## **SIEMENS**

## **Data sheet**



## SITOP MODULAR/3AC/24VDC/20A/CO

SITOP modular plus 20 A Stabilized power supply input: 3 AC 400-500 V output: 24 V DC/20 A Option for with protective varnish

Figure similar

Input	
type of the power supply network	3-phase AC
supply voltage at AC	
<ul> <li>minimum rated value</li> </ul>	400 V
<ul> <li>maximum rated value</li> </ul>	500 V
initial value	320 V; Starting from Vin > 340 V
full-scale value	550 V
design of input wide range input	Yes
overvoltage overload capability	2.3 × Vin rated, 1.3 ms
operating condition of the mains buffering	at Vin = 400 V
buffering time for rated value of the output current in the event of power failure minimum	6 ms
operating condition of the mains buffering	at Vin = 400 V
line frequency	
1 rated value	50 Hz
2 rated value	60 Hz
line frequency	47 63 Hz
input current	
<ul> <li>at rated input voltage 400 V</li> </ul>	1.1 A
at rated input voltage 500 V	0.9 A
current limitation of inrush current at 25 °C maximum	35 A
I2t value maximum	0.7 A <sup>2</sup> ·s
fuse protection type	none
• in the feeder	Required: 3-pole connected miniature circuit breaker 6 16 A characteristic C or circuit breaker 3RV2011-1DA10 (setting 3 A) or 3RV2711-1DD10 (UL 489)
Output	
voltage curve at output	Controlled, isolated DC voltage
output voltage at DC rated value	24 V
output voltage	
at output 1 at DC rated value	24 V
relative overall tolerance of the voltage	3 %
relative control precision of the output voltage	
<ul> <li>on slow fluctuation of input voltage</li> </ul>	0.1 %
on slow fluctuation of ohm loading	0.2 %
residual ripple	
maximum	100 mV
voltage peak	
• maximum	200 mV

adjustable output voltage	24 20 0 1/
adjustable output voltage	24 28.8 V
product function output voltage adjustable	Yes
type of output voltage setting	via potentiometer; max. 480 W
display version for normal operation	Green LED for 24 V OK
type of signal at output	via signaling module (6EP1961-3BA10)
behavior of the output voltage when switching on	No overshoot of Vout (soft start)
response delay maximum	2.5 s
voltage increase time of the output voltage	
• maximum	500 ms
output current	
• rated value	20 A
rated range	0 20 A; +60 +70 °C: Derating 2%/K
supplied active power typical	480 W
short-term overload current	
at short-circuit during operation typical	60 A
duration of overloading capability for excess current	
at short-circuit during operation	25 ms
constant overload current	
on short-circuiting during the start-up typical	23 A
product feature	
bridging of equipment	Yes; switchable characteristic
number of parallel-switched equipment resources for	2
increasing the power	
Efficiency	
efficiency in percent	90 %
power loss [W]	
<ul> <li>at rated output voltage for rated value of the output current typical</li> </ul>	53 W
Closed-loop control	
relative control precision of the output voltage with rapid	1 %
fluctuation of the input voltage by +/- 15% typical	
relative control precision of the output voltage load step of resistive load 50/100/50 % typical	2 %
setting time	
<ul><li>load step 50 to 100% typical</li></ul>	4 ms
load step 100 to 50% typical	4 ms
setting time	
• maximum	10 ms
Protection and monitoring	
design of the overvoltage protection	< 35 V
response value current limitation typical	23 A
property of the output short-circuit proof	Yes
design of short-circuit protection	Alternatively, constant current characteristic approx. 23 A or latching
	shutdown
enduring short circuit current RMS value	
• typical	23 A
display version for overload and short circuit	LED yellow for "overload", LED red for "latching shutdown"
Safety	
galvanic isolation between input and output	Yes
galvanic isolation	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178
operating resource protection class	Class I
leakage current	
maximum	3.5 mA
protection class IP	IP20
Approvals	
certificate of suitability	
CE marking	Yes
UL approval	Yes; UL-Listed (UL 508), File E197259; CSA (CSA C22.2 No. 14, CSA
<b>σ</b> ου αρριοναι	C22.2 No. 107.1)
CSA approval	Yes; UL-Listed (UL 508), File E197259, CSA (CSA C22.2 No. 14, CSA C22.2 No. 107.1)

<ul> <li>cCSAus, Class 1, Division 2</li> </ul>	No
• ATEX	No
certificate of suitability	
• IECEx	No
NEC Class 2	No
<ul> <li>ULhazloc approval</li> </ul>	No
FM registration	No
type of certification CB-certificate	No
certificate of suitability	
EAC approval	Yes
certificate of suitability shipbuilding approval	No
shipbuilding approval	-
Marine classification association	
<ul> <li>American Bureau of Shipping Europe Ltd. (ABS)</li> </ul>	No
<ul> <li>French marine classification society (BV)</li> </ul>	No
DNV GL	No
<ul> <li>Lloyds Register of Shipping (LRS)</li> </ul>	No
Nippon Kaiji Kyokai (NK)	No
EMC	
standard	
for emitted interference	EN 55022 Class B
for mains harmonics limitation	EN 61000-3-2
for interference immunity	EN 61000-6-2
environmental conditions	211 01000 0 2
ambient temperature	
during operation	0 70 °C; with natural convection
during operation     during transport	-40 +85 °C
during transport     during storage	-40 +85 °C
environmental category acc. to IEC 60721	Climate class 3K3, 5 95% no condensation
Mechanics	Climate class SNO, 5 95 % no condensation
	agrayy type terminals
type of electrical connection	screw-type terminals
• at input	L1, L2, L3, PE: 1 screw terminal each for 0.2 4 mm <sup>2</sup> single-core/finely stranded
• at output	+, -: 2 screw terminals each for 0.33 4 mm <sup>2</sup>
for auxiliary contacts	•
width of the enclosure	160 mm
height of the enclosure	125 mm
depth of the enclosure	125 mm
required spacing	
• top	50 mm
• bottom	50 mm
● left	0 mm
• right	0 mm
net weight	2 kg
product feature of the enclosure housing can be lined up	Yes
fastening method	Snaps onto DIN rail EN 60715 35x7.5/15
electrical accessories	Buffer module, signaling module
MTBF at 40 °C	711 213 h
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

