

## POWER SUPPLY 1-PHASE, 12V DC LOW POWER PIANO SERIES

PIM60.125  
 PSU 100-240V ac I/P 12V dc 5A 60W O/P Screw

- Output current 5 A
- Push-in or screw terminals
- Up to 90,7% efficiency
- Low no-load power losses



### PRODUCT DESCRIPTION

The latest and smallest representatives of the PIANO product family are currently the 12V DIN rail power supplies PIM60 (60W). Mini power supplies. New space opportunities.

The new PIANO Mini (PIM) power supplies create space in your systems or machines and allow you a more flexible planning. A 60W DIN rail power supply in a 36 x 90 x 91mm (WxHxD) housing is currently unique in the market. This results in completely new space opportunities for you.

Focus on core features.

The most important characteristic of the PIANO devices is their focus on the core features of a power supply: efficiency, lifetime, reliability and size. The very high PULS quality is maintained in each of these features.

Push-in or screw terminals - you decide.

For the PIM60 you can choose between push-in and screw terminals. The push-in terminals reduce installation time, and are very reliable in environments prone to shock and vibration. In addition, they are ideally suited for robot-assisted wiring processes.

The screw terminals, that accommodate large diameter wires, are still popular in environments with minimal shock and vibration.

Growing power supply family.

With the new PIANO Mini products, PULS now provides a complete, cost-oriented product family in the 36-480W power range.

## TECHNICAL DATA

### INPUT DATA

<b>Input voltage ac</b>	100-240 V
<b>Input voltage ac min</b>	90 V AC
<b>Input voltage ac max</b>	264 V AC
<b>Inrush current at 120 V ac typical</b>	15 A

Inrush current at 230 V ac typical	36 A
Input voltage range	Wide-range
Power factor at 120 V ac, full load. Typical	0.55
Power factor at 230 V ac, full load. Typical	0.47
Number of phases	1

## OUTPUT DATA

Output voltage	12 V DC
Output voltage min	12 V DC
Output voltage max	15 V DC
Output current	5 A
Power	60 W

## EFFICIENCY / LIFETIME / MTBF

Efficiency at 120 V ac, full load, typical	90.2 %
Efficiency at 230 V ac, typical	89.6 %
Efficiency at 230 V ac, full load, typical	90.7 %
Lifetime at 120 V ac, full load and +40 ° C	103000 h
Lifetime at 230 V ac, full load and +40 ° C	119000 h

## DIMENSIONS

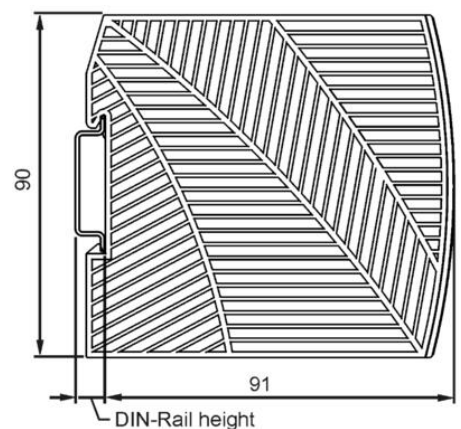
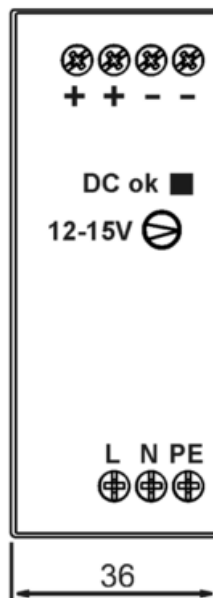
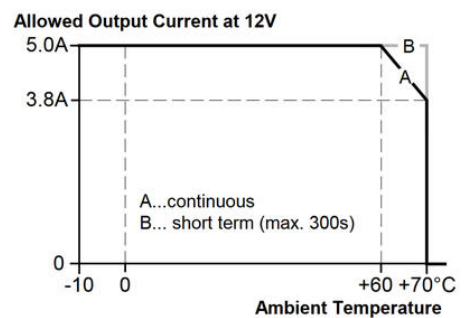
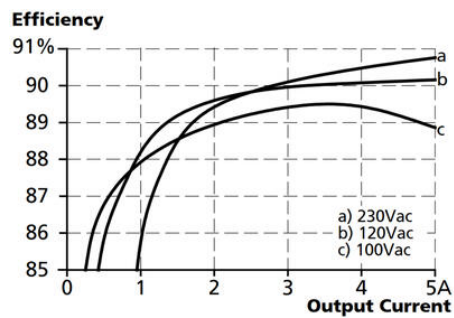
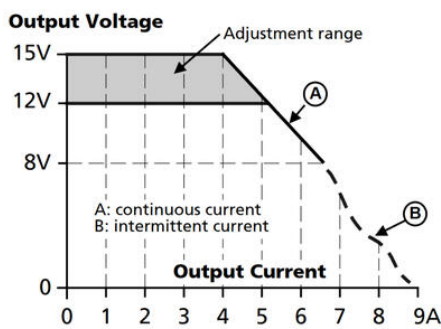
Width	36 mm
Height	90 mm
Depth	91 mm
Weight	0.225 kg

## OTHER

Approvals	CB, CE, cULus
Hold time at 120 V ac, typical full load	23 ms
Hold time at 230 V ac, typical full load	107 ms
IP class	IP20
Clamp type	Screw
Cable connection	Screw max 6 mm <sup>2</sup> solid, 4 mm <sup>2</sup> stranded
Load regulation	<100 mV (0-5 A)
Material protection	Polycarbonate
Supply frequency	50-60 ±6 %
Parallel connection for increased current	Not allowed

<b>PFA (EN61000-3-2)</b>	Fulfilled (Class A)
<b>Primary fuse</b>	Min 6A B type or 4A C type
<b>Ripple max</b>	100 mV pp
<b>Series</b>	Piano
<b>Series connection for increased voltage</b>	Yes
<b>Power consumption 120 V ac</b>	1 A
<b>Power consumption 230 V ac</b>	0.6 A
<b>Power drop from +60 °C to + 70 °C</b>	2.4 W/°C
<b>Temperature min without derating</b>	-10 °C
<b>Temperature max without derating</b>	60 °C
<b>Transient</b>	VDE 0160 (750 V, 1,3 ms)

<b>Type Power Supply</b>	AC-DC
--------------------------	-------



All dimensions in mm