Operating Instructions

F01057y

TERRALIGHT

TERRA-L series Ground Monitoring Device

BA-en-4013-2503

ellex
electrostatic
innovations

List of contents

Dear customer,

The controlled grounding principle used in the **TERRA**LIGHT Ground Monitoring Device series TERRA-L ensures that static charges developing in potentially explosive atmospheres, e.g. during loading, discharging or refilling are safely avoided. This means that the risk of ignition caused by uncontrolled static discharges is eliminated at source. Because the ground connection is monitored, there is no need for low-resistance ground connections or large conductor cross-sections-

Static charges are caused by the contact and separation of material surfaces, e.g. when pumping liquid or powdery materials from one container to another. If no leakage device is available to lead these charges to ground, extremely high charge potentials may develop. Deflagrations or even explosions caused by sparking can result in substantial damage or personal injury.

Objects are considered to be adequately grounded if their ground leakage resistance is not greater than $10^5 \ldots 10^8\ \Omega$. The Eltex TERRA-L ground monitoring device guarantees a safe and reliable ground connection. Used in combination with the Eltex ground clamps and the cable rewinders the device provides the ultimate ground connection.

The TERRA-L components monitor the connection to the bonding conductor and the contact across the ground clamps.

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

Simply 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 of Appliance
TERRA-L Ground Monitoring Device

Ground contact makers and cables **Monitoring device**

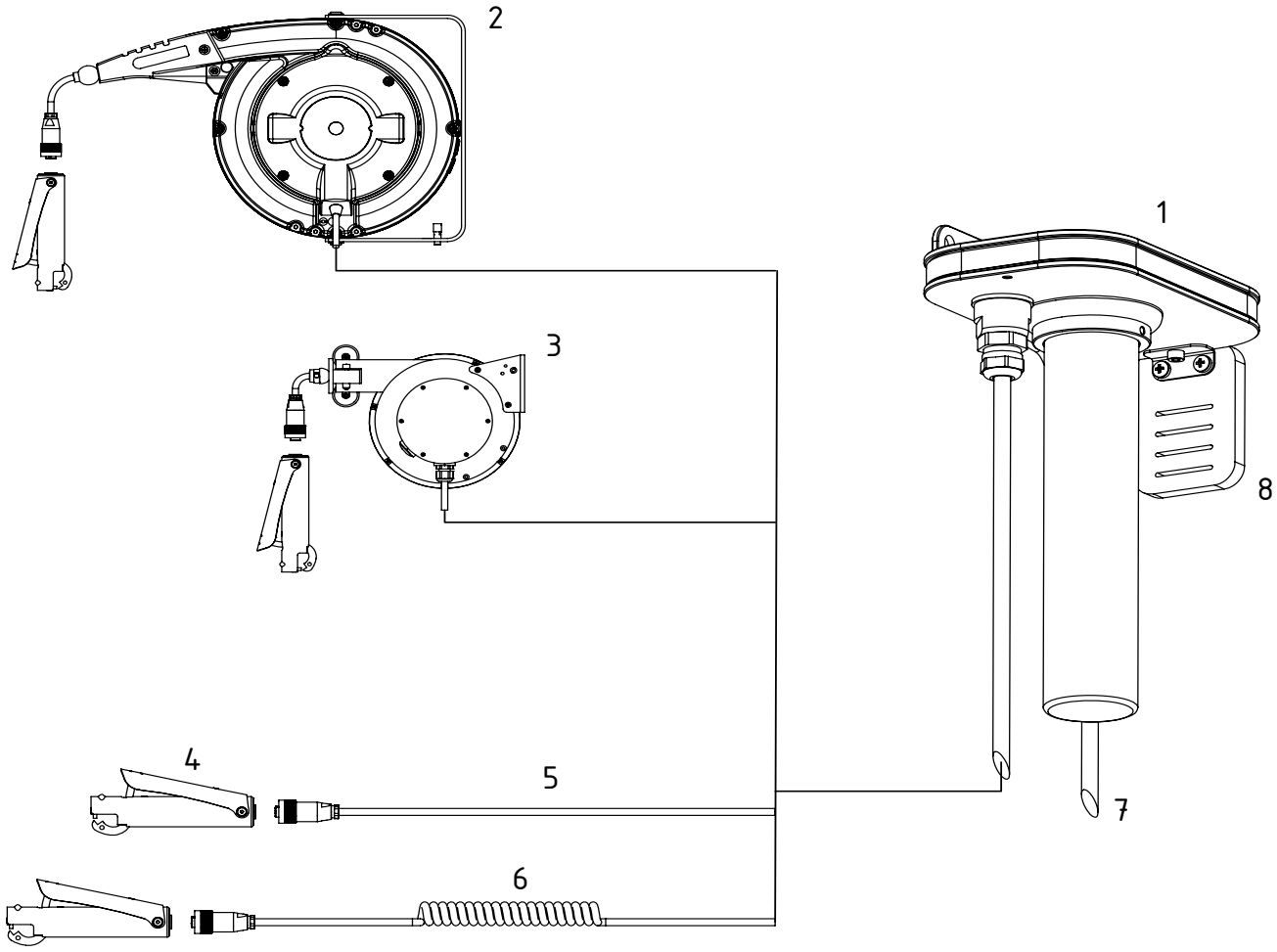


Fig. 1: Overview TERRA-L Ground Monitoring Device

1 TERRA-L
2 Cable rewinder, aluminum, 601KR/AW and 601KR/DW with ground clamp
3 Cable rewinder, plastic, 601KR/KW with ground clamp
4 Ground clamp
5 Ground cable KG/BNlb
6 Helix ground cable KG/BSLB
7 PAL connection cable KG/BNLX
8 Clamp holder (optional in 2 versions, available as an accessory

1.1 Components

TERRA-L
for installation in explosion hazard areas
operating voltage 3 x 1.5 V DC (batteries)
for connecting one ground contact maker

601KR/AW, 601KR/DW, 601KR/KW cable rewinder
see separate Operating Instructions BA-en-4007

