





doprino 3 radio net (- OMS)

April 2022 ▪ ista International GmbH
C.83.0036 | Release 9.1.0

ista



Contents

- 1.** Introduction
- 2.** Device Properties
- 3.** Warnings
- 4.** Installation
- 5.** Commissioning and User Interface
- 6.** Replacement
- 7.** Readout / Reparameterisation



Introduction Task and Function

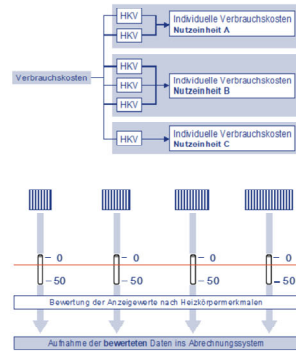
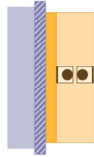


Heat cost allocators

- register temperature and duration of the temperature effect
- have a dimensionless display

The actual consumption results from

- the display values of all heat cost allocators as well as
- the information regarding the characteristics of the individual radiators





Contents

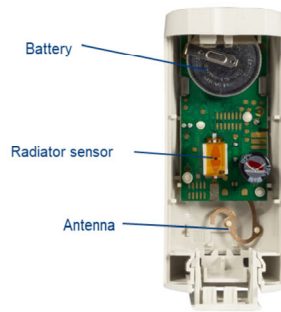
1. Introduction
- 2. Device Properties**
3. Warnings
4. Installation
5. Commissioning and User Interface
6. Replacement
7. Readout / Reparameterisation



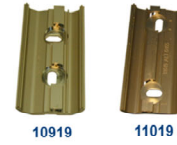
Introduction to the doprimo 3 radio net



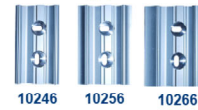
Compact device



Mounting parts



Widening parts



Downwards compatible

Device Properties * The precise launch date varies from country to country

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Article numbers:

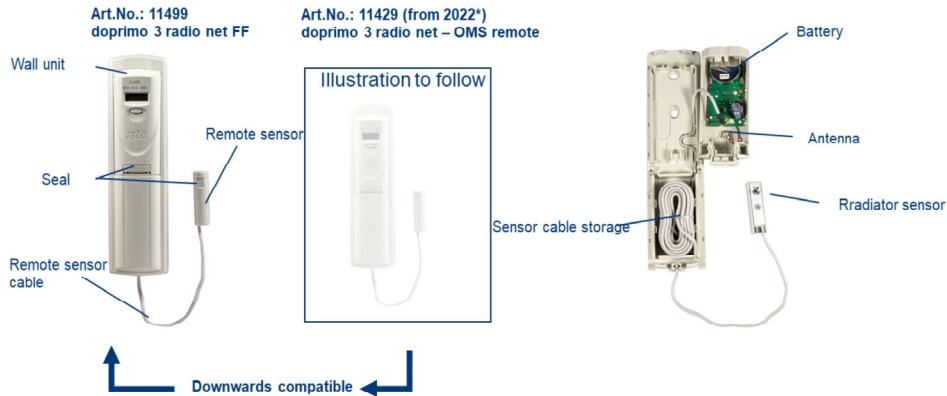
- 11490: doprimo 3 radio net
- 11420: doprimo 3 radio net – OMS compact

The doprimo 3 radio net – OMS compact (11420) is downwards compatible with all preceding versions of doprimo 3.

Introduction to doprimo 3 radio net (- OMS remote)



Remote sensor device



* The precise launch date varies from country to country

Device Properties

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Article numbers:

- 11499: doprimo 3 radio net FF
- 11429: doprimo 3 radio net – OMS remote

The doprimo 3 radio net – OMS remote (11429) is downwards compatible with all preceding versions of doprimo 3.

Service variants

Classic

- Radio communication is not activated
- Temporary activation of service radio telegrams is possible via ista radio at the press of a button

ista radio networked / WalkBy

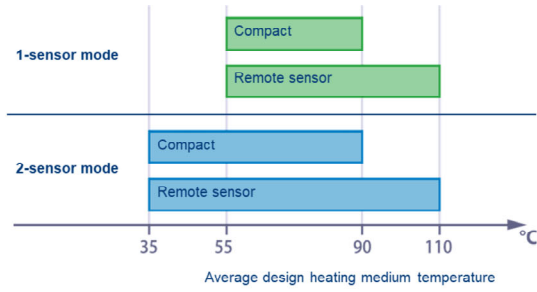
- The bidirectional ista radio is activated
- Networking of the terminal devices is possible
- WalkBy communication is possible

OMS

- Unidirectional OMS telegrams are activated in C1 mode
- The bidirectional ista radio is activated in the WalkBy variant
- Networking of the terminal devices is not possible



Device Properties Introduction to the device





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Warnings



Warning: *Explosion hazard*

Improper handling of the lithium metal battery installed in the device can cause the battery to explode and associated fires or injuries.



