

# Operating Instructions



F00072+73y

## TERRACLAMP

### Ground Clamps Series TERRA-C

for active grounding with the Eltex ground monitoring systems and for passive grounding

BA-en-4014-2003





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## Dear Customer,

The active Eltex ground clamps series **TERRACLAMP** are designed for making and - in connection with Eltex TUE30 Terra-Control and **TERRALIGHT** Ground Monitoring Systems - for monitoring ground connections.

Special ground monitoring systems operating with two ground clamps are capable of monitoring the correct grounding of conductive Big Bags by measuring the electric resistance between two opposing grounding flags.

The passive Eltex Ground Clamps Series **TERRACLAMP** are designed for making ground connections for discharging static charges.

The appliances are used in areas where potentially explosive materials and substances are loaded, discharged, refilled or transported. Any developing static charges are safely and effectively eliminated and led to ground. This means that the risk of ignition caused by static discharges is eliminated at source.

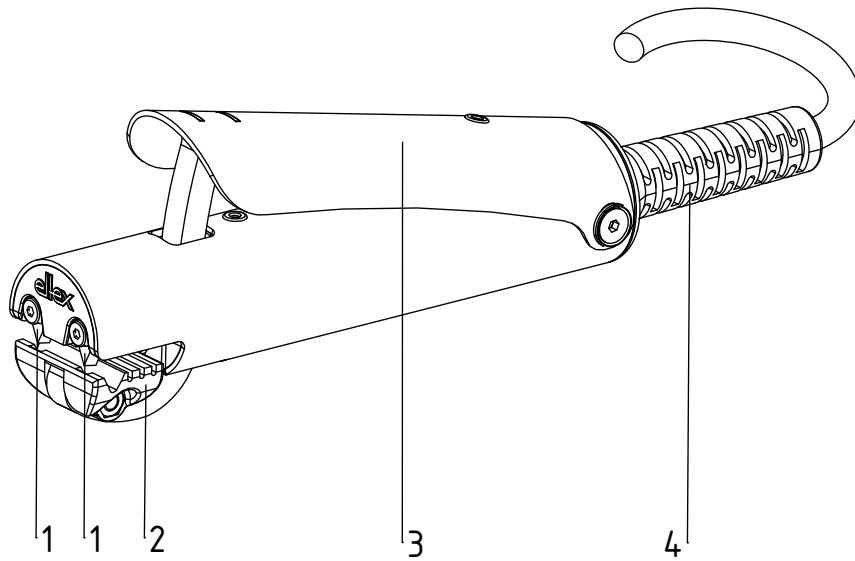
Different design variants of ground clamps are available for active, passive and Big-Bag grounding and for use in potentially explosive atmospheres.

Please read the operating instructions carefully before starting the instrument. This will help you prevent personal injuries and damage to property.

Please give us a call if you have any suggestions, proposals or ideas for improvements. We greatly appreciate the feedback from the users of our appliances.

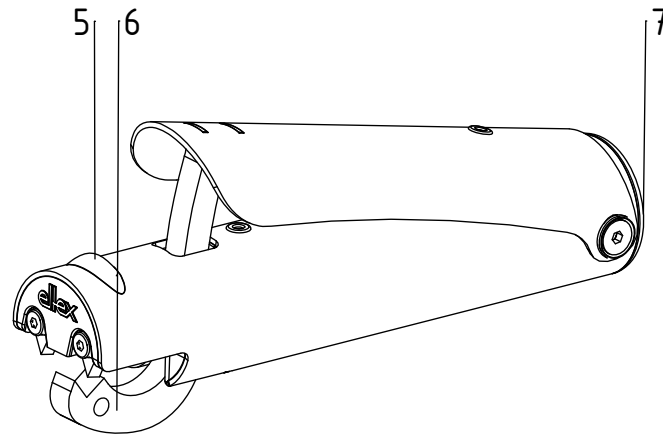
# 1. Overview

Fig. 1:  
Ground clamps  
series  
**TERRACLAMP**  
with fixed cable  
connection



- 1 Contact element
- 2 Pressure plate
- 3 Operating lever
- 4 with fixed cable connection
- 5 Status LED
- 6 Clamping lever
- 7 Cable connection, pluggable

Fig. 2:  
Ground clamps  
series  
**TERRACLAMP**  
with LED,  
plug-in cable  
connection



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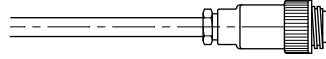
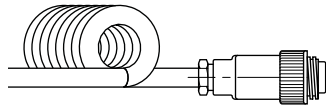
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**Cable**

helix ground cable

ground cable

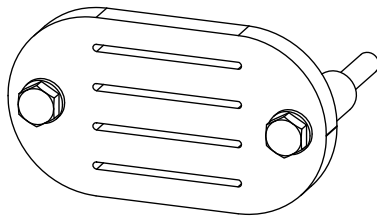
*Fig. 3:  
Cables*



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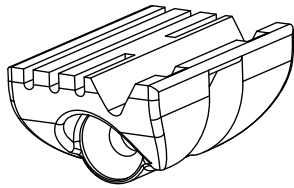
**Accessory**

