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## High performance. Focused diagnostics.

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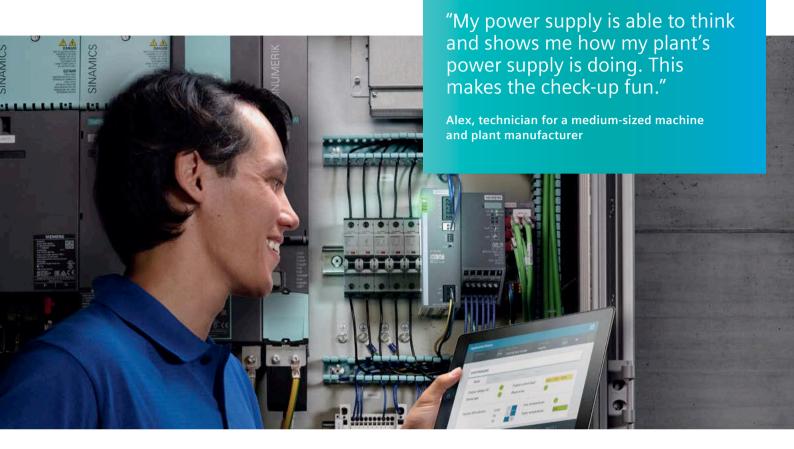
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SITOP PSU6200 – the all-around power supply for a wide range of applications

siemens.com/sitop-psu6200

## Focused diagnostics. Top Integration.



### Thanks to a diagnostics monitor and interface, Alex has an instantaneous overview.

#### Important status messages ...

... from SITOP PSU6200 never go unnoticed by Alex the technician. The unit's LEDs tell him whether all the parameters are in the green zone, or if there's something he needs to do to ensure that his plant continues to operate smoothly.

#### Integrated in the automation ...

... Alex benefits from detailed status messages with SITOP PSU6200 power supply units as of 10 A. He can view the status and all relevant operational data via a single digital input on the PLC and use a free function block to evaluate the serial code. Alex immediately detects whether a value is critical on a ready-to-use faceplate. This allows him to find a remedy before the machine is affected.

#### **Top Integration**

- LED and signaling contact for "DC o.k." on all versions, diagnostics monitor and interface as of 10 A
- Diagnostics monitor with utilization and end-of-service-life indication via LEDs for "DC o.k.," utilization, and remaining service life
- Diagnostics interface for connecting to the automation via just one digital PLC input
  - Display of operating parameters and status: power, voltage, overload, operating hours, temperature status, manufacturing date and type
  - Evaluation by means of preassembled function block as ready-to-run code for SIMATIC S7-1200 and 1500 as well as display on WinCC faceplate

## Fast installation. Top efficiency.

Labeling on front panel, push-in terminals, reduced space requirement – Luke prefers easy handling in his work as an electrician.

#### Reliable wiring every minute ...

... is child's play for Luke with the SITOP PSU6200: The unique terminal labeling prevents errors during wiring because it precisely corresponds to the label on the circuit diagram. Push-in terminals also make wiring faster, ensuring a secure connection with or without end sleeves – whether you're using single- or multiple-stranded.

#### More room in the control cabinet ...

... is a valuable commodity for Luke, given today's packing density. With SITOP PSU6200, he benefits from a narrow overall width. In addition, the power supply units require no lateral installation clearances between components on the DIN rail. All these features combine to deliver a high degree of efficiency of up to 95 percent.

#### Top efficiency.

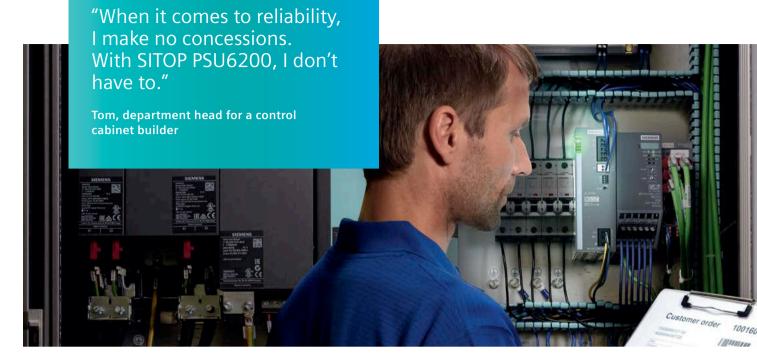
#### • Push-in terminals

- Unique terminal labeling on the front of the unit
- Additional minus terminal (grounding) for potential equalization/PELV according to the Machinery Directive
- Line fed in from the front
- Slim design
- No lateral installation clearances required
- High degree of efficiency of up to 95%
- As of 10 A: active PFC (power factor correction) for high power factor/ reduction of reactive current component

### "Installation and wiring now go like clockwork, and I also save valuable space."

Luke, electrician for a control cabinet builder





# Dependable operation. Top reliability.

As head of control cabinet building, Tom relies on a high overload capacity, a robust, wide-range input, and a strong metal enclosure when powering plants.

