

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

ILE2K661PC1A0

EAN Code: 3606485204765

### 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	Ethernet/IP, integrated	
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	4800 rpm at 24 V 6000 rpm at 48 V	
Nominal torque	0.26 N.m at 24 V 0.26 N.m at 48 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	1855.2 V	
Current consumption	7000 mA peak 5500 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 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	Safe torque off Overload of output voltage Short circuit of the output voltage	
Maximum supply current	0.1 A (power stage disabled) 6.8 A at 24 V 3.8 A at 48 V	
Maximum supply current  Nominal output power	0.1 A (power stage disabled) 6.8 A at 24 V	
	0.1 A (power stage disabled) 6.8 A at 24 V 3.8 A at 48 V	
Nominal output power	0.1 A (power stage disabled) 6.8 A at 24 V 3.8 A at 48 V 131 W at 24 V 163 W at 48 V	
Nominal output power Peak stall torque	0.1 A (power stage disabled) 6.8 A at 24 V 3.8 A at 48 V  131 W at 24 V 163 W at 48 V  0.43 N.m at 24 V 0.43 N.m at 48 V	
Nominal output power  Peak stall torque  Continuous stall torque	0.1 A (power stage disabled) 6.8 A at 24 V 3.8 A at 48 V  131 W at 24 V 163 W at 48 V  0.43 N.m at 24 V 0.43 N.m at 48 V	
Nominal output power  Peak stall torque  Continuous stall torque  Detent torque	0.1 A (power stage disabled) 6.8 A at 24 V 3.8 A at 48 V  131 W at 24 V 163 W at 48 V  0.43 N.m at 24 V 0.43 N.m at 48 V  0.28 N.m	
Nominal output power  Peak stall torque  Continuous stall torque  Detent torque  Speed feedback resolution	0.1 A (power stage disabled) 6.8 A at 24 V 3.8 A at 48 V  131 W at 24 V 163 W at 48 V  0.43 N.m at 24 V 0.43 N.m at 48 V  0.28 N.m  12 points/turn	
Nominal output power  Peak stall torque  Continuous stall torque  Detent torque  Speed feedback resolution  Accuracy error	0.1 A (power stage disabled) 6.8 A at 24 V 3.8 A at 48 V  131 W at 24 V 163 W at 48 V  0.43 N.m at 24 V 0.43 N.m at 48 V  0.28 N.m  12 points/turn  +/- 0.5 °	
Nominal output power  Peak stall torque  Continuous stall torque  Detent torque  Speed feedback resolution  Accuracy error  Rotor inertia	0.1 A (power stage disabled) 6.8 A at 24 V 3.8 A at 48 V  131 W at 24 V 163 W at 48 V  0.43 N.m at 24 V 0.43 N.m at 48 V  0.28 N.m  12 points/turn  +/- 0.5 °  0.17 kg.cm²  7000 rpm	
Nominal output power  Peak stall torque  Continuous stall torque  Detent torque  Speed feedback resolution  Accuracy error  Rotor inertia  Maximum mechanical speed	0.1 A (power stage disabled) 6.8 A at 24 V 3.8 A at 48 V  131 W at 24 V 163 W at 48 V  0.43 N.m at 24 V 0.43 N.m at 48 V  0.28 N.m  12 points/turn  +/- 0.5 °  0.17 kg.cm²  7000 rpm 6500 rpm	
Nominal output power  Peak stall torque  Continuous stall torque  Detent torque  Speed feedback resolution  Accuracy error  Rotor inertia  Maximum mechanical speed  Maximum radial force Fr	0.1 A (power stage disabled) 6.8 A at 24 V 3.8 A at 48 V  131 W at 24 V 163 W at 48 V  0.43 N.m at 24 V 0.43 N.m at 48 V  0.28 N.m  12 points/turn  +/- 0.5 °  0.17 kg.cm²  7000 rpm 6500 rpm 80 N  30 N (force pressure)	
Nominal output power  Peak stall torque  Continuous stall torque  Detent torque  Speed feedback resolution  Accuracy error  Rotor inertia  Maximum mechanical speed  Maximum radial force Fr  Maximum axial force Fa	0.1 A (power stage disabled) 6.8 A at 24 V 3.8 A at 48 V  131 W at 24 V 163 W at 48 V  0.43 N.m at 24 V 0.43 N.m at 48 V  0.28 N.m  12 points/turn  +/- 0.5 °  0.17 kg.cm²  7000 rpm 6500 rpm 80 N  30 N (force pressure) 30 N (tensile force)	
Nominal output power  Peak stall torque  Continuous stall torque  Detent torque  Speed feedback resolution  Accuracy error  Rotor inertia  Maximum mechanical speed  Maximum radial force Fr  Maximum axial force Fa  Service life in hours	0.1 A (power stage disabled) 6.8 A at 24 V 3.8 A at 48 V  131 W at 24 V 163 W at 48 V  0.43 N.m at 24 V 0.43 N.m at 48 V  0.28 N.m  0.08 N.m  12 points/turn  +/- 0.5 °  0.17 kg.cm²  7000 rpm 6500 rpm 80 N  30 N (force pressure) 30 N (tensile force)	

