


## 230V ~ / 12 V

- › fencee **power DUOPD10**
- › fencee **power DUOPD20**
- › fencee **power DUOPD30**
- › fencee **power DUOPD40**
- › fencee **power DUOPD50**
- › fencee **power DUOPD70**

	STORED ENERGY	OUTPUT ENERGY	OUTPUT VOLTAGE	OUTPUT VOLTAGE 500 Ω	SWITCHING ON/OFF				
fencee <b>power DUOPD10</b>	1,4 J	1 J	9000 V	5000 V	✓	35 km	8 km	2 km	1,5 km
fencee <b>power DUOPD20</b>	3 J	2 J	12 000 V	6000 V	✓	60 km	15 km	3 km	1,5 km
fencee <b>power DUOPD30</b>	4,5 J	3 J	11 200 V	6400 V	✓	100 km	23 km	5 km	2 km
fencee <b>power DUOPD40</b>	5,7 J	4 J	10 000 V	5500 V	✓	120 km	30 km	8 km	3 km
fencee <b>power DUOPD50</b>	7,5 J	5 J	11 000 V	6600 V	✓	140 km	40 km	10 km	4 km
fencee <b>power DUOPD70</b>	10 J	7 J	10 500 V	7500 V	✓	180 km	70 km	17 km	8 km

# 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 DUO PD10**, fencee **power DUO PD20**  
fencee **power DUO PD30**, fencee **power DUO PD40**  
fencee **power DUO PD50**

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

**2014/35/EU**  
**2014/30/EU**



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.:**  
**37 748**

Issued by accredited **Státní zkušebnou strojů a.s.**,  
Třanovského 622/11, 163 00, Praha 6.

This declaration is issued at explicit responsibility of the manufacturer.

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In Lanškroun February 12th. 2018

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



# DECLARATION OF CONFORMITY

## Manufacturer:

VNT electronics s.r.o.  
Dvorská 605, 563 01 Lanškroun  
Company ID-No.: 64793826

declares that the below listed products:

## ENERGIZER FOR ELECTRIC FENCES

fencee **power DUO RF PD70**

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

**2014/35/EU**

**2014/30/EU**



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.:**

**37 904**

Issued by accredited **Státní zkušebnou strojů a.s.**,  
Třanovského 622/11, 163 00, Praha 6.

This declaration is issued at explicit responsibility of the manufacturer.

In Lanškroun August 28th. 2018

Ing. Jan Horák  
Executive Head of the Company  
Phone: +420 730 893 828  
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A handwritten signature in black ink, appearing to be 'J. Horák'.



Thank you for purchasing the product fence➊  
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.

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## 2. IMPORTANT RECOMMENDATIONS



**We recommend that this manual is read thoroughly and fully understood before using the device and that it is retained for future reference!**

- The energizer will provide better protection for your animals and land. Local conditions and surroundings always affect the device function and for that reason the manufacturer is not able to guarantee full protection against damage to the fence system.
- Use only the original adapter to supply the energizer – 14 V / 1 A. The supply voltage must not exceed 16 V. 12 V controller must be used if the solar panel is used as the energizer must not be connected directly to the panel.
- Switch off the energizer before carrying out any work on the electric fence system.
- Read thoroughly the Safety Guidelines paragraph.
- Strictly observe all safety guidelines during installation work.
- Do not connect the device on one fence system to another appliance. Damage to all connected devices and appliances may occur in the event of lightning strike.
- The device may only be repaired by the manufacturer's qualified personnel.
- Please dispose all waste in accordance with your country's code of practice.
- Do not let the unconnected battery cable hang freely as the short circuit and the consequent destruction of the energizer may take place.