#### Constant current ...

... even under difficult conditions – for Tom, that starts with the right power supply. With SITOP PSU6200, he's on the safe side. With its extra power, it provides a 50 percent higher rated current for up to five seconds in the event of an overload. In the case of an extremely high overload, it keeps the current constant and changes to hiccup mode for self-protection only when the output voltage drops to 15 volts. Once the overload has been corrected, it continues in normal operation.

#### Extreme ruggedness ...

... is required in industries with harsh environmental conditions. That's why SITOP PSU6200 is just right for Tom. The power supply unit is tough, both electrically and mechanically. The wide-range input is suitable for AC and DC voltages and can handle a lot of undervoltage and overvoltage. And the metal enclosure isn't just rugged, it also optimally dissipates heat losses – which are already low, thanks to a high degree of efficiency. These are all ideal conditions for a long service life.

#### **Top reliability**

- High overload capacity, thanks to 150% extra power for 5 s/min and constant current behavior
- Robust AC input with a wide range and DC capability
- Rugged metal enclosure
- Designed for optimal heat dissipation

# Many features. Top device.

### SITOP PSU6200 – product highlights at a glance

#### **Diagnostics** monitor SITOP PSU6200 power supply units as of 24 V/10 A and 12 V/12 A indicate their operating status, current utilization, and end of service life via LEDs Output voltage o.k. Utilization < 30% > 30% > 60% > 90% < 10% Service life Product identification label **Rugged metal enclosure Push-in terminals** permit secure assembly without need for tools **Diagnostics monitor** (5 LEDs) Additional minus terminal for grounding PELV circuits according Unique terminal labeling to the Machinery Directive for error-free wiring **Diagnostics interface** Setting options • COM (signaling relay/diagnostics Data Matrix Code interface) (product information via • HV (response value for signaling Service and Support app) contact DC o.k. -> 20 V/23 V) • PO (parallel operation) Wide range input, Output voltage setting DC-compatible 12-15.5 V DC or 24-28 V DC 85-275 V AC or 99-275 V DC Direct side-by-side mounting **Robust input** without clearances saves space protects against undervoltage and overvoltage Active PFC as of 10 A Active power factor correction means a high

#### **Diagnostics interface**

SITOP PSU6200 power supply units as of 24 V/10 A and 12 V/12 A output a serial code via the diagnostics interface. The signal can be read in via a digital input on a PLC and evaluated by a function block. Function blocks are available for SIMATIC S7-1200 and 1500. For easy visualization in WinCC, a faceplate is also available for download.

- The following status and operating parameters are displayed: DC o.k.
- Utilization < 30%, > 30%, > 60%, > 90%
- Remaining service life < 10%
- Output current (resolution 1 A)

• Output voltage (resolution 0.1 V)

power factor and the wide-range input

- Device temperature < 40°C, < 60°C, < 70°C, overtemperature
- Counter for short-term undervoltage or overvoltage at the DC output
- Manufacturing date, article number
- Device settings:
- COM signaling relay/diagnostics interface
- HV response value of signaling contact (20 V/23 V)
- PO parallel operation

# SITOP PSU6200 portfolio

## Technical specifications for the 1-phase 12-V and 24-V power supplies

Technical specifications					SITOP PSU6200 1-phase
Output voltage/current	12 V/2 A	24 V/1.3 A	24 V/2.5 A	12 V/7 A	24 V/3.7 A
Article No. <sup>2)</sup>	6EP3321-7SB00-0AX0	6EP3331-7SB00-0AX0	6EP3332-7SB00-0AX0	6EP3323-7SB00-0AX0	6EP3333-7LB00-0AX0
Rated input voltage value	120–230 V AC/120–240 V DC				
– Range	85–275 V AC/110–275	V DC			
Mains buffering	150 ms	150 ms	150 ms	20 ms	20 ms
Line frequency, rated value	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Rated input current value	0.43 / 0.26 A	0.54 / 0.32 A	1.03 / 0.60 A	1.41 / 0.83 A	1.46 / 0.87 A
– Inrush current <sup>1)</sup>	< 30 A	< 30 A	< 30 A	< 35 A	< 35 A
– Recom. miniature circuit breaker	At and above 6 A characteristic C or at and above 10 A characteristic B				
Rated output voltage	12 V	24 V	24 V	12 V	24 V
– Tolerance	± 3%	± 3%	± 3%	± 3%	± 3%
<ul> <li>Setting range</li> </ul>	10.5–12.9 V	22.2–26.4 V	22.2–26.4 V	12–15.5 V	24–28 V
Rated output current	2 A	1.3 A	2.5 A	7 A	3.7 A
<ul> <li>Continuously up to +45°C</li> </ul>	2 A	1.3 A	2.5 A	8.4 A	3.7 A
<ul> <li>Overload behavior (extra power for 5 s/min)</li> </ul>	-	-	-	10.5 A	-
- Derating	Above +60°C (3%/K)	Above +60°C (3%/K)	Above +60°C (3%/K)	Above +60°C (3%/K)	-
Efficiency at rated values, approx.	83%	86%	88%	86,5%	89%
Signaling interface	No	No	No	DC o.k.	DC o.k.
Parallel switching	No	No	No	No	No
Electronic short-circuit protection	Yes, constant current (< 9 V hiccup)	Yes, constant current (< 15 V hiccup)	Yes, constant current (< 15 V hiccup)	Yes, constant current (< 9 V hiccup)	Yes, constant current (< 15 V hiccup)
Radio interference level (EN 55022)	Class A	Class A	Class B	Class B	Class B
Radio interference suppression (EN 61000-3-2)	Not applicable	Not applicable	Not applicable	Yes	Yes
Degree of protection (EN 60529)	IP 20	IP 20	IP 20	IP 20	IP 20
Ambient temperature	−25 +70 °C	−25 +70 °C	−25 +70 °C	−25 +70 °C	−25 +70 °C
Dimensions (W x H x D) in mm	25 x 100 x 88	25 x 100 x 88	40 x 100 x 88	35 x 135 x 125	35 x 135 x 125
Weight, approx.	0.2 kg	0.2 kg	0.25 kg	0.7 kg	0.7 kg
Certificates	CE, cULus, CB, in prepa	ration: cCSAus, DNV GL	, ABS, SEMI F47		CE, cULus, CB, in preparation: cCSAus, DNV GL, ABS, SEMI F47,