*Fig. 4:  
Clamp holder  
wall mounting*



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*Fig. 5:  
Pressure plate*



Z-116357y\_8

## Design Variants

### Ground clamps for use with the components of the Terra-Control TUE30 and TERRALIGHT ground monitoring systems

#### Active ground clamps:

TERRA-C/SO: Ground clamp:

with coupling connector

or

with fixed lead length of 3, 6, 9, 12, 15 or 18 m  
(specify length), cable color: light blue

cable end prefabricated:

- stripped, braids are fitted with wire end sleeves
- coupling connector
- coupling socket

or

with fixed helix lead length of 5 or 10 m  
(specify length), cable color: light blue

cable end prefabricated:

- stripped, braids are fitted with wire end sleeves
- coupling connector
- coupling socket

TERRA-C/SL: Ground clamp with integrated LED status display:

with coupling connector

or

with fixed lead length of 3, 6, 9, 12, 15 or 18 m  
(specify length), cable color: light blue

cable end prefabricated:

- stripped, braids are fitted with wire end sleeves
- coupling connector
- coupling socket

or

with fixed helix lead length of 5 or 10 m  
(specify length), cable color: light blue

cable end prefabricated:

- stripped, braids are fitted with wire end sleeves
- coupling connector
- coupling socket

### **Active ground clamps for Big-Bags:**

TERRA-C/BO: Ground clamp with pressure plate for flexible contacts  
points:

with coupling connector

or

with fixed lead length of 3, 6, 9, 12, 15 or 18 m  
(specify length), cable color: light blue

cable end prefabricated:

- stripped, braids are fitted with wire end sleeves
- coupling connector
- coupling socket

or

with fixed helix lead length of 5 or 10 m  
(specify length), cable color: light blue

cable end prefabricated:

- stripped, braids are fitted with wire end sleeves
- coupling connector
- coupling socket

TERRA-C/BL: Ground clamp with integrated LED status display and  
pressure plate for flexible contacts:

with coupling connector

or

with fixed lead length of 3, 6, 9, 12, 15 or 18 m  
(specify length), cable color: light blue

cable end prefabricated:

- stripped, braids are fitted with wire end sleeves
- coupling connector
- coupling socket

or

with fixed helix lead length of 5 or 10 m  
(specify length), cable color: light blue

cable end prefabricated:

- stripped, braids are fitted with wire end sleeves
- coupling connector
- coupling socket



## **Passive ground clamps for use without ground monitoring systems:**

TERRA-C/PO: Ground clamp with current limiting resistor  
with coupling connector

or

with fixed lead length of 3, 6, 9, 12, 15 or 18 m

(specify length), cable color: orange

cable end prefabricated:

- stripped, braids are fitted with wire end sleeves
- coupling connector
- coupling socket
- with cable lug 10.5 mm diameter

or

with fixed helix lead length of 5 or 10 m

(specify length), cable color: light blue

cable end prefabricated:

- stripped, braids are fitted with wire end sleeves
- coupling connector
- coupling socket
- with cable lug 10.5 mm diameter

## **Cable for active grounding:**

KG/BSA050: helix ground cable  
with coupling socket and wire end sleeve  
extensible 1 to 5 m  
cable color: light blue

KG/BSA100: helix ground cable  
with coupling socket and wire end sleeve  
extensible 2 to 10 m  
cable color: light blue

KG/BS050: helix ground cable  
with coupling socket and connector  
extensible 1 to 5 m  
cable color: light blue

KG/BS100: helix ground cable  
with coupling socket and connector  
extensible 2 to 10 m  
cable color: light blue

KG/BNA\_\_\_: ground cable  
with coupling socket and wire end sleeve  
5 to 95 m in steps to 5 meters (specify length)  
cable color: light blue

KG/BNB\_\_\_: ground cable  
with coupling socket and connector  
5 to 95 m in steps to 5 meters (specify length)  
cable color: light blue

#### **Cable for passive grounding:**

KG/GSA050: helix ground cable  
with coupling socket and wire end sleeve  
extensible 1 to 5 m  
cable color: orange

KG/GSA100: helix ground cable  
with coupling socket and connector  
extensible 1 to 5 m  
cable color: orange

KG/GNA\_\_\_: ground cable  
with coupling socket and wire end sleeve  
5 to 95 m in steps to 5 meters (specify length)  
cable color: orange

KG/GNB\_\_\_: ground cable with plug and socket  
with coupling socket and connector  
5 to 95 m in steps to 5 meters (specify length)  
cable color: orange

#### **Clamp holder:**

116740: wall mounting  
optionally available as accessory  
dimensions see Fig. 12

116738: installation on monitoring system **TERRALIGHT**  
optionally available as accessory  
dimensions see operating instructions **TERRALIGHT**

#### **Optional accessories:**

For use on extremely hard surfaces (e.g. VA, rough surfaces) there are optional contact elements in a robust design available; for contacting flexible media, such as Big-Bags or small contact areas (e.g. bucket handles) an optional pressure plate is available, see [chapter 9 "Spare parts and accessories", page 25](#).

