

Truck Earthing Verification TES01-V2 (IP)(EX)

Instruction manual

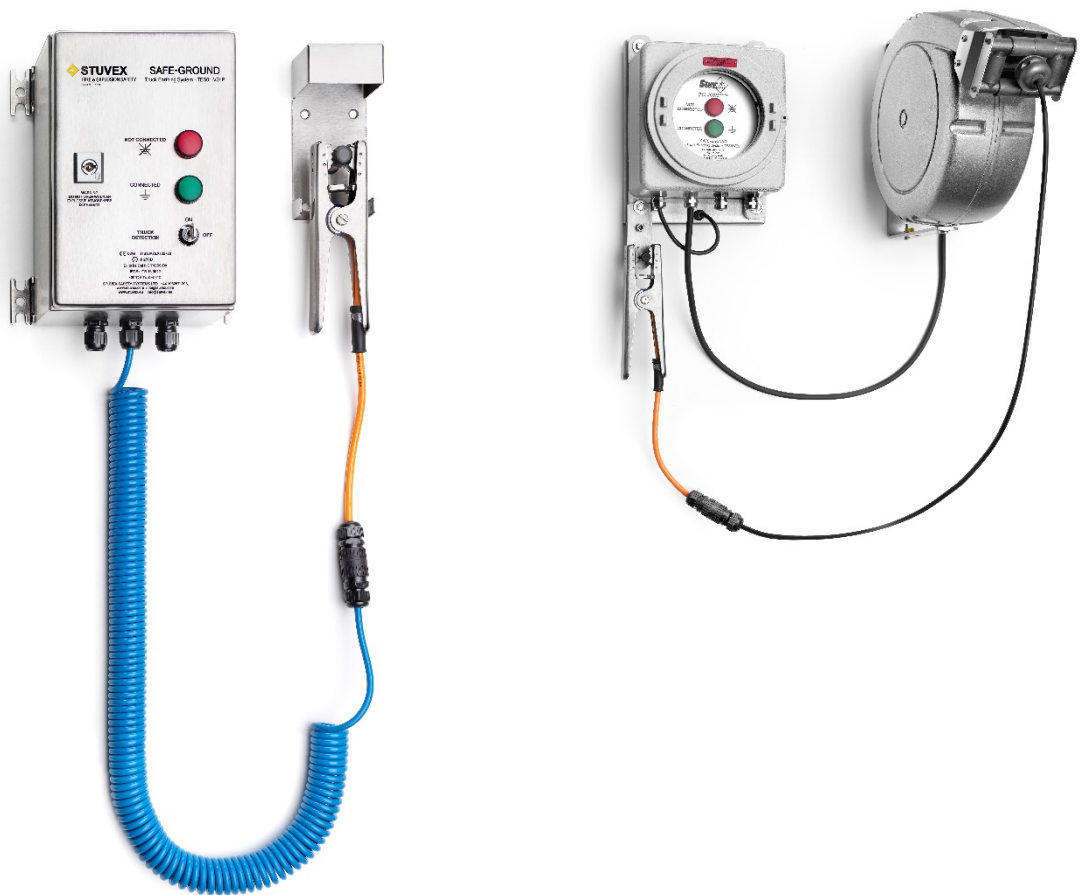


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Manufacturer

Stuvex International NV

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Revision

Version	Changes
MAN_TES (IP)(EX)_SI_17_10	Original version
MAN_TES (IP)(EX)_SI_17_21	Addition of electrical schemas
MAN_TES01-V2 (IP)(EX)_SI_19_10	Update number ATEX certificate for the grounding systems TES01 versions IP and EX; IECEx certificate number added for the IP and EX versions TES01 grounding systems. New wider ambient temperature range. Addition of electrical schemas.
MAN_TES01-V2 (IP)(EX)_SI_19_20	Added data concerning TES01-V2 module; adjustment of wiring instructions, removal of detail errors
MAN_TES01-V2 (IP)(EX)_SI_19_21	Items added in parts and ordering information
MAN_TES01-V2 (IP)(EX)_SI_19_21	Added data concerning TES01-V2 module; adjustment of wiring instructions
MAN_TES01-V2 (IP)(EX)_SI_19_22	Change concerning the earthing of the local network

Safety instructions

This instruction manual

Always keep these instructions within reach. Carefully check that no pages are missing from these instructions. If this is the case, please contact Stuvex, or an authorised representative.

General

These instructions must be read thoroughly and understood before proceeding with the installation and use of the devices described in them. If a component is not installed or handled in accordance with these instructions, Stuvex can on no account be held liable for any consequences. In addition to these instructions, legal and other (local) regulations concerning safety at work and company regulations regarding the production environment are also applicable. This applies in particular to an explosion hazard.

Intended use

Intended use means following up the manufacturer's instructions regarding the installation and conditions for putting into service, usage and maintenance as mentioned in the sections 'General description' and 'Technical data' of these instructions. Any use that is not in agreement with this is considered to be improper use. The manufacturer cannot be held liable for any consequential losses or damages. This risk is entirely for the user.

Safety of the process

The incorporation, maintenance and replacement of components may only be executed if the process installation that is protected by the device as described in these instructions is standing still or made safe.

Safe installation, putting into operation and maintenance

The TES01-V2/IP or TES01-V2/EX are earthing systems which can be used in potentially explosive atmospheres. Installation must be carried out in accordance with local legislation and with due observance of these instructions. Solve any occurring faults immediately. Should you be unable to solve a fault yourself, obtain information from Stuvex or the nearest Stuvex distributor.

Do not make any modifications, additions or reconstructions to the TES01-V2/IP or the TES01-V2/EX that could affect safety without consulting the manufacturer. Only use original spare parts.

WARNING

ALL TYPES OF COVER AND GUARANTEES WILL BE VOID IF THE DEVICE IS PUT INTO SERVICE, MODIFIED, REPAIRED OR MAINTAINED IN ANY WAY WHATSOEVER BY UNTRAINED OR UNAUTHORISED PERSONS.

Regulations

Locally applicable regulations must be observed for all activities. Observe safety and warning symbols on the devices. Always make sure that all warning symbols on the devices are and remain fully legible.

Explosion safety

See also the ATEX information mentioned below in these instructions.

Dispose of as waste

The electronic components (conducting plates, power units, transformers, coils, cables, plugs) in the device may contain harmful substances. When dismantling and disposing of the device, the applicable existing local stipulations must be observed. Refer to an authorised waste disposal company.

General description

Intended use

Loading and unloading flammable liquids or powders from trucks can generate electrostatic charges. If enough energy is generated, a spark discharge may cause an explosion. This risk is avoided by earthing all conductive components, including the truck. A modern earthing system provides at least:

- A verification of the sound connection of the earth clamp with the truck's earthing points
- Recognition of the presence of a truck on the clamps
- A safe discharge of the truck
- A proper earth connection
- One or more release contacts for the loading or unloading process
- A status indication

The TES01-V2/IP or TES01-V2/EX earthing devices are intended to enable the safe and controlled earthing of trucks of normal dimensions (allowed mass 12 tons or more) so that safe loading and unloading can be carried out. These devices can form a part of a preventive system or a process installation.

The TES01-V2/EX variant belongs to device group II category 2GD and can be used in explosive atmosphere zones 1 or 2 or in zones 21 or 22. The TES01-V2/IP variant belongs to device group II category 2D and can be used in zones 21 or 22. Apart from this, both versions have the same functions.

Working principle of the TES01-V2/IP and TES01-V2/EX earthing systems

The TES01-V2/IP or TES01-V2/EX earthing device combines all the characteristics summarised above. It verifies the low resistance between the earth clamp jaws. If the device also detects the presence of a truck, by means of a capacitance measurement, the release contact will be activated and a green indicator will light up. The truck will now discharge safely and in a controlled way. The connection is permanently checked while loading or unloading. If the connection is interrupted, a red indicator will light up. If the TES01-V2/IP and TES01-V2/EX device is connected via an interlock relay, loading or unloading will automatically be interrupted. The cycle can be restarted by disconnecting and then reconnecting the earth clamp.

