

SITOP POWER 24 V/30 A  
 SITOP POWER 30 STABILIZED POWER SUPPLY INPUT: 400-500  
 V 3 AC OUTPUT: 24 V DC/30 A



Input	
Input	3-phase AC
Rated voltage value $V_{in}$ rated	400 ... 500 V
Voltage range AC	360 ... 550 V
<ul style="list-style-type: none"> <li>Note</li> </ul>	340 ... 360 V for max. 2 s or at max. 0.9 x $I_{out}$ rated
Wide-range input	Yes
Overvoltage resistance	$2.3 \times V_{in}$ rated, 1.3 ms
Mains buffering at $I_{out}$ rated, min.	4.5 ms; at $V_{in} = 360$ V
Rated line frequency	50 ... 60 Hz
Rated line range	47 ... 63 Hz
Input current	
<ul style="list-style-type: none"> <li>at rated input voltage 400 V</li> </ul>	1.4 A
Switch-on current limiting (+25 °C), max.	25 A
$I^2t$ , max.	1 A <sup>2</sup> ·s
Built-in incoming fuse	none
Protection in the mains power input (IEC 898)	Required: 3-pole connected miniature circuit breaker characteristic C up to 25 A (recommended: 6 A) or circuit-breaker 3RV1021-1DA10 (setting 3 A) or 3RV1721-1DD10 (UL 489)

### Output

Output	Controlled, isolated DC voltage
Rated voltage $V_{out}$ DC	24 V
Total tolerance, static $\pm$	3 %
Residual ripple peak-peak, max.	150 mV
Residual ripple peak-peak, typ.	50 mV
Spikes peak-peak, max. (bandwidth: 20 MHz)	240 mV
Spikes peak-peak, typ. (bandwidth: 20 MHz)	200 mV
Adjustment range	22.8 ... 26.4 V
Product function Output voltage adjustable	Yes
Output voltage setting	via potentiometer; only permissible at ambient temperature 0 °C to +45 °C
Status display	Green LED for 24 V OK
On/off behavior	Slight overshoot of $V_{out}$ (< 2 V for max. 500 ms)
Startup delay, max.	3 s
Voltage rise, typ.	40 ms
Rated current value $I_{out}$ rated	30 A
Current range	0 ... 30 A
Supplied active power typical	720 W
Short-term overload current	
• on short-circuiting during the start-up typical	60 A
• at short-circuit during operation typical	60 A
Duration of overloading capability for excess current	
• on short-circuiting during the start-up	600 ms
• at short-circuit during operation	600 ms
Parallel switching for enhanced performance	Yes; only permissible at ambient temperature 0 °C to 45 °C
Numbers of parallel switchable units for enhanced performance	2

### Efficiency

Efficiency at $V_{out}$ rated, $I_{out}$ rated, approx.	90 %
Power loss at $V_{out}$ rated, $I_{out}$ rated, approx.	80 W

### Closed-loop control

Dynamic mains compensation ( $V_{in}$ rated $\pm 15$ %), max.	1 %
Dynamic load smoothing ( $I_{out}$ : 50/100/50 %), $U_{out} \pm$ typ.	4 %
Setting time maximum	3 ms

### Protection and monitoring

Output overvoltage protection	Yes, according to EN 60950
Current limitation	31.5 ... 39 A
Property of the output Short-circuit proof	Yes
Short-circuit protection	Electronic shutdown, automatic restart
Enduring short circuit current RMS value	

<ul style="list-style-type: none"> <li>• maximum</li> </ul>	48 A
Overload/short-circuit indicator	-

## Safety

Primary/secondary isolation	Yes
Galvanic isolation	Safety extra low output voltage $V_{out}$ according to EN 60950-1
Protection class	Class I
Leakage current <ul style="list-style-type: none"> <li>• maximum</li> <li>• typical</li> </ul>	3.5 mA 0.78 mA
CE mark	Yes
UL/CSA approval	Yes
UL/cUL (CSA) approval	cULus-Listed (UL 508, CSA C22.2 No. 142), File E143289
Explosion protection	-
Certificate of suitability IECEx	No
Certificate of suitability NEC Class 2	No
FM approval	-
CB approval	Yes
Marine approval	-
Degree of protection (EN 60529)	IP20

## EMC

Emitted interference	EN 55022 Class B
Supply harmonics limitation	EN 61000-3-2
Noise immunity	EN 61000-6-2

## Operating data

Ambient temperature <ul style="list-style-type: none"> <li>• during operation</li> <li>— Note</li> <li>• during transport</li> <li>• during storage</li> </ul>	0 ... 55 °C with natural convection -25 ... +85 °C -25 ... +85 °C
Humidity class according to EN 60721	Climate class 3K3, no condensation

## Mechanics

Connection technology	screw-type terminals
Connections <ul style="list-style-type: none"> <li>• Supply input</li> <li>• Output</li> <li>• Auxiliary</li> </ul>	L1, L2, L3, PE: 1 screw terminal each for 0.5 ... 2.5 mm <sup>2</sup> single-core/finely stranded L+: 1 screw terminal for 0.33 ... 10 mm <sup>2</sup> ; M: 2 screw terminals for 0.33 ... 10 mm <sup>2</sup> -
Width of the enclosure	280 mm
Height of the enclosure	180 mm
Depth of the enclosure	92 mm
Weight, approx.	3.6 kg

Product feature of the enclosure housing for side-by-side mounting	No
Installation	Snaps onto DIN rail EN 60715 35x15
Mechanical accessories	Mounting bracket 90° (6EP1971-2BA00)
MTBF at 40 °C	515 274 h
Other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)