

# LXM32MC10N4

motion servo drive - Lexium 32 - three-phase  
supply voltage 208/480V - 11 kW



## Main

|                           |                                                                                                                                                                                            |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range of product          | Lexium 32                                                                                                                                                                                  |
| Product or component type | Motion servo drive                                                                                                                                                                         |
| Device short name         | LXM32M                                                                                                                                                                                     |
| Format of the drive       | Book                                                                                                                                                                                       |
| Network number of phases  | Three phase                                                                                                                                                                                |
| [Us] rated supply voltage | 200...240 V (- 15...10 %)<br>380...480 V (- 15...10 %)                                                                                                                                     |
| Supply voltage limits     | 170...264 V<br>323...528 V                                                                                                                                                                 |
| Supply frequency          | 50/60 Hz (- 5...5 %)                                                                                                                                                                       |
| Network frequency         | 47.5...63 Hz                                                                                                                                                                               |
| EMC filter                | Integrated                                                                                                                                                                                 |
| Continuous output current | 40 A (f = 4 kHz)                                                                                                                                                                           |
| Output current 3s peak    | 100 A for 5 s                                                                                                                                                                              |
| Maximum continuous power  | 11000 W at 400 V                                                                                                                                                                           |
| Nominal power             | 11 kW at 400 V (f = 4 kHz)                                                                                                                                                                 |
| Line current              | 23.3 A, THDI of 140 % at 480 V, without line choke<br>32 A, THDI of 54 % at 480 V, with external line choke of 0.5 mH<br>38.1 A, THDI of 70 % at 380 V, with external line choke of 0.5 mH |

## Complementary

|                         |                                                                                                                              |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------|
| Switching frequency     | 4 kHz                                                                                                                        |
| Overvoltage category    | III                                                                                                                          |
| Leakage current         | < 30 mA                                                                                                                      |
| Output voltage          | <= power supply voltage                                                                                                      |
| Electrical isolation    | Between power and control                                                                                                    |
| Type of cable           | Single-strand IEC cable (for $\theta = 50$ °C) conductor material: copper 90 °C ,wire insulation material: XLPE/EPR          |
| Electrical connection   | Terminal cable 8 mm <sup>2</sup> AWG 8 (CN8)                                                                                 |
| Tightening torque       | 3.8 N.m (CN8)                                                                                                                |
| Discrete input number   | 2 capture                                                                                                                    |
| Discrete input type     | Capture (CAP)                                                                                                                |
| Sampling duration       | 0.25 ms                                                                                                                      |
| Discrete input voltage  | 24 V DC for capture                                                                                                          |
| Discrete input logic    | Positive (compliment of STO_A, compliment of STO_B) at State 0: < 5 V at State 1: > 15 V conforming to EN/IEC 61131-2 type 1 |
| Response time           | <= 5 ms (compliment of STO_A, compliment of STO_B)                                                                           |
| Discrete output number  | 3                                                                                                                            |
| Discrete output type    | Logic (DO) 24 V DC                                                                                                           |
| Discrete output voltage | <= 30 V DC                                                                                                                   |
| Discrete output logic   | Positive or negative (DO) conforming to EN/IEC 61131-2                                                                       |
| Contact bounce time     | <= 1 ms (compliment of STO_A, compliment of STO_B)                                                                           |
| Braking current         | 50 mA                                                                                                                        |

|                         |                                                                                                                                                                              |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Response time on output | 250 µs (DO) discrete                                                                                                                                                         |
| Control signal type     | Pulse train output (PTO) :RS422 (f = <= 500 kHz) (cable length: 100 m)                                                                                                       |
| Protection type         | Against reverse polarity :inputs signal                                                                                                                                      |
| Safety function         | STO (safe torque off), integrated                                                                                                                                            |
| Safety level            | SIL 3 conforming to EN/IEC 61508                                                                                                                                             |
| Communication interface | Integrated Modbus                                                                                                                                                            |
| Type of connector       | RJ45 (labelled CN7) :Modbus                                                                                                                                                  |
| Commissioning port      | 2-wire RS485 multidrop Modbus                                                                                                                                                |
| Transmission rate       | 9600, 19200, 38400 bps for bus length of <= 40 m Modbus                                                                                                                      |
| Number of addresses     | 1...247 Modbus                                                                                                                                                               |
| Status LED              | 1 LED (red) servo drive voltage                                                                                                                                              |
| Signalling function     | Display of faults in 7 segments                                                                                                                                              |
| Marking                 | CE                                                                                                                                                                           |
| Operating position      | Vertical +/- 10 degree                                                                                                                                                       |
| Product compatibility   | Servo motor BMH (190 mm, 1 motor stacks)<br>Servo motor BMH (190 mm, 2 motor stacks)<br>Servo motor BMH (190 mm, 3 motor stacks)<br>Servo motor BMH (190 mm, 4 motor stacks) |
| Width                   | 180 mm                                                                                                                                                                       |
| Height                  | 385 mm                                                                                                                                                                       |
| Depth                   | 240 mm                                                                                                                                                                       |
| Product weight          | 9.6 kg                                                                                                                                                                       |

