# ILE1F661PB1A7

brushless DC motor, Lexium ILA ILE ILS, 24 to 36V, CANopen DS301 interface, 174mm, 92:1





#### 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	24 V 36 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	92:1 (735:5)
Nominal speed	44 rpm at 24 V 44 rpm at 36 V
Nominal torque	9 N.M at 24 V 9.2 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	Overload of output voltage Short circuit of the output voltage
	Safe torque off
Maximum supply current	0.1 A (power stage disabled)
	6.8 A at 24 V
	3.8 A at 36 V
Nominal output power	41 W at 24 V
	42 W at 36 V
Peak stall torque	11.96 N.M at 24 V
	16.56 N.m at 36 V
Continuous stall torque	11.7 N.m
Detent torque	12.3 N.m
Speed feedback resolution	12 points/turn motor
	0.33° gearbox output
Accuracy error	+/- 1 point
Maximum torsional backlash	1°
Rotor inertia	1270 kg.cm²
Maximum mechanical speed	54 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

IEC 50347
EN 61800-3 : 2001-02
IEC 61800-3
EN 61800-3:2001, second environment
IEC 50178
IEC 60072-1
IEC 61800-3, Ed 2
TÜV[RETURN]UL[RETURN]cUL
5065 °C (with power derating of 2 % per °C)
050 °C (without derating)
105 °C power amplifier
110 °C motor
-2570 °C
<= 1000 m without derating
1585 % without condensation
20 m/s² (f= 10500 Hz) 10 cycles conforming to IEC 60068-2-6
150 m/s² 1000 shocks conforming to IEC 60068-2-29
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	9.0 cm
Package 1 Width	19.0 cm
Package 1 Length	38.5 cm
Package 1 Weight	2.25 kg
Unit Type of Package 2	S04
Number of Units in Package 2	3
Package 2 Height	30 cm
Package 2 Width	40 cm
Package 2 Length	60 cm
Package 2 Weight	8.0 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

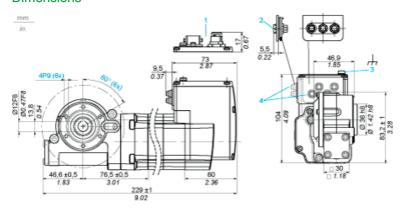
Warranty	18 months	

# Product data sheet **Dimensions Drawings**

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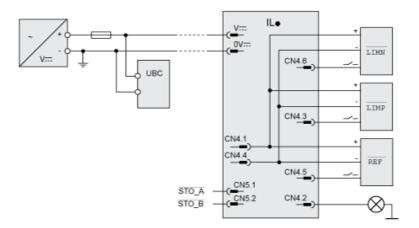
### Integrated Drive with Worm Gear

#### **Dimensions**



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

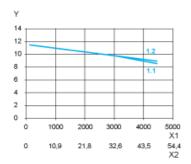
### Connection Example with 4 I/O Signals



# 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