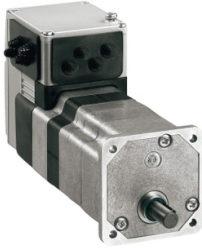


Product data sheet

Specifications



brushless dc motor 24..36 V - Profibus DP interface - L = 174 mm - 18:1

ILE1B661PB1A1

! Discontinued

! Discontinued on: Sep 15, 2023

! End-of-service on: Dec 31, 2024

Product availability: Non-Stock - Not normally stocked in distribution facility

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
Phase	Single phase
[Us] rated supply voltage	36 V 24 V
Network type	DC
Communication interface	Profibus DP, Integrated
Length	6.9 in (174 mm)
Winding type	Medium speed of rotation and medium torque
Electrical Connection	Printed circuit board connector
Holding brake	Without
Gear box type	Straight teeth gear, 3 stages
Reduction ratio	18:1 (160:9)
Nominal speed	225 rpm 24 V 270 rpm 36 V
Nominal torque	27.4 lbf.in (3.1 N.m) 24 V 31.0 lbf.in (3.5 N.m) 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	2.6 in (66 mm)
Number of motor stacks	1
Centring collar diameter	0.6 in (16 mm)
Centring collar depth	0.2 in (4 mm)
Number of mounting holes	4
Mounting holes diameter	0.2 in (4.4 mm)

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

Circle diameter of the mounting holes	2.90 in (73.54 mm)
Feedback type	BLDC encoder
Shaft end	Keyed
Second shaft	Without second shaft end
Shaft diameter	0.4 in (10 mm)
Shaft length	1.0 in (25 mm)
Key width	0.6 in (16 mm)
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 safety input 3 mA at 24 V on/STO_B safety input 2 mA at 24 V 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	0.06 A 36 V power stage disabled) 0.1 A 24 V power stage disabled) 4 A 36 V 4.5 A 24 V
Nominal output power	74 W 24 V 98 W 36 V
Peak stall torque	33.10 lbf.in (3.74 N.m) 24 V 45.85 lbf.in (5.18 N.m) 36 V
Continuous stall torque	38.06 lbf.in (4.3 N.m)
Detent torque	9.7 lbf.in (1.1 N.m)
Speed feedback resolution	1.667° gearbox output 12 points/turn motor
Accuracy error	+/- 1 point
Maximum torsional backlash	1 °
Rotor inertia	48 kg.cm ²
Maximum mechanical speed	281 rpm
Maximum radial force Fr	200 N long-term operation) 200 N short-term operation)
Maximum axial force Fa	10 N long-term operation) 80 N short-term operation)
Service life in hours	2500 h bearing short-term operation 15000 h bearing long-term operation
Marking	CE
Type of cooling	Natural convection
Net Weight	4.08 lb(US) (1.85 kg)

Environment

Standards	IEC 61800-3, Ed 2 EN/IEC 50178 IEC 60072-1 EN/IEC 61800-3 EN 50347 EN 61800-3 : 2001-02 EN 61800-3:2001, second environment
Product Certifications	cUL TÜV UL
Ambient air temperature for operation	122...149 °F (50...65 °C) (with power derating of 2 % per °C) 32...122 °F (0...50 °C) (without derating)
Permissible ambient air temperature around the device	221 °F (105 °C) power amplifier 230 °F (110 °C) motor
Ambient Air Temperature for Storage	-13...158 °F (-25...70 °C)
Operating altitude	<= 3280.84 ft (1000 m) without derating
Relative humidity	15...85 % without condensation
Vibration resistance	20 m/s ² 10...500 Hz) 10 cycles EN/IEC 60068-2-6
Shock resistance	150 m/s ² 1000 shocks 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

Ordering and shipping details

Category	US1PC5618288
Discount Schedule	PC56
GTIN	3389119222136
Returnability	No

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	4.3 in (11 cm)
Package 1 Width	7.4 in (18.8 cm)
Package 1 Length	15.4 in (39 cm)
Package weight(Lbs)	5.104 lb(US) (2.315 kg)
Unit Type of Package 2	S04
Number of Units in Package 2	4
Package 2 Height	11.8 in (30 cm)
Package 2 Width	15.7 in (40 cm)
Package 2 Length	23.6 in (60 cm)
Package 2 Weight	23.175 lb(US) (10.512 kg)
Package 3 Height	11.8 in (30.0 cm)

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

[EU RoHS Directive](#)

Pro-active compliance (Product out of EU RoHS legal scope)

SCIP Number

C2ce416c-ac1e-4e66-863f-bde9b6d94d11

REACH Regulation

[REACH Declaration](#)

California proposition 65

WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

PVC free

Yes

Use Longer



Lifetime extension

Repair

No

Use Again



Repack and remanufacture

[Circularity Profile](#)

[End of Life Information](#)

WEEE Label

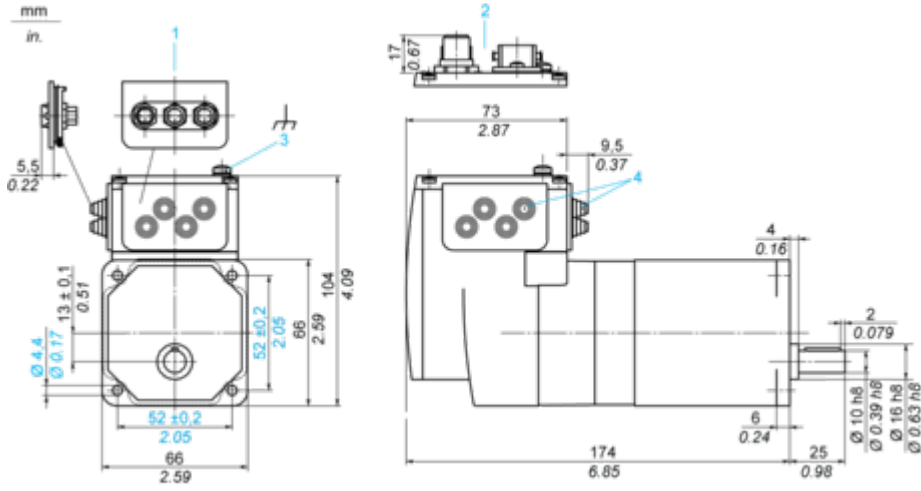


The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

Dimensions

Integrated Drive with Straight Teeth Gear

Dimensions



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

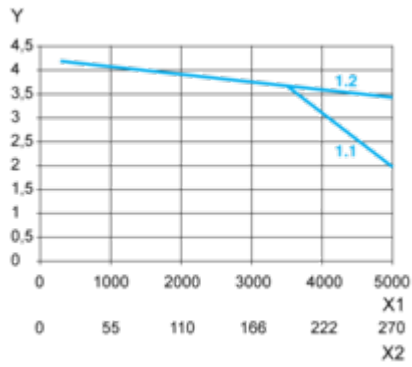
Wiring

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