

# Product data sheet

Specifications



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

ILS1U853TB1A0

Product availability : Stock - 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)

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

<b>Feedback type</b>	Index pulse
<b>Shaft end</b>	Untapped
<b>Second shaft</b>	Without second shaft end
<b>Shaft diameter</b>	0.55 in (14 mm)
<b>Shaft length</b>	1.18 in (30 mm)
<b>Supply voltage limits</b>	18...40 V
<b>Current consumption</b>	6000 mA maximum continuous
<b>Associated fuse rating</b>	10 A
<b>Input/Output type</b>	4 signals (each be used as input or output)
<b>Voltage state 0 guaranteed</b>	-3...4.5 V
<b>Voltage state 1 guaranteed</b>	15...30 V
<b>Discrete input current</b>	10 mA at 24 V safety input
<b>Discrete output voltage</b>	23...25 V
<b>Maximum switching current</b>	100 mA per output 200 mA total
<b>Protection Type</b>	Short circuit of the output voltage Safe torque off Overload of output voltage
<b>Peak stall torque</b>	39.83 lbf.in (4.5 N.m)
<b>Continuous stall torque</b>	39.83 lbf.in (4.5 N.m)
<b>Speed feedback resolution</b>	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
<b>Accuracy error</b>	+/- 6 arc min
<b>Rotor inertia</b>	3.3 kg.cm <sup>2</sup>
<b>Maximum mechanical speed</b>	2000 rpm
<b>Maximum radial force Fr</b>	110 N
<b>Maximum axial force Fa</b>	170 N tensile force) 30 N force pressure)
<b>Service life in hours</b>	20000 h bearing
<b>Marking</b>	CE
<b>Type of cooling</b>	Natural convection
<b>Net Weight</b>	10.36 lb(US) (4.7 kg)

## Environment

<b>Standards</b>	EN/IEC 50178 EN 50347 IEC 61800-3, Ed 2 EN 61800-3 : 2001-02 EN/IEC 61800-3 IEC 60072-1 EN 61800-3:2001, second environment
<b>Product certifications</b>	TÜV cUL UL
<b>Ambient air temperature for operation</b>	122...149 °F (50...65 °C) with power derating of 2 % per °C) 32...122 °F (0...50 °C) without derating)
<b>Permissible ambient air temperature around the device</b>	221 °F (105 °C) power amplifier 230 °F (110 °C) motor
<b>Ambient Air Temperature for Storage</b>	-13...158 °F (-25...70 °C)
<b>Operating altitude</b>	<= 3280.84 ft (1000 m) without derating

Relative humidity	15...85 % without condensation
Vibration resistance	20 m/s <sup>2</sup> 10...500 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	Shaft bushing IP41 EN/IEC 60034-5 Total except shaft bushing IP54 EN/IEC 60034-5

## Ordering and shipping details

Category	18288-LEXIUM INTEGRATED DRIVES II
Discount Schedule	PC56
GTIN	3389119227681
Nbr. of units in pkg.	1
Package weight(Lbs)	11.24 lb(US) (5.1 kg)
Returnability	No
Country of origin	DE

## Packing Units

Unit Type of Package 1	PCE
Package 1 Height	4.13 in (10.5 cm)
Package 1 width	7.48 in (19 cm)
Package 1 Length	15.35 in (39 cm)

## Offer Sustainability

Sustainable offer status	Green Premium product
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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
RoHS exemption information	<a href="#">Yes</a>
China RoHS Regulation	<a href="#">China RoHS declaration</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End of Life Information</a>
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.
PVC free	Yes

## Contractual warranty

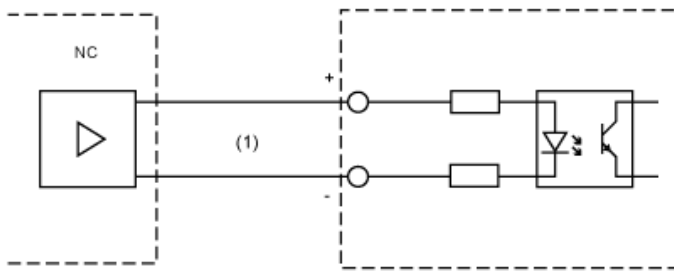
Warranty	18 months
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**Multifunction Interface**

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**Input Wiring Diagram**

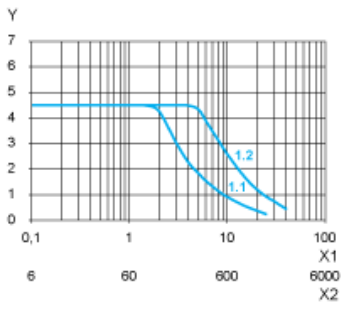


(1) Opto-isolated signals

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".

**Torque Characteristics**

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- 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