ILS2K852PB1F0

integrated drive ILS with stepper motor - 24..48 V - EtherNet/IP - 5 A





Main

| Range of product | Lexium integrated drive |
|---------------------------|--------------------------------------------|
| Product or component type | Motion integrated drive |
| Device short name | ILS |
| Motor type | 3-phase stepper motor |
| Number of motor poles | 6 |
| Network number of phases | Single phase |
| [Us] rated supply voltage | 24 V 48 V |
| Network type | DC |
| Communication interface | Ethernet/IP, integrated |
| Length | 217.3 mm |
| Winding type | Medium speed of rotation and medium torque |
| Electrical connection | Printed circuit board connector |
| Holding brake | With |
| Gear box type | Without |
| Nominal speed | 180 rpm at 24 V 360 rpm at 48 V |
| Nominal torque | 4 N.m |
| Holding torque | 6 N.M holding brake 4 N.m |
| | |

Complementary

| Complementary | | |
|---------------------------------------|--------------------------------------------------------------------------|--|
| Transmission rate | 125, 250, 500 kbauds | |
| Mounting support | Flange | |
| Motor flange size | 85 mm | |
| Number of motor stacks | 2 | |
| Centring collar diameter | 60 mm | |
| Centring collar depth | 2 mm | |
| Number of mounting holes | 4 | |
| Mounting holes diameter | 6.5 mm | |
| Circle diameter of the mounting holes | 99 mm | |
| Feedback type | Index pulse | |
| Shaft end | Untapped | |
| Second shaft | Without second shaft end | |
| Shaft diameter | 12 mm | |
| Shaft length | 30 mm | |
| Supply voltage limits | 1855 V | |
| Current consumption | 5000 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 | -34.5 V | |
| Voltage state 1 guaranteed | 1530 V | |
| Discrete input current | 10 MA at 24 V for safety input 2 mA at 24 V for 24 V signal interface | |
| | | |

| Discrete output voltage | 2325 V |
|---------------------------|--------------------------------------------------------------------------------|
| Maximum switching current | 100 MA per output 200 mA total |
| Protection type | Short circuit of the output voltage Safe torque off Overload of output voltage |
| Peak stall torque | 4 N.m |
| Continuous stall torque | 4 N.m |
| Speed feedback resolution | 20000 points/turn |
| Accuracy error | +/- 6 arc min |
| Rotor inertia | 2.4 kg.cm ² |
| Maximum mechanical speed | 3000 rpm |
| Maximum radial force Fr | 100 N |
| Maximum axial force Fa | 170 N (tensile force) 30 N (force pressure) |
| Service life in hours | 20000 h bearing |
| Brake pull-in power | 22 W |
| Brake release time | 40 ms |
| Brake application time | 20 ms |
| Marking | CE |
| Type of cooling | Natural convection |
| Net weight | 5.4 kg |

Environment

| Environment | |
|------------------------------------------------|-------------------------------------------------------------|
| Standards | IEC 50347 |
| | IEC 60072-1 |
| | EN 61800-3 : 2001-02 |
| | IEC 61800-3 |
| | IEC 50178 |
| | IEC 61800-3, Ed 2 |
| | EN 61800-3:2001, second environment |
| Product certifications | UL[RETURN]TÜV[RETURN]cUL |
| Ambient air temperature for operation | 4055 °C (with power derating of 2 % per °C) |
| · | 040 °C (without derating) |
| Permissible ambient air temperature around the | 105 °C power amplifier |
| device | 110 °C motor |
| 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) 10 cycles conforming to IEC 60068-2-6 |
| Shock resistance | 150 m/s² 1000 shocks conforming to IEC 60068-2-29 |
| IP degree of protection | IP41 shaft bushing: conforming to IEC 60034-5 |
| | IP54 total except shaft bushing: conforming to 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 | 4.9 kg | |

Offer Sustainability

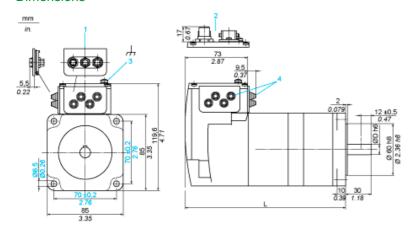
| Sustainable offer status | Green Premium product |
|--------------------------|------------------------------------------------------------|
| REACh Regulation | REACh Declaration |
| EU RoHS Directive | Pro-active compliance (Product out of EU RoHS legal scope) |
| Mercury free | Yes |
| China RoHS Regulation | China RoHS Declaration |

| RoHS exemption information | ₽¥Yes |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Environmental Disclosure | Product Environmental Profile |
| Circularity Profile | End Of Life Information |
| WEEE | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |
| Contractual warranty | |
| Warranty | 18 months |

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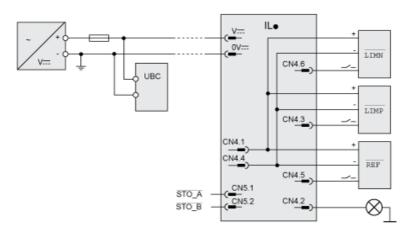
Integrated Drive with Holding Brake

Dimensions



- Accessories: I/O signal insert with industrial connectors Option: industrial connectors
- 2
- Earth (ground) terminal Accessories: cable entries \emptyset = 3 ... 9 mm/0.12 ... 0.35 in. 4 L D
- 217.3 mm/8.55 in.
- 12 mm/0.47 in.

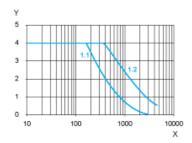
Connection Example with 4 I/O Signals



Product data sheet Performance Curves

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Torque Characteristics



- X Y Speed of rotation in rpm
- Torque in Nm
- 1.1 Max. torque at 24 V
- 1.2 Max. torque at 48 V