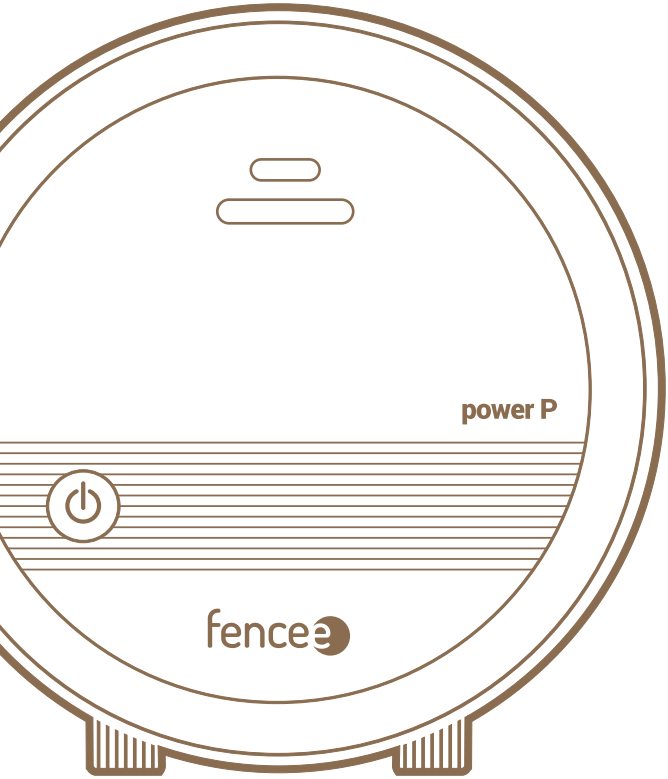
fencee **ENERGIZER**
FOR ELECTRIC FENCE SYSTEM

INSTRUCTIONS FOR USE **EN**



230 V~

- fencee **power P10**
- fencee **power P20**
- fencee **power P30**
- fencee **power P40**

	STORED ENERGY	OUTPUT ENERGY	OUTPUT VOLTAGE	OUTPUT VOLTAGE 500 Ω	SWITCHING ON / OFF	TEOR. MAX CEE			
fencee **power P10**	1,4 J	1 J	9 500 V	4000 V	✓	35 km	8 km	2 km	1,5 km
fencee **power P20**	2,8 J	2 J	10 000 V	5000 V	✓	60 km	15 km	3 km	1,5 km
fencee **power P30**	4,5 J	3 J	11 500 V	6000 V	✓	100 km	23 km	5 km	2 km
fencee **power P40**	6 J	4 J	11 500 V	6400 V	✓	120 km	30 km	8 km	3 km

Safe Animal Management | Power supply - 230 V

VNT electronics s.r.o.
Dvorská 605
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DECLARATION OF CONFORMITY

Manufacturer:
VNT electronics s.r.o.
Dvorská 605
563 01 Lanškroun
Company ID-No.: 64793826
declares that the below listed products:

Energizers for electric fences
fencee power P10, fencee power P20
fencee power P30, fencee power P40

are in accordance with requirements of standards
and regulations relevant for given type of devices:

2014/35/EU
2014/30/EU

CE

Products are safe under condition of their conventional use
in accordance with instructions for use. Declaration
of conformity is issued pursuant to these materials

Test Report No.:
37 482

Issued by accredited Státní zkušebna strojů a.s., Třanovského 622/11,
163 00, Praha 6. This declaration is issued at explicit responsibility
of the manufacturer.

In Lanškroun October 19th, 2017

Ing. Jan Horák
Executive Head of the Company
Phone: +420 730 893 828
info@fencee.eu

www.fencee.eu

Thank you for purchasing the product fence
of the company **VNT electronics s.r.o.**
The equipment conforms to safety regulations in accordance with valid legislation as well as relevant EU (CE) regulations.

We also ask you to read these instructions for use before using the device carefully and to keep it for possible application in the future.
Electric fence must be constructed so that persons are protected against unintentional contact with pulses conductors under normal operating conditions.

From the point of view of legislation, especially the standard **2014/35/EU - 2014/30/EU** (Low Voltage Directive - Electric appliances for domestics and similar purposes – Safety - Part 2-76: Special requirement on energizers for electric fences) relate to the fences.

