

MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Selected official pages for procurement and maintenance review

PRODUCT BRAND

Siemens

PRODUCT MODEL

6EP3333-7SB00-0AX0

SITOP PSU6200. 24 V / 5 A regulated power supply.

OFFICIAL SOURCE

SITOP PSU6200 1ph | A5E44623264-2-76

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[Open the original manufacturer document](#)

Selected legal/safety and exact-model electrical tables. The full manual remains necessary for mounting, wiring and application engineering.

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Amikon Limited prepared this independent reference package. Selected Siemens pages follow unchanged, retaining their original format and printed page numbers. This extract does not replace the complete applicable instructions.

Legal information

Warning notice system

This manual contains notices you have to observe in order to ensure your personal safety, as well as to prevent damage to property. The notices referring to your personal safety are highlighted in the manual by a safety alert symbol, notices referring only to property damage have no safety alert symbol. These notices shown below are graded according to the degree of danger.

DANGER

indicates that death or severe personal injury **will** result if proper precautions are not taken.

WARNING

indicates that death or severe personal injury **may** result if proper precautions are not taken.

CAUTION

indicates that minor personal injury can result if proper precautions are not taken.

NOTICE

indicates that property damage can result if proper precautions are not taken.

If more than one degree of danger is present, the warning notice representing the highest degree of danger will be used. A notice warning of injury to persons with a safety alert symbol may also include a warning relating to property damage.

Qualified Personnel

The product/system described in this documentation may be operated only by **personnel qualified** for the specific task in accordance with the relevant documentation, in particular its warning notices and safety instructions. Qualified personnel are those who, based on their training and experience, are capable of identifying risks and avoiding potential hazards when working with these products/systems.

Proper use of Siemens products

Note the following:

WARNING

Siemens products may only be used for the applications described in the catalog and in the relevant technical documentation. If products and components from other manufacturers are used, these must be recommended or approved by Siemens. Proper transport, storage, installation, assembly, commissioning, operation and maintenance are required to ensure that the products operate safely and without any problems. The permissible ambient conditions must be complied with. The information in the relevant documentation must be observed.

Trademarks

All names identified by ® are registered trademarks of Siemens AG. The remaining trademarks in this publication may be trademarks whose use by third parties for their own purposes could violate the rights of the owner.

Disclaimer of Liability

We have reviewed the contents of this publication to ensure consistency with the hardware and software described. Since variance cannot be precluded entirely, we cannot guarantee full consistency. However, the information in this publication is reviewed regularly and any necessary corrections are included in subsequent editions.

Safety instructions

1.1 General safety instructions



WARNING

Correct handling of the devices

When operating electrical devices, it is inevitable that certain components will carry dangerous voltages.

Therefore, failure to handle the units properly can result in death or serious physical injury as well as extensive property damage.

Only appropriately qualified personnel may work on or in the vicinity of this equipment.

Perfect, safe, and reliable operation of this equipment is dependent on proper transportation, storage, installation and mounting.

Before installation or maintenance work can begin, the system's main switch must be switched off and measures taken to prevent it being switched on again.

If this instruction is not observed, touching live parts can result in death or serious injury.

