



# **Truma VarioHeat**

GB Operating instructions To be kept in the vehicle!

Page 2



## Table of contents

Symbols used	2 2 3 4 4 5
Troubleshooting Maintenance / Repairs / Cleaning	5

#### **Operating instructions**

Start-up6Room temperature sensor6Truma CP plus VarioHeat digital control panel6Intended use6Safety instructions6Important notes6Air conditioning systems – shared use of IR remote controland Truma CP plus VarioHeat control panel6Display and control elements7Rotary push button7Back button7Start-up7Start-up7Start-up7Start-up8Select setting level8Switching on and off8Change room temperature8Set time switch9Switch lighting on / off10Set time10Special displays11230 V mains voltage available11Infrared (IR) remote control (air conditioning system)11External control panel (CI-BUS)11Marinenance12Truma CP classic VarioHeat analogue control panel12VarioHeat fuse12VarioHeat fuse12
Intended use6Safety instructions6Important notes6Air conditioning systems – shared use of IR remote controland Truma CP plus VarioHeat control panel6Display and control elements7Rotary push button7Back button7Start-up7Functions8Select setting level8Select fan level8Set time switch9Switch lighting on / off10Set time10Special displays11230 V mains voltage available11Infrared (IR) remote control (air conditioning system)11Energy type display11Warning11Fault11Maintenance12Truma CP classic VarioHeat analogue control panel12Disposing of the VarioHeat12Disposing of the VarioHeat12
Safety instructions6Important notes6Air conditioning systems – shared use of IR remote controland Truma CP plus VarioHeat control panel6Display and control elements7Rotary push button7Back button7Initial start-up7Start-up7Functions8Select setting level8Select fan level8Set time switch9Switch lighting on / off10Set time10Special displays11230 V mains voltage available11Infrared (IR) remote control (air conditioning system)11External control panel (CI-BUS)11Fault11Maintenance12Truma CP classic VarioHeat analogue control panel12Opisoning of the VarioHeat12Disposing of the VarioHeat12
Important notes6Air conditioning systems – shared use of IR remote controland Truma CP plus VarioHeat control panel6Display and control elements7Rotary push button7Back button7Initial start-up7Start-up7Functions8Select setting level8Select fan level8Set time switch9Switch lighting on / off10Set time10Special displays11230 V mains voltage available11Infrared (IR) remote control (air conditioning system)11External control panel (CI-BUS)11Fault11Maintenance12Truma CP classic VarioHeat analogue control panel12Opisoning of the VarioHeat12Disposing of the VarioHeat12
Air conditioning systems – shared use of IR remote controland Truma CP plus VarioHeat control panel6Display and control elements7Rotary push button7Back button7Initial start-up7Start-up7Functions8Select setting level8Switching on and off8Change room temperature8Set time switch9Switch lighting on / off10Set time10Special displays11230 V mains voltage available11Infrared (IR) remote control (air conditioning system)11External control panel (CI-BUS)11Fault11Maintenance12Truma CP classic VarioHeat analogue control panel12Opisoning of the VarioHeat12Disposing of the VarioHeat12
and Truma CP plus VarioHeat control panel6Display and control elements7Rotary push button7Back button7Initial start-up7Start-up7Functions8Select setting level8Switching on and off8Change room temperature8Select fan level8Set time switch9Switch lighting on / off10Set time10Special displays11230 V mains voltage available11Infrared (IR) remote control (air conditioning system)11External control panel (CI-BUS)11Fault11Maintenance12Truma CP classic VarioHeat analogue control panel12Oisposing of the VarioHeat12
Display and control elements7Rotary push button7Back button7Initial start-up7Start-up7Functions8Select setting level8Switching on and off8Change room temperature8Select fan level8Set time switch9Switch lighting on / off10Set time10Service menu10Special displays11230 V mains voltage available11Infrared (IR) remote control (air conditioning system)11External control panel (CI-BUS)11Fault11Maintenance12Truma CP classic VarioHeat analogue control panel12(optional)12Disposing of the VarioHeat12
Rotary push button7Back button7Back button7Initial start-up7Start-up7Functions8Select setting level8Switching on and off8Change room temperature8Select fan level8Set time switch9Switch lighting on / off10Set time10Service menu10Special displays11230 V mains voltage available11Infrared (IR) remote control (air conditioning system)11External control panel (CI-BUS)11Fault11Maintenance12Truma CP classic VarioHeat analogue control panel12Disposing of the VarioHeat12
Back button7Initial start-up7Start-up7Functions8Select setting level8Switching on and off8Change room temperature8Select fan level8Set time switch9Switch lighting on / off10Set time10Service menu10Special displays11230 V mains voltage available11Infrared (IR) remote control (air conditioning system)11External control panel (CI-BUS)11Fault11Maintenance12Truma CP classic VarioHeat analogue control panel12Disposing of the VarioHeat12
Initial start-up7Start-up7Functions8Select setting level8Switching on and off8Change room temperature8Select fan level8Set time switch9Switch lighting on / off10Set time10Service menu10Special displays11230 V mains voltage available11Infrared (IR) remote control (air conditioning system)11External control panel (CI-BUS)11Fault11Maintenance12Truma CP classic VarioHeat analogue control panel12Disposing of the VarioHeat12
Start-up7Functions8Select setting level8Switching on and off8Change room temperature8Select fan level8Set time switch9Switch lighting on / off10Set time10Service menu10Special displays11230 V mains voltage available11Infrared (IR) remote control (air conditioning system)11External control panel (CI-BUS)11Fault11Maintenance12Truma CP classic VarioHeat analogue control panel12Disposing of the VarioHeat12
Functions8Select setting level8Switching on and off8Change room temperature8Select fan level8Set time switch9Switch lighting on / off10Set time10Service menu10Special displays11230 V mains voltage available11Infrared (IR) remote control (air conditioning system)11External control panel (CI-BUS)11Fault11Maintenance12Truma CP classic VarioHeat analogue control panel12Disposing of the VarioHeat12
Select setting level8Switching on and off8Change room temperature8Select fan level8Set time switch9Switch lighting on / off10Set time10Service menu10Special displays11230 V mains voltage available11Infrared (IR) remote control (air conditioning system)11Energy type display11Warning11Fault11Maintenance12Truma CP classic VarioHeat analogue control panel12Disposing of the VarioHeat12
Switching on and off8Change room temperature8Select fan level8Set time switch9Switch lighting on / off10Set time10Service menu10Special displays11230 V mains voltage available11Infrared (IR) remote control (air conditioning system)11External control panel (CI-BUS)11Fault11Maintenance12Truma CP classic VarioHeat analogue control panel12Disposing of the VarioHeat12
Select fan level8Set time switch9Switch lighting on / off10Set time10Service menu10Special displays11230 V mains voltage available11Infrared (IR) remote control (air conditioning system)11External control panel (CI-BUS)11Energy type display11Warning11Fault11Maintenance12Truma CP classic VarioHeat analogue control panel12Ipisposing of the VarioHeat12
Set time switch9Switch lighting on / off10Set time10Service menu10Special displays11230 V mains voltage available11Infrared (IR) remote control (air conditioning system)11External control panel (CI-BUS)11Warning11Fault11Maintenance12Truma CP classic VarioHeat analogue control panel12Ipisposing of the VarioHeat12
Switch lighting on / off10Set time10Service menu10Special displays11230 V mains voltage available11Infrared (IR) remote control (air conditioning system)11External control panel (CI-BUS)11Energy type display11Warning11Fault11Maintenance12Truma CP classic VarioHeat analogue control panel12Ipisposing of the VarioHeat12
Set time10Service menu10Special displays11230 V mains voltage available11Infrared (IR) remote control (air conditioning system)11External control panel (CI-BUS)11Energy type display11Warning11Fault11Maintenance12Truma CP classic VarioHeat analogue control panel12Ioptional)12Disposing of the VarioHeat12
Service menu10Special displays11230 V mains voltage available11Infrared (IR) remote control (air conditioning system)11External control panel (CI-BUS)11Energy type display11Warning11Fault11Maintenance12Truma CP classic VarioHeat analogue control panel12(optional)12Disposing of the VarioHeat12
Special displays11230 V mains voltage available11Infrared (IR) remote control (air conditioning system)11External control panel (CI-BUS)11Energy type display11Warning11Fault11Maintenance12Truma CP classic VarioHeat analogue control panel12(optional)12Disposing of the VarioHeat12
230 V mains voltage available11Infrared (IR) remote control (air conditioning system)11External control panel (CI-BUS)11Energy type display11Warning11Fault11Maintenance12Truma CP classic VarioHeat analogue control panel12(optional)12Disposing of the VarioHeat12
Infrared (IR) remote control (air conditioning system)11External control panel (CI-BUS)11Energy type display11Warning11Fault11Maintenance12Truma CP classic VarioHeat analogue control panel12(optional)12Disposing of the VarioHeat12
External control panel (CI-BUS)       11         Energy type display       11         Warning       11         Fault       11         Maintenance       12         Truma CP classic VarioHeat analogue control panel       12         (optional)       12         Disposing of the VarioHeat       12
Energy type display       11         Warning       11         Fault       11         Maintenance       12         Truma CP classic VarioHeat analogue control panel       12         (optional)       12         Disposing of the VarioHeat       12
Warning       11         Fault       11         Maintenance       12         Truma CP classic VarioHeat analogue control panel       12         (optional)       12         Disposing of the VarioHeat       12
Maintenance       12         Truma CP classic VarioHeat analogue control panel       12         (optional)       12         Disposing of the VarioHeat       12
Truma CP classic VarioHeat analogue control panel       12         (optional)       12         Disposing of the VarioHeat       12
(optional) 12 Disposing of the VarioHeat 12
Disposing of the VarioHeat
VarioHeat fues
Accessories
Technical data, heater
Truma CP plus VarioHeat technical data
Manufacturer's Warranty
(European Union)
Troubleshooting guide, Truma VarioHeat
Troubleshooting guide (air conditioning system) 15
Troubleshooting guide, Truma VarioHeat 16