## 2. Safety

The units have been designed, built and tested using state-of-the-art engineering, and have left the factory in a technically and operationally safe condition. If used improperly, the units may nevertheless be hazardous to personnel and may cause injury or damage. Read the operating instructions carefully and observe the safety instructions.

### 2.1 Identification of risks and hazards

Possible risks and hazards resulting from the use of the units are referred to in these operating instructions by the following symbols:



#### **Warning!**

This symbol appearing in the operating instructions refers to operations which, if carried out improperly, may result in serious personal injuries.



#### **Caution!**

This symbol appearing in the operating instructions refers to operations which, if carried out improperly, may result in damage to property.



#### **Ex Warning!**

Only for units with Ex approval.

This symbol denotes the special conditions which must be observed when operating the units in explosion hazard areas as specified in the approvals.

### 2.2 Technical advance

The manufacturer reserves the right to make changes to the technical specifications without prior notice in order to adapt the units to state-of-the-art engineering. Eltex will provide the latest information on any changes or modifications in the operating instructions on request.

## 2.3 Proper use

### Active grounding

The active ground clamps series TERRA-C and the associated ground cable series KG must be used only for static grounding and must be connected to the appropriate Eltex ground monitoring systems.

The application area are for example: refilling and filling stations, agitators or dryers for liquid or powdery substances, and in conveyor and transportation equipment with potentially explosive atmosphere.

The Eltex active ground clamps generate a transitory electric connection between the plant and equipment in use and the equipotential bonding (PA).

Together with the TUE30 Terra-Control and **TERRALIGHT** ground monitoring systems, this configuration provides the ultimate grounding effect for static charges.

### Passive grounding

The passive Eltex ground clamps series TERRA-C and the associated ground cable series KG must be used only for “static grounding” in refilling and filling stations, agitators or dryers for liquid or powdery substances, and in conveyor and transportation equipment with potentially explosive atmosphere.

The passive Eltex ground clamps generate a transitory electric connection between the plant and equipment in use and the equipotential bonding (PA). The purpose of the ground clamps is to leak off or discharge static charges from these plants and equipment to ground. The passive ground clamps must not be connected to analyzing devices.

The ground clamps (with an internal resistance of  $>200$  kOhm) can also be connected to systems linked to the protective circuit. With this protective suppressor circuit, no explosive sparking can occur between the PA and the equipment connected to the protective circuit system in the event of potential differences of  $<120$  V.

The manufacturers will not assume any liability and warranty if the units are used improperly or used outside the intended purpose.

Modifications or changes made to the devices are not permitted.

Use only original Eltex spare parts and equipment.

## 2.4 Work and operational safety



### Warning!

Carefully observe the following notes and the complete [chapter 2 "Safety", page 11!](#)

- The local standards, rules and regulations relating to the installation and operation of electrical appliances in potentially explosive atmospheres must be observed.
- Appliances designed for use in potentially explosive atmospheres must not be modified. The technical specifications for ambient conditions and operation must be maintained and observed (see [chapter 7 "Technical specifications", page 22](#)).
- Electrical systems in potentially explosive atmospheres must always be in perfect technical condition. Defects must be rectified immediately (see [chapter 4 "Operation", page 19](#)).
- Any work involving the units must be carried out by qualified electricians (see [chapter 3 "Installation and assembly", page 15](#), [chapter 5 "Maintenance", page 20](#)).
- The unit may only be used by qualified personnel trained for explosion hazard areas.
- Observe the type plate with the connection ratings (supply voltage) of the units (see [chapter 4 "Operation", page 19](#)).
- A „Connect/Disconnect Approval“ by the plant operator must be obtained before carrying out any installation, assembly, service, repair or maintenance work in potentially explosive atmospheres. Make sure that there is no potentially explosive atmosphere prevailing in the working area (see [chapter 3 "Installation and assembly", page 15](#), [chapter 5 "Maintenance", page 20](#)).
- **Before starting the plant in use, connect the clamps to the equipment and make sure that no potentially explosive atmosphere exists in the working area.**  
The clamp connection of the ground clamp must make good and secure contact throughout the whole time the plant is in operation (see [chapter 3.1 "Electrical connection of the ground clamps", page 15](#)).
- The maximum cable length in the intrinsically safe circuit must not exceed the maximum rated capacitance and inductance (see the operating instructions of the ground monitoring unit). The ground monitoring unit must always be connected to the equipotential bonding (see [chapter 3.1 "Electrical connection of the ground clamps", page 15](#)).
- The ground clamps must not be installed under load, to avoid uncontrolled snapping back of the cable together with the ground clamp(see [chapter 3.1 "Electrical connection of the ground clamps", page 15](#)).

- Cables and clamps must not be damaged. Damaged cables and clamps must be replaced with new parts (see [chapter 5 "Maintenance", page 20](#)).
- To make sure that the proper ground connection exists with the equipotential bonding and that no malfunctions occur in active clamps, the ground clamp must be cleaned when dirty (see [chapter 5.2 "Ground clamps", page 20](#)).