6.1 Input

	6EP3333-7LB00-0AX0 (24 V/3.7 A)	6EP3333-7SB00-0AX0 6EP3333-7SC00-0AX0 (24 V/5 A)	6EP3334-7SB00-3AX0 6EP3334-7SC00-3AX0 (24 V/10 A)	6EP3336-7SB00-3AX0 6EP3336-7SC00-3AX0 (24 V/20 A)
Rated voltage $U_{in rated}$	AC: 120 - 240 V; DC: 120 - 240 V		AC: 120 - 240 V; DC: 110 - 240 V	
Voltage range	AC: 102 - 264 V; DC: 99 - 275 V	AC: 102 - 264 V; DC: 99 - 275 V	AC: 102 - 264 V; DC: 85 - 275 V	AC: 102 - 264 V; DC: 85 - 275 V
• Remark	-	Derating at U_{in} < 110 V DC: max. 80 % $I_{out rated}$	Derating at U_{in} < 110 V DC: max. 80 % $I_{out rated}$	Derating at U_{in} < 110 V DC: max. 90 % $I_{out rated}$
Wide-range input	Yes			
Switch-in/switch-out threshold, typical	82 V / 51 V	83 V / 53 V	83 V / 74 V	83 V / 74 V
Line failure buffering at $I_{out rated}$, min	20 ms	20 ms	20 ms	20 ms
Power-failure buffering	at 120 V / 240 V			
Rated line frequency	50 - 60 Hz			
Line frequency range	47 - 63 Hz			
Input current at rated input voltage 120 V	1.5 A AC / 0.9 A DC	1.9 A AC / 1.1 A DC	2.2 A AC / 2.2 A DC	4.4 A AC / 4.8 A DC
Input current at a rated input voltage of 240 V	0.8 A AC / 0.5 A DC	1.1 A AC / 0.6 A DC	1.2 A AC / 1.1 A DC	2.2 A AC / 2.2 A DC
Inrush current limiting (25 °C), max.	29 A	30 A	6 A	12 A
I^2t , at 120 V AC, max.	0.4 A ² s	0.4 A ² s	1 A ² s	4 A ² s
I^2t , at 240 V AC, max.	1.3 A ² s	1.3 A ² s	0.6 A ² s	1.4 A ² s
Integrated input fuse	Fuse T 3.15 A	Fuse T 3.15 A	T 6 A fuse	T 10 A fuse
Protection/fusing in the line feeder cable (IEC 898)	Recommended: Miniature circuit breaker characteristic C, 6 A	Recommended: Miniature circuit breaker characteristic C, 6 A	Recommended: Miniature circuit breaker characteristic C, 10 A	Recommended: Miniature circuit breaker characteristic C, 10 A
Power consumption (active power) at full load	100 W	133 W	260 W	500 W
Overvoltage strength	300 V AC for 30 seconds			

	6EP3333-7LB00-0AX0 (24 V/3.7 A)	6EP3333-7SB00-0AX0 6EP3333-7SC00-0AX0 (24 V/5 A)	6EP3334-7SB00-3AX0 6EP3334-7SC00-3AX0 (24 V/10 A)	6EP3336-7SB00-3AX0 6EP3336-7SC00-3AX0 (24 V/20 A)
Output	Regulated, isolated DC voltage			
Rated voltage $U_{out\ rated\ DC}$	24 V			
Total tolerance, static $\pm$	3 %	3 %	3 %	3 %
Static line regulation, approx. $\pm$	0.1 %	0.1 %	0.1 %	0.5 %
Static load regulation, approx. $\pm$	1 %	1 %	1 %	1 %
Residual ripple Peak-peak, max.	150 mV	150 mV	150 mV	150 mV
Spikes peak-peak, max. (bandwidth, 200 MHz)	240 mV	240 mV	240 mV	240 mV
Adjustment range	24 V - 28 V			
Output voltage can be adjusted	Yes			
Output voltage setting	Using a potentiometer			
Status display	LED green for 24 V O.K.		LED green for 24 V O.K., diagnostics monitor, see Chapter Status displays and signaling (Page 13)	LED green for 24 V O.K., diagnostics monitor, see Chapter Status displays and signaling (Page 13)
Signaling	Relay contact (NO contact, contact rating 60 V DC/0.3 A) for 24 V O.K.			
Response when switching on/off	Overshoot of $U_{out} < 100\text{ mV}$			Overshoot of $U_{out} < 520\text{ mV}$
Starting delay, max.	90 ms	90 ms	310 ms	230 ms
Starting delay, typ.	30 ms	30 ms	140 ms	80 ms
Voltage rise 120 V / 240 V AC max.	150 ms	100 ms	200 ms	100 ms
Voltage rise 120 V / 240 V AC typ.	130 ms	50 ms	180 ms	80 ms
Rated current $I_{out\ rated}$	3.7 A	5 A	10 A	20 A
Current range	0 - 3.7 A	0 - 5 A	0 - 10 A	0 - 20 A
• Remark		6 A to 45 °C 60 ... 70 °C derating: 3 % $I_{out\ rated}/K$	12 A to 45 °C 60 ... 70 °C derating: 3 % $I_{out\ rated}/K$	24 A to 45 °C 60 ... 70 °C derating: 3 % $I_{out\ rated}/K$
Active power output, typ.	89 W	120 W	240 W	480 W
Overload capability (Extra Power)	-	7.5 A for 5 s/min	15 A for 5 s/min	30 A for 5 s/min
Can be connected in parallel to increase the power rating	No	No	Yes	Yes
Number of devices that can be connected in parallel to increase the power rating, units	-	-	2	2