#### Model

Truma VarioHeat eco Truma VarioHeat comfort

## Symbols used



Symbol indicates possible hazards.

Note containing information and tips.

Read the safety instructions and operating instructions carefully before starting the appliance.

## Intended use

#### Proper use

- The appliance is approved solely for installation and operation in caravans and construction trailers of vehicle class O, motor caravans of vehicle class M1, commercial vehicles of vehicle classes N1 and N2 and mobile homes if the gas system is installed in accordance with EN 1949. The national legislation and regulations for operating and testing gas installations (e.g. DVGW Work Sheet G 607 in Germany) must be observed.
- The appliance may be used only to heat the vehicle's interior.
- If the appliance is operated while the vehicle is in motion, facilities must be installed to prevent uncontrolled emission of liquefied gas in the event of an accident (according to UN-ECE regulation 122).
- If the appliance is being used for commercial purposes, the operator must ensure that special statutory and insurance regulations of the respective destination country are observed (e.g. DGUV regulations in Germany).

#### Improper use

All other uses not listed under proper use are improper and therefore prohibited. This applies for example to installation and operation in:

- Motor buses of vehicle classes M2 and M3,
- Commercial vehicles of vehicle class N3,
- Boats and other water vessels,
- Hunting/forestry huts, weekend homes or awnings.
- Installation in trailers and vehicles used to transport hazardous goods is prohibited
- Defective appliances must not be used.
- Appliances installed and utilised in contravention of the operating and installation instructions must not be used.

# **Safety instructions**

To ensure safe and proper use, carefully read and observe the operating instructions and other documents supplied with the product, and keep them in a safe place for future reference. The respective valid laws, directives and standards must be observed.

Not following the rules in the operating and installation instructions can result in serious material damage and can seriously put at risk the health or life of persons. The appliance's operator or user bears sole responsibility for any damage incurred as a result of this.

# What must I do if I smell gas?

- Avoid ignition sources, e.g. extinguish all naked flames, do not actuate any electrical switches or use any mobile phones or radios in the vehicle, do not start the vehicle's engine, do not operate any appliances, do not smoke.
- Open windows and doors
- Evacuate all persons from the vehicle.
- Shut off gas cylinders and/or shut off the gas supply from the outside.
- Have the entire gas system inspected and repaired by qualified experts.
- Do not put the gas system back into operation until after it has been inspected and repaired.

A safe operating environment

The appliance may be operated only with appropriate Truma control panels and accessories.