## 2.5 Special conditions according to the certificate of conformity



### Active Eltex ground clamps:

- Equipotential bonding must be provided along the entire length of the measuring circuit. (see [chapter 3.1 "Electrical connection of the ground clamps", page 15](#)).

### Passive Eltex ground clamps:

- (see [chapter 3.1 "Electrical connection of the ground clamps", page 15](#)).
- The use of the ground clamps is strictly limited to leading potentially hazardous static charges to ground.
- Before connecting the ground clamps, make sure that no potentially explosive atmosphere exists in the working area.
- The use of the clamps in areas requiring Category 1 is not permitted for Explosion Class IIC.

### 3. Installation and assembly



When installing the systems in potentially explosive zones, every possible precaution must be taken to ensure that no explosive atmosphere exists!



#### 3.1 Electrical connection of the ground clamps

- **Before starting the plant in use, connect the clamps to the equipment and make sure that no potentially explosive atmosphere exists in the working area**

The clamp connection of the ground clamp must make good and secure contact throughout the whole time the plant is in operation.

- The ground clamps must not be installed under load, to avoid uncontrolled snapping back of the cable together with the ground clamp.

#### 3.1.1 Active ground clamps



##### **Notes for use in atmospheres with potentially explosive zones!**

In areas in which potentially explosive atmospheres can exist, simple power equipment such as the Eltex ground clamps can be connected to the measuring circuit of the ground monitoring devices. Simple power equipment must comply with the appropriate requirements of EN 60079-11, but no certification and marking is required.

The active ground clamps are equipped with either

- a coupling connector which is connected to the cable rewriter
- a coupling socket to which an other ground clamp with cable can be connected
- with fixed lead length and differently prefabricated cable end (wire end sleeve, coupling connector or coupling socket)
- with fixed helix lead length and differently prefabricated cable end (wire end sleeve, coupling connector or coupling socket).

All active grounding components have a light blue cable.

For the terminal assignment of the ground monitoring system, please refer to the appropriate operating instructions.



##### **Warning!**

The maximum cable length in the intrinsically safe circuit must not exceed the maximum rated capacitance and inductance (see the operating instructions of the ground monitoring system). The ground monitoring system must always be connected to the equipotential bonding!



An equipotential bonding connection (PA) must be established along the entire intrinsically safe measuring circuit.



### 3.1.2 Passive ground clamps

- The use of the ground clamps is strictly limited to leading potentially hazardous static charges to ground.
- Before connecting the ground clamps, make sure that no potentially explosive atmosphere exists in the working area.
- The use of the clamps in areas requiring Category 1 is not permitted for Explosion Class IIC.

The passive ground clamps are equipped with either

- a coupling connector which is connected to the cable rewriter
- a coupling socket to which an other ground clamp with cable can be connected
- with fixed lead length and differently prefabricated cable end (wire end sleeves, coupling connector, coupling socket or cable lug)
- with fixed helix lead length and differently prefabricated cable end (wire end sleeves, coupling connector, coupling socket or cable lug).

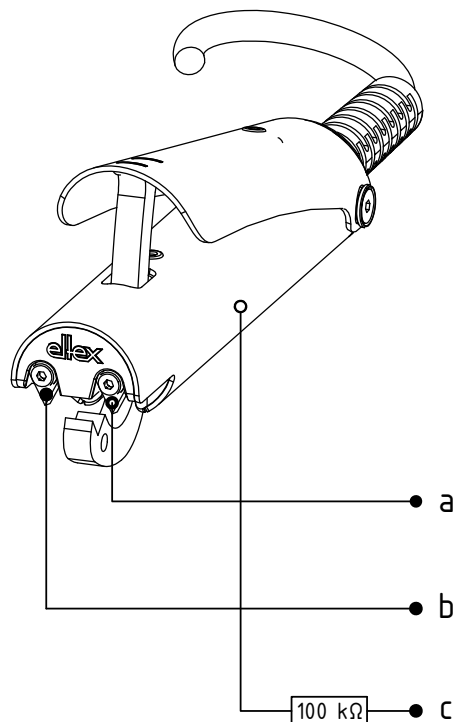
All passive grounding components have an orange cable.



### 3.2 Wiring diagram of the ground clamps

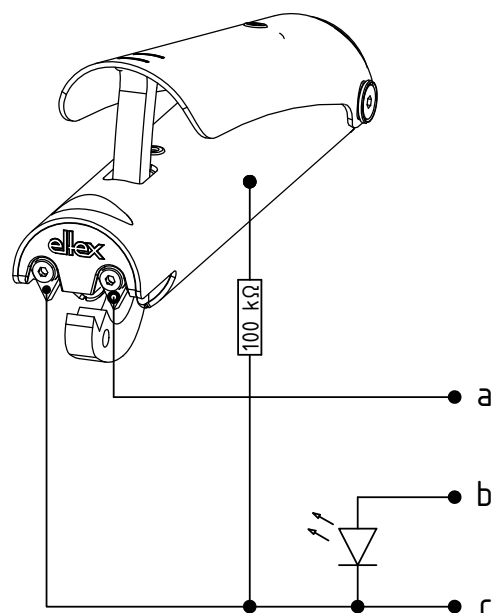
The resistance circuitry is encapsulated in the clamp.

