



LINE CONDITIONERS

PE 1421 /20X

(9415 014 2120X)

230V / 230V-50Hz

200VA

USER'S GUIDE

1. INTRODUCTION.

The PE1421/20M is a completely enclosed line conditioner, contained in metal housing with plastic covers, fitted with mains switch, power on/off indicator, two output sockets and a means cable with plug, which deliver a sinewave output with galvanic separation between input and output. The output is short-circuit proof. A built-in filter eliminates voltage ringing caused by switched-mode power supply load. (X) Following plugs and sockets are available; - /201 valid in Austria, Germany, Holland, Italy, Sweden, Norway. - /202 valid in Belgium, France, - /203 valid in Great-Britain, - /204 valid in Switzerland.

2. UNPACKING.

On delivery, check the apparatus to ascertain whether any damage has occurred in transit. Retain all packing materials until all items of the line conditioner have been accounted for and checked. -Claims: in the event of obvious damage or shortages, or if the safety of the line conditioner is suspect, a claim should be filed with the carrier immediately. ETI should also be notified in order to facilitate the repair.

3. GENERAL.

This line conditioner may incorporate minor changes from the information contained in this sheet, Only values with tolerances or limits can be considered as guaranteed data. Figures without tolerances are informative data without guarantee. The ambient temperature is defined as the temperature 20mm below the unit. The air circulation through the unit may not be impeded. For indoor use only.

4. CONFORMITY TO EUROPEAN DIRECTIVES:

4.1. Low Voltage Directive 73/23 CEE

This apparatus complies with applicable essential requirements of the L.V.D. based on relevant requirements of EN 60950 and EN 60742. The following is among the features that must be considered before use: -Protection against electric shock is achieved by using the protective earthing conductor of the building wiring that is assuming hazardous voltage if the basic insulation fails. It is therefore not allowed to connect this apparatus to a power system or a power supply outlet without protective earthing conductor (yellow-green conductor). -This apparatus is only designed for "**indoor use**" and "**pollution level 2**". This equipment is not intended for use in locations where ingress of e.g. water, flammable liquids, conductive dust or explosive gas is possible. -If this apparatus is brought from a cold to a warm environment, condensation may cause hazardous condition. Do not connect this apparatus until it has reached the room temperature and/or is completely dry. -This apparatus relies on the building installation for protection. Two fuses must be provided in the branch circuit, max. current rating 16A. -There is no user serviceable part inside this apparatus. **Do not remove cover**, refer to qualified ETI service personnel. -To prevent risk of fire and overheating, do not cover or obstruct ventilation openings. Do not mount in zero clearance compartment. -Do not get onto, or put heavy objects on this apparatus. -Whenever it is likely that safety protection has been impaired, refer to qualified ETI service personnel. In the meantime, this apparatus must be made inoperative and secured against operation.

4.2. Electro Magnetic Compatibility Directive 89 336, CEE:

This apparatus complies with applicable essential requirements of the E.M.C. directive based on EN 50081-1 and EN 50082-1.

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5.ELECTRICAL DATA.

The values given in this section are valid within the rated range of operation (-10°C to +45°C). On delivery, the line conditioner is adjusted at an ambient temperature of 23°C, with convection cooling.

5.1 GENERAL.

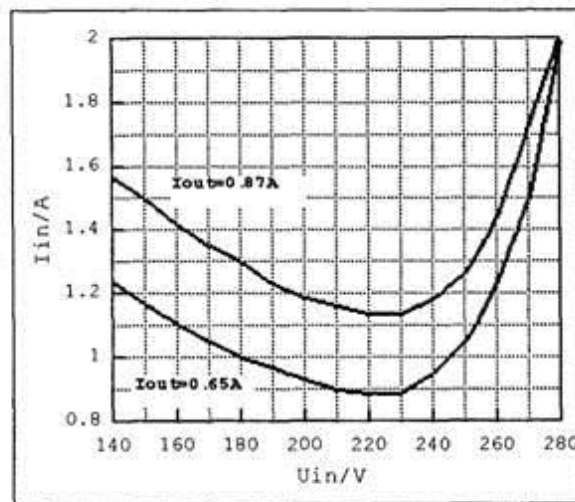
- Leakage current (from chassis to earth) at 50Hz (on delivery) : max. 0.1mA
- Dielectric strength test AC between
 - primary and secondary: 4.0kV
 - primary and chassis: 2.0kV
 - secondary and chassis : 2.0kV
- Overcurrent : natural limitation of transformer with leakage flux path.
- Short-circuit current : between 150% and 200%.
- The output terminals are floating with respect to earth.
- The AC voltage between anyone of the output terminals and the earth may not exceed 500V .
- Noise level max. 40dBA.

5.2 INPUT

- Mains voltage nominal: 220-240V
- Operating range : 187-254V
- Input current max : 1.5A
- Efficiency at full load : > 76%
- Frequency : 50Hz (± 1 %)
- Harmonic content : EN61000-3-2

$I_{in} : U_{in}$

for 100% (0.87A)
and 75 % (0.65A)
linear resistive load.

