

wipos P1 12-10



(illustration similar)

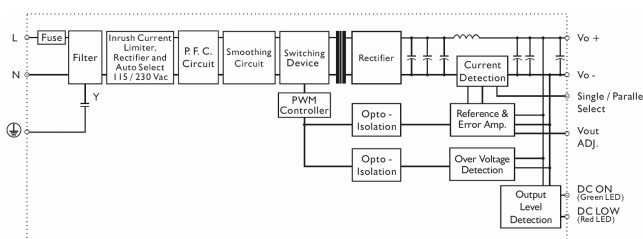
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Switching power supply

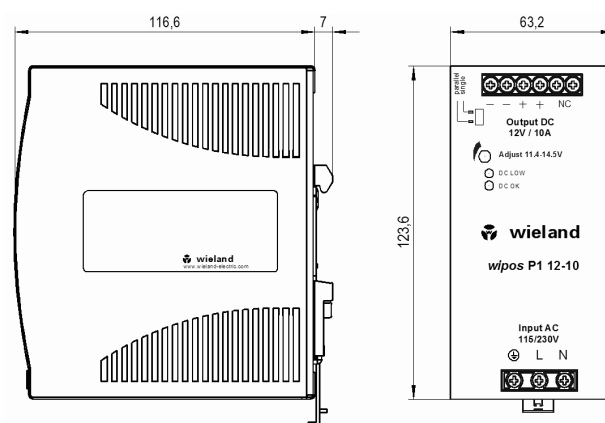
12 V DC / 10 A

81.000.6142.0

- Primary switching power supply, single phase
- Output: 12 V DC / 10 A (adjustable 11.4 - 14.5 V DC)
- Short circuit proof
- Input: 115/230 V AC auto select; 210 - 375 V DC
- Full load up to 60 °C
- PFC Technology
- Vertical mount
- Parallel operation (max. 3 devices)
- 100 % Burn-In



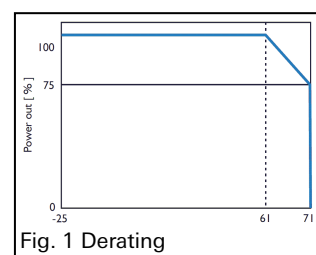
Block diagram



Dimensional diagram

Technical Data

wipos P1 12-10		Part number: 81.000.6142.0
Rated power	[P ₀]	120 W
Rated output voltage	[U ₀]	12 V DC
Rated output current	[I _{0N}]	10 A DC
Efficiency typ. / min.		86 % / 84 %
Minimum load		none
Output voltage trim range (U ₀ , I _{0N})		11.4 V ... 14.5 V
Output voltage accuracy (I _{0N})		-0 % / +1 %
Line regulation		±0.5 %
Load regulation (U ₀) at	single operation: parallel operation:	±1 % ±5 %
Temperature coefficient (U ₀ , I _{0N})		± 0.03 % / K
Rated overload protection		125 % - 145 %
Output short circuit (U ₀ , I _{0N})		current limited (fold forward)
Ripple & noise (U ₀ , I _{0N} , BW = 20 MHz)		<50 mV _{ss}
Operation indicator		Display range
	output voltage OK (U ₁ , I _{0N})	"DC OK", LED green (U ₀ 10.0 ... 11.2 V)
	output voltage too low (U ₁ , I _{0N})	"DC LOW", LED red (U ₀ < 10.0 ... 11.2 V)
Parallel operation (0.9 I _{0N})		yes, max. 3 devices
Derating (61 °C ... 71 °C)		2.5 % / K (see Fig. 1 Derating)
Overvoltage protection (U ₀ , I _{0N})		125 % ... 145 %



**wipos P1 12-10****Technical Data**

wipos P1 12-10		Part number: 81.000.6142.0	
Rated input voltage AC	[U _{IN AC}]	115 V AC (90 ... 132 V) auto select 230 V AC (180 ... 264 V) auto select	
Line frequency AC		47 – 63 Hz	
Power correction filter (PFC)		yes (0.7)	
Rated input voltage DC	[U _{IN DC}]	210 – 375 V DC	
Rated input current 115 V / 230 V		2.8 A / 1.4 A	
Inrush current 115 V AC / 230 V AC		24 A / 48 A max.	
Input fuse		T3.15 A / 250 V (intern)	
Hold up time (at I _{ON})	U _{I AC} = 115 V U _{I AC} = 230 V	> 25 ms > 30 ms	
Isolation voltage (input/output)		3000 V AC / 4242 V DC	
Isolation resistance (input/output)		100 MOhm	
Cooling / ventilation		free convection	
Mounting conditions (free space)		25 mm in all directions / up 50 °C no horizontal space needed	
Operating ambient temperature	[T _U]	-35 °C ... +71 °C (UL: max. 50 °C)	
Humidity in operation		20 – 95 % RH	
Storage temperature	[T _U]	-35 °C ... +85 °C	
Mounting on		DIN rail 35 mm (EN 60715)	
Degree of protection		IP 20	
MTBF (Bellcore issue 6 @ 40 °C, GB)		450.000 h	
Dimensions (W x H x D)		63.2 x 123.6 x 123 mm	
Weight		ca. 920 g	
Housing material		metal	
Connector cross section (min.)	solid stranded	0.5 mm ² 0.5 mm ²	(AWG24) (AWG24)
Connector cross section (max.)	solid stranded	6 mm ² 6 mm ²	(AWG10) (AWG10)
Strip length		8 mm	
Torque	input terminals output terminals	1.0 Nm max. 0.6 Nm max.	
Approvals and standards			
UL / cULus		UL 508 Listed, UL60950-1 Recognized	
TUV / safety		EN60950-1, EN61558-1, EN61558-2-17 (follow EN60204) , IRAM	
CE		EN55022 & EN61000-6-3, EN61000-3-2, EN61000-3-3, EN55024 & EN61000-6-2, EN61000-4-2, EN61000-4-3, EN61000-4-4, EN61000-4-5, EN61000-4-6, EN61000-4-8, EN61000-4-11, EN60204-1, EN61204-3	
Terminal connections			
-		2 x output voltage 12 V, negative output terminal (internally connected)	
+		2 x output voltage 12 V, positive output terminal (internally connected)	
NC		not connected	
L		AC: Phase, DC: no polarity	
N		AC: Neutral, DC: no polarity	
⊕ (PE)		PE (ground), always connect	