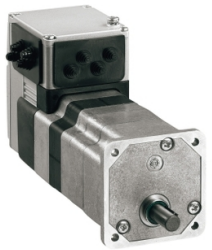
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Product datasheet

Specifications



brushless dc motor 24..36 V - CANopen DS301 interface - L = 174 mm - 54:1

ILE1F661PC1A3

EAN Code: 3389119222426

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 36 V
Network type	DC
Communication interface	CANopen DS301, 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, 4 stages
Reduction ratio	54:1 (490:9)
Nominal speed	73 rpm at 24 V 88 rpm at 36 V
Nominal torque	10 N.m at 36 V 9.5 N.m at 24 V

Complementary

Transmission rate	50, 100, 125, 250, 500, 800 and 1000 kbauds
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

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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…40 V
Current consumption	7000 mA peak 5500 mA maximum continuous
Associated fuse rating	10 A
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	Safe torque off Short circuit of the output voltage Overload of output voltage
Maximum supply current	0.06 A at 36 V (power stage disabled) 0.1 A at 24 V (power stage disabled) 3.5 A at 36 V 4.3 A at 24 V
Nominal output power	73 W at 24 V 88 W at 36 V
Peak stall torque	12.64 N.m at 24 V 17.5 N.m at 36 V
Continuous stall torque	11.5 N.m
Detent torque	3.3 N.m
Speed feedback resolution	12 points/turn motor 0.55° gearbox output
Accuracy error	+/- 1 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	1.85 kg

Environment

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Standards	IEC 50178 IEC 50347 IEC 61800-3, Ed 2 IEC 61800-3 IEC 60072-1 EN 61800-3:2001, second environment EN 61800-3 : 2001-02
Product certifications	cUL TÜV UL
Ambient air temperature for operation	50…65 °C (with power derating of 2 % per °C) 0…50 °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 IEC 60068-2-6
Shock resistance	150 m/s² 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	11.700 cm
Package 1 Width	19.200 cm
Package 1 Length	39.700 cm
Package 1 Weight	2.280 kg

Logistical informations

Country of origin	DE

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

Carbon footprint (kg.eq.CO2 per CR, Total Life cycle)	838
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
PVC free	Yes

Use Again

Repack and remanufacture

Circularity Profile	End of Life Information
Take-back	No
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

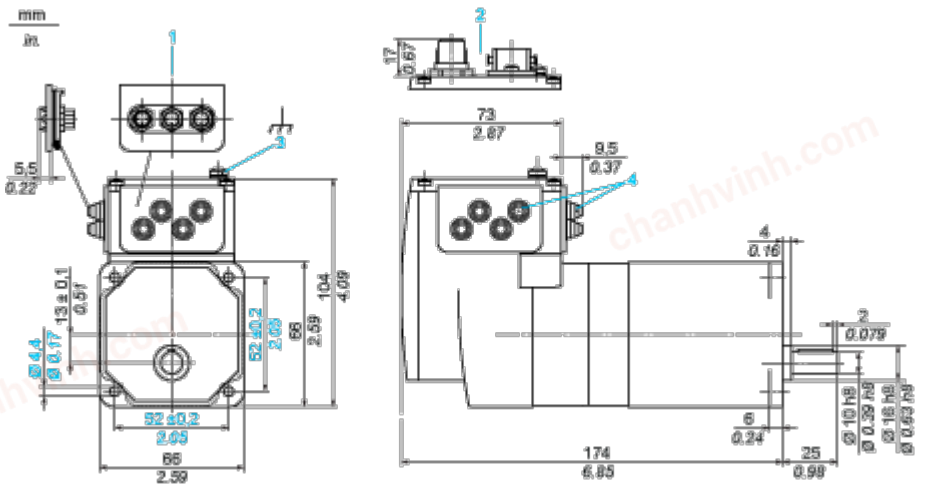
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Dimensions Drawings

Integrated Drive with Straight Teeth Gear

Dimensions



1 Accessories: I/O signal insert with industrial connectors

2 Option: industrial connectors

3 Earth (ground) terminal

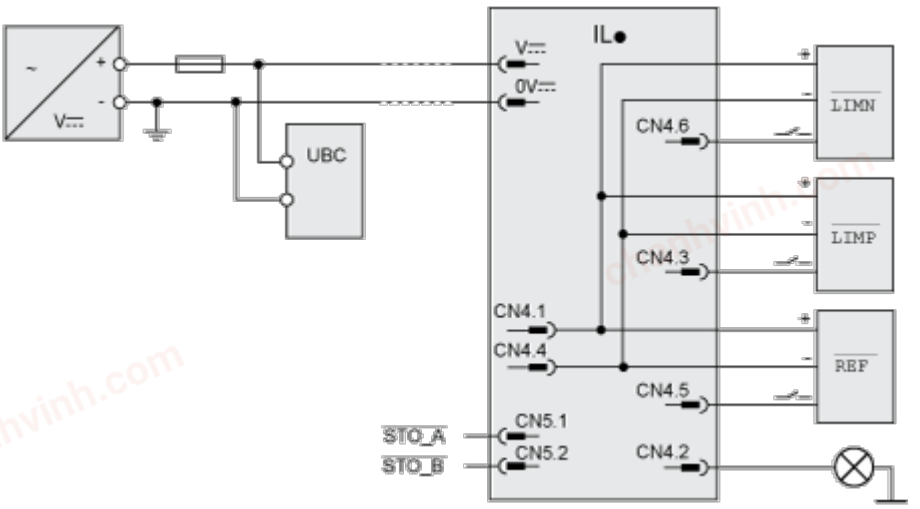
4 Accessories: cable entries Ø = 3 ... 9 mm/0.12 ... 0.35 in.

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Product datasheet ILE1F661PC1A3

Connections and Schema

Connection Example with 4 I/O Signals

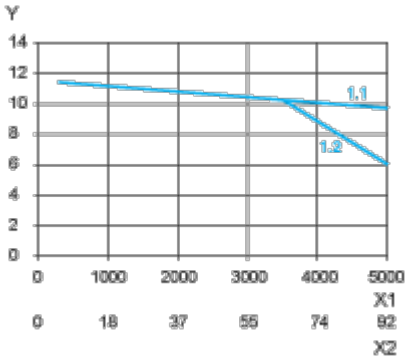


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Performance Curves

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