

### MLFB-Ordering data

6SL3120-2TE15-0AD0



Client order no. :

Order no. :

Offer no. :

Remarks :

Item no. :

Consignment no. :

Project :

| Rated data                                        |                       | Ambient conditions                       |                                                                                         |
|---------------------------------------------------|-----------------------|------------------------------------------|-----------------------------------------------------------------------------------------|
| DC link voltage                                   | DC 510 ... 720 V      | Installation altitude (without derating) | 1000 m (3281 ft)                                                                        |
| Electronics power supply                          | DC 24 V -15 % / +20 % | Cooling <sup>8)</sup>                    | Internal air cooling                                                                    |
| Current demand, max.                              | 0.90 A                | Cooling air requirement                  | 0.009 m³/s                                                                              |
| DC-link current I <sub>d</sub> <sup>1)</sup>      | 12.0 A                | Ambient temperature                      |                                                                                         |
| Output current                                    |                       | During operation                         | 0 ... 40 °C (32 ... 104 °F)                                                             |
| Rated value I <sub>N</sub>                        | 2 x 5.0 A             | Connections                              |                                                                                         |
| Base load current I <sub>H</sub>                  | 2 x 4.3 A             | Motor end                                |                                                                                         |
| For S6 duty (40%) I <sub>S6</sub>                 | 2 x 6.7 A             | Version                                  | connector (X1, X2)                                                                      |
| I <sub>max</sub>                                  | 2 x 15.0 A            | Conductor cross-section                  | 2 ... 6 mm² (16 ... 10 AWG)                                                             |
| Type rating <sup>2)</sup>                         |                       | PE connection                            | M5 screw                                                                                |
| Based on I <sub>N</sub>                           | 2 x 2.7 kW            | Max. motor cable length                  |                                                                                         |
| Based on I <sub>H</sub>                           | 2 x 2.3 kW            | Shielded                                 | 50 m (164 ft)                                                                           |
| Rated pulse frequency                             | 4.00 kHz              | Unshielded                               | 75 m (246 ft)                                                                           |
| Current carrying capacity                         |                       | Standards                                |                                                                                         |
| DC link busbars <sup>3)</sup>                     | 100 A                 | Compliance with standards                | CE, cULus                                                                               |
| 24 V busbars <sup>4)</sup>                        | 20 A                  | Safety Integrated                        | SIL 2 acc. to IEC 61508, PL d acc. to EN ISO 13849-1, Category 3 acc. to EN ISO 13849-1 |
| DC link capacitance                               | 220 µF                |                                          |                                                                                         |
| Output frequency for servo control <sup>5)</sup>  | 650 Hz                |                                          |                                                                                         |
| Output frequency for V/f control <sup>6)</sup>    | 600 Hz                |                                          |                                                                                         |
| Output frequency for vector control <sup>7)</sup> | 300 Hz                |                                          |                                                                                         |



Figure similar

| Mechanical data             |                      | General tech. specifications               |                   |
|-----------------------------|----------------------|--------------------------------------------|-------------------|
| <b>Line side</b>            |                      | <b>Sound pressure level (1m)</b>           | 60.0 dB           |
| <b>Width</b>                | 50.00 mm (1.97 in)   | <b>Power loss, typ./max. <sup>9)</sup></b> | 0.08 kW / 0.13 kW |
| <b>Height</b>               | 380.00 mm (14.96 in) |                                            |                   |
| <b>Depth</b>                | 270.00 mm (10.63 in) |                                            |                   |
| <b>Degree of protection</b> | IP20 / UL open type  |                                            |                   |
| <b>Type of construction</b> | Booksize             |                                            |                   |
| <b>Net weight</b>           | 4.7 kg (10.36 lb)    |                                            |                   |

1) Rated dc link current for dimensioning an external DC connection

2) Rated output of a typical standard asynchronous motor at 400 V 3 AC

3) 200 A possible with reinforced DC link bridges (accessory).

4) If, when connecting several Line Modules and Motor Modules in series, the current carrying capacity exceeds 20 A, another 24 V DC connection is required using a 24 V terminal adapter (max. connectable cross-section 6 mm<sup>2</sup>, max. protection 20 A).

5) With rated output current (max. output frequency 1300 Hz at a current controller cycle of 62.5 µs, pulse frequency 8 kHz, 60 % permissible output current). Observe the dependency between max. output frequency and current derating. At present, the output frequency is limited to 550 Hz, the values stated apply with the high output frequency license.

6) Observe the dependency between max. output frequency and current derating. At present, the output frequency is limited to 550 Hz, the values stated apply with the high output frequency license.

7) Observe the dependency between max. output frequency and current derating.

8) Power units with intensified air cooling thanks to integrated fan

9) Power loss of the Motor Module with rated power including losses of the 24 V DC electronics power supply