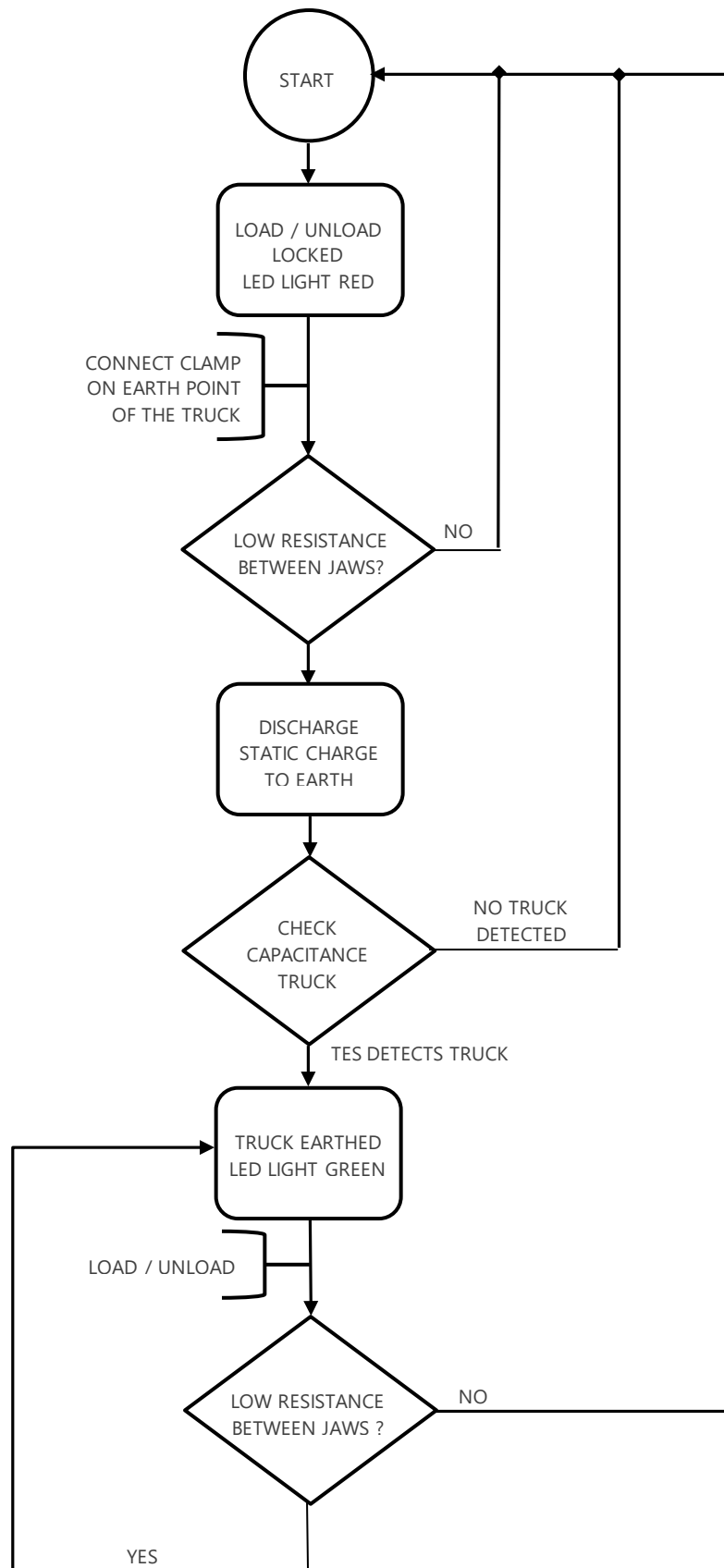
General characteristics of the TES01-V2

The following general characteristics are part of any TES01-V2:

- Resistance measurement at the location of the earth clamp
- Safe discharge of electrostatic charges that have accumulated on the truck
- Check of the truck's electrical stability
- Bypass option for the capacitance verification (optional with the TES01-V2/EX variant)
- Potential-free contact for the release of loading and unloading functions
- Indicator lights (red and green) for local status indication
- Power supply 100-240 V AC or 24 V DC as standard
- Certified for use in ATEX environments

Logical operating diagram

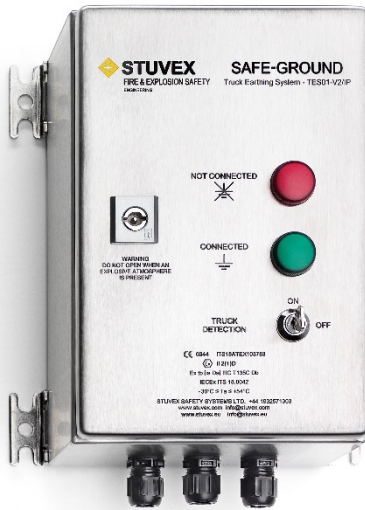
See the diagram below.



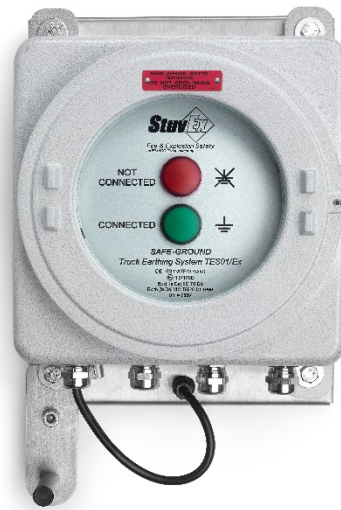
Technical data

General technical data

Safety Integrity Level SIL 2 in accordance with the Technical Reliability Study T533. Measurement and earth circuits are intrinsically Ex i safe and suitable for use in zone 0 or zone 20. Equipment in accordance with IEC 60079-31-1 and NFPA77.



TES01-V2/IP control unit



TES01-V2/EX control unit

Technical data for the TES01-V2/IP

IECEX and ATEX relevant data

Zones	Zone 21 and zone 22 (dust) and no-risk environments
Certificate IECEX	ITS 18.0042
Markings IECEX	Ex db [ia Da] IIIC T135°C Db IP66
Certificate ATEX	ITS18ATEX103783
Markings ATEX	II 2 (1)D Ex tb [ia Da] IIIC T135°C Db, -30° ≤Ta ≤ +54°C
SIL Class	SIL 2

Other data

Material	Stainless steel AISI 304
Dimensions (H, W, D)	300 x 200 x 155 mm
Mass	5 kg
Connections	3 inputs for M20 gland connections 5-10 mm
Cable glands	Ex t with clamp range 5-10 mm
External earthing bolt	M8, length 17 mm
Protection class	IP 66
Power supply	100-240 V AC +10%/-15% 50/60 Hz or 24 V DC, see also the installation conditions
Consumption	20 W
Operating temperature	-30°C to +54°C
Storage temperature	-30°C to +60°C
Humidity	95% at 20°C non-condensing
Status signals	Red (unearthed truck or fault) or green (correctly earthed truck)
Remote notification	1 potential-free NO contact 1 A 240 V AC/ 30 V DC 1 change-over contact 6 A 240 V AC/ 30 V DC
Bypass	Via front panel key switch

Technical data for the TES01-V2/EX

IECEX and ATEX relevant data

Zones	Zone 21 and zone 22 (dust), zone 1 and zone 2 (gas) and no-risk environments
Certificate IECEX	ITS 18.0043
Markings IECEX	Ex db [ia Ga] IIC T6 Gb Ex tb [ia Da] IIIC T85°C Db
Certificate ATEX	ITS18ATEX103784
Markings ATEX	II 2(1) GD Ex db [ia Ga] IIC T6 Gb Ex tb [ia Da] IIIC T85°C Db -30° ≤ Ta ≤ +54°C
SIL Class	SIL 2