#### Active ground clamps



a = blue  
b = brown  
c = green/yellow

Fig. 6:  
Type  
TERRA-C/\_C  
active clamp  
without LED  
connecting cable  
3 x 1.5 mm<sup>2</sup>



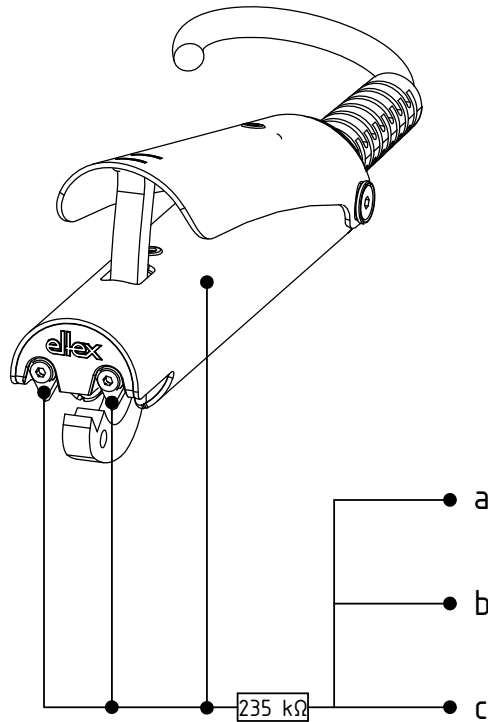
a = blue  
b = brown  
c = green/yellow

Fig. 7:  
Type  
TERRA-C/\_L  
active clamp  
with LED  
plug-in cable  
connection

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Z-116357Y\_5

## Passive ground clamps

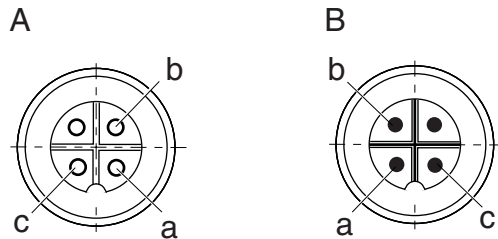


*a = blue  
b = brown  
c = green/yellow*

**Fig. 8:**  
Type  
TERRA-C/PO  
passive clamp  
without LED  
connecting cable  
3 x 1.5 mm<sup>2</sup>

Z-116357y\_6

### 3.3 Pin assignment of the coupling connector / coupling socket



*a = blue  
b = brown  
c = green/yellow*

*A = socket  
B = connector*

**Fig. 9:**  
Pin assignment  
of the coupling  
connector /  
- socket

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### 3.4 Cable specifications

- three-core 3 x 1.5 mm<sup>2</sup>
- wire color blue, brown, green/yellow  
light blue-sheathed for active grounding  
orange-sheathed for passive grounding
- oil and gasoline resistant

## 4. Operation



Electrical systems in potentially explosive atmospheres must always be in perfect technical condition. Defects must be rectified immediately.



### **Caution!**

Observe the type plate with the connection ratings (supply voltage) of the units.

### 4.1 Start-up

#### **Active ground clamps**

If all connections (supply voltage, ground clamp, etc.) have been made correctly, the system is operational and the supply voltage may be activated. The units are operational now.

#### **Passive ground clamps:**

Once the clamps are properly connected to the equipotential bonding, they can be used for grounding.



## 5. Maintenance

- When maintaining or servicing the systems in potentially explosive zones, every possible precaution must be taken to ensure that no explosive atmosphere exists.
- Any work involving the units must be carried out by qualified electricians.
- Cables and clamps must not be damaged. Damaged cables and clamps must be replaced with new parts.

### 5.1 Checking the resistance to earth

#### Active clamps:

If the ground clamps are tested together with an Eltex ground monitoring system, the procedure and the measured values can be found in the corresponding operating instructions for the ground monitoring system.

If the ground clamps are tested alone, the following values apply:

#### TERRA-C/\_O:

between contact element 1 and connection "a": < 1 Ohm

between contact element 2 and connection "b": < 1 Ohm

between enclosure and connection "c": 100 kOhm  $\pm$ 10 %

#### TERRA-C/\_L:

between contact element 1 and connection "a": < 1 Ohm

between contact element 2 and connection "c": < 1 Ohm

between enclosure and connection "c": 100 kOhm  $\pm$ 10 %

#### Passive clamps:

Measurement of the earthing resistance between clamp jaw and ground (PAL):

ground clamp TERRA-C/PO:

earthing resistance: 235 kOhm  $\pm$ 10 %

clamping force: 100 N  $\pm$ 20 %

### 5.2 Ground clamps



To make sure that the proper ground connection exists with the equipotential bonding and that no malfunctions occur in active clamps, the ground clamp must be cleaned when dirty.

Store the ground clamp such that it cannot be damaged. Replace damaged cables and clamps with new parts. Whenever possible, the ground clamp should either be hung up freely or be clamped to a non-conductive object.