CONTENT

1. INTRODUCTION

By means of this device, you ensure better protection for your animals and pieces of land. Local conditions and circumstances always affect functionality of equipment and total protection against violation of fence may not be guaranteed therefore. Manufacturer of the energizer does not grant guarantee that not violation of electric fence installation and so escape of animals occurs. By means of installation of the electric fence, safety of animals in the enclosure or protection of a piece of land should be increased.

Please observe the following instructions for use.

Important notices

- Before performing any activities on energizer or fence system, switch of the energizer.
- Read the Safety instructions carefully.
- When installing, make sure to observe all safety regulations.
- Do not connect the energizer on one fence system with another appliance. Lightning stroke against the fence connects to all other devices then.
- Use only original spare parts.

2. DESCRIPTION OF THE ENERGIZER FOR ELETRIC FENCE

Energizers fencee power P are high performance devices to power extensive areas of electric fences. They are powered from network 230 V.

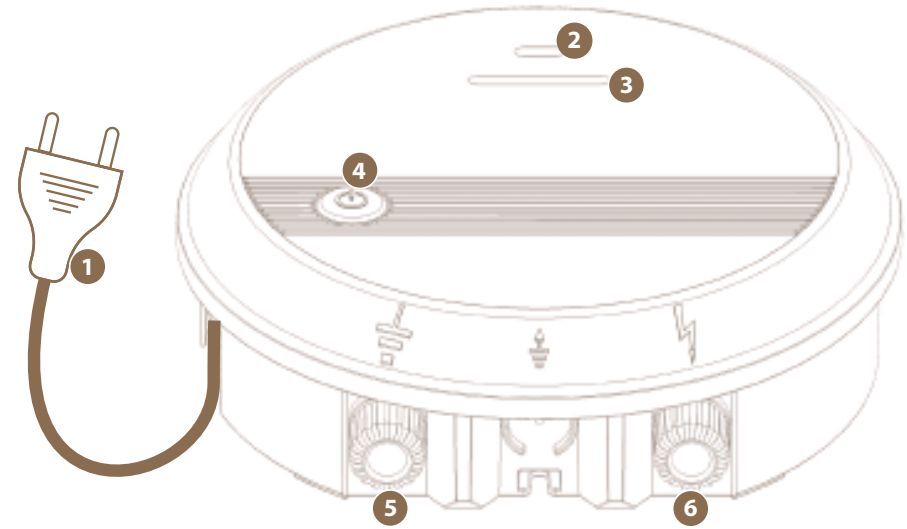


Figure No. 1: Energizer Power P

1	Network connector
2	LED control of connecting energizer – blue color is burning
3	LED control of function – blinking green by pulses, when is voltage lower then 30000V, blinks red
4	ON / OFF switch button
5	Earthing (black)
6	Connection to fence system (red)

Table No. 1: Description of the energizer

Explanations of symbols shown on energizer

Earthing connection. Connect this connection to your earthing system.

Fence output with full voltage. Connect this connection to your fence system.

Energizer should be opened or repaired solely by qualified persons for the reason of reducing risk of electric stroke.

Please dispose of waste in accordance with regulations valid for your country.

3. FUNCTIONALITY OF THE ELECTRIC FENCER

HOW THE ELECTRIC FENCE WORKS

Electric fence system consist from the energizer and fencing marked with posts and conductors. The energizer creates regular high-voltage impulses that generate a voltage between the conducting material and the ground. When an animal (or a person, vegetation or similar) creates a connection between the ground and the conducting material, the circuit is completed. Generated impulses are unpleasant, but not dangerous to people or animals as they only act for a short period of time and results in the desired deterrent effect. The impulse lasts for a matter of milliseconds. These fences serve not only to enclose an area, but also act as a deterrent e.g. to protect against wild boars.

Benefits of electric fence systems:

- electric fences are long-lasting, simple to put up and great value for money compared with normal fences.
- it is easy to assembly and flexible for using
- designed for guarding and protecting different animals.
- compared to other fences, such as barbed wire, it does not cause any damage to the animals.

