

Product data sheet

Characteristics

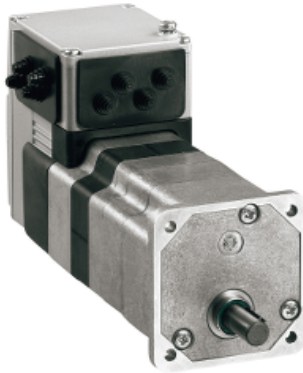
ILE1F661PB1A1

brushless dc motor 24..36 V - CANopen DS301 interface - L = 174 mm - 18:1

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



Price* : 1,240.00 USD



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	24 V 36 V
Network type	DC
Communication interface	Integrated CANopen DS301
Length	6.85 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 at 24 V 270 rpm at 36 V
Nominal torque	27.43 lbf.in (3.1 N.m) at 24 V 30.97 lbf.in (3.5 N.m) at 36 V

Complementary

Transmission rate	50, 100, 125, 250, 500, 800 and 1000 kbauds
Mounting support	Flange
Motor flange size	2.6 in (66 mm)
Number of motor stacks	1
Centring collar diameter	0.63 in (16 mm)

Centring collar depth	0.16 in (4 mm)
Number of mounting holes	4
Mounting holes diameter	0.17 in (4.4 mm)
Circle diameter of the mounting holes	2.9 in (73.54 mm)
Feedback type	BLDC encoder
Shaft end	Keyed
Second shaft	Without second shaft end
Shaft diameter	0.39 in (10 mm)
Shaft length	0.98 in (25 mm)
Key width	0.63 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 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 Short circuit of the output voltage Safe torque off
Supply current	Supply: 4 A, 36 V Supply: 0.06 A, 36 V, power stage disabled Supply: 0.1 A, 24 V, power stage disabled Supply: 4.5 A, 24 V
Nominal output power	74 W at 24 V 98 W at 36 V
Peak stall torque	33.1 lbf.in (3.74 N.m) at 24 V 45.84 lbf.in (5.18 N.m) at 36 V
Continuous stall torque	38.05 lbf.in (4.3 N.m)
Detent torque	9.73 lbf.in (1.1 N.m)
Speed feedback resolution	1.667° (gearbox output) 12 points/turn (motor)
Accuracy error	+/- 1 point
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 of bearing: (short-term operation) 15000 h of bearing: (long-term operation)
Marking	CE
Type of cooling	Natural convection
Product weight	4.08 lb(US) (1.85 kg)

Environment

Standards	IEC 60072-1 EN/IEC 50178 EN 61800-3:2001, second environment EN 61800-3 : 2001-02 IEC 61800-3, Ed 2 EN/IEC 61800-3
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Product certifications	CUL UL TÜV
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 (f = 10...500 Hz) for 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

Ordering and shipping details

Category	18288 - LEXIUM INTEGRATED DRIVES II
Discount Schedule	PC56
GTIN	003389119222310
Nbr. of units in pkg.	1
Package weight(Lbs)	4.9500000000000002
Returnability	N
Country of origin	DE

Offer Sustainability

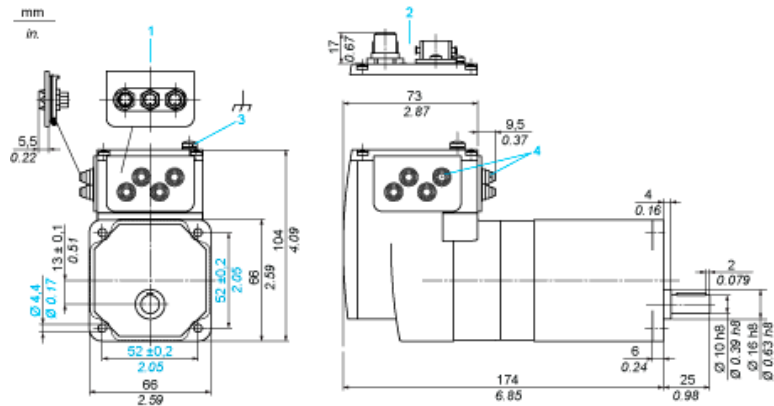
Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 0922 - Schneider Electric declaration of conformity Schneider Electric declaration of conformity
REACH	Reference not containing SVHC above the threshold Reference not containing SVHC above the threshold
Product environmental profile	Available End of Life Information
Product end of life instructions	Available
California proposition 65	WARNING: This product can expose you to chemicals including:
- - - - - Substance 1	Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm.
- - - - - More information	For more information go to www.p65warnings.ca.gov

Contractual warranty

Warranty period	18 months
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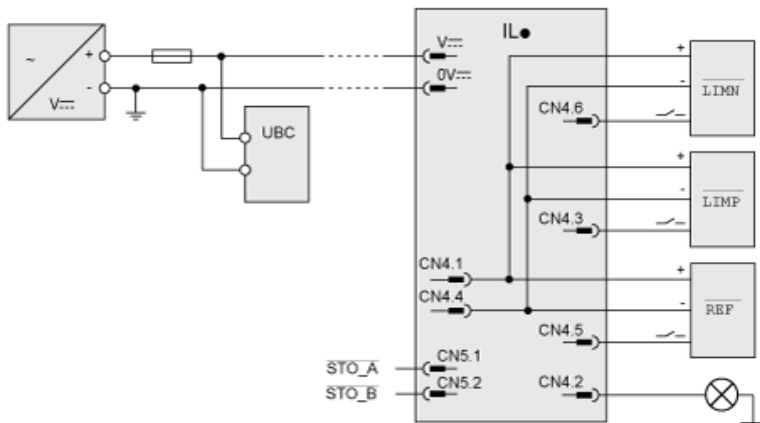
Integrated Drive with Straight Teeth Gear

Dimensions

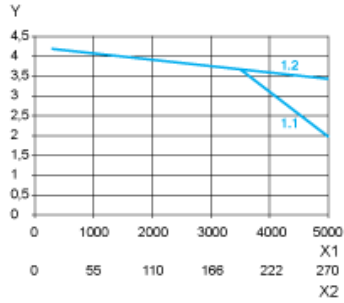


- 1 Accessories: I/O signal insert with industrial connectors
- 2 Option: industrial connectors
- 3 Earth (ground) terminal
- 4 Accessories: cable entries $\varnothing = 3 \dots 9 \text{ mm} / 0.12 \dots 0.35 \text{ in.}$

Connection Example with 4 I/O Signals



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