Product data sheet Characteristics

ILE2D661PC1A7

brushless dc motor 24..48V- DeviceNet interface - L = 174 mm- 92:1



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 volt-	24 V
age	48 V
Network type	DC
Communication inter- face	Integrated DeviceNet
Length	229 mm
Winding type	Medium speed of rotation and medium torque
Electrical connection	Industrial connector
Holding brake	Without
Gear box type	Worm gear, 3 stages
Reduction ratio	92:1 (735:5)
Nominal speed	44 rpm at 48 V
	44 rpm at 24 V
Nominal torque	9.2 N.m at 48 V
	9.2 N.m at 24 V

Complementary

Complementary	
Transmission rate	125, 250, 500 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
Second shaft	Without second shaft end
Supply voltage limits	1855.2 V
Current consumption	5500 mA (maximum continuous) 7000 mA (peak)
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	2 mA at 24 V for 24 V signal interface <= 3 mA at 24 V on/STO_B for safety input <= 10 mA at 24 V on/STO_A for safety input
Discrete output voltage	2325 V
Maximum switching current	200 mA total 100 mA per output

Protection type	Overload of output voltage Safe torque off Short circuit of the output voltage
Supply current	Supply: 2.6 A, 48 V Supply: 6.8 A, 24 V Supply: 0.1 A, power stage disabled
Nominal output power	42 W at 48 V 41 W at 24 V
Peak stall torque	19.78 N.m at 48 V 19.78 N.m at 24 V
Continuous stall torque	11.6 N.m
Detent torque	12.3 N.m
Speed feedback resolution	0.33° (gearbox output) 12 points/turn (motor)
Accuracy error	+/- 1 point
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 of bearing :
Marking	CE
Type of cooling	Natural convection
Product weight	2.3 kg

Environment

Standards	EN 50347 EN 61800-3:2001, second environment EN 61800-3: 2001-02 EN/IEC 50178 EN/IEC 61800-3 IEC 60072-1 IEC 61800-3, Ed 2
Product certifications	CUL TÜV UL
Ambient air temperature for operation	040 °C without derating > 4055 °C with power derating of 2 % per °C
Permissible ambient air temperature around the device	110 °C (motor) 105 °C (power amplifier)
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) for 10 cycles conforming to EN/IEC 60068-2-6
Shock resistance	150 m/s² for 1000 shocks conforming to EN/IEC 60068-2-29
IP degree of protection	IP54 total except shaft bushing conforming to EN/IEC 60034-5 IP41 shaft bushing conforming to EN/IEC 60034-5

Offer Sustainability

Sustainable offer status	Not Green Premium product
RoHS (date code: YYWW)	Compliant - since 0910 - Schneider Electric declaration of conformity
REACh	Reference not containing SVHC above the threshold

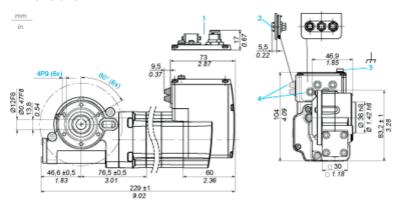


Product data sheet Dimensions Drawings

ILE2D661PC1A7

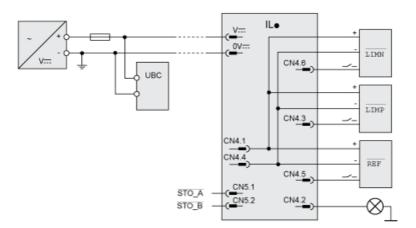
Integrated Drive with Worm Gear

Dimensions



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

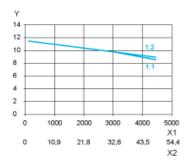
Connection Example with 4 I/O Signals



Product data sheet Performance Curves

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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