

Data sheet for SINAMICS S120 Combi

Article No. : 6SL3111-3VE21-6FA1



Figure similar

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

Item no. :
Consignment no. :
Project :

Rated data				
Output	Spindle	Feedrate 1	Feedrate 2	Feedrate 3
Rated output current AC I_N	18.0 A	5.0 A	5.0 A	-
AC base load current I_H	15.3 A	4.3 A	4.3 A	-
Intermittent operating current AC I_{S6} (40%)	24.0 A	6.5 A	6.5 A	-
Peak current AC I_{max}	36.0 A	10.0 A	10.0 A	-
Rated power: at 540 V DC link voltage	8.7 kW	2.4 kW	2.4 kW	-
Rated power: at 600 V DC link voltage	9.7 kW	2.7 kW	2.7 kW	-

Input

Number of phases	3 AC
Line voltage	380 ... 460 V ± 10 %
Line frequency	45 ... 66 Hz
DC electronic power supply	24 V (20.4 ... 28.8 V)
Electronics current consumption at DC 24 V	
without external fan assembly	1.5 A
with external fan assembly	2.3 A
Rated current	
at 3AC 400 V	28.0 A
at 3AC 380 V / 480 V	29.0 A / 25.0 A
at 3AC 400 V I_{S6} (40%)	35.5 A
at 3AC 400 V peak current	56.0 A

Infeed

Rated power P_N (S1)	16.0 kW
Feed-in power P_{S6} (40%)	21.0 kW
Feed-in peak power P_{max}	35.0 kW

Output

Number of phases	3 AC
Rated voltage	0 ... 0.7 x DC link voltage
Pulse frequency	4 kHz
Electronic output current for extension axis DC 24	20.0 A
Output for extension axis	
DC link output current DC I_N	40.0 A
DC link voltage	460 ... 720 V

Energy recovery

Rated power P_N (S1)	16.0 kW
Feed-in peak power P_{max}	35.0 kW
DC link capacitance	1,645 μ F
DC link voltage	460 ... 720 V
DC overvoltage cut-off	820 V ± 2 %
DC undervoltage cut-off	380 V ± 2 %
Mains fuse	AJT35
I_n fuse	35.0 A
Circuit breaker rated current	35.0 A
Resulting rated short-circuit current SCCR at 480 V AC	65 kA
Resulting rated short-circuit current SCCR at 600 V AC	200 kA

General tech. specifications

Power factor	0.65 ... 0.90
Displacement angle $\cos \phi$	0.96

Power loss

Total	425 W
Internal	81 W
External	344 W

Ambient conditions

Cooling	External air cooling
Cooling air requirement	160 m ³ /h (5,650.35 ft ³ /h)
Installation altitude (without derating)	1,000 m (3,280.84 ft)

Ambient temperature

during operation, max.	45 °C (113 °F)
The specified values refer to operation without derating	



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Mechanical data	
Degree of protection	IP20 / UL open type
Net weight	18.4 kg (40.48 lb)
Dimensions	
Width	305 mm (12.01 in)
Height	410 mm (16.14 in)
Depth	260 mm (10.24 in)
Standards	
Compliance with standards	CE, cURus
Safety Integrated	SIL 2 acc. to IEC 61508, PL d acc. to EN ISO 13849-1, Category 3 acc. to EN ISO 13849-1