ILS1F851PB1F0

integrated drive ILS with stepper motor - 24..36 V - CANopen DS301 - 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	
Network number of phases	Single phase	
[Us] rated supply voltage	24 V 36 V	
Network type	DC	
Communication interface	CANopen DS301, integrated	
Length	187.3 mm	
Winding type	Medium speed of rotation and medium torque	
Electrical connection	Printed circuit board connector	
Holding brake	With	
Gear box type	Without	
Nominal speed	200 rpm at 24 V 400 rpm at 36 V	
Nominal torque	2 N.m	
Holding torque	6 N.M holding brake 2 N.m	

Complementary

smission rate 50, 100, 125, 250, 500, 800 and 1000 kbauds	
Flange 85 mm	
85 mm	
1	
60 mm	
2 mm	
4	
6.5 mm	
99 mm	
Index pulse	
Untapped	
Without second shaft end	
12 mm	
30 mm	
1840 V	
5000 mA maximum	
10 A	
4 signals (each be used as input or output)	
-34.5 V	
1530 V	
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	Safe torque off Overload of output voltage Short circuit of the output voltage	
Peak stall torque	2 N.m	
Continuous stall torque	2 N.m	
Speed feedback resolution	20000 points/turn	
Accuracy error	+/- 6 arc min	
Rotor inertia	1.3 kg.cm²	
Maximum mechanical speed	2000 rpm	
Maximum radial force Fr	100 N	
Maximum axial force Fa	170 N (tensile force) 30 N (force pressure)	
Service life in hours	20000 h bearing	
Brake pull-in power	22 W	
Brake release time	40 ms	
Brake application time	20 ms	
Marking	CE	
Type of cooling	Natural convection	
Net weight	4.4 kg	

Environment

Standards	IEC 61800-3, Ed 2 IEC 61800-3 EN 61800-3 : 2001-02 IEC 60072-1 IEC 50347 EN 61800-3:2001, second environment IEC 50178	
Product certifications	UL[RETURN]TÜV[RETURN]cUL	
Ambient air temperature for operation	5065 °C (with power derating of 2 % per °C) 050 °C (without derating)	
Permissible ambient air temperature around the device	105 °C power amplifier 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

PCE
1
10.5 cm
19.0 cm
39.0 cm
3.4 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	

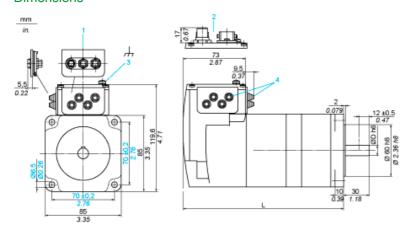
RoHS exemption information	₫Yes	
Environmental Disclosure	Product Environmental Profile	
Circularity Profile	End Of Life Information	
WEEE	The product must be disposed on European Union markets following spec waste collection and never end up in rubbish bins	
PVC free	Yes	
Contractual warranty		
Warranty	18 months	

Warranty	10 man	the
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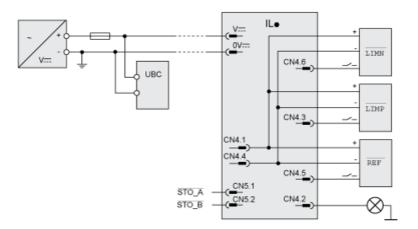
Integrated Drive with Holding Brake

Dimensions



- Accessories: I/O signal insert with industrial connectors Option: industrial connectors
- 2
- Earth (ground) terminal Accessories: cable entries \emptyset = 3 ... 9 mm/0.12 ... 0.35 in. 4 L D
- 187.3 mm/7.37 in.
- 12 mm/0.47 in.

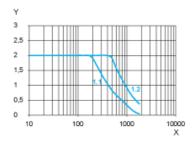
Connection Example with 4 I/O Signals



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 36 V