The following apply to the device and the LITHIUM METAL BATTERY - **do not**:

- heat above the device storage and operating temperatures given in the installation instructions
- throw onto fire
- expose to water
- short circuit
- open or damage
- charge
- weld or solder



Safety instructions Lithium metal batteries



WARNING

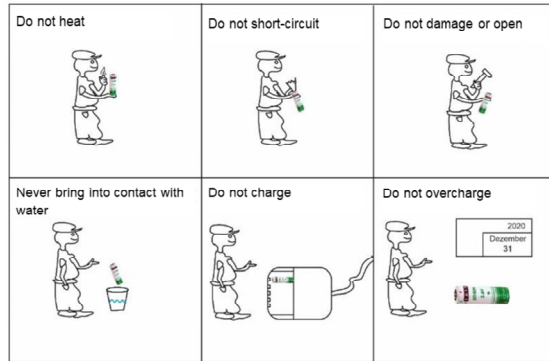
Explosion hazard due to improper handling

The following actions must never be carried out with lithium metal batteries or devices in which they are installed:



Note:

Damage to the battery is usually not immediately visible. Rather, it is a gradual process that can lead to the battery exploding after a time delay.



Notes

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Notes on transport and disposal - ADR SP 188 sticker



Note: *Power is supplied via a LITHIUM METAL BATTERY*

▪ Dangerous goods information of the device:

- Classification: LITHIUM METAL BATTERIES CONTAINED IN EQUIPMENT
- UN Number: UN 3091
- Dangerous goods class: 9
- Label: SV188
- Battery weight: 0.008 kg
- Lithium content: 0.29 g



- The Summary UN 38.3 required for the transport can be requested from ista citing the article number.
- Comply with the national and international dangerous goods regulations.
- Disposal of the battery exclusively in accordance with national regulations on lithium battery disposal.





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Installation methods and accessories

Installation Installation Methods and Installation Kits



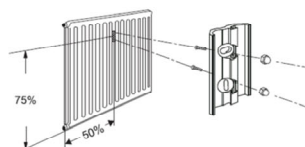
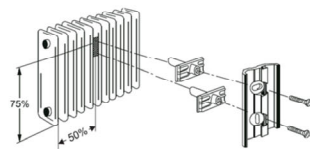
Installation methods

- Welded installation
- Screwed installation / clamping bolt installation
- Bonded installation (remote sensor)
- Installation kit

Depending on radiator

Installation kits

- e.g. convector block for installation on convectors
- Widening element for installation between radiator fins

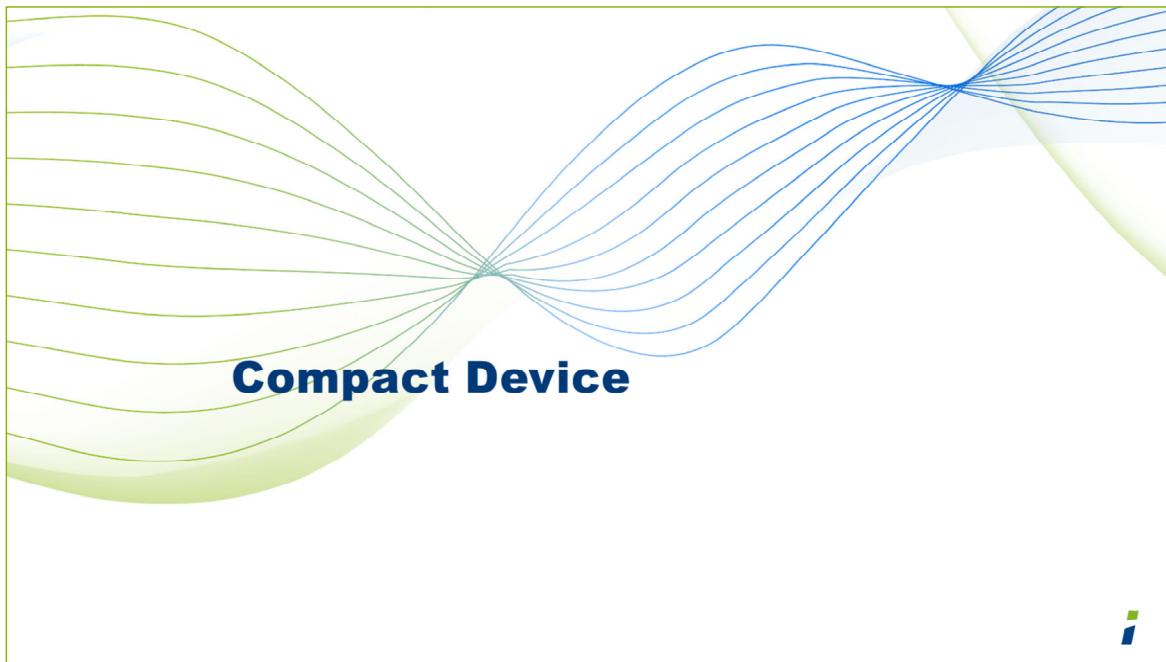


Installation Accessories

- Bolts, screws, nuts
- Panels
- Widening parts
- Installation kits
- Assembly components
- Seals
- Miscellaneous (e.g. adhesive)



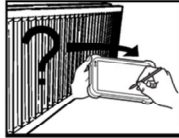
Compact and remote sensor device use the same seal.



