



(!) Discontinued

integrated drive ILS with stepper motor - 24..48 V - EtherNet/IP - 5 A

ILS2K853PB1A0

! Discontinued on: 29 Oct 2020

! End-of-service on: 1 Jul 2021

# Main

mam	
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 48 V
network type	DC
Communication interface	Ethernet/IP, integrated
Length	200.6 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 48 V
Nominal torque	6 N.m
Holding torque	6 N.m

# Complementary

Transmission rate	125, 250, 500 kbauds
mounting support	Flange
Motor flange size	85 mm
Number of motor stacks	3
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	14 mm	
Shaft length	30 mm	
Supply voltage limits	1855 V	
Current consumption	5000 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 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	Overload of output voltage Short circuit of the output voltage Safe torque off	
Peak stall torque	6 N.m	
Continuous stall torque	6 N.m	
Speed feedback resolution	20000 points/turn	
Accuracy error	+/- 6 arc min	
Rotor inertia	3.3 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	
marking	CE	
Type of cooling	Natural convection	
Net weight	4.7 kg	

# **Environment**

Standards	EN 61800-3:2001, second environment EN 61800-3: 2001-02 EN/IEC 50178 IEC 61800-3, Ed 2 IEC 60072-1 EN/IEC 61800-3 EN 50347
Product certifications	UL cUL TÜV
Ambient air temperature for operation	4055 °C (with power derating of 2 % per °C) 040 °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 EN/IEC 60068-2-6	
Shock resistance	150 m/s² 1000 shocks conforming to EN/IEC 60068-2-29	
IP degree of protection	legree of protection  IP41 shaft bushing: conforming to EN/IEC 60034-5  IP54 total except 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	10.4 cm
Package 1 Width	18 cm
Package 1 Length	36.5 cm
Package 1 Weight	5 kg

# **Contractual warranty**

Warranty 18 months



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Transparency RoHS/REACh

### Well-being performance

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

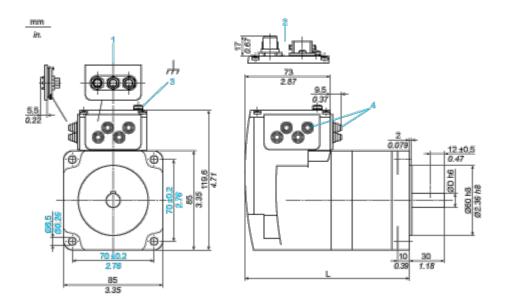
#### **Certifications & Standards**

Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)
China Rohs Regulation	China RoHS declaration
Environmental Disclosure	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**

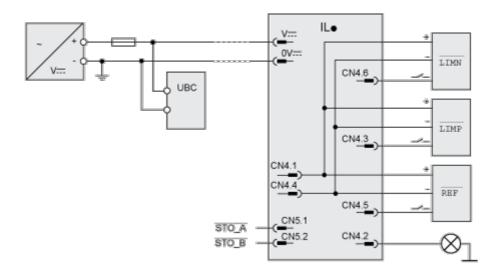
#### **Dimensions**



- 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 200.6 mm/7.90 in.
- D 14 mm/0.55 in.

Connections and Schema

## Connection Example with 4 I/O Signals

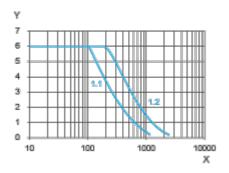


# **Product datasheet**

## ILS2K853PB1A0

#### 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 48 V