Other data

Material	Aluminium housing (copper-free)
Finish	Painted RAL 7035
Dimensions (H, W, D)	265 x 230 x 150 mm
Mass	10 kg
Connections	4 inputs M20
Cable glands	Ex d IIC
External earthing bolt	M6 length 10 mm
Protection class	IP 66
Power supply	100-240 V AC 50/60 Hz or 24 V DC, see also the installation conditions
Consumption	20 W
Operating temperature	-30°C to + 54°C
Storage temperature	-30°C to + 60°C
Humidity	95% at 20°C non-condensing
Status signals	Red (unearthed truck or fault) or green (correctly earthed)
Remote notification	1 potential-free NO contact 1 A 240 V AC/ 30 V DC
Bypass	Optional via key switch

Technical data TES01-V2 module (built-in)**IECEX and ATEX-relevante gegevens**

Zones	Passive Ex i component for zones 21 en 22, zones 1 en 2
Certificate IECEX	ITS 18.0035X
Marking IECEX	[Ex ia Ga IIC] [Ex ia Da IIIC] -40°C ≤ Ts ≤ +60°C
Certificat ATEX	ITS18ATEX203659X
Marking ATEX	II (1) GD [Ex ia Ga IIC] [Ex ia Da IIIC] -40°C ≤ Ts ≤ +60°C

Other data

Material	ABS, DIN rail montage
Dimensions	45 x 92,5 x 126,5 mm
Protection class	n.v.t.
Mass	250 g
Standard factory settings rotary switch	A, other settings for special applications and only after consultation with StuvEx
Power supply	24 V DC +20%/-20%, 300 mA max
Operating temperature	-40°C tot +60°C
Storage temperature	-40°C tot +60°C
Humidity	95% bij 20°C niet condenserend

Technical data of the accessories: earth clamps CL1, CM1, CS1 (optional)

ATEX- relevant data (applicable for all types of earth clamps)

Zones	Passive Ex accessories for Ex zones 0 or 20
Certificate	ISSeP 04ATEX084X
Markings	II 1GD Ex ia IIC, IIIC



Earth clamp CL1

Material	Aluminium
Size	260 mm
Clamp jaw opening	3 to 15 mm
Accessories	Male connector assembled
Use	Industrial environment



Earth clamp CM1

Material	SS 304
Size	210 mm
Clamp jaw opening	3 to 35 mm
Accessories	Male connector assembled
Use	Industrial environment



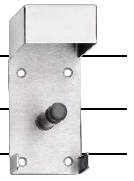
Earth clamp CS1

Material	SS 304
Size	162 mm
Clamp jaw opening	3 to 35 mm
Accessories	Male connector assembled
Use	Industrial environment

Technical data of the accessories: storage hook for earth clamp, with or without shelter (option)

Storage hook with shelter

Material	SS 304, clamp support, plastic
Weight	0.200 kg



Storage hook without shelter

Material	SS 304, clamp support, plastic
Weight	0.200 kg



Technical data of the accessories: spiral cable SP 1/10 (option)

Spiral cable SP 1/10

Material	TPE-E with sheath in UV resistant and fire retardant plastic RAL 5015
Cable	Ø 8 mm, 3 × 0.75 mm ²
Length	Up to 10 m when not retracted; approx. 1 m when retracted
Accessories	F connector, assembled

Technical data of the accessories: cable without reel (option)

Cable without reel

Material	Silicone sheath, UV resistant and fire retardant, black
Cable	H07RN-F, 3G1.5 Ø 9.5 mm
Length	10 m
Accessories	F connector, assembled

Technical data of the accessories: cable reel CR 1/65 (option)

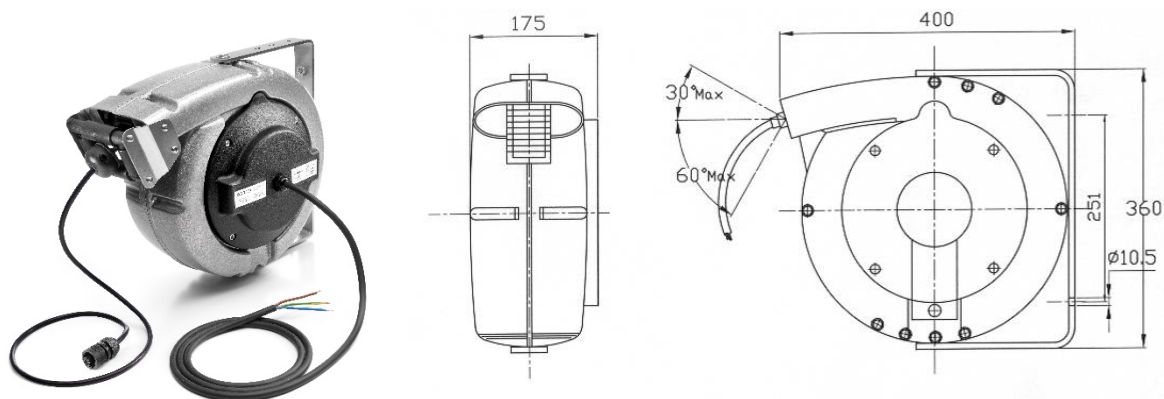
Rotatable cable reel with automatic retractor in shock and weatherproof housing.

ATEX relevant data

Zones	Passive Ex i component for zones 21 and 22, zones 1 and 2
Certificate	ISSeP 04ATEX084X
Markings	II 2GD Ex ia IIC, IIIC

Other data

Material	Aluminium housing
Cable	H05RN-F 2 × 1,5 + 1,5 mm ² , connection via 1,7 m 3G2.5 cable, Ø 8.5 mm, 15 m
Protection class	IP 65
Mass	12 kg
Accessories	F connector, assembled



Technical data of the accessories: key switch for bypass (option only for TES01-V2/EX)

ATEX relevant data

Zones	EX zones 1 and 2 (gas) 21 and 22 (dust)
Certificate	PTB01ATEX1105
Markings	II 2G Ex de IIC T6 Gb, II 2D Ex tb IIIC T80°C Db IP 66



Other data

Material	Fibreglass-reinforced polyester
Dimensions	80 × 93 × 72 mm ³
Cable gland	1 × M25 cable gland, clamp range 7-17 mm
Contacts	1 NO, 1 NG
Mass	0.450 kg

Assembly

Unpacking

Using the carrier's delivery note, check that all the listed items have been delivered. Unpack the device in a clean environment. If possible, keep the packaging material for future reference. Check the device carefully for signs of damage. All important components have a serial number. If any deviations are found, inform Stuvex or an authorised Stuvex distributor. If the devices are to be stored prior to installation, ensure that the correct storage conditions are provided. If any articles are missing or damaged, notify either the carrier, Stuvex or the authorised Stuvex distributor. Deviations must be reported immediately on receipt.

Contents of the TES01-V2/IP packaging

Article number	Description
502-4010-006	TES01-V2/IP control unit with plastic key mounted onto the housing
	2 x metal bypass key
	3 x M20 cable glands with assembly nut
	1 x gland plug
	1 x mounting brackets
	1 x information panel with connection procedure
	1 x instruction manual

Contents of the TES01-V2/EX packaging

Article number	Description
501-4010-006	TES01-V2/EX control unit
	2 x M20 blind plugs
	1 x information panel with connection procedure
	1 x instruction manual

Control unit assembly

Assembly, putting into service and execution of maintenance must be carried out by trained and authorised personnel with knowledge of the regulations regarding electrical systems and explosion-safe equipment. If the assembly, putting into service or maintenance is executed by personnel other than Stuvex personnel, only a limited guarantee can be granted on the device and the accessories. Mount the device onto a vertical column or wall, with the cable glands pointing downwards. Make sure that the device, the clamp and the connectors are sufficiently protected from rain and direct sunlight to prevent sudden temperature fluctuations and condensation.

Cable reel

Suspend the reel on a wall so that the clamp hangs freely and remains easily accessible for the operator. The reel is fitted with a fixing hook, which allows the reel to rotate in the direction that the cable is pulled. Install the reel so that the cable can be pulled in and out without damage.

