Truma CP plus



EN Operating instructions To be kept in the vehicle Page 02



heating | cooling | controlling

Truma CP plus control panel

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Symbols used



The appliance must only be installed and repaired by an expert.



Symbol indicates possible hazards.

Note containing information and tips.

Operating instructions

Intended use

The electronic Truma CP plus control panel¹ is used to control and monitor a Combi CP plus ready heater and / or a Truma air conditioning system. The Truma CP plus¹ serves as an interface for operating connected appliances via the Truma App and Truma iNet Box.

The Truma CP plus¹ is intended for installation in caravans and motor homes. Installation in boats is not permitted.

Safety instructions

- Operate the Truma CP plus 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 these operating instructions.
- Do not carry out any repair work or modifications on the Truma CP plus control panel!
- A defective Truma CP plus control panel may only be repaired by the manufacturer or the manufacturer's service department.
- Never use LP gas appliances when refuelling, in multistorey car parks, in garages or on ferries. Switch off the Truma CP plus control panel to prevent the heater being switched back on by the Truma App or the time switch (see "Switching on/off").

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 or Truma iNet Box) is connected to the bus system, the procedure described in "Initial start-up" must be repeated.
- The ZUCB time switch can no longer be used when the Combi CP plus ready heater is connected to the Truma CP plus control panel.

Air conditioning systems – joint use of IR remote control and Truma CP plus control panel

- Even after connecting the Truma CP plus control panel, the IR remote control is available for controlling the air conditioning system. The Truma CP plus 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 control panel may be used to define the start and end time of a required period.

¹ And/or Truma CP plus CI-BUS for CI-BUS – not retrofittable.

Display and control elements



- = 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 go back to a previous 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



Botate clockwise

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

Rotate anticlockwise

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



Tap

- Accept (save) a selected value.
- Select a menu item, switch to setting level

Long press

- Main switch function ON / OFE
- If a Truma iNet Box was recognised while searching for an appliance, the function of the rotary push button changes (see "APP mode in conjunction with an iNet Box" on page 6).

Back button

Press the Back button (9) to return to a previous menu and cancel changes. 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 the power supply.

12 V direct voltage for Truma CP plus control panel and Combi and 230 V \sim mains voltage for air conditioning systems and Combi E.

- Start the search of the appliances under the menu item "Service menu" -> "RESET" -> "PR SET".

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

Start-up

Start / stand-by screen

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



- The display changes between the time and the set room temperature.
 - Special displays on command via Truma App. IR remote control of the air conditioning system or CI BUS (see "Special displays" on page 14).
 - 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 control panel can be selected 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.

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Switching on/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.
 - "APP"¹ appears in the display after 2 seconds.
 "OFF" appears after another 2 seconds.

 - The Truma CP plus control panel plus deactivation procedure may be delayed by several minutes because of internal heating or air conditioning system after-runs.

¹ Only in conjunction with a Truma iNet Box.

APP mode in conjunction with an iNet Box

Function

In APP mode, the connected appliances and the Truma CP plus control panel go into Stand-by mode and wait for new commands.



The time switch is disabled in APP mode.

When a new command is input via the Truma APP, the connected appliances and the Truma CP plus are activated with the specified values.

Activating APP mode

- Press the rotary push button for about 2 seconds until "APP" appears in the display.
- Release the rotary push button.

Ending APP mode

If no commands are input via the Truma APP, APP mode can be ended on the Truma CP plus.

- Briefly press the rotary push button.



The previously stored values are then used for continued operation.



Changing the room temperature

- Select icon in menu bar (3) with rotary push button.
- Change to the setting level by tapping on the rotary push button.
- Depending on the appliance that is connected, select between heating system (HEATER) or air conditioning system (AC) or automatic air conditioning system¹ (AUTO) using the rotary push button.

- Tap rotary push button to confirm selection.
- Select desired temperature with rotary push button.
- Tap the rotary push button to confirm the value.



Heater (HEATER)

Adjustable temperature range 5 – 30 °C (1 °C increments) $a = Heater^2$ – Heater is switched on.



The temperature range below 5 $^{\circ}$ C (OFF) must be selected in order to switch off the heater.

