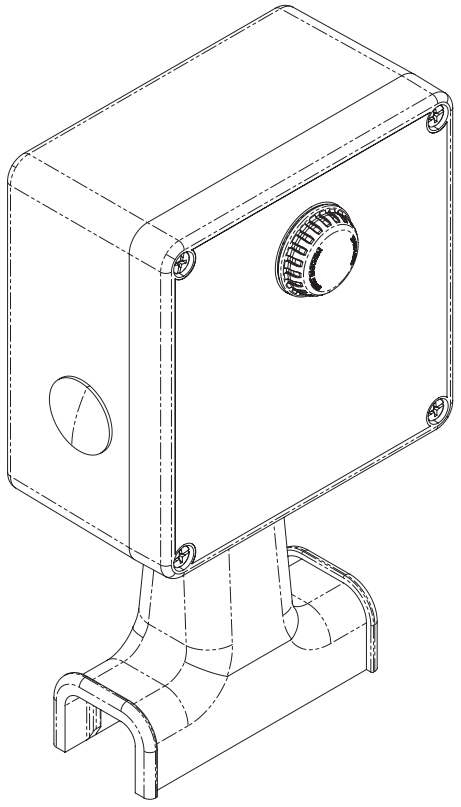
Raychem

Elexant 3500i

Installation Instructions



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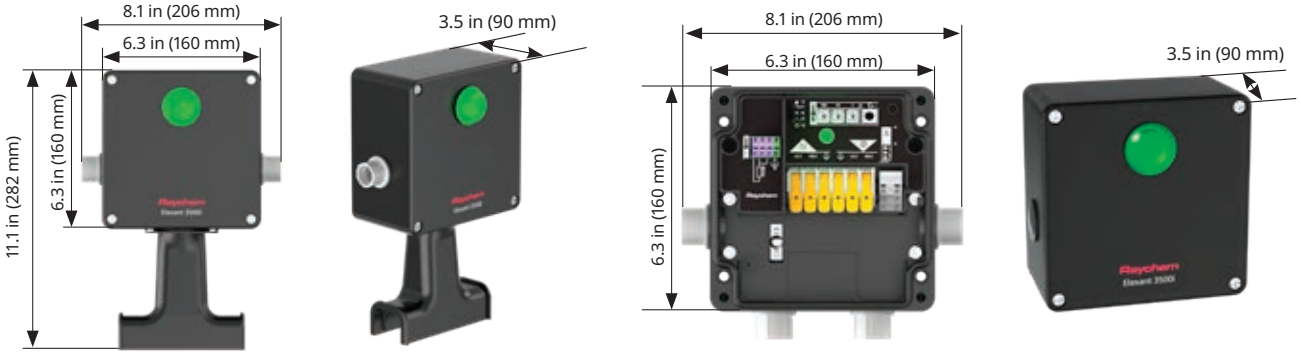
Elexant 3500i Enclosure Dimensions



Pipe Mount

Wall Mount

Figure 1: Dimensions of Elexant 3500i

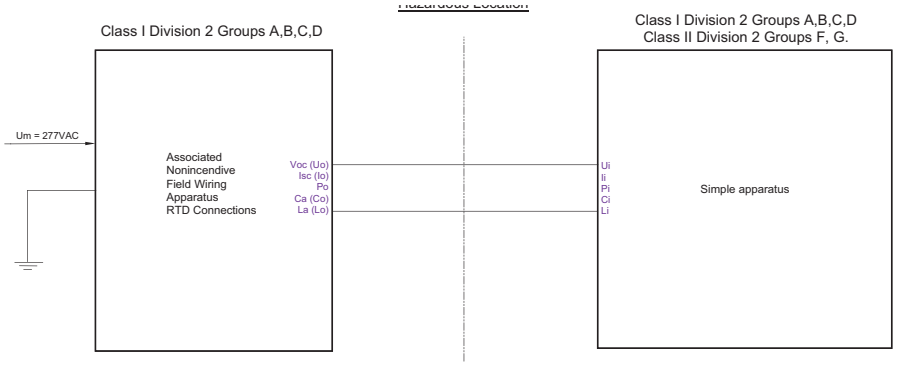
Hazardous Area Approvals

Raychem Elexant 3500i

c UL us
E490519

Class I, Division 2, Group A, B, C, D T5 Type 4X
Class II, Division 2, Group F, G

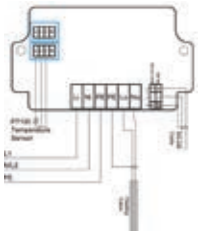
Non-incendive parameters for RTD output – Shall be installed in accordance with Control Drawing below
Voc = 5.88 VDC
Isc = 89 mA
Po = 0.131 W
Ca = 42.7 µF
La = 4474 µH



Associated Nonincendive Field Wiring Apparatus Entity Paramaters:

1 Parameters Applicable Per RTD Channel:

Voc (Uo) = 5.88VDC
Isc (Io) = 89mA
Po = 0.131W
Ca (Co) = 42.7uF
La (Lo) = 4474uH



Notes:

2 Must be installed per Elexant 3500i installation instructions and in accordance with NEC, CEC & local wiring regulations

3 3500i-ST, 3500i-AR, 3500i-C, 3500i-I & 3500i-GF must be installed in an enclosure suitable for the application in accordance with the National Electrical Code (ANSI/NFPA 70) for installation in the United States, the Canadian Electrical Code for installations in Canada, or other local codes, as applicable.

4 3500i-xx-P-A and 3500i-xx-W-A systems are suitable for Class II Division 2 Groups F, G.

5 Associated nonincendive field wiring apparatus shall not be connected in parallel

Entity Application

Ci + Ccable <= Ca
Li + Lcable <= La

Capacitance and inductance of the field wiring from the nonincendive field wiring apparatus to the associated nonincendive field wiring apparatus shall be calculated and must be included in the system calculations as shown in above. Cable capacitance, Ccable, plus nonincendive field wiring apparatus capacitance, Ci must be less than the marked capacitance, Ca (or Co), shown on any associated nonincendive field wiring apparatus used. The same applies for inductance (Lcable, Li and La or Lo, respectively). Where the cable capacitance and inductance per foot are not known, the following values shall be used for two or three core cables: Ccable = 60 pF/ft., Lcable = 0.2 µH/ft

Drawing Number 2000003612-A Rev. A

Safety Instructions

Please read all instructional literature carefully and thoroughly before starting. Refer to the inside front cover for the listing of Liabilities and Warranties. NOTICE: The information contained in this document is subject to change without notice. Please read these Operating Instructions before Commissioning the thermostat. Keep the operating instructions in a place which is always accessible to all users. Should any difficulties arise during start-up, you are asked not to carry out any unauthorized manipulations on the instrument as this could affect your warranty rights. Please contact the nearest Chemelex subsidiary or the head office. If any servicing is required, the instrument must be returned to the head office.

During operation, do not leave this Instruction Manual or other objects inside the enclosure. Use the temperature controller or limiter only for its intended purpose and operate it only in clean, undamaged condition. Do not make any modifications to the temperature controller or limiter that are not expressly mentioned in this Instruction Manual. If the Elexant 3500i is used in a manner not specified by Chemelex, the protection provided by the equipment may be impaired. Whenever work is done on the temperature controller or limiter, be sure to observe the national safety and electrical code requirements and accident prevention regulations and the safety instructions given in this Instruction Manual.

Carry out work on the thermostats in the de-energized state only.

⚠ Branch circuit protection and disconnection devices shall be provided a location that is easily reached, and identified as the disconnect device for the equipment in.

⚠ Les dispositifs de protection et de déconnexion des circuits de dérivation doivent être placés à un endroit facilement accessible et identifiés comme étant le dispositif de déconnexion de l'équipement qu'ils contiennent.

⚠ The purchaser should make the manufacturer aware of any external effects or aggressive substances that the equipment may be exposed to.

⚠ L'acheteur doit informer le fabricant des effets externes ou des substances agressives auxquels l'appareil peut être exposé.

⚠ The cable glands shall only be used for fixed installations, the cables must be fixed to prevent pulling or twisting.

⚠ Les presse-étoupes ne doivent être utilisés que pour des installations fixes, les câbles doivent être fixés de manière à éviter toute traction ou torsion.

⚠ Do not disconnect while circuit is live unless area is known to be non-hazardous.

⚠ Ne pas debrancher tant que le circuit est sous tension a moins qu'il ne s'agisse d'un emplacement non dangereux.

Specific Conditions of Use

1. Cable entry shall be through rated conduit hubs to maintain the ratings of the enclosure provided.
2. Unused cable entries must be filled with suitable rated conduit plugs maintaining the environmental ratings of the enclosure.
3. Leads connected to the terminals shall be insulated for the appropriate voltage and this insulation shall extend to within 1 mm (1/32") of the metal of the terminal throat.
4. The maximum permitted current of the alarm contacts is 2 A, and the maximum permitted voltage is 277 Vac.
5. Intrinsically safe circuits are supplied from shunt Zener diodes barriers that must be adequately earthed.

Area of Use

The Elexant 3500i consists of a temperature controller but can alternatively be programmed to act as a temperature limiter. Elexant 3500i electronic modules are approved for use in ordinary locations and Class I Division 2 Groups A, B, C, D and are required to be installed in an Elexant 3500i enclosure. Elexant 3500i units consisting of an Elexant 3500i electronics module and Elexant 3500i enclosure are approved for use in ordinary locations, Class I Division 2 Groups A, B, C, D, Class II Division 2 Groups F, G.

Description

The Elexant 3500i is a family of electronic thermostats that function as Type 4X and IP66 rated power connection kits for Raychem industrial heating cables. When power mineral insulated (MI) or series-resistance (SC), cold leads must be used, accounting for MI or SC cold lead gland size, hub size, and power cable size. Power cable gland and hubs for MI or SC cold lead glands are not included. The kits can be used to connect one or two heating cables to power. The Elexant 3500i power terminals are rated for single copper conductor up to wire size 25mm^2 (4AWG), or they may accept 2 copper conductors of wire size 6mm^2 (10 AWG) in 1 terminal with the use of a twin ferrule.