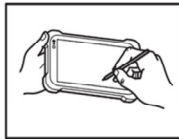
Installation (Steps 1 to 3) Preparation Work



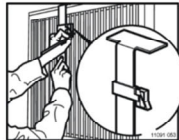
1. Identify radiator



2. Record data on PDA or installation card



3. Determine point of installation



Compact device

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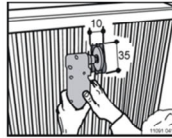
Notes:

- Identify the radiator with the aid of the installation manual or the radiator database in the PDA.
- Document the data in the PDA.
- Use the assembly gauge or a tape measure to determine the installation point.

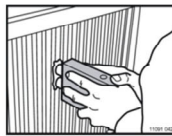
Installation (Steps 4 to 6) Welded Installation



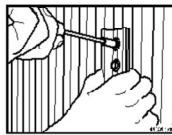
4. Grind off radiator paint



5. Weld on retaining stud
Important! Follow the safety
instructions for the welding apparatus!



6. Screw on mounting part (back
section)

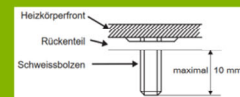


Continue with Step 7.



Note on choice of welding studs!

For welded installation, choose a welding stud length so that the maximum protrusion of the welding stud at the rear is 10 mm.



Compact device

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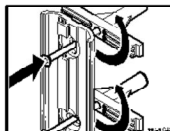
Notes:

- Grind off the radiator paint at the point of installation using a grinder (10 mm x 35 mm).
- Use the stud welder to weld the retaining studs on the radiator.
Important! Follow the safety instructions for the welding apparatus!
- Use HKV (heating circuit manifold) screwdriver HKVE/HKVV (hollow) to screw the mounting part on the studs.

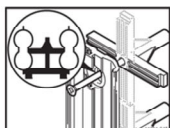
Installation (Steps 4 to 6) Clamping Bolt Installation



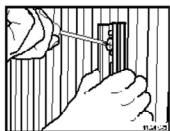
4. Preassemble mounting part and clamping bolt



5. Position the preassembled mounting part on the installation point



6. Tighten both clamping bolts



Continue with step 7.

Compact device

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Notes:

Preassemble the mounting part and the two clamping bolts: To do so, insert screws through the holes in the mounting part and screw the clamping bolts onto the screws.

Position the preassembled mounting part on the radiator. To do so: Place both clamping bolts in a vertical position and push between the radiator fins at the installation point. Place clamping bolts in a horizontal position.

Use a Phillips screwdriver to tighten the screws, to fix the mounting part with the two clamping bolts.

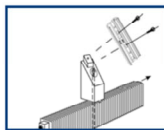
Installation (Steps 4 to 5) with / on Installation Kit



4. Install the installation kit



5. Screw on mounting part (back section)



Continue with step 7.

Compact device

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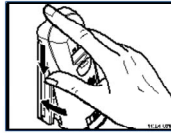
Note:

- Fit the respective installation kit according to the installation methods and special instructions.
- Use a Phillips screwdriver to screw the mounting part on the installation kit.

Installation (Step 7 to 9) Completion work



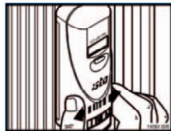
7. Attach upper part



8. Fasten upper part



9. Check fit of upper part



Compact device

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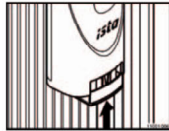
Notes:

- Place upper part (front section) on the mounting part.
- Fasten the upper part by pushing it onto the mounting part.
- Check the correct fit of the upper part. To do so: Move upper part back and forth.

