ILE1F661PB1A8

brushless DC motor, Lexium ILA ILE ILS, 24 to 36V, CANopen DS301 interface, 174mm, 115:1





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	229 mm
Winding type	Medium speed of rotation and medium torque
Electrical connection	Printed circuit board 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 36 V
Nominal torque	10.2 N.M at 24 V 10.6 N.m at 36 V

Complementary

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	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	1840 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	-34.5 V
Voltage state 1 guaranteed	1530 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	2325 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 36 V
Naminal autaut nawar	37 W at 24 V
Nominal output power	39 W at 36 V
Peak stall torque	14.95 N.M at 24 V
	20.7 N.m at 36 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
Maximum torsional backlash	1°
Rotor inertia	1980 kg.cm²
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 60072-1
	IEC 61800-3, Ed 2
	EN 61800-3:2001, second environment
	IEC 61800-3
	IEC 50347
	EN 61800-3 : 2001-02
	IEC 50178
Product certifications	cUL[RETURN]UL[RETURN]TÜV
Ambient air temperature for operation	5065 °C (with power derating of 2 % per °C)
	050 °C (without derating)
Permissible ambient air temperature around the	105 °C power amplifier
device	110 °C motor
Ambient air temperature for storage	-2570 °C
Operating altitude	<= 1000 m without derating
Relative humidity	1585 % without condensation
Vibration resistance	20 m/s² (f= 10500 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	11.0 cm
Package 1 Width	19.0 cm
Package 1 Length	39.2 cm
Package 1 Weight	2.654 kg
Unit Type of Package 2	S06
Number of Units in Package 2	12
Package 2 Height	73.5 cm
Package 2 Width	60.0 cm
Package 2 Length	80.0 cm
Package 2 Weight	44.848 kg
Unit Type of Package 3	P06

Number of Units in Package 3	24
Package 3 Height	77.0 cm
Package 3 Width	80.0 cm
Package 3 Length	60.0 cm
Package 3 Weight	72.196 kg

Offer Sustainability

Sustainable offer status	Green Premium product
REACh Regulation	REACh Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
Mercury free	Yes
China RoHS Regulation	China RoHS Declaration
RoHS exemption information	€Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End Of Life Information
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
PVC free	Yes

Contractual warranty

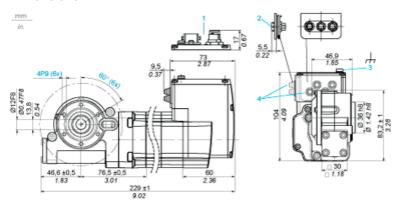
Warranty	18 months
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Product data sheet **Dimensions Drawings**

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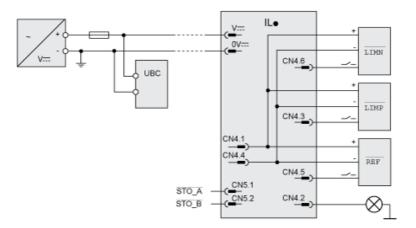
Integrated Drive with Worm Gear

Dimensions



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

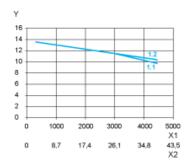
Connection Example with 4 I/O Signals



Product data sheet Performance Curves

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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