Note: For two heating cables powered by a single circuit the length of each heating cable should not exceed the maximum allowable circuit length published in the Raychem self-regulating cables design guide and the total current of all heating cables on the circuit should equal no more than 80% of the circuit breaker current rating. These kits may be installed at temperatures as low as -55°C (-67°F). For easier installation store above freezing until just before installation. For technical support call Chemelex Technical Support Department at (800)-545-6258.

Chemelex, 899 Broadway Street, Redwood City, CA 94063, United States of America

Technical Data

Environmental	
Compliance	RoHS and Reach
Ambient Operating Temperature	From –55°C to +60°C (T4) (–67°F to +140°F)
Ambient Storage Temperature	–55°C to + 80°C (–67°F to +176°F)
Maximum Pipe Temperature	205°C (401°F)
Relative Humidity	0% to 90%, noncondensing
Max Altitude	2000m (6562 ft)
Enclosure	
Protection	Type 4X, IP 66
Installation position	Any position allowed, typical use with conduit hubs facing down When installing upside down, knock out the drain hole of the pipe-stand
Electrical data	
Supply Voltage	100 to 277 Vac +/–10%, 47-63 Hz.
Internal Power Consumption	15VA max
Maximum Current	⚠ 32 A @ 40°C (104°F), linearly derated to 24 A at 60°C (140°F) (power source protected by listed branch circuit breaker rated maximum 40 A. If applicable, disconnect device shall be installed in compliance with local electrical code.)
Contact lifetime	>250K operations at 32 A / 277 VAC (resistive load) at 40°C (104°F)
Alarm output relay	Contact rated ⚠ 277 Vac, 2 A, 47-63 Hz, CAT II, type of load is resistive. For the alarm variant the relay output is set to be normally closed. For the communicating, current sensing, and ground fault version, the relay output is software programmable to open, close or to toggle in case of alarm
Electrical safety	⚠ UL / CSA 61010-1, Category III, Pollution degree 2.
Grounding and Bonding (Earthing)	Elexant 3500i units must be earthed in accordance with the local wiring regulations.
Electromagnetic compatibility	
FCC	47 CFR Part 15B - Class A, Part 15C **Note:** This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.
Industry Canada (IC)	CAN ICES-003 (Class A) / NMB-003(Class A), RSS-Gen, RSS-247 **Note:** This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions: 1. This device may not cause interference. 2. This device must accept any interference, including interference that may cause undesired operation of the device. L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : 1. L'appareil ne doit pas produire de brouillage; 2. L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Elexant 3500i Complete Thermostat (Pipe Mount)

Name	Description	Part Number	Weight
Elexant 3500i-ST-P-A	Standard Variant Pipe Mount Kit	2000003757	7.5lb
Elexant 3500i-AR-P-A	Alarm Variant Pipe Mount Kit	2000003758	7.5lb
Elexant 3500i-C-P-A	Communicating Variant Pipe Mount Kit	2000002626	7.5lb

Name	Description	Part Number	Weight
Elexant 3500i-I-P-A	Current Sensing Variant Pipe Mount Kit	2000003759	7.5lb
Elexant 3500i-GF-P-A	Ground Fault Detecting Variant Pipe Mount Kit	2000003760	7.5lb

Elexant 3500i Complete Thermostat (Wall Mount)

Name	Description	Part Number	Weight
Elexant 3500i-ST-W-A	Standard Variant Wall Mount Kit	2000003749	6.5lb
Elexant 3500i-AR-W-A	Alarm Variant Wall Mount Kit	2000003750	6.5lb
Elexant 3500i-C-W-A	Communicating Variant Wall Mount Kit	2000002454	6.5lb
Elexant 3500i-I-W-A	Current Sensing Variant Wall Mount Kit	2000003751	6.5lb
Elexant 3500i-GF-W-A	Ground Fault Detecting Variant Wall Mount Kit	2000002924	6.5lb

Elexant 3500i Replacement Control Module

Name	Description	Part Number	Weight
Elexant 3500i-ST	Standard Variant Replacement Module	2000003766	2.6lb
Elexant 3500i-AR	Alarm Variant Replacement Module	2000003767	2.6lb
Elexant 3500i-C	Communicating Variant Replacement Mod-ule	2000002657	2.6lb
Elexant 3500i-I	Current Sensing Variant Replacement Mod-ule	2000003768	2.6lb
Elexant 3500i-GF	Ground Fault Detecting Variant Replace-ment Module	2000003769	2.6lb

Elexant 3500i Replacement Enclosure

Name	Description	Part Number	Weight
Elexant 3500i-W-A	Elexant 3500i Wall Mount Replacement Kit	2000003747	4.0lb
Elexant 3500i-P-A	Elexant 3500i Pipe Mount Replacement Kit	2000003756	4.5lb

Elexant 3500i Accessories

Name	Description	Part Number	Weight
MONI-PT100-260/2	Pt. 100 ohm RTD w/2 m lead for pipe mount versions	1244-006615	0.3lb
MONI-PT100-260/5	Pt. 100 ohm RTD w/5 m lead for pipe mount versions	1244-020817	0.3lb
MONI-PT100-260/10	Pt. 100 ohm RTD w/10 m lead for pipe mount versions	1244-020816	0.3lb
RTD4AL	Pt. 100 ohm RTD4AL for wall mount versions	RTD4AL	1.3lb
MBRP-B	Mounting Bracket for wall mount versions	T0002003	1.1 lb

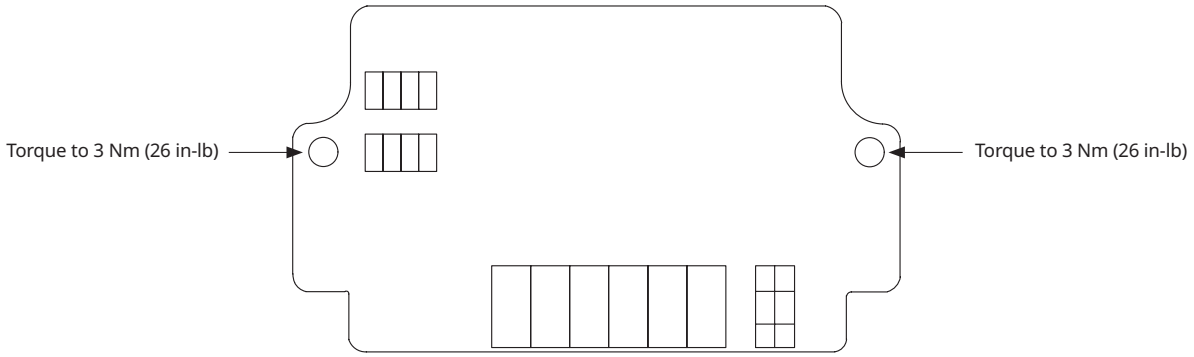
*Other RTDs available, see Elexant 3500i product web page.

INSTALLATION

Mechanical Installation

The Elexant 3500i is available in two versions for mounting. The pipe stand mounting version can be mounted directly on a pipe up to a pipe temperature of 205°C (401°F). Ensure that the ambient temperature of the equipment does not exceed 60°C (140°F) at any time. To provide sufficient stability, the pipe stand shall be attached by means of 2 pipe straps. The wall mount version of the Elexant 3500i can be mounted off pipe on a bracket such as the MBRP-B.

The Elexant 3500i electronics module is shipped loose in the enclosure to allow for additional components such as conduit hubs or the pipe stand to be secured and wires pulled into the enclosure before termination. The Elexant 3500i module is secured to the enclosure via the two attachment screws noted below using a 5mm Hex connection. Install to 3Nm (26 in-lb).



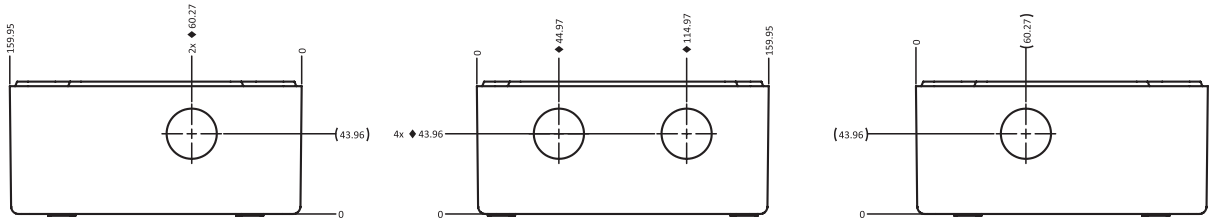
Connecting Cables and Conduit Hubs to Elexant 3500i Units

⚠ At ambient temperatures above 45°C (113°F) the cable selected should have a temperature rating of 90°C (194°F) or higher. Conduit hubs with a temperature rating of 90°C (194°F) or higher and Type 4X should be selected.

⚠ Copper (Cu) conductors shall be used.

Raceway entries for conduit hubs for both mounting variants are shown below. RTD, communications, and alarm relay wiring must be wired through a separate conduit hub from high voltage power wiring.

