

Article No. : 6SL3131-7TE31-2AA3

Client order no. :  
Order no. :  
Offer no. :  
Remarks :

Item no. :  
Consignment no. :  
Project :

Figure similar



| Electrical data                                  |                                  |
|--------------------------------------------------|----------------------------------|
| Input                                            |                                  |
| Number of phases                                 | 3 AC                             |
| Line voltage                                     | 342 ... 528 V                    |
| Line frequency                                   | 47 ... 63 Hz                     |
| Short-circuit strength <sup>1)</sup>             | 65 kA                            |
| Line power factor                                |                                  |
| in Active mode                                   |                                  |
| Fundamental power factor cos phi <sub>1 2)</sub> | 1                                |
| Total                                            | 1                                |
| in Smart Mode                                    |                                  |
| Fundamental power factor, minimal                | 0.96                             |
| Total                                            | 0.65 ... 0.90                    |
| Overvoltage category                             | Class III                        |
| DC link voltage <sup>3)</sup>                    |                                  |
| at 380 V ... 400 V AC, factory setting           | 600 V                            |
| at 400 V ... 415 V AC, factory setting           | 625 V                            |
| DC-link voltage                                  | 1.35 x line voltage (Smart Mode) |
| Electronics power supply with DC                 | 24 V (-15 % / 20 %)              |

| Connections             |                                                                                                 |
|-------------------------|-------------------------------------------------------------------------------------------------|
| Line side               |                                                                                                 |
| Design                  | M8 bolt (X1)                                                                                    |
| Conductor cross-section | 2.50 ... 120.00 mm <sup>2</sup> (AWG 14 ... AWG - 3)<br>(Alternatively 2 x 50 mm <sup>2</sup> ) |
| PE conductor            | M8 Screw                                                                                        |
| Line length, max.       |                                                                                                 |
| Shielded                | 1,000 m (3,280.84 ft)                                                                           |
| Unshielded              | 1,500 m (4,921.26 ft)                                                                           |

| Mechanical data      |                     |
|----------------------|---------------------|
| Degree of protection | IP20 / UL open type |
| Type of construction | Booksize            |
| Net weight           | 30.7 kg (67.68 lb)  |
| Dimensions           |                     |
| Width                | 300 mm (11.81 in)   |
| Height               | 380 mm (14.96 in)   |
| Depth <sup>5)</sup>  | 226 mm (8.90 in)    |

| Rated data                              |                 |
|-----------------------------------------|-----------------|
| Infeed power                            |                 |
| Rated value                             | 120 kW (150 hp) |
| for S6 duty                             | 145 kW          |
| Maximum                                 | 175 kW          |
| Regenerative feedback power             |                 |
| Rated value                             | 120 kW (150 hp) |
| for S6 duty                             | 145 kW          |
| Maximum                                 | 175 kW          |
| DC-link current                         |                 |
| at 600 V DC                             | 200 A           |
| for S6 duty                             | 244 A           |
| Maximum                                 | 292 A           |
| Input current                           |                 |
| at 380 V AC 3-phase                     | 192 A           |
| at 400 V AC 3-phase                     | 182 A           |
| at 480 V AC 3-phase                     | 152 A           |
| at 400 V S6 duty                        | 220 A           |
| at 400 V, maximum                       | 267 A           |
| Current requirement at 24 V DC, maximum | 2.5 A           |
| Ampacity of the busbars                 |                 |
| for electronics power supply at 24 V DC | 20 A            |
| for DC-link connection                  | 200 A           |
| DC link capacitance                     |                 |
| of the Active Line Module               | 3,995 µF        |
| of the drive system, maximum            | 20,000 µF       |

| General technical specifications |         |
|----------------------------------|---------|
| Sound pressure level             | 75 dB   |
| Losses <sup>10)</sup>            | 2.26 kW |

| Ambient conditions               |                                                                                                                                                                                                                                                                                                                             |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ambient temperature in operation | 0 ... 40 °C (32 ... 104 °F)                                                                                                                                                                                                                                                                                                 |
| Cooling air throughput           | 0.144 m³/s (5.085 ft³/s)                                                                                                                                                                                                                                                                                                    |
| Installation altitude            | 1,000 m (3,280.84 ft)                                                                                                                                                                                                                                                                                                       |
| Type of cooling <sup>11)</sup>   | External air cooling                                                                                                                                                                                                                                                                                                        |
| RI suppression                   | Active Line Module + Active Interface Module: Category C3 according to EN 61800-3 up to 350 m (1148 ft) total cable length. With line filter: Category C2 according to EN 61800-3 up to 350 m (1148 ft) total cable length. Category C3 according to EN 61800-3 from 350 m to 1000 m (1148 ... 3281 ft) total cable length. |

| Standards                 |           |
|---------------------------|-----------|
| Compliance with standards | CE, cULus |

## Data sheet for Active Line Modules

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<sup>1)</sup> in conjunction with the recommended Class J fuse, or circuit breaker according to UL489 / CSA 22.2 No. 5-02

<sup>2)</sup> Factory setting can be altered by inputting a reactive current setpoint (Active Mode)

<sup>3)</sup> In Active Mode, the DC link voltage is regulated and can be adjusted as a voltage decoupled from the line voltage. In Smart Mode, the DC link voltage is kept in proportion to the line voltage at the mean rectified line voltage value. For line voltages of 416 ... 480 V AC, Active Mode can also be selected if the connected motors are suitable for > 650 V DC.

<sup>5)</sup> At installation level

<sup>10)</sup> Power loss of the Active Line Module with rated power including losses of the 24 V DC electronics power supply

<sup>11)</sup> Power units with intensified air cooling thanks to integrated fan