

# ILT2A421MC1A

integrated drive ILT with stepper motor - 24..48 V DC - CANopen - 0.19 N.m



## Main

|                           |                                            |
|---------------------------|--------------------------------------------|
| Range of product          | Lexium integrated drive                    |
| Product or component type | Motion integrated drive                    |
| Device short name         | ILT                                        |
| Motor type                | 2-phase stepper motor                      |
| Network type              | DC                                         |
| Electrical connection     | Industrial connector                       |
| [Us] rated supply voltage | 24...48 V                                  |
| Communication interface   | CANopen DS402                              |
| Length                    | 77.72 mm                                   |
| Winding type              | Medium speed of rotation and medium torque |
| Holding brake             | Without                                    |
| Gear box type             | Without                                    |
| Nominal speed             | 800 rpm at 24 V<br>1500 rpm at 48 V        |
| Holding torque            | 0.19 N.m                                   |

## Complementary

|                            |                                                                                                                                                                                                                                                 |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Transmission rate          | 10, 20, 50, 100, 125, 250, 800, 1000 kbauds                                                                                                                                                                                                     |
| Mounting support           | Flange                                                                                                                                                                                                                                          |
| Motor flange size          | 42 mm                                                                                                                                                                                                                                           |
| Feedback type              | Index pulse                                                                                                                                                                                                                                     |
| Supply voltage limits      | 12...48 V                                                                                                                                                                                                                                       |
| Current consumption        | 1.3 A (maximum continuous)                                                                                                                                                                                                                      |
| Input/Output type          | 11 signals (each be used as input or output)                                                                                                                                                                                                    |
| Voltage state 0 guaranteed | <= 0.8 V                                                                                                                                                                                                                                        |
| Voltage state 1 guaranteed | >= 2.2 V                                                                                                                                                                                                                                        |
| Discrete input current     | 1.75 mA at 24 V for 24 V signal interface                                                                                                                                                                                                       |
| Discrete output voltage    | 5...24 V                                                                                                                                                                                                                                        |
| Maximum switching current  | 600 mA single channel<br>275 mA four channels                                                                                                                                                                                                   |
| Protection type            | Overload of output voltage<br>Short circuit of the output voltage                                                                                                                                                                               |
| Peak stall torque          | 0.19 N.m                                                                                                                                                                                                                                        |
| Continuous stall torque    | 0.19 N.m                                                                                                                                                                                                                                        |
| Speed feedback resolution  | 800 steps<br>6400 steps<br>51200 steps<br>50000 steps<br>5000 steps<br>40000 steps<br>400 steps<br>3200 steps<br>25600 steps<br>25000 steps<br>20000 steps<br>2000 steps<br>200 steps<br>1600 steps<br>12800 steps<br>10000 steps<br>1000 steps |

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|                       |                          |
|-----------------------|--------------------------|
| Accuracy error        | +/- 0.3 arc/min          |
| Rotor inertia         | 0.038 kg.cm <sup>2</sup> |
| Service life in hours | 20000 H                  |
| Marking               | CE                       |

## Environment

|                                                       |                                                                                                                                                                                                                               |
|-------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Standards                                             | EMC immunity IEC 61000-4-2<br>EN 55011:2007, A2:2007 for Group 1, Class A<br>EN 61000-3-2 : 2006<br>EN 61000-3-3:1995, A1:2001, A2:2005<br>IEC 61000-4-11<br>IEC 61000-4-3<br>IEC 61000-4-4<br>IEC 61000-4-5<br>IEC 61000-4-6 |
| Ambient air temperature for operation                 | 0...50 °C without derating<br>> 50...65 °C with power derating of 2 % per °C                                                                                                                                                  |
| Permissible ambient air temperature around the device | 100 °C                                                                                                                                                                                                                        |
| Ambient air temperature for storage                   | -25...70 °C                                                                                                                                                                                                                   |
| Operating altitude                                    | <= 1000 m without derating                                                                                                                                                                                                    |
| Relative humidity                                     | 15...85 % without condensation                                                                                                                                                                                                |
| IP degree of protection                               | IP54 total except shaft bushing conforming to EN/IEC 60034-5<br>IP41 shaft bushing conforming to EN/IEC 60034-5                                                                                                               |