Air conditioning system (AC)

Adjustable temperature 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

- ¹ Automatic climate control (AUTO) only if "ACC" has been activated in the service menu (see "Service menu" on page 12). The factory default setting is "deactivated".
- ² Symbol flashes until the desired room temperature is reached.



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

Automatic climate control (AUTO)

Adjustable temperature range 18 – 25 °C (1 °C increments)

Automatic changeover between heater and air conditioning system for an approximately constant temperature inside the vehicle.

f = AUTO – Automatic climate control is activated

Requirements for operation with automatic climate control:

- The heater and air conditioning system must be connected.
- Automatic climate control "ACC" must be activated in the service menu (see "Service menu" on page 12).



Changing the hot water level

Select icon in menu bar (3) with rotary push button.

- Change to the setting level by tapping on the rotary push button.
- Select desired level with rotary push button.
- Tap the rotary push button to confirm the value.



- = OFF Hot water generator is switched off.
- a = eco* Hot water temperature 40 °C
- b = hot Hot water temperature 60 °C
- c = boost Targeted, rapid heating of water (water priority) for maximum 40 minutes. When the water temperature is reached, room heating continues.

This symbol flashes until the required water temperature has been reached.



Selecting the energy type

- The select energy type menu is displayed only if a heater with electric heating elements is connected.
- Select icon in menu bar (3) with rotary push button.
- Change to the setting level by tapping on the rotary push button.
- Select desired energy type with rotary push button.
- Tap the rotary push button to confirm the value.



^{*} Hot water temperature may exceed 40 °C with combined room and water heating. Not available for the Australian variants.

lcon	Operating mode	Energy type
а	Gas / Fuel	Gas ² / Diesel ²
b	MIX 1 ¹	Electric (900 W) + Gas ² / Diesel ²
С	MIX 2 ¹	Electric (1800 W) + Gas ² / Diesel ²
d	EL 1 ¹	Electric (900 W)
е	EL 21	Electric (1800 W)

¹ Mixed and electric mode. Only possible with heaters that have electric heating elements e. g. Combi E CP plus ready.

² Power for gas / diesel, see operating instructions for the corresponding heater.

When the heater is switched on (room temperature, hot water level active), the status line shows the energy type selected in the previous heating procedure. The factory setting is gas / diesel.

Special features in mixed mode

– Interruption of mains voltage 230 V \sim :

The heating system switches automatically to gas and diesel mode. When the 230 V \sim power supply is restored, the heater automatically switches back to mixed mode.

- Malfunction in combustion procedure (e.g. lack of fuel).
- Combi Gas The heater switches automatically to electric mode. For the heater to operate in mixed mode again, the cause of the malfunction must be remedied and acknowledged on the Truma CP plus control panel. See "Malfunction" on page 15.

Combi Diesel The heater shows a malfunction. For the heater to operate in mixed mode again, the cause of the malfunction must be remedied and acknowledged on the Truma CP plus control panel. Switch to "Electric" mode if the malfunction persists.

Special features in electric mode

- If the 230 V \sim power supply is interrupted and the 12 V supply is switched on, a fault code is shown on the display.
- When the 230 V \sim power supply is restored, the heater starts automatically with the previous settings. The fault code is no longer displayed.



Selecting the 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)

lcon	Operating mode	Description
_	OFF	Fan is switched off. (can be selected only if no appli- ance is in operation).
a	VENT ¹	Circulated air, when no appli- ance is in operation and the hot water generator is switched off. 10 speed settings are available.
b	ECO	Low fan level
С	HIGH ²	High fan level
d	BOOST ³	Rapid room heating Available if the difference between the selected and actual room temperature is >10 °C

When the heater is switched on (room temperature, hot water level 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 OFF	Description Fan is switched off (can be selected only if no appli- ance is in operation).
а	-	-
b	LOW	Low fan level
С	MID	Medium fan level
d	HIGH	Highest fan level
е	NIGHT	Ultra-quiet fan operation
f	AUTO	Automatic fan level selection. Cannot be changed in AUTO mode.

Automatic climate control (AUTO)

Not possible to select the fan level with automatic climate control.