## 3. PACKAGE CONTENTS

- Energizer fencee **power DUO PD**
- Earthing cable 150 cm
- Connecting cable to the fence system 100 cm
- 14 V / 1 A power supply adapter for mains connection
- Battery cable 170 cm
- fencee warning sign – Warning! Electric fence!
- 2 installation self-tapping screws and rawlplugs
- User Manual

## 4. FUNCTION ELECTRIC FENCE

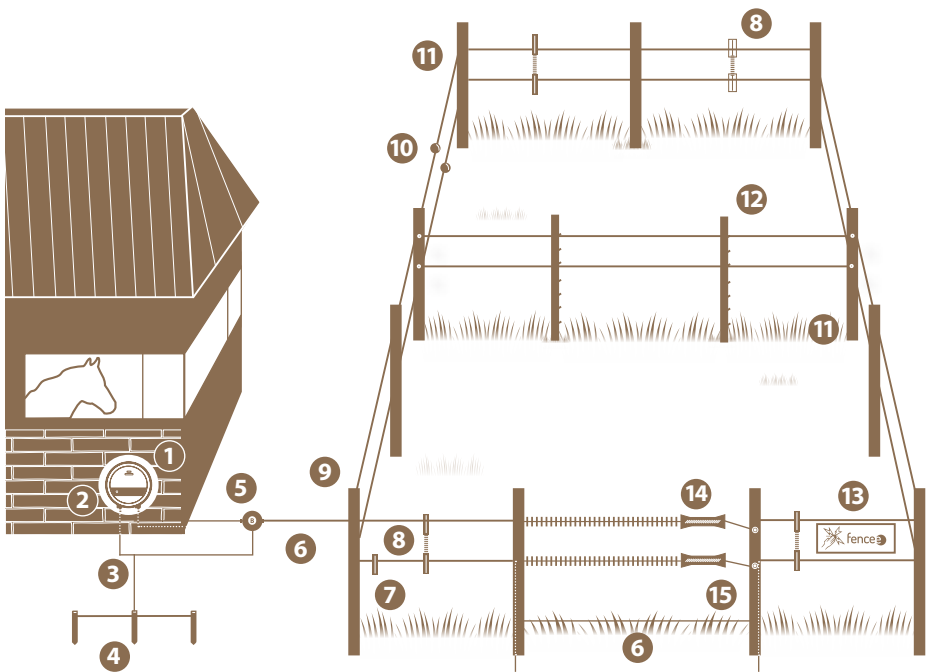
### How the electric fence works

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.



1	Energizer fence
2	ON/OFF button on energizer
3	Earthing cable
4	Anticorrosive earthing rod
5	Lightning diverter

6	High-voltage connecting cable
7	Conductor
8	Line connector
9	Fixed post
10	Tensioner

11	Insulators
12	Flexible post
13	Warning sign
14	Gate
15	Insulator of gate

## 5. INTRODUCTION

Energizers **power DUO PD** may be either powered from 230 V mains using 14 V power supply adapter (include in the package contents) or appropriate 12 V battery.

The integrated microprocessor fully controls the operation and ensures optimal performance taking into account the condition of the fence system and the current situation.

The fence load is continuously measured during the fence systems operation. The energizers power output is then automatically adjusted to keep the required output voltage in the widest possible load range. This control significantly aids in saving energy when using quality fence system with a low load. It also optimises energy consumption to maintain adequately high fence system voltage, which is, for example, overgrown with grass (high load).

LED indicator lights and BARGRAF on the front of the energizer show the power supply status and fence system voltage and also signal any potential faults on the fence.

### 5.1 Energizers PD with power output higher than 5 J

Standard's special requirements must be observed for energizers with power output higher than 5 J, namely time cut-off limit when the power output is increased and thus ensuring safety.

Products must be identified by mark. 

fencee energizers have time cut-off limit of 50 seconds, which means that whilst the fence system is under load and its resistance drops below 500 Ohm (overgrown grass, fallen branches, etc.), the energizer will supply the maximum of 5 J for 50 s. If the fence system resistance does not increase during this time (carrying out corrective measures), the energizer will gradually increase the power output.

Acoustic and visual warning when the fence system is suddenly under load is another feature. If the fence resistance drops abruptly during one pulse from over than 1,000 Ohm to less than 400 Ohm (fallen branches, tangled animal or human, etc.), alarm is triggered after six pulses, acoustic warning and red LED indicator light flashes. At the same time, the pulse period is shortened to 3 s. The alarm is switched off after increasing the fence resistance to more than 600 Ohm or after the time limit of 10 min. Both functions are independent and separate.

### 5.2 List of main advantages



**Czech** product



Special **transformer ST**  
extra high voltage with long term protection



**Smart Control** technology ensures  
**microprocessor-controlled** operation and optimal performance



**3 years** warranty

## Combined models **power DUO PD:**



### Battery management

Battery status monitoring and management.



