

LOGO!POWER 24 V/2.5 A STABILIZED POWER SUPPLY
INPUT: 100-240 V AC (110-300 V DC) OUTPUT: 24 V/2.5 A DC

Technical specifications

Product	LOGO!Power
Power supply, type	24 V/2.5 A

Input

Input	1-phase AC or DC
Supply voltage / with AC / minimum rated value	100 V
Supply voltage / with AC / maximum rated value	240 V
Supply voltage	
• with AC	85 ... 264 V
Input voltage / for DC	110 ... 300 V
Wide-range input	Yes
Oversvoltage resistance	2.3 × Vin rated, 1.3 ms
Mains buffering at Iout rated, min.	40 ms
Mains buffering	at Vin = 187 V
Rated line frequency	50 / 60 Hz
Rated line range	47 ... 63 Hz
Input current / at rated input voltage 120 V	1.22 A
Input current / at rated input voltage 230 V	0.66 A
Switch-on current limiting (+25 °C), max.	46 A
I ² t, max.	3 A ² ·s
Built-in incoming fuse	internal
Protection in the mains power input (IEC 898)	Recommended miniature circuit breaker: from 16 A characteristic B or from 10 A characteristic C

Output

Output	Controlled, isolated DC voltage
Rated voltage Vout DC	24 V
Total tolerance, static ±	3 %
Static mains compensation, approx.	0.1 %
Static load balancing, approx.	1.5 %
Residual ripple peak-peak, max.	200 mV
Residual ripple peak-peak, typ.	10 mV
Spikes peak-peak, max. (bandwidth: 20 MHz)	300 mV

Spikes peak-peak, typ. (bandwidth: 20 MHz)	50 mV
Adjustment range	22.2 ... 26.4 V
Product function / Output voltage adjustable	Yes
Output voltage setting	via potentiometer
Status display	Green LED for output voltage OK
On/off behavior	No overshoot of Vout (soft start)
Startup delay, max.	0.5 s
Voltage rise, typ.	10 ms
Rated current value Iout rated	2.5 A
Current range	0 ... 2.5 A
• Note	+55 ... +70 °C: Derating 2%/K
Active power supplied / typical	60 W
Parallel switching for enhanced performance	Yes
Numbers of parallel switchable units for enhanced performance	2
Efficiency	
Efficiency at Vout rated, Iout rated, approx.	88 %
Power loss at Vout rated, Iout rated, approx.	8 W
Active power loss / during no-load operation / maximum	1.8 W
Closed-loop control	
Dynamic mains compensation (Vin rated ± 15 %), max.	0.2 %
Dynamic load smoothing (Iout: 10/90/10 %), Uout \pm typ.	2 %
Load step setting time 10 to 90%, typ.	1 ms
Load step setting time 90 to 10%, typ.	1 ms
Protection and monitoring	
Output overvoltage protection	Yes, according to EN 60950-1
Current limitation, typ.	3.3 A
Property of the output / Short-circuit proof	Yes
Short-circuit protection	Constant current characteristic
Enduring short circuit current / RMS value / maximum	4.8 A
Overload/short-circuit indicator	-
Safety	
Primary/secondary isolation	Yes
Galvanic isolation	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178
Protection class	Class II (without protective conductor)
CE mark	Yes
UL/CSA approval	Yes
UL/cUL (CSA) approval	cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cURus-Recognized (UL 60950, CSA C22.2 No. 60950), File E151273, NEC class 2 (acc. to UL 1310)

Explosion protection	ATEX (EX) II 3G Ex nA IIC T3; cCSAus (CSA C22.2 No. 213-M1987, ANSI/ISA-12.12.01-2007) Class I, Div. 2, Group ABCD, T4
FM approval	Class I, Div. 2, Group ABCD, T4
CB approval	Yes
Marine approval	GL, ABS, BV, DNV, LRS
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 / during operation	-20 ... +70 °C
• Note	with natural convection
Ambient temperature / during transport	-40 ... +85 °C
Ambient temperature / during storage	-40 ... +85 °C
Humidity class according to EN 60721	Climate class 3K3, no condensation
Mechanics	
Connection technology	screw-type terminals
Connections / Supply input	L, N: 1 screw terminal each for 0.5 ... 2.5 mm ² single-core/finely stranded
Connections / Output	+, -: 2 screw terminals each for 0.5 ... 2.5 mm ²
Connections / Auxiliary	-
Width / of the enclosure	72 mm
Height / of the enclosure	90 mm
Depth / of the enclosure	52.6 mm
Installation width	72 mm
Mounting height	130 mm
Weight, approx.	0.25 kg
Product property / of the enclosure / housing for side-by-side mounting	Yes
Mounting type / wall mounting	No
Mounting type / Standard rail mounting	Yes
Mounting type / S7 rail mounting	No
Installation	Snaps onto DIN rail EN 60715 35x7.5/15
Other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)
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