Series 70 ground clamps
see separate Operating Instructions BA-en-4017

TERRA-C ground clamps
see separate Operating Instructions BA-en-4014

Ground cable KG
see separate Operating Instructions BA-en-4018

1.2 Variants

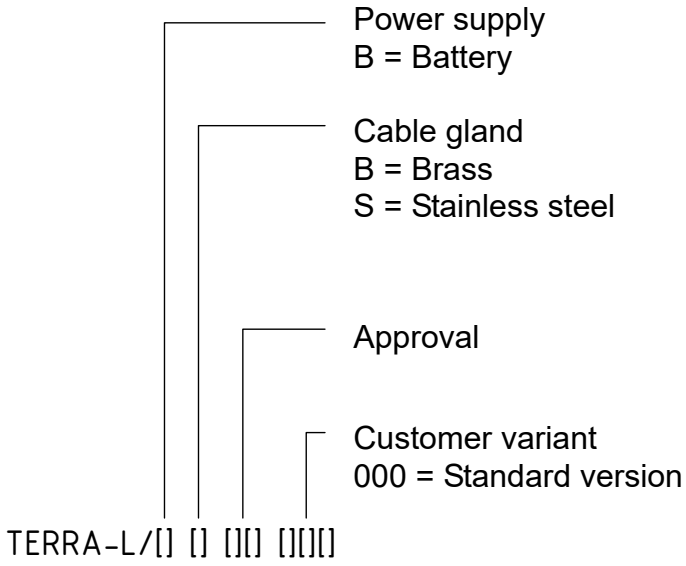


Fig. 2:
TERRA-L

10343X3w

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.

For warranty conditions, please refer to the General Terms and Conditions (GTC), see www.eltex.de.

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

The TERRA-L ground monitoring device must be operated only for the purpose of static ground connection.

The TERRA-L ground monitoring device are designed for operation with specific Eltex contact clamps of the series TERRA-C/xxx and cable rewinders 601KR/_. These contact clamps provide high degree of safety and the best possible ground connection in terms of static electricity.

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!electricians
Carefully observe the following notes and the complete Chapter 2 "Safety", page 7!

- The local standards, rules and regulations relating to the installation and operation of electrical appliances in potentially explosive atmospheres must be observed (e.g. EN 60079-14 and EN 60079-17 in the EU and ElexV in Germany).
- 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 TERRA-L", page 25).
- Observe the type plate with the connection data (supply voltage) of the devices (see Chapter 4 "Operation", page 21).

- Electrical devices used in explosion hazard areas must at all times be in a technically faultless condition. Any defects must be repaired or remedied immediately (see Chapter 4 "Operation", page 21).
- Any work involving the units must be carried out by qualified electricians (see Chapter 3 "Assembly and installation", page 11, Chapter 5 "Maintenance", page 23, Chapter 6 "Troubleshooting", page 24).
- The unit may only be used by qualified personnel trained for explosion hazard areas.

- 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 a potentially explosive atmosphere does not exist at this instant of time! (see Chapter 3.2 "Assembly", page 12, Chapter 5 "Maintenance", page 23, Chapter 6 "Troubleshooting", page 24).
- A permanent ground connection must be established via the ground terminal. The ground cable must have a minimum cross-section of 4 mm² (see Chapter 3.3 "Grounding", page 13).
- Intrinsically safe circuits must be routed separately from non-intrinsically safe circuits (separate cable conduits/ducts).
- Crossing intrinsically safe and non-intrinsically safe leads is not permitted (see Chapter 3.4.1 "Cable connection", page 14).
- When connecting the cables, pay attention to the correct length of the stripped section and the position within the connecting adapter (see Chapter 3.4.1 "Cable connection", page 14).
- Incorrect connector assignment may lead to an inadvertent release, especially in combination with the light plug (see Chapter 3.5 "Terminal assignments", page 19).

- The maximum cable length in the intrinsically safe circuit must not exceed the maximum permissible capacity and inductance (see Chapter 7 "Technical specifications TERRA-L", page 25).
- The ground monitoring device must always be connected to the equipotential bonding conductor (see Chapter 3.4.1 "Cable connection", page 14).
- If the ground cable is subjected to tensile stress in the application (e.g. if KG/BN_ (ground cable) or KG/BS_(helix ground cable) is used), the cable must be secured additionally with an external strain relief (e.g. a strap clip); see Chapter 3.4.1 "Cable connection", page 14.
- An equipotential bonding connection (PA) must be established along the entire intrinsically safe measuring circuit (see Chapter 4 "Operation", page 21).
- If all connections (supply voltage, ground clamps etc.) have been made correctly and the battery is inserted, the device is operational (see Chapter 4.1 "Start-up", page 21).
- Once the TERRA-L ground monitoring device has been assembled and installed, it must be tested for proper functioning (see Chapter 4.3 "Function control", page 22).
- Check the ground monitoring devices at regular intervals for proper function, in doing so check the operating points (see Chapter 5.1 "Ground monitoring devices", page 23).
- Cables and clamps must not be damaged. Damaged cables and clamps must be replaced with new parts (see Chapter 5 "Maintenance", page 23).
- To make sure that the proper ground connection exists with the equipotential bonding and that no malfunctions occur, the ground clamp must be cleaned when dirty (see Chapter 5.2 "Ground clamps", page 23).
- Perform regular checks to ensure that the cable and the insulation show no tears or abrasion that could impair the cable's insulation or functioning (see Chapter 5.3 "Cable rewinders", page 23).
- The optionally available balancers (article no. 116738 and 116740) can be used in gas groups IIA, IIB and IIC, zone 0 and zone 20.

2.5 Special conditions according to the declaration of conformity

- Only the following battery types (D cells) may be used to operate the TERRA-L device:
  - Duracell Plus Power MN1300
  - Procell Constant PC1300
  - Procell Intense PX1300

  (see Chapter 3.4.2 "Battery change (Fig. 6) / Battery disposal", page 16).
- The batteries may only be replaced if it can be ensured that a potentially explosive atmosphere does not exist at this instant of time (see Chapter 3.4.2 "Battery change (Fig. 6) / Battery disposal", page 16).
- Equipotential bonding (PA) shall be established along the entire cable run of the measuring circuit (see Chapter 4 "Operation", page 21).
- In areas where dust can form explosive atmospheres, only correspondingly certified and marke ("D") equipment may be connected to the measuring circuit.
- In areas where gas can form explosive atmospheres, simple electrical apparatus like clamps and cable rewinders may be connected to the measuring circuit. The simple apparatus must comply with the appropriate requirements of EN 60079-11, but must not be certified and marked.

3. Assembly and installation

Attention!
Once the TERRA-L ground monitoring device has been assembled and installed, it must be tested for proper functioning, see chapter 4.3.

