

MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

PRODUCT BRAND

Siemens

PRODUCT MODEL

6EP1437-2BA20

Siemens 6EP1437-2BA20 is a SITOP PSU300S stabilized power supply with a three-phase 400–500 V AC input and a regulated 24 V DC, 40 A output. The output voltage is adjustable from 24 to 28 V.

OFFICIAL SOURCE

SITOP PSU300S Operating Instructions

C98130-A7587-A1-6-76

[Open current Siemens source](#)

2.2 Connections and terminal designation

The line input terminals ① can be used to establish the connection to supply voltage. The output terminals ② are used to connect to the loads to be supplied (see also Section Installation (Page 25)).

The operating state of the device can be processed via the signaling contact ③ (function and contact rating, see Chapter Status displays and signaling (Page 12)).

Connections and terminal designations	
① line input L1, L2, L3, PE	One screw terminal each
② Output +	2 screw terminals
② Output -	2 screw terminals
③ signal 13, 14 (24 V O.K.)	One screw terminal each

	① + ②	③	④
	SZS 0,6 x 3,5 / PZ1 / PH1	SZS 0,6 x 3,5	SZS 0,6 x 3 / PZ1 / PH1 max. Ø 3,5 mm
	1 x 0,2 - 6 mm ²	1 x 0,14 - 1,5 mm ²	-
	1 x 0,2 - 4 mm ²	1 x 0,14 - 1,5 mm ²	-
AWG	24 - 10	28 - 16	-
Nm	0,5 - 0,6 Nm	0,22 Nm	0,04 Nm
	8 mm	7 mm	-

Figure 2-2 Terminal data for 6EP1434-2BA10 and 6EP1436-2BA10

	①	②	③	④
	SZS 0,6 x 3,5 / PZ1 / PH1	SZS 1,0 x 5,5	SZS 0,6 x 3,5	SZS 0,4 x 2,5 / max. Ø 3,5 mm
	1 x 0,2 - 6 mm ²	1 x 0,5 - 16 mm ²	1 x 0,14 - 4,0 mm ²	-
	1 x 0,2 - 4 mm ²	1 x 2,5 - 10 mm ²	1 x 0,14 - 2,5 mm ²	-
AWG	28 - 12	26 - 6	22 - 12	-
Nm	0,5 - 0,6 Nm	1,2 - 1,5 Nm	0,22 Nm	0,04 Nm
	8 mm	12 mm	7 mm	-

