Product data sheet Characteristics

ILS1B573PC1A0

integrated drive ILS with stepper motor - 24..36 V - Profibus DP - 3.5 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
Network number of phases	Single phase
[Us] rated supply voltage	24 V 36 V
Network type	DC
Communication interface	Profibus DP, integrated
Length	138.9 mm
Winding type	Medium speed of rotation and medium torque
Electrical connection	Industrial connector
Holding brake	Without
Gear box type	Without
Nominal speed	200 rpm at 24 V 500 rpm at 36 V
Nominal torque	1.5 N.m
Holding torque	1.7 N.m

Complementary

Complementary	
Transmission rate	9.6, 19.2, 45.45, 93.75, 187.5, 500, 1500, 3000, 6000 and 12000 kbauds
Mounting support	Flange
Motor flange size	57 mm
Number of motor stacks	3
Centring collar diameter	38.1 mm
Centring collar depth	1.6 mm
Number of mounting holes	4
Mounting holes diameter	5.2 mm
Circle diameter of the mounting holes	66.6 mm
Feedback type	Index pulse
Shaft end	Untapped
Second shaft	Without second shaft end
Shaft diameter	8 mm
Shaft length	21 mm
Supply voltage limits	1840 V
Current consumption	3500 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
	Short circuit of the output voltage
	Safe torque off
Peak stall torque	1.5 N.m
Continuous stall torque	1.5 N.m
Speed feedback resolution	20000 points/turn
Accuracy error	+/- 6 arc min
Rotor inertia	0.38 kg.cm²
Maximum mechanical speed	3000 rpm
Maximum radial force Fr	50 N
Maximum axial force Fa	100 N (tensile force)
	8.4 N (force pressure)
Service life in hours	20000 h bearing
Marking	CE
Type of cooling	Natural convection
Net weight	2 kg

Environment

Ctandarda	EN 50347
Standards	EN 61800-3 : 2001-02
	EN 61600-3 : 2001-02 EN 61800-3:2001, second environment
	IEC 60072-1
	EN/IEC 50178
	IEC 61800-3, Ed 2
	EN/IEC 61800-3
Product certifications	TÜV
	CUL
	UL
Ambient air temperature for operation	5065 °C (with power derating of 2 % per °C)
	050 °C (without derating)
Permissible ambient air temperature around the	105 °C power amplifier
device	110 °C motor
Ambient air temperature for storage	-2570 °C
Operating altitude	<= 1000 m without derating
Relative humidity	1585 % without condensation
Vibration resistance	20 m/s² (f= 10500 Hz) 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

Packing Units

Unit Type of Package 1	PCE	
Number of Units in Package 1	1	
Package 1 Weight	2.8 kg	
Package 1 Height	10.5 cm	
Package 1 width	19.0 cm	
Package 1 Length	39.0 cm	

Offer Sustainability

Sustainable offer status	Green Premium product
REACh Regulation	☑ REACh Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	₫Yes
China RoHS Regulation	☑ China RoHS Declaration

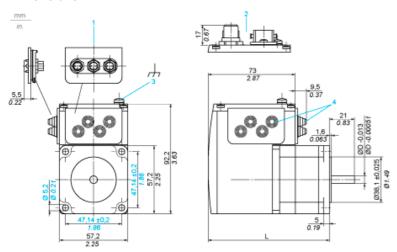
Environmental Disclosure	Product Environmental Profile
Circularity Profile	☑ End Of Life Information
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
PVC free	Yes
Contractual warranty	
Warranty	18 months

Product data sheet **Dimensions Drawings**

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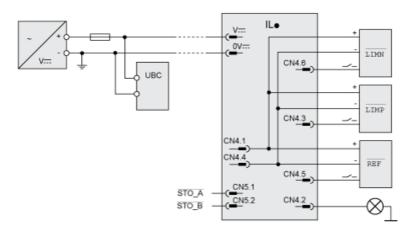
Integrated Drive

Dimensions



- Accessories: I/O signal insert with industrial connectors 1 2 3 4
- Option: industrial connectors
- Earth (ground) terminal Accessories: cable entries $\emptyset = 3 \dots 9 \text{ mm/}0.12 \dots 0.35 \text{ in.}$
- 138.9 mm/5.47 in.
- 8.00 mm/0.31 in.

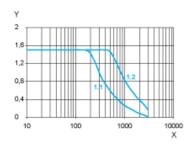
Connection Example with 4 I/O Signals



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 36 V