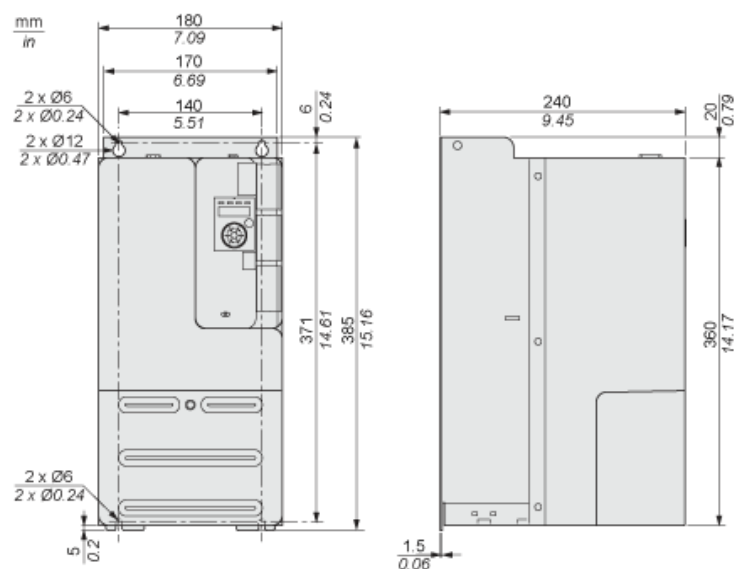
## Environment

|                                       |                                                                        |
|---------------------------------------|------------------------------------------------------------------------|
| Electromagnetic compatibility         | Conducted EMC at class A group 1 conforming to EN 55011                |
| Standards                             | EN/IEC 61800-3                                                         |
| Product certifications                | CSA                                                                    |
| IP degree of protection               | IP20 conforming to EN/IEC 60529                                        |
| Vibration resistance                  | 1 gn (f = 13...150 Hz) conforming to EN/IEC 60068-2-6                  |
| Shock resistance                      | 15 gn for 11 ms conforming to EN/IEC 60028-2-27                        |
| Pollution degree                      | 2 conforming to EN/IEC 61800-5-1                                       |
| Environmental characteristic          | Classes 3C1 conforming to IEC 60721-3-3                                |
| Relative humidity                     | Class 3K3 (5 to 85 %) without condensation conforming to IEC 60721-3-3 |
| Ambient air temperature for operation | 0...50 °C conforming to UL                                             |
| Ambient air temperature for storage   | -25...70 °C                                                            |
| Type of cooling                       | Integrated fan                                                         |
| Operating altitude                    | <= 1000 m without derating                                             |

## Offer Sustainability

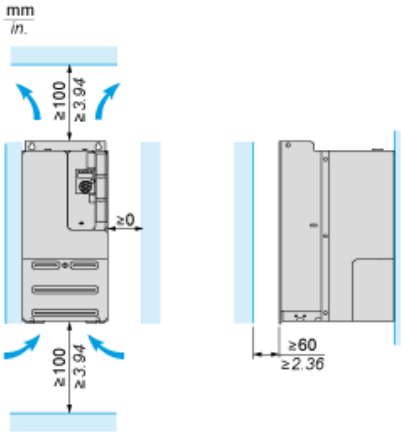
|                                  |                                                                                       |
|----------------------------------|---------------------------------------------------------------------------------------|
| Sustainable offer status         | Green Premium product                                                                 |
| RoHS (date code: YYWW)           | Compliant - since 1408 - <a href="#">Schneider Electric declaration of conformity</a> |
| REACH                            | Reference not containing SVHC above the threshold                                     |
| Product environmental profile    | Available <a href="#">Download Product Environmental</a>                              |
| Product end of life instructions | Available <a href="#">Download End Of Life Manual</a>                                 |

## Dimensions



Lexium 32 Motion Control Servo Drives

Mounting Recommendations



LXM32MD85N4, LXM32MC10N4 servo drives have an integrated fan.  
When selecting the position of the device in the control cabinet, note the following:

- Mount the device in a vertical position ( $\pm 10^\circ$ ). This is required for cooling the device.
- Adhere to the minimum installation distances for required cooling. Avoid heat accumulations.
- Do not mount the device close to heat sources.
- Do not mount the device on flammable materials.
- The heated airflow from other devices and components must not heat up the air used for cooling the device.
- If the thermal limits are exceeded during operation, the drive switches off (overtemperature).

NOTE: For cables that are connected via the underside of the servo drive, a free space  $\geq 200$  mm/7.87 in. is required under the unit to comply with the bending radius of the connection cables.

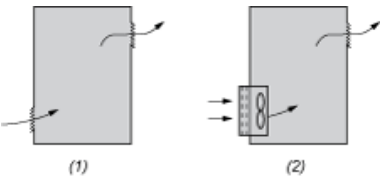
| Ambient temperature | Mounting distances | Instructions to be followed |
|---------------------|--------------------|-----------------------------|
| 0°C...+ 50°C        | d $\geq 0$ mm      | –                           |

NOTE: Do not use insulated enclosures, as they have a poor level of conductivity.

Recommendations for Mounting in an Enclosure

To ensure good air circulation in the servo drive:

- Fit ventilation grilles on the enclosure.
- Ensure that ventilation is adequate, otherwise install a forced ventilation unit with a filter.



- (1) Natural convection
- (2) Forced ventilation
- Any apertures and/or fans must provide a flow rate at least equal to that of the servo drive fans (refer to characteristics).
- Use special filters with IP 54 protection.

Mounting in Metal Enclosure (IP 54 Degree of Protection)

The servo drive must be mounted in a dust and damp proof enclosure in certain environmental conditions, such as dust, corrosive gases, high humidity with risk of condensation and dripping water, splashing liquid, etc. In these cases, Lexium 32 servo drives can be installed in an enclosure where the internal temperature must not exceed 60°C.