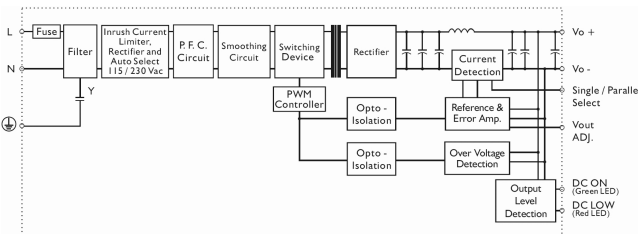




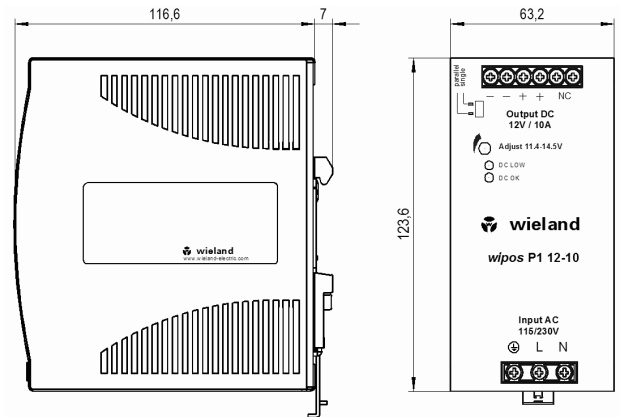
(illustration similar)

wipos P1 12-10
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 ... 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)
Overshoot protection (U ₀ , I _{0N})		125 % ... 145 %

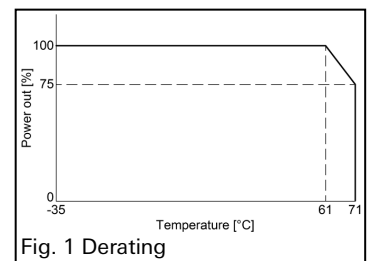


Fig. 1 Derating

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 factor correction filter (PFC)		yes (0.7)
Rated input voltage DC	[U _{IN_DC}]	210 ... 375 V DC
Rated input current 115/230 V AC		2.8 A/1.4 A
Inrush current 115/230 V AC		24 A/48 A max.
Input fuse		T3.15 A/250 V (intern)
Hold up time (at I _{0N})	U _{LAC} = 115 V U _{IAC} = 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 to 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		DIN rail 35 mm (EN60715)
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 (AWG24) 0.5 mm ² (AWG24)
Connector cross section (max.)	solid stranded	6 mm ² (AWG10) 6 mm ² (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, EN61558-2-16 (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