

ILE2K661PC1A0

brushless dc motor 24..48V- EtherNet/IP
interface - L = 122 mm- w/o gearbox



Main

Range of product	Lexium integrated drive
Product or component type	Motion integrated drive
Device short name	ILE
Motor type	Brushless dc motor
Number of motor poles	6
Network number of phases	Single phase
[Us] rated supply voltage	24 V 48 V
Network type	DC
Communication interface	Integrated Ethernet/IP
Length	122 mm
Winding type	Medium speed of rotation and medium torque
Electrical connection	Industrial connector
Holding brake	Without
Gear box type	Without
Reduction ratio	1:1
Nominal speed	6000 rpm at 48 V 4800 rpm at 24 V
Nominal torque	0.26 N.m at 48 V 0.26 N.m at 24 V

Complementary

Transmission rate	125, 250, 500 kbauds
Mounting support	Flange
Motor flange size	66 mm
Number of motor stacks	1
Centring collar diameter	40 mm
Centring collar depth	2 mm
Number of mounting holes	4
Mounting holes diameter	4.4 mm
Circle diameter of the mounting holes	73.54 mm
Feedback type	BLDC encoder
Shaft end	Untapped
Second shaft	Without second shaft end
Shaft diameter	8 mm
Shaft length	25 mm
Supply voltage limits	18...55.2 V
Current consumption	5500 mA (maximum continuous) 7000 mA (peak)
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	-3...4.5 V
Voltage state 1 guaranteed	15...30 V
Discrete input current	2 mA at 24 V for 24 V signal interface ≤ 3 mA at 24 V on/STO_B for safety input ≤ 10 mA at 24 V on/STO_A for safety input

Discrete output voltage	23...25 V
Maximum switching current	200 mA total 100 mA per output
Protection type	Overload of output voltage Safe torque off Short circuit of the output voltage
Supply current	Supply: 3.8 A, 48 V Supply: 6.8 A, 24 V Supply: 0.1 A, power stage disabled
Nominal output power	163 W at 48 V 131 W at 24 V
Peak stall torque	0.43 N.m at 48 V 0.43 N.m at 24 V
Continuous stall torque	0.28 N.m
Detent torque	0.08 N.m
Speed feedback resolution	12 points/turn
Accuracy error	+/- 0.5 °
Rotor inertia	0.17 kg.cm ²
Maximum mechanical speed	6500 rpm 7000 rpm
Maximum radial force Fr	80 N
Maximum axial force Fa	30 N (tensile force) 30 N (force pressure)
Service life in hours	20000 h of bearing :
Marking	CE
Type of cooling	Natural convection
Product weight	1.4 kg

Environment

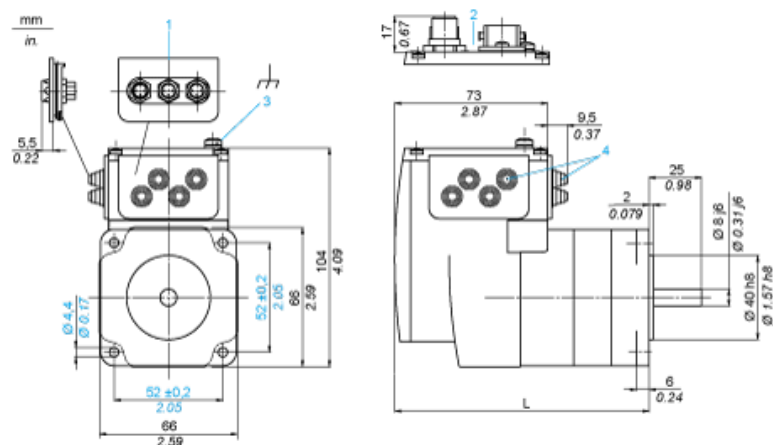
Standards	EN 50347 EN 61800-3:2001, second environment EN 61800-3 : 2001-02 EN/IEC 50178 EN/IEC 61800-3 IEC 60072-1 IEC 61800-3, Ed 2
Product certifications	CUL TÜV UL
Ambient air temperature for operation	0...40 °C without derating > 40...55 °C with power derating of 2 % per °C
Permissible ambient air temperature around the device	110 °C (motor) 105 °C (power amplifier)
Ambient air temperature for storage	-25...70 °C
Operating altitude	<= 1000 m without derating
Relative humidity	15...85 % without condensation
Vibration resistance	20 m/s ² (f = 10...500 Hz) for 10 cycles conforming to EN/IEC 60068-2-6
Shock resistance	150 m/s ² for 1000 shocks conforming to EN/IEC 60068-2-29
IP degree of protection	IP54 total except shaft bushing conforming to EN/IEC 60034-5 IP41 shaft bushing conforming to EN/IEC 60034-5

Offer Sustainability

Sustainable offer status	Not Green Premium product
RoHS (date code: YYWW)	Compliant - since 0931 - Schneider Electric declaration of conformity
REACH	Reference not containing SVHC above the threshold
Product environmental profile	Available Download Product Environmental

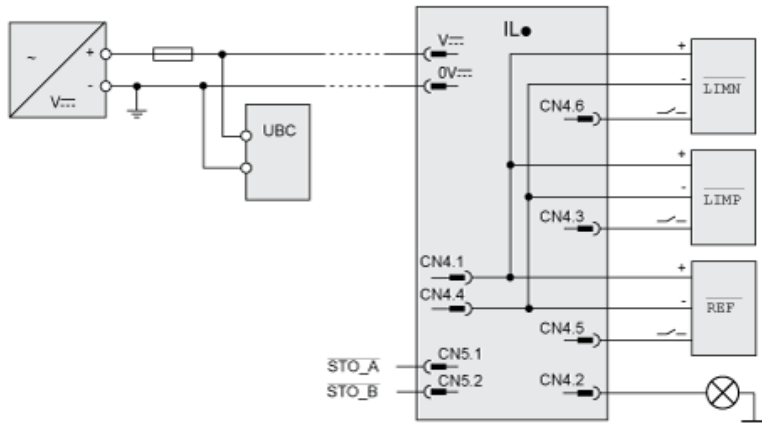
Integrated Drive without Gearing

Dimensions

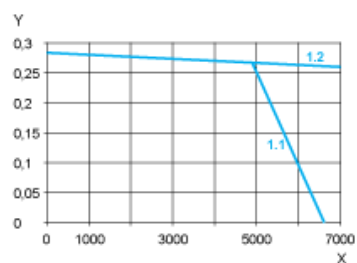


- 1 Accessories: I/O signal insert with industrial connectors
- 2 Option: industrial connectors
- 3 Earth (ground) terminal
- 4 Accessories: cable entries $\varnothing = 3 \dots 9 \text{ mm}/0.12 \dots 0.35 \text{ in.}$
- L 122 mm/4.80 in.

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 48 V