PLE-1Pxx0-EU Plena Amplifier

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BOSCH
Invented for life

- 120 and 240 W power amplifier in a compact housing
- 1 V line level balanced input
- 70 V, 100 V and 8 ohm outputs
- 100 V input for slave operation on 100 V speaker line
- Temperature-controlled forced front to back ventilation (directly stackable)

The PLE-1P120-EU and PLE-1P240-EU are two high-power plug-and-play cost effective power amplifiers that deliver 120 and 240 Watts to constant voltage or 8 ohm loads. Built with premium quality and protections, they offer basic functionality at a budget price. The amplifiers offer straight 1 V and 100 V line in, and 70 V, 100 V and 8 ohms out. They can extend the power of the PLE- series mixer amplifiers or be combined with the PLE-10M2-EU mixer, or work anywhere where more power on an existing 100 V line is needed or when a line level signal is provided.

Functions

Protection
The amplifier is protected against overload and short circuits. A limiter protects the amplifier and loudspeaker against accidental overdriving. A temperature-controlled fan ensures proper cooling without producing acoustic noise at lower output levels.

Power input and output
The unit operates both on mains power and on a 24 V battery power supply for emergency back up, with automatic switchover. The amplifier also has a built-in charger to charge the connected battery. The system has a balanced input and loop-through facility. This makes it easy to connect multiple amplifiers. The secondary input is a 100 V line input to connect the amplifier to a 100 V loudspeaker line to provide more power in remote locations.
Gain or level control is located on the rear of the unit to avoid accidental setting change. A meter with LED bar shows the output level.
The amplifier has a 70 V or 100 V output for constant voltage loudspeaker systems, and a low impedance output for 8 ohm loudspeaker loads.

Controls and indicators
Front
- Power on LED
- LED VU meter for master output (LEDs for -18, -12 -6, -3, 0 dB)
- On/off button

Back
- Level control

Interconnections
See Technical Specifications.

Certifications and approvals

Safety	acc. to EN 60065
EMC emission	acc. to EN 55103-1
EMC immunity	acc. to EN 55103-2

Installation/configuration notes

Rear view

Parts included

Quantity	Components
1	PLE-1P120-EU or PLE-1P240-EU Plena Mixer Amplifier
1	Power cord
1	Manual
1	Set of 19”mounting brackets

Technical specifications

Electrical

Mains power supply	
Voltage	115 - 230 VAC ±10%, 50/60 Hz
Inrush Current PLE-1P120-EU	4.5/9 A (230/115 VAC)
Inrush Current PLE-1P240-EU	9/18 A (230/115 VAC)
Power consumption PLE-1P120-EU	380 VA
Power consumption PLE-1P240-EU	760 VA

Battery power supply	
Voltage	24 VDC, +10% / -15%
Current PLE-1P120-EU	5.5 A
Current PLE-1P240-EU	11 A
Charge current	0.5 ADC
Charge float voltage	27.3 VDC

Power consumption (PLE-1P120-EU)	
Max power (mains)	227 W
-6dB (mains)	130 W
Idle (mains)	12 W
Max power (24 V)	7 A (150 W)
-6 dB (24 V)	4.4 A (194 W)
Idle (24 V)	0.3 A (7 W)

Power consumption (PLE-1P240-EU)	
Max power (mains)	451 W
-6dB (mains)	244 W
Idle (mains)	16 W
Max power (24 V)	12 A (290 W)
-6 dB (24 V)	8.1 A (194 W)
Idle (24 V)	0.3 A (7 W)

Performance	
Max / rated power PLE-1P120-EU	180 W / 120 W
Max / rated power PLE-1P240-EU	360 W / 240 W
Power reduction on backup power	-1 dB
Frequency response	50 Hz to 20 kHz (+1/-3 dB @ -10 dB ref. rated output)
Distortion	<1% @ rated output power, 1 kHz

Inputs	
Connector 1	3-pin XLR, balanced
Sensitivity	1 V
Impedance	20 kohm
Connector 2	3-pin Euro style, balanced
Sensitivity	100 V
Impedance	300 kohm
Dynamic range	100 dB
CMRR (mic)	>40 dB (50 Hz to 20 kHz)

Loudspeaker outputs 70 V / 100 V	
Connector	Euro style pluggable screw terminals

Loudspeaker output 8 ohm	
Connector	Euro style pluggable screw terminals
PLE-1P120-EU	31 V (120 W)
PLE-1P240-EU	44 V (240 W)

Mechanical

Dimensions (H x W x D)	100 x 430 x 270 mm (19" wide, 2U high)
Mounting	Stand-alone, 19" rack
Color	Charcoal
Weight (PLE-1P120-EU)	Approx. 10.5 kg
Weight (PLE-1P240-EU)	Approx. 12.5 kg

Environmental

Operating temperature	-10 ºC to +45 ºC
Storage temperature	-40 ºC to +70 ºC
Relative humidity	<95%
Acoustic noise level of fan	<40 dB SPL @ 1 m temperature controlled

Ordering information

PLE-1P120-EU Plena Amplifier
Power amplifier, 120 W, 100 VAC / 70 VAC.
Order number **PLE-1P120-EU**

PLE-1P240-EU Plena Amplifier
Power amplifier, 240 W, 100 VAC / 70 VAC.
Order number **PLE-1P240-EU**

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