WARNING

THE METAL BRACKET ON THE CABLE REEL MUST BE EARTHED BY CONNECTING A 6 MM² CABLE TO THE PRE-ASSEMBLED EYE NUT

Cable reel locking mechanism

The reel is equipped with a lock, which prevents the cable from retracting while it is in use. This lock is activated as standard. It can be deactivated by changing the position of a spring as indicated on the photos. To do this, a plate on the side of the reel must be opened using a screwdriver (photo 1). Before closing the reel again, test that the locking mechanism works adequately after moving the spring.

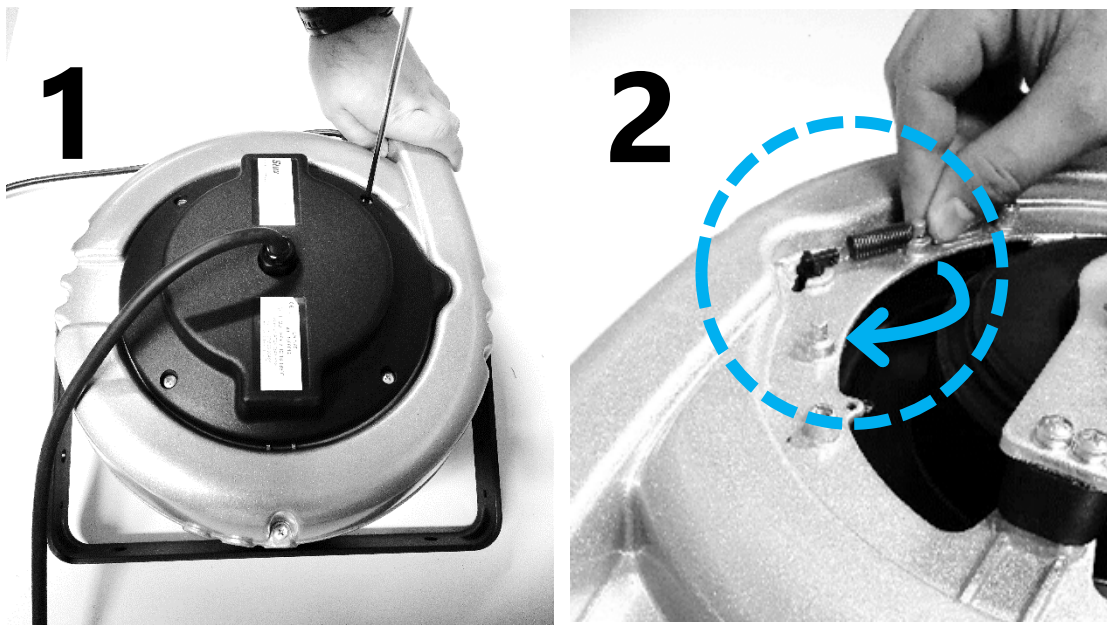


Fig. 2 The spring in the position 'lock (cable brake) activated' as standard. To deactivate the lock, the spring must be attached to the other anchor point as indicated by the arrow.

Electrical installation

Earthing the control unit

The device's metal housing is fitted with an internal earth clamp to which the power cable's earth wire is connected. The housing is also fitted with an external earthing point. Connect this earthing point to the local equipotential network or factory grounding using an earthing cable of at least 6 mm² and no more than 16 mm². If such a network is unavailable, provide a local earthing point with an earth resistance of preferably less than 30 Ohm.

Earthing the cable reel bracket

If the TES01-V2 device is used in combination with a cable reel, the metal bracket must be earthed. For this purpose, the bracket has an eye nut for connecting the earthing wire. Connect this earthing point with an earthing cable of at least 6 mm².

Power supply for the control units

Use cables of type 3G 1.5 mm² (min. 0.75 mm² and max. 2.5 mm²) of a type in accordance with local installation specifications. Appropriated ATEX certified cable glands must be used if the system is installed in an ATEX zone.

Wiring instructions for a 24 V DC power supply

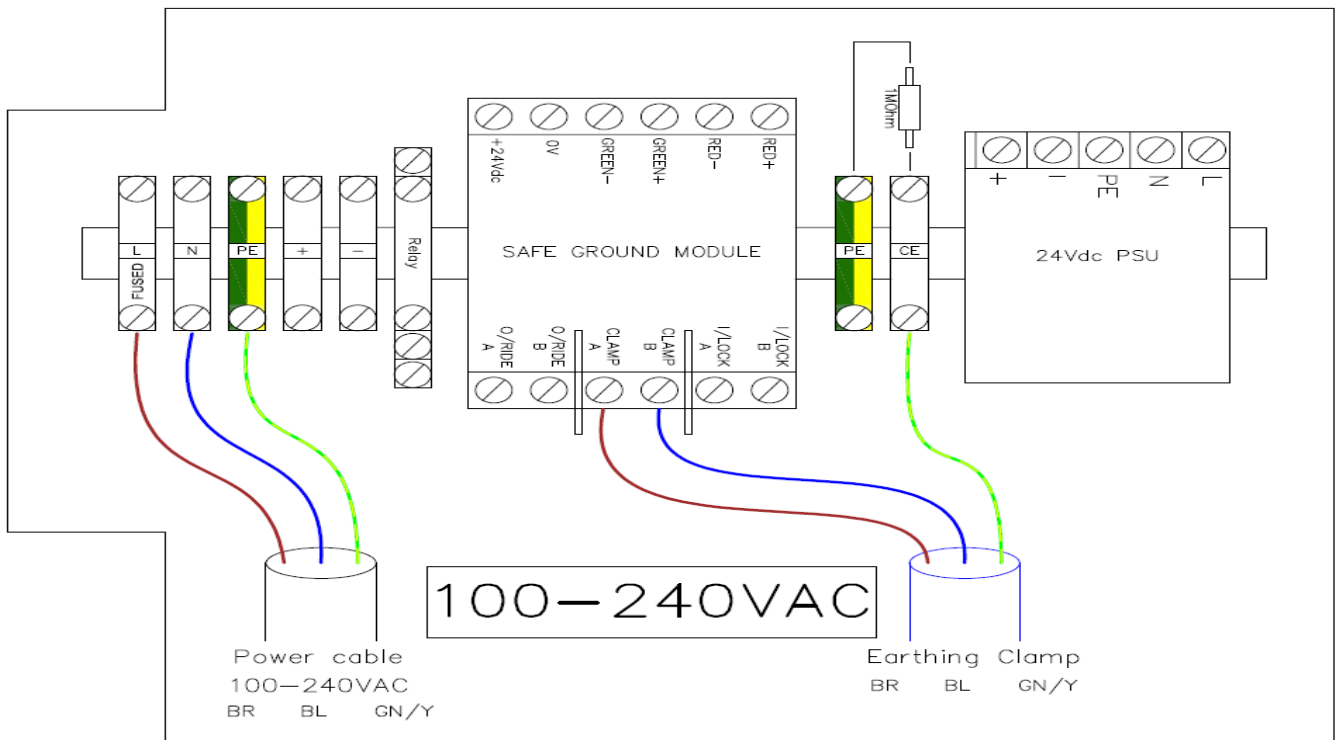
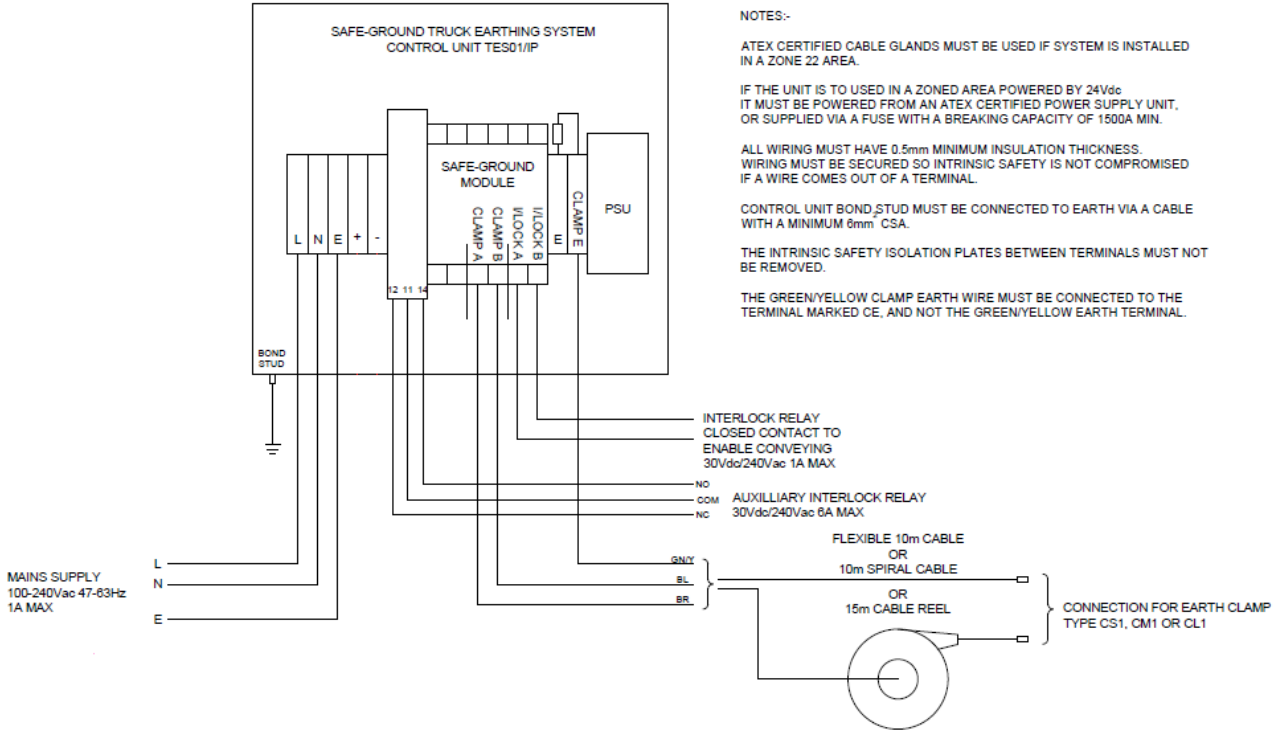
If an external 24 V DC power supply is opted for, it must comply with the following requirements. Note that the negative pole of the 24 V power supply must be connected to earth in the TES01-V2 device.