Wall Mount Variant



Pipe Mount Variant

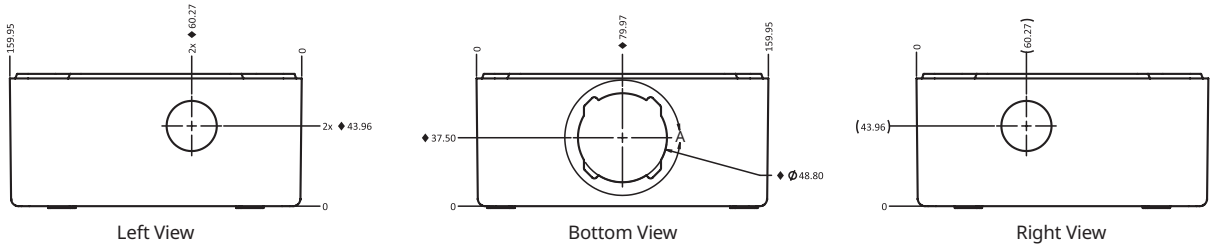
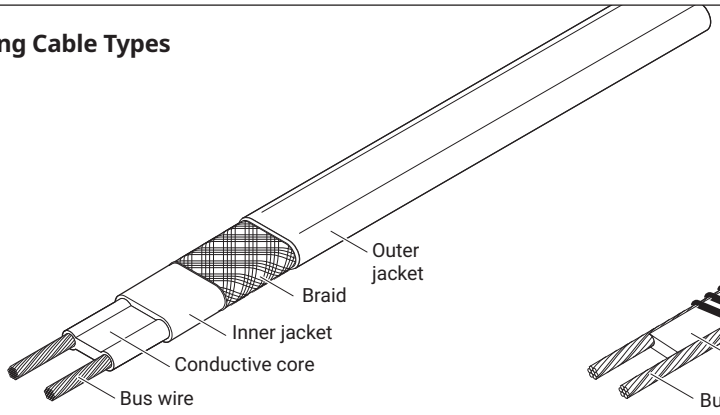


Figure 2: Elexant 3500i Hub Entry Locations

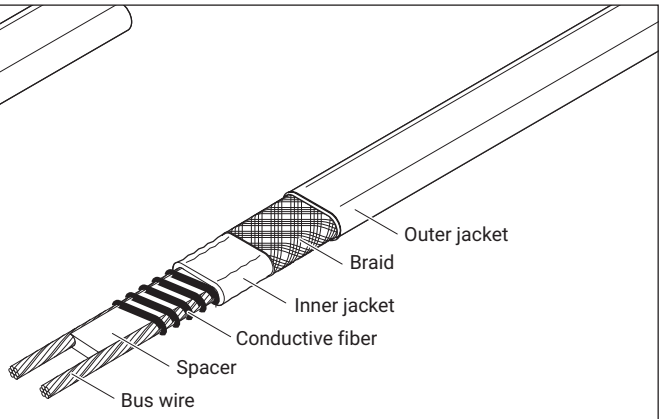
Conduit Hubs	Only use approved conduit hubs, suitably certified for the intended area of use.
	For metal conduit hubs use an internal locknut to assure earth continuity with the Elexant 3500i internal earth plate.
	Only use Raychem locknuts or types recommended by the conduit hub manufacturer.
	Follow installation instructions provided by the conduit hub manufacturers.

Installation for Pipe Mount Variants.

Heating Cable Types

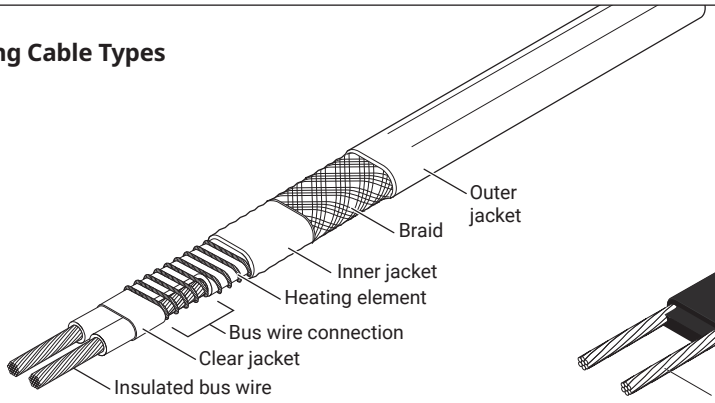


BTV-CR, BTV-CT, QTVR-CT

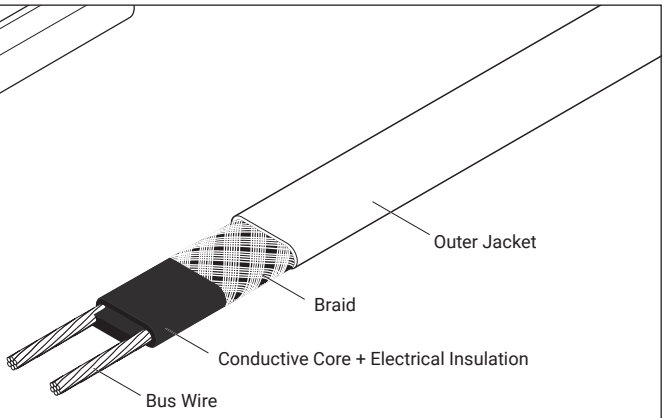


XTV(R)-CT

Heating Cable Types



VPL-CT

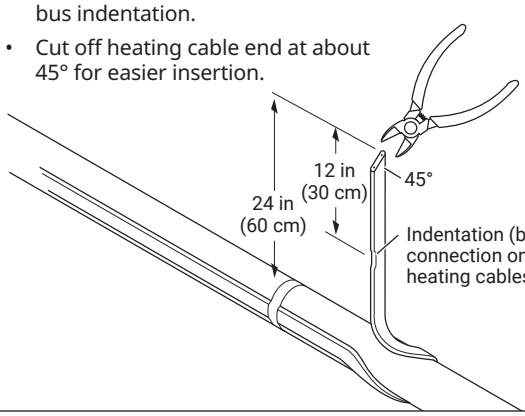


HTV-CT

INSALLATION INSTRUCTIONS FOR BTV-CR, BTV-CT, QTVR-CT, XTV(R)-CT, VPL-CT, HTV-CT CABLES

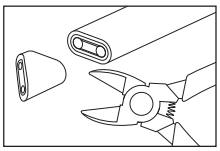
1

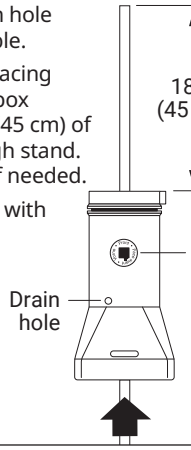
- Secure heating cable to pipe
- Allow approximately 24 in (60 cm) of heating cable for installation. For VPL, cut cable 12 in (30 cm) from bus indentation.
- Cut off heating cable end at about 45° for easier insertion.



2

- Optional: If stand is to be installed on bottom side of pipe, knock out drain hole prior to inserting cable.
- With label on stand facing desired direction of box opening, push 18 in (45 cm) of heating cable through stand. Use cable lubricant if needed.
- Square off cable end with 90° cut.

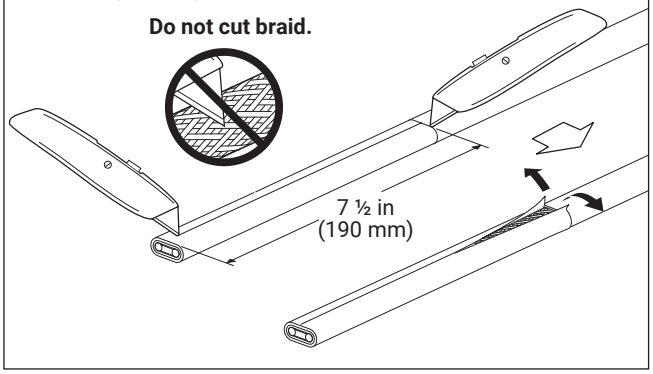




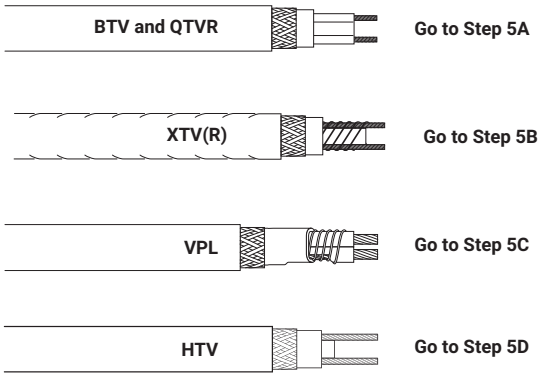
- Repeat Steps 1 & 2 for additional cable if required.
- Do not attach stand to pipe until step 12.

3

- Lightly score outer jacket around and down as shown.
- Bend heating cable to break jacket at score, then peel off jacket.

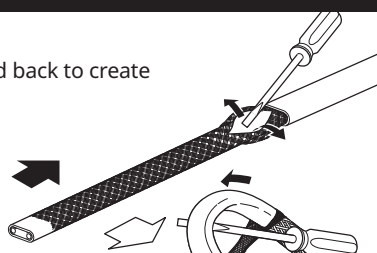


4

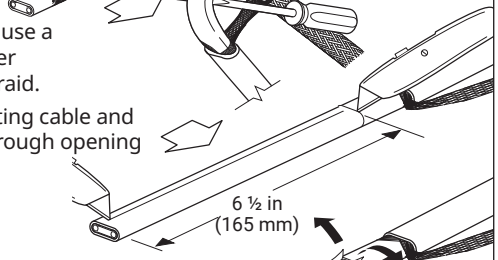


5A

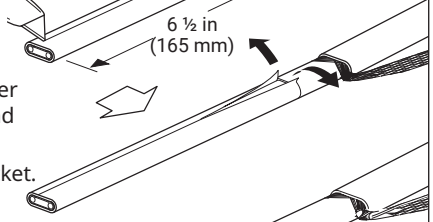
BTV and QTVR



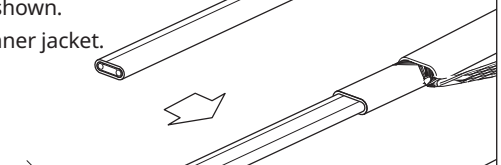
- Push braid back to create a pucker.