## Offer Sustainability

|                          |                           |
|--------------------------|---------------------------|
| Sustainable offer status | Not Green Premium product |
|--------------------------|---------------------------|

## Dimensions

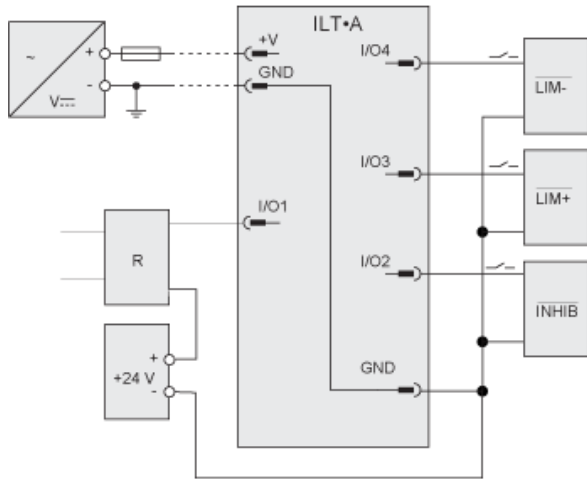
The technical drawing shows two views of a mechanical component:

- Front View (Left):** A square flange with four mounting holes. Dimensions include a central hole diameter of  $\varnothing 5,0 \pm 0,051$  ( $\varnothing 0,19$ ), outer hole diameters of  $\varnothing 22,0 \pm 0,051$  ( $\varnothing 0,87$ ) and  $\varnothing 16,3 \pm 0,051$  ( $\varnothing 0,64$ ), and overall width of  $42,9 \pm 0,127$  ( $1,69$ ). Mounting holes are specified as  $4 \times M3 \times 0,5 (I)$  x  $0,15 (2)$  and  $4 \times M3 \times 0,19 (I)$  x  $0,059 (2)$ .
- Side View (Right):** Shows the profile of the component with various heights and widths. Key dimensions include a total height of  $70,9 \pm 0,254$  ( $2,79$ ), a base thickness of  $29,5 \pm 0,114$  ( $1,16$ ), and a top section width of  $35,1 \pm 0,738$  ( $1,38$ ). Other features include a threaded section with a diameter of  $12,5 \pm 0,127$  ( $0,49$ ) and a final assembly dimension of  $23,9 \pm 0,508$  ( $0,94$ ) with a tolerance of  $0,08$ . A small protrusion at the bottom right has a diameter of  $15,0 \pm 0,508$  ( $0,59$ ) and a length of  $4,49 \pm 0,0508$  ( $0,18$ ).

- (1) Thread  
(2) Depth  
L 77.72 mm/3.06 in.

## Connection Example with 4 I/O Signals

Three sinking inputs (I/O4 - I/O2) and a sourcing output (I/O1).

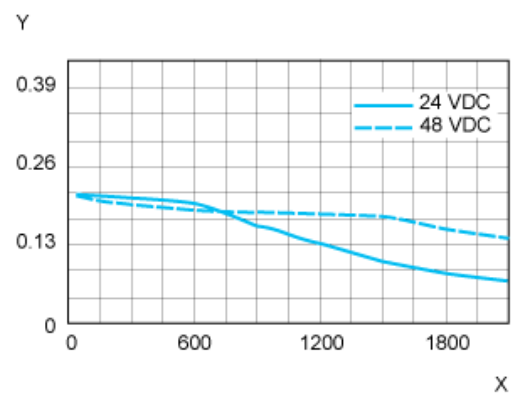


R Relay

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Torque Characteristics

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X Speed of rotation in rpm  
Y Torque in Nm