Product data sheet Characteristics

ILS2T573PB1A0

integrated drive ILS with stepper motor - 24..48 V - Modbus TCP - 3.5 A





Main

Range of Product	Lexium integrated drive
Product or Component Type	Motion integrated drive
Device short name	ILS
Motor Type	3-phase stepper motor
Number of motor poles	6
Phase	Single phase
[Us] rated supply voltage	24 V 48 V
Network type	DC
Communication interface	Modbus TCP, Integrated
Length	5.47 in (138.9 mm)
Winding type	Medium speed of rotation and medium torque
Electrical Connection	Printed circuit board connector
Holding brake	Without
Gear box type	Without
Nominal speed	300 rpm 24 V 600 rpm 48 V
Nominal torque	13.28 lbf.in (1.5 N.m)
Holding torque	13.28 lbf.in (1.5 N.m)

Complementary

Complementary	
Transmission Rate	10, 100 Mbits
Mounting Support	Flange
Motor flange size	2.24 in (57 mm)
Number of motor stacks	3
Centring collar diameter	1.50 in (38.1 mm)
Centring collar depth	0.06 in (1.6 mm)
Number of mounting holes	4
Mounting holes diameter	0.20 in (5.2 mm)
Circle diameter of the mounting holes	2.62 in (66.6 mm)
Feedback type	Index pulse
Shaft end	Untapped
Second shaft	Without second shaft end
Shaft diameter	0.31 in (8 mm)
Shaft length	0.83 in (21 mm)
Supply voltage limits	1855 V
Current consumption	3500 mA maximum continuous
Associated fuse rating	16 A
Commissioning interface	RS485 Modbus TCP 9.6, 19.2 and 38.4 kbauds)
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 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	Short circuit of the output voltage Safe torque off Overload of output voltage
Peak stall torque	13.28 lbf.in (1.5 N.m)
Continuous stall torque	13.28 lbf.in (1.5 N.m)
Speed feedback resolution	20000 points/turn
Accuracy error	+/- 6 arc min
Rotor inertia	0.38 kg.cm²
Maximum mechanical speed	3000 rpm
Maximum radial force Fr	50 N
Maximum axial force Fa	100 N tensile force) 8.4 N force pressure)
Service life in hours	20000 h bearing
Marking	CE
Type of cooling	Natural convection
Product Weight	4.41 lb(US) (2 kg)

Environment

Standards	EN 61800-3 : 2001-02 IEC 60072-1 EN 50347 EN/IEC 50178 EN 61800-3:2001, second environment IEC 61800-3, Ed 2 EN/IEC 61800-3
Product Certifications	TÜV CUL UL
Ambient air temperature for operation	104131 °F (4055 °C) with power derating of 2 % per °C) 32104 °F (040 °C) without derating)
Permissible ambient air temperature around the device	221 °F (105 °C) power amplifier 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 EN/IEC 60068-2-6
Shock resistance	150 m/s² 1000 shocks EN/IEC 60068-2-29
IP degree of protection	Shaft bushing IP41 EN/IEC 60034-5 Total except shaft bushing IP54 EN/IEC 60034-5

Ordering and shipping details

18288-LEXIUM INTEGRATED DRIVES II
PC56
3606485189871
No
DE

Packing Units

PCE	
1	
3.15 in (8.0 cm)	
7.28 in (18.5 cm)	
13.98 in (35.5 cm)	
5.07 lb(US) (2.3 kg)	
	1 3.15 in (8.0 cm) 7.28 in (18.5 cm) 13.98 in (35.5 cm)

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
REACh Regulation	☑ REACh Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
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

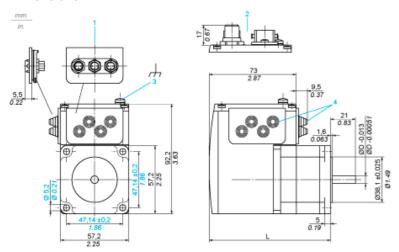
18 months

Product data sheet **Dimensions Drawings**

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Integrated Drive

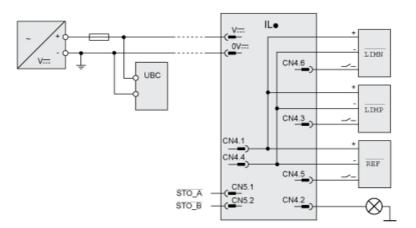
Dimensions



- Accessories: I/O signal insert with industrial connectors 1 2 3 4
- Option: industrial connectors
- Earth (ground) terminal Accessories: cable entries $\emptyset = 3 \dots 9 \text{ mm/}0.12 \dots 0.35 \text{ in.}$
- 138.9 mm/5.47 in.
- 8.00 mm/0.31 in.

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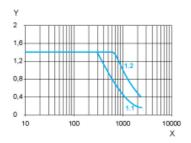
Connection Example with 4 I/O Signals



Product data sheet Performance Curves

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Torque Characteristics



- X Y Speed of rotation in rpm
- Torque in Nm
- 1.1 Max. torque at 24 V
- 1.2 Max. torque at 48 V