# Product data sheet

Specifications





① Discontinued

integrated drive ILS with stepper motor - 24..36V - I/O for motion sequence - 5A

ILS1M853PB1F0

(Discontinued on: Jun 30, 2023

Product availability: Non-Stock - Not normally stocked in distribution facility

### Main

Lexium integrated drive
Motion integrated drive
ILS
3-phase stepper motor
6
Single phase
24 V 36 V
DC
I/O for motion sequence, Integrated
9.7 in (247.3 mm)
Medium speed of rotation and medium torque
Printed circuit board connector
With
Without
120 rpm 36 V 60 rpm 24 V
53.1 lbf.in (6 N.m)
53.1 lbf.in (6 N.m) holding brake 53.1 lbf.in (6 N.m)

### Complementary

Transmission Rate	9.6, 19.2 and 38.4 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)

Price is "List Price" and may be subject to a trade discount - check with your local distributor or retailer for actual price.

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	5000 mA maximum continuous
Associated fuse rating	10 A
Commissioning interface	RS485 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 on/STO_A safety input 3 mA at 24 V on/STO_B safety input 10 mA at 24 V 24 V signal interface
Discrete output voltage	1030 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	53.1 lbf.in (6 N.m)
Continuous stall torque	53.1 lbf.in (6 N.m)
Speed feedback resolution	20000 points/turn
Accuracy error	+/- 6 arc min
Rotor inertia	3.5 kg.cm <sup>2</sup>
Maximum mechanical speed	1000 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)

## Environment

Standards

IEC 60072-1 EN 50347 EN/IEC 61800-3 EN/IEC 50178 IEC 61800-3, Ed 2 EN 61800-3:2001, second environment EN 61800-3 : 2001-02

Product Certifications	UL cUL 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 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/s <sup>2</sup> 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	3389119227346
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)

## **Contractual warranty**

Warranty

18 months

## Sustainability Screen

**Green Premium<sup>TM</sup> label** is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Yes

Learn more about Green Premium >

Guide to assess a product's sustainability >



Transparency RoHS/REACh

#### Well-being performance

Mercury Free

Rohs Exemption Information

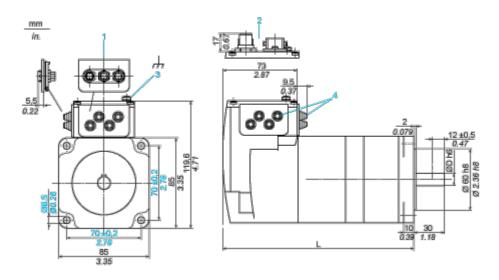
### **Certifications & Standards**

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
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

#### **Dimensions Drawings**

#### Integrated Drive with Holding Brake

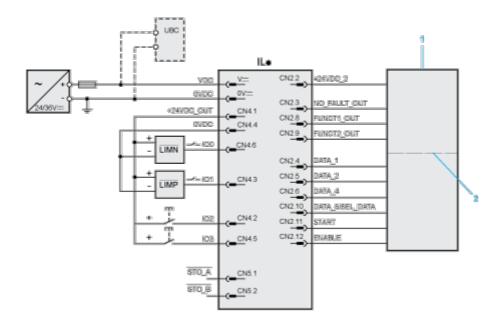
#### Dimensions



- 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 247.3 mm/9.74 in.
- D 14 mm/0.55 in.

#### Connections and Schema

#### Connection Example with 4 I/O Signals

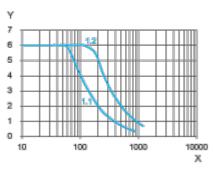


1 PLC

2 Galvanic isolation

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