Installation (Step 10 to 12) Completion work



10. Allow pre-installed seal to latch into position

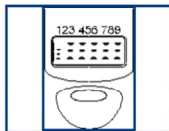


11. Installation complete



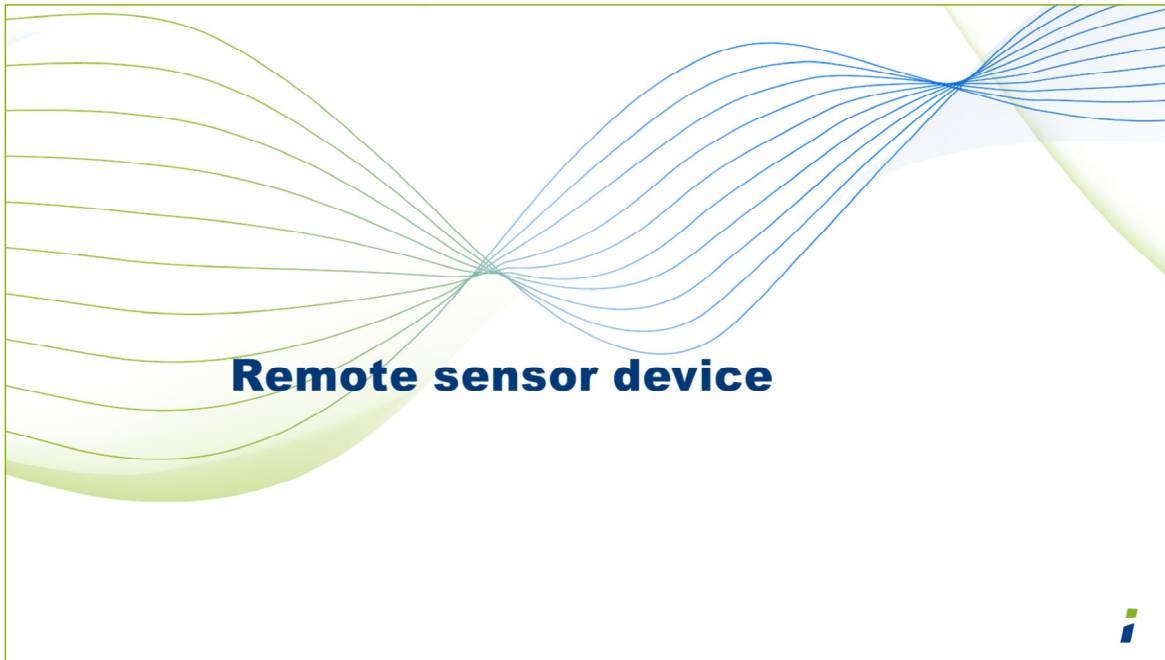
12. Commissioning (startup).

- See also separate chapter.



Notes:

- Seal the device by allowing the pre-installed seal to latch into position on the mounting part. It must latch into position with an audible click.



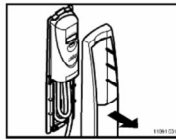
Installation (remote sensor device): Preparation work



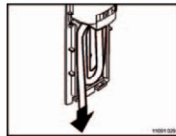
i Preparation work

  → Step 1 to 5 as for compact device

6. Remove housing



7. Unwind remote sensor cable



Remote sensor device

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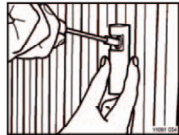
Notes:

- Identify the radiator with the help of the installation manual or the radiator database in the tablet.
- Document the data in the tablet/ on the installation card.
- Use the assembly gauge or a tape measure to determine the installation point.
- Remove the housing from the top section.
- Unwind the remote sensor cable from the wall-mounted device.

Installation (Step 8) Welded Installation



8. Screw on remote sensor



Continue with step 11.

Remote sensor device

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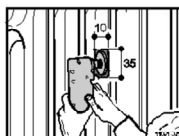
Notes:

- Use HKV (heating circuit manifold) screwdriver HKVE/HKVV (hollow) to screw the remote sensor onto the two studs.

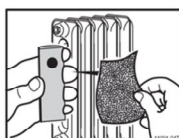
Installation (Steps 8 to 10) Bonded Installation



8. Grind off radiator paint

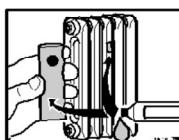


9. Roughen the remote sensor



10. Apply the adhesive and bond remote sensor

Bonded installation only permitted after prior approval!



Remote sensor device

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Notes:

- Grind off the radiator paint at the point of installation using a grinder (10 mm x 35 mm).
- Roughen the remote sensor with the aid of emery paper.
- Apply adhesive on the mounting part of the remote sensor and on the radiator.
- Bond the remote sensor.

Note: Bonded installation is only permitted in particular cases following prior approval by the branch office! Exception: In the case of cast iron finned radiators, bonded installation is officially approved (installation method 8D).

Installation (Steps 8 to 9) with / on Installation Kit



8. Install the installation kit

without picture

9. Screw on remote sensor

without picture

Continue with step 11.

Remote sensor device

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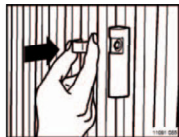
Notes:

- Fit the respective installation kit according to the installation methods and special instructions.
- Screw the remote sensor onto the installation kit.

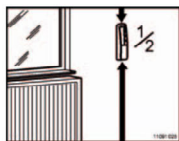
Installation (Step 11 to 13) Completion work



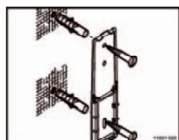
11. Seal remote sensor



12. Determine point of installation for wall-mounted device



13. Screw on the mounting part of the wall-mounted device



Important! Check wall for existing pipes and cables!

