

SITOP POWER 24 V/40 A
 SITOP POWER 40 STABILIZED POWER SUPPLY INPUT: 400-500 V 3 AC OUTPUT: 24 V DC/40 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"> Note 	340 ... 360 V for max. 2 s or at max. 0.9 x I_{out} rated
Wide-range input	Yes
Oversoltage resistance	$2.3 \times V_{in}$ rated, 1.3 ms
Mains buffering at I_{out} rated, min.	3 ms; at $V_{in} = 360$ V
Rated line frequency 1	50 Hz
Rated line frequency 2	60 Hz
Rated line range	47 ... 63 Hz
Input current	
<ul style="list-style-type: none"> at rated input voltage 400 V 	1.9 A
Switch-on current limiting (+25 °C), max.	25 A
I^2t , max.	1 A ² ·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 temperatur 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	40 A

Current range	0 ... 40 A
Supplied active power typical	960 W
Short-term overload current	
• on short-circuiting during the start-up typical	70 A
• at short-circuit during operation typical	70 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 Vout rated, Iout rated, approx.	90 %
Power loss at Vout rated, Iout rated, approx.	107 W

Closed-loop control

Dynamic mains compensation (Vin rated ±15 %), max.	1 %
Dynamic load smoothing (Iout: 50/100/50 %), Uout ± typ.	4 %
Setting time maximum	3 ms

Protection and monitoring

Output overvoltage protection	Yes, according to EN 60950
Current limitation	42 ... 52 A
Property of the output Short-circuit proof	Yes
Short-circuit protection	Electronic shutdown, automatic restart
Enduring short circuit current RMS value	
• maximum	62 A
Overload/short-circuit indicator	-

Safety

Primary/secondary isolation	Yes
Galvanic isolation	Safety extra low output voltage Vout according to EN 60950-1
Protection class	Class I
Leakage current	
• maximum	3.5 mA
• typical	0.78 mA
CE mark	Yes
UL/cUL (CSA) approval	cULus-Listed (UL 508, CSA C22.2 No. 142), File E143289
Explosion protection	-
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"> • during operation — Note • during transport • during storage 	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"> • Supply input • Output • Auxiliary 	L1, L2, L3, PE: 1 screw terminal each for 0.5 ... 2.5 mm ² single-core/finely stranded L+: 1 screw terminal for 0.33 ... 10 mm ² ; M: 2 screw terminals for 0.33 ... 10 mm ² -
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)