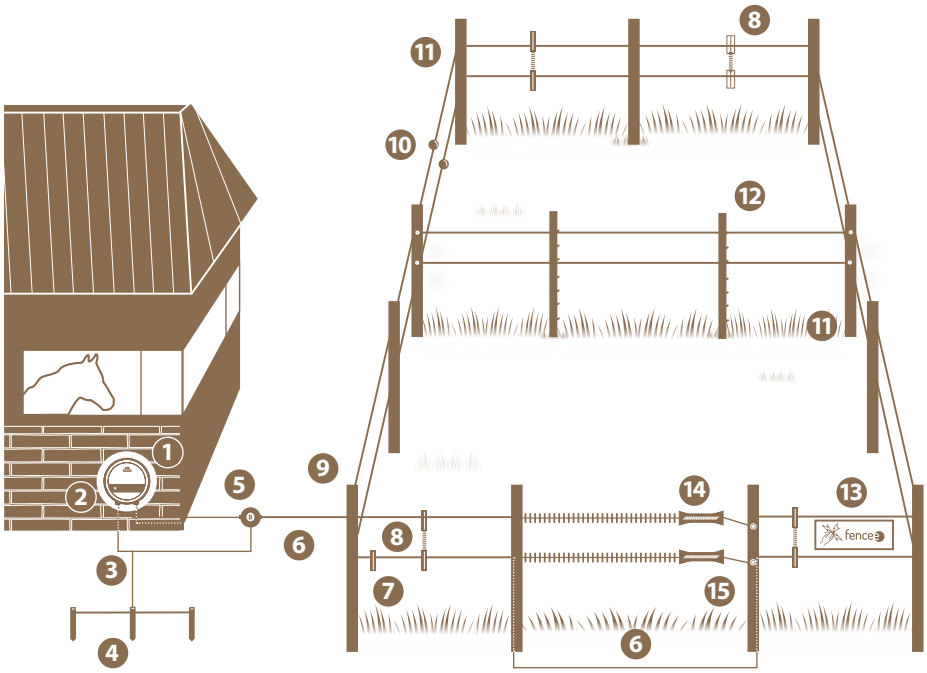


Figure No. 2: Wiring of electric fencer

1	Energizer fence	6	High-voltage connecting cable	11	Insulators
2	On/off button on energizer	7	Conductor	12	Flexible post
3	Earthing cable	8	Line connector	13	Warning sign
4	Anticorrosive earthing rod	9	Fixed post	14	Gate
5	Lightning diverter	10	Tensioner	15	Insulator of gate

Table No. 2: Description of individual parts of the fence system

4. INSTALLATION OF THE ENERGIZER

Before installation, please read all Safety instructions listed in these instructions for use carefully.

Choose a place suitable for installation of energizer.

Observe the following measures when choosing a place for installation of energizer.

Choose a place:

- Where you can achieve a good earthing.
- Which is distant enough from children and animals
- Where energizer is well accessible.
- Where permanent water stream is avoided.

To mount energizer on wall, use attached screws, on which you can hang the energizer easily.

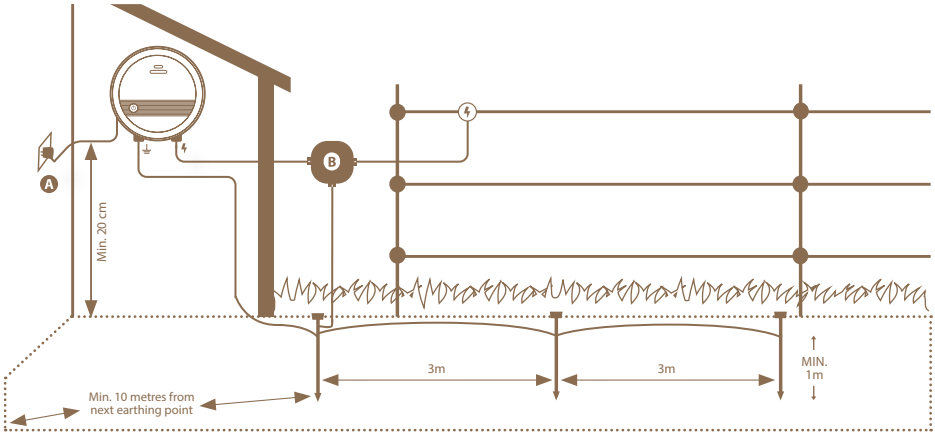


Figure No. 3: Assembly of generator and earthing

ASSEMBLY OF ENERGIZER BY USING DIN RAIL

Energizer can be easily and practically mounted by using DIN rail and mounting bracket.
Set for assembly on DIN rail can be ordered as separate accessories.

