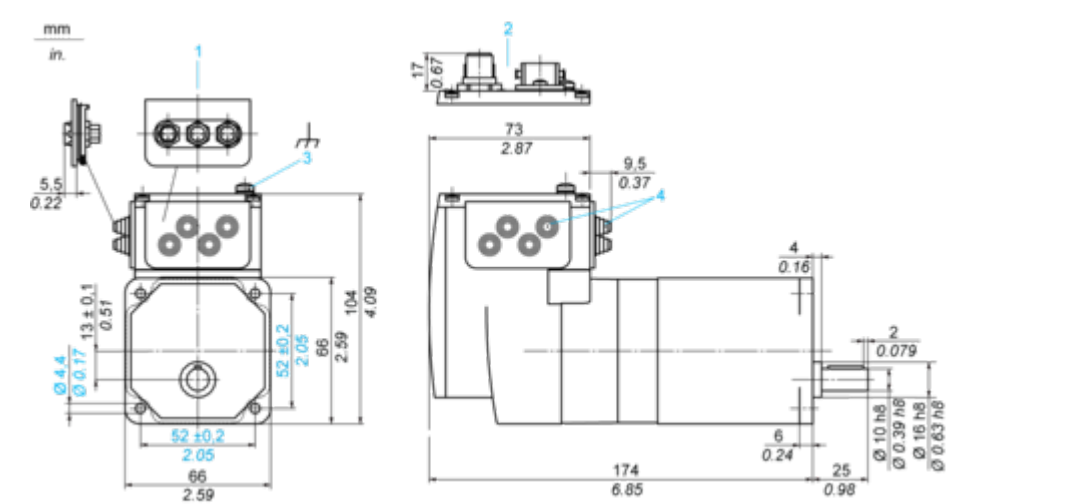


The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

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 Ø 3 ... 9 mm/0.12 ... 0.35 in.

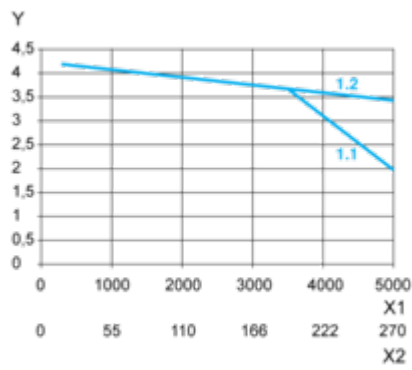
Wiring

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