



Figure similar

Data sheet for Active Line Modules

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

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

in Active mode

Fundamental power factor cos phi ₁ ²⁾	1
Total	1

in Smart Mode

Fundamental power factor, minimal	.96
Total	0.65 ... 0.90

Overvoltage category Class III

DC link voltage³⁾

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 ² (AWG 14 ... AWG - 3) (Alternatively 2 x 50 mm ²)
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

Dimensions

Width	300 mm (11.81 in)
Height	380 mm (14.96 in)
Depth ⁵⁾	226 mm (8.90 in)
Degree of protection	IP20 / UL open type
Net weight	30.7 kg (67.68 lb)
Type of construction	Booksize

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 ¹⁰⁾	2.26 kW

Ambient conditions

Ambient temperature in operation	0 ... 40 °C (32 ... 104 °F)
Cooling air throughput	0.144 m ³ /s (5.085 ft ³ /s)
Installation altitude	1,000 m (3,280.84 ft)
Type of cooling ¹¹⁾	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
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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⁾ Factory setting can be altered by inputting a reactive current setpoint (Active Mode)
- ³⁾ 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.
- ⁵⁾ At installation level
- ¹⁰⁾ Power loss of the Active Line Module with rated power including losses of the 24 V DC electronics power supply
- ¹¹⁾ Power units with intensified air cooling thanks to integrated fan