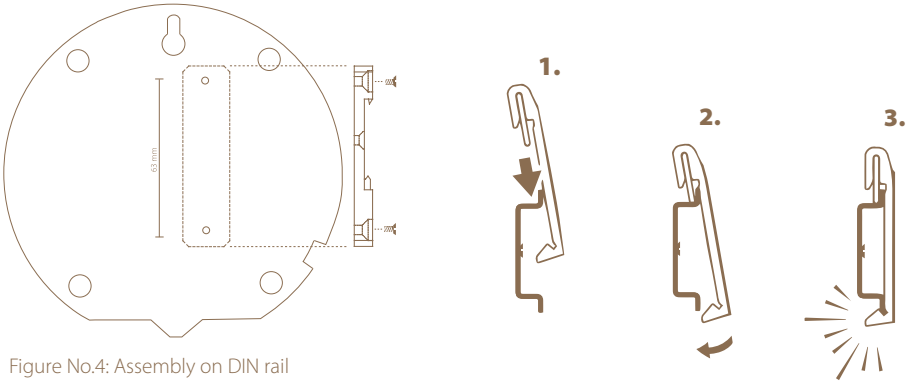


Figure No.4: Assembly on DIN rail

5. EARTHING

Correct earthing is very important because total function of the fence system is dependent on it!

Beat earthing rod with corrosion protection into ground completely at place with maximum and permanent humidity. On dry pieces of land or in case of soils with lower electric conductivity, use one or several supplementary earthing rods (with length of minimum of 1 m) and place them at distance of approximately 3 metres from each other.

Exceptions are fence system powered by battery energizer or working with low output. Here minimum length of earthing rod of 50 cm is recommended.

Distance of at least 10 metres must be between earthing rod of fence system and another earthing system, for example earthing of a house, protective earthing of electric supply system or earthing of violation alarm.

Do not connect the energizer to already existing earthing.

6. SAFETY INSTRUCTIONS ⚠

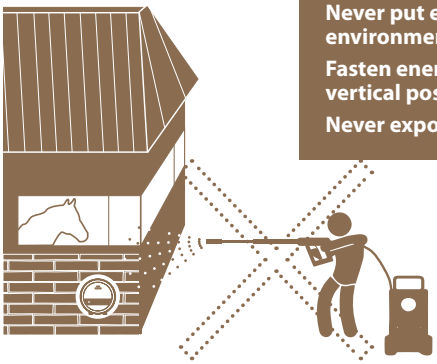
Electric fence system must be operated in accordance with description mentioned in the instructions for use. We ask you to read these instructions for use thoroughly and keep them safely after successful installation.

Electric animal fences and their ancillary equipment shall be installed, operated and maintained in a manner that minimises danger to persons, animals or their surroundings
Prevent from using electric fence system in which animals or people could get stuck.

An electric animal fence shall not be supplied from two separate energizers or from independent fence circuits of the same energizer.

For any two separate electric animal fences, each supplied from a separate energizer independently timed, the distance between the wires of the two electric animal fences shall be at least 2,5 m. If this gap is to be closed, this shall be effected by means of electrically non-conductive material or an isolated metal barrier.

For installation of electric fence system, do not use barbed wire or razor wire or other types of wires having sharp edges.



Energizers must be installed in a dry place.

Never put energizer on ground – in moist or wet environment.

Fasten energizer by means of hanging screw or DIN strip in vertical position – at least 20 cm above ground.

Never expose energizer to continuous water stream.

Supplementary non-conductive fencing using barbed wire or razor wire must be placed at least 150 mm from conductor of electric fence system and must be earthed at regular intervals.

All sections of electric fence system installed along public communication must be marked with warning sign fastened to posts or to fencing and visible from every point at regular intervals of the communication.

Warning sign (see Figure No. 5):
- It is of yellow color and minimum dimensions of 100 x 200 mm
- It includes either marking according to standard or sign ˝Attention – electric fence˝ on both sides
- Height of text must be 25 mm at minimum and data on it must be indelible
- 1 piece of it is a part of this package

Figure No. 5: Warning sign

Supply and connecting leads:

- working at voltage higher than 1kV and led in buildings, must be insulated from earthing elements of the building efficiently. You reach that by using insulated high-voltage cables or by keeping sufficient distance between the conductor and building frame. Do not use conventional electric cables.

- being laid in ground (in soil) must be protected by a fixed tube of insulators or use insulated high-voltage cables designed for this purpose again. Also ensure that the conduit is not damaged, for example by hooves of animals or tractor wheels that can plunge in the ground. Do not use conventional electric cables.

- may not be laid in a tube along with other distributing, communicating or data cables.