Danger of toxic exhaust fumes! The heater's exhaust can be toxic in enclosed spaces (e.g. garages, workshops). If the vehicle is parked in closed rooms:

- Shut off the fuel supply to the heater.
- Deactivate the time switch.
- Switch the heater off on the control panel.
- Make sure that the appliances definitely cannot be switched on via the Truma App.

Danger of fire / explosion during refuelling. The appliance must not be operated during refuelling:

- the vehicle,
- the caravan's towing vehicle or
- other appliances.

Switch off the LP gas appliance at the control panel. Shut off the gas supply to the LP gas appliance. Make sure that the LP gas appliance can definitely not be switched on under any circumstances.

If the cowl has been placed near or directly beneath a window that can be opened, the appliance must be equipped with an automatic shut-off device in order to prevent operation with the window open. Never use objects (e.g. spray cans, candles) or flammable materials, liquids, gaseous substances or vapours in the vicinity of the appliance, in the installation compartment or in the appliance itself.

Keep flammable materials away from the area in front of the warm air outlets. Never block the warm air outlets.

The openings for circulated air intake, the installation compartment and the space around the appliance must be kept free of obstacles so that the appliance does not overheat.

Keep the cowl for the exhaust duct and combustion air infeed free of contamination (slush, ice, leaves etc.) at all times.

Danger from hot surfaces and exhaust gas. Do not touch the area around the wall cowl and do not lean any objects against the wall cowl or the vehicle. Obligations of the operator / vehicle owner



The vehicle owner is responsible for correct operation of the appliance.

The installer or vehicle owner must affix the yellow warning information sticker that is provided with the appliance to the vehicle in a location that is clearly visible to all users. Missing stickers can be requested from Truma.

The appliance, the gas system and the exhaust duct for the combustion products must be inspected by a recognised expert in accordance with the national regulations (e.g. DVGW Worksheet G 607 in Germany) or, if there are no such regulations, at least every two years.

- A recognised specialist must carry out a leak test after changes have been made to the liquid gas system.
- The vehicle owner is responsible for having the check carried out.

Pressure regulating devices and hoses must be replaced with new ones no more than 10 years after their date of manufacture (every 8 years if used commercially).

Inspect hose lines regularly and have them replaced if they are broken.

## Safe operation

The use of upright gas cylinders from which gas is taken in the **gas phase** is mandatory for the operation of gas pressure regulation systems, gas equipment and gas systems. Gas cylinders from which gas is taken in the liquid phase (e.g. for fork lifts) must not be used, since they would result in damage to the gas system.

The operating pressure of the gas supply (30 mbar) and of the appliance (see type plate) must be the same.

In Germany, only pressure regulating equipment that complies with DIN EN 16129 (in vehicles) with a fixed output pressure of 30 mbar may be used for the gas system. The flow rate of the pressure regulating equipment must correspond to at least the maximum consumption of all appliances installed by the system manufacturer.

For vehicles, we recommend the Truma MonoControl CS gas pressure regulation system and the Truma DuoComfort / DuoControl CS gas pressure regulation system for two-cylinder gas systems.

At temperatures of around 0 °C and below, the gas pressure regulation system or the changeover valve should be operated with the EisEx regulator heater.

Suitable hoses that meet national regulations must always be used in the respective destination country.

During the initial start-up of a brand new appliance, small quantities of fumes and a slight odour may briefly occur. When the appliance is started up after a particularly long period of non-use, there may be some smoke and/or smell due to dust or dirt. It is a good idea to allow the appliance to run at maximum output for a few minutes for the purpose of self-cleaning and to ensure that the area is well ventilated.

This appliance may be used by children from 8 years old and by persons with reduced physical, sensory or mental capabilities or with a lack of experience only if they are supervised or have been instructed in the safe use of the appliance and understand the resulting risks.



Children must not be allowed to play with the appliance.

The integrity and tight fit of the exhaust double duct must be checked regularly, particularly at the end of long trips. Also check the mounting of the appliance and the cowl.

To prevent damage to the appliance from spray water, such as when cleaning the vehicle, do not spray water directly into the cowl.

# Operation while driving

For heating while driving, the UN ECE regulation 122 stipulates a safety shut-off device to prevent the uncontrolled escape of gas in the event of an accident. The Truma MonoControl CS gas pressure regulation system fulfils this requirement. National regulations and rules must be followed.

If no safety shut-off device (e.g. no MonoControl CS) is installed, the gas cylinder must be closed while driving and notices must be attached in accordance with the valid regulations.

## Troubleshooting

If you notice unusual noises or smells, Close off the gas supply and switch off the appliance.

Danger of fire / explosion if you attempt to use an appliance that has been damaged by flooding or if the vehicle has been involved in an accident. A damaged appliance must be repaired by an expert or be replaced.

Have faults repaired by an expert with-• out delay.

Only carry out repairs yourself if the so-Iution is described in the troubleshooting guide of this operating instructions.

Following a deflagration (backfire), have the appliance and the exhaust gas system checked by an expert.

Maintenance / Repairs / Cleaning



The appliance may only be maintained, repaired and cleaned by an expert.



Maintenance, repairs and cleaning must not be done by children.



It is prohibited to use products containing chlorine on and inside the appliance.

## **Operating instructions**

#### **Read the safety instructions and operating instructions carefully before starting the appliance.** The vehicle owner is responsible for correct operation of the appliance.

The installer or vehicle owner must affix the yellow sticker with the warning information, which is enclosed with the appliance, in a location in the vehicle where it is clearly visible to all users. Missing stickers can be requested from Truma.

## **Function description**

VarioHeat is a warm air heater for air circulation to heat camping vehicles quickly. The burner is fan-assisted, which ensures that operation is problem-free, even when on the move. The appliance automatically selects the required operating level according to the temperature difference between the setting on the control panel and the current room temperature. A boost function for quick heating and a night function for low-noise operation are also available. The various fan settings allow air circulation mode without heating.

The digital control panel can be used to select other functions such as time switch or operation of a Truma air conditioning system. Information on this can be found under Truma CP plus VarioHeat digital control panel

This appliance always starts up at the lowest setting. If this is not sufficient to achieve the desired temperature inside the vehicle, the appliance switches to a higher operating level after about 5 minutes.

