

SITOP compact power supply

Extremely efficient in saving space and energy



Space savings of up to 33 %

Energy savings of up to 35 %

The SITOP PSU100C controlled power supplies of the SITOP compact product line for the low-end performance range have an extremely slimline design that marks them out for distributed applications, e. g. installation in control boxes or small control cabinets. With a width of just 22.5 or 30 mm, the power supply units require up to 1/3 less space on the mounting rail than comparable devices.

Another convincing feature of these 12 V DC and 24 V DC power supplies is their high efficiency across the entire load range. And because the power losses are also extremely low, even in no-load operation, users save up to 35 % of energy.

The wide-range input enables problem-free connection to single-phase AC networks as well as to DC networks. The plug-in terminals also ensure user-friendly connection.

The benefits at a glance

- Power supplies 24 V DC/0.6 A and 1.3 A, 12 V DC/2.0 A
- Small mounting surface thanks to slimline design
- Low energy consumption thanks to high efficiency across the entire load range
- Minimum energy losses in no-load operation
- Connections via plug-in terminals
- Wide-range input 85 ... 264 V AC for 120 V and 230 V AC single-phase networks without changeover
- Operation on 110 ... 300 V DC networks
- Adjustable output voltage
- Operating temperature range -20 ... 70 °C
- International package of standards

SITOP PSU100C

Answers for industry.

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Selection table SITOP compact

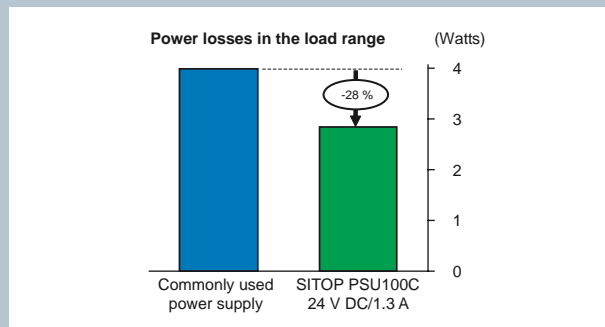


	22.5 mm design	30 mm design	
Output voltage/current	24 V DC/0.6 A	24 V DC/1.3 A	12 V DC/2 A
Order No.	6EP1331-5BA00	6EP1331-5BA10	6EP1321-5BA00
Rated input voltage	100 – 230 V AC	100 – 230 V AC	100 – 230 V AC
• Range	85 ... 264 V AC/110 ... 300 V DC	85 ... 264 V AC/110 ... 300 V DC	85 ... 264 V AC/110 ... 300 V DC
Mains buffering	typ. 20 ms (at 230 V AC)	typ. 20 ms (at 230 V AC)	typ. 20 ms (at 230 V AC)
Rated line frequency	50/60 Hz	50/60 Hz	50/60 Hz
Rated input current	0.28 ... 0.12 A	0.63 ... 0.31 A	0.63 ... 0.31 A
• Recommended miniature circuit breaker	from 10 A Char. C, from 16 A Char. B	from 10 A Char. C, from 16 A Char. B	from 10 A Char. C, from 16 A Char. B
Rated output voltage	24 V DC	24 V DC	12 V DC
• Tolerance	± 3 %	± 3 %	± 3 %
• Setting range	–	22.2 ... 26.4 V DC	10.5 ... 12.9 V DC
Rated output current	0.6 A (to +55 °C)	1.3 A (to +55 °C)	2 A (to +55 °C)
• Derating	+55 ... 70 °C	+55 ... 70 °C	+55 ... 70 °C
Efficiency at rated values, approx.	82 %	86 %	82 %
Energy losses in no-load operation	< 0,5 W	< 0,75 W	< 0,5 W
Switching in parallel	yes	yes	yes
Electronic short-circuit protection	yes, restart	yes, restart	yes, restart
Radio interference suppression (EN 55022)	Class B	Class B	Class B
Degree of protection (EN 60529)	IP20	IP20	IP20
Ambient temperature	–20 ... +70 °C	–20 ... +70 °C	–20 ... +70 °C
Connections ¹⁾	removable screw terminals	removable screw terminals	removable screw terminals
Dimensions (W x H x D) in mm	22.5 x 80 x 100 mm	30 x 80 x 100 mm	30 x 80 x 100 mm
Weight approx.	0.12 kg	0.17 kg	0.17 kg
Certifications	CE, UL, CSA, ATEX	CE, UL, CSA, ATEX	CE, UL, CSA, ATEX

¹⁾ Accessories: Removable spring terminals, Order No. 6EP1971-5BA00 (Packing unit 100 pieces, for 50 power supplies SITOP PSU100C)

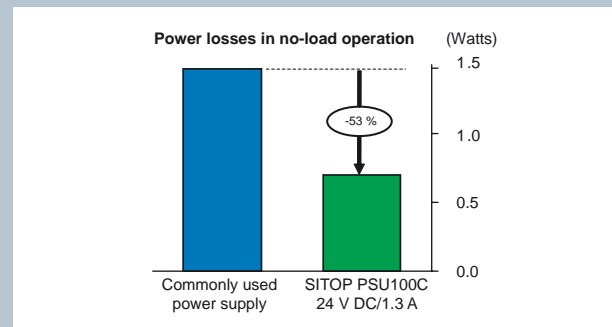
Save energy during operation under load

Power supplies in industrial applications are usually dimensioned to their maximum load, such as switching on capacitive loads. In operation, they are mainly run only within a load range of 30 to 70 % of rated power – dependent on the process, e. g. switching motors, sensors or actuators. Because of this, the high efficiency of the SITOP PSU100C across the entire load range permits energy savings of up to 28 %.



Save energy in standby operation

Industrial power supplies are not usually operated for 24 hours a day over the entire year. During non-productive periods, and at weekends or holidays, individual loads or plant sections are increasingly switched to a type of “standby operation” to save energy. The SITOP PSU100C supports this with especially low no-load losses and thus with energy savings of up to 53 %.



Summary: With its high efficiency in operation under load and in standby, SITOP compact enables you to make energy savings of up to 35 % (mix of load and standby operation) comparison with commonly used power supplies ²⁾.

²⁾ Average value of comparable devices on the market at 230 V AC input voltage

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