- The fan level of the air conditioning system is determined automatically.
- Only "ECO" is available for heaters.
- ¹ Can lead to increased motor wear depending on frequency of use.
- ² Fan level "HIGH" results in higher power consumption, higher noise level and increased motor wear.
- ³ Not available with Combi Diesel.



Setting the time switch

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 enclosed spaces (e.g. garages, workshops).

If the vehicle is parked in closed rooms:

- Shut off the fuel supply (gas or diesel) to the heater.
- Switch off the Truma CP plus control panel to prevent the heater being switched back on by the Truma App or the time switch (see "Switching on/off").

- When air conditioning systems are being operated, the time switch of the Truma CP plus control panel must only be used to 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.

Entering the start time

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



24 h mode



Entering the end time

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

24 h mode







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.

Setting the room temperature



For more information refer to "Changing the room temperature" on page $\boldsymbol{6}$

- Select required room temperature with rotary push button.
- Tap the rotary push button to confirm the value.

Setting the hot water level



For more information refer to "Changing the hot water level" on page 7

- Select required hot water level with rotary push button.
- Tap the rotary push button to confirm the value.

Selecting the energy type



For more information refer to "Selecting the energy type" on page 7

- Select required energy type with rotary push button.
- Tap the rotary push button to confirm the value.



The select energy type menu is displayed if a heating system with electric heating elements is connected.

Selecting the fan level

The "Select fan level" menu is available only if a room temperature of 5° C or higher is set. Not available with automatic climate control AUTO. For more information refer to "Selecting the fan level" on page 8

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

Activating the time switch (ON)

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



- 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.

Deactivating the 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.





Switching lighting on / off

Available with air distributors with ambient lighting for Truma air conditioning systems.

- 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 can be selected in 5 levels.
 - OFF Switch lighting off.
- Tap the rotary push button to confirm the value.





Setting the 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 0 °C to -5 °C.



Example: Set room temperature 23 °C;

OFFSET = -1 °C;

Setpoint value for heater = 22 °C

Default setting: 0 °C (Celsius).

2. AC SET^{1,2}

When automatic climate control is running, the room temperature may be perceived differently in heating and cooling modes. "AC SET" is used to set an offset between cooling and heating. The setting can be made in increments of 0.5 °C from 0 °C to +5 °C.



Example: Set room temperature 23 °C; AC SET = 2 °C - Setpoint value for air conditioning system = 25 °C

Default setting: +1 °C (Celsius).

- ¹ Only available if the air conditioning system and heater are connected.
- $^{\rm 2}~$ Only available if ACC is set to "ON".

3. ACC¹

The automatic climate control function AUTO is activated or blocked with "ACC".

- ON The automatic climate control function AUTO is activated. Automatic climate control function AUTO can be selected in the Room temperature menu.
 - "AC SET" appears in the Service menu.
- OFF The automatic climate control function AUTO is blocked.



Default setting: OFF

Truma automatic climate control will function properly only if it is installed correctly. Your Truma Partner will be pleased to advise you whether your vehicle is suitable. Requirements for automatic climate control functioning as expected:

- 1. The air conditioning system and heater cover the entire area of the vehicle that is supposed to be automatically air conditioned.
- 2. The room temperature sensor of the heater is the lead sensor of automatic climate control and must therefore be in a suitable location, i.e.
 - in the area in which the required room temperature should be reached.
 - if possible, not influenced by outside temperature or sunlight.
 - not close to warm air ducts, cold air ducts or other sources of heat.
 - warm or cold air from the air outlets must not flow against the room temperature sensor. Particular attention must be paid to this when adjusting the air throttles on Aventa air conditioning systems.
 - with good circulation and not on the vehicle ceiling.

Truma Partners are trained in the correct installation of automatic climate control. You can find our Truma Partners at www.truma.com.

4. °C / °F temperature display

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



Default setting: °C (Celsius).

5. Changing the background lighting

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



6. 12 h / 24 h mode

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



Default setting: 24 h mode.

7. Changing the language

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



Default setting: English

8. Showing the version number

Display version number of heater, air conditioning system, Truma CP plus control panel or iNetBox.