## Start-up

- Remove the cowl cover.
- Open the gas cylinder and the quick-acting valve in the gas supply line.
- Switch on the heater, see.
- Truma CP plus VarioHeat digital control panel or Truma CP classic VarioHeat analogue control panel

If the appliance is not used for a long period, place on the cowl cover and close the quick-acting valve in the gas supply line and the gas cylinder.

## Room temperature sensor

To measure the room temperature, an external room temperature sensor is located in the vehicle. The position of the sensor is determined by the vehicle manufacturer depending on the vehicle model. More information can be found in the operating instructions for your vehicle.



Figure 1

The temperature setting on the control panel depends on personal heating requirements and the design of the vehicle, and must be determined individually.

# Truma CP plus VarioHeat digital control panel

#### Intended use

The Truma CP plus VarioHeat control panel is used to control and monitor a Truma VarioHeat heater and / or a Truma air conditioning system.

The following air conditioning systems can be operated with the Truma CP plus VarioHeat<sup>1</sup>:

- Saphir compact<sup>2</sup>
- Saphir comfort RC
- Aventa eco
- Aventa comfort

Truma CP plus VarioHeat for the

Truma air conditioning systems Aventa eco, Aventa comfort (from serial number 24084022 – 04/2013), Saphir comfort RC and Saphir compact (from serial number 23091001 – 04/2012)

The Truma CP plus VarioHeat is intended for installation in caravans and motor homes.

- <sup>1</sup> And Truma CP plus VarioHeat CI BUS for CI BUS not retrofittable.
- <sup>2</sup> From serial number 23091001. In combination with a Truma VarioHeat heater, a "control panel cable coupling" is essential between the air conditioning system and the heater. Order the "control panel cable coupling" separately. Not in conjunction with inverter TG 1000 sinus.

## Safety instructions

- Operate the Truma CP plus VarioHeat control panel only if it is in a technically perfect condition.
- Repairs must be carried out immediately. Only carry out repairs yourself if the solution is described in the troubleshooting guide of this operating instructions.
- Do not carry out any repair work or modifications on the Truma CP plus VarioHeat control panel.
- A defective Truma CP plus VarioHeat control panel may only be repaired by the manufacturer or the manufacturer's service department.
- Never use LP gas appliances when refuelling, in multi-storey car parks, in garages, or on ferries. Switch off the LP gas appliance on the Truma CP plus VarioHeat control panel.

#### Important notes

- If the power supply to the system has been interrupted, the time / time switch must be reset.
- If a new or replacement appliance (heater, air conditioning system) is connected to the bus system, the procedure described in "Initial start-up" must be repeated.

#### Air conditioning systems – shared use of IR remote control and Truma CP plus VarioHeat control panel

- Even after connecting the Truma CP plus VarioHeat control panel, the IR remote control is available for controlling the air conditioning system. The Truma CP plus VarioHeat control panel recognises all settings that are made using the IR remote control on the air conditioning system. The IR remote control only transmits the settings that are shown in its display (no bidirectional communication).
- Only the time switch of the Truma CP plus VarioHeat control panel may be used to clearly define the start and end time of a required period.

## Display and control elements





- 1 = Display
- 2 = Status bar
- 3 = Menu bar (upper)
- 4 = Menu bar (lower)
- 5 = 230 V mains supply indicator (power)
- 6 = Time switch display
- 7 = Settings / Values
- 8 = Rotary push button
- 9 = Back button

The menus can be selected in lines (3 + 4) and settings can be made using the rotary push button (8). The display (1) has an illuminated background. The Back button (9) can be used to return from a menu.

## Rotary push button

Setpoints and parameters can be selected and modified using the rotary push button (8) and saved by tapping on it. Selected menu items flash.



Figure 3

#### Rotate clockwise

- Menu is run through from left to right. - Increase values (+).



#### Rotate anticlockwise

- Menu is run through from right to left. - Decrease values (-).

Figure 4



#### Tapping

Accept (save) a selected value.

Select a menu item, switch to setting level

# Long press

Main switch function ON / OFF.

## Back button

Pressing the Back button (9) returns you from a menu and discards settings. This means that the previous values are retained.

#### Initial start-up

In order to perform the initial start-up, the following steps are required:

- Switch on power supply.
- 12 V direct voltage for the Truma CP plus VarioHeat and Truma VarioHeat control panel, or the 230 V mains voltage for the air conditioning systems.
- Start the search of the appliances under the menu item "Service menu" -> "RESET" -> "PR SET".

After confirmation, the Truma CP plus VarioHeat control panel initialises itself. "INIT ..." appears on the display while this is in progress. The appliances that have been found are stored in the control panel.

#### Start-up Start / stand-by screen

After connecting the Truma CP plus VarioHeat control panel to the power supply, a start screen is displayed after a few seconds.

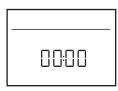


Figure 6



- The display changes between the time and the set room temperature.
- Special displays on command via IR remote control of the air conditioning system or CI-BUS (see "Special displays" on page 11).
- After a repair / retrofit, the procedure described under "Initial start-up" must be repeated.

## Functions

The functions in the menu bars (3, 4) of the Truma CP plus VarioHeat control panel are selectable in any order. The operating parameters are shown on the status bar (2) and on the displays (5, 6).

## Select setting level

- Tap the rotary push button.

The display shows the setting level. The first icon flashes.



Figure 7

## Switching on and off

#### Switching on

Tap the rotary push button.

Previously set values / operating parameters are reactivated after switching on.

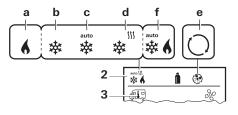
#### Switching off

Press the rotary push button for longer than 4 seconds.

The Truma CP plus VarioHeat control panel deactivation procedure can be delayed by several minutes because of internal heating or air conditioning system after-runs ("OFF" is shown on the display during this time).



- Select icon in menu bar (3) with rotary push button.
- Change to the setting level by tapping on the rotary push button.
- Select between the heater (HEATER) or the air conditioning system (AC) using the rotary push button, depending on the appliance connected.
- Tap rotary push button to confirm selection.
- Select desired temperature with rotary push button.
- Tap the rotary push button to confirm the value.



#### Figure 8

#### Heater (HEATER)

settable temperature range 5 – 30 °C (1 °C increments) a = Heater on – Symbol lights up,

the symbol flashes until the room temperature is reached.