3.1 View of appliance TERRA-L

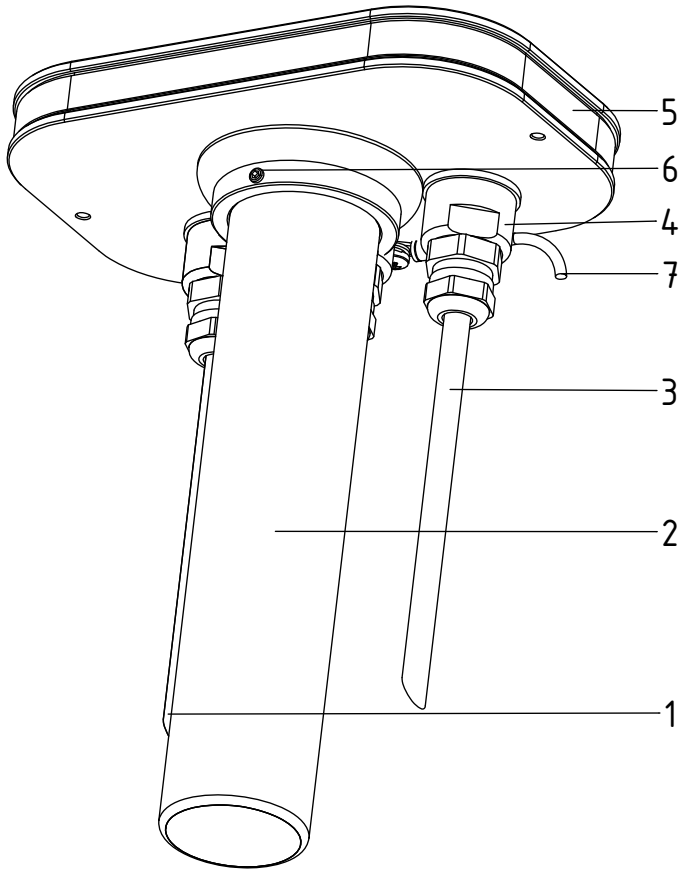


Fig. 3:
View of appliance TERRA-L

1 Connection of the ground contact maker / cable rewinder
2 Battery case
3 Connection PAL
4 Adapter with cable gland
5 Signal light (surrounding)
6 Locking screw against unintentional opening of the battery compartment
7 Ground connection

3.2 Assembly

When installing the device in explosion hazard areas, every precaution must be taken to ensure that a potentially explosive atmosphere does not exist at this instant of time!

The TERRA-L ground monitoring device is approved for assembly and installation in potentially explosive atmospheres. The device is designed for wall mounting and is attached with the mounting brackets.

The point of installation must be dry and the indicator lamp must remain in full view. Avoid direct exposure to sunlight.

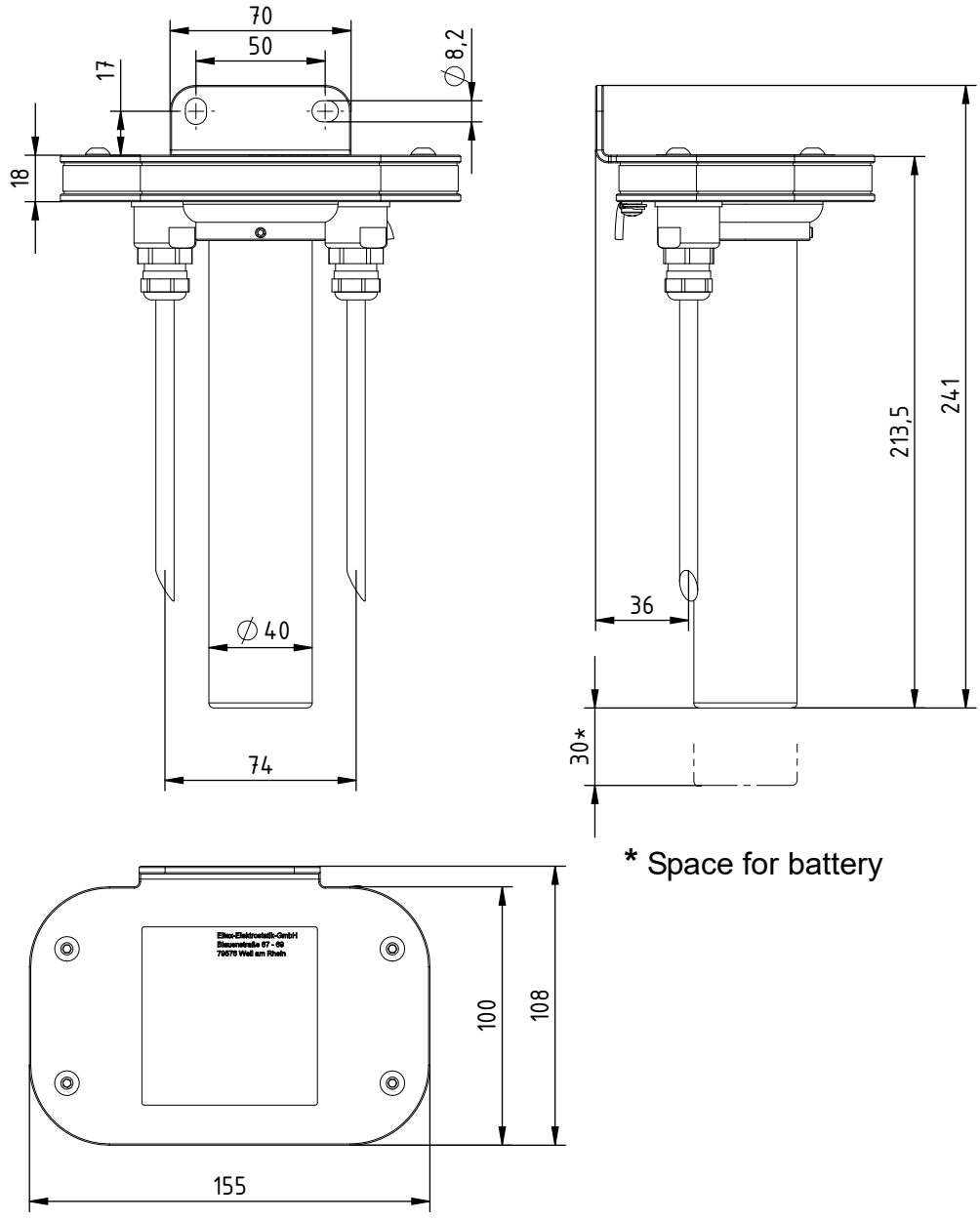
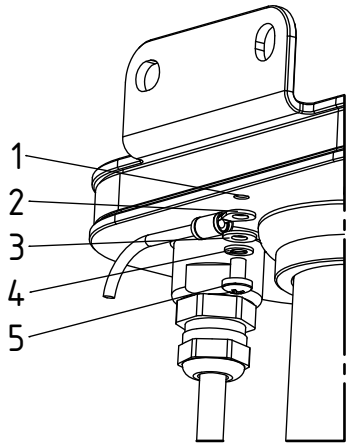


Fig. 4: Mounting Dimensions TERRA-L

3.3 Grounding

Attention!
A permanent ground connection must be established via the ground terminal (Fig. 5). The ground cable must have a minimum cross-section of 4 mm².



