ILS1F853TB1F0

integrated drive ILS with stepper motor - 24..36 V - CANopen DS301 - 6 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	36 V 24 V
Network type	DC
Communication interface	CANopen DS301, Integrated
Length	9.7 in (247.3 mm)
Winding type	High speed of rotation and medium torque
Electrical Connection	Printed circuit board connector
Holding brake	With
Gear box type	Without
Nominal speed	100 rpm 24 V 300 rpm 36 V
Nominal torque	39.8 lbf.in (4.5 N.m)
Holding torque	53.1 Lbf.In (6 N.m) holding brake 39.8 lbf.in (4.5 N.m)

Complementary

Complementary	
Transmission Rate	50, 100, 125, 250, 500, 800 and 1000 kbauds
Mounting Support	Flange
Motor flange size	3.3 in (85 mm)
Number of motor stacks	3
Centring collar diameter	2.4 in (60 mm)
Centring collar depth	0.08 in (2 mm)
Number of mounting holes	4
Mounting holes diameter	0.3 in (6.5 mm)
Circle diameter of the mounting holes	3.9 in (99 mm)
Feedback type	Index pulse
Shaft end	Untapped
Second shaft	Without second shaft end
Shaft diameter	0.6 in (14 mm)
Shaft length	1.2 in (30 mm)
Supply voltage limits	1840 V
Current consumption	6000 mA maximum
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

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. This documentation is not inherent or and is not to be used for determining suitability or inhability of these products for specific user applications. It is the dourn aren in integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

Maximum switching current	100 MA per output	
Č	200 mA total	
Protection Type	Overload of output voltage	-
	Short circuit of the output voltage	
	Safe torque off	
Peak stall torque	39.8 lbf.in (4.5 N.m)	
Continuous stall torque	39.8 lbf.in (4.5 N.m)	
Speed feedback resolution	20000 points/turn	
Accuracy error	+/- 6 arc min	
Rotor inertia	3.5 kg.cm²	
Maximum mechanical speed	2000 rpm	
Maximum radial force Fr	110 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	14.3 lb(US) (6.5 kg)	
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Environment

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

Ordering and shipping details

Category	US1PC5618288
Discount Schedule	PC56
GTIN	3389119227230
Returnability	No
Country of origin	DE

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	4.1 in (10.5 cm)
Package 1 Width	7.5 in (19.0 cm)
Package 1 Length	15.4 in (39.0 cm)
Package 1 Weight	12.1 lb(US) (5.5 kg)

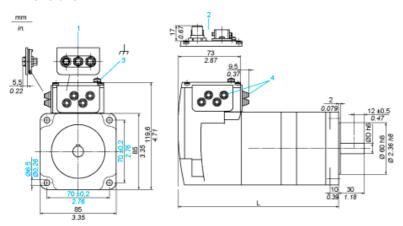
Offer Sustainability

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

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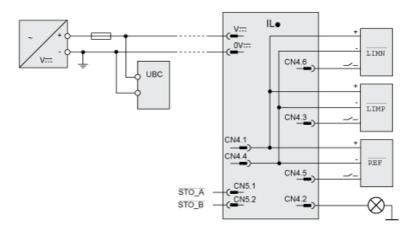
Integrated Drive with Holding Brake

Dimensions



- Accessories: I/O signal insert with industrial connectors Option: industrial connectors
- 2
- Earth (ground) terminal
- 4 L D Accessories: cable entries $\emptyset = 3 \dots 9 \text{ mm/0.12} \dots 0.35 \text{ in.}$
- 247.3 mm/9.74 in.
- 14 mm/0.55 in.

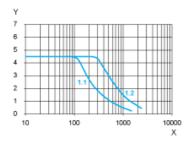
Connection Example with 4 I/O Signals



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