### Combined power supply

Power supply is either from 230 V mains or standard 12 V battery, which may also be used as the backup power supply.



### Power switching

Manual switching between the high and low power output; option for reducing demand on the battery.



### LED Bargraph

Provides visual information on fence system status.



### Time delay 50 s

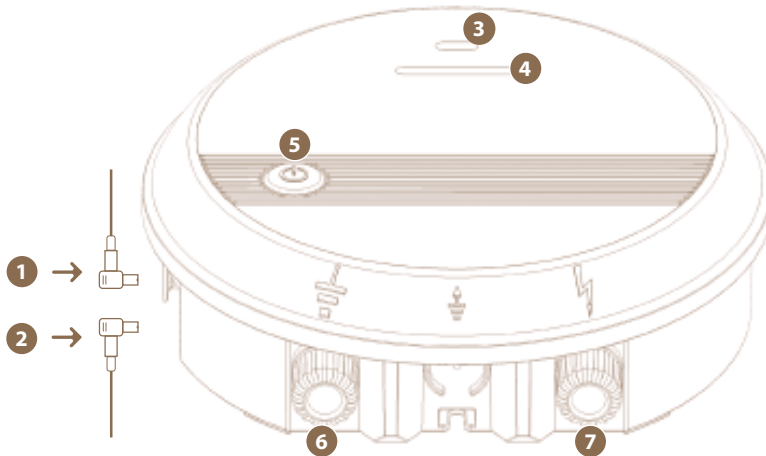
Increase power to maximum power for safety reasons.



### Award **Zlatý Klas 2018**

energizer **power DUO PD50**

## 6. PRODUCT DESCRIPTION



1	Connector for connecting adapter ( 14 V <u>DC</u> /1 A)
2	Connector for connecting battery (12 V)
3	LED control of connecting energizer and status indication
4	BARGRAF Indicator – indication of voltage on fence system
5	ON/OFF switch button
6	Earthing (black)
7	Connection to fence system (red)

### Meaning of displayed symbols



Earthing connection for connecting to your earthing system.



Full voltage fence system connection for connecting to your fence system.

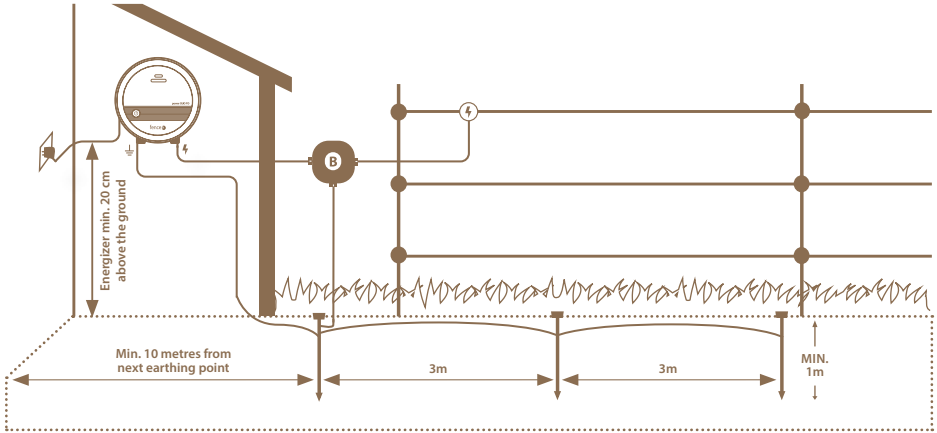


## 7. READY TO USE

### Choose a place suitable for installation of energizer:

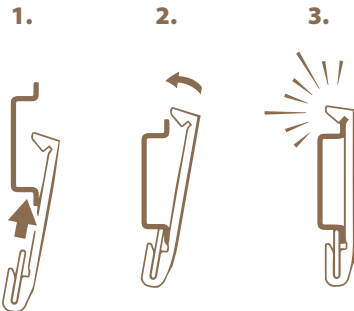
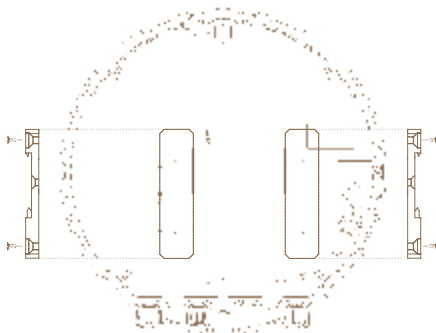
- Where you can achieve a good earthing.
- Which is distant enough from children and animals
- Where energizer is well accessible.
- Where permanent water stream is avoided.