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

Appliance

- C = Truma CP plus control panel
- C = Truma CP plus control panel CI-BUS
- $A = Air \ conditioning \ system$
- H = Heater
- T = Truma iNet Box

9. Default setting (RESET)

The reset function resets the Truma CP plus control panel back to the factory setting. This deletes all settings. Newly connected appliances are recognised and saved in the Truma CP plus control panel.

- Switch on the power supply

12 V direct voltage for CP plus control panel and Combi and 230 V \sim mains voltage for air conditioning systems and Combi E.

Perform Reset

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



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

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

Special displays

230 V \sim mains voltage available

The icon indicates that 230 V ${\bf \sim}$ mains voltage (power) is available at the connected heater and/or air conditioning system.



Truma App with iNet Box

When a command is sent via the Truma APP from a mobile device, "APP" appears in the display.

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 control panel CI-BUS is the company's own variant that is configured only at the factory.



Warning

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



Read out warning code

- 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 17).



W = Warning 42 = Fault code H = Appliance H = Heater

A = Air conditioning system

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 control panel has not been acknowledged and the warning symbol remains. The affected appliance remains in warning status. Other connected appliances can be operated.

Malfunction

In the event of a malfunction, the Truma CP plus control panel immediately jumps to the "Malfunction" menu level and displays the fault code of the fault. The cause of the malfunction can be determined and remedied with the aid of the troubleshooting guide (from Page 17).



E = Malfunction 112 = Fault code H = Appliance H = Heater A = Air conditioning system

Cause eliminated / return to the setting level

- Tap the rotary push button. If the display is in stand-by mode, tap to activate the background lighting and tap again to acknowledge the malfunction.
- The respective appliance is restarted.



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

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

In this case, the malfunction in the Truma CP plus control panel has not been acknowledged and the warning symbol remains. The appliance remains in malfunction state. Other connected appliances can be operated.

Maintenance

The Truma CP plus control panel is maintenance-free. Use a damp, non-scouring cloth to clean the front panel. If this is not sufficient, use a neutral soap solution.

Disposal

The Truma CP plus control panel 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.

Technical specifications

Display

Dimensions (L x W x H) Operating temperature range Storage temperature range Interfaces CP plus CP plus CI-BUS Power supply Power consumption

Quiescent current consumption Weight Protection class Protection type

CE 0085

Subject to technical changes.

LCD, monochrome, with background lighting 92 x 103 x 40 mm

-25 °C to +60 °C

-25 °C to +70 °C

TIN bus TIN bus, CI-BUS 8 V – 16.5 V == max. 65 mA (100 % background lighting) 6.5 mA – 10 mA (Stand-by)

3 mA (Off) approx. 100 g Class III IP00

Troubleshooting guide for Combi gas heater (H)

Fault code	Cause	Remedy
W 17 H	Summer mode with empty water container	Switch heater off and allow it to cool. Fill boiler with water
W 18 H	Warm air temperature exceeded:	
	Not all warm air ducts are connected	Check whether the 4 warm air ducts are connected
	Warm air outlets blocked	Check the individual outlet openings
	Circulated air intake blocked	Remove the circulated air intake blockage
W 21 H	Room temperature sensor or cable faulty	Inspect the room temperature sensor cable, replace if faulty
		Check the resistance of the room temperature sensor. 15 °C – 16.2 kOhm / 20 °C – 12.6 kOhm / 25 °C – 10.0 kOhm Replace room temperature sensor if faulty
W 24 H	Risk of low voltage. Battery voltage is too low < 10.4 V	Charge battery
W 29 H	FrostControl heating element has a short circuit	Disconnect heating element plug from electronic control unit. Replace heating element
W 42 H	Window above cowl open (window switch)	Close window.
W 43 H	Overvoltage > 16.4 V	Check battery voltage / voltage sources such as the charger
W 44 H	Low voltage. Battery voltage is too low < 10.0 V	Charge battery. If necessary replace old battery
W 45 H	No 230 V operating voltage	Restore 230 V $oldsymbol{\sim}$ operating voltage
	230 V fuse defective	Replace 230 V fuse (see Combi operating instructions)
	Overheating protection has been triggered	Reset overheating protection (see Combi operating instructions)
E 112 H	Gas cylinder empty	Replace the gas cylinder
E 121 H E 122 H	Gas cylinder or quick-acting valve in the gas supply line closed	Check gas supply and open valves
E 211 H	Gas pressure regulation system iced up	Use regulator heater (EisEx)
E 212 H	Butane content in the gas cylinder too high	Use propane. Butane is unsuitable for heating, particularly at temper- atures below 10 °C.
	Combustion air infeed or exhaust outlet is sealed	Inspect openings for obstructions (slush, ice, leaves, etc.) and remove any obstructions
	Gas pressure regulation system faulty	Inspect / replace gas pressure regulation system
W 255 H	Heater has no 12 V power supply	Ensure that the 12 V power supply is available
	No connection between heater and control panel	Make connection between heater and control panel