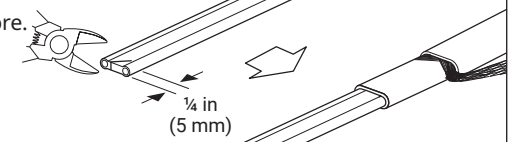
- At pucker use a screwdriver to open braid.
- Bend heating cable and work it through opening in braid.



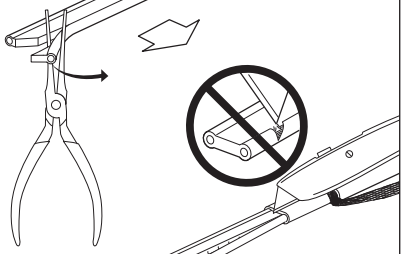
- Lightly score inner jacket around and down as shown.
- Peel off inner jacket.



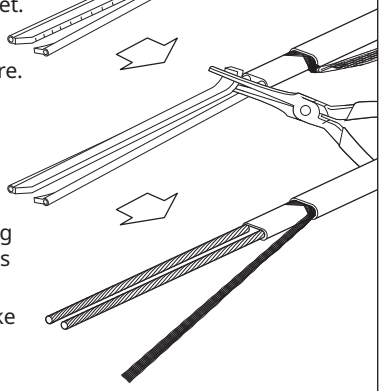
- Notch core.



- Peel bus wire from core.



- Score core between buswires at inner jacket.
- Bend and snap core.
- Peel core from bus wire.

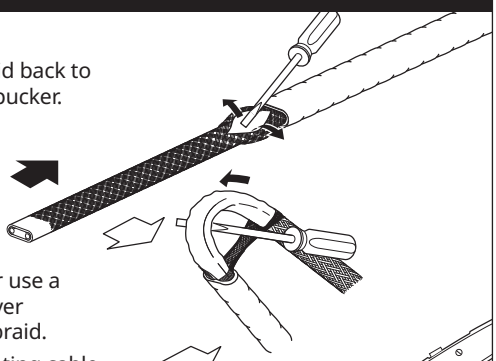


- Remove any remaining core material from bus wires.
- Pull braid tight to make pigtail.

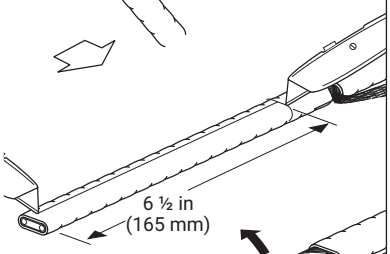
Go to Step 6

5B

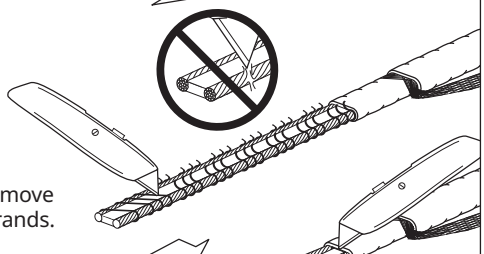
XTV(R)



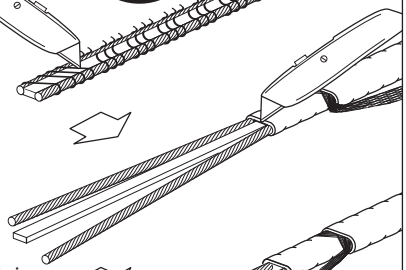
- Push braid back to create a pucker.
- At pucker use a screwdriver to open braid.
- Bend heating cable and work it through opening in braid.



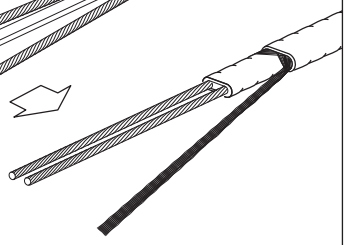
- Lightly score inner jacket around and down as shown.
- Peel off inner jacket.



- Cut and remove all fiber strands.



- Score and remove center spacer.

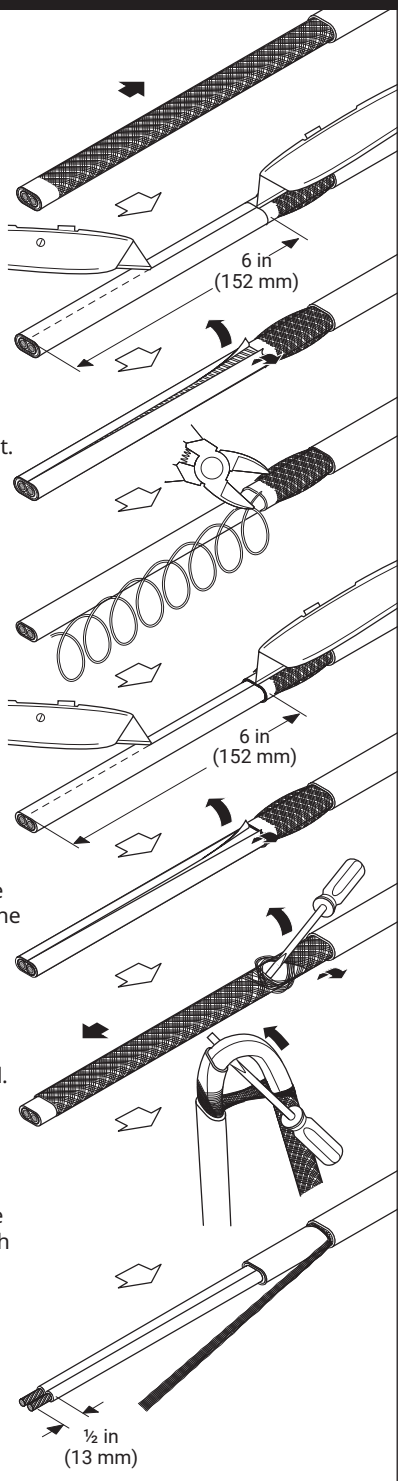


- Remove any remaining fiber material from bus wires.
- Pull braid tight to make pigtail.

Go to Step 6

5C

VPL

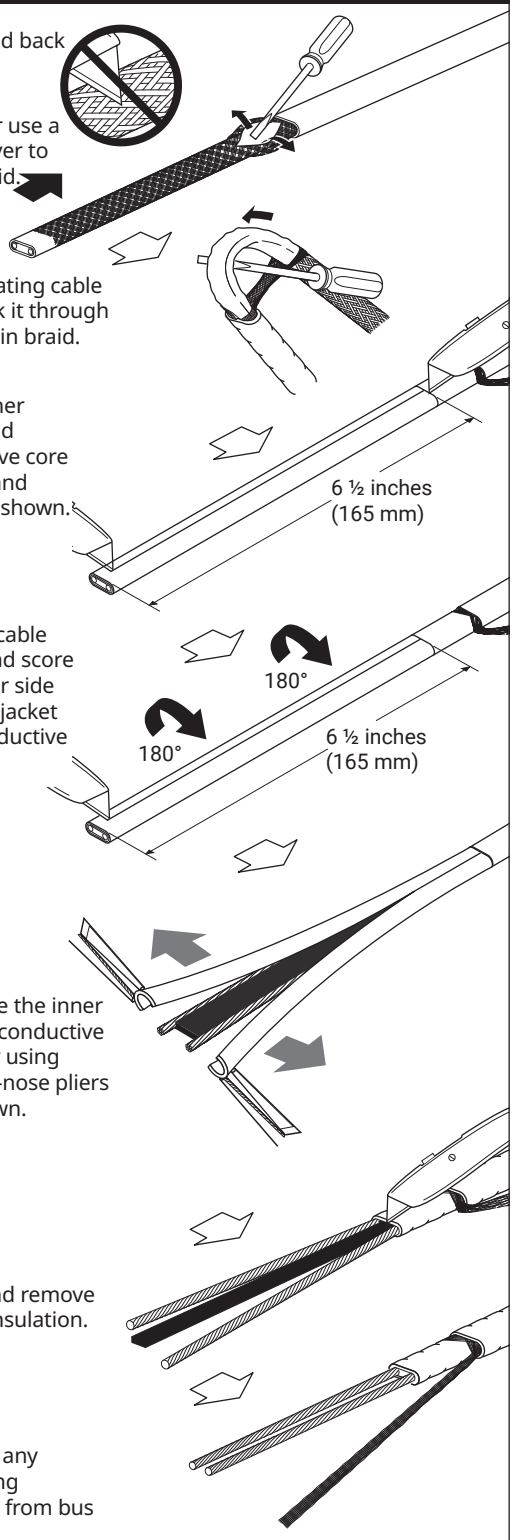


- Push braid back and bunch as tight as possible.
- Lightly score inner jacket around and down as shown.
- Peel off inner jacket.
- Unwind heating element, cut and remove as shown.
- Lightly score clear jacket around and down as shown.
- Bend heating cable to break jacket at the score then peel off jacket.
- Push braid forward. Use a screwdriver to open braid as shown.
- Bend heating cable and work it through opening in braid.
- Remove insulation from ends of bus wires.
- Pull braid tight to make pigtail.

Go to Step 6

5D

HTV

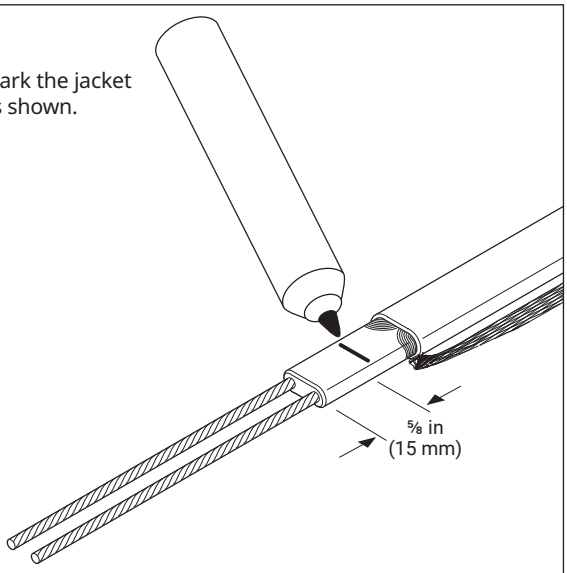


- Push braid back to create a pucker.
- At pucker use a screwdriver to open braid.
- Bend heating cable and work it through opening in braid.
- Score inner jacket and conductive core around and down as shown.
- Peel off inner jacket.
- Flip the cable 180ºC and score the other side of inner jacket and conductive core.
- Remove the inner jacket, conductive core by using needle-nose pliers as shown.
- Score and remove center insulation.
- Remove any remaining material from bus wires.
- Pull braid tight to make pigtail.

