



integrated drive ILS with stepper motor - 24..36 V - CANopen DS301 - 5 A

ILS1F852PC1A0

! Discontinued on: 9 Feb 2023

① Discontinued

## Main

Range of product	f 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	36 V 24 V	
network type	DC	
Communication interface	CANopen DS301, integrated	
Length	170.6 mm	
Winding type	Medium speed of rotation and medium torque	
Electrical connection	Industrial connector	
Holding brake	Without	
Gear box type	Without	
Nominal speed	100 rpm at 24 V 200 rpm at 36 V	
Nominal torque	4 N.m	
Holding torque	4 N.m	

# Complementary

Transmission rate	50, 100, 125, 250, 500, 800 and 1000 kbauds	
mounting support	Flange 85 mm	
Motor flange size	85 mm	
Number of motor stacks	2	
Centring collar diameter	60 mm	
Centring collar depth	2 mm	
Number of mounting holes	4	
Mounting holes diameter	6.5 mm	
Circle diameter of the mounting holes	99 mm	
Feedback type	Index pulse	

Shaft end	Untapped
Second shaft	Without second shaft end
Shaft diameter	12 mm
Shaft length	30 mm
Supply voltage limits	1840 V
Current consumption	5000 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 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 Short circuit of the output voltage Overload of output voltage
Peak stall torque	4 N.m
Continuous stall torque	4 N.m
Speed feedback resolution	20000 points/turn
Accuracy error	+/- 6 arc min
Rotor inertia	2.2 kg.cm²
Maximum mechanical speed	1500 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
marking	CE
Type of cooling	Natural convection
Net weight	3.6 kg

# **Environment**

Standards	EN 50347 EN/IEC 50178 EN 61800-3:2001, second environment EN 61800-3: 2001-02 IEC 60072-1 IEC 61800-3, Ed 2 EN/IEC 61800-3	
Product certifications	UL TÜV cUL	
Ambient air temperature for operation	rature for 5065 °C (with power derating of 2 % per °C) 050 °C (without derating)	
Permissible ambient air temperature around the device	105 °C power amplifier vice 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 EN/IEC 60068-2-6	
Shock resistance	150 m/s² 1000 shocks conforming to EN/IEC 60068-2-29	
IP degree of protection	IP41 shaft bushing: conforming to EN/IEC 60034-5	

# **Packing Units**

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	10.5 cm
Package 1 Width	19.0 cm
Package 1 Length	39.0 cm
Package 1 Weight	4.0 kg

# **Contractual warranty**

Warranty 18 months



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Transparency RoHS/REACh

## Well-being performance

	Mercury Free	
<b>②</b>	Rohs Exemption Information	Yes
	Pvc Free	

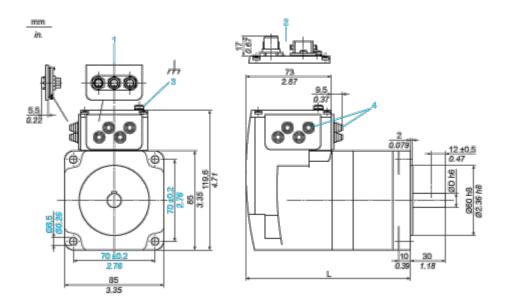
#### **Certifications & Standards**

Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)
China Rohs Regulation	China RoHS declaration
<b>Environmental Disclosure</b>	Product Environmental Profile
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
Circularity Profile	End of Life Information

#### **Dimensions Drawings**

#### **Integrated Drive without Holding Brake**

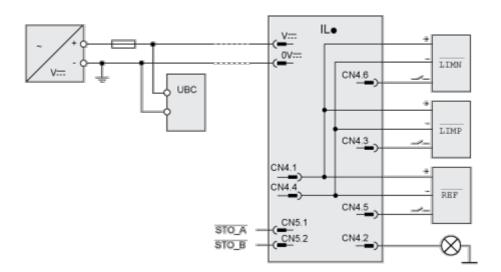
#### **Dimensions**



- 1 Accessories: I/O signal insert with industrial connectors
- 2 Option: industrial connectors
- 3 Earth (ground) terminal
- 4 Accessories: cable entries  $\emptyset = 3 \dots 9 \text{ mm/0.12} \dots 0.35 \text{ in.}$
- L 170.6 mm/6.72 in.
- D 12 mm/0.47 in.

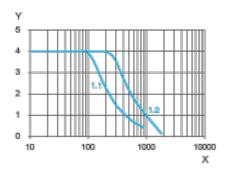
Connections and Schema

## Connection Example with 4 I/O Signals



#### Performance Curves

## **Torque Characteristics**



- X Speed of rotation in rpm
- Y Torque in Nm
- 1.1 Max. torque at 24 V
- 1.2 Max. torque at 36 V