- 24 V DC +/-20%
- 7.2 W
- Executed in SELV (Safety Extra Low Voltage) ATEX compliant power supply
- To be protected with a 1 A melt-fuse with interrupting capacity (IC) of 1.5 kA
- The cable insulation must be at least 0.5 mm thick

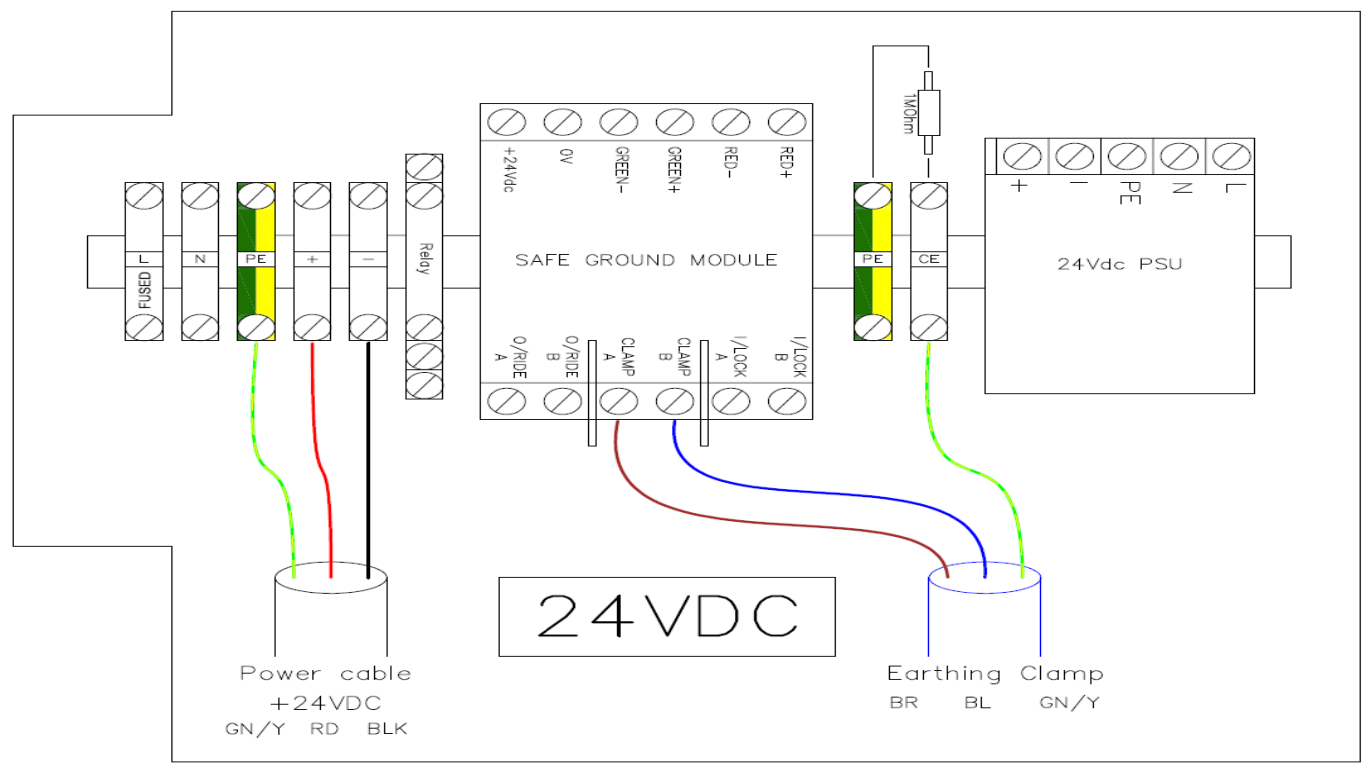
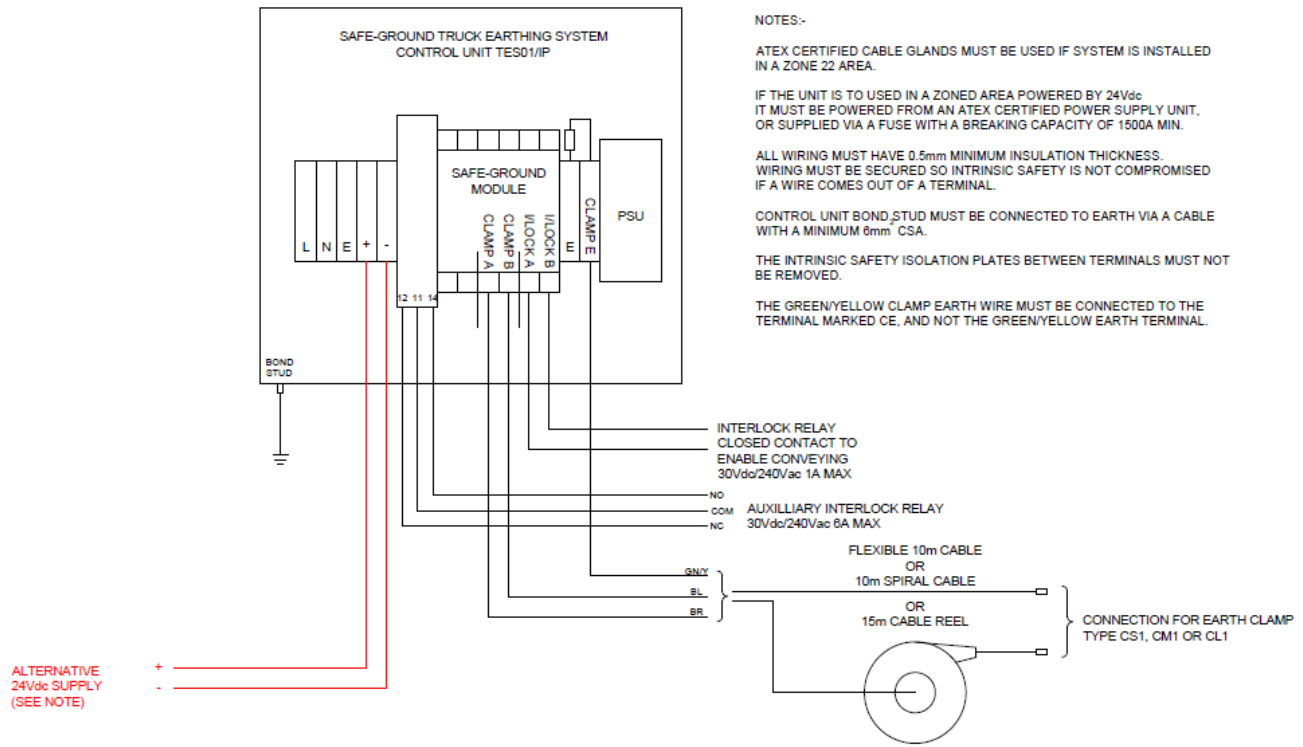
TES01-V2/IP wiring instructions