Go to Step 6

6

- Mark the jacket as shown.



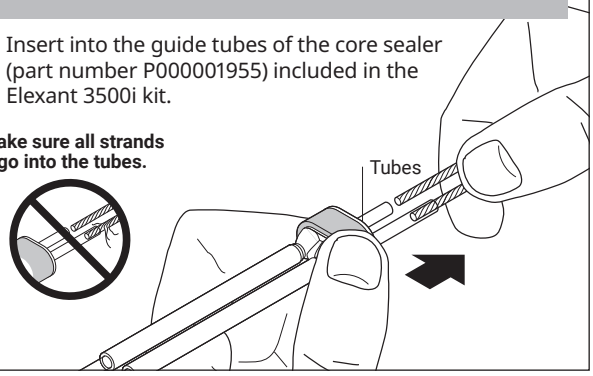
7

⚠ CAUTION: Health Hazard. Wash hands after contact with sealant. Consult material safety data sheet VEN 0033.

⚠ AVERTISSEMENT : risque pour la santé. Se laver les mains après tout contact avec le produit d'étanchéité. Consulter la fiche de données de sécurité VEN 0033.

- Insert into the guide tubes of the core sealer (part number P000001955) included in the Elexant 3500i kit.

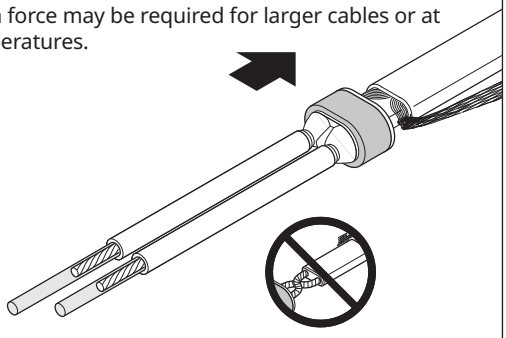
Make sure all strands go into the tubes.



8

- Push core sealer onto the heating cable to the mark made in step 6.

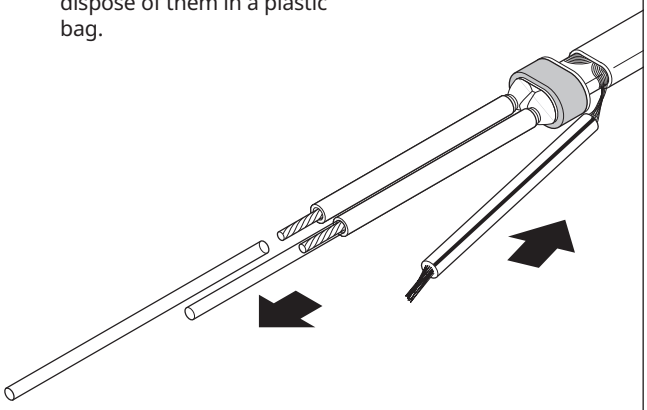
Note: Extra force may be required for larger cables or at lower temperatures.



Make sure the bus wires do not kink, bunch, or crossover.

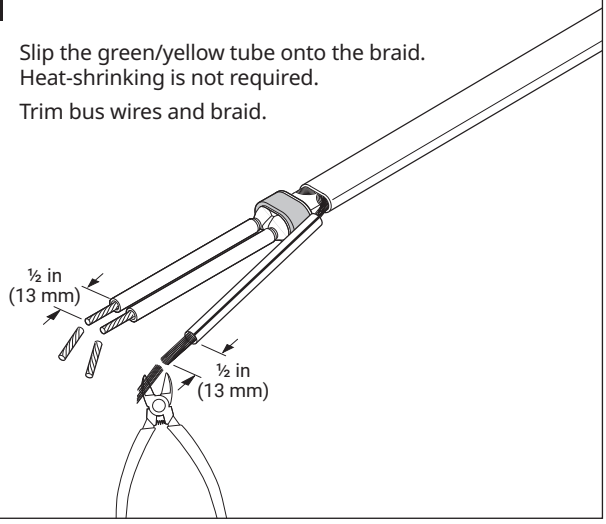
9

- Remove the guide tubes and dispose of them in a plastic bag.

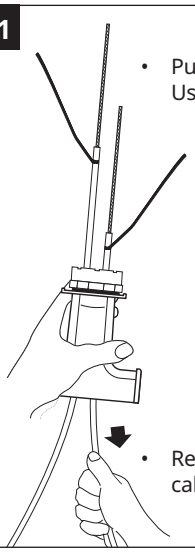


10

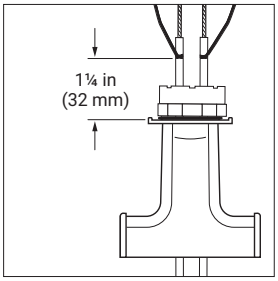
- Slip the green/yellow tube onto the braid. Heat-shrinking is not required.
- Trim bus wires and braid.



11

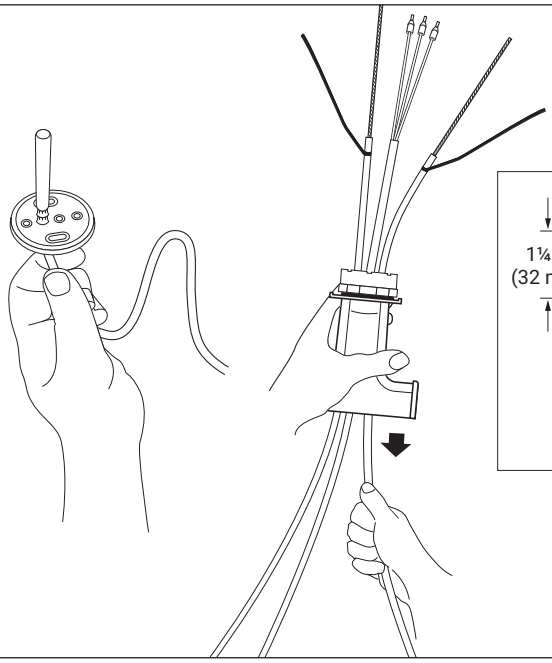


- Pull heating cable back into stand as shown. Use cable lubricant if needed.

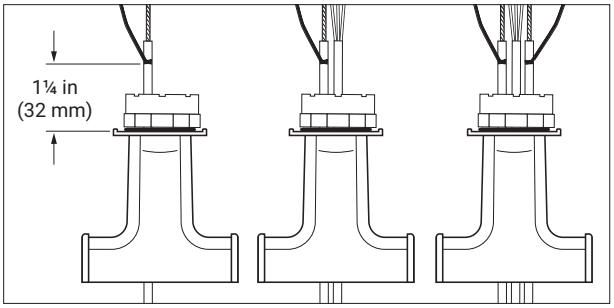


- Repeat steps 2 through 7 for other heating cables before continuing to step 8.

11a



- Pull heating cable back into stand as shown. Use cable lubricant if needed.

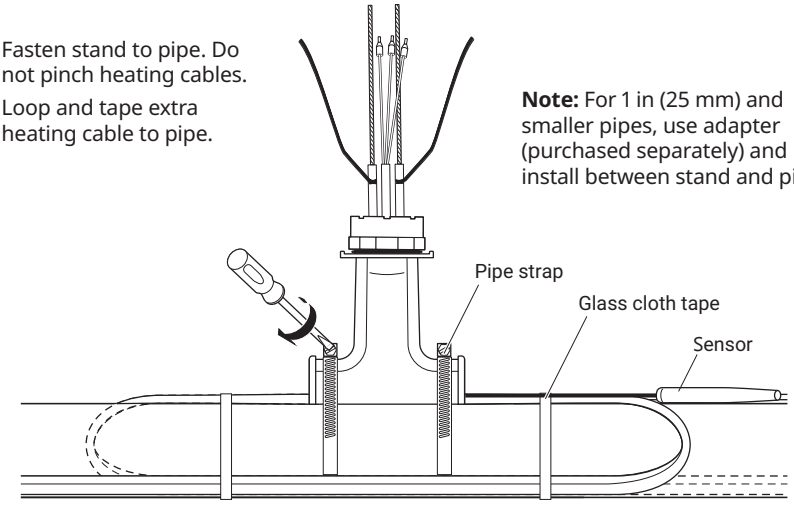


- Repeat steps 2 through 7 for other heating cables before continuing to step 8.

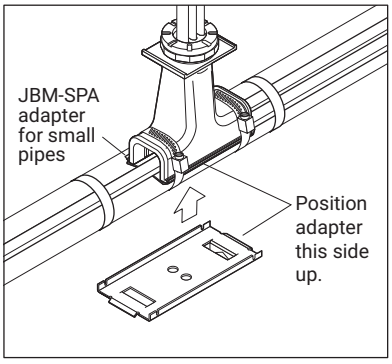
12

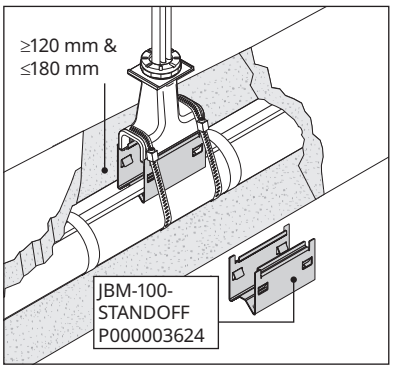
- Fasten stand to pipe. Do not pinch heating cables.
- Loop and tape extra heating cable to pipe.

