ILS1B851PC1F0





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	Integrated Profibus DP
Length	7.37 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	200 rpm at 24 V 400 rpm at 36 V
Nominal torque	17.7 lbf.in (2 N.m)
Holding torque	17.7 lbf.in (2 N.m) 53.1 lbf.in (6 N.m) (holding brake)

Complementary

Complementary	
Transmission rate	9.6, 19.2, 45.45, 93.75, 187.5, 500, 1500, 3000, 6000 and 12000 kbauds
Mounting support	Flange 85 mm
Motor flange size	3.35 in (85 mm)
Number of motor stacks	1
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	3.9 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 for safety input <= 3 mA at 24 V on/STO_B for safety input 2 mA at 24 V for 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	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.cm ²
Maximum mechanical speed	2000 rpm
Maximum radial force Fr	100 N
Maximum axial force Fa	30 N (force pressure) 170 N (tensile force)
Service life in hours	20000 h of bearing:
Brake pull-in power	22 W
Brake release time	40 ms
Brake application time	20 ms
Marking	CE
Type of cooling	Natural convection
Product weight	9.7 lb(US) (4.4 kg)

Environment

standards	EN 50347 EN 61800-3:2001, second environment EN 61800-3: 2001-02 EN/IEC 50178 EN/IEC 61800-3 IEC 60072-1 IEC 61800-3, Ed 2
product certifications	CUL TÜV 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 (f = 10500 Hz) for 10 cycles conforming to EN/IEC 60068-2-6
shock resistance	150 m/s² 1000 shocks conforming to EN/IEC 60068-2-29
IP degree of protection	IP41 shaft bushing conforming to EN/IEC 60034-5 IP54 total except shaft bushing conforming to EN/IEC 60034-5

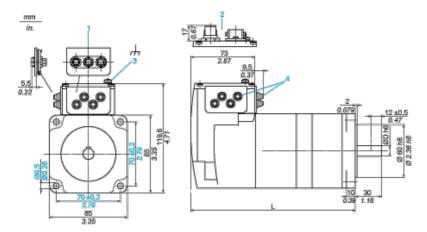
Offer Sustainability

Green Premium product	Green Premium product
Compliant - since 0922 - Schneider Electric declaration of conformity	Compliant - since 0922 - Schneider Electric declaration of conformity
Reference not containing SVHC above the threshold	Reference not containing SVHC above the threshold
Available	Available
Available	Available

Integrated Drive with Holding Brake

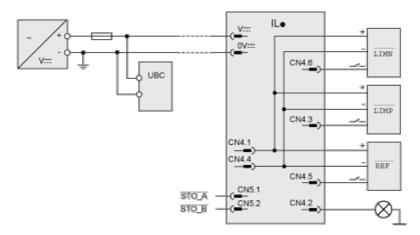
Dimensions



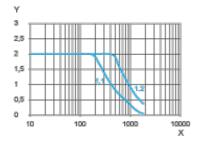


- 1 Accessories: I/O signal insert with industrial connectors
- 2 Option: industrial connectors
- 3 Earth (ground) terminal
- 4 Accessories: cable entries $\emptyset = 3 \dots 9 \text{ mm}/0.12 \dots 0.35 \text{ in.}$
- L 187.3 mm/7.37 in.
- **D** 12 mm/0.47 in.

Connection Example with 4 I/O Signals



Torque Characteristics



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