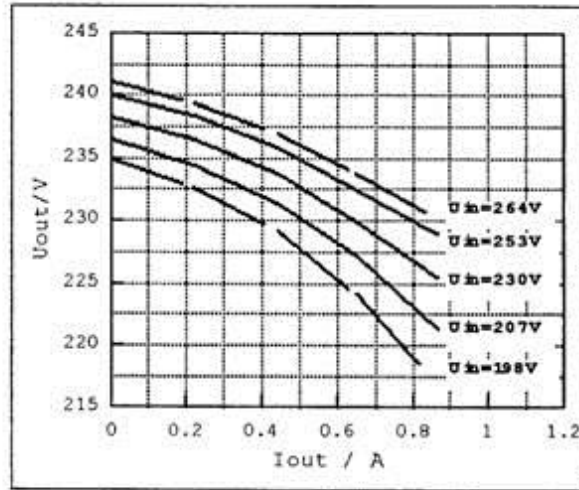


Typical values PE1421/XX

5.3 OUTPUT.

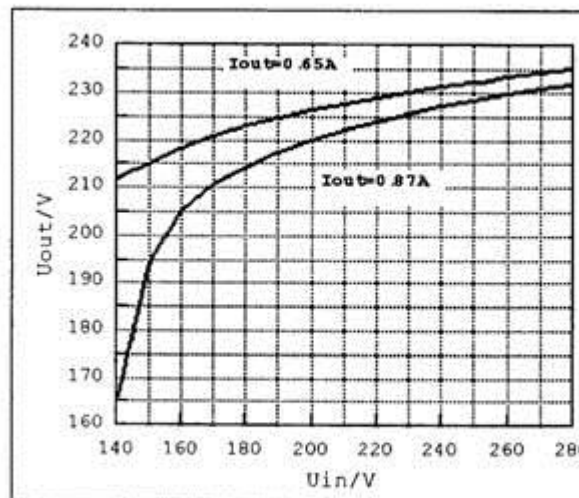
- Output voltage nominal value at 75% load : 230V t1% (1)
- Output power: max. 200VA
- Cos PHI of the load : 1.0 (0.7 ... 1.0)
- Warm-up time: 4 hours
- Distortion (output) : max. 4%
- Transient suppression for asymmetrical pulses : min. 60d8
- Source frequency effect, for each 1 % mains frequency variation, the max. output variation is 1.5%.
(1) with a cold core (+23°C), the output voltage is approximatively 1.3% higher.

Uout : Iout for linear
resistive load



Typical values PE1421/XX

Uout : Uin
for 100% (0.87A)
and 75 % (0.65A)
linear resistive load.

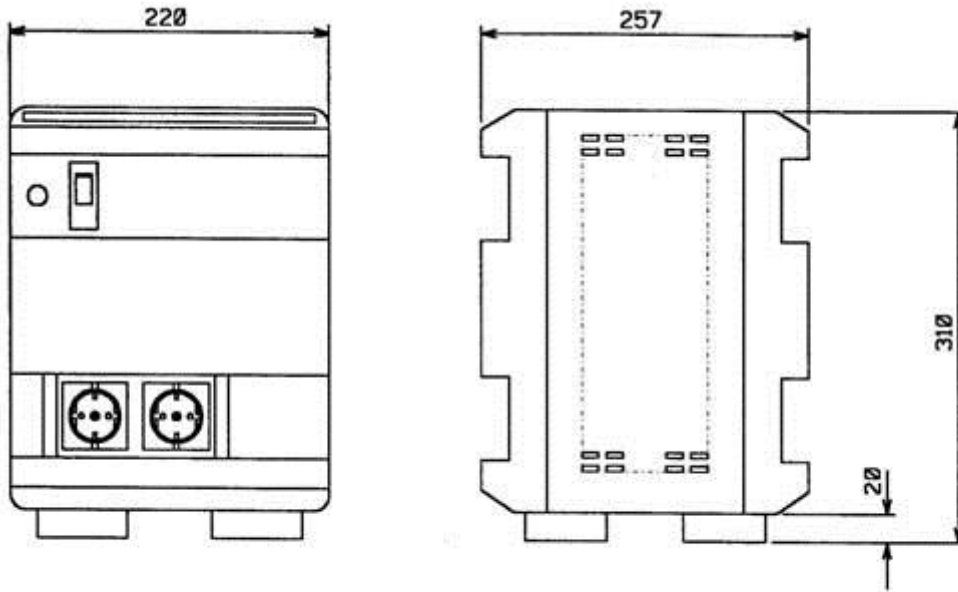


Typical values PE1421/XX

6. CLIMATIC CONDITIONS.

- Ambient temperature
- rated range of use : -10°C to +45°C
- limit range of operation : -20°C to +45°C
- limit range for storage and transport : -40°C to +70°C
- Humidity (ambient air, non condensing): 20% to 90%

7. MECHANICAL DATA.



PE1421/20(X)

(3) Protection degree of the enclosure according to IEC 529 = IP20

Weight: 9 kg

8. MOUNTING INSTRUCTIONS.

- A physical spacing and/or orientation of the line conditioner field must be realized to avoid interactions with circuits like audio, CRT displays, etc...
- To reduce EMI coupling, input and output cables must be separated.