Note: For 1 in (25 mm) and smaller pipes, use adapter (purchased separately) and install between stand and pipe.



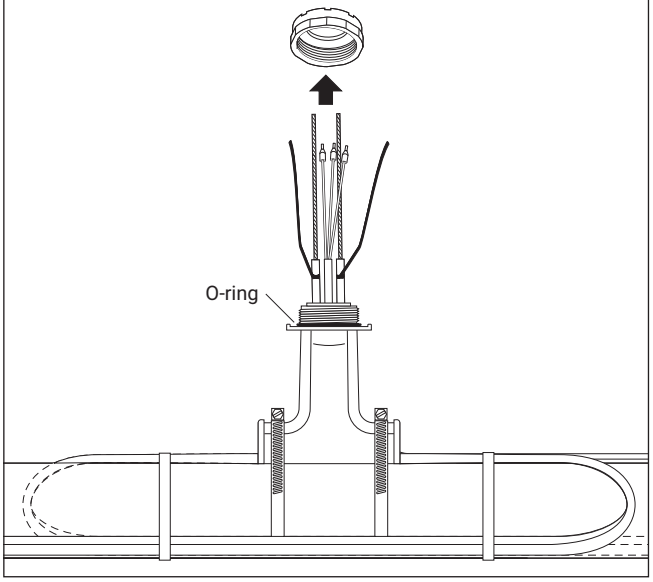
13





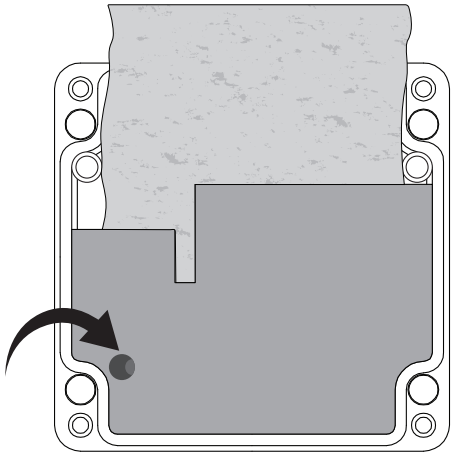
14

- Remove box nut.



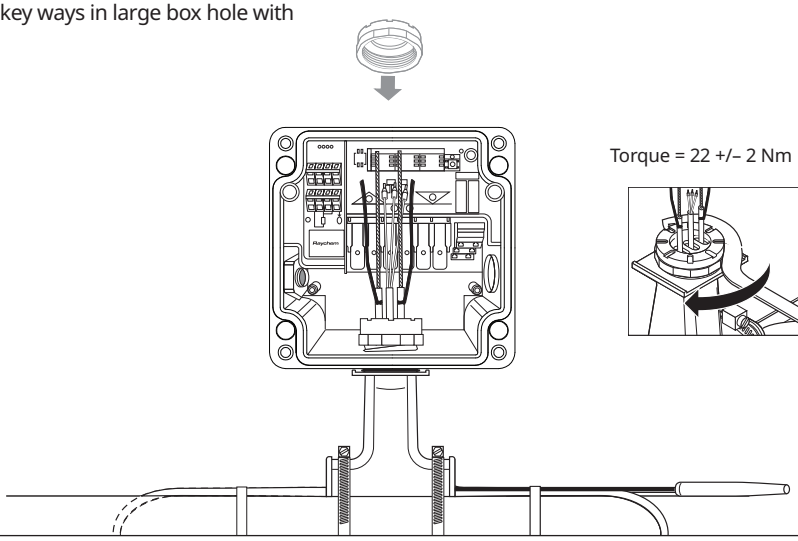
14A

- Use a Phillips head screwdriver to remove the the terminal cover from the 3500i enclosure.



15

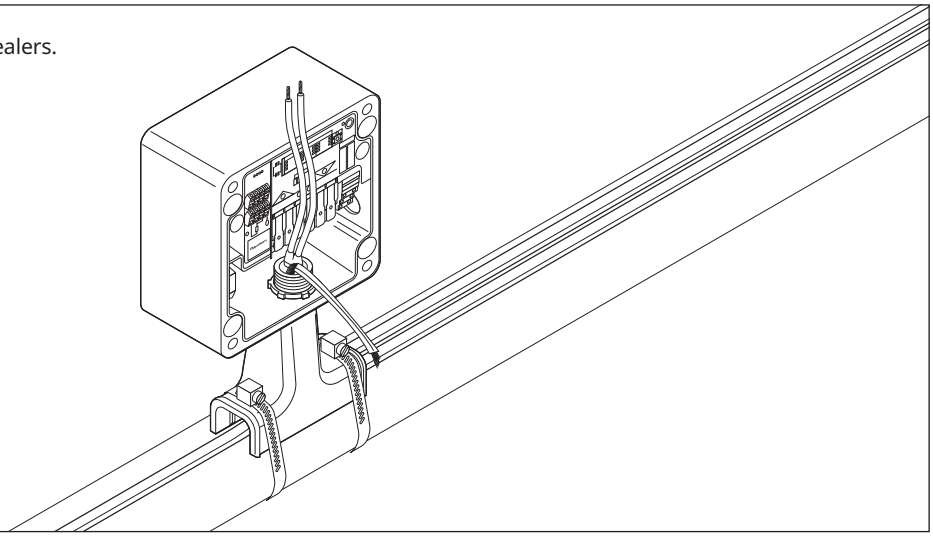
- Place junction box onto stand. Align key ways in large box hole with alignment feature on stand.
- Put box nut back onto stand.
- Tighten box nut with spanner.



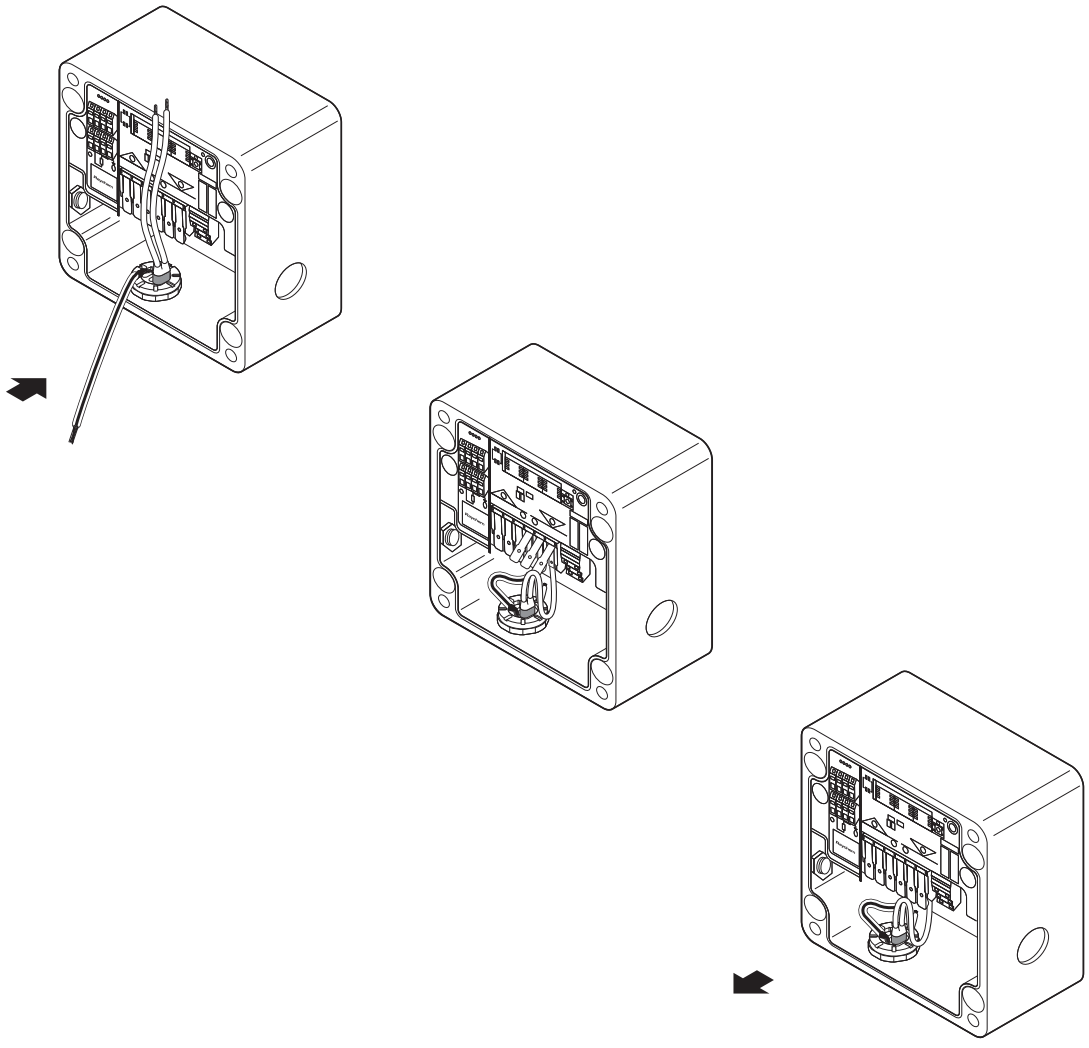
Torque = 22 +/– 2 Nm

16

Finished view of installed core sealers.

