# ILS2K851PC1F0

integrated drive ILS with stepper motor - 24..48 V - EtherNet/IP - 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 48 V
Network type	DC
Communication interface	Ethernet/IP, Integrated
Length	7.4 in (187.3 mm)
Winding type	Medium speed of rotation and medium torque
Electrical Connection	Industrial connector
Holding brake	With
Gear box type	Without
Nominal speed	300 rpm 24 V 600 rpm 48 V
Nominal torque	17.7 lbf.in (2 N.m)
Holding torque	53.1 Lbf.In (6 N.m) holding brake 17.7 lbf.in (2 N.m)

### Complementary

Complementary		
Transmission Rate	125, 250, 500 kbauds	
Mounting Support	Flange	
Motor flange size	3.3 in (85 mm)	
Number of motor stacks	1	
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)	
Feedback type	Index pulse	
Shaft end	Untapped	
Second shaft	Without second shaft end	
Shaft diameter	0.5 in (12 mm)	
Shaft length	1.2 in (30 mm)	
Supply voltage limits	1855 V	
Current consumption	5000 mA maximum continuous	
Associated fuse rating	16 A	
Commissioning interface	RS485 Modbus TCP 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 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	Short circuit of the output voltage Overload of output voltage Safe torque off
Peak stall torque	17.7 lbf.in (2 N.m)
Continuous stall torque	17.7 lbf.in (2 N.m)
Speed feedback resolution	20000 points/turn
Accuracy error	+/- 6 arc min
Rotor inertia	1.3 kg.cm²
Maximum mechanical speed	3000 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	9.7 lb(US) (4.4 kg)

### Environment

Standards	EN 61800-3:2001, second environment
	IEC 60072-1
	EN 61800-3 : 2001-02
	IEC 50178
	IEC 50347
	IEC 61800-3
	IEC 61800-3, Ed 2
Product Certifications	UL[RETURN]TÜV[RETURN]¢UL
Ambient air temperature for operation	104131 °F (4055 °C) with power derating of 2 % per °C)
· ·	32104 °F (040 °C) without derating)
Permissible ambient air temperature around the	221 °F (105 °C) power amplifier
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 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
	IP54 total except shaft bushing: conforming to IEC 60034-5

## Ordering and shipping details

Category	US1PC5618288	
Discount Schedule	PC56	
GTIN	3606485204963	
Returnability	No	
Country of origin	DE	

## Packing Units

Unit Type of Package 1	PCE	
Number of Units in Package 1	1	
Package 1 Height	4.09 in (10.4 cm)	
Package 1 Width	7.09 in (18.0 cm)	
Package 1 Length	14.4 in (36.5 cm)	
Package 1 Weight	8.6 lb(US) (3.9 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	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.

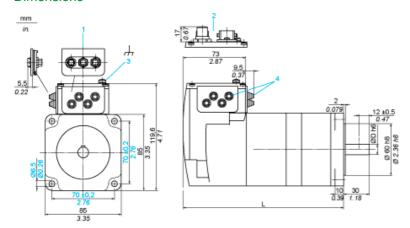
## Contractual warranty

Warranty	18 months

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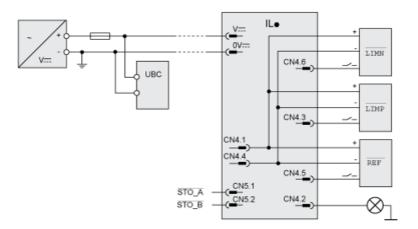
## Integrated Drive with Holding Brake

### **Dimensions**



- Accessories: I/O signal insert with industrial connectors Option: industrial connectors
- 2
- Earth (ground) terminal Accessories: cable entries  $\emptyset$  = 3 ... 9 mm/0.12 ... 0.35 in. 4 L D
- 187.3 mm/7.37 in.
- 12 mm/0.47 in.

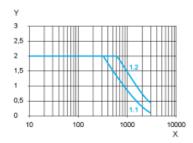
## Connection Example with 4 I/O Signals



# Product data sheet Performance Curves

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## **Torque Characteristics**



- X Y Speed of rotation in rpm
- Torque in Nm
- 1.1 Max. torque at 24 V
- 1.2 Max. torque at 48 V