## 6. Warranty

The units are warranted for a period of 12 months provided that the operating conditions have been maintained, that the units have not been tampered with and that the units show no mechanical damage.

The warranty applies only if the operating and assembly instructions specified by Eltex have been observed. The warranty period begins on the date of delivery.

In the event of defects occurring during the warranty period, the units or defective components will be repaired at Eltex. Defective components will be replaced and installed free of charge.

If repairs are required at the customer's premises, the costs for sending a technician (travel, travel time, expenses) will be charged to the customer.

## 7. Technical specifications

### 7.1 Active ground clamps

as shown on  
appliance  
marking:



Types TERRA-C/SO, TERRA-C/SL, TERRA-C/BO, TERRA-C/BL	
Clamp material	stainless steel, PP
Operating ambient temperature	with coupling connector, -socket: -40...+70°C (-40...+158°F) with fixed cable -30...+70°C (-22...+158°F)
Ground cable	oil and gasoline resistant control lead 3 x 1,5 mm <sup>2</sup> , color: light blue temperature range -40... +90°C (-40...+194°F)
effective capacitance inductance	TERRA-C/_O: L <sub>i</sub> und C <sub>i</sub> negligible TERRA-C/_L: L <sub>i</sub> = 57 µH, C <sub>i</sub> = 40nF
Protection class	IP67 according EN 60529
Dimensions	see Fig. 10
Weight	with coupling connector, -socket: approx. 0.35 kg
Approval / Identification marking	ATEX: BVS 20 ATEX E 017 X II 1G Ex ia IIC T4 Ga, II 1D Ex ia IIIC T135°C Da IECEx: BVS 20.0012.X Ex ia IIC T4 Ga, Ex ia IIIC T135°C Da

## 7.2 Passive ground clamps

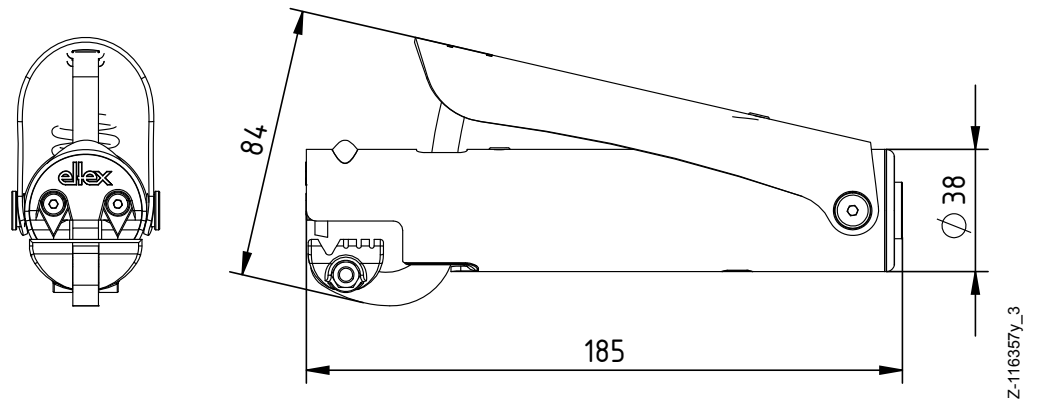
Type TERRA-C/PO	
Clamp material	stainless steel, PP
Operating ambient temperature	with coupling connector, -socket: -40...+70°C (-40...+158°F) with fixed cable -30...+70°C (-22...+158°F)
Ground cable	oil and gasoline resistant control lead 3 x 1,5 mm <sup>2</sup> , color: orange temperature range -40...+90°C (-40...+194°F)
Protection	IP67 according EN 60529
Dimensions	see Fig. 10
Weight	with coupling connector, -socket: ca. 0,35 kg
Clamping width	35 mm
Clamping force	100 N ±20 %
Earth leakage resistance	235 kOhm ±10 %
max. discharge	120 V



The current approval with all supplements can be found on our servicesite at <http://service.eltex.de>.

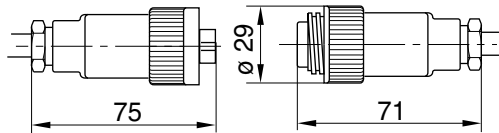
## 8. Dimensions

Fig. 10:  
**TERRACLAMP**  
maximum clamp  
opening 35 mm



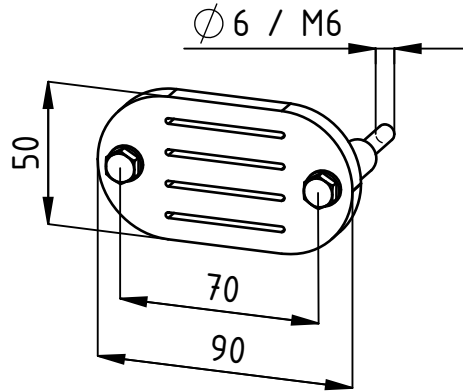
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Fig. 11:  
Coupling  
connector / socket



