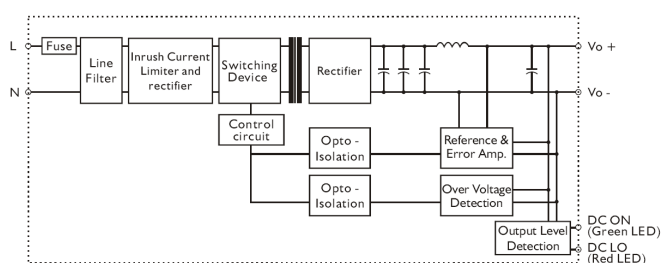


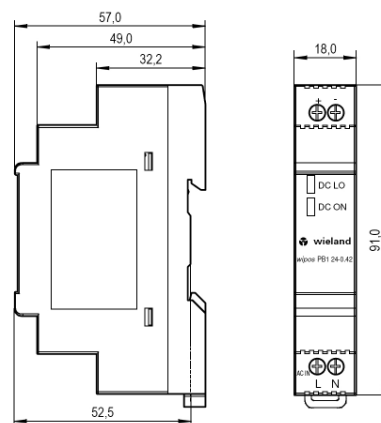
wipos PB1 24-0.42

wipos PB1 24-0.42
 Switching power supply
 24 V DC/0.42 A
 81.000.6300.0

- Primary switching power supply, single phase
- Output: 24 V DC/0.42 A
- Short circuit proof
- Input: 100 - 240 V AC; 120 - 375 V DC
- Full load up to 60 °C
- DIN rail mounted device



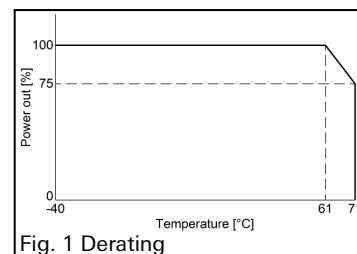
Block diagram



Dimensional diagram

Technical Data

wipos PB1 24-0.42		Part number: 81.000.6300.0
Rated output power	[P _O]	10 W
Rated output voltage	[U _O]	24 V DC
Rated output current	[I _{ON}]	0.42 A DC
Efficiency typ./min.		80 %/78 %
Minimum load		none
Output voltage accuracy (U _{IN AC} , I _{ON})		±1 %
Line regulation		±1 %
Load regulation (U _{IN AC})		±1 %
Temperature coefficient (U _{IN AC} , I _{O min})		± 0.03 %/K
Rated overload protection		110 % - 165 %
Output short circuit (U _O , I _{ON})		Current limited (fold forward)
Ripple & noise (U _{IN AC} , I _{ON} , BW = 20 MHz)		< 50 mV _{ss}
Operation indicator	Display range	Output voltage OK (U _I , I _{ON}) "DC OK", LED green (U _O 19.2 ... 21.6 V) Output voltage too low (U _I , I _{ON}) "DC LOW", LED red (U _O < 19.2 ... 21.6 V)
Parallel operation		no
Derating (61°C ... 71 °C)		2.5 %/K (see Fig. 1 Derating)
Overvoltage protection (U _{IN AC} , I _{ON})		30 ... 33 V



Technical Data

wipos PB1 24-0.42		Part number: 81.000.6300.0	
Rated input voltage AC	[U _{IN,AC}]	100 - 240 V AC	
Line frequency AC		47 - 63 Hz	
Power factor correction filter (PFC)		not necessary	
Input voltage range AC	[U _{I,AC}]	90 ... 264 V AC	
Input voltage range DC	[U _{I,DC}]	120 ... 375 V DC	
Rated input current (U _{I,AC} = 115 V, I _{ON})		0.2 A typ./0.3 A max.	
Inrush current (U _I = 115/230 V AC, I _{ON})		max. 15 A/max. 30 A	
Input fuse		T 1A/250 V AC (internal)	
Hold up time (U _I = 115/230 V AC, I _{ON})		> 20 ms/> 100 ms	
Input surge voltage protection		Varistor	
Isolation voltage (input/output)		3000 V AC/4242 V DC	
Isolation resistance (input/output)		100 MOhm	
Switching frequency min./max.		80 kHz/90 kHz	
Ventilation/Cooling		Free air convection	
Mounting conditions (free space)		25 mm in all directions	
Pollution degree		2	
Operating ambient temperature	[T _U]	-40 °C ... +71 °C	
Humidity in operation		20 – 95 % RH	
Storage temperature	[T _U]	-40 °C ... +85 °C	
Mounting on		DIN rail 35 mm (EN 60715)	
Degree of protection		IP 20	
MTBF		868,000 h	
Dimensions (W x H x D)		18 x 91 x 57 mm	
Weight		ca. 0.065 kg	
Housing material		Plastic	
Connector cross section			
cross section min.	solid/stranded	0.2 mm ²	(AWG26)
cross section max.	solid/stranded	2.5 mm ²	(AWG12)
Strip length		4 - 5 mm	
Torque		0.56 Nm max.	
Approvals and standards			
UL/cULus		UL 508 Listed, UL60950-1 Recognized	
CE		EN61000-6-3, EN 55022 Class B, EN61000-3-2, EN61000-3-3, EN61000-6-2, EN55024, EN61000-4-2, Level 3, EN61000-4-3 Level 3, EN61000-4-4 Level 4, EN61000-4-5 L-N Level 3, EN61000-4-6 Level 3, EN61000-4-8 Level 4, EN61000-4-11, ENV50204 Level 2, EN60204-1, EN61204-3	
Terminal connections			
-		Output voltage 24 V DC, negative output	
+		Output voltage 24 V DC, positive output	
L		AC: phase conductor, DC: no polarity	
N		AC: neutral conductor, DC: no polarity	