



PSE100-series AC/DC 60 to 100W

Input / Output

- 110 or 230Va.c. models 100W, PSE100.
- Worldwide AC input 60W, PSE60.
- Single outputs from 5 to 48 Vd.c.

Features

- Conformally coating, tropic.
- Accesible on front panel:
 - Output voltage adjustment.
 - Output voltage measurement.
 - Output OK status green LED.

Operation

- High efficiency.
- Operating temperature range -25 to +70°C.
- Fully encapsulated, meets IP30 as standard.
- Convection cooled.

EMC

- EN61000-6-3, Emission.
- EN61000-6-2, Immunity.
- EN/IEC61000-4-4, 4kV.

Input and output ratings

Nominal inputs	Input range	Code
100, 110, 220, 230 ,240 Va.c.	85 to 264V	ACW
100, 110 Va.c.	85 to 135V	ACR
220, 230, 240 Va.c.	176 to 264V	AC

Voltage	Output	
	Current	Power
5V	12 - 20A	60 - 100W
13.2V	4.5 - 7.6A	60 - 100W
15V	4 - 6.7A	60 - 100W
24V	2.5 - 4.2A	60 - 100W
48V	1.3 - 2.1A	60 - 100W

Output ratings and type code

Output			Input		
Voltage	Current	Power	85 - 264V	85 - 135V	176 - 264V
5V ¹	12.0A	60W	PSE60ACW5		
5V ¹	20.0A	100W	PSE100ACR5 PSE100AC5		
13.2V	4.50A	60W	PSE60ACW13.2		
13.2V	7.60A	100W	PSE100ACR13.2 PSE100AC13.2		
15V	4.00A	60W	PSE60ACW15		
15V	6.70A	100W	PSE100ACR15 PSE100AC15		
24V	2.50A	60W	PSE60ACW24		
24V	4.20A	100W	PSE100ACR24 PSE100AC24		
48V	1.30A	60W	PSE60ACW48		
48V	2.10A	100W	PSE100ACR48 PSE100AC48		

How to read our product code:
Example **PSE100 AC24**
PSE100 = Family code
AC = input voltage code AC
24 = Output voltage 24V

1. -25 to +55°C 100% load, for 70°C derate to 75%.

Features

- **Conformal coating**
PSE100 is conformal coated to withstand non condensing tropical environment Rh 95%.
- **Voltage adjust**
Voltage adjustment and output voltage measurement accesable from frontpanel.
- **DC ON LED**
The green LED is on when the output >90% of nominal output.

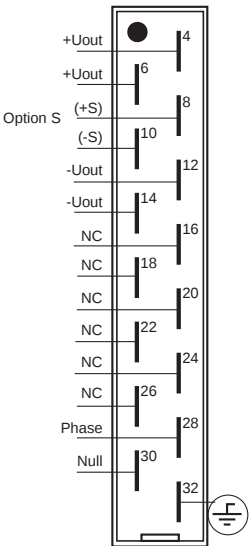


Figure 1. Pin-out DIN41612, H15

Optional Features

- **Overvoltage protection OVP-A**
The output voltage is limited to 15% over nominal output voltage. A thyristor short-circuits the output.
- **Built in series diode -C**
A series diode on the output, which is mounted inside the case. Use this option when output is connected in parallel with other power supplies to achive redundancy. The output power might be derated. It´s model dependent, please contact factory.
- **Remote sense -S**
The voltage sensing can be put at the load to compensate for voltage drop. Is a standard feature on 5V output. The sense can compensate for voltage drops up to 5% of the nominal voltage.
- **2.5 kVa.c. isolation Output/case -E2**
The emission level increase to level A.
- **8 TE Euro panel -L**, see figure 4
- **Wall mounting panels -N**, see figure 3 and 5
Including connector holder.
- **H15 Screw type female-H15-S**
- **H15 FastOn 6.3mm female -H15-T**
- **DIN rail TS35 clips -Q**

General data / input data

Design topology	Push-Pull
Switching frequency	100 kHz
Emission / immunity	See page 4
Safety EN/IEC60950	Class I
AC frequency range	48-400Hz
Inrush current limit	With NTC
Isolation	see table page 4
Dimensions (D x W x H)	172 x 36.3 x 106
Weight	0.85 kg

