LINE CONDITIONERS

PE 1427/20

(9415 014 27201)

230V / 230V-50Hz **3000VA**

USER'S GUIDE

1.INTRODUCTION.

The PE1427/20 (closed version) is a line conditioner which delivers a sinewave output with galvanic separation between input and output. The output is short-circuit proof. Several stabilizers of the same type may be connected in parallel or in three-phase configuration.

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. Mount the power supply unit with the cooling surfaces in a vertical plane. The min. distance between any part of the line conditioner and any conductive part must be in accordance with the relevant safety norms.

4.SAFETY AND EMC STANDARDS

4. 1.SAFETY

This equipment is designed to meet the relevant requirements of EN 60950 and EN 60742 when applicable When installed, the following conditions of acceptability are to be considered : -This equipment shall be installed in compliance with the enclosure mounting, spacing, casualty (including markings) and circuit separation requirements of the end-use apparatus. Refer to §9 for proper wire gauge. Refer to §6 for proper fuse rating. -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 component to a power system or a power supply outlet without protective earthing conductor. Refer to §8, for connection of protective earthing conductor (yellow/green). -This equipment is only designed for **"Indoor use" and "pollution level 2".** This component is not intended for use in locations where ingress of e.g. water, flammable liquids, conductive dust or explosive gas is possible. -If this equipment is brought from a cold to a warm environment, condensation may cause hazardous condition. Do not connect this component until it has reached the room temperature and/or is completely dry. -To prevent risk of fire and overheating, do not cover or obstruct ventilation openings. Do not mount in zero clearance compartment. This equipment is intended for use in a restricted access location and to be mounted on a concrete floor or other noncombustible surface.
-Whenever it is likely that safety protection has been impaired, refer to qualified ETI service personnel. In the meantime, this equipment must be made inoperative and secured against operation.

4.2-Electro Magnetic Compatibility Directive 89/336/CEE:

This component complies with applicable essential requirements of the E.M.C. directive based on EN 55014 (emission), EN 61000-3-2 (harmonic currents) and EN 61000-4-5 (surges).

ELECTROTECHNISCHE INDUSTRIE ETI B.V.
Postbus 56, 7120 AB Aalten - NL
Vierde Broekdijk 16, 7122 JD Aalten - NL
Telefoon +31(0)543 47 24 31
Fax +31(0)543 47 54 25

5. ELECTRICAL DATA.

The values given in this section are valid within the rated range of operation (see §7). On delivery, the line conditioner is adjusted at an ambient temperature of 23oC, with convection cooling.

5.1 GENERAL.

- Leakage current (from chassis to earth) at 50Hz (on delivery) : max. 0. 1 mA

This equipment is suitable for connection to IT power network

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.

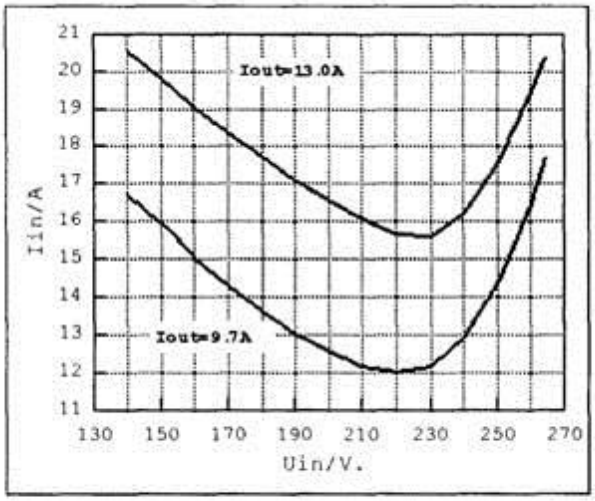
-Noise level max. 50dBA.

5.2 INPUT

-Mains voltage nominal	220-240V
-Operating range : ,	187-254V
-Input current max :	20A
-Efficiency at full load	> 89%
-Frequency:	50Hz L+ 1 %)
-Harmonic content:	EN61000-3-2

Iin - Uin

for 100% (13.0A) and 75 % (9.7A) linear resistive load.