#### Air conditioning system (AC)

settable temp	perature range 16 – 31 °C (1 °C increments)
b = COOL	-Air conditioning system is switched on
c = AUTO	-Air conditioning system is set to automatic
d = HOT	-Air conditioning system is in heating mode

e = VENT – Air conditioning system is in air circulation mode



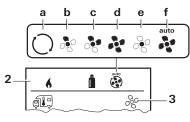
Quick temperature change possible using rotary push button (in stand-by screen).



# Select fan level

With connected heating / air conditioning system

- Select icon in menu bar (3) with rotary push button.
- Change to the setting level by tapping on the rotary push button.
- Select desired fan level with rotary push button.
- Tap the rotary push button to confirm the value.



Heater (HEATER)

Figure 9

lcon	Operating mode	Description
_	OFF	Fan is switched off. (only selectable if no appliance is in operation).
а	VENT <sup>1</sup>	Air circulation if no appliance is in operation. 10 speed settings available.
b	ECO	Automatic control of the fan, de- pending on the heating power / optimised to the current heating requirement
d	BOOST <sup>2</sup>	Rapid room heating Available if the difference be- tween the selected and actual room temperature is >10 °C
е	NIGHT	Heater running only at partial load. Might not be possible to reach the set room temperature (depending on the vehicle size and outside temperature).

<sup>1.</sup> Can lead to increased motor wear depending on frequency of use.

2. Fan level "BOOST" results in higher power consumption, higher noise level and increased motor wear.

As soon as the heater is switched on (room temperature selected), the status bar (2) displays the fan level that was selected during the previous heating procedure. The factory setting is "ECO".

#### Air conditioning system (AC)

lcon	Operating mode	Description
_	OFF	Fan is switched off (only selectable if no appliance is in operation).
а	_	_
b	LOW	Low fan level
С	MID	Medium fan level
d	HIGH	High fan level
е	NIGHT	Ultra-quiet fan operation
f	AUTO	Automatic fan level selection. Cannot be changed in AUTO mode.



Danger of toxic exhaust fumes. The activated time switch switches on the heater even when the vehicle is parked. The heater's exhaust can be toxic in closed spaces (e.g. garages, workshops).

If the vehicle is parked in closed rooms:

- Shut off the (gas) fuel supply to the heater.
- Deactivate the time switch of the Truma CP plus VarioHeat control panel (OFF).
- Switch off the heater at the Truma CP plus VarioHeat control panel.

 When air conditioning systems are being operated, the time switch of the Truma CP plus VarioHeat control panel must only be used to clearly define the start and end time for a required period of time.

If the time switch has been activated (ON), the deactivate time switch menu is displayed first (OFF).

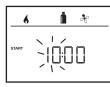
- Select icon in menu bar (4) with rotary push button.

 Change to the setting level by tapping on the rotary push button.

#### Enter start time

- Set the hours then the minutes with the rotary push button.

24 h mode



12 h mode

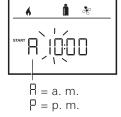


Figure 10

Figure 11

#### Entering the end time

Set the hours then the minutes with the rotary push button.24 h mode12 h mode



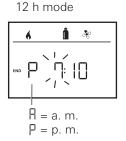


Figure 12

Figure 13

If the start/end point was exceeded during entry, the operating parameters are not taken into consideration until the next start/end point has been reached. Until then, the operating parameters that have been set outside the time switch remain valid.

#### Set room temperature

- Depending on the appliance that is connected, select the heater or air conditioning system using the rotary push button
- Tap rotary push button to confirm selection.
- Select required room temperature with rotary push button.
- Tap the rotary push button to confirm the value.

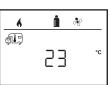


Figure 14

#### Select fan level

- Select desired fan level with rotary push button.
- Tap the rotary push button to confirm the value.



Figure 15

#### Activate time switch (ON)

- Activate time switch with rotary push button (ON).
- Tap the rotary push button to confirm the value.

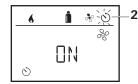


Figure 16

- The time switch remains active until it is deactivated (OFF), even for several days.
  - If the time switch is programmed and active, the time switch icon flashes.

#### Deactivate time switch (OFF)

- Change to the setting level by tapping on the rotary push button.
- Deactivate time switch with rotary push button (OFF).
- Tap the rotary push button to confirm the value.



Figure 17



## Switch lighting on / off

Available when air conditioning system is connected

Aventa comfort or Aventa eco

- Select icon in menu bar (4) with rotary push button.
- Change to the setting level by tapping on the rotary push button.
- Select required function with rotary push button.
- 1 5 Switch lighting on. Brightness selectable in 5 levels.

OFF - Switch lighting off.

- Tap the rotary push button to confirm the value.

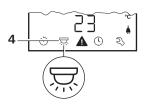
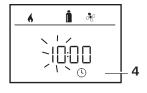


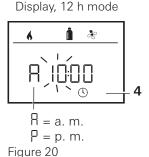
Figure 18



Set time

Display, 24 h mode







With the rotary push button (8), select the "Set time" symbol in the menu bar (4).

The hour display flashes.

- Set the hours with rotary push button (8).
- The minutes display flashes when the rotary push button (8) is tapped again.
- Set the minutes with rotary push button (8).
- Tap the rotary push button (8) to confirm the value.



#### Service menu

# 1. Calibrating the room temperature sensor of the heater (OFFSET)

The room temperature sensor of the heater can be individually adjusted to the sensor's installation situation. The setting can be made in increments of 0.5 °C within the range of 5 °C to -5 °C.



Example: Set room temperature 23 °C; OFFSET = -1 °C; – Setpoint value for heater = 22 °C

Figure 21

Presetting: 0 °C (Celsius).

#### 2. °C / °F temperature display

Select the temperature display °C (Celsius) or °F (Fahrenheit).

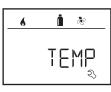


Figure 22

Presetting: °C (Celsius).

#### 3. Changing the background lighting

Change the background lighting of the Truma CP plus VarioHeat control panel in 10 increments.



Figure 23

## **4. 12 h / 24 h mode**

Display time in 12 h (a. m., p. m.) / 24 h mode.



Figure 24

Presetting: 24 h mode.

#### 5. Change language

Select the desired language (German, English, French, Italian).



Figure 25

Presetting: English

#### 6. Showing the version number

Display the version number of the heater, air conditioning system, Truma CP plus VarioHeat control panel.