1 M4 thread in the housing
2 Ground lead with ring terminal
3 Washer
4 Spring
5 M4x6 screw

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Fig. 5: Grounding connection

3.4 Electrical connection

When installing the device in explosion hazard areas, every precaution must be taken to ensure that a potentially explosive atmosphere does not exist at this instant of time!

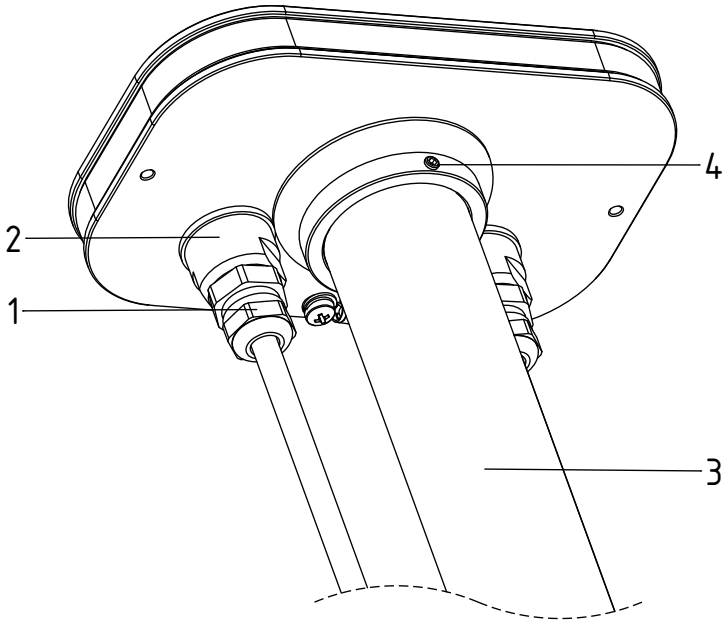

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Fig. 6: Mounting Dimensions TERRA-L

1. Cap nut
2. Adapter with cable gland
3. Battery compartment with thread and locking mechanism
4. Locking screw

3.4.1 Cable connection

Attention!
When connecting the cables, note the correct length of the stripped section and the position within the connecting adapter.

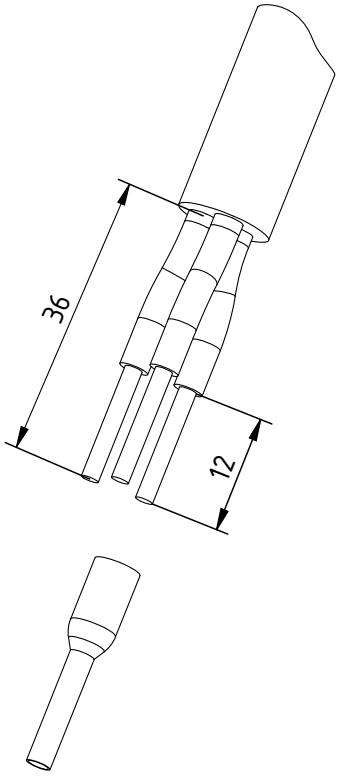

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Fig. 7:
Cable termination

The wires must be crimped with insulated ferrules (10 mm length). Ideally, a square crimping tool should be used.

The connecting terminals are suitable for a conductor cross-section of 0.2 mm² ... 1.5 mm².

The cable glands are designed for a circular cross-section and an external cable diameter of 7.5 ...9.5 mm.

- To connect the cable, first loosen the cap nut (1) at the gland, then unscrew the adapter with the cable gland (2), see Fig. 6.
- Connect the cable as shown in Fig. 8 / Fig. 10.
- Fasten the adapter with the cable gland (2), then tighten the cap nut (1) with a torque of approx. 5 Nm (applies to Eltex grounding cables with an external cable diameter of 8.6 mm). The gasket must not be damaged.
- When using other cables or other cable diameters, the tightening torques must be specified by the user. The cable gland and the cap nut must be tightened firmly.

- Tightening the connection thread or the union nut too loosely or too tightly can impair the type of protection, the tightness and the strain relief

Attention!
If the ground cable is subjected to tensile stress in the application (e.g. if KG/BN_ (ground cable) or KG/BS_(helix ground cable) is used), the cable must be secured additionally with an external strain relief (e.g. a strap clip).

A two-core cable for connecting the ground circuit with the PAL bonding lead is routed into the connecting terminal space via the cable inlet (5, 6 Fig. 8 / Fig. 10). The double routing ensures that any disruptions to the PAL bonding lead are identified.

Note:
The two PAL leads belong to the intrinsically safe circuit, see cable entry 5, 6 Fig. 8 / Fig. 10.
This is **NO** protective ground link, the leads must **NOT** be coloured green/yellow resp. yellow. The PAL connection can be made with a two-wire sheathed cable, with no wire colours prescribed, i.e., all colours apart from green/yellow resp. yellow are permitted.

The sheathed cable have to be made in light blue or marked accordingly.

Ex!

The maximum cable length in the intrinsically safe circuit must not exceed the maximum rated capacity and inductance (see Technical Specifications).

Ex!

The ground monitoring device must always be connected to an equipotential bond.

3.4.2 Battery change (Fig. 6) / Battery disposal

The batteries may only be replaced if it can be ensured that a potentially explosive atmosphere does not exist at this instant of time!

- Undo the locking screw (4), then unscrew the battery compartment (3) counter clockwise.
- Replace the batteries; note the correct battery type and polarity.
- Close the battery compartment (3) and re-fasten the locking screw (4). The screw is a protection against inadvertent opening of the battery compartment.

Only the battery types (D cells) specified in Chapter 2.5 "Special conditions according to the declaration of conformity”, page 10 may be used to operate the TERRA-L.

Attention!
If replacement batteries are not purchased from Eltex, Eltex recommends checking each delivery in accordance with IEC 60079-11:2023, chapter 9.14.2 in order to detect unannounced changes by the battery manufacturer. If the replacement batteries are purchased from Eltex (spare part "battery set" article 116901), this check is carried out by Eltex.