Figure 2-3 Terminal data for 6EP1437-2BA20

2.6 Dimensions and weight

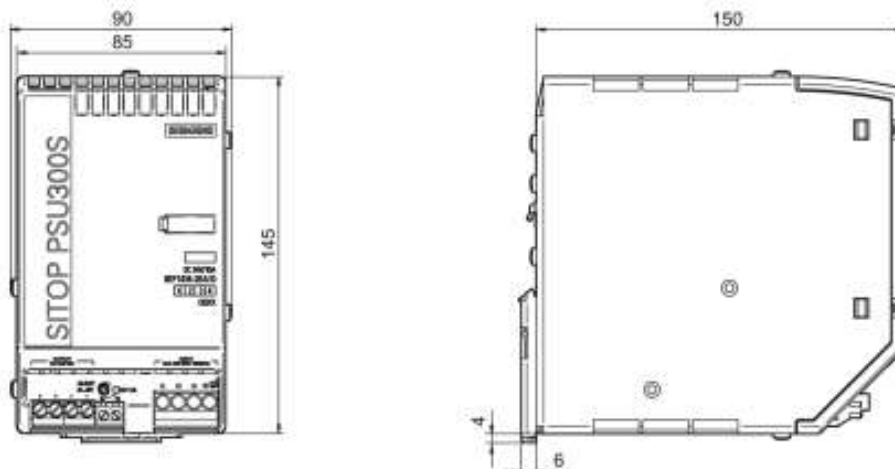


Figure 2-7 Dimension drawing 6EP1434-2BA10, 6EP1436-2BA10

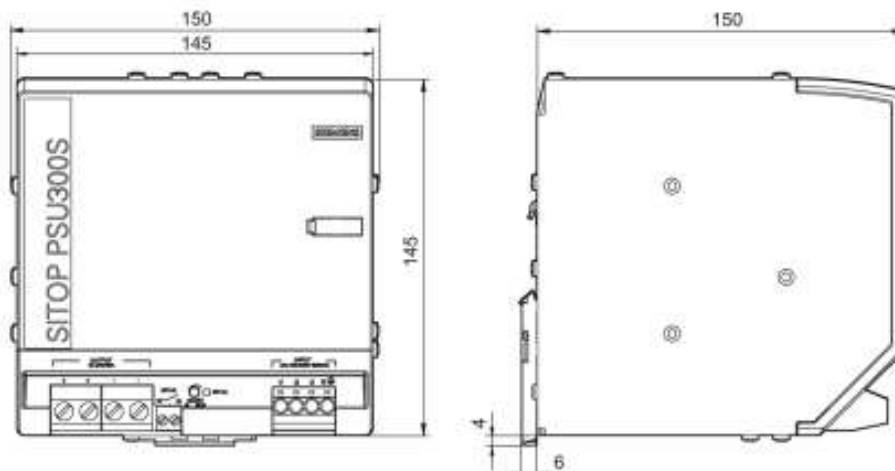


Figure 2-8 Dimension drawing 6EP1437-2BA20

	6EP1434-2BA10 (24 V / 10 A) 6EP1436-2BA10 (24 V / 20 A)	6EP1437-2BA20 (24 V / 40 A)
Dimensions (W × H × D) in mm	90 × 145 × 150	150 × 145 × 150
Weight	Approx. 1.6 kg	Approx. 3.7 kg

Technical data

Note

Technical data is applicable for a rated input voltage, rated load and +25° C ambient temperature (if nothing else is specified).

6.1 Input

	6EP1434-2BA10 24 V / 10 A	6EP1436-2BA10 24 V / 20 A	6EP1437-2BA20 24 V / 40 A
Input	3-phase, AC		
Rated voltage U _e rated	400...500 V		
Voltage range	340...550 V		
Wide-range input	Yes		
Power failure buffering at I _a rated	6 ms	6 ms	6 ms
Power-failure buffering	at U _e = 400 V		
Rated line frequency	50/60 Hz		
Line frequency range	47...63 Hz		
Input current / at rated value of input voltage 400 V	0.6 A	1.2 A	2.0 A
Input current / at rated value of input voltage 500 V	0.5 A	1 A	1.7 A
Switch-on current limitation (+ 25° C), max.	36 A	36 A	60 A
I _t , max	0.9 A ² s	0.9 A ² s	3.4 A ² s
Integrated input fuse	None		
Protection in the line feeder cable (IEC 898)	required: 3-pole, coupled miniature circuit-breaker 6 ... 16 A characteristic C or circuit breaker 3RV2011-1DA10 (setting 3 A) or 3RV2711-1DD10 (UL 489)		
	required: 3-pole, coupled miniature circuit-breaker 10 ... 16 A characteristic C or circuit breaker 3RV2011-1DA10 (setting 3 A) or 3RV2711-1DD10 (UL 489)		
Overvoltage strength	2.3 × U _e rated, 1.3 ms		

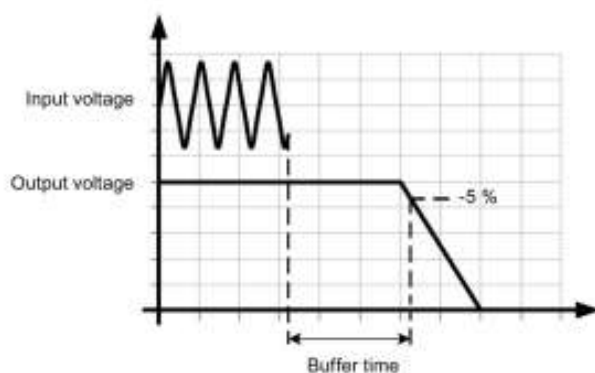


Figure 6-1 Power-failure buffering

6.2 Output

	6EP1434-2BA10 24 V / 10 A	6EP1436-2BA10 24 V / 20 A	6EP1437-2BA20 24 V / 40 A
Output	Regulated, isolated DC voltage		
Rated voltage value U _a rated DC	24 V		
Total tolerance, static ±	3 %	3 %	3 %
Static line regulation, approx.	0.5 %	0.5 %	1 %
Static load regulation, approx.	1 %	1 %	2 %
Residual ripple in the load range	150 mV	150 mV	150 mV
Peak-peak, max.			
Spikes peak-peak, max. (bandwidth, approx. 20 MHz)	240 mV	240 mV	240 mV
Adjustment range	24...28 V		
Product function / output voltage can be adjusted	Yes		
Output voltage setting	Using a potentiometer		
• Remark			
	Max. 240 W	Max. 480 W	Max. 960 W
Status display	LED green for 24 V O.K.		
Signaling	Relay contact (NO contact, rating 60 VDC /0.3 A) for 24 V O.K.		
Response when switching on/off	No overshoot of U _a (soft start)		
Starting delay, max.	1.5 s	1.5 s	1.5 s
Voltage rise, typ.	30 ms	30 ms	15 ms