Example: H 1.20.01 -> H = Appliance; 1.20.01 = Version number

#### Appliance

- P = Truma CP plus VarioHeat control panel
- A = Air conditioning system
- H = Heater

Figure 26

#### 7. Presetting (RESET)

The Reset function sets the Truma CP plus VarioHeat control panel back to the factory setting. This deletes all settings. Newly connected appliances are recognised and stored in the control panel.

- Switch on the power supply 12 V direct voltage for the Truma CP plus VarioHeat and Truma VarioHeat control panel or 230 V mains voltage for air conditioning systems.

#### **Perform Reset**

- Select "RESET" with the rotary push button (8).
- Tap on the rotary push button (8).
- "PR SET" appears in the display.
- Tap the rotary push button (8) to confirm.



Figure 27

After confirmation, the Truma CP plus VarioHeat control panel initialises itself.

"INIT ..." appears on the display while this is in progress.

## **Special displays**

## 230 V mains voltage available

The icon signals that 230 V mains power supply is available.

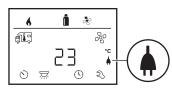


Figure 28

Icon appears only in conjunction with a Truma air conditioning system.

## Infrared (IR) remote control (air conditioning system)

When a command is sent via the infrared remote control of the air conditioning system, "IR" appears in the display.

## External control panel (CI-BUS)

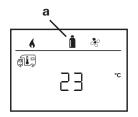
When a command is sent via an external control panel with CI-BUS, "CI" appears in the display.



The Truma CP plus VarioHeat control panel CI-BUS is the company's own variant that is configured only at the factory.

## Energy type display

- The energy type gas (a) is displayed in heating mode





# Warning

This symbol indicates that an operating parameter has reached an undefined state. In this case the appliance concerned continues to operate. As soon as the operating parameter is within the target range again, this symbol goes off again automatically.

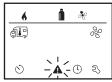


Figure 30

#### Read out code of warning

- Select icon with rotary push button.
- Tap the rotary push button.

The current warning code will be displayed. The cause of the warning can be determined and remedied with the aid of the troubleshooting guide (from page 15 and ff).



- Warning W =28 = Fault code Η = Appliance H = Heater
  - A = Air conditioning system

Figure 31

#### Cause eliminated / return to the setting level Tap the rotary push button.

#### Cause not eliminated / return to the setting level - Press the Back button.

In this case, the warning in the Truma CP plus VarioHeat control panel is not acknowledged and the warning symbol remains. The affected appliance remains in warning status. Other connected appliances can be operated.

## Fault

In the event of a fault, the Truma CP plus VarioHeat control panel immediately jumps to the "Fault" menu level and displays the fault code of the fault. The cause of the fault can be determined and remedied with the aid of the troubleshooting guide (from page 15 and ff).

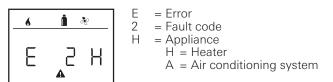


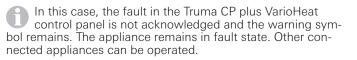
Figure 32

#### Cause eliminated / return to the setting level

- Tap the rotary push button. - The respective appliance is restarted.
- This can take several minutes because of internal afterruns of connected appliances.

If the cause has not been remedied, the fault will occur again and the control panel will jump to the "Fault" menu level again.

#### Cause not eliminated / return to the setting level Press the Back button.



## Maintenance

The Truma CP plus VarioHeat control panel is maintenancefree. In order to clean the front panel, use a damp, non-scouring cloth. If this is not sufficient, use a neutral soap solution.

## Truma CP classic VarioHeat analogue control panel (optional)



Figure 33

- a = "Heating" control knob Green LED "Operation" Red LED "Fault / Warning"
- b = Rotary switch
- c = "Heating" rotary switch Large flame symbol "eco" Small flame symbol "night"
- d = Rotary switch "Off" e = Rotary switch "Vent"
- Full load (large symbol)

Partial load (small symbol)

#### eco

Automatic control of the fan, depending on the heating power / optimised to the current heating requirement

#### night

Heater running only at partial load. Might not be possible to reach the set room temperature (depending on the vehicle size and outside temperature).

#### Switch the heater on

- Set the desired room temperature at the control knob (a).
- Set the rotary switch (b) to the desired output (c).

## Switch the ventilation on

- Set the rotary switch (b) to the desired output (e).

# Switching off

Set the rotary switch (b) to the centre (d). If the heater is turned off after heating, the fan may still run to utilise the residual heat.

## Green LED "On"

(beneath control knob)

When the appliance is on (heating or ventilation), the green LED must light up (the fan is on). If the LED does not light up, check the (main) switch if necessary. Please observe the respective vehicle manufacturer's instructions.

## Red LED "Fault / warning"

If there is a fault / warning, the red LED flashes. In each case, the fault is reset by switching off and then switching back on again. Following a reset, it can take some time until the green LED lights up again.

A flashing code is output in the event of a fault / warning. The Truma CP classic VarioHeat troubleshooting guide enables the cause and remedy to be determined.

## Maintenance

The Truma CP classic VarioHeat control panel is maintenancefree. In order to clean the front panel, use a damp, non-scouring cloth. If this is not sufficient, use a neutral soap solution.

## Disposing of the VarioHeat

The appliance must be disposed of in accordance with the administrative regulations of the respective country in which it is used. National regulations and laws (in Germany, for example, the End-of-Life Vehicle Regulation) must be observed.

## VarioHeat fuse

The appliance fuse is located on the electronic control unit and can only be changed by an expert.

Appliance fuse (F1): 10 AF - quick - (EN 60127-2-3)

The fine wire fuse must always be replaced with a fuse of the same type.