TES01-V2/IP clamps	Connect to
L, N, E	L, N, E of mains supply 100/240 V AC, 47/63 Hz, 1 A Max
+, -	Alternative 24 V DC supply, attention read the instructions on previous page
12	NC auxiliary interlock relay 30 V DC, 240 V AC, 6 A Max
11	COM auxiliary interlock relay 30 V DC, 240 V AC, 6 A Max
14	NO auxiliary interlock relay 30 V DC, 240 V AC, 6 A Max
Clamp A	BROWN cable (flexible, spiral, cable reel)
Clamp B	BLUE cable (flexible, spiral, cable reel)
I/LOCK A, I/LOCK B	Interlock relay closed contact 30 V DC, 240 V AC, 1 A Max
E	DO NOT USE, DO NOT CONNECT
CE	GREEN/YELLOW cable (flexible, spiral, cable reel)

TES01-V2/IP 100-240 VAC wiring instructions



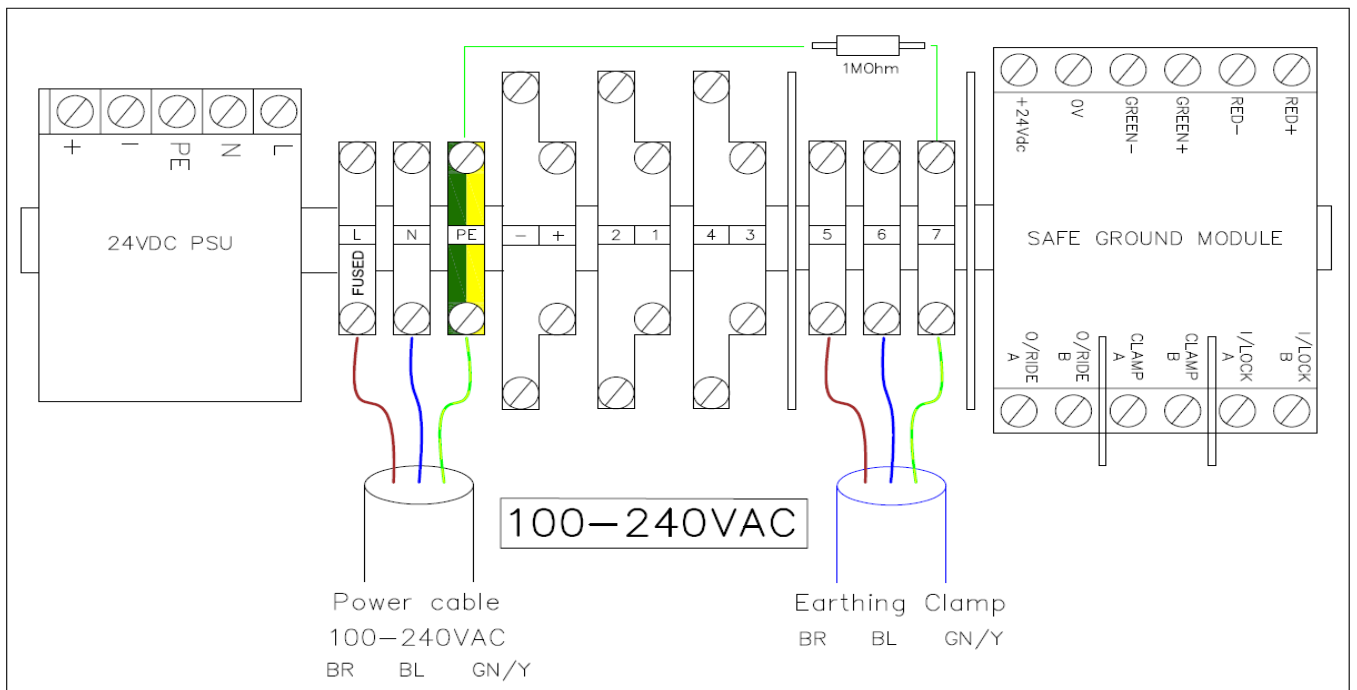
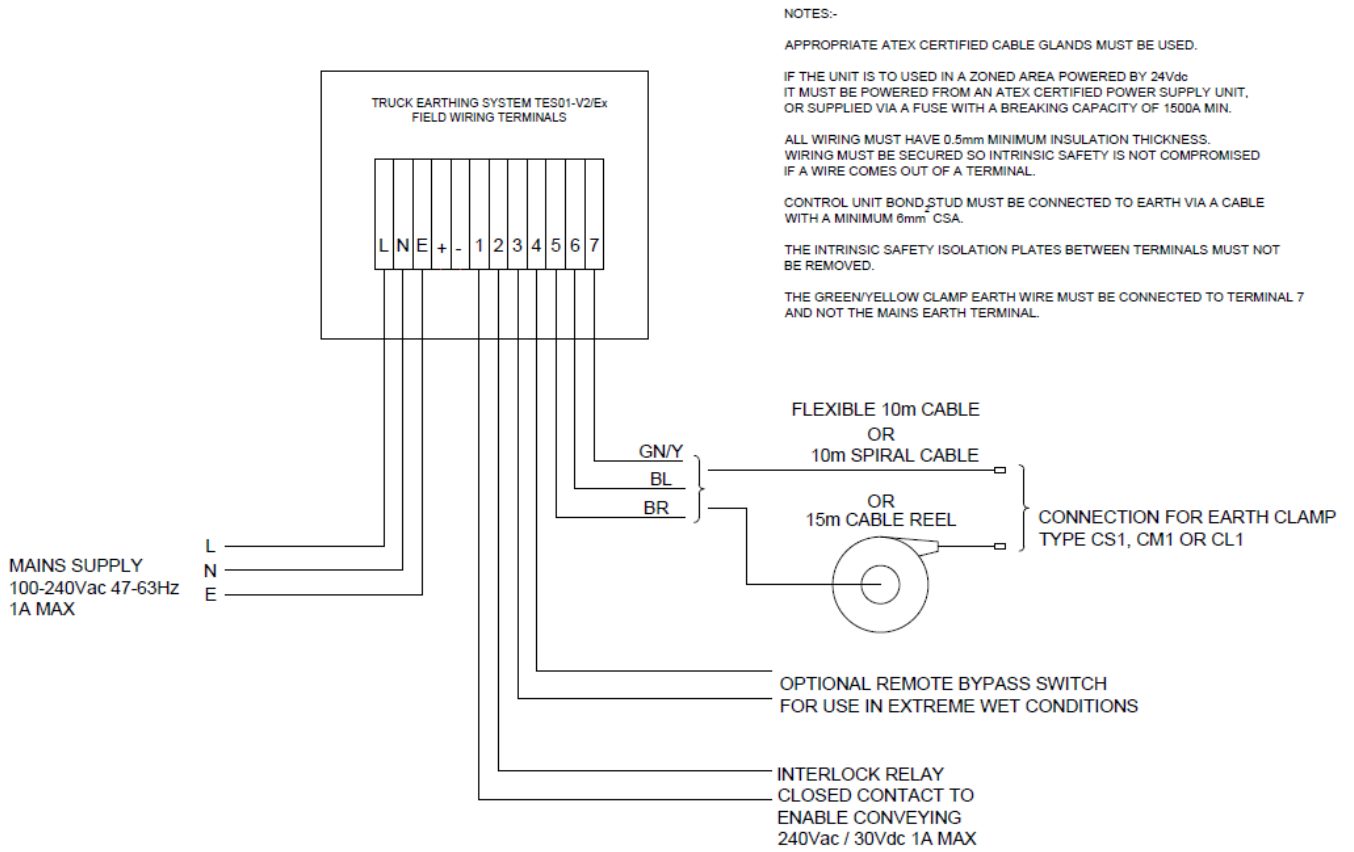
TES01-V2/IP 24 VDC wiring instructions