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



### 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.

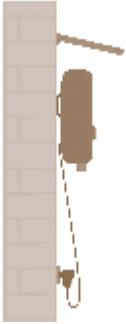


- Energizers must be installed in a dry place.
- Never put energizer on ground – in moist or wet environment.
- Fasten energizer by means of hanging screw or DIN rail with mounting bracket in vertical position – at least 20 cm above ground.
- Never expose energizer to continuous water stream.



**VERTICAL ON THE WALL IDEALLY WITH A CANOPY**

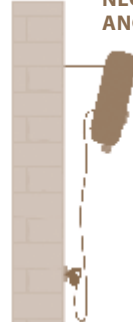
We recommend mounting on DIN rail 80 mm (Art.Nr. 8043)



**NEVER EXPOSE TO A CONTINUOUS STREAM OF WATER!**



**NEGATIVE ANGLE**



**ON THE GROUND – IN A PUDDLE**



**ON THE GROUND – UPSIDE DOWN**



## 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.

## Connecting connectors

Models fencee **power DUO PD** have two waterproof input connectors; upper one for adapter connection and lower one for battery connection. Connectors may be wrongly connected thus always make sure that the correct connections taken place. This design has preference for connecting to the mains voltage with the option of connecting to the battery, as a backup power supply in the event of power failure. Running the energizer for a long time just from the battery is not desirable due to the higher energy consumption and low capacity of conventional batteries.



Positive polarity  
14 V  $\bar{\bar{}}$  / 1 A

Preview of connector wiring.



Upper connector  
for **ADAPTER**  
Lower connector  
for **BATTERY**



**If the adapter and battery are connected to wrong connectors, charging and the low battery indication will not work and the battery will not be discharging.**

## Connecting output terminals

 Connect **the black earthing output** to the earthing rod using earthing cable.

 Connect **the red output** to the fence system using the connecting cable.

## 8. CONTROL

### IN SWITCHED-OFF CONDITION OF THE ENERGIZER

Compared to POWER models, the ON/OFF switch button has extended functionality here. After first switch-on of energizer, blue LED is burning or blinking indicating operation at higher output. After each other switch-on, the energizer remembers selected mode.

### IN SWITCHED-OFF CONDITION OF THE ENERGIZER



Long press (>2 s) → **Energizer is switched on.**

Short press → **No response.**

### ENERGIZER IS SWITCHED ON; BY PRESSING PUSH BUTTON:



Long press (>2 s) → **Manual switching between the high and low power output (approximately 50 %).** User selectable; when, for example, it is used for more sensitive animals or to reduce demand on battery, if required. The low power output is always limited to the maximum of 5 J.

Short press → **Energizer is fully switched off.**

## 9. EXPLANATION OF LED INDICATING LIGHTS AND BARGRAPH INDICATOR

### LED control:

#### BURNING / BLINKING

- **blinking** – operation on battery only
- **permanent burning** – operation with adapter

#### COLOR

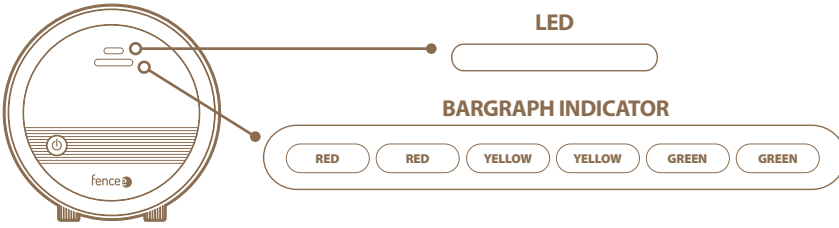
- **blue** – operation at higher output (100%)
- **purple** – operation at lower output (c. 50%)
- **red** – it lights up when battery voltage drops below 12 V.

