

SITOP power flexi

6EP1353-2BA00

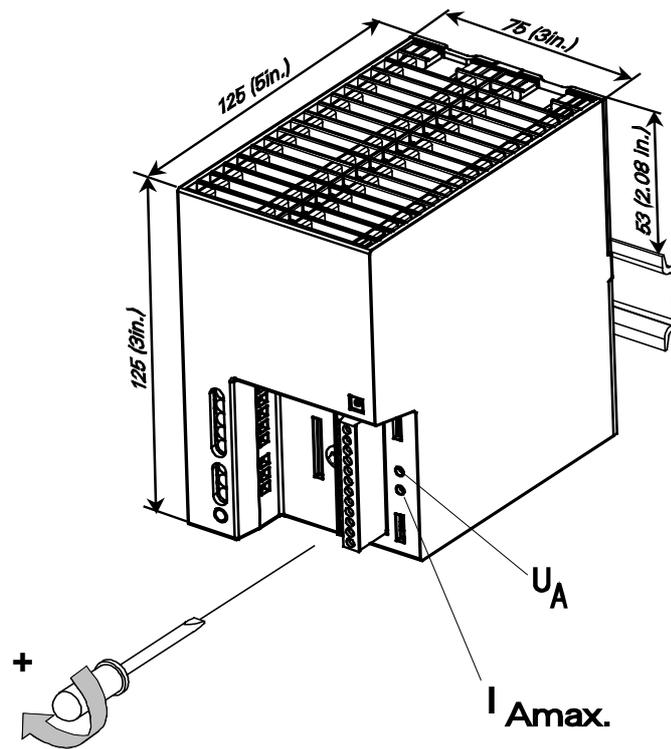
Betriebsanleitung
Operating instructions

Best. Nr.: C98130-A7518-A1-03-7419



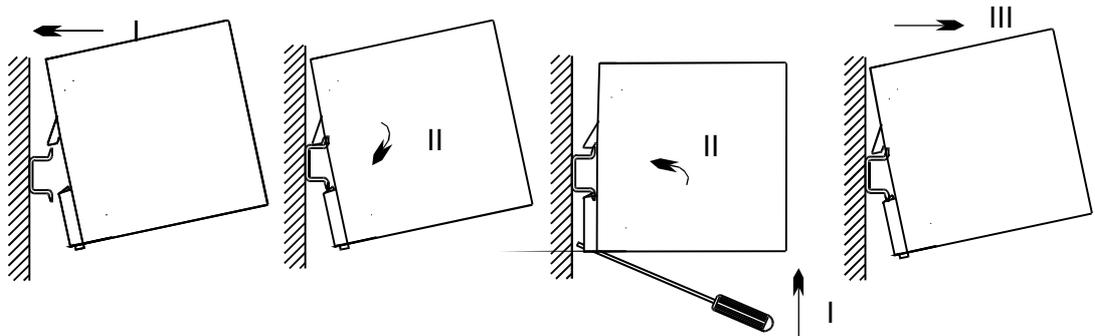
Maßbild
Dimension drawings

SITOP power flexi



Einstellung U_A und I_{Amax}
 Adjustment U_A and I_{Amax}

Montage
Installation



Hinweis

Diese Betriebsanleitung enthält aus Gründen der Übersichtlichkeit nicht sämtliche Detailinformationen zu allen Typen des Produkts und kann auch nicht jeden denkbaren Fall der Aufstellung, des Betriebes oder der Instandhaltung berücksichtigen. Weiterführende Hinweise erhalten Sie über die örtliche Siemens-Niederlassung bzw. aus dem Katalog KT 10 Stromversorgungen SITOP power. Technische Änderungen jederzeit vorbehalten. In Zweifelsfällen gilt der deutsche Text.

Note

These instructions cannot claim to cover all details of possible equipment variations, nor in particular can they provide for every possible example of installation, operation or maintenance. Further information is obtainable from your local Siemens office or from Catalog KT 10 Power Supplies SITOPpower. Subject to change without prior notice. The German text applies in cases of doubt.

**WARNING**

Hazardous voltages are present in this electrical equipment during operation. Failure to properly maintain the equipment can result in death, severe personal injury or substantial property damage. Only qualified personnel is allowed to work on or around this equipment. The successful and safe operation of this equipment is dependent on proper handling, installation and operation.