Remote sensor device

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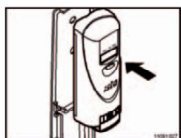
Notes:

- Seal the remote sensor. To do so: Firmly push in seal until it engages the second time.
Note: For bonded installation, the remote sensor must be secured against manipulation by the *ista* user protection (tamper-proof adhesive seal)!
- Determine the installation point for the wall-mounted device (next to the radiator at half the room height).
- Screw the mounting part of the wall-mounted device onto the wall.
Important! Before doing so, check the wall for existing cables!

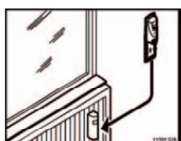
Installation (Step 14 to 16) Completion work



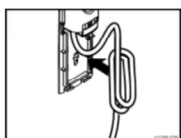
14. Attach upper part



15. Lay the remote sensor cable



16. Wind up excess cable



Remote sensor device

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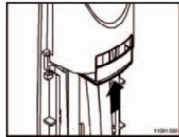
Notes:

- Place the upper part on the mounting part of the wall-mounted device.
- Lay the remote sensor cable in the cable duct between remote sensor and wall-mounted device.
- Wind up excessive cable and stow it away in the cable box on the wall-mounted device.
- Cable duct 20m for cutting to required length is available as article 10636

Installation (Step 17 to 19) Completion work



17. Seal wall-mounted device

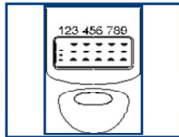


18. Fit the housing



19. Commissioning

- See also separate chapter.



Remote sensor device

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Notes:

- Seal the wall-mounted device by allowing the pre-installed seal to latch onto the mounting part. It must latch into position with an audible click.
- Fit the housing onto the wall-mounted device.



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Commissioning



Compact and Remote Sensor Device



Device not installed
Storage mode

Art.No.: 11490, 11499



Art.No.: 11420, 11429



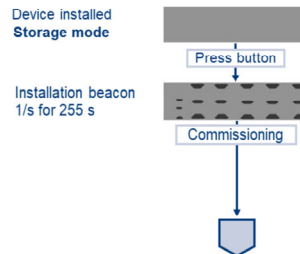
Notes:

- If the device has not yet been installed, the illustrated display appears when the device button is pressed

Commissioning



Compact device



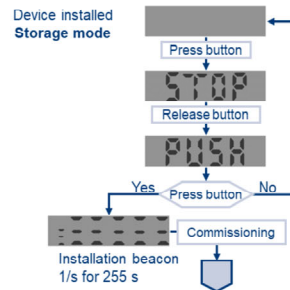
Notes:

- If the display was activated during installation: Wait until the display does not show anything.
- Press the pushbutton.
The device is now in installation mode for 4 minutes.

Commissioning



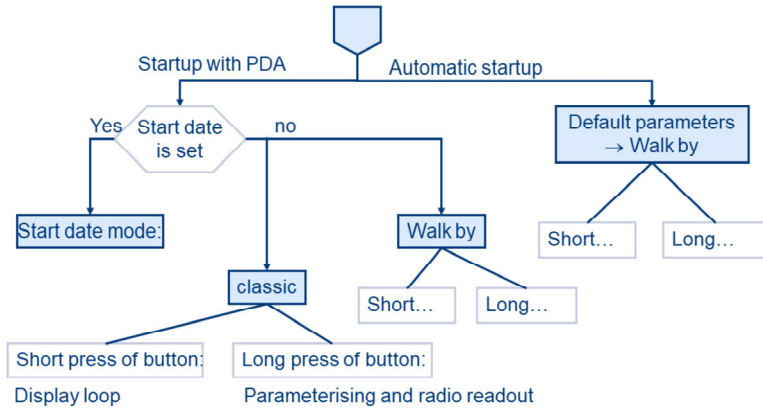
Remote sensor device



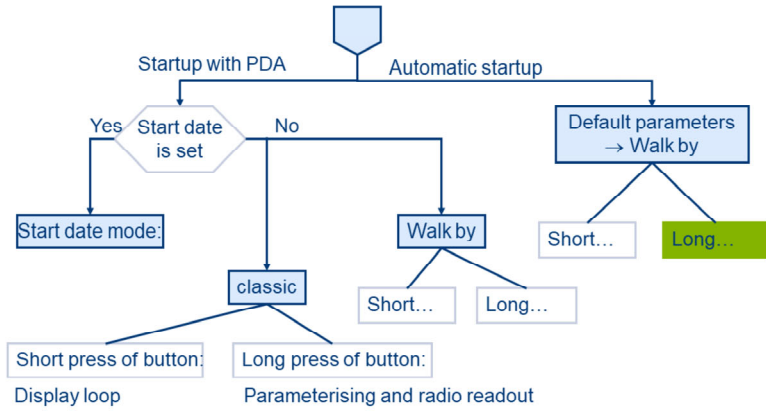
Notes:

- If the display was activated during installation: Wait until the display does not show anything.
- Press the button until "STOP" appears.
- Release the button
- As soon as "PUSH" appears in the display, press the button again.
- The device is now in installation mode for 4 minutes.