When battery voltage drops below 11,6 V, warning siren is started (beeping). When battery voltage drops below 11,4 V, energizer is switched off. Reason is protection of battery from deep discharge of the battery (battery destruction). If discharged battery and adapter are connected simultaneously, red LED is burning, until battery is charged at 12 V at least.

### BARGRAPH INDICATOR:

To indicate input voltage at fence system, **power DUO PD** models are equipped with BARGRAPH indicator. It consists of six **LEDs - 2x RED | 2x YELLOW | 2x GREEN** – ordered from left to right. BARGRAPH indicator always goes through LEDs from the first red one up to indicated position where it stops for a while.

## Indicating statuses are as follows:



• voltage **< 3 kV** - 1× RED



• voltage **3–5 kV** - 2× RED



• voltage **5–6 kV** - 1× YELLOW



• voltage **6–7 kV** - 2× YELLOW



• voltage **7–8 kV** - 1× GREEN



• voltage **> 8 kV** - 2× GREEN



## 10. SAFETY GUIDELINES

Install and operate the electric fence systems in such a way that they do not pose the risk of electric shock to humans, animals or disturb the environment.

Avoid using the electric fence systems that could trap animals or people.

One electric fence system must not be powered by two or more energizers or by independent power supply devices designated for electric fence systems of the same equipment.

When operating two or more different electric fence systems and if they are powered by different energizers, the minimum distance between the electric fences must be 2,5 m. Use electrically non-conductive material if this distance is required to be smaller.

Do not use barbed or razor wire or any other types of sharp-edged wire to install the electric fence system.

Non-conductive additional fencing in which barbed or razor wire is used must be at least 150 mm from the electric fence system wire and must be earthed at regular intervals.

All electric fence system sections installed along the public roads must be marked with warning signs attached to poles or fences at regular intervals and visible from the road.

### Warning sign

- It is of yellow colour with minimum dimensions of 100 × 200 mm
- It is either standard warning sign or contains the following Inscription on both sides: “**WARNING! ELECTRIC FENCE**”
- Letters must be at least 25 mm high and indelible
- One warning sign is included in the package contents



### Power supply and connecting cables

- Cables that are rated for voltages higher than 1 kV and are located in buildings must be effectively insulated from the building's earthing features. This may be achieved by using insulated high-voltage cables or by leaving appropriate distance between the cable and the building frame. Do not use standard electrical cables
- Cables that are laid in the ground (soil) must be protected by solid insulator pipes or use insulated high-voltage cables designed for this purpose. Make sure that the cables will not be damaged by, for example animal hooves or tractor wheels, which can sink into the ground. Do not use standard electrical cables.
- Cables must not be placed in pipes together with other circuit, communication 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.

Power line voltage	Clearance
≤ 1000 V	3 metres
> 1000 ≤ 33000 V	4 metres
> 33000 V	8 metres

- 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 outer most 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.

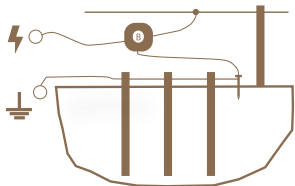
In electrical animal fences intended for deterring birds from roosting on buildings no fence wire shall be grounded if the fence wires are not connected to metal parts. If one wire is connected with a metal part (ie a gutter) or a metal structure of the building these metal parts must be grounded. A 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.

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 fence system, 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.



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 energizer 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 output 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, perceptible 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.

