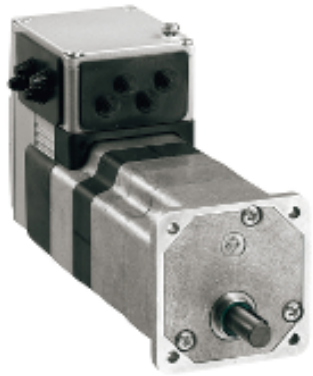
Product data sheet
Characteristics

ILE1F661PC1A2
brushless DC motor, Lexium ILA ILE ILS, 24 to 36V, CANopen DS301 interface, industrial connector, 174mm, straight teeth gear, 38:1



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	36 V 24 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, 3 stages
Reduction ratio	38:1 (75:2)
Nominal speed	107 rpm at 24 V 128 rpm at 36 V
Nominal torque	5.8 N.M at 24 V 6 N.M at 36 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
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) 4 A at 24 V 3.4 A at 36 V
Nominal output power	65 W at 24 V 81 W at 36 V
Peak stall torque	10.94 N.M at 36 V 7.9 N.M at 24 V
Continuous stall torque	8.2 N.M
Detent torque	3 N.M
Speed feedback resolution	12 points/turn motor 0.8° gearbox output
Accuracy error	+/- 1 point
Maximum torsional backlash	1 °
Rotor inertia	211 Kg.Cm²
Maximum mechanical speed	133 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	IEC 61800-3 IEC 60072-1 EN 61800-3:2001, second environment IEC 50178 IEC 50347 IEC 61800-3, Ed 2 EN 61800-3 : 2001-02
Product certifications	UL[RETURN]TÜV[RETURN]cUL
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	8.0 Cm
Package 1 Width	18.5 Cm
Package 1 Length	35.5 Cm
Package 1 Weight	2.25 Kg

Offer Sustainability

Total lifecycle Carbon footprint	778 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	17.5334558824
Carbon footprint of the manufacturing phase [A1 to A3]	18 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.2903029412
Carbon footprint of the distribution phase [A4]	0.3 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.0160239706
Carbon footprint of the installation phase [A5]	0 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	759.684
Carbon footprint of the use phase [B2, B3, B4, B6]	760 kg CO2 eq.
Mercury free	Yes
Sustainable packaging	No
Carbon footprint of the end-of-life phase [C1 to C4]	0.2602257353
Carbon footprint of the end-of-life phase [C1 to C4]	0.3 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile
Total lifecycle Carbon footprint	778
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No
SCIP Number	C2ce416c-ac1e-4e66-863f-bde9b6d94d11
REACh Regulation	Reference contains Substances of Very High Concern above the threshold
EU RoHS Directive	Compliant By Exemption
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, w
PVC free	Yes
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 a

Contractual warranty

Warranty (in months)	18

Product Life Status : Commercialised