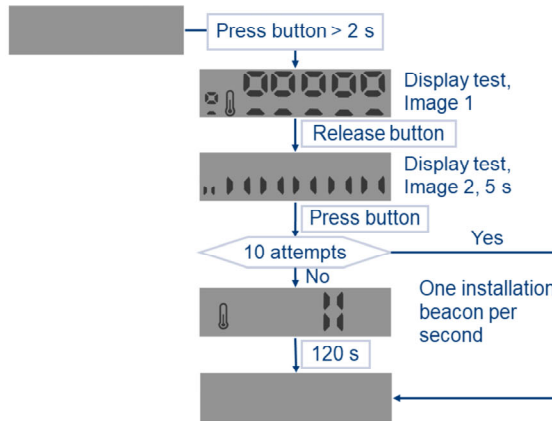
Commissioning performed Device mode



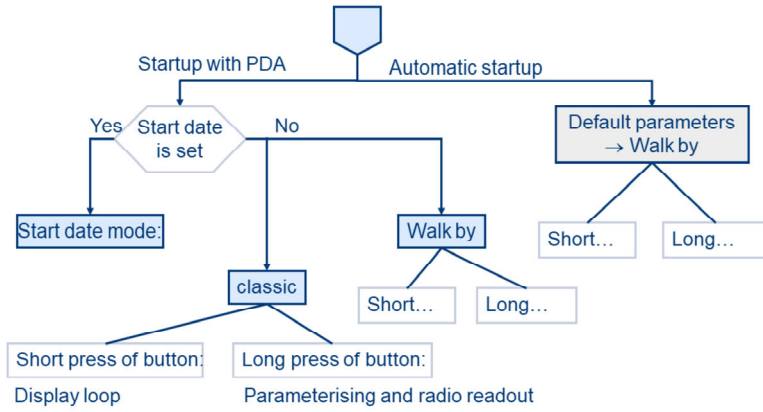
Commissioning Device Mode



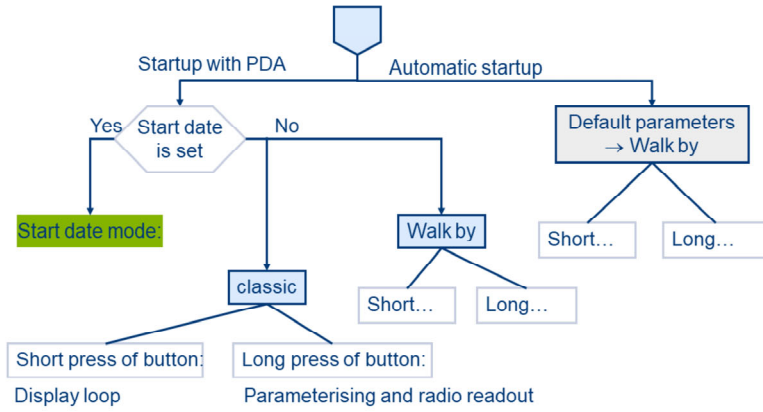
Commissioning Walk by after automatic Commissioning



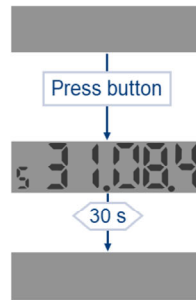
Commissioning performed Device mode



Commissioning performed Device mode



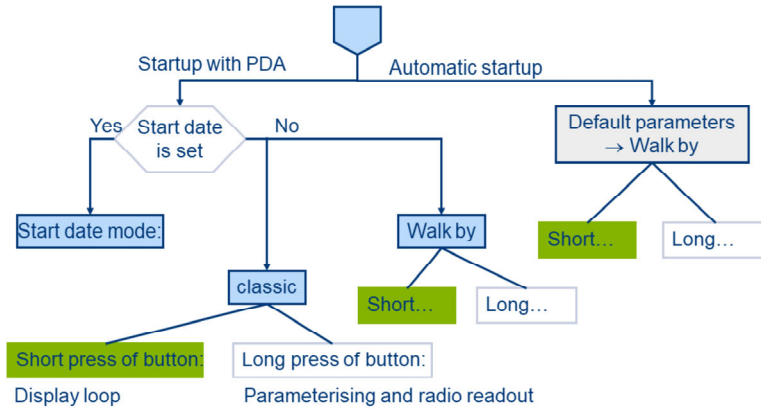
Commissioning performed Start Date Mode Display



Notes:

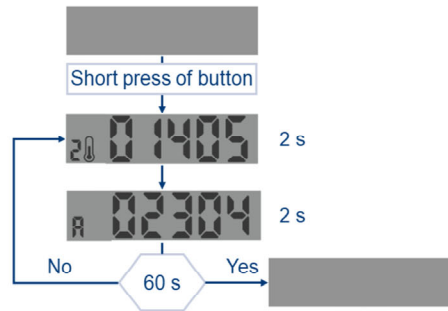
- Is only displayed if start date mode is parameterised via the job

Commissioning performed Device mode



It is also possible to activate the readout beacon if the device is in a sensor net network.