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Fig. 12:  
Clamp holder  
article no. 116740  
wall mounting



Z-116742y\_2



## 9. Spare parts and accessories

Article	Article-No.
<b>Active grounding</b>	
<p>Active ground clamp            Cable color: light blue            with coupling connector or with fixed lead length of 3, 6, 9, 12, 15 or 18 m (specify length) and cable end prefabricated:</p> <ul style="list-style-type: none"> <li>- stripped, braids are fitted with wire end sleeves</li> <li>- coupling connector</li> <li>- coupling socket or</li> </ul> <p>with fixed helix lead length of 5 or 10 m (specify length) and cable end prefabricated:</p> <ul style="list-style-type: none"> <li>- stripped, braids are fitted with wire end sleeves</li> <li>- coupling connector</li> <li>- coupling socket</li> </ul>	TERRA-C/SO
<p>Active ground clamp with integrated LED status display            Cable color: light blue            with coupling connector or with fixed lead length of 3, 6, 9, 12, 15 or 18 m (specify length) and cable end prefabricated:</p> <ul style="list-style-type: none"> <li>- stripped, braids are fitted with wire end sleeves</li> <li>- coupling connector</li> <li>- coupling socket or</li> </ul> <p>with fixed helix lead length of 5 or 10 m (specify length) and cable end prefabricated:</p> <ul style="list-style-type: none"> <li>- stripped, braids are fitted with wire end sleeves</li> <li>- coupling connector</li> <li>- coupling socket</li> </ul>	TERRA-C/SL
<p>Active ground clamp for BIG-BAG            with pressure plate for flexible contact points            Cable color: light blue            with coupling connector or with fixed lead length of 3, 6, 9, 12, 15 or 18 m (specify length) and cable end prefabricated:</p> <ul style="list-style-type: none"> <li>- stripped, braids are fitted with wire end sleeves</li> <li>- coupling connector</li> <li>- coupling socket or</li> </ul> <p>with fixed helix lead length of 5 or 10 m (specify length) and cable end prefabricated:</p> <ul style="list-style-type: none"> <li>- stripped, braids are fitted with wire end sleeves</li> <li>- coupling connector</li> <li>- coupling socket</li> </ul>	TERRA-C/BO

Article	Article-No.
<p>Active ground clamp for BIG-BAG with integrated LED status display and pressure plate for flexible contact points Cable color: light blue with coupling connector or with fixed lead length of 3, 6, 9, 12, 15 or 18 m (specify length) and cable end prefabricated:</p> <ul style="list-style-type: none"> <li>- stripped, braids are fitted with wire end sleeves</li> <li>- coupling connector</li> <li>- coupling socket or</li> </ul> <p>with fixed helix lead length of 5 or 10 m (specify length) and cable end prefabricated:</p> <ul style="list-style-type: none"> <li>- stripped, braids are fitted with wire end sleeves</li> <li>- coupling connector</li> <li>- coupling socket</li> </ul>	TERRA-C/BL
<p>Active helix ground cable, 3-pin with coupling IP67 for connecting ground clamps with coupling socket and wire end sleeve, extensible 1 to 5, cable color: light blue</p>	KG/BSA050
<p>Active helix ground cable, 3-pin with coupling IP67 for connecting ground clamps with coupling socket and wire end sleeve, extensible 2 to 10, cable color: light blue</p>	KG/BSA100
<p>Active helix ground cable, 3-pin with coupling IP67 for connecting ground clamps with coupling socket and connector, extensible 1 to 5, cable color: light blue</p>	KG/BSB050
<p>Active helix ground cable, 3-pin with coupling IP67 for connecting ground clamps with coupling socket and connector, extensible 2 to 10, cable color: light blue</p>	KG/BSB100
<p>Active ground cable, 3-pin with coupling IP67 for connecting ground clamps with coupling socket and wire end sleeve, 5 to 95 m in steps to 5 meters (specify length), cable color: light blue</p>	KG/BNA____
<p>Active ground cable, 3-pin with coupling IP67 for connecting ground clamps with coupling socket and connector, 5 to 95 m in steps to 5 meters (specify length), cable color: light blue</p>	KG/BNB____
<p>Cable rewriter, aluminum, for active grounding, 2.5 meters connecting cable and 20 meters ground cable with coupling IP67 for connecting ground clamps with connector</p>	601KR/AW
<p>Cable rewriter, aluminum, for active grounding, 2.5 meters connecting cable and 12 meters ground cable with coupling IP67 for connecting ground clamps with connector</p>	601KR/DW