Supply and connecting leads and electric line of fence system:

- shall not cross above overhead power or communication lines. Crossings with overhead power lines shall be avoided wherever possible. If such a crossing cannot be avoided it shall be made underneath the power line and as nearly as possible at right angles to it
- If are installed near an overhead power line, the clearances shall not be less than those shown „Table No. 3“

Power line voltage	Clearance
≤ 1.000 V	3 metres
›1.000 ≤ 33.000 V	4 metres
›33.000 V	8 metres

Table No. 3: Minimum clearances from power lines for electrical animal fences

- If are installed near an overhead power line, their height above the ground shall not exceed 3 m. This height applies to either side of the orthogonal projection of the outermost conductors of the power line on the ground surface, for a distance of:
  - 2 m for power lines operating at a nominal voltage not exceeding 1000 V
  - 15 m for power lines operating at a nominal voltage exceeding 1000 V

- Being nearby telephone line or telephone cable, must be conducted at a distance of minimum of 2 metres.

Electric animal fences intended for deterring birds household pet containment or training animals such as cows need only be supplied from low output energizers to obtain satisfactory and safe performance.

In electrical animal fences intended for deterring birds from roosting on buildings no fence wire shall be grounded if the fence wires are not connected to metal parts. If one wire is connected with a metal part (ie a gutter) or a metal structure of the building these metal parts must be grounded. A warning sign shall be fitted to every point where persons may gain ready access to the conductors.

Where an electric animal fence crosses a public pathway, a non-electrified gate shall be incorporated in the electric animal fence at that point or a crossing by means of stiles shall be provided. At any such crossing, the adjacent electrified wires shall carry warning signs. (see Figure No. 5).

Avoid direct contact with fencing, especially with head, neck or upper part of body. Do not creep through the fencing or over it. For passing the enclosure, use a gate or another point in installation designed for this purpose.

Overvoltage protective equipment – lightning diverter

To prevent from damages caused by lightning, we recommend leading a circuit of fence system near to building via overvoltage protective equipment – lightning diverter fastened to outer masonry of the building by means of non-combustible materials before its connecting to energizer. This applied also for combined energizers, if they are used together with a network adapter.

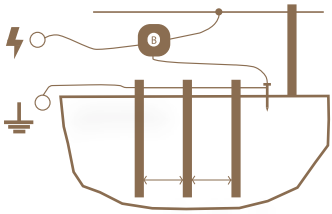


Figure No. 6: Overvoltage protective equipment with lightning diverter

Overvoltage caused by storm can cause insulation of electric fence system. In such a case, network voltage can get into electric fence system, and serious danger to people or animals can occur.

Generally, we recommend connecting network powered electric fence system only to such supply networks that are protected with earth-leakage circuit breaker with maximum actuating current of 30 mA. In addition to that, correct installation of energizer with auxiliary discharger and choking coil is necessary, as described within these instructions. It is suitable to disconnect network supplied electric fence system from network as well as from fencing (if possible) during storm.

If a network with earth-leakage circuit-breaker was not used for purposes of supplying energizer, and the enrgizer was connected to the fence system or the network during storm, it is necessary to check and test it before putting it into operation again.

For this purpose, connection to network with earth-leakage circuit-breaker must be available. For purposes of testing, connect earthing terminal of energizer to protective conductor of the supply network and connect pin to power socket protected with earth-leakage circuit-breaker then. If energizer beats correctly and does not show any deviations from normal operation subsequently, it can be connected to fence system again. If the earth-leakage circuit-breaker however falls out when energizer is connected, you must not use it and it must be repaired professionally.

If connecting lines of this energizer are damaged, they must be replaced by manufacturer or authorized service or another qualified person so that possibility of danger is excluded. Service and repairs of these energizers must be performed by authorized persons only!

Each user of electric fence system is responsible for its operation and should perform regular checks of energizer and fence system at least once a day, depending on operating conditions!

Procedure of checking:

- Visual control of energizer and fence system
- Measuring of minimum voltage of 2500 V in every place of the fence system

If installation is performed inside a building, energizer may not be operated in a room with increased risk of fire in any case (barn, shed, cattle shed). In addition to that, no combustible materials may be stored near to fence system and connectors of energizer. Installation of energizer must be made on a fire-resistant surface.