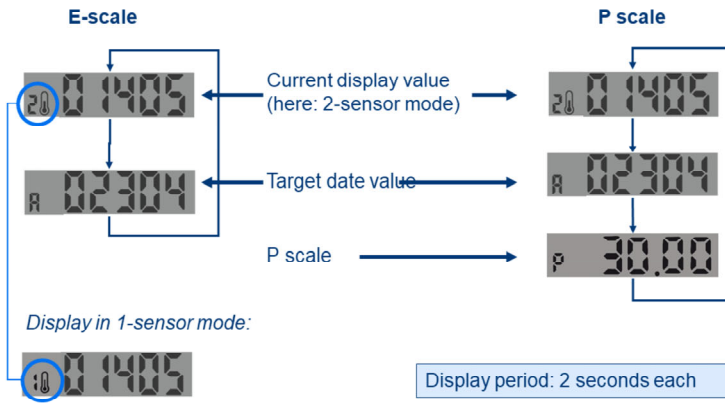
Commissioning performed Measuring mode display loop



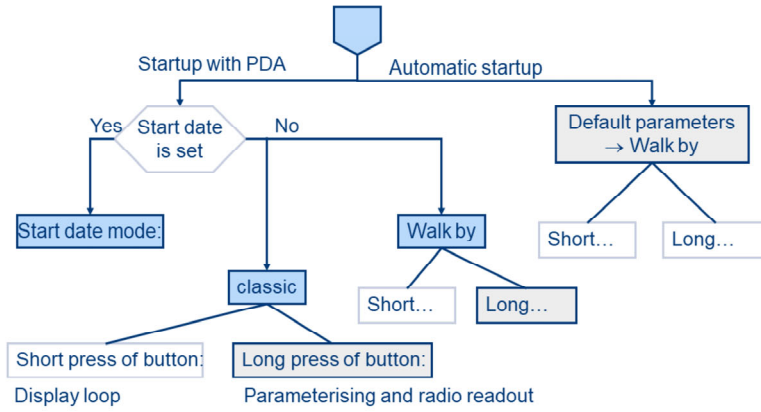
The number of activations for transmitting devices is limited to 10 per day.

Communication with the device is also enabled in the sensor net.

Commissioning performed Measuring mode display loop

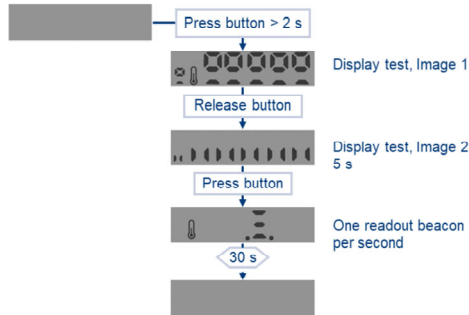


Commissioning performed Device mode



Communication with the device is also enabled in the sensor net.

Classic readout - commissioning performed Display test and readout via tablet



It is also possible to activate the readout beacon if the device is in a sensor net network.

The number of activations for transmitting devices is limited to 10 per day.

Communication with the device is also enabled in the sensor net.

Commissioning performed Error display



Error codes

- P2 Incorrect internal data → replace device
- P3 Room air sensor error → replace device
- P4 Radiator sensor error → replace device
- P7 Room air sensor error during test measurement → can be ignored
- P8 Radiator sensor error during test measurement → can be ignored



Malfunction mode
(permanent display)

The **"STOP"** and **"PUSH"** displays during startup of a remote sensor device are **not** error codes!





Contents

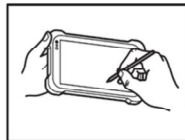
1. Introduction
2. Device Properties
3. Warnings
4. Installation
5. Commissioning and User Interface
6. **Replacement**
7. Readout / Reparameterisation



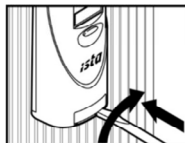
Replacement



1. Record the data of the old device
 - on the tablet



2. Destroy the seal



3. Detach old upper part



Notes:

- Document the data of the old device on the tablet.

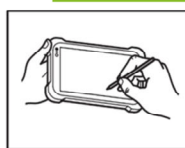
Replacement



4. Fit new upper part
See "Installation" chapter

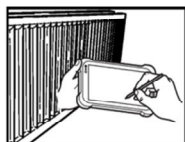


5. Record data of the new device



6. Record radiator data
■ (except in case of complaint)

Continue with start-up (see separate chapter)



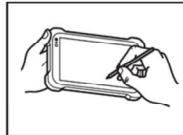
Notes:

- Fit the new upper part and seal it.
- Document the data of the new device on the tablet.
- Record the radiator data on the tablet or on the installation card (exception: complaint).