Article	Article-No.
<b>Passive Grounding</b>	
Passive ground clamp with current limiting resistor Cable color: orange with coupling connector with fixed lead length of 3, 6, 9, 12, 15 or 18 m (specify length) and cable end prefabricated: - stripped, braids are fitted with wire end sleeves - coupling connector - coupling socket - with cable lug 10.5 mm diameter or with fixed helix lead length of 5 or 10 m (specify length) and cable end prefabricated: - stripped, braids are fitted with wire end sleeves - coupling connector - coupling socket - with cable lug 10.5 mm diameter	TERRA-C/PO
Passive helix ground cable, 3-pin with coupling IP67 for connecting ground clamps with coupling socket and wire end sleeve, extensible 1 to 5, cable color: orange	KG/GSA050
Passive helix ground cable, 3-pin with coupling IP67 for connecting ground clamps with coupling socket and connector, extensible 1 to 5, cable color: orange	KG/GSB050
Passive ground cable, 3-pin with coupling IP67 for connecting ground clamps with coupling socket and wire end sleeve, 5 to 95 m in steps to 5 meters (specify length), cable color: orange	KG/GNA__
Passive ground cable, 3-pin with coupling IP67 for connecting ground clamps with coupling socket and connector, 5 to 95 m in steps to 5 meters (specify length), cable color: orange	KG/GNB__
Cable rewriter, aluminum, for passive grounding, 2.5 meters connecting cable and 12 meters ground cable with coupling IP67 for connecting ground clamps with connector	601KR/EW
<b>Accessories</b>	
Clamp holder, wall mounting	116740
Coupling socket 4-pin, IP67	ELM00714
Coupling connector 4-pin, IP67	ELM00713
Contact element, standard	117318
Contact element, robust use	117319
Pressure plate	117320
Operating instructions (specify language)	BA-xx-4014

Please specify the article number when ordering.

## A. Annex

### A.1 Grounding with ground monitoring unit (active grounding)

In compliance with EC-Type Examination Certificate PTB18ATEX2005 (**TERRALIGHT**), PTB99ATEX2188X (TCO) and PTB00ATEX2174X (TCB), the clamps and cable rewinders may be used in the potentially explosive zone with the following intrinsically safe ground monitoring units:

- **TERRALIGHT** Typ TERRA-L/\_\_\_\_\_
- Terracompact II Type TCO030S and TCO030B
- Terrabox Type TCB030/\_\_\_\_
- or other ground monitoring systems with the following max. output values:

voltage:	$U_o \leq 35 \text{ V DC}$
current strength:	$I_o \leq 250 \text{ mA}$
power:	$P_o \leq 650 \text{ mW}$

The following Eltex clamps and cable rewinders have been specially tested for the potentially explosive zone and carry the EC-Type Examination Certificate DMT00ATEXE068X and BVS 20 ATEX E 017 X:

- Clamps Type TERRA-C/\_\_\_\_
- Clamps Type 70AG, 70AK, 70BG, 70HK
- Cable rewinders Type 601KR/AW, 601KR/DW, 601KR/KW

The maximum connectable total cable length to the grounding systems TUE30 resp. **TERRALIGHT** is 200 m.

Please note the information in the separate operating instructions for the Eltex ground monitoring devices **TERRALIGHT**, Terracompact II or Terrabox.

## A.2 Overview

Approval No.	Units	File name
BVS 20 ATEX E 017 X	Clamps Type TERRA-C/SO, TERRA-C/SL, TERRA-C/BO, TERRA-C/BL	TERRA-C-Clamps- ATEX_en.pdf
IECEX BVS 20.0012 X	Clamps Type TERRA-C/SO, TERRA-C/SL, TERRA-C/BO, TERRA-C/BL	IECEX_BVS_200012 _en.pdf

The current approval with all supplements can be found on our servicesite at <http://service.eltex.de>.



# EU-Declaration of Conformity


C-4014-en-2003



Eltex-Elektrostatik-Gesellschaft mbH  
Blauenstraße 67 - 69  
D-79576 Weil am Rhein

declares in its sole responsibility that the product

**Ground clamp TERRACLAMP type TERRA-C\*** (according to Eltex reference code)

Identification:  II 1G Ex ia IIC T4 Ga resp. II 1D Ex ia IIIC T135°C Da  
Certification-no.: BVS 20 ATEX E 017 X  
Notified body: DEKRA Testing and Certification GmbH, Dinnendahlstr. 9, 44809 Bochum, NB No. 0158

complies with the following directives and standards.

Relevant EU-Directive:

**2014/34/EU**

Directive: Equipment or Protective System intended for use in potentially explosive Atmospheres

Harmonized standards applied:

EN IEC 60079-0:2018

Explosive atmospheres – Equipment – General requirements

EN 60079-11:2012

Explosive atmospheres – Equipment protection by intrinsic safety “i”

Relevant EU-Directive:

**2011/65/EU**

RoHS Directive

in the version effective at the time of delivery.

Eltex-Elektrostatik-Gesellschaft mbH keep the following documents for inspection:

- proper operating instructions
- plans
- other technical documentation

Weil am Rhein, 03.03.2020  
Place/Date



Lukas Hahne, Managing Director

# Eltex offices and agencies

The addresses of all  
Eltex agencies can be  
found on our website at  
[www.eltex.de](http://www.eltex.de)



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Eltex-Elektrostatik-Gesellschaft mbH  
Blauenstraße 67-69  
79576 Weil am Rhein | Germany  
Phone +49 (0) 7621 7905-422  
eMail [info@eltex.de](mailto:info@eltex.de)  
Internet [www.eltex.de](http://www.eltex.de)