Product data sheet Characteristics

ILS2K852PB1F0

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





Main Range of product Lexium integrated drive Product or component Motion integrated drive type Device short name Motor type 3-phase stepper motor Number of motor poles Network number of Single phase phases [Us] rated supply 24 V voltage 48 V DC Network type Communication Ethernet/IP, integrated interface Length Winding type Medium speed of rotation and medium torque Electrical connection Printed circuit board connector With Holding brake Without Gear box type 180 rpm at 24 V Nominal speed 360 rpm at 48 V Nominal torque

6 N.M holding brake

4 N.m

Complementary

Complementary		
Transmission rate	125, 250, 500 kbauds	
Mounting support	Flange	
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	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	

Holding torque

Discrete output voltage	2325 V
Maximum switching current	100 MA per output
	200 mA total
Protection type	Short circuit of the output voltage
	Safe torque off
	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	2.4 kg.cm²
Maximum mechanical speed	3000 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	5.4 kg

Environment

EN 50347
IEC 60072-1
EN 61800-3 : 2001-02
EN/IEC 61800-3
EN/IEC 50178
IEC 61800-3, Ed 2
EN 61800-3:2001, second environment
UL
ΤÜV
cUL
4055 °C (with power derating of 2 % per °C)
040 °C (without derating)
105 °C power amplifier
110 °C motor
-2570 °C
<= 1000 m without derating
1585 % without condensation
20 m/s² (f= 10500 Hz) 10 cycles conforming to EN/IEC 60068-2-6
150 m/s² 1000 shocks conforming to EN/IEC 60068-2-29
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	18.0 cm	
Package 1 Length	36.5 cm	
Package 1 Weight	4.9 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 specific waste collection and never end up in rubbish bins	

Contractual warranty

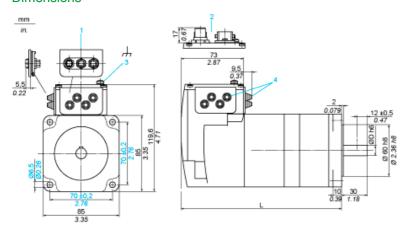
Warranty 18 months	
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Product data sheet **Dimensions Drawings**

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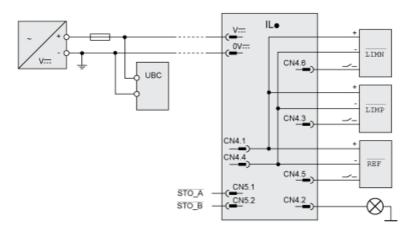
Integrated Drive with Holding Brake

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.
- 217.3 mm/8.55 in.
- 4 L D 12 mm/0.47 in.

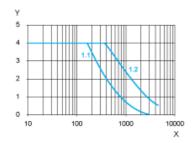
Connection Example with 4 I/O Signals



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 48 V