SIEMENS

Product data sheet 6EP1536-3AA00



SITOP PSU400M 20 A DC/DC TRANSFORMER INPUT: 600 V DC OUTPUT: 24 V/20 A DC

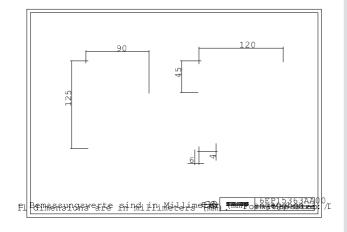
Technical specifications	
Product	SITOP PSU400M
Power supply, type	24 V/20 A
Input	
Input	DC voltage
Supply voltage / at DC	600 600 V
Voltage range	
• Note	(startup from approx. 400 V DC); derating necessary at 200 \dots 300 V DC and 820 \dots 900 V DC
Input voltage / at DC	200 900 V
Overvoltage resistance	Shutdown at Vin > 900 V DC
Input current / at DC / at nominal level of the input voltage 600 V / nominal value	0.85 A
Switch-on current limiting (+25 °C), max.	8 A
l²t, max.	0.02 A²-s
Built-in incoming fuse	yes, cut-off capacity 20 kA; L/R < 2 ms ("+" and "-" input)
Output	
Output	Controlled, isolated DC voltage
Rated voltage Vout DC	24 V
Total tolerance, static ±	3 %
Static mains compensation, approx.	0.3 %

Static load balancing, approx.	0.3 %
Residual ripple peak-peak, max.	150 mV
Residual ripple peak-peak, typ.	30 mV
Spikes peak-peak, max. (bandwidth: 20 MHz)	200 mV
Spikes peak-peak, typ. (bandwidth: 20 MHz)	100 mV
Adjustment range	24 28.8 V
Product feature / output voltage adjustable	Yes
Output voltage setting	via potentiometer
Status display	Green LED for 24 V OK, green flashing LED for start delay
Signaling	Relay contact (NO contact, rating 60 V DC/ 0.3 A; 30 V DC/1 A) for 24 V OK
On/off behavior	No overshoot of Vout (soft start)
Startup delay, max.	0.1 s
• Note	10 s adjustable using switch
Voltage increase time / of the output voltage / maximum	150 ms
Rated current value lout rated	20 A
Current range	0 20 A
• Note	9 A up to +70 °C
delivered active power / typ.	480 W
short-term overload current / at short-circuit during run-up / typical	40 A
Duration of overloading ability for excess current / on short-circuiting during the start-up	150 ms
Parallel switching for enhanced performance	Yes
• Note	switchable characteristic
Numbers of parallel switchable units for enhanced performance	2
Efficiency	
Efficiency at Vout rated, lout rated, approx.	95 %
Power loss at Vout rated, lout rated, approx.	25 W
Closed-loop control	
Dynamic mains compensation (Vin rated ±15 %), max.	1.5 %
Dynamic load smoothing (lout: 50/100/50 %), Uout ± typ.	1.5 %
Load step setting time 50 to 100%, typ.	1 ms
Load step setting time 100 to 50%, typ.	1 ms
Setting time / maximum	5 ms
Protection and monitoring	
Output overvoltage protection	< 33 V
Current limitation, typ.	22 A
Characteristic feature of the output / short-circuit protected	Yes
Short-circuit protection	Alternatively, constant current characteristic approx. 22 A or latching shutdown

Enduring short circuit current / Effective level / typical	22 A
• Note	overload capability 150 % lout rated up to 5 s/min
Overload/short-circuit indicator	LED yellow for "overload", LED red for "latching shutdown", red LED flashing for "Overtemperature"
Safety	
Primary/secondary isolation	Yes
Potential separation	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178
Protection class	Class I
CE mark	Yes
UL/CSA approval	Yes
UL/cUL (CSA) approval	cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259
Explosion protection	-
FM approval	-
CB approval	No
Marine approval	GL and ABS in process
Degree of protection (EN 60529)	IP20
EMC	
Emitted interference	EN 55022 Class A (emission)
Supply harmonics limitation	-
Noise immunity	EN 61000-6-2
Operating data	
Ambient temperature / in operation	-25 +70 °C
• Note	with natural convection
Ambient temparature / on transport	-40 +85 °C
Ambient temparature / in storage	-40 +85 °C
Humidity class according to EN 60721	Climate class 3K3, no condensation
Mechanics	
Connection technology	screw-type terminals
Connections / Supply input	DC input, +, -, PE: 1 screw terminal each for 0.2 6/4 mm² single-core/finely stranded
Connections / Output	L+, M: 2 screw terminals each for 0.2 6/4 mm² single-core/finely stranded
Connections / Auxiliary	Alarm signals: 2 screw terminals for 0.14 1.5 mm² single-core/finely stranded
Width / of the housing	90 mm
Height / of the housing	125 mm
Depth / of the housing	125 mm
Installation width	90 mm
Mounting height	225 mm

Product feature / of the housing / housing for side-by-side mounting	Yes
Type of mounting / wall mounting	No
Type of fixing / cap rail mounting	Yes
Type of mounting / S7-300 rail mounting	No
Installation	Snaps onto DIN rail EN 60715 35x7.5/15
Mechanical accessories	Device identification label 20 mm × 7 mm, pastel-turpuoise 3RT1900 -1SB20

Other information



Specifications at rated input voltage and ambient temperature +25 $^{\circ}\text{C}$ (unless otherwise specified)

letzte Änderung:

Sep 10, 2012