Typical values PE1427/XX

5.3 OUTPUT.

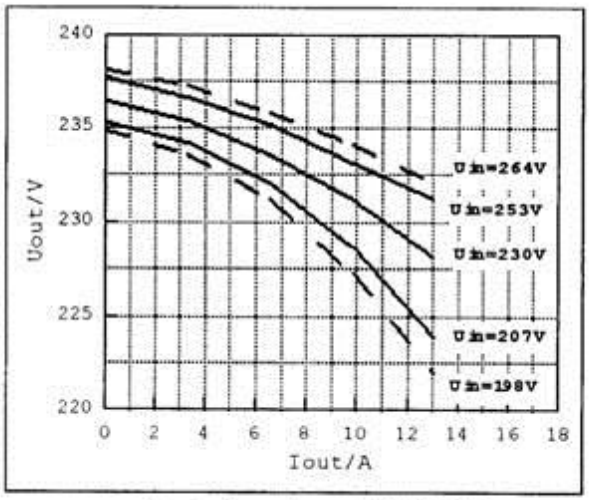
-Output voltage nominal value at 75% load	230V ± 1 % (1)
-Output power :	max. 3000VA
-Cos PHI of the load	1.0(0.7 ....1.0)
-Warm-up time:	4 hours
-Distortion (output)	max. 4%
-Transient suppression for asymmetrical pulses	min. 60dB

-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 approximately 1.3% higher.

Uout -. Iout for linear

resistive load



Typical values PE1427/XX

Uout -- Uin

for 100% (13.0A) and
75 % (9.7A) linear
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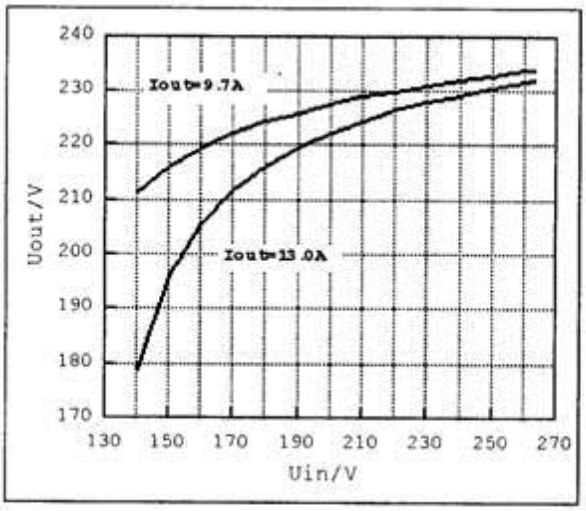


Typical values PE1427/XX

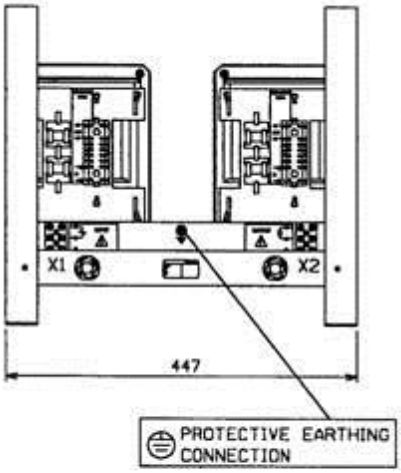
6.PROTECTIONS.

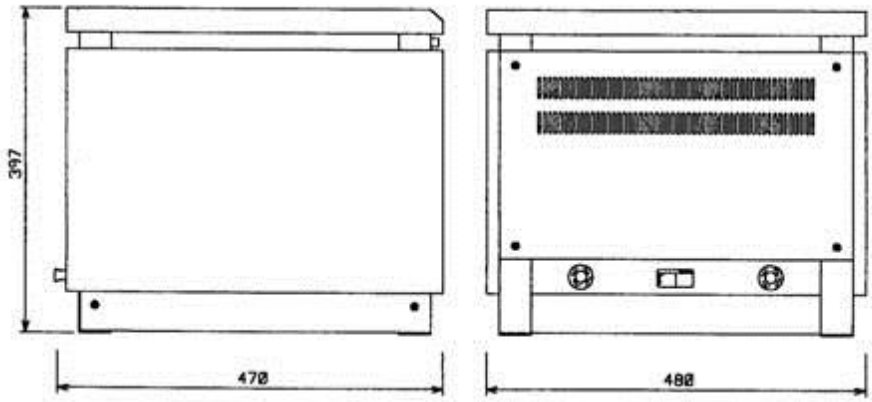
Two delayed action fuses, high breaking capacity, rated 32 A, are to be inserted in the primary circuit by the user, outside the line conditioner. For continued protection against fire, only fuses with the required rated current and of the specified type shall be used for replacement; the use of repaired fuses and the short-circuiting of fuse-holders is prohibited.

7. CLIMATIC CONDITIONS.

-Ambient temperature	PE1427/20
-rated range of use	-10'Cto +35'C
-limit range of operation	-20'C to + 35'C
-limit range for storage and transport	-40'C to + 70'C
-Humidity (ambient air, non condensing) :	20% to 90%

8. MECHANICAL DATA.





PE1427/20 -Protection degree of the enclosure according to IEC 529 = IP20
-Weight = 75 kg

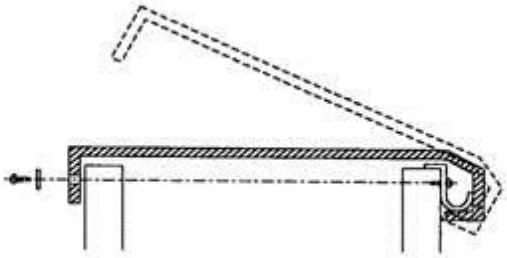
9. MOUNTING INSTRUCTIONS.