Exhausted batteries may be returned to us or must be disposed of properly.

3.4.3 **Connection** TERRA-L

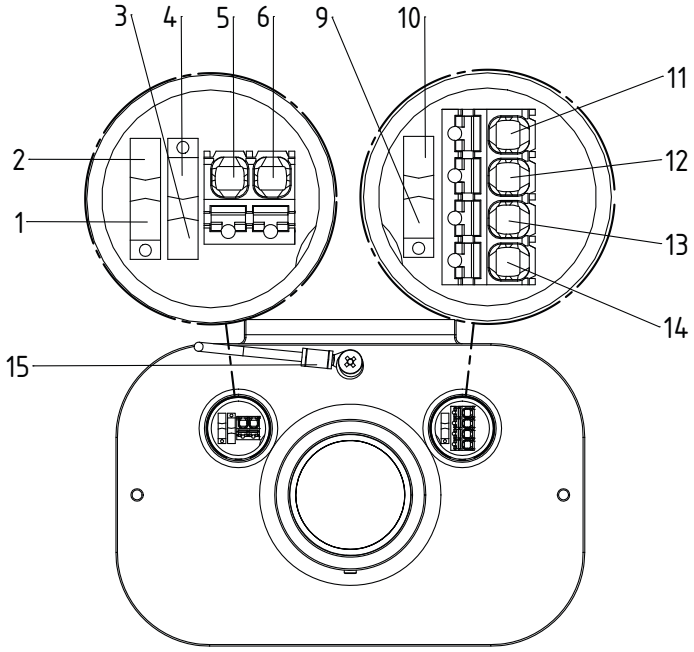

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Fig. 8: Connection TERRA-L

Position	**Function**	**Labeling electronic parts**
Sliding switch 1:		
1	Switch position: steady light	Flash OFF
2	Switch position: flashing	Flash ON
Sliding switch 2:		
3	Switch position: flashing 1 per 3 seconds	3 s
4	Switch position: flashing 1 per 1 second	1 s
5	Connection PAL	PAL
6	Connection PAL	PAL
Sliding switch 3:		
9	Switch position: additional 10 Ohm measurement deactivated	10 Ohm OFF
10	Switch position: additional 10 Ohm measurement activated	10 Ohm ON
11	Connection external LED	LED
12	Connection ground contact maker GND	GND
13	Connection ground contact maker 2	C2
14	Connection ground contact maker 1	C1
15	Ground connection	GND

3.4.4 Configuring the sliding switch

There are two sliding switches that offer 3 different setup options for the LED display and one sliding switch for activating / deactivating the 10-ohm measurement:

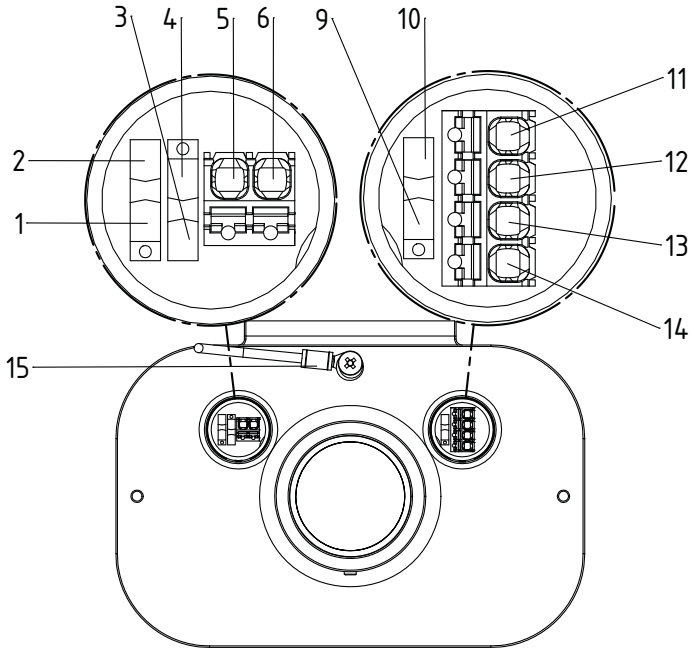

Fig. 9: Mounting Dimensions TERRA-L

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Sliding switch 1:

- Position 1: Steady light
  Sliding switch 2: Position 3, 4 without function
- Position 2: Flashing

Sliding switch 2

- Position 3: Flashing at 0.3 Hz frequency: 1 x / 3 seconds
- Position 4: Flashing at 1 Hz frequency: 1 x / second

Sliding switch 3:

- Position 9: Additional 10-ohm measurement deactivated
- Position 10: Measurement of leak resistances <10 ohms activated

3.5 Terminal assignments

Terminal assignment TERRA-L

Terminal	**Connection: PAL**
PAL PAL	Equipotential bond Equipotential bond
Terminal	**Connection: ground contact maker**
LED GND C2 C1	Connection for external LED display Ground contact maker: GND Ground contact maker: Contact 2 Ground contact maker: Contact 1
	Connection: battery
	3 x 1.5 V D cells

