# **Product data sheet**

Specification





integrated drive ILS with stepper motor - 24..36 V - pulse/direction 24 V - 6A

ILS1U853TB1A0

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

Price\*: 1,150.00 USD

## 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
Phase	Single phase
[Us] Rated Supply Voltage	36 V 24 V
Network Type	DC
Communication Interface	Pulse/direction 24 V, Integrated
Length	7.90 in (200.6 mm)
Winding Type	High speed of rotation and medium torque
Electrical Connection	Printed circuit board connector
Holding Brake	Without
Gear Box Type	Without
Nominal Speed	100 rpm 24 V 300 rpm 36 V
Nominal Torque	39.83 lbf.in (4.5 N.m)
Holding Torque	39.83 lbf.in (4.5 N.m)

## Complementary

Mounting Support	Flange
Motor Flange Size	3.35 in (85 mm)
Number Of Motor Stacks	3
Centring Collar Diameter	2.36 in (60 mm)
Centring Collar Depth	0.08 in (2 mm)
Number Of Mounting Holes	4
Mounting Holes Diameter	0.26 in (6.5 mm)
Circle Diameter Of The Mounting Holes	3.90 in (99 mm)
Feedback Type	Index pulse
Shaft End	Untapped

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

Second Shaft	Without second shaft end
Shaft Diameter	0.55 in (14 mm)
Shaft Length	1.18 in (30 mm)
Supply Voltage Limits	1840 V
Current Consumption	6000 mA maximum continuous
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 safety input
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	39.83 lbf.in (4.5 N.m)
Continuous Stall Torque	39.83 lbf.in (4.5 N.m)
Speed Feedback Resolution	1.8°, 0.9°, 0.72°, 0.36°, 0.18°, 0.09°, 0.072°, 0.036° 200, 400, 500, 1000, 2000, 4000, 5000, 10000 steps
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	10.36 lb(US) (4.7 kg)

## **Environment**

Standards	IEC 50178 IEC 50347 IEC 61800-3, Ed 2 EN 61800-3 : 2001-02 IEC 61800-3 IEC 60072-1 EN 61800-3:2001, second environment
Product Certifications	TÜV cUL UL
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	221 °F (105 °C) power amplifier 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 IEC 60068-2-6	
Shock Resistance	150 m/s² 1000 shocks IEC 60068-2-29	
Ip Degree Of Protection	IP41 shaft bushing: conforming to IEC 60034-5	

# Ordering and shipping details

Category	US1PC5618288
Discount Schedule	PC56
Gtin	3389119227681
Returnability	No
Country Of Origin	DE

# **Packing Units**

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	4.13 in (10.5 cm)
Package 1 Width	7.48 in (19.0 cm)
Package 1 Length	15.35 in (39.0 cm)
Package 1 Weight	11.24 lb(US) (5.1 kg)

## **Contractual warranty**

Apr 25, 2024

Warranty 18 months

# Sustainability Green Premium"

**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.

Learn more about Green Premium >

Guide to assess a product's sustainability >





Transparency RoHS/REACh

## Well-being performance

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

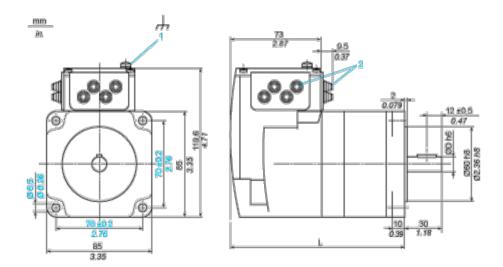
## **Certifications & Standards**

Reach Regulation	REACh Declaration
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 without Holding Brake**

#### **Dimensions**



- 1 Earth (ground) terminal
- 2 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.

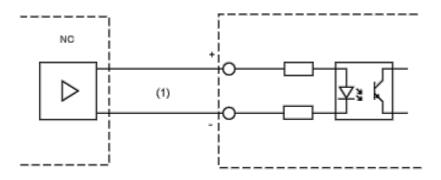
## **Product data sheet**

## ILS1U853TB1A0

#### Connections and Schema

#### **Multifunction Interface**

## **Input Wiring Diagram**



#### (1) Opto-isolated signals

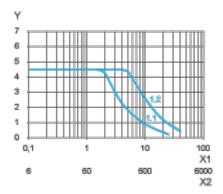
The reference pulses are supplied via two of the signal inputs, either as pulse/ direction signals or as A/B signals. The other signal inputs have the functions "power amplifier enable/pulse blocking" and "step size switching/PWM motor current control".

# Product data sheet

## ILS1U853TB1A0

#### Performance Curves

## Torque Characteristics



- X1 Frequency in kHz
- X2 Speed of rotation in rpm
- Y Torque in Nm
- 1.1 Max. torque at 24 V
- 1.2 Max. torque at 36 V