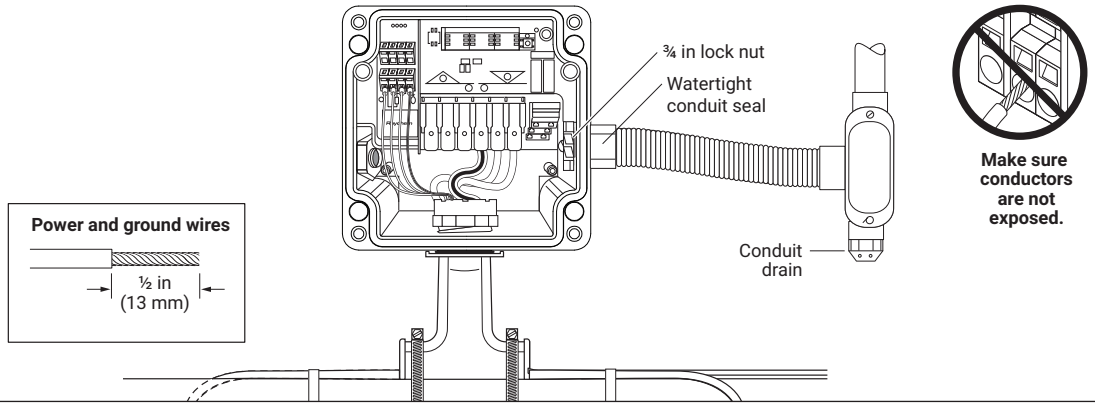


17



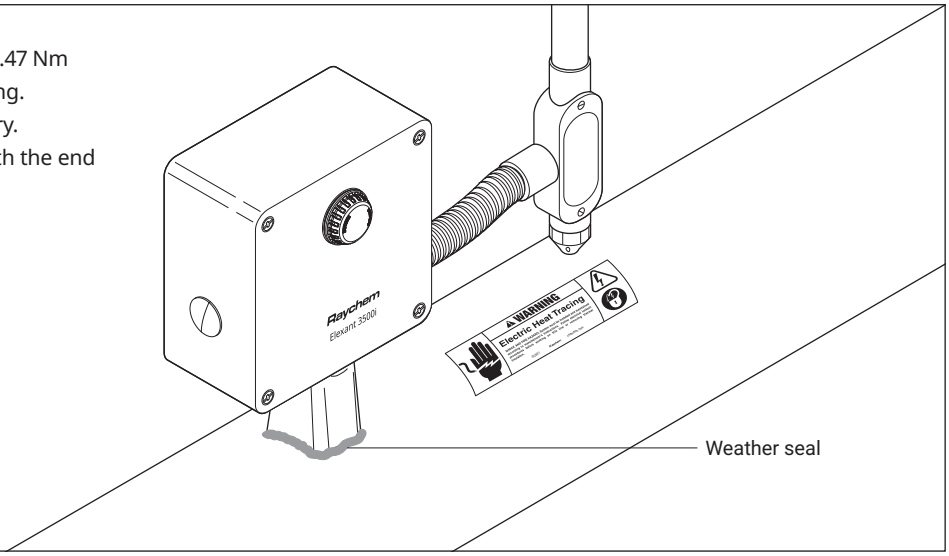
18

- Install conduit and fittings as shown. To minimize loosening due to vibration, use flexible conduit.
- Pull in power and ground wires, strip off ½ in (13 mm) of insulation, and terminate.
- Use a Phillips head screwdriver to secure terminal cover from the 3500i enclosure



19

- Install lid. Torque = 1.02 to 1.47 Nm
- Apply insulation and cladding.
- Weather-seal the stand entry.
- Leave these instructions with the end user for future reference.



Electrical Installation

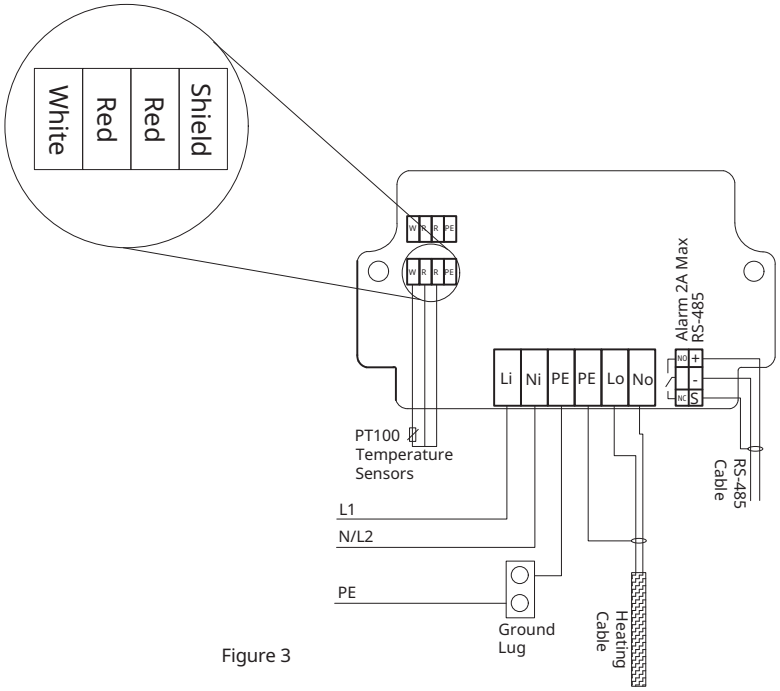
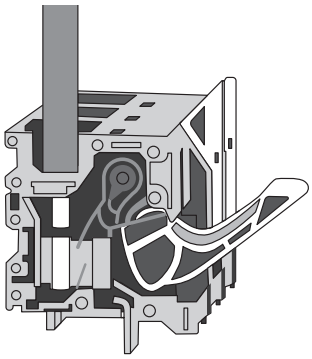


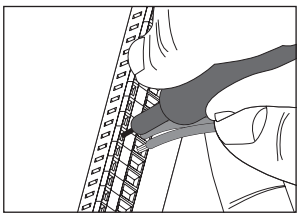
Figure 3

Installation notes

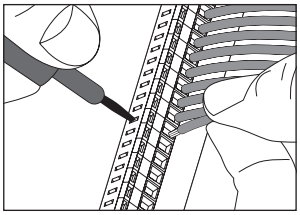
Conductor termination

Insert fine-stranded conductors and remove all conductors via operating tool.





Inserting a conductor via 3.5 mm screwdriver.
Screwdriver actuation parallel to conductor entry



Inserting a conductor via 3.5 mm screwdriver.
Screwdriver actuation perpendicular to conductor entry

Figure 4: Electrical connection diagram Elexant 3500i

Wiring Diagram

Elexant 3500i units must be installed in accordance with local wiring regulations. Figure 3 shows the electrical connection diagram. The optional second Pt100 temperature sensor for the control unit is omitted for clarity. Terminate cable shields on the green earth terminal.

Configuration

The Elexant 3500i electronic thermostats can be configured in a number of ways. The communicating, current sensing, and ground fault detecting variants can be configured locally by means of a handheld programming device using the Elexant Connect application or from a central location using the Touch 1500 or Raychem Supervisor software. For more information about configuring the Elexant 3500i using these software programs, please refer to the Elexant Connect Operations Manual (EU2191), Touch 1500-EX Operations Manual (H58682), or the Raychem Supervisor Operations Manual (H57576). After programming, all settings are permanently stored in the nonvolatile memory of the Elexant 3500i, avoiding loss of data in the event of power failure or after a long-term power shutdown.

The Standard and Alarm variants of the Elexant 3500i can be programmed via the digital switches and rotary dial located here:

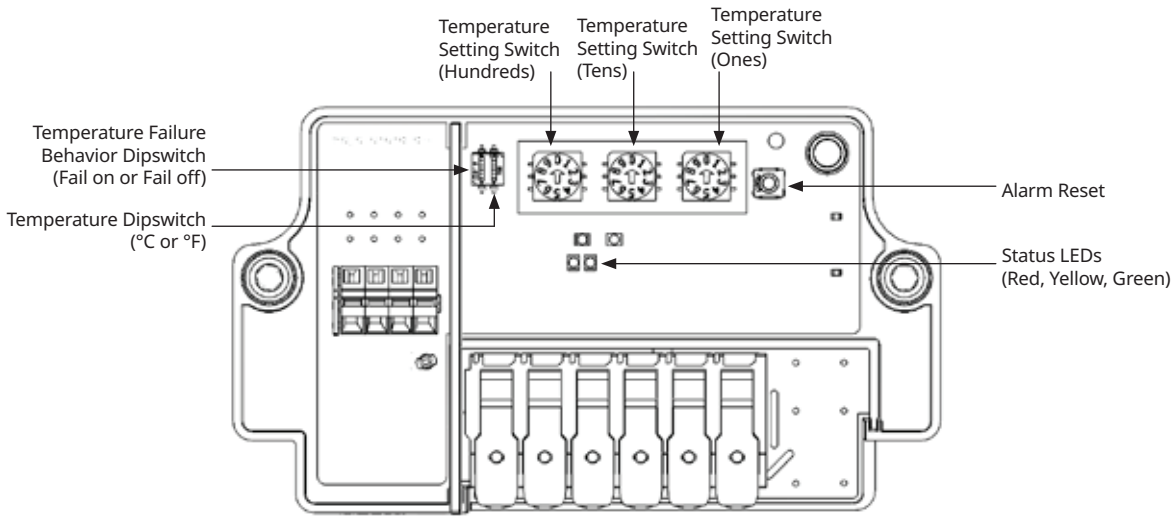


Figure 5: Elexant 3500i Standard and Alarm Variant Digital Switches and Rotary Dials

There are two dipswitches on the Standard and Alarm Variant of the Elexant 3500i. The dipswitch on the left is to set temperature sensor failure behavior. In the case of a temperature sensor failure the Elexant 3500i can switch to an on or an off state, depending upon the users requirement. Setting the dipswitch up, towards the filled circle, will program the Elexant 3500i to fail on, while setting the dipswitch down, towards the empty circle, will program the Elexant 3500i to fail off. By default, the Elexant 3500i is shipped with a fail off setting, meaning in the event of a sensor failure the Elexant 3500i will not energize the heat trace circuit. Setting the dipswitch up towards the filled circle will program the Elexant 3500i to energize the heat trace circuit in the event of a temperature sensor failure.

