

### 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
<b>Electrical data / Input</b>	
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 weights

### 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

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

Plugged into the basic unit or rack mounted

Yes

No

No

No

## 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

- 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

EN 55022, EN 61000-6-4

Yes

Yes

No

No

No

No

No

No

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>

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