# **Environment**

Standards	EN 61800-3 : 2001-02 IEC 50178 EN 61800-3:2001, second environment IEC 60072-1 IEC 61800-3, Ed 2 IEC 61800-3 IEC 50347	
Product certifications	cUL UL TÜV	
Ambient air temperature for operation	4055 °C (with power derating of 2 % per °C) 040 °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**

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	8.0 cm
Package 1 Width	18.5 cm
Package 1 Length	36.5 cm
Package 1 Weight	1.7 kg

# **Logistical informations**

Country of origin

# **Contractual warranty**

Warranty 18 months



Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing "Use Better, Use Longer, Use Again" campaign to extend product lifetimes and recyclability.

#### Environmental Data explained >

How we assess product sustainability >

☑ Environmental footprint	
Carbon footprint (kg.eq.CO2 per CR, Total Life cycle)	307
Environmental Disclosure	Product Environmental Profile

#### **Use Better**

── Materials and Substances	
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
SCIP Number	C2ce416c-ac1e-4e66-863f-bde9b6d94d11
REACh Regulation	REACh Declaration
PVC free	Yes

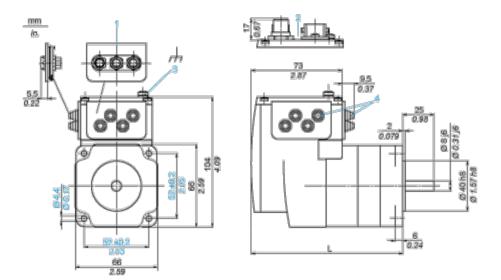
#### **Use Again**

○ Repack and remanufacture	
Circularity Profile	End of Life Information
Take-back	No
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

### **Dimensions Drawings**

### **Integrated Drive without Gearing**

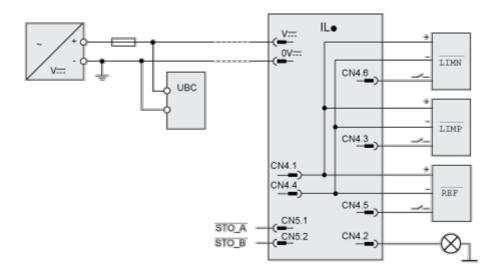
#### **Dimensions**



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

Connections and Schema

### Connection Example with 4 I/O Signals

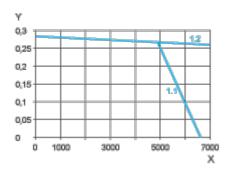


## **Product datasheet**

## ILE2K661PC1A0

#### Performance Curves

### **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