

Product type designation

Power Supply PS598-1

SCALANCE PS598-1 Power-Supply 300 W input: 85-264 V AC IEC plug; Output: DC 24 V connecting terminals or for direct connection to SCALANCE X-500



Type of current supply	300 W, input: 85-264 V, output:DC 24
Electrical data / Input	
Voltage curve / at input	AC single phase
Supply voltage / at AC	85 ... 264 V
Supply voltage / 1 / at AC / Rated value	230 V
Design of input / wide range input	Yes
Overvoltage category	Category II (20 A rated branch circuit)
Buffering time / for rated value of the output current / in the event of power failure / minimum	16 ms
Line frequency	
• 1 / Rated value	50 Hz
• 2 / Rated value	60 Hz
Line frequency	47 ... 63 Hz
Input current / at rated input voltage 230 V / Rated value	1.8 A
Current limitation / of inrush current / at 25 °C / maximum	40 A
Fuse protection type / at input	replaceable

Electrical data / Output	
Voltage curve / at output	Controlled, isolated DC voltage
Output voltage / at DC / Rated value	24 V
Display version / for normal operation	Green LED for 24 V ok and fault LED
Behavior of the output voltage / when switching on	Overshoot of $U_a < 5\%$
ON-delay time / maximum	1.5 s
Voltage increase time / of the output voltage / maximum	15 ms
Output current	
• Rated value	12.5 A
• Rated range	0 ... 12.5 A
Supplied active power / typical	300 W
Product feature / Parallel switching of channels	Yes
Number of parallel-switched resources / for increasing the power	2
Efficiency in percent	87 %
Power loss [W]	39 W

Electrical data / Closed-loop control	
Relative overall tolerance / of the voltage	2 %
Residual ripple / maximum	0.36 V
Voltage peak / maximum	240 V
Relative control precision / of the output voltage	
• On slow fluctuation of input voltage	0.2 %
• On slow fluctuation of ohm loading	0.4 %
• load step of resistive load 50/100/50 % / typical	3.25 %
• with rapid fluctuation of the input voltage by +/- 15% / typical	0.8 %
Setting time	
• load step 50 to 100% / typical	2 ms
• load step 100 to 50% / typical	2 ms

Electrical data / Protection and monitoring	
Design of the overvoltage protection / at output	< 37 V
Response value current limitation / typical	1.15 A
Property of the output / Short-circuit proof	Yes
Design of short-circuit protection	Electronic shutdown, automatic restart

Electrical data / Safety	
Galvanic isolation / between entrance and outlet	Yes
Galvanic isolation	Safety extra-low output voltage U_{out} acc. to EN 60950-1 and EN 50178
Operating resource protection class	Class I
Leakage current	
• maximum	3 mA

- typical

0.858 mA

Interfaces

Type of electrical connection

- at input
- at output

IEC plug

for plugging into basic device or screw terminal in accordance with specification

Design, dimensions and weight

Width

446 mm

Height

44 mm

Depth

140 mm

Net weight

1.7 kg

Product feature / of the enclosure / housing for side-by-side mounting

No

Mounting type

Plugged into the basic unit or rack mounted

- 19-inch installation
- wall mounting
- Standard rail mounting
- S7-300 rail mounting

Yes

No

No

No

Permitted ambient conditions

Ambient temperature

- during operation
- during storage
- during transport
- Note

60 °C

-25 ... +70 °C

-25 ... +70 °C

Operation with integral fan, non-replaceable

Environmental category / acc. to IEC 60721

Climate class 3K3, without condensation

Protection class IP

IP20

Standards, specifications, approvals

Standard

- for safety / from CSA and UL
- for emitted interference
- for interference immunity

UL 60950-1, CSA C22.2 No. 60950-1

EN 55022 (Class B)

EN 61000-6-2

Certificate of suitability

EN 55022, EN 61000-6-4

- CE marking
- C-Tick
- E1 approval
- E1 approval
- Railway application in accordance with EN 50155
- Railway application in accordance with EN 50124-1
- IEC 61850-3

Yes

Yes

No

No

No

No

No

No

Further Information / Internet Links

Internet-Link

- to website: Selector SIMATIC NET SELECTION TOOL <http://www.siemens.com/snst>
- to website: Industrial communication <http://www.siemens.com/simatic-net>
- to website: Industry Mall <https://mall.industry.siemens.com>
- to website: Information and Download Center <http://www.siemens.com/industry/infocenter>
- to website: Image database <http://automation.siemens.com/bilddb>
- to website: CAx Download Manager <http://www.siemens.com/cax>
- to website: Industry Online Support <https://support.industry.siemens.com>

last modified:

08/12/2019