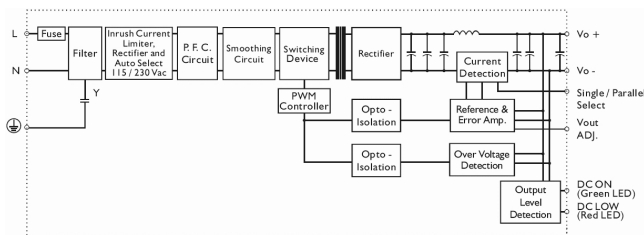




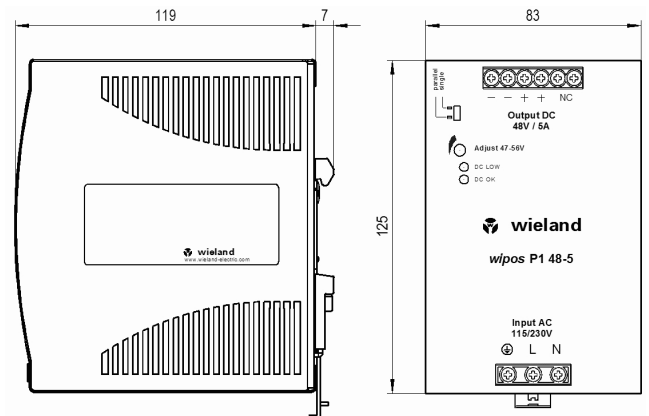
(illustration similar)

**wipos P1 48-5**  
Switching Power Supply  
48 V DC/5 A  
81.000.6134.0

- Primary switching power supply, single phase
- Output: 48 V DC/5 A (adjustable 47 - 56 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



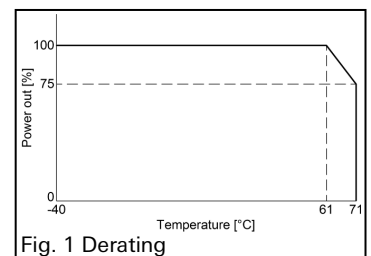
Block diagram



Dimensional diagram

**Technical Data**

wipos P1 48-5		Part number: 81.000.6134.0
Rated power	[P <sub>O</sub> ]	240 W
Rated output voltage	[U <sub>O</sub> ]	48 V DC
Rated output current	[I <sub>ON</sub> ]	5 A DC
Efficiency typ./min.		90 %/88 %
Minimum load		none
Output voltage trim range (U <sub>O</sub> , I <sub>ON</sub> )		47 ... 56 V
Output accuracy (I <sub>ON</sub> )		-0 %/+1 %
Line regulation		±0.5 %
Load regulation (U <sub>O</sub> ) at	single operation: parallel operation:	±1 % ±5 %
Temperature coefficient (U <sub>O</sub> , I <sub>Omin</sub> )		±0.03 %/K
Rated overload protection		120 % - 145 %
Output short circuit (U <sub>O</sub> , I <sub>ON</sub> )		Current limited (fold forward)
Ripple & noise (U <sub>O</sub> , I <sub>ON</sub> , BW = 20 MHz)		< 100 mV <sub>ss</sub>
Operation indicator	Display range	Output voltage OK (U <sub>I</sub> , I <sub>ON</sub> ) "DC OK", LED green (U <sub>O</sub> 37 ... 43 V) Output voltage low (U <sub>I</sub> , I <sub>ON</sub> ) "DC LOW", LED red (U <sub>O</sub> < 37 ... 43 V)
Parallel operation (0.9 I <sub>O max</sub> )		yes, max. 3 devices
Derating (61 °C ... 71 °C)		2.5 %/K (see Fig. 1 Derating)
Overvoltage protection (I <sub>ON</sub> )		120 % ... 145 %



## Technical Data

wipos P1 48-5		Part number: 81.000.6134.0	
Rated input voltage AC	[U <sub>IN,AC</sub> ]	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 <sub>IN,DC</sub> ]	210 ... 375 V DC	
Rated input current 115/230 V AC		5.4 A/2.2 A	
Inrush current 115/230 V AC		30 A/60 A max.	
Input fuse		T6.3 A/250 V (intern)	
Hold up time (U <sub>I</sub> , I <sub>0N</sub> )	U <sub>L,AC</sub> = 115 V U <sub>I,AC</sub> = 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	
Moulding conditions (free space)		25 mm in all directions / up to 50 °C no horizontal space required	
Operating temperature range	[T <sub>U</sub> ]	-40 °C ... +71 °C (UL: max. 50 °C)	
Humidity in operation		20 - 95 % RH	
Storage temperature	[T <sub>U</sub> ]	-40 °C ... +85 °C	
Mounting		35 mm DIN rail acc. EN60715	
Protection degree		IP 20	
MTBF (Bellcore issue 6 @ 40 °C, GB)		423.000 h	
Dimensions (W x H x D)		83 x 123.6 x 123 mm	
Weight		ca. 1.3 kg	
Housing material		metal	
Connector cross section (min.)	solid stranded	0.5 mm <sup>2</sup> 0.5 mm <sup>2</sup>	(AWG24) (AWG24)
Connector cross section (max.)	solid stranded	6 mm <sup>2</sup> 6 mm <sup>2</sup>	(AWG10) (AWG10)
Strip length		8 mm	
Torque	input clamps output clamps	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 48 V, negative terminal (internally connected)	
+		2 x output voltage 48 V, positive terminal (internally connected)	
NC		not connected	
L		AC: Phase, DC: no polarity	
N		AC: Neutral, DC: no polarity	
⊕ (PE)		PE (ground), always connect	