## 11. TROUBLESHOOTING

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

<b>Cause</b>	<b>Fault removal</b>
<b>Energizer does not work?</b>	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 flashing on BARGRAPH indicator, then the device works properly. Otherwise, the device is damaged (contact your salesman). When using battery and accumulator devices, observe correct wiring of poles.
<b>Red LED light is blinking</b>	Battery voltage decreased below 12V - replace the battery with a sufficiently charged one or connect adapter.
<b>Red LED light is blinking and warning siren sounds (beeping)</b>	Battery voltage decreased below 11,6 V - replace the battery with a sufficiently charged one or connect adapter.
<b>No LED signal is burning</b>	Energizer is switched off manually or battery voltage decreased below 11,4 V and energizer was switched off automatically. Reason is protection of battery from its deep discharge (and battery destruction). Replace the battery with a sufficiently charged one or connect adapter – until battery voltage reaches at least 12 V, red LED will be burning.
<b>Lead-in or short circuit of supply lines of the fence system</b>	Do not use conventional cables for supply lines. High-voltage cable is recommended.
<b>Conductor has adverse properties (thin diameter, high resistance)</b>	Use high-quality conductor with low resistance and larger diameter. Ensure high-quality correct connection of conductors.
<b>Low-quality earthing, too short earth rod, corrosion, dry soil</b>	Add next rod, moisten.
<b>Lead-in via growth near fence system</b>	Remove the growth (mow it).
<b>Conductor on ground (for example break, insufficient mechanical tension)</b>	Repair fencing, use special connectors, stretch conductor.
<b>Too long fence system. Was correct accessories used for given purpose?</b>	Use accessories suitable for given length of fence system and for animals – in case of need, consult specialized salesman.
<b>Insulator pierces, losses occur</b>	Replace defective and weather-worn insulators.
<b>Conductor is connected via knot, insufficient connection</b>	Use relevant special connectors for the conductor.



## 12. 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!**

### 13. TECHNICAL PARAMETERS

	power DUO PD10	power DUO PD20	power DUO PD30
POWER SUPPLY	<b>230 V ~</b> 3 W	<b>230 V ~</b> 5 W	<b>230 V ~</b> 5 W
POWER CONSUMPTION	<b>12 V ☒</b> 40–100 mA	<b>12 V ☒</b> 40–140 mA	<b>12 V ☒</b> 80–240 mA
INPUT ENERGY	1,4 J	3 J	4,5 J
OUTPUT ENERGY	1 J	2 J	3 J
OUTPUT VOLTAGE	9000 V	12 000 V	11 200 V
OUTPUT VOLTAGE 500 Ω	5000 V	6000 V	6400 V
ON/OFF	✓	✓	✓
LED ON/OFF	✓	✓	✓
LED IMPULS	✓	✓	✓
LED LOW BATTERY VOLTAGE	✓	✓	✓
LED POWER LOWER 50%	✓	✓	✓
LED ERROR CHECK	✓	✓	✓
LED IMPULS BARGRAF	✓	✓	✓
TEOR. MAX CEE	35 km	60 km	100 km
LOW VEGETATION	8 km	15 km	23 km
MEDIUM VEGETATION	2 km	3 km	5 km
HIGH VEGETATION	1,5 km	1,5 km	2 km
GROUNDING 1 m	1×	2×	2×
EL. FENCE NETTING	3×	5×	6×
WEIGHT	1512 g	1534 g	1540 g
DIAMETER	210 mm		
DEPTH	66 mm		

	power DUO PD40	power DUO PD50	power DUO PD70
POWER SUPPLY	<b>230 V ~</b> 9 W	<b>230 V ~</b> 9 W	<b>230 V ~</b> 12 W
POWER CONSUMPTION	<b>12 V ☒</b> 80–320 mA	<b>12 V ☒</b> 100–420 mA	<b>12 V ☒</b> 300–750 mA
INPUT ENERGY	5,7 J	7,5 J	10 J
OUTPUT ENERGY	4 J	5 J	7 J
OUTPUT VOLTAGE	10 000 V	11 000 V	10 500 V
OUTPUT VOLTAGE 500 Ω	5500 V	6600 V	7500 V
ON/OFF	✓	✓	✓
LED ON/OFF	✓	✓	✓
LED IMPULS	✓	✓	✓
LED LOW BATTERY VOLTAGE	✓	✓	✓
LED POWER LOWER 50%	✓	✓	✓
LED ERROR CHECK	✓	✓	✓
LED IMPULS BARGRAF	✓	✓	✓
TEOR. MAX CEE	120 km	140 km	180 km
LOW VEGETATION	30 km	40 km	70 km
MEDIUM VEGETATION	8 km	10 km	17 km
HIGH VEGETATION	3 km	4 km	8 km
GROUNDING 1 m	3x	3x	3x
EL. FENCE NETTING	6x	8x	14x
WEIGHT	1540 g	1557 g	1659 g
DIAMETER	210 mm		
DEPTH	66 mm		



# fencee

23062023

Stamp and signature of seller:

**fencee**  
Electric **fencing**

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