Connection to the cable rewinder

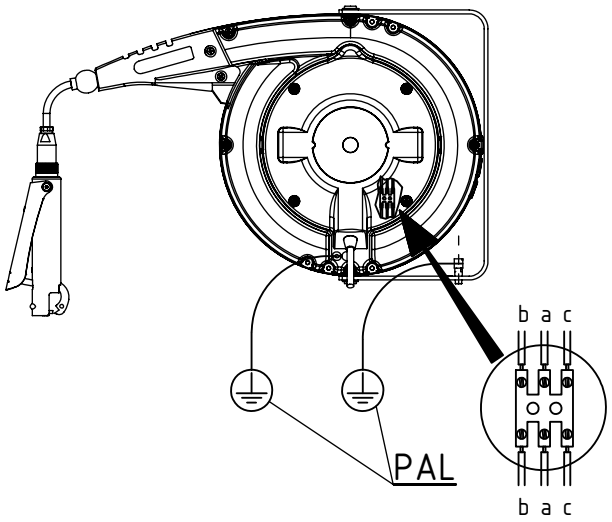

Fig. 10: Connection of the cable rewinder 601KR/_

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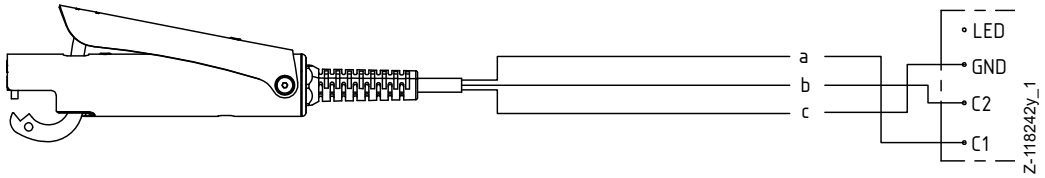
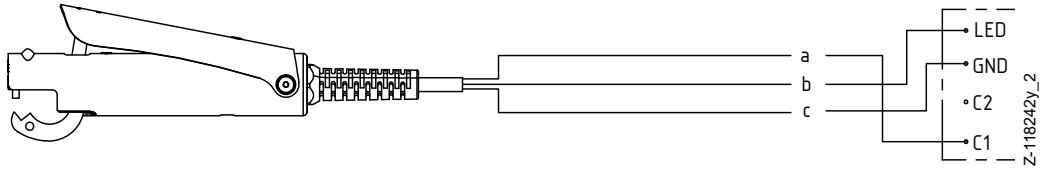
Connection examples of the ground contact makers

Fig. 11: Connection example of the ground contact makers TERRA-L



Wire color: a: blue b: brown c: green/yellow resp. yellow

Fig. 12: Connection example of the ground contact makers TERRA-L with integrated status LED



Wire color: a: blue b: brown c: green/yellow resp. yellow

Warning!
Incorrect pin assignment may lead to an inadvertent release, especially in combination with the ground contact makers with integrated status LED.

4. Operation

Caution!
Please note the type plate indicating the connection data (supply voltage) of the devices.

- An equipotential bonding connection (PA) must be established along the entire intrinsically safe measuring circuit.
- Electrical devices used in explosion hazard areas must at all times be in a technically faultless condition. Any defects must be repaired or remedied immediately.

4.1 Start-up

If all connections (supply voltage, ground clamps etc.) have been made correctly and the battery is inserted, the device is operational.

4.2 Function

If the ground contact maker has been connected properly and clamped to the container to be grounded and monitored, the intrinsically safe circuit is closed.
This status is indicated by the green steady light or green flashing of the lamp.

The diagram of the TERRA-L ground monitoring device is shown in Fig. 13.
Operating points see chapter 7 "Technical specifications TERRA-L".

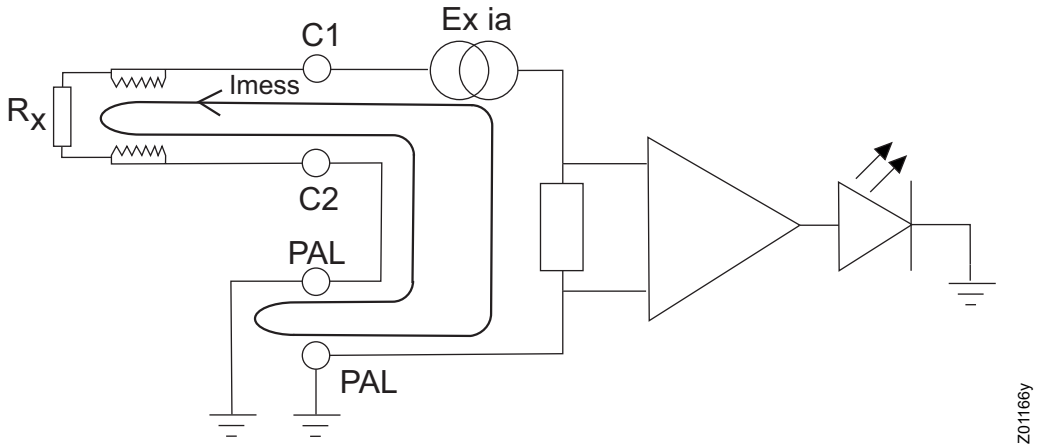


Fig. 13: Diagram of the TERRA-L ground monitoring device

For the operating points, the total resistance is relevant, consisting of Rx, plus the line resistance of the supply lines to the ground contact maker and the PAL lines.

Imess = intrinsically safe measuring circuit

4.3 Function control

If the 70AG and 70AK ground clamps are connected to a conductive, non-grounded object, the green operating light signals the enable state and the proper function.

4.4 Undervoltage warning

- If the battery voltage is low, the LEDs are yellow instead of green and the external LED is deactivated.
- The device will still function, but the batteries should be changed at the next opportunity.

4.5 Battery life

The life of the batteries depends primarily on the frequency of use, the configuration and the environmental conditions. The following table of average values shows the influence of the configuration on the expected battery life.

		groun-ding not detected	**grounding detected**		
			steady light	**1 s - interval**	**3 s - interval**
with external LED	10 Ohm ON	31900 h / 1329 days	235 h /	990 h	2920 h
	10 Ohm OFF		270 h	2180 h	4930 h
without external LED	10 Ohm ON		330 h	1130 h	3020 h
	10 Ohm OFF		400 h	2960 h	6000 h

The stated values apply to continuous operation. If the ground monitoring device is only temporarily active, the life of the batteries increases accordingly.

Example:
Configuration without external LED, 10-ohm measurement OFF, 1-second interval, average use of 8 h / day:

2960 h : 8 h / day = 370 days

For this reason, the “steady light” option is only recommended for applications in which the TERRA-L device is only used for a short time each day.

5. Maintenance

Before carrying out maintenance or service work in the explosion hazard area, make sure that a potentially explosive atmosphere does not exist at this instant of time.

Warning!
Maintenance and repair work must be carried out only by qualified electricians.

Cables and clamps must not be damaged. Damaged cables and clamps must be replaced with new parts.

5.1 Ground monitoring devices

Check the devices at regular intervals for proper function, in doing so check the operating points. The inspection intervals are specified in the accident prevention regulations, as amended (e.g. in Germany DGUV V3). No other maintenance work is required.

Checking the operating points

Determine the operating points (see chapter 7 "Technical specifications TERRA-L") by using a decimal resistor.

5.2 Ground clamps

To make sure that the proper ground connection exists with the equipotential bonding and that no malfunctions occur, 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.

5.3 Cable rewinders

Perform regular checks to ensure that the cable and the insulation show no tears or abrasion that could impair the cable's insulation or functioning. Clean the cable with a cloth soaked in warm water to remove dirt or incrustations and ensure perfect unwinding.

Defective devices must be sent in for repair.

6. Troubleshooting

Before carrying out maintenance or service work in the explosion hazard area, make sure that a potentially explosive atmosphere does not exist at this instant of time.

Warning!
Maintenance and repair work must be carried out only by qualified electricians.

