Product data sheet Characteristics

ILS2T571PB1A0

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	4.01 in (101.9 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	1000 rpm 24 V 2000 rpm 48 V
Nominal torque	3.98 lbf.in (0.45 N.m)
Holding torque	3.98 lbf.in (0.45 N.m)

Complementary

Complementary	
Transmission Rate	10, 100 Mbits
Mounting Support	Flange
Motor flange size	2.24 in (57 mm)
Number of motor stacks	1
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	0.25 in (6.35 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	Overload of output voltage Short circuit of the output voltage Safe torque off
Peak stall torque	3.98 lbf.in (0.45 N.m)
Continuous stall torque	3.98 lbf.in (0.45 N.m)
Speed feedback resolution	20000 points/turn
Accuracy error	+/- 6 arc min
Rotor inertia	0.1 kg.cm ²
Maximum mechanical speed	3000 rpm
Maximum radial force Fr	24 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
Net Weight	2.87 lb(US) (1.3 kg)

Environment

LIIVIIOIIIIEIIL	
Standards	IEC 50178 EN 61800-3: 2001-02 IEC 61800-3 IEC 50347 IEC 61800-3, Ed 2 IEC 60072-1 EN 61800-3:2001, second environment
Product Certifications	cUL[RETURN]UL[RETURN]TÜV
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 IEC 60068-2-6
Shock resistance	150 m/s² 1000 shocks IEC 60068-2-29
IP degree of protection	Shaft bushing IP41 IEC 60034-5 Total except shaft bushing IP54 IEC 60034-5

Ordering and shipping details

Category	18288-LEXIUM INTEGRATED DRIVES II
Discount Schedule	PC56
GTIN	3606485189833
Returnability	No
Country of origin	DE

Packing Units

Unit Type of Package 1	PCE	
Number of Units in Package 1	1	
Package 1 Height	3.15 in (8.0 cm)	
Package 1 Width	7.28 in (18.5 cm)	
Package 1 Length	13.98 in (35.5 cm)	
Package 1 Weight	3.53 lb(US) (1.6 kg)	



Offer Sustainability

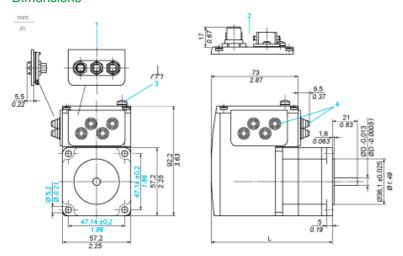
Sustainable offer status	Green Premium product	
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov	
REACh Regulation	☑ REACh Declaration	
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)	
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	

Product data sheet **Dimensions Drawings**

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Integrated Drive

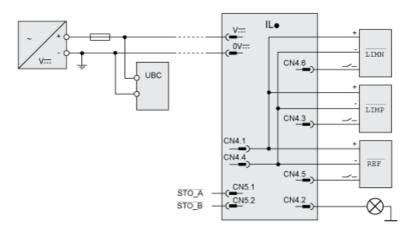
Dimensions



- Accessories: I/O signal insert with industrial connectors 1 2 3 4
- Option: industrial connectors
- Earth (ground) terminal Accessories: cable entries $\emptyset = 3 \dots 9 \text{ mm/}0.12 \dots 0.35 \text{ in.}$
- 101.9 mm/4.01 in.
- 6.35 mm/0.25 in.

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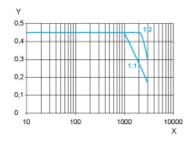
Connection Example with 4 I/O Signals



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