#### Accessories

#### **Cowl cover**

39141-00 cream 39141-01 black 39141-02 bianco

## Technical data, heater

Determined in accordance with EN 624 and/or Truma test conditions

#### Gas type

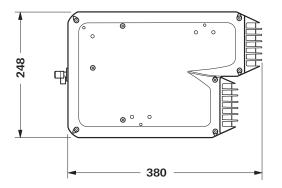
Liquefied gas (propane / butane) **Operating pressure** 30 mbar (see type plate) Rated heat output (gas consumption) Truma VarioHeat eco 1300 W (100 g/h) / 2800 W (220 g/h) Truma VarioHeat comfort 1300 W (100 g/h) / 2800 W (220 g/h) / 3700 W (290 g/h) Additional information in accordance with EN 624 Truma VarioHeat eco Q\_ = 3.1 kW (Hs); 230 g/h; C<sub>13</sub>; I<sub>3B/P (30)</sub> Truma VarioHeat comfort Q\_ = 4.1 kW (Hs); 300 g/h; C<sub>13</sub>; I<sub>3B/P (30)</sub> **D**estination countries AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LI, LT, LU, LV, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR Air delivery volume Truma Vario Heat eco 75 / 155 m<sup>3</sup>/h Truma VarioHeat comfort 75 / 155 / 210 m<sup>3</sup>/h Power consumption at 12 V Truma VarioHeat eco 0.65 / 2.75 A Truma VarioHeat comfort 0.65 / 2.75 / 5.4 A **Quiescent current consumption** with Truma CP plus VarioHeat 0.004 A with Truma CP classic VarioHeat 0.001 A Weight Heater without peripheral devices: 5.1 kg 

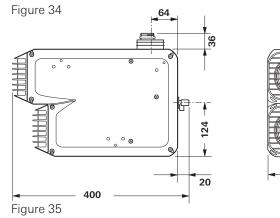
## **CE** product identification number CE-0085CR0203

E1 10R-058062

Subject to technical changes.

### Dimensions (all dimensions in mm)





## Truma CP plus VarioHeat technical data

#### Display

Dimensions (L x W x H) **Operating temperature** range Storage temperature range Interfaces Truma CP plus VarioHeat Truma CP plus VarioHeat CI BUS **Power supply** Current consumption at Rated voltage 12 V

**Quiescent current** consumption Weight

6

-25 °C to +70 °C TIN bus

-25 °C to +60 °C

LCD, monochrome, with

background lighting 92 x 103 x 40 mm

TIN bus, CI BUS 8 V - 16.5 V

max. 65 mA (100 % background lighting) 6.5 mA – 10 mA (stand-by) 284

123

max. 3 mA (Off) approx. 100 g

Subject to technical changes.

## Manufacturer's Warranty (European Union)

#### 1. Scope of Manufacturer's Warranty

As the Manufacturer of the appliance, Truma undertakes a warranty towards the Consumer that covers any material and/ or manufacturing defects of the appliance.

This Warranty is applicable in EU member states as well as in lceland, Norway, Switzerland and Turkey. A Consumer is the natural person who was the first one to purchase the appliance from the Manufacturer, OEM or dealer and who neither resold the appliance in a commercial or self-employed professional capacity nor installed it for a third party in such a capacity.

The Manufacturer's Warranty covers any of the aforementioned defects that occur within 24 months upon concluding the purchase agreement between the seller and the Consumer. The Manufacturer or an authorised service partner undertakes to remedy such defects through subsequent fulfilment, i.e. at its discretion either by repairing or replacing the defective item. Any defective parts shall become the property of the Manufacturer or the authorised service partner. If the appliance is no longer manufactured at the time of defect notification and if replacement delivery has been opted for, then the Manufacturer may deliver a similar product.

If the Manufacturer remedies a defect under its warranty commitment, the term of the Warranty shall not recommence anew with regard to the repaired or replaced parts; rather, the original warranty period shall continue to be applicable to the appliance. Only the Manufacturer itself and an authorised service partner shall be entitled to conduct a warranty job. Any costs that occur in the event of a warranty claim shall be settled directly between the authorised service partner and the Manufacturer. The Warranty does not cover additional costs arising from complicated removal or installation jobs on the appliance (e.g. dismantling of furnishings or parts of the vehicle body), and neither does it cover travel expenses incurred by the authorised service partner or the Manufacturer.

No further-reaching claims shall be permitted, especially damage claims presented by the Consumer or third parties. This provision shall not affect the validity of the German Product Liability Act (Produkthaftungsgesetz).

Neither does the voluntary Manufacturer's Warranty affect the Consumer's legally applicable claims for defects towards the seller in the relevant country of purchase. In individual countries there may be warranties that can be issued by the relevant dealer (official distributor, Truma Partner). In such cases the warranty can be implemented directly through the dealer from whom the Consumer bought the appliance. The warranty regulations of the country in which the appliance was purchased by the Consumer for the first time shall also be applicable.

#### 2. Warranty exclusions

**No** warranty claim shall be applicable under the following circumstances:

- Improper, unsuitable, faulty or negligent use and any use that is not compliant with the intended purpose
- Improper installation, assembly or commissioning, contrary to operating or installation instructions
- Improper operation or operation contrary to operating or installation instructions, particularly any disregard for maintenance, care or warning notes,
- Instances where installations, repairs or any other procedures have been conducted by non-authorised parties
- Consumable materials and parts which are subject to natural wear and tear
- Installation of replacement, supplementary or accessory parts that are not original manufacturer's parts or which have not been approved by the manufacturer. If the appliance is subject to networked control, this applies, in particular, if the control units or the software have not been approved by Truma or if the Truma control unit (e.g. Truma CP plus or Truma iNet Box) has not been exclusively used for controlling Truma appliances or appliances approved by Truma.

- Damage arising from foreign substances (e.g. oil or plasticisers in the gas), chemical or electrochemical influences in the water, or cases when the appliance has come into contact with unsuitable substances (e.g. chemical products, flammable substances or unsuitable cleaning agents)
- Damage caused by abnormal environmental or unsuitable operating conditions
- Damage caused by force majeure or natural disasters or any other influences not within Truma's responsibility
- Damage resulting from improper transport
- End customer's or third-party modifications of the appliance, including any replacement, supplementary or accessory parts, or installation of the same, especially concerning the exhaust gas system or the cowl.

#### 3. Making a warranty claim

The warranty must be claimed with an authorised service partner or at the Truma Service Centre. All the relevant addresses and phone numbers can be found at www.truma.com, in the "Service" section.

The Manufacturer's address is: Truma Gerätetechnik GmbH & Co. KG Truma Servicezentrum Wernher-von-Braun-Straße 12 85640 Putzbrunn, Germany

To ensure a smooth procedure, we would be grateful if you could have the following details ready before contacting us:

- Detailed description of the defect
- Serial number of the appliance
- Date of purchase

The authorised service partner or the Truma Service Centre will then specify the further procedure. To avoid transport damage, the affected appliance must only be shipped by prior arrangement with the authorised service partner or the Truma Service Centre.

