SITOP modular 40 A



Power supply, type	20 A
Order number	6EP1 436-3BA00
Input	Three-phase AC
Rated voltage Uinrated	3 AC 400-500 V wide-range input
Voltage range	320 to 550 V (startup at U _{in} > 340)
Overvoltage strength	2.3 x U _{in rated} , 1.3 ms
Line buffering at loutrated	$>$ 6 ms at U_{in} = 400 V
Rated line frequency; rated line-frequency range	50/60 Hz; 47 to 63 Hz
Rated current I _{in rated}	1.1 A (U _{in} = 400 V)
Switch-on current limit (+25°C)	< 35 A
I ² t	$< 0.7 \text{ A}^2 \text{s}$
Built-in line-side fuse	None
Required protection in the supply feeder	3-pole coupled circuit-breaker 6 A to 16 A, C characteristic or motor circuit-breaker 3RV1021-1DA10, setting 3 A
Output	Stabilized, floating direct voltage
Rated voltage U _{out rated}	24 V DC
Total tolerance	± 3%
Static line smoothing	Approx. ± 0.1%
Static load smoothing	Approx. ± 0.2%
Ripple content (clock frequency: approx. 50 kHz)	< 100 mV _{pp}
Spikes (bandwidth: 20 MHz)	< 200 mV _{pp}
Adjustment range	24 to 28.8 V (max. 480 W)
Operation indicator	Green LED for 24 V O.K
Response on activation/deactivation	No overshoot of Uout (soft start)
Startup delay/voltage rise	< 2.5 s/< 500 ms
Rated current lout rated	20 A
Current range up to +60°C	

Power supply, type	20 A
• Up to +60°C	0 to 20 A
Dynamic U/I at	
Power-up on short-circuit	Approx. 23 A constant current
Short-circuit during operation	Typically 60 A for 25 ms
Parallel switching for enhanced performance	Yes, 2 (selectable current characteristic)
Efficiency	
Efficiency at Uout rated, Iout rated	Approx. 90%
Heat loss at Uout rated, lout rated	Approx. 53 W
Control	
Dynamic line smoothing (U _{in rated} ±15%)	< 1% U _{out}
Dynamic load smoothing (I _{out} : 50/100/50%)	Approx. ±2% U _{out}
Load-step settling time	
• 50 at 100%	< 10 ms (typ. 4 ms)
• 100 at 50%	< 10 ms (typ. 4 ms)
Protection and monitoring	
Output overvoltage protection	< 35 V
Current limit	Typically 23 A
Short-circuit protection	Choice of stabilized current characteristic approx. 23 A or latching shutdown
Sustained-short-circuit-current rms value	Approx. 23 A
Overload/short-circuit indicator	Yellow LED for "overload", red LED for "latching shutdown"
Security	
Primary/secondary galvanic isolation	Yes, SELV output voltage U _{out} acc. to EN 60950 and EN 50178
Protection class	Class I
Leakage current	< 3.5 mA
German Technical Inspectorate approval	Yes
CE marking	Yes
UL/cUL (CSA) approval	Yes, UL-listed (UL 508), File E197259, CSA (CSA 22.2 No. 14-95)
FM approval	-
Marine Type Approval	-
Degree of protection (EN 60529)	IP20
EMC	

Power supply, type	20 A
Iterference emission	EN 55022 Class B
Line harmonics limitation	EN 61000-3-2
Interference immunity	EN 61000-6-2
Operating data	
Ambient temperature range	0 to +60°C with natural convection
Transport/storage temperature range	-25 to +85°C
Humidity rating	Climatc class 3K3 acc. to EN 60721, no condensation
Mechanical specifications	
Connections	
 Mains input L1, L2, L3 PE 	One screw-type terminal each for 0.2 to 4 mm ² single core/finely stranded
Output +	2 screw-type terminals for 0.33 to 4 mm ²
Output -	2 screw-type terminals for 0.33 to 4 mm ²
Dimensions (W x H x D) in mm	160 x 125 x 125
Weight, approx.	2 kg
Mounting	Snap-mounting on DIN rail DIN EN 50022-35x15/7.5
Accessories	Buffer module (6EP1961-3BA00) Signaling module (6EP1961-3BA10) Redundancy module (6EP1961-3BA20)

© 2001 - 2006 Siemens AG, Automation and Drives