DNV GL, ABS, SEMI F4 NEC Class 2



24 V/5 A	24 V/10 A	12 V/12 A	24 V/20 A			
6EP3333-7SB00-0AX0	6EP3334-7SB00-3AX0	6EP3324-7SB00-3AX0	6EP3336-7SB00- 3AX0			
	120–230 V AC/120–240 V DC					
	85–275 V AC/99–275 V DC					
20 ms	25 ms	25 ms	25 ms			
50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz			
1.87 / 1.11 A	2.18 / 1.19 A	1.35 / 0.77 A	4.33 / 2.29 A			
< 35 A	< 10 A	< 10 A	< 10 A			
24 V	24 V	12 V	24 V			
± 3%	± 3%	± 3%	± 3%			
24–28 V	24–28 V	12–15.5 V	24–28 V			
5 A	10 A	12 A	20 A			
6 A	12 A	14.4 A	24 A			
7.5 A	15 A	18 A	30 A			
Above +60°C (3%/K)	Above +60°C (3%/K)	Above +60°C (3%/K)	Above +60°C (3%/K)			
90%	92,5%	89%	95%			
DC o.k.	DC o.k./Diagnostics	DC o.k./Diagnostics	DC o.k./Diagnostics			
No	Yes	Yes	Yes			
Yes, constant current (< 15 V hiccup)	Yes, constant current (< 15 V hiccup)	Yes, constant current (< 9 V hiccup)	Yes, const. current (< 15 V hiccup)			
Class B	Class B	Class B	Class B			
Yes	Yes	Yes	Yes			
IP 20	IP 20	IP 20	IP 20			
–25 +70 °C	−25 +70 °C	−25 +70 °C	−25 +70 °C			
35 x 135 x 125	45 x 135 x 125	45 x 135 x 125	70 x 135 x 155			
0.7 kg	0.9 kg	0.9 kg	1.5 kg			

CE, cULus, CB, in preparation: cCSAus, DNV GL, ABS, SEMI F47

<sup>1)</sup> Inrush current can be limited by means of a SITOP inrush current limiter: Article no. 6EP4683-6LB00-0AY0 (max. 5 A, 100–240 V AC) <sup>2)</sup> Planned start of delivery: 1st quarter 2019 Technical specifications apply at rated input voltage and ambient temperature of +25°C (unless otherwise specified)

## Ready for the future!

#### Designed for reduced TCO

The high quality and long service life of the new standard power supply keeps the total cost of ownership at a minimum. And before a failure can have serious consequences, the power supply indicates the end of its service life with plenty of time to respond. To easily identify the device, simply scan the Data Matrix Code using the Siemens Industry Online Support app. You can also use the app to obtain complete product documentation.

#### Efficient product selection

The TIA Selection Tool calculates the optimal power supply for your needs. Simply enter the automated products being supplied with power in the 24-V consumer view. For multiple solutions, it offers a table comparing multiple devices. Once you've selected your solution, you can export the resulting product list to Excel or Adobe or transfer it to the shopping cart at the Siemens Industry Mall for ordering.

#### Everything you need for project planning

Additional information – including 3D data, circuit diagram macros, certificates, and operating instructions – are available at the click of a mouse. You can download the engineering data in the DXF, STEP, EPLAN, and eCl@ss advanced formats and apply it directly to your project engineering. This data is also available via the CAx Download Manager. Not only does this save you a significant amount of valuable engineering time, you also benefit from the configurable manuals when creating custom project documentation using My Documentation Manager.

#### Siemens quality - made in Europe

SITOP has stood for high-quality power supplies for over 25 years. The high quality and availability are primarily due to our development and production sites in Vienna, Austria, and Sibiu, Romania.

#### Certified and standards-compliant

SITOP power supplies are being used in a wide variety of applications worldwide, which has enabled their comprehensive certification. SITOP PSU6200 power supplies already meet the EMC standard requirements for DC output that will be mandatory starting in 2020.

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