### Product data sheet Characteristics

## ILS1R852PC1A0

integrated drive ILS with stepper motor - 24..36 V - RS485 - 5 A





#### 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	24 V 36 V
Network type	DC
Communication interface	RS485, Integrated
Length	6.72 in (170.6 mm)
Winding type	Medium speed of rotation and medium torque
Electrical Connection	Industrial connector
Holding brake	Without
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	35.40 lbf.in (4 N.m)

#### Complementary

Complementary	
Transmission Rate	9.6, 19.2 and 38.4 kbauds
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
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	1840 V
Current consumption	5000 mA maximum
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 on/STO_A safety input 3 MA at 24 V on/STO_B safety input 2 mA at 24 V 24 V signal interface
Discrete output voltage	2325 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	20000 points/turn	
Accuracy error	+/- 6 arc min	
Rotor inertia	2.2 kg.cm²	
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	
Marking	CE	
Type of cooling	Natural convection	
Net Weight	7.94 lb(US) (3.6 kg)	

#### Environment

Standards	EN 50347 EN/IEC 50178 IEC 60072-1 EN 61800-3 : 2001-02 EN 61800-3:2001, second environment EN/IEC 61800-3 IEC 61800-3, Ed 2
Product Certifications	cUL[RETURN]TÜV[RETURN]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 EN/IEC 60068-2-6
Shock resistance	150 m/s² 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	3389119227490
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	8.82 lb(US) (4.0 kg)	



### 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 www.P65Warnings.ca.gov	
REACh Regulation	☑ REACh Declaration	
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)	
Mercury free	Yes	
China RoHS Regulation	<sup>™</sup> 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.	

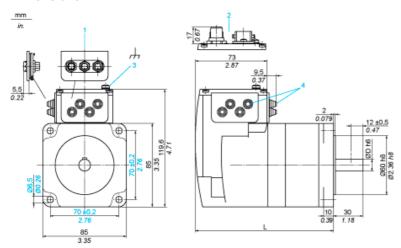
### Contractual warranty

Warranty	18 months

## ILS1R852PC1A0

### Integrated Drive without Holding Brake

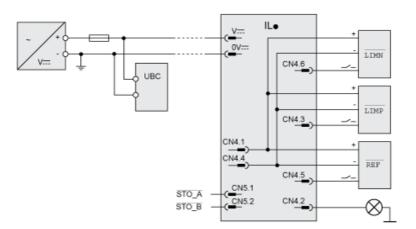
#### **Dimensions**



- Accessories: I/O signal insert with industrial connectors
- Option: industrial connectors 2 3 4
- Earth (ground) terminal
- Accessories: cable entries  $\emptyset = 3 \dots 9 \text{ mm/0.12} \dots 0.35 \text{ in.}$ 
  - 170.6 mm/6.72 in.
- 12 mm/0.47 in.

# ILS1R852PC1A0

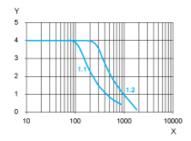
### Connection Example with 4 I/O Signals



## Product data sheet Performance Curves

# ILS1R852PC1A0

### **Torque Characteristics**



- X Y Speed of rotation in rpm
- Torque in Nm
- 1.1 Max. torque at 24 V
- 1.2 Max. torque at 36 V