If the warranty claim is recognised by the Manufacturer, then the transport expenses shall be borne by the same. If no warranty claim is applicable, the Consumer will be notified accordingly and any repair and transport expenses shall then be the Consumer's liability. We ask you not to send in an appliance without prior arrangement.

## Troubleshooting guide, Truma VarioHeat

Fault	Cause	Remedy
# 2	Flame not recognised:	
# 16	<ul> <li>Gas cylinder or quick-acting valve in the gas supply line closed</li> </ul>	<ul> <li>Check gas supply and open valves</li> </ul>
	- Gas pressure regulation system iced up	– Use EisEx regulator heater
	– Butane content in the gas cylinder too high	<ul> <li>Use propane (butane is unsuitable for heating, particularly at temperatures below 10 °C)</li> </ul>
	<ul> <li>Combustion air infeed or exhaust outlet is sealed</li> </ul>	<ul> <li>Inspect openings for obstructions (slush, ice, leaves, etc.) and remove any obstructions</li> </ul>
#7	<ul> <li>Room temperature sensor not connected or cable defective</li> </ul>	– Contact Truma Service
# 11	- Temperature cutout has been triggered	– Contact Truma Service
# 25	– Overvoltage > 16.4 V	<ul> <li>Check the battery voltage and voltage sources such as the charger</li> </ul>
# 26	– Low voltage, battery voltage too low < 10 V $$	- Charge battery and replace old battery if necessary
# 27	<ul> <li>Warm air outlets blocked</li> <li>Circulated air intake blocked</li> <li>End outlets EN closed up</li> </ul>	<ul> <li>Remove blockage</li> <li>Remove blockage</li> <li>Open end outlets EN</li> </ul>
# 28	- Open window above cowl (window switch)	– Close windows
# 29	- Risk of low voltage, battery voltage too low $<$ 10.4 V	<ul> <li>Charge battery</li> </ul>
# 32	- Motor wear limit will be reached soon	– Contact Truma Service
# 255	<ul> <li>No connection between heater and control panel</li> <li>Control panel cable or main fuse defective</li> </ul>	– Contact Truma Service

If these measures do not remedy the fault or if fault codes are displayed that you cannot find in the troubleshooting guide, contact Truma Service.

## Troubleshooting guide (air conditioning system)

Fault code	Cause	Remedy
# 1	Failure (short circuit or broken cable), room temperature sensor	Contact Truma Service
# 2	lce sensor failure – internal	Inspect the filter and replace it if necessary
# 4	lce sensor failure – external (if present)	Keep the air inlets / outlets on the roof free of obstructions such as leaves
#8	IR receiver unplugged or cable broken	Contact Truma Service

If these measures do not remedy the fault or if fault codes are displayed that you cannot find in the troubleshooting guide, contact Truma Service.

## Troubleshooting guide, Truma VarioHeat

Flashing code on the analog CP classic control panel Flashing sequence - On / Off 0.5 seconds Pause between flashing sequence 5 seconds

Fault	Cause	Remedy
LEDs do not light up, appliance is switched on, operating voltage present	<ul> <li>Automatic restart is blocked, e.g. after a power failure</li> </ul>	<ul> <li>Reset (fault reset) by switching off, wait for 5 seconds and then switch on again</li> </ul>
No LED illuminates after switching on	<ul> <li>No operating voltage</li> </ul>	<ul> <li>Check 12 V battery voltage, charge battery if necessary</li> <li>Check plug connections</li> </ul>
	<ul> <li>Appliance fuse or vehicle fuse defective</li> </ul>	- Check fuse of appliance or vehicle and replace if necessary
The green LED lights up after switching on, but the heater does not operate	<ul> <li>The temperature set on the con- trol panel is lower than the room temperature</li> </ul>	<ul> <li>Select a higher room temperature on the control panel</li> </ul>
Red LED flashes 1 x	<ul> <li>Gas cylinder or quick-acting valve in the gas supply line closed</li> </ul>	<ul> <li>Check gas supply and open valves</li> </ul>
	– Gas cylinder empty	<ul> <li>Replacing a gas cylinder</li> </ul>
After exercise for a	<ul> <li>Gas pressure regulation system iced up</li> </ul>	<ul> <li>Use EisEx regulator heater</li> </ul>
After operating for a longer period of time, the heater switches	<ul> <li>Butane content in the gas cylinder too high</li> </ul>	<ul> <li>Use propane (butane is unsuitable for heating, particularly at temperatures below 10 °C)</li> </ul>
to fault	<ul> <li>Combustion air infeed or exhaust outlet is sealed</li> </ul>	<ul> <li>Inspect openings for obstructions (slush, ice, leaves, etc.) and remove any obstructions</li> </ul>
Red LED flashes 2 x	– Heater fault	– Contact Truma Service
After the heater is switched on, the	<ul> <li>Risk of low voltage, battery voltage too low &lt; 10.4 V</li> </ul>	<ul> <li>Charge battery</li> </ul>
green LED is lit and the <b>red LED flashes</b> <b>3 x</b>	<ul> <li>Low voltage, battery voltage too low &lt; 10 V</li> </ul>	- Charge battery and replace old battery if necessary
	– Overvoltage > 16.4 V	<ul> <li>Check the battery voltage and voltage sources such as the charger</li> </ul>
Red LED flashes 4 x	<ul> <li>Open window above cowl (win- dow switch)</li> </ul>	– Close windows
Red LED flashes 5 x	<ul> <li>Warm air outlets blocked</li> <li>Circulated air intake blocked</li> </ul>	<ul><li>Remove blockage</li><li>Remove blockage</li></ul>
Red LED flashes 6 x	<ul> <li>Motor wear limit will be reached soon</li> </ul>	– Contact Truma Service

If these measures do not remedy the fault or if fault codes are displayed that you cannot find in the troubleshooting guide, contact Truma Service.

**GB** Should problems occur, please contact the Truma Service Centre or one of our authorised service partners (see www.truma.com).

In order to avoid delays, please have the unit model and serial number ready (see type plate).

Typenschild

## Service

Telefon +49 (0)89 4617-2020 Telefax +49 (0)89 4617-2159 service@truma.com www.truma.com