ILE1R661PB1A7

brushless DC motor, Lexium ILA ILE ILS, 24 to 36V, RS485 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
Phase	Single phase
[Us] rated supply voltage	36 V 24 V
Network type	DC
Communication interface	RS485, Integrated
Length	9.02 in (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 24 V 44 rpm 36 V
Nominal torque	79.7 Lbf.ln (9 N.m) 24 V 81.4 lbf.in (9.2 N.m) 36 V

Complementary

Transmission Rate	9.6, 19.2 and 38.4 kbauds	
Mounting Support	Flange	
Motor flange size	2.6 in (66 mm)	
Number of motor stacks	1	
Centring collar diameter	1.4 in (36 mm)	
Number of mounting holes	2	
Mounting holes diameter	0.2 in (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 safety input 3 MA at 24 V on/STO_B safety input 2 mA at 24 V 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	
	Safe torque off	
	Short circuit of the output voltage	
Maximum supply current	0.1 A power stage disabled)	
	6.8 A 24 V	
	3.8 A 36 V	
Nominal output power	41 W 24 V	
	42 W 36 V	
Peak stall torque	105.85 Lbf.In (11.96 N.m) 24 V	
	146.57 lbf.in (16.56 N.m) 36 V	
Continuous stall torque	103.6 lbf.in (11.7 N.m)	
Detent torque	108.9 lbf.in (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	5.07 lb(US) (2.3 kg)	

Environment

Standards	EN 61800-3:2001, second environment	
	IEC 50178	
	IEC 50347	
	IEC 60072-1	
	IEC 61800-3, Ed 2	
	EN 61800-3 : 2001-02	
	IEC 61800-3	
Product Certifications	UL[RETURN]TÜV[RETURN]cUL	
Ambient air temperature for operation	122149 °F (5065 °C) with power derating of 2 % per °C)	
	32122 °F (050 °C) without derating)	
Permissible ambient air temperature around the	221 °F (105 °C) power amplifier	
device	230 °F (110 °C) motor	
Ambient Air Temperature for Storage	-13158 °F (-2570 °C)	
Operating altitude	<= 3280.84 ft (1000 m) without derating	
Relative humidity	1585 % without condensation	
Vibration resistance	20 m/s² 10500 Hz) 10 cycles IEC 60068-2-6	
Shock resistance	150 m/s² 1000 shocks 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	

Ordering and shipping details

Category	US1PC5618288
Discount Schedule	PC56
GTIN	3389119222556
Returnability	No
Country of origin	DE

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	3.5 in (9.0 cm)
Package 1 Width	7.5 in (19.0 cm)
Package 1 Length	15.2 in (38.5 cm)
Package 1 Weight	4.96 lb(US) (2.25 kg)

Offer Sustainability

Warranty

Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov
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

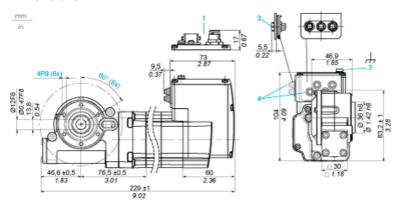
18 months

Product data sheet **Dimensions Drawings**

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Integrated Drive with Worm Gear

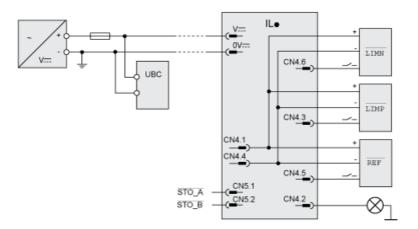
Dimensions



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

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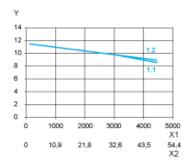
Connection Example with 4 I/O Signals



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