9.1 GENERAL.

A disconnect device shall be provided to disconnect the equipment from the supply for servicing. If provided, the plug on the power supply cord is permitted as disconnect device For PERMANENTLY CONNECTED EQUIPMENT, a readily accessible disconnect device shall be incorporated in the fixed wiring. For PLUGGABLE EQUIPMENT, the socket-outlet shall be installed near the equipment and shall be easily accessible. 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. Max. cross-section of connecting block 6 mm2 for flexible wire / 10 mm2 for rigid wire Min. cross section of connecting leads 4 mm2 A line conditioner attains a nominal working temperature higher than a conventional transformer, due to the high flux density.

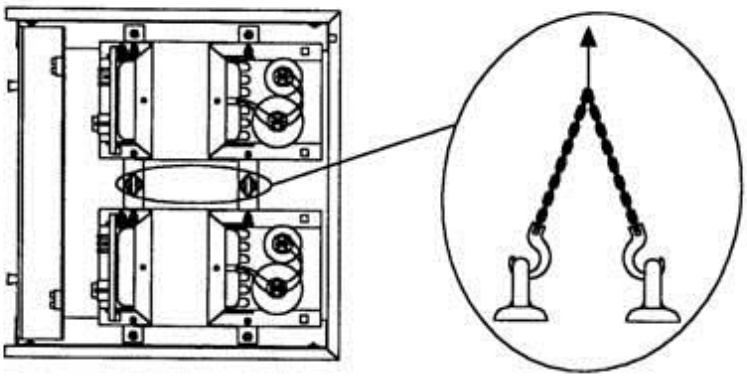
9.2 /20 VERSION

- The connecting blocks are accessible after removing the rear plate (4 screws).
- Use the included clips, screws and washers to place the cover. (1.fix the clips, 2.place the cover, 3.fix the cover)



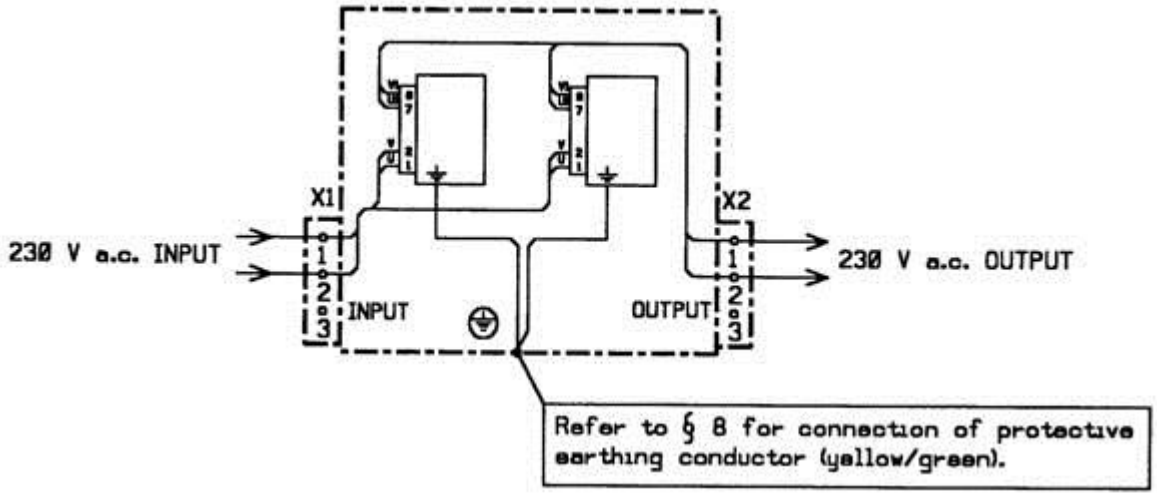
9.3 Transit - Transport.

- Remove the cover (only for /20).
- Use lift rings to move the unit.



10. APPLICATIONS.

10.1 CONNECTION.



10.2 Three-phase connection.

Three-phase applications are permissible, providing the line conditioners are all of the same type number, but only with star-connected output and symmetrical loads. Otherwise, only the line stability per phase can be guaranteed because of possible phase shifts. To avoid phase shifts, this symmetry also applies to the connecting leads which must be of the same length and cross-section. For technical information, please contact ETI.