



# integrated drive ILS with stepper motor - 24..36 V - Profibus DP - 5

ILS1B852PB1A0

! Discontinued on: 15 Jun 2023

! To be end-of-service on: 31 Dec 2026

#### 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	Profibus DP, integrated	
Length	170.6 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	100 rpm at 24 V 200 rpm at 36 V	
Nominal torque	4 N.m	
Holding torque	4 N.m	

### Complementary

Transmission rate	9.6, 19.2, 45.45, 93.75, 187.5, 500, 1500, 3000, 6000 and 12000 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

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	
2325 V	
100 mA per output 200 mA total	
Overload of output voltage Safe torque off Short circuit of the output voltage	
4 N.m	
4 N.m	
20000 points/turn	
+/- 6 arc min	
2.2 kg.cm <sup>2</sup>	
1500 rpm	
100 N	
170 N (tensile force) 30 N (force pressure)	
20000 h bearing	
CE	
Natural convection	
3.6 kg	

## **Environment**

Standards	EN/IEC 61800-3		
	EN/IEC 50178		
	EN 50347		
	IEC 61800-3, Ed 2		
	EN 61800-3 : 2001-02		
	EN 61800-3:2001, second environment		
	IEC 60072-1		
Product certifications	cUL		
	TÜV		
	UL		
Ambient air temperature for operation	5065 °C (with power derating of 2 % per °C) 050 °C (without derating)		
-	Coo o (Mandat dollating)		
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 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	22 cm
Package 1 Width	19.5 cm
Package 1 Length	40 cm
Package 1 Weight	4.659 kg
Unit Type of Package 2	S06
Number of Units in Package 2	9
Package 2 Height	73.5 cm
Package 2 Width	60 cm
Package 2 Length	80 cm
Package 2 Weight	54.931 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**

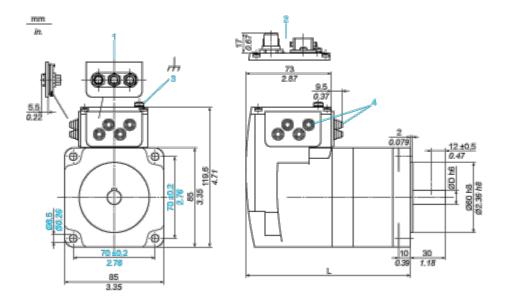
Circularity Profile	End of Life Information
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
<b>Environmental Disclosure</b>	Product Environmental Profile
China Rohs Regulation	China RoHS declaration
Eu Rohs Directive	Pro-active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

19 Aug 2024

#### **Dimensions Drawings**

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

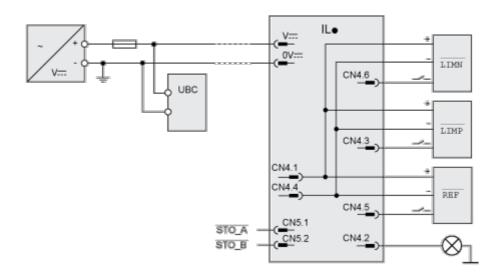
#### **Dimensions**



- 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.

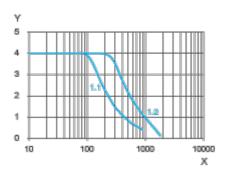
Connections and Schema

#### 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