- Higher ripple affects the input, contact factory

Output data

Source regulation	0.2%
Load regulation (0-100% load)	0.2%
Transient recovery time for a load step of 10% to 100% voltage deviation	<2ms 3%
Output ripple (100kHz) ²	Typ. 10mVp-p
Input ripple (100 Hz) Uin 230Va.c.	<10 mVrms, 50mVp-p
Input ripple (100 Hz) Uin 110Va.c.	<20 mVrms, 100mVp-p
Emission / Immunity	See page 4
Temperature coefficient	0.02% /°C
Min output adjustment range adjustable with a 15 turn potentiometer	90% to 110%
Current limit, rectangular.	105%
Remote sense	Option S
Soft start	Yes
Start-up time	1s
Hold-up time, contact factory	
PSE60ACW (230 Va.c.)	20 ms
PSE60ACW (110 Va.c.)	3 ms
PSE100AC (230 Va.c.)	10 ms
PSE100AC (110 Va.c.)	3 ms
Efficiency ³	
PSE60ACW	80-85%
PSE100AC (230 Va.c.)	80-88%
PSE100ACR (110 Va.c.)	82-91%
Operating temperature range at 100% load. Conduction cooling with outputs >10 V	-25 to +70°C
Operating temperature range at 100% load. Conduction cooling with outputs <10 V	-25 to +55°C
Storage temperature range	-40 to +85°C

- Output ripple might increase to 0.5% RMS of Vout, when EN/IEC61000-4-3, 10V/m test is applied
- Lowest efficiency measured within the whole input voltage range at 100% load.

Mechanical drawing

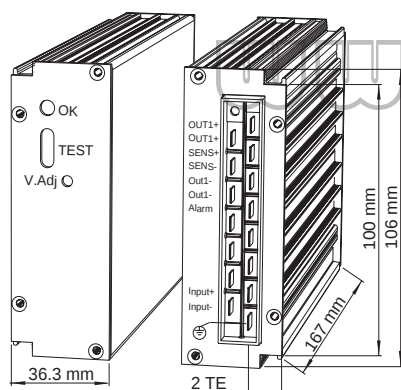


Figure 2. Dimensions
Weight: 0.85 kg

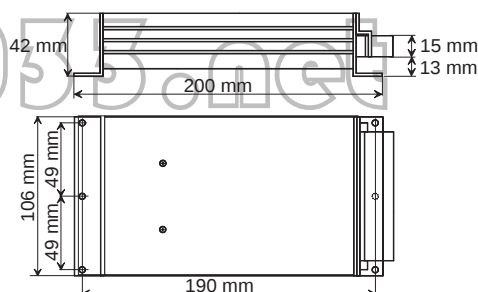
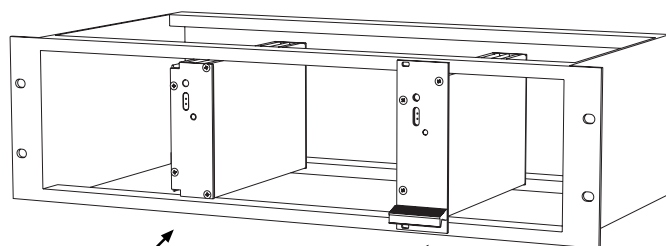


Figure 3. Dimensions with option N, Wall mounting
Weight: 0.91 kg

PSE100 wall mounted. Using PSE wall mounting kit with H15 connector and connector holder (Optional).

PSE100 DIN-rail mounted. Using PSE wall mounting kit with H15 connector, connector holder and DIN-rail clips (Optional).



PSE 100 mounted in a 19" Sub-rack. Standard unit.

PSE 100 mounted in a 19" Sub-rack with L panel (Optional)

Figure 4. 3HE 19" sub rack mounting

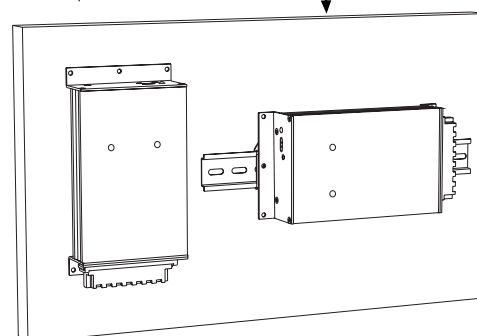


Figure 5. Wall mounting
Option -N