## **ILS1V573PB1A0**

integrated drive ILS with stepper motor-24..36V-pulse/direction w/o RS422- 3.5A





#### Main

Lexium integrated drive
Motion integrated drive
ILS
3-phase stepper motor
6
Single phase
24 V 36 V
DC
Pulse/direction 5 V without RS422, integrated
138.9 mm
Medium speed of rotation and medium torque
Printed circuit board connector
Without
Without
200 rpm at 24 V 500 rpm at 36 V
1.5 N.m
1.7 N.m

#### Complementary

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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 continuous
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 for safety input
Discrete output voltage	2325 V
Maximum switching current	100 MA per output 200 mA total

Protection type	Safe torque off	
	Short circuit of the output voltage	
	Overload of output voltage	
Peak stall torque	1.5 N.m	
Continuous stall torque	1.5 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	0.38 kg.cm <sup>2</sup>	
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

Standards	EN 61800-3 : 2001-02 EN 61800-3:2001, second environment IEC 61800-3, Ed 2 IEC 50178 IEC 61800-3 IEC 60072-1 IEC 50347
Product certifications	cUL[RETURN]TÜV[RETURN]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 device	105 °C power amplifier 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 IEC 60068-2-6
Shock resistance	150 m/s² 1000 shocks conforming to 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

### Packing Units

3	
Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	11.0 cm
Package 1 Width	17.0 cm
Package 1 Length	24.5 cm
Package 1 Weight	2.111 kg
Unit Type of Package 2	P06
Number of Units in Package 2	54
Package 2 Height	85.0 cm
Package 2 Width	80.0 cm
Package 2 Length	60.0 cm
Package 2 Weight	140.55 kg

#### Offer Sustainability

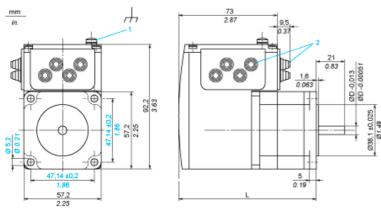
Sustainable offer status	Green Premium product
REACh Regulation	☑ REACh Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
Mercury free	Yes
China RoHS Regulation	China RoHS Declaration
RoHS exemption information	₫Yes
Environmental Disclosure	Product Environmental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

Warranty	18 months	

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#### Integrated Drive

#### **Dimensions**

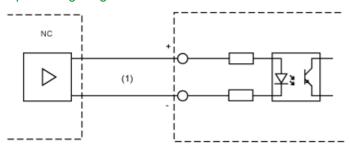


- Earth (ground) terminal
- 1 2 Accessories: cable entries  $\emptyset = 3 \dots 9 \text{ mm/0.12} \dots 0.35 \text{ in.}$
- L D 138.9 mm/5.47 in.
- 8 mm/0.31 in.

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#### Multifunction Interface

#### Input Wiring Diagram



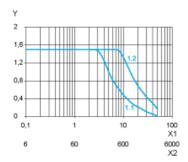
#### (1) Opto-isolated signals

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".

## Product data sheet Performance Curves

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#### **Torque Characteristics**



- X1 Frequency in kHz
- X2 Y Speed of rotation in rpm
- Torque in Nm
- 1.1 Max. torque at 24 V
- 1.2 Max. torque at 36 V