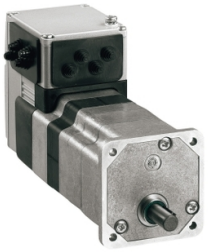
Product datasheet

Specifications



brushless dc motor 24..36 V - Profibus DP interface - L = 174 mm - 92:1

ILE1B661PB1A7

Discontinued on: 15 Jun 2023

To be end-of-service on: 31 Dec 2026

Discontinued - Service only

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	36 V 24 V
Network type	DC
Communication interface	Profibus DP, 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	92:1 (735:5)
Nominal speed	44 rpm at 24 V 44 rpm at 36 V
Nominal torque	9 N.m at 24 V 9.2 N.m at 36 V

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	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

Excluding VAT and subject to change. Please check with your local distributor through "Where to buy"

Second shaft	Without second shaft end
Supply voltage limits	18…40 V
Current consumption	7000 mA peak 5500 mA maximum continuous
Associated fuse rating	10 A
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	Short circuit of the output voltage Overload of output voltage Safe torque off
Maximum supply current	0.1 A (power stage disabled) 6.8 A at 24 V 3.8 A at 36 V
Nominal output power	41 W at 24 V 42 W at 36 V
Peak stall torque	11.96 N.m at 24 V 16.56 N.m at 36 V
Continuous stall torque	11.7 N.m
Detent torque	12.3 N.m
Speed feedback resolution	12 points/turn motor 0.33° gearbox output
Accuracy error	+/- 1 point
Maximum torsional backlash	1 °
Rotor inertia	1270 kg.cm²
Maximum mechanical speed	54 rpm
Maximum radial force Fr	200 N
Maximum axial force Fa	80 N
Service life in hours	9000 h bearing
Marking	CE
Type of cooling	Natural convection
Net weight	2.3 kg

Environment

Standards	EN/IEC 50178 EN 61800-3 : 2001-02 EN 50347 EN/IEC 61800-3 IEC 61800-3, Ed 2 IEC 60072-1 EN 61800-3:2001, second environment
Product certifications	TÜV cUL UL

Ambient air temperature for operation	50…65 °C (with power derating of 2 % per °C) 0…50 °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/s² (f= 10…500 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 Height	9.0 cm
Package 1 Width	19.0 cm
Package 1 Length	38.5 cm
Package 1 Weight	2.25 kg

Contractual warranty

Warranty (in months)	18

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

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 Longer

Lifetime extension

Repair	No

Use Again

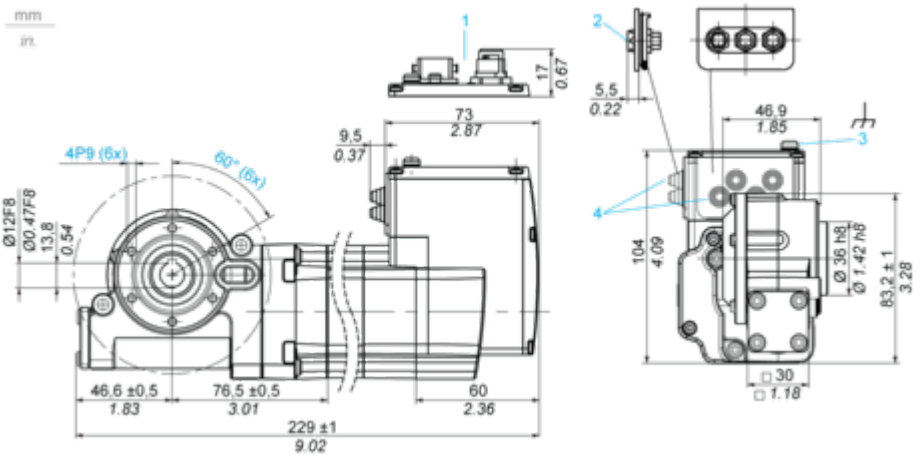
Repack and remanufacture

End of life manual availability	End of Life Information
WEEE Label	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Dimensions

Integrated Drive with Worm Gear

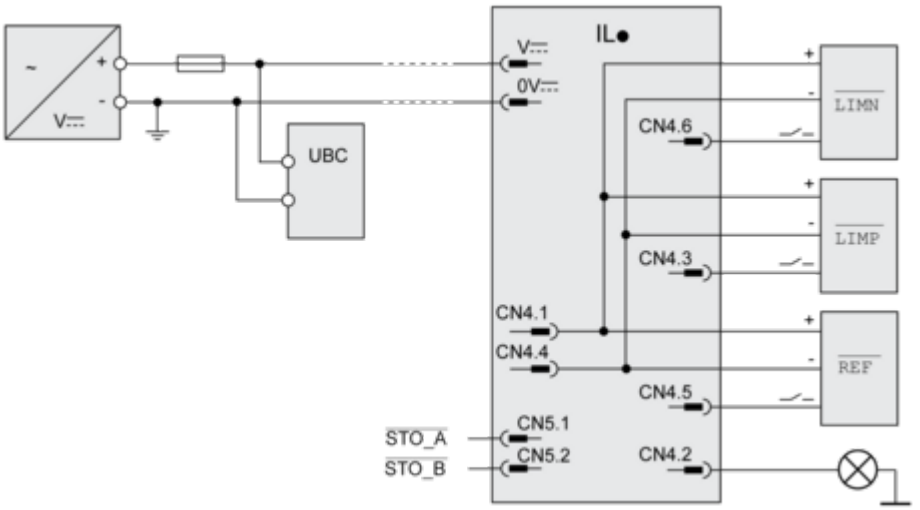
Dimensions



1 Option: industrial connectors
2 Accessories: I/O signal insert with industrial connectors
3 Earth (ground) terminal
4 Accessories: cable entries Ø = 3 ... 9 mm/0.12 ... 0.35 in.

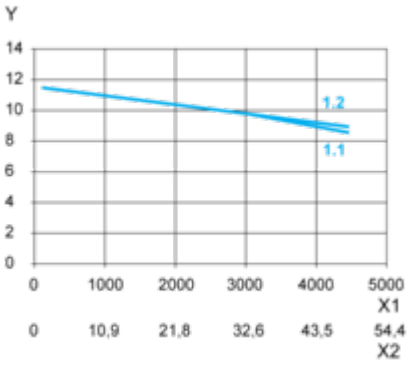
Wiring

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 36 V