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# Data sheet for Smart Line Modules Booksize

## Article No. : 6SL3131-6AE21-0AA1



Figure similar

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

Item no. :
Consignment no. :
Project :

### Electrical data

| | |
|---|---|
| **Input** | |
| Number of phases | 3 AC |
| Line voltage | 342 ... 528 V |
| Line frequency | 47 ... 63 Hz |
| Short-circuit strength [1] | 65 kA |
| **Line power factor** | |
| Fundamental power factor, minimal | 0.96 |
| Total | 0.65 ... 0.90 |
| Overvoltage category | Class III |
| **DC link voltage [2]** | |
| DC-link voltage | 1.35 × line voltage |
| Electronics power supply with DC | 24 V (-15 % / 20 %) |

### Connections

| | |
|---|---|
| **Line side** | |
| Design | screw-type terminal (X1) |
| Conductor cross-section | 2.5 ... 6 mm² (AWG 14 ... AWG 10) |
| PE conductor | M5 screw |
| Shield connecting kit | Cable shield connection plate integrated into the connector |
| **Line length, max.** | |
| Shielded | 350 m (1,148.29 ft) |
| Unshielded | 560 m (1,837.27 ft) |

### Mechanical data

| | |
|---|---|
| Degree of protection | IP20 / UL open type |
| Type of construction | Booksize |
| Net weight | 5.4 kg (11.91 lb) |
| **Dimensions** | |
| Width | 50 mm (1.97 in) |
| Height | 380 mm (14.96 in) |
| Depth [3] | 226 mm (8.90 in) |

### Standards

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

### Rated data

| | |
|---|---|
| **Infeed power** | |
| Rated value | 10.0 kW (10.0 hp) |
| for S6 duty | 13.0 kW |
| Maximum | 20.0 kW |
| **Regenerative feedback power** | |
| Rated value | 10.0 kW (10.0 hp) |
| for S6 duty | 13.0 kW |
| Maximum | 20.0 kW |
| **DC-link current** | |
| at 540 V DC | 18.5 A |
| at 600 V DC | 16.6 A |
| for S6 duty | 22.0 A |
| Maximum | 33.2 A |
| **Input current** | |
| at 380 V AC 3-phase | 17.0 A |
| at 400 V AC 3-phase | 16.2 A |
| at 480 V AC 3-phase | 12.8 A |
| at 400 V S6 duty | 21.1 A |
| at 400 V, maximum | 31.2 A |
| Current requirement at 24 V DC, maximum | 0.90 A |
| **Ampacity of the busbars** | |
| for electronics power supply at 24 V DC | 20 A |
| for DC-link connection | 100 A |
| **DC link capacitance** | |
| of the Line Module | 330 µF |
| of the drive system, maximum | 6,000 µF |

### General technical specifications

| | |
|---|---|
| Sound pressure level | 60 dB |
| Losses [4] | 0.140 kW |

### Ambient conditions

| | |
|---|---|
| Ambient temperature in operation | 0 ... 40 °C (32 ... 104 °F) |
| Cooling air throughput | 0.008 m³/s (0.283 ft³/s) |
| Installation altitude | 1,000 m (3,280.84 ft) |
| Type of cooling [5] | External air cooling |
| RI suppression | Standard: No radio interference suppression; With line filter: Category C2 to EN 61800-3 Total cable length up to 350 m (1148 ft) (shielded) |

Subject to change. Calculated values may differ from nameplate ratings. © Copyright Siemens

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[1] in conjunction with the recommended Class J fuse, or circuit breaker according to UL489 / CSA 22.2 No. 5-02
[2] The DC link voltage is maintained at the mean value of the rectified line voltage.
[3] At installation level
[4] Power loss of the Smart Line Module with rated power including losses of the 24 V DC electronics power supply
[5] Power units with intensified air cooling thanks to integrated fan