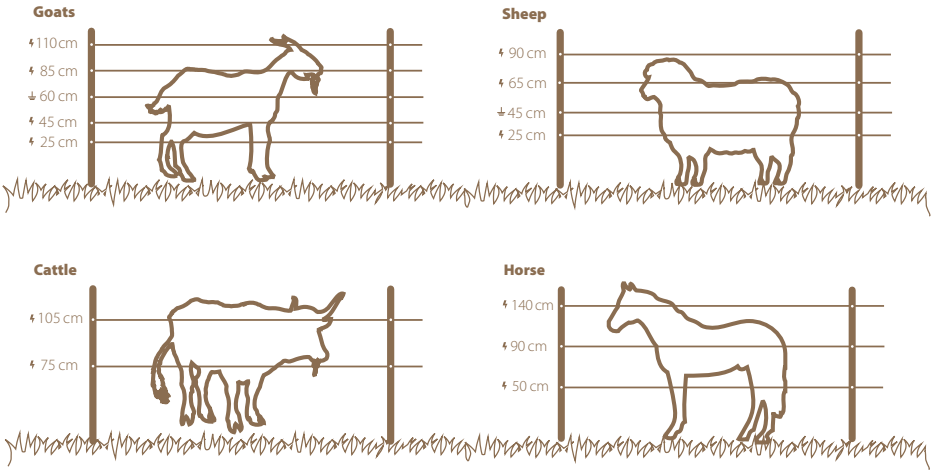
For stable using, use only energizers designed for that purpose!

Do not connect battery or accumulator energizers to electric power network or devices being connected to network voltage, except for sources determined to that by the manufacturer, in any case. This energizer may not be used by persons (including children) who have limited physical, perceptive or mental abilities or do not possess sufficient experiences and knowledge, when they are not under supervision or are not trained for operating energizer by persons who are responsible for their safety. Children should be under supervision so that there is not chance that they play with the energizer.

Ensure that all connected network supplied auxiliary circuits have at least the same protection class as energizer.

Electric fence system must be used in accordance with description mentioned in the instructions for use.

RECOMMENDATIONS FOR PLACING CONDUCTORS



7. TROUBLESHOOTING - POSSIBLE FAULT SOURCES – REDUCTION OF FENCER FUNCTIONALITY

In case that electric fence system does not give pulse or voltage is lower than 3 kV and red diode is flashing, it is necessary to check below listed causes.

Cause	Fault removal
Energizer does not work?	Disconnect the device from the fence system and switch it on again! If blue or violet LED is burning and yellow or green LED is blinking on BARGRAF, then the device works properly. Otherwise, the device is damaged (contact your salesman). When using battery and accumulator devices, observe correct wiring of poles.
Lead-in or short circuit of supply lines of the fence system	Do not use conventional cables for supply lines. High-voltage cable is recommended.
Conductor has adverse properties (thin diameter, high resistance)	Use high-quality conductor with low resistance and larger diameter. Ensure high-quality correct connection of conductors.
Low-quality earthing, too short earth rod, corrosion, dry soil	Add next rod, moisten.
Lead-in via growth near fence system	Remove the growth (mow it).
Conductor on ground (for example break, insufficient mechanical tension)	Repair fencing, use special connectors, stretch conductor.
Too long fence system. Was correct accessories used for given purpose?	Use accessories suitable for given length of fence system and for animals – in case of need, consult specialized salesman.
Insulator pierces, losses occur	Replace defective and weather-worn insulators.
Conductor is connected via knot, insufficient connection	Use relevant special connectors for the conductor.

Table No. 4: Possible fault sources

8. GUARANTEE

In addition to a guarantee requested by law, we provide you with a guarantee in accordance with below listed conditions:

- Guarantee period begins on the day of its purchase. Guarantee claims are acknowledged explicitly pursuant to submission of bill or cash voucher. Guarantee repair is free of charge, or we reserve the right to deliver a device of the same value.
- Guarantee is valid in case of correct use in accordance with the instructions for use. It expires in case of interferences by unauthorized persons and in case of using spare parts of foreign origin.
- All deficiencies resulting from material defects or manufacturing defects shall be removed in manufacturer´s discretion by repairing or free-of-charge replacement of the energizer.
- In case of delivering spare parts or repairing, original guarantee period is not prolonged.
- Guarantee period and address of guarantee provider can be found in attached instructions for use of given type of energizer.
- Accumulators or batteries of any type, damages due to overvoltage (caused by lightning among others) and damages due to spill-over of accumulator acid are not included in the guarantee.

This energizer is provided with guarantee period of 3 years according to our conditions for guarantee! Safety instructions, earthing, putting into operation, care of batteries and accumulator, conditions for guarantee and possible fault sources can be found in attached instructions for use!

Stamp and signature of seller:

fencee

ENERGIZER
FOR ELECTRIC FENCE SYSTEM

Respect.
Care. Innovation.
ECO PRINT

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