Note that the Standard and Alarm variant of the Elexant 3500i will display a temperature sensor failure alarm via a red status LED and the Alarm variant will engage the alarm relay in the event of a temperature sensor failure.

The dipswitch on the right is used to switch between Celsius and Fahrenheit. By default, the Elexant 3500i is shipped with this dipswitch down towards Celsius.

Finally, the rotary dials are used to select a setpoint temperature. The Elexant 3500i monitors the sensor temperature and compares it to the setpoint temperature. If the measured temperature is above the control temperature setpoint by more than the Deadband value, (by default 3°C/5°F) the output is turned off. If the control temperature falls below the control temperature setpoint, the output is turned on. When the control sensor temperature is within the dead band, the output does not change its state.

⚠ WARNING: Explosion Hazard- Substitution of Components May Impair Suitability for Intrinsic Safety and Class I Division 2 (Zone 2)

⚠ WARNING: Explosion Hazard- Do not disconnect equipment unless power has been switched off or the area is known to be Non-Hazardous.

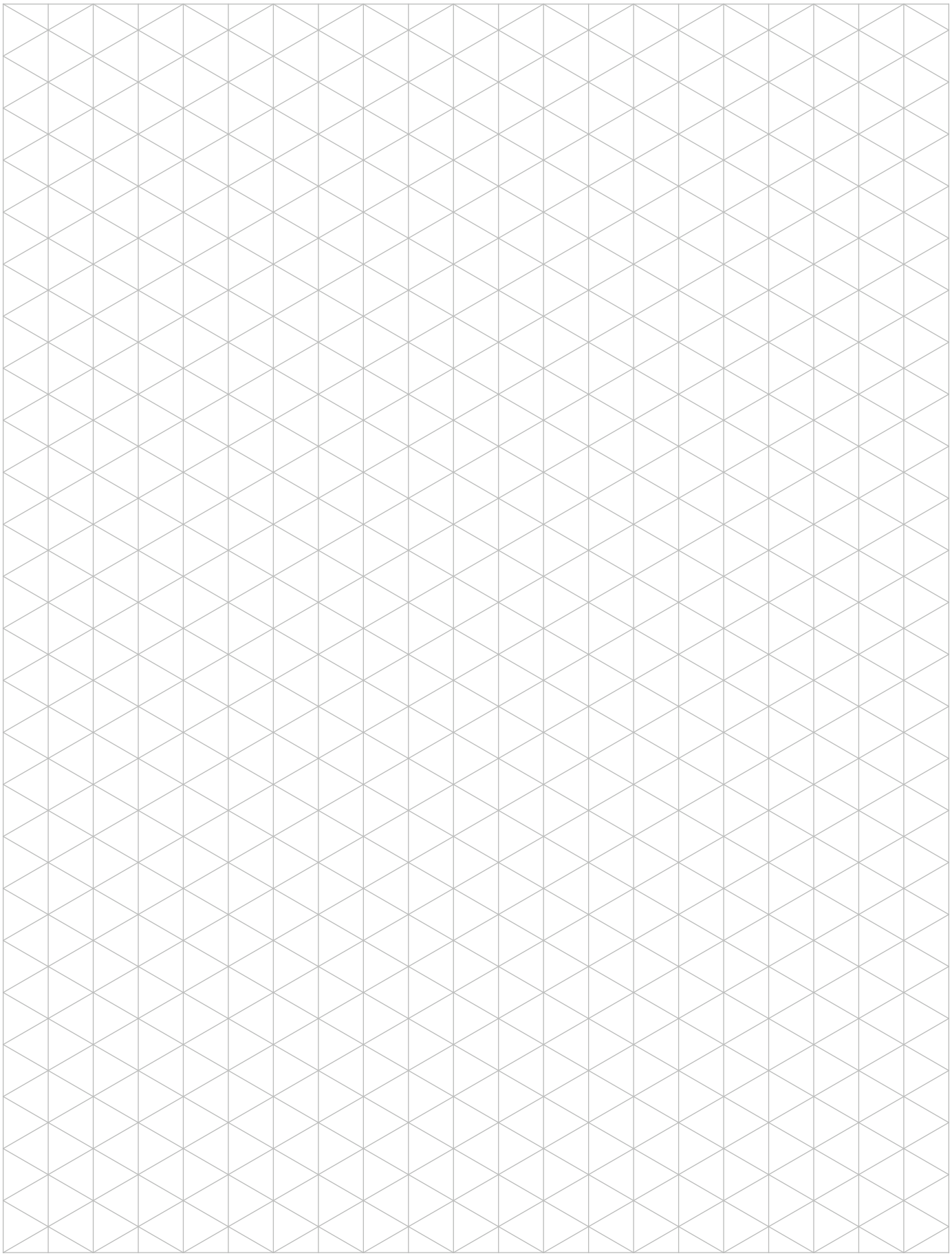
⚠ AVERTISSEMENT- Risque d'explosion. La substitution de composants peut rendre ce matériel inacceptable pour les emplacements de sécurité intrinsèque Classe i, Division 2 (zone 2).

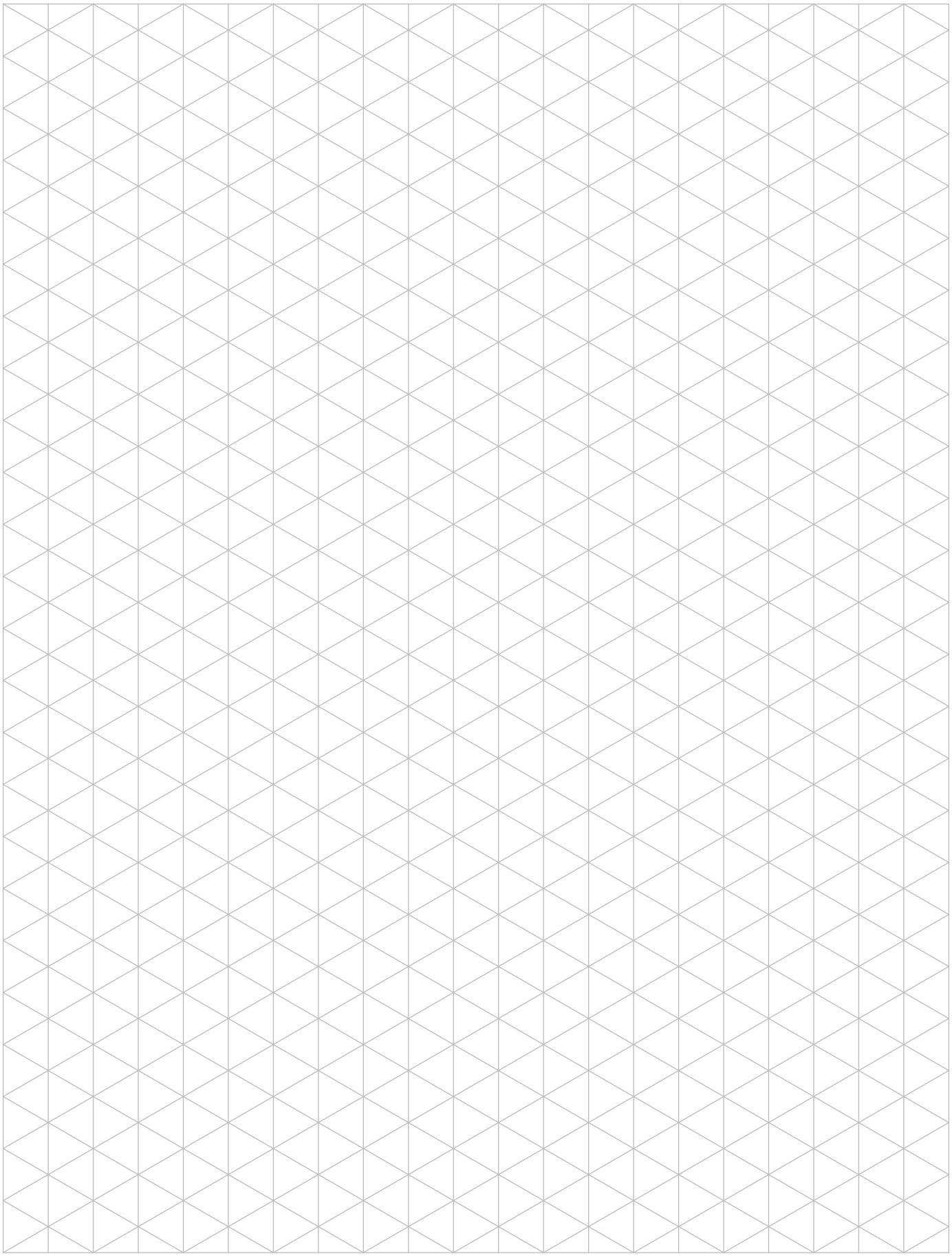
⚠ AVERTISSEMENT- Risque d'explosion. Ne pas débrancher l'appareil à moins d'avoir coupé l'alimentation électrique ou à moins qu'il ne s'agisse d'un emplacement non dangereux

ELEXANT 3500I STATUS INDICATOR LIGHT

Color	LED Behavior	Alarms*
Green	Solid	Power On, Heating Off
Flashing Green	80% on, 20% off (Flicker off aka "Heartbeat")	Power On, Heating On, Limiter Output On
Yellow	Solid	High temp, Low Temp, Low Current, GF Alarm, Cycle Count, Heater on time Alarm,
Red	50% on, 50% off	GF Trip , GF CT Failure, TS Fail, SW Fail, Lim Trip, High Temp cutout, internal failure

* Where applicable. Not all alarms available in all variants. For more information about Elexant 3500i alarms, see Elexant Connect Operations Manual (EU2191).





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