6.3 Efficiency

	6EP3323-7SB00-0AX0 (12 V/7 A)	6EP3324-7SB00-3AX0 (12 V/12 A)
Efficiency at $U_{out rated}$, $I_{out rated}$ 120 V / 240 V AC approx.	86.2 % / 87.1 %	89.4 % / 89.9 %
Power loss at $U_{out rated}$, $I_{out rated}$ 120 V / 240 V AC approx.	14 W / 13 W	17 W / 17 W
Power loss when idling 120 V / 240 V AC approx.	1.2 W / 1.7 W	3.1 W / 2.6 W

	6EP3333-7LB00-0AX0 (24 V/3.7 A)	6EP3333-7SB00-0AX0 6EP3333-7SC00-0AX0 (24 V/5 A)	6EP3334-7SB00-3AX0 6EP3334-7SC00-3AX0 (24 V/10 A)	6EP3336-7SB00-3AX0 6EP3336-7SC00-3AX0 (24 V/20 A)
Efficiency at $U_{out rated}$, $I_{out rated}$ 120 V / 240 V AC approx.	88.0 % / 89.0 %	88.6 % / 90.2 %	92.2 % / 93.0 %	94.0 % / 95.5 %
Power loss at $U_{out rated}$, $I_{out rated}$ 120 V / 240 V AC approx.	12 W / 12 W	16 W / 14 W	21 W / 19 W	31 W / 23 W
Power loss when idling 120 V / 240 V AC approx.	1.5 W / 2.3 W	1.3 W / 2 W	2.6 W / 2.2 W	2.5 W / 2.5 W

	6EP3344-7SB00-3AX0 (48 V/5 A)	6EP3346-7SB00-3AX0 (48 V/10 A)
Efficiency at $U_{out rated}$, $I_{out rated}$ 120 V / 240 V AC approx.	92.2 % / 93.0 %	94.0 % / 95.5 %
Power loss at $U_{out rated}$, $I_{out rated}$ 120 V / 240 V AC approx.	21 W / 19 W	31 W / 23 W
Power loss when idling 120 V / 240 V AC approx.	2.6 W / 2.2 W	2.5 W / 2.5 W

6.5 Protection and monitoring

	6EP3323-7SB00-0AX0 (12 V/7 A)		6EP3324-7SB00-3AX0 (12 V/12 A)	
Output overvoltage protection	in the case of an internal fault $U_{out} < 20\text{ V}$		in the case of an internal fault $U_{out} < 20\text{ V}$	
Current limitation, typ.	9.3 A		14.7 A	
• Remark	Overload capability with 150 % $I_{out rated}$ up to 5 s/min		Overload capability with 150 % $I_{out rated}$ up to 5 s/min	
Short-circuit protection	Electronic trip, automatic restart (hiccup)			
Overload / short-circuit display	-		Diagnostics monitor, see Chapter Status displays and signaling (Page 13)	
	6EP3333-7LB00-0AX0 (24 V/3.7 A)	6EP3333-7SB00-0AX0 6EP3333-7SC00-0AX0 (24 V/5 A)	6EP3334-7SB00-3AX0 6EP3334-7SC00-3AX0 (24 V/10 A)	6EP3336-7SB00-3AX0 6EP3336-7SC00-3AX0 (24 V/20 A)
Output overvoltage protection	in the case of an internal fault $U_{out} < 32\text{ V}$			
Current limitation, typ.	3.7 A	6.5 A	12.2 A	24.5 A
• Remark		Overload capability with 150 % $I_{out rated}$ up to 5 s/min	Overload capability with 150 % $I_{out rated}$ up to 5 s/min	Overload capability with 150 % $I_{out rated}$ up to 5 s/min
Short-circuit protection	electronic trip, automatic restart (hiccup)			
Overload / short-circuit display	-	-	Diagnostics monitor, see Chapter Status displays and signaling (Page 13)	
	6EP3344-7SB00-3AX0 (48 V/5 A)		6EP3346-7SB00-3AX0 (48 V/10 A)	
Output overvoltage protection	in the case of an internal fault $U_{out} < 32\text{ V}$			
Current limitation, typ.	12.2 A		24.5 A	
• Remark	Overload capability with 150 % $I_{out rated}$ up to 5 s/min		Overload capability with 150 % $I_{out rated}$ up to 5 s/min	
Short-circuit protection	electronic trip, automatic restart (hiccup)			
Overload / short-circuit display	Diagnostics monitor, see Chapter Status displays and signaling (Page 13)			