

# Product data sheet

Specifications



integrated drive ILS with stepper motor - 24..36V - pulse/direction 5V RS422- 5A

ILS1W852PB1F0

! Discontinued on: Jun 30, 2023

! Discontinued

Product availability: Stock - Normally stocked in distribution facility

## 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 5 V RS422, Integrated
Length	8.56 in (217.3 mm)
Winding Type	Medium speed of rotation and medium torque
Electrical Connection	Printed circuit board connector
Holding Brake	With
Gear Box Type	Without
Nominal Speed	100 rpm 24 V 200 rpm 36 V
Nominal Torque	35.40 lbf.in (4 N.m)
Holding Torque	53.10 lbf.in (6 N.m) holding brake 35.40 lbf.in (4 N.m)

## Complementary

Mounting Support	Flange
Motor Flange Size	3.35 in (85 mm)
Number Of Motor Stacks	2
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

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

Shaft End	Untapped
Second Shaft	Without second shaft end
Shaft Diameter	0.47 in (12 mm)
Shaft Length	1.18 in (30 mm)
Supply Voltage Limits	18...40 V
Current Consumption	5000 mA maximum continuous
Associated Fuse Rating	10 A
Input/Output Type	4 signals (each be used as input or output)
Voltage State 0 Guaranteed	-3...4.5 V
Voltage State 1 Guaranteed	15...30 V
Discrete Input Current	10 mA at 24 V safety input
Discrete Output Voltage	23...25 V
Maximum Switching Current	100 mA per output 200 mA total
Protection Type	Overload of output voltage Safe torque off Short circuit of the output voltage
Peak Stall Torque	35.40 lbf.in (4 N.m)
Continuous Stall Torque	35.40 lbf.in (4 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	2.4 kg.cm <sup>2</sup>
Maximum Mechanical Speed	1500 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	11.90 lb(US) (5.4 kg)

## Environment

Standards	EN 61800-3 : 2001-02 EN 50347 EN/IEC 50178 EN 61800-3:2001, second environment IEC 60072-1 IEC 61800-3, Ed 2 EN/IEC 61800-3
Product Certifications	UL TÜV cUL
Ambient Air Temperature For Operation	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
<b>Relative Humidity</b>	15...85 % without condensation
<b>Vibration Resistance</b>	20 m/s² 10...500 Hz) 10 cycles EN/IEC 60068-2-6
<b>Shock Resistance</b>	150 m/s² 1000 shocks EN/IEC 60068-2-29
<b>Ip Degree Of Protection</b>	Shaft bushing IP41 EN/IEC 60034-5 Total except shaft bushing IP54 EN/IEC 60034-5

## Ordering and shipping details

<b>Category</b>	18288-LEXIUM INTEGRATED DRIVES II
<b>Discount Schedule</b>	PC56
<b>Gtin</b>	3389119227872
<b>Returnability</b>	No
<b>Country Of Origin</b>	DE

## Packing Units

<b>Unit Type Of Package 1</b>	PCE
<b>Number Of Units In Package 1</b>	1
<b>Package 1 Height</b>	4.13 in (10.5 cm)
<b>Package 1 Width</b>	7.48 in (19.0 cm)
<b>Package 1 Length</b>	15.35 in (39.0 cm)
<b>Package 1 Weight</b>	9.70 lb(US) (4.4 kg)

## Contractual warranty

<b>Warranty</b>	18 months
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## Sustainability

**Green Premium™ label** is Schneider Electric's commitment to delivering products with best-in-class 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

 Mercury Free

 RoHS Exemption Information Yes

## 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

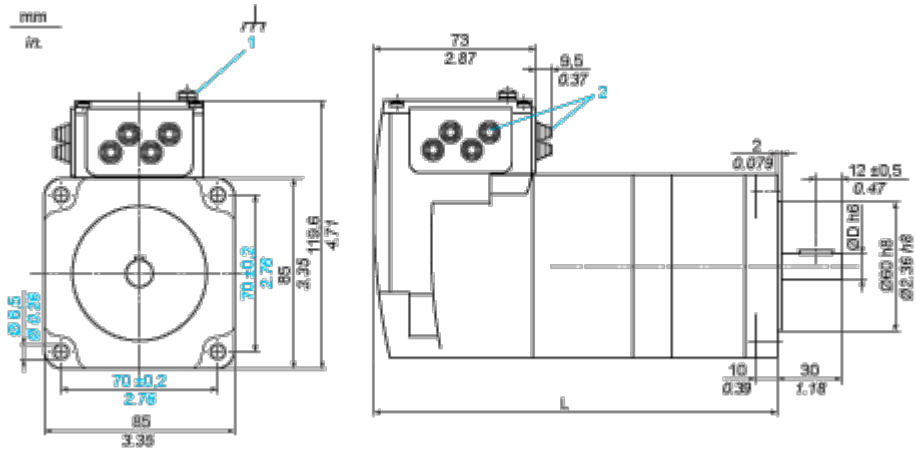
[End of Life Information](#)

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](http://www.P65Warnings.ca.gov)

Integrated Drive with Holding Brake

Dimensions

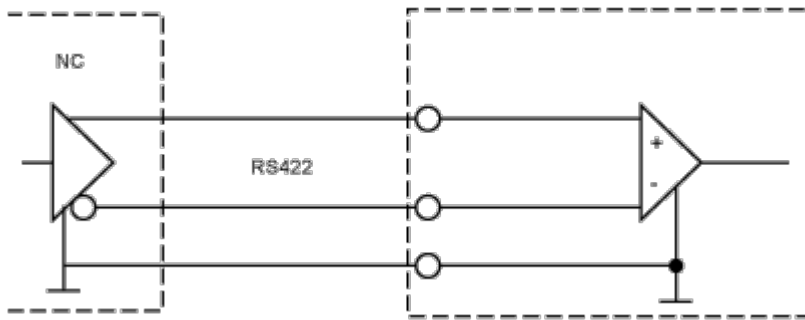


- 1 Earth (ground) terminal
- 2 Accessories: cable entries  $\varnothing = 3 \dots 9 \text{ mm} / 0.12 \dots 0.35 \text{ in.}$
- L 217.3 mm/8.55 in.
- D 12 mm/0.47 in.

Multifunction Interface

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Input Wiring Diagram

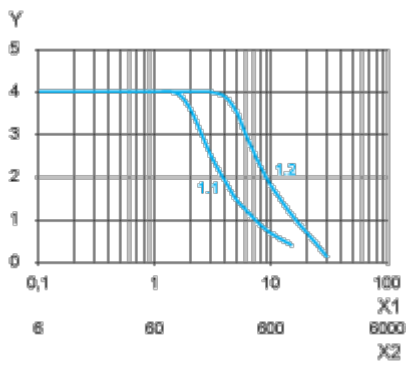


The reference pulses are supplied via two of the signal inputs, either as pulse/ direction signals or as A/B signals. The other signal inputs have the functions "power amplifier enable/pulse blocking" and "step size switching/PWM motor current control".

Performance Curves

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