Error/Symptom	**Remedy**
LEDs on the TERRA-L device lights up yellow.	Low battery voltage; the function is still given, a timely battery replacement is recommended.
Lighting LEDs on the TERRA-L device, although the ground clamp has not been clamped to a conductive object.	Dirt settled on ground clamp: Clean ground clamp with solvent (cleaning gasoline). Do not immerse the plug of the coupling in solvent.
Lighting LEDs on the TERRA-L device after attaching the clamp to a conductive and grounded object, although the connections to terminals C2 and/or PAL are disrupted.	No error! The unit identifies the ground connection of the object and enables.
No LED display, because the cable ripped from the plug or from the clamp.	Shorten cable and reconnect (see Electrical Connections)
Cable break on the cable rewinder.	Shorten cable and reconnect (see Electrical Connections).

7. Technical specifications TERRA-L

Supply voltage	supply via 3 x 1.5 V D cells yellow LEDs indicate a low battery voltage
Operating ambient temperature	-18…+50 °C (-0-4…+122 °F)
Storage temperature	-40…+80 °C (-40…+176 °F), without battery
Ambient humidity	max. 80 % r.h., non-dewing
Enclosure material	stainless steel with wall bracket
Protection class	IP65 according to EN 60529
Dimensions	240.5 x 155 x 108 mm (H x W x D), see Fig. 14
Weight	1.75 kg
Measurement circuit	intrinsically safe according to EN 60079-11 maximum voltage U_0: 5.2 V DC maximum current I_0: 0.22 A maximum output P_0: 0.27 W maximum permissible connected load (capacity / inductance): C_0 : 2.19 µF, L_0 : 1000 µH
Operating points	ON <20 kOhm, OFF >50 kOhm / ±20 %
Permitted battery types (D cells)	Duracell Plus Power MN1300 Procell Constant PC1300 Procell Intense PX1300
Approval / Marking	PTB 18 ATEX 2005 X ⟨Ex⟩ II 1G Ex ia IIC T4 Ga, II 1D Ex ia IIIC T135°C Da IECEx: PTB 24.0002X Ex ia IIC T4 Ga, Ex ia IIIC T135°C Da

as shown on appliance marking:

The maximum connectable total cable length to the TERRA-L ground monitoring device is 200 m.

Attention!
If replacement batteries are not purchased from Eltex, Eltex recommends checking each delivery in accordance with IEC 60079-11:2023, chapter 9.14.2 in order to detect unannounced changes by the battery manufacturer. If the replacement batteries are purchased from Eltex (spare part "battery set" article 116901), this check is carried out by Eltex.

8. Dimensions

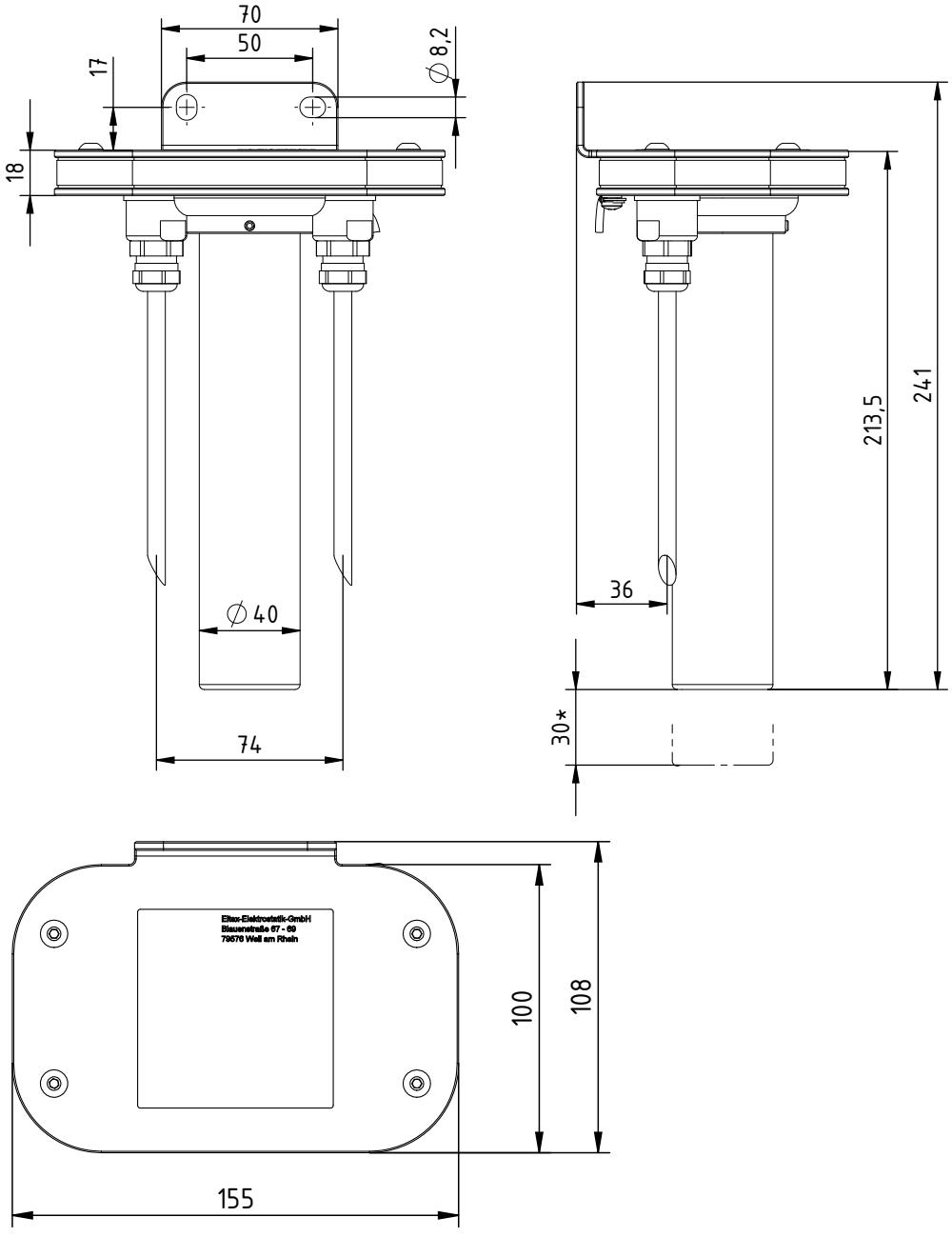
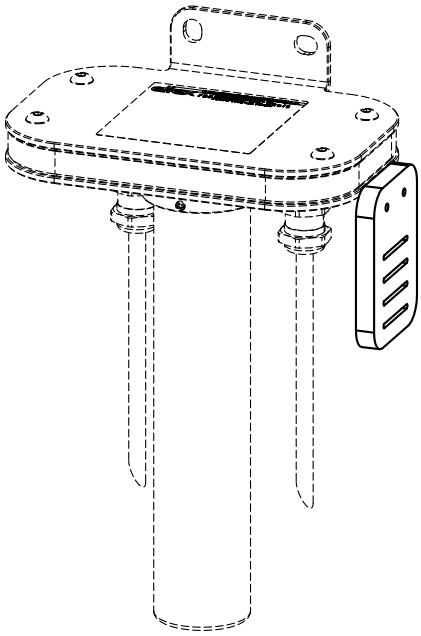


