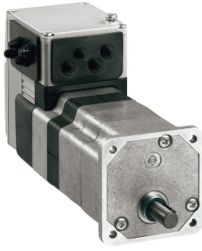


Product datasheet

Specifications



brushless dc motor 24..48 V - EtherCAT interface - L = 174 mm - 54:1

ILE2E661PB1A6

⚠ Discontinued on: Jan 23, 2021

⚠ Discontinued

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	48 V 24 V
Network type	DC
Communication interface	EtherCAT, integrated
Length	229 mm
Winding type	Medium speed of rotation and medium torque
Electrical connection	Printed circuit board connector
Holding brake	Without
Gear box type	Worm gear, 3 stages
Reduction ratio	54:1 (1715:32)
Nominal speed	75 rpm at 24 V 75 rpm at 48 V
Nominal torque	6 N.m at 24 V 6 N.m at 48 V

Complementary

Transmission rate	100 Mbits
Mounting support	Flange
Motor flange size	66 mm
Number of motor stacks	1
Centring collar diameter	36 mm
Number of mounting holes	2
Mounting holes diameter	4.4 mm
Feedback type	BLDC encoder
Shaft end	Hole
Second shaft	Without second shaft end

Supply voltage limits	18...55.2 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	-3...4.5 V
Voltage state 1 guaranteed	15...30 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	23...25 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
Maximum supply current	0.1 A (power stage disabled) 6.8 A at 24 V 2.7 A at 48 V
Nominal output power	45 W at 24 V 47 W at 48 V
Peak stall torque	13.93 N.m at 24 V 13.93 N.m at 48 V
Continuous stall torque	8 N.m
Detent torque	6.5 N.m
Speed feedback resolution	12 points/turn motor 0.56° gearbox output
Accuracy error	+/- 1 point
Rotor inertia	430 kg.cm ²
Maximum mechanical speed	93 rpm
Maximum radial force Fr	200 N
Maximum axial force Fa	80 N
Service life in hours	6000 h bearing
Marking	CE
Type of cooling	Natural convection
Product weight	2.3 kg

Environment

Standards	EN 50347 EN 61800-3 : 2001-02 EN/IEC 61800-3 IEC 61800-3, Ed 2 IEC 60072-1 EN 61800-3:2001, second environment EN/IEC 50178
Product certifications	cUL TÜV UL
Ambient air temperature for operation	40...55 °C (with power derating of 2 % per °C) 0...40 °C (without derating)

Permissible ambient air temperature around the device	105 °C power amplifier 110 °C motor
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) 10 cycles conforming to EN/IEC 60068-2-6
Shock resistance	150 m/s ² 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 Height	10.4 cm
Package 1 Width	18.0 cm
Package 1 Length	36.5 cm
Package 1 Weight	2.3 kg

Contractual warranty

Warranty (in months)	18
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Environmental Data

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

[Environmental Disclosure](#)

[Product Environmental Profile](#)

Use Better



Materials and Substances

SCIP Number

C2ce416c-ac1e-4e66-863f-bde9b6d94d11

EU RoHS Directive

[Compliant By Exemption](#)

REACH Regulation

[Reference contains Substances of Very High Concern above the threshold](#)

PVC free

Yes

Use Longer



Lifetime extension

Repair

No

Use Again



Repack and remanufacture

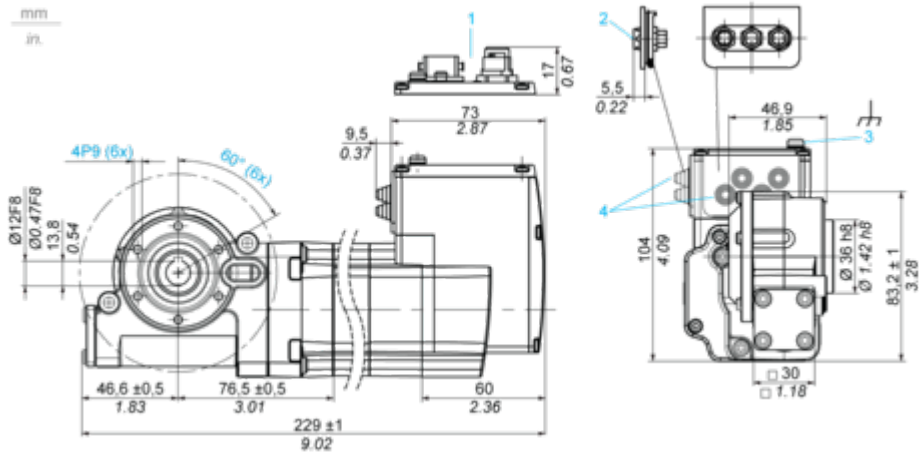
End of life manual availability

[End of Life Information](#)

Dimensions

Integrated Drive with Worm Gear

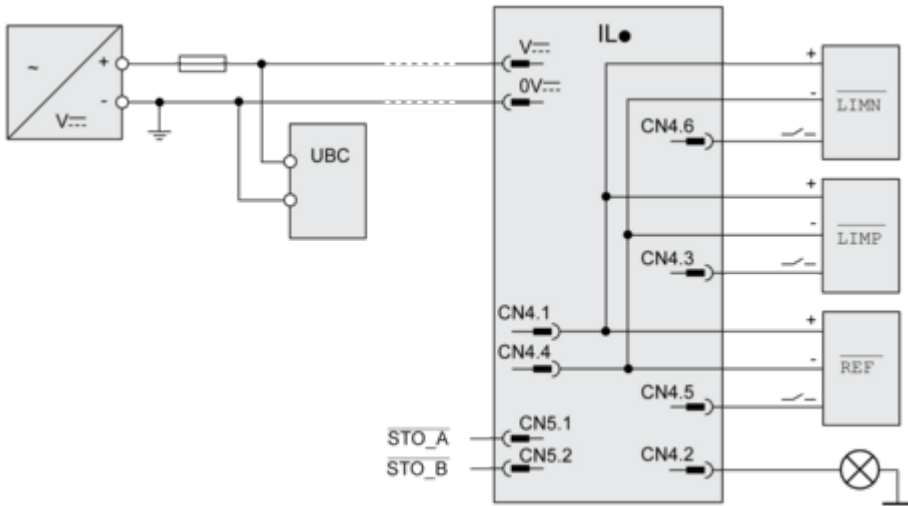
Dimensions



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

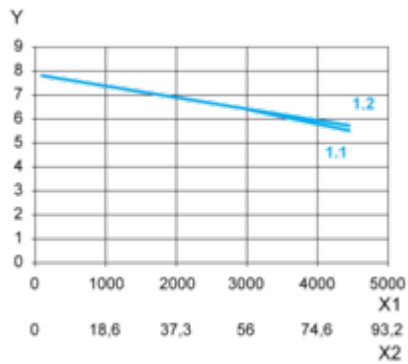
Wiring

Connection Example with 4 I/O Signals



PerformanceCurves

Torque Characteristics



- X1 Speed of rotation of motor in rpm
- X2 Speed of rotation of gearing in rpm
- Y Torque in Nm
- 1.1 Max. torque at 24 V
- 1.2 Max. torque at 48 V