Replacement Dismantling wall-mounted device



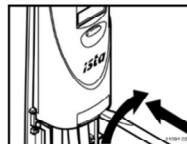
1. Use ista service tools to read out data of the old device



2. Remove housing



3. Destroy the seal



Replacement

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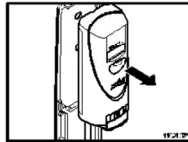
Notes:

- Document the data of the old device on the tablet
- Remove the housing of the wall-mounted device if necessary for an old device.
- Destroy the seal using a screwdriver.

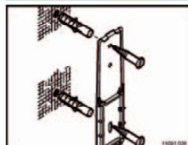
Replacement Dismantling wall-mounted device



4. Detach old upper part from the mounting part



5. Remove wall-mounted device



6. Disconnect remote sensor cable



Replacement

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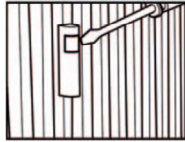
Notes:

- Detach the old upper part from the mounting part.
- Detach the wall-mounted device.
- Disconnect the remote sensor cable (from the wall-mounted device to the radiator).

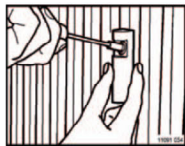
Replacement Dismantling remote sensor - welded installation



7. Remove seal



8. Detach old remote sensor



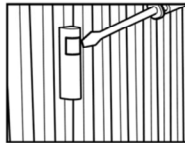
Notes:

- Remove the seal of the remote sensor using a screwdriver.
- Unscrew the nut M3 and detach the remote sensor.

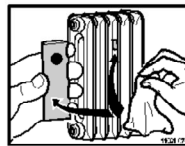
Replacement Dismantling remote sensor - bonded installation



7. Detach old remote sensor



8. Clean adhesive area



Notes:

- Detach the old remote sensor by levering it off the radiator with the aid of a screwdriver.
- Clean the adhesive area on the radiator with the aid of emery paper.
- Roughen the remote sensor with the aid of emery paper.

Replacement Completion work

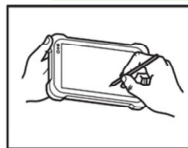


9. Install new remote sensor device

See "Installation" chapter

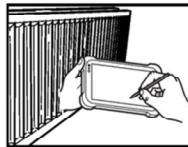


10. Record data of the new device



11. Record radiator data, if assigned
■ (except in case of complaint)

Continue with start-up (see
separate chapter)



Notes:

- Fit the new remote sensor and seal it.
- Fit the new wall-mounted device and seal it.
- Document the data of the new device in the PDA / on the installation card.
- Record the radiator data in the PDA or on the installation card (exception: complaint).



Contents

- 1.** Introduction
- 2.** Device Properties
- 3.** Warnings
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Readout / Reparameterisation Service variants of networked ista Funk / Walk by



Readout / reparameterisation via networked ista radio (sensor net)

- Data transmission directly to ista via mobile phone network



Walk-by readout / reparameterisation

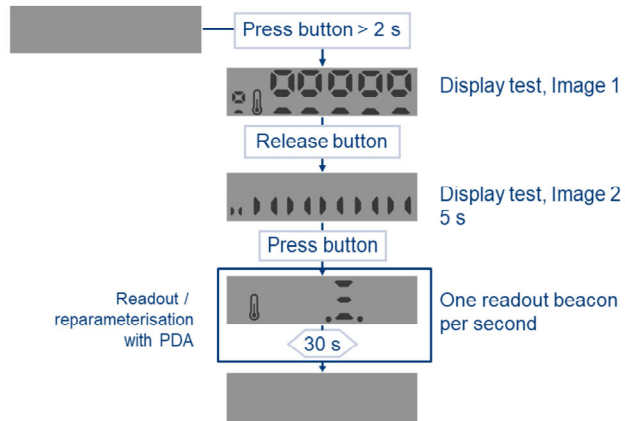
- Read out / reparameterise devices using ista service tools
- Check data on the tablet for completeness



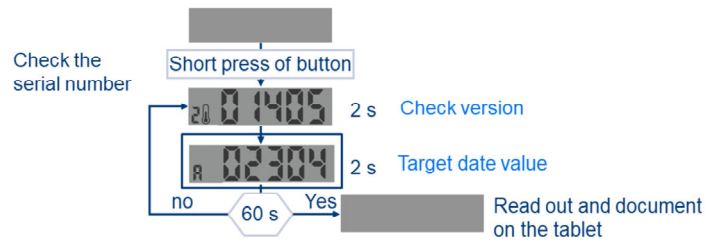
Instructions regarding the walk-by read-out:

- Read out the devices by walk-by with the ista service tools, e.g. from the staircase.
- Check that all devices have been recorded in the ista service tools.
- A walk by read out is also possible if the device is in a network or is asleep. However, this requires manual activation of the device with a long press of the button.

Readout / Reparameterisation Classic and AMM Service Variant




Readout VISUAL optical



Notes

- Check the device's serial number.
- Trigger the display loop by pressing the pushbutton.
- Use the ista service tools to document the display data.



Thank you

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