



PSU100D 24 V/2.1 A STABILIZED POWER SUPPLY
INPUT: 100-240 V AC OUTPUT: 24 V DC/2.1 A

Technical specifications

Product	PSU100D
Power supply, type	24 V/2.1 A
Input	
Input	1-phase AC
Rated voltage value V_{in} rated	100 ... 240 V
Voltage range	85 ... 264 V
Wide-range input	Yes
Mains buffering at I_{out} rated, min.	15 ms
Mains buffering	at $V_{in} = 115/230$ V
Rated line frequency	50 / 60 Hz
Rated line range	47 ... 63 Hz
Input current / at nominal level of the input voltage 100 V / nominal value	1.1 A
Input current / at nominal level of the input voltage 240 V / nominal value	0.7 A
Switch-on current limiting (+25 °C), max.	60 A
I^2t , max.	1.2 A ² ·s
Built-in incoming fuse	internal
Protection in the mains power input (IEC 898)	Recommended miniature circuit breaker: from 10 A characteristic C or from 16 A characteristic B

Output

Output	Controlled, isolated DC voltage
Rated voltage Vout DC	24 V
Total tolerance, static ±	2 %
Static mains compensation, approx.	0.5 %
Static load balancing, approx.	1 %
Residual ripple peak-peak, max.	100 mV
Spikes peak-peak, max. (bandwidth: 20 MHz)	100 mV
Adjustment range	22 ... 28 V
Product feature / output voltage adjustable	Yes
Output voltage setting	via potentiometer
Status display	Green LED for 24 V OK
On/off behavior	Overshoot of Vout < 2 %
Startup delay, max.	1 s
Voltage increase time / of the output voltage / maximum	30 ms
Rated current value Iout rated	2.1 A
Current range	0 ... 2.1 A
• Note	+50 ... +70 °C: Derating 2.5%/K
delivered active power / typ.	50 W
Parallel switching for enhanced performance	Yes
Numbers of parallel switchable units for enhanced performance	2
Efficiency	
Efficiency at Vout rated, Iout rated, approx.	86 %
Power loss at Vout rated, Iout rated, approx.	8 W
Closed-loop control	
Dynamic mains compensation (Vin rated ±15 %), max.	0.5 %
Dynamic load smoothing (Iout: 50/100/50 %), Uout ± typ.	5 %
Protection and monitoring	
Output overvoltage protection	< 35 V
Current limitation, typ.	2.5 A
Characteristic feature of the output / short-circuit protected	Yes
Short-circuit protection	Electronic shutdown, automatic restart
Enduring short circuit current / Effective level / typical	6 A
Overload/short-circuit indicator	-
Safety	
Primary/secondary isolation	Yes
Potential separation	Safety extra low output voltage Vout according to EN 60950-1
Protection class	Class I
stray current / maximum	3.5 mA
stray current / typical	1 mA

CE mark	Yes
UL/CSA approval	Yes
UL/cUL (CSA) approval	cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cURus (UL 60950-1, CSA C22.2 No. 60950-1), File E151273
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	not applicable
Noise immunity	EN 61000-6-2
Operating data	
Ambient temperature / in operation	-10 ... +70 °C
• Note	with natural convection
Ambient temperature / on transport	-40 ... +85 °C
Ambient temperature / in storage	-40 ... +85 °C
Mechanics	
Connection technology	screw-type terminals
Connections / Supply input	L, N, PE: 1 screw terminal each for 0.3 ... 1.3 mm ² single-core/finely stranded
Connections / Output	+, -: 1 screw terminal each for 0.3 ... 1.3 mm ²
Connections / Auxiliary	-
Width / of the housing	97 mm
Height / of the housing	128 mm
Depth / of the housing	38 mm
Weight, approx.	0.35 kg
Type of mounting / wall mounting	Yes
Type of mounting / standard rail mounting	No
Type of mounting / S7-300 rail mounting	No
Installation	Wall mounting
Other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)
letzte Änderung:	Dec 2, 2013