Fig. 14: Dimensions TERRA-L



Mounting is possible on the right or the left side of the TERRA-L

Abb. 15:
Clamp holder mounting on TERRA-L

Z-116742y_1

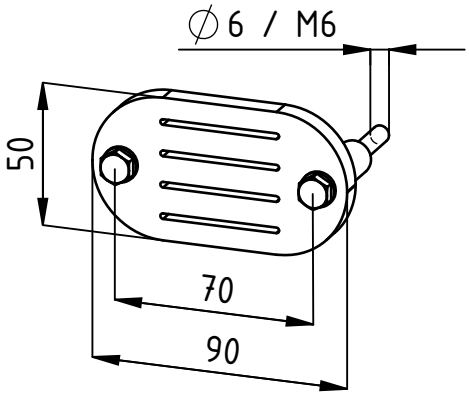


Fig. 16:
Clamp holder mounting on wall

Z-116742y_2

9. Accessories and spare parts

Article	Article-No.
Light plug	116189
Gground 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, for connection to TERRA-L: - 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) and cable end prefabricated: - stripped, braids are fitted with wire end sleeves - coupling connector - coupling socket	TERRA-C/SOS
Ground clamp with integrated LED status dispaly Cable clolor: 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, for connection to TERRA-L - 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) and cable end prefabricated: - stripped, braids are fitted with wire end sleeves - coupling connector - coupling socket	TERRA-C/SLS
Ground clamp, large with coupling plug IP67 and 300 mm ± 50mm lead length or without plug and lead length as specified (3, 6, 9, 12, 15 or 18 m) or without plug and helix lead length as specified (5 or 10 m	70AG
Ground clamp, small with coupling plug IP67 and 300 mm ± 50mm lead length or without plug and lead length as specified (3, 6, 9, 12, 15 or 18 m) or without plug and helix lead length as specified (5 or 10 m)	70AK
Cable rewinder, aluminum, 3.0 meters connecting cable, 20 meters ground cable with coupling socket IP67 for connecting ground clamps with plug	601KR/AW

Article	Article-No.
Cable rewinder, aluminum, 3.0 meters connecting cable, 12 meters ground cable with coupling socket IP67 for connecting ground clamps with plug	601KR/DW
Cable rewinder, plastic, 3.0 meters connecting cable, 9 meters ground cable with coupling socket IP67 for connecting ground clamps with plug	601KR/KW
Function testing device TERRA-TU	TERRA-TU
Helix ground cable, 3-pin with coupling IP67 for connecting ground clamps with coupling socket and wire end sleeve, extensible 1 to 5 m, cable color: light blue	KG/BSLB050
Helix ground cable, 3-pin with coupling IP67 for connecting ground clamps with coupling socket and wire end sleeve, extensible 2 to 10 m, cable color: light blue	KG/BSLB100
Ground cable, 3-pin with coupling IP67 for connecting ground clamps with coupling socket and wire end sleeve, 1 to 95 m in steps of 5 meters (specify cable length), cable color: light blue	KG/BNLB_ _ _
PAL connection cable, 3-pin, one-sided pre-assembled, for connection to TERRA-L with wire end sleeves, 1 to 95 m in steps of 5 meters (specify cable length), cable color: light blue	KG/BNLX_ _ _
3-pin ground cable (specify cable length)	LEI00009
Coupling socket, 4-pin, IP67 (side: cable rewinder)	ELM00714
Coupling plug, 4-pin, IP67 (side: clamp)	ELM00713
Cable gland (V2A) with adapter	116902
Cable gland (Ms nickel-plated) with adapter	116903
Battery set (3 pieces, 1.5 V D cells)	116901
Battery compartment with thread	116904
Clamp holder, mounting on TERRA-L	116738
Clamp holder, mounting on wall	116740
Operating Instructions (specify language)	BA-xx-4013

Please specify the article number when ordering.

10. Decommissioning

The following steps must be taken to dispose of the TERRA-L ground monitoring device:

Before disposing of the device, the battery integrated in the TERRA-L ground monitoring device must be removed and disposed of separately.

To do this, loosen the locking screw (4, Fig. 6), then unscrew the battery compartment (3, Fig. 6) anticlockwise.

After removing the battery, the TERRA-L ground monitoring device can be disposed of according to the methods of general waste disposal (electrical waste).

Exhausted batteries may be returned to us or must be disposed of properly.

EU-Declaration of Conformity

CE-4013-en-2411_TERRA-L

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

declares in its sole responsibility that the product

TERRALIGHT TERRA-L **Ground Monitoring Device** (according to Eltex reference code)

Identification:		II 1G Ex ia IIC T4 Ga and II 1D Ex ia IIIC T135°C Da
Certification-no.		PTB 18 ATEX 2005 X
Notified body	:	Physikalisch-Technsiche Bundesanstalt, Bundesallee 100, 38116 Braunschweig, NB No. 0102

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"
IEC 60079-11:2023	Explosive atmospheres – Equipment protection by intrinsic safety "i"

Relevant EU-Directive:

2014/35/EU	Low Voltage Directive

Harmonized standard applied:

EN 60204-1:2018	Safety of machinery – Electrical equipment of machines – General requirements

Relevant EU-Directive:

2014/30/EU	EMC Directive

Harmonized standards applied:

EN 55011:2016 + A1:2017 + A11:2020 + A2:2021	Industrial, scientific and medical equipment – Radio-frequency disturbance characteristics – Limits and methods of measurement
EN IEC 61000-6-2:2019	Electromagnetic compatibility (EMC) – Generic standards – Immunity for industrial environments

Relevant EU-Directives:

2011/65/EU	RoHS Directive
(EU) 2015/863	RoHS Delegated 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, 05.11.2024
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

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