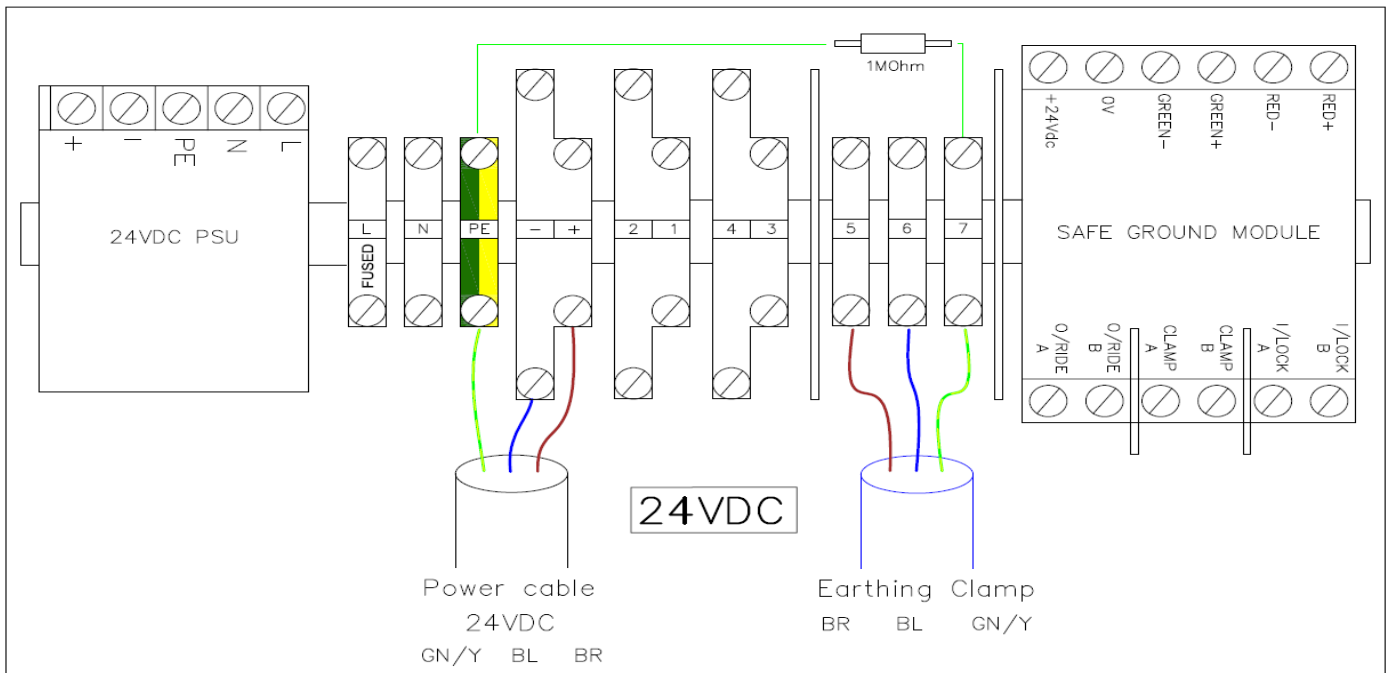
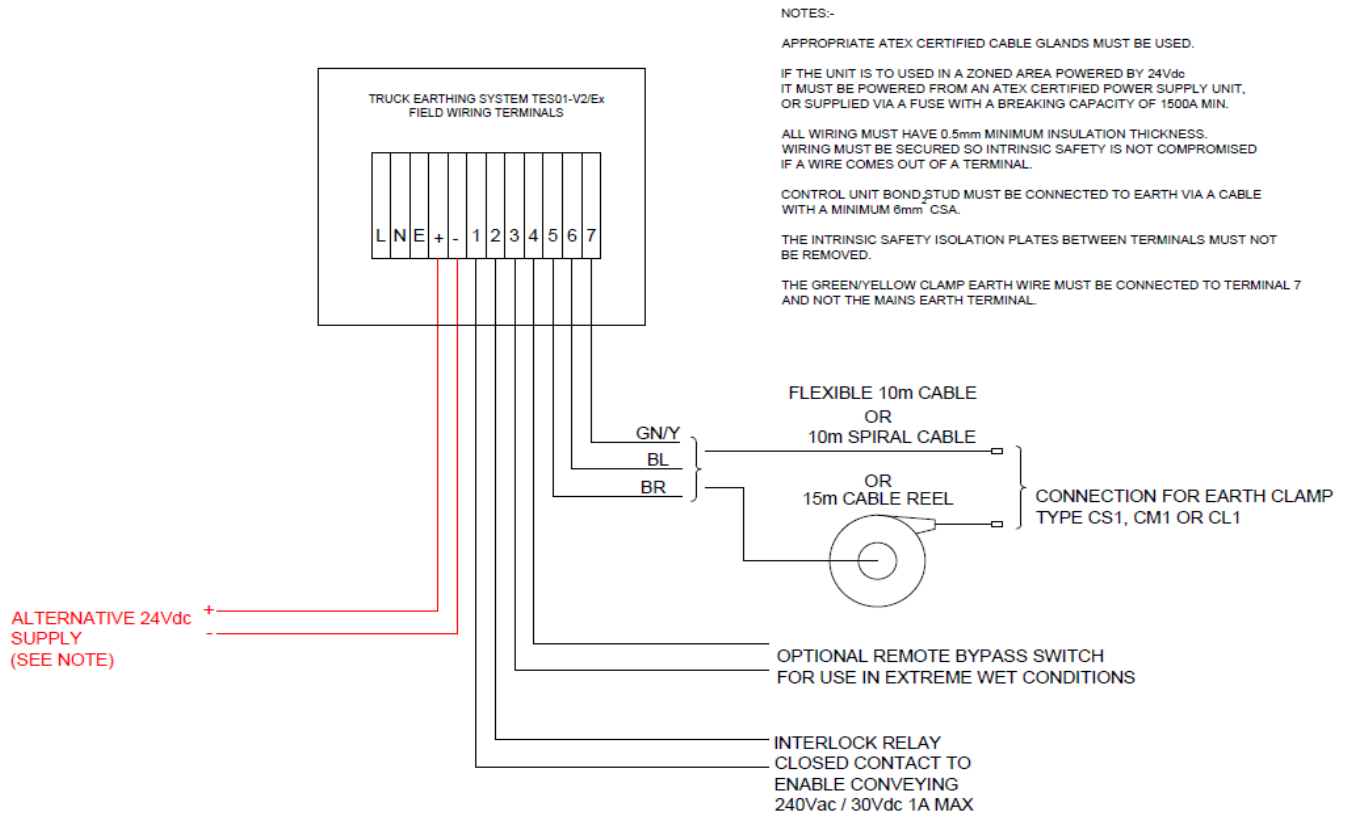
TES01-V2/EX wiring instructions

TES01-V2/EX clamps	Connect to
L, N, E	L, N, E of mains supply 100/240 V AC, 47/63 Hz, 1 A Max
+, -	Alternative 24 V DC supply, attention read the instructions on previous page
1, 2	Interlock relay closed contact 30 V DC, 240 V AC, 1 A Max
3, 4	Optional remote bypass switch
5	BROWN cable (flexible, spiral, cable reel)
6	BLUE cable (flexible, spiral, cable reel)
7	GREEN/YELLOW cable (flexible, spiral, cable reel)

TES01-V2/EX 100-240 VAC wiring instructions

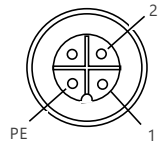


TES01-V2/EX 24 VDC wiring instructions

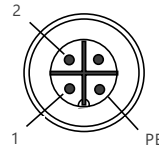


Wiring instructions (cable and clamp)

The connectors have four connections: 1,2,3, PE. Connection according to the drawing below. The fourth pen is not in use. By default, the connectors are already assembled.