The mains switch has to be switched off and prevented from being switched on again before installation or maintenance. If these rules are not adhered to, contact with live parts or improper use can result in death or severe personal injury.

**CAUTION**

Electrostatic sensitive devices (ESD). Only trained personnel are permitted to open the device.

Description and design

The SITOP flexi power supply is a rail-mounted built-in unit. The relevant DIN/VDE regulations or equivalent local regulations must be observed during installation.

Primary switched-mode power supply for connection to 120 or 230 V, 50/60 Hz single-phase AC system; the output is potential-free, protected against short-circuit and open-circuit conditions and adjustable.

Technical method of operation

The output voltage of the device can be set to between 3 V_{DC} and 52 V_{DC}. The output voltage is adjusted by means of a potentiometer **U_A** on the front (see page 2 for position) or externally by means of terminals X2-2 (see page 6).

The device works in the output voltage range from 3 to 12 V_{DC} with a max. output current of 10 A.

In the output voltage range 12 to 52 V_{DC}, the power output is limited to a maximum of 120 W (see characteristic curve, page 6).

The current can be limited to between 2 A and 10 A. Current limitation is set by means of a potentiometer **I_{Amax}** (see page 2 for position) or externally by means of terminals X2-12 (see page 6).

Technical data**Input variables**

Input voltage:

AC 120/230V, 50/60Hz

Tolerance:

85-132V 170-264V

Overvoltage proof:

acc. to EN 61000-4-1 A.2

Efficiency at full load and 230 V:

> 75%

Limitation of inrush current(25°C) standard

at 230 V:

< 32A, 0.8A²s

Recommended circuit-breaker on supply side
6A characteristic. C.

Input current at 120/230 V:

2.2/0.9A

Power consumption:

138 W

Weight

0.9kg

Output variables

DC output voltage:

As delivered conditions: 24 V ±1% (rated voltage), adjustable by means of screwdriver at potentiometer **U_A** (front of device. For position, see page 2) in the range 3 to 52 V

Ripple content of output voltage:

< 50 mV_{ss} ripple

< 100 V_{ss} spikes

DC output current:

max. 10 A (in the range 3 to 12 V)

Output power:

max. 120 W (in the range 12 to 52 V)

Output-current limitation:

As delivered condition: 10 A ±10%, adjustable by means of screwdriver at potentiometer **I_{Amax}** (front of device. For position, see page 2) in the range 2 to 10 A.

Environment

Temperature

For storage and transport: -25 to +85 °C

For operation from 97-132 V and 195-264 V: 0 to +60°C

For operation from 170-180 V: derating $t_{amb} + 1K / V_{AC}$

for operation from 85-90 V: derating $t_{amb} + 2K / V_{AC}$

Humidity class :

acc. to EN 60721 class 3K3

Natural air convection cooling

Protection and monitoring function

Current limitation: typ. 1.1 x P_{rated}

Response to short-circuit (output): constant current characteristic and automatic re-acceleration

Mains buffering time:

>10 ms at input voltage of 93/187 V and output power of 120 W

Built-in fuse:

T 3,15A/250V

Regulations

Degree of protection: IP20 to IEC 529

Protection class: 1 to IEC 536

Safety to VDE 0160 and VDE 0805 (EN60950): SELV

Emission: acc. to EN 50081-1, RI suppression acc. to EN 55022, limit curve B

Noise Immunity: acc. to EN 50082-2 incl. Table A4

Limitation of input-current harmonics:

acc. to EN 61000-3-2

UL/cUL (UL 508/CSA 22.2), FILE143289

Installation notes

Mounting on standard mounting rails to DIN EN 50022-35x15/7,5. To ensure adequate cooling, the device must be installed vertically, with the input and output terminals at the bottom. Be sure to leave a minimum free space of 50 mm (2 in.) above and below the device.

The supply voltage (AC 120/230 V) and necessary jumper for the 120 V range must be connected in accordance with VDE 0100 and VDE 0160. A protective device (fuse) and an isolating device for disconnecting the power supply must be provided. If the equipment is operated in the 120 V range, a jumper must be wired between the two "AC120 V-JUMPER"-terminals. It must have the same cross-section and insulation as the power supply cables. It must not be longer than 100 mm (4 in.).



WARNING: The necessary jumper also carries dangerous electrical voltage !