Female connector



Male connector

Pen number	Connect to
1	Brown
2	Blue
3	Not in use
PE	Yellow-green

Putting into service

Before connecting the power

The following checks must be made before connecting the power supply.

1. Check that the parts have been connected in accordance with the wiring instructions
2. Check the external earth connection via the earth wire and when using the cable reel, check that the cable reel's metal bracket is earthed
3. Check the continuity of the wiring between the earthing clamp and the control unit; check that there is no short-circuit between these three wires
4. Check that the resistance between the metal part of the earth clamp and earth is 1 M Ω
5. Check that the control unit's interlock (release contact) is connected to the process control system
6. **Only for the TES01-V2/EX** check that an Ex d blind plug has been inserted into boring M20x1.5 if no bypass switch is used

Applying a voltage

Once the above series of checks have been made, the voltage may be applied and the connection with the truck can be made. Now conduct the following checks.

1. Check that the red light is burning
2. Check the loading/unloading process: it should not be possible to start this now (only if fitted with an interlock contact)
3. Turn off the truck's engine!
4. **To connect the earth clamp to the truck: do not connect any hoses to the truck, the side supports may not be used, make sure that the truck does not make contact with for instance a bumper bar, wall or any other metal object**
5. Connect the earth clamp with the truck's earthing point and check that the green light is burning
6. Check that the loading/unloading process is started (only if fitted with an interlock contact)
7. Check that the loading/unloading process stops when the earth clamp is disconnected from the truck (only if fitted with an interlock contact)
8. Test the bypass switch by turning the switch on (if fitted). Attach the earth clamp to a metal object (not to a truck) and check that the green light starts burning. Then switch the bypass switch off and stow the earth clamp away

The TES01-V2 is now ready for use. No further calibration or set-up is required.

Use

Connecting the earthing device to the truck

After putting into service, the TES01-V2/IP or TES01-V2/EX earthing device will be ready for use. Note however, that the earthing device only works correctly if the following steps are taken in the sequence indicated below.

1. Park the truck so that it does not touch any objects, particularly metal objects (for instance a metal bumper bar).
2. Turn the truck's engine off.
3. Now first connect the earth clamp of the TES01-V2/IP or TES01-V2/EX device to the truck's designated earthing point. It is important to only use the designated earthing point and not to connect the clamp for instance to the wheel nuts.
4. Check that the green light on the TES01-V2 earthing device is illuminated.
5. Only now should the loading or unloading hoses be connected, and any supports if required.
6. Check that the green light on the TES01-V2 earthing device is still illuminated.
7. Loading or unloading can now safely proceed.

Disconnecting the earthing device

1. First disconnect the loading/unloading hoses, withdraw the support feet
2. Disconnect the TES01-V2 device

Maintenance

General maintenance indications

This chapter describes the inspections which have to be performed. Regular inspections increase the installation's operating safety. Problems or faults in the device or the cable reel may only be solved by personnel trained by Stuvex.

General device inspections

- Visually inspect the condition of the housing
- Visually inspect the condition of the housing's soft seal as well as the cable glands for any damage and dust accumulation
- Inspect, by measurement, the device's earth connection
- Inspect the fuse when using the device in ATEX zone and supply with 24 V DC

General inspection of the cable and earth clamp

- Visually inspect the condition of the earthing cable and earth clamp at regular intervals for wear or corrosion
- Inspect the inside of the connectors between the clamp and reel for the presence of moisture (condensation)
- The earth clamp may be lubricated with transparent grease if necessary
- Make sure that the contacts are always clean
- Inspect, by measurement, the earthing of the reel and bracket

ATEX information

Intended use

The device's intended use as described in these instructions in the chapters 'General description' and 'Technical data' must be strictly observed. The device itself can be installed in an explosion hazard environment or Ex zone. For this reason, specific EU directives must be applied and the uniformity will be indicated in the EU declaration of conformity.

Directive 1999/92/EC "ATEX 153"

This directive concerns safe working in an Ex environment. Each company's 'explosion safety document' handles this subject matter in detail.

Directive 2014/34/EC "ATEX114"

This handles devices and safety systems for use in Ex zones, as well as European standards regarding construction, installation, maintenance and repair.

WARNING

ANY PERSONNEL DEALING WITH THE DEVICE DESCRIBED IN THIS INSTRUCTION MANUAL MUST HAVE THE NECESSARY KNOWLEDGE OF THE EXPLOSION SAFETY DOCUMENT BELONGING TO THE COMPANY, OR THE ENVIRONMENT IN WHICH THE DEVICE IS INSTALLED, AS WELL AS THE STANDARDS APPLICABLE TO THIS DEVICE. THE FOLLOWING INSTRUCTIONS ARE THEREFORE MERELY INDICATIVE. THEY DO NOT REPLACE THE ABOVE-MENTIONED REQUIRED KNOWLEDGE.

Instructions for the safe installation and putting into service of electrical explosion-safe equipment

Besides the local installation instructions, the following standards must also be observed:

- EN 60079-14 Explosive atmospheres – Part 14 : Electrical installations in hazardous areas
- EN 60079-17 Explosive atmospheres – Part 17 : Inspection and maintenance of electrical installations

Trouble shooting

Although the TES01-V2 earthing system has been developed and manufactured with the greatest care, it is still possible for problems or faults to occur. Going through the following frequently occurring issues step by step will help you to find a solution for the problem more quickly.

Cable reel, cables, earth clamp

Problem	Solution
Cable reel bracket earthed?	Connect to earth with a 6 mm ² cable
Cable worn?	Replace the cable if wear is visible
Condition of the earth clamp?	Replace if corrosion or damage is visible
Condition of the connectors between the clamp and the reel?	Inspect the inside for condensation and damage

Correct sequence used for connecting the earth clamp?

0. Park the truck so that it does not make any contact with a (metal) object
1. Turned off the truck's engine?
2. First connect the TES earth clamp to the truck's designated earthing point (not to the wheel nuts etc.)
3. Wait until the green light lights up
4. Only then may the hose be connected, and any supports placed
5. Load / unload the product

Truck

Problem	Solution
Earthing point present and known?	Earthing point recognisable by an earthing symbol
Earth clamp connected to the designated truck earthing point?	Connect to earthing point (not to wheel nuts etc.)
Condition of the truck's earthing point?	Remove any corrosion, paint, oil, dirt etc.

Parts and ordering information

Article number	Description
502-4010-006	TES01-V2/IP control unit
501-4010-006	TES01-V2/EX control unit
503-1100-008	CL1 active clamp, male connector mounted
503-1050-003	CM1 active clamp, male connector mounted
503-1000-003	CS1 active clamp, male connector mounted
503-5910-100	SP1/10 10 m spiral cable
503-5900-100	CO1/10 10 m straight cable
503-3250-010	CR1/65 15 m cable reel
641-1100-020	Optional TES01-V2 EX remote bypass key switch
503-0900-003	Clamp station, storage hook with shelter
503-0900-103	Clamp hook, storage hook without shelter
503-1500-000	Spare male/female connector set for use with cable reel/clamp
501-5800-000	Cable glands set TES01-V2 EX
502-5800-000	Cable glands set TES01-V2 IP