Fault code	Cause	Remedy
W 301 H W 417 H	Overvoltage > 16.4 V	Check battery voltage / voltage sources such as the charger
W 302 H W 418 H	Low voltage. Battery voltage is too low < 10.0 V	Charge battery. If necessary replace old battery
W 303 H W 411 H	Risk of low voltage. Battery voltage is too low < 10.4 V $$	Charge battery
W 401 H	Summer mode with empty water container	Switch heater off and allow it to cool. Fill boiler with water
W 402 H	Warm air temperature exceeded:	
	Not all warm air ducts are connected	Check whether the 4 warm air ducts are connected
	Warm air outlets blocked	Check the individual outlet openings
	Circulated air intake blocked	Remove the circulated air intake blockage
W 407 H	No 230 V \sim operating voltage	Restore 230 V $oldsymbol{\sim}$ operating voltage
	230 V fuse defective	Replace 230 V fuse (see Combi operating instructions)
W 408 H	No gas supply in Mix mode	Check gas supply. See fault # 507 (electronic heating continues in Mix mode)
W 412 H	Window above cowl open (window switch)	Close window
E 507 H	Gas cylinder empty	Replace the gas cylinder
E 516 H E 517 H	Gas cylinder or quick-acting valve in the gas supply line closed	Check gas supply and open valves
	Gas pressure regulation system iced up	Use regulator heater (EisEx)
	Butane content in the gas cylinder too high	Use propane. Butane is unsuitable for heating, particularly at temper- atures below 10 °C.
	Combustion air infeed or exhaust outlet is sealed	Inspect openings for obstructions (slush, ice, leaves, etc.) and remove any obstructions
	Gas pressure regulation system faulty	Inspect / replace gas pressure regulation system
E 607 H	Max. number of fault resets reached	Wait 15 minutes and reset fault
E 621 H	Room temperature sensor or cable faulty	Inspect the room temperature sensor cable, replace if faulty
E 624 H	FrostControl heating element has a short circuit	Disconnect heating element plug from electronic control unit. Replace heating element
E 632 H	Overheating protection has been triggered	Reset overheating protection (see Combi operating instructions)

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

Troubleshooting guide for Combi diesel heater (H)

Fault code	Cause	Remedy
E 111 H	Room temperature sensor or cable faulty	Inspect the room temperature sensor cable, replace if faulty
		Check the resistance of the room temperature sensor. 15 °C – 16.2 kOhm / 20 °C – 12.6 kOhm / 25 °C – 10.0 kOhm Replace room temperature sensor if faulty
E 122 H	Lack of fuel due to low tank level, tank is empty and / or vehicle is on a slope	Fill tank with fuel. Then fill the fuel line as described in "Initial start- up" (see Combi Diesel operating instructions).
E 131 H	No connection between heater and control panel	Make connection between heater and control panel
E 132 H	FrostControl heating element has a short circuit	Disconnect heating element plug from electronic control unit. Replace heating element
E 150 H	Warm air temperature exceeded:	
	Not all warm air ducts are connected	Check whether the 4 warm air ducts are connected
	Warm air outlets blocked	Check the individual outlet openings
	Circulated air intake blocked	Remove the circulated air intake blockage
E 151 H	Water temperature exceeded in winter mode	
	Water temperature sensor excessive temperature	Switch off appliance and allow it to cool down. Fill boiler with water
	Warm air outlets blocked	Check the individual outlet openings
	Circulated air intake blocked	Remove the circulated air intake blockage
E 152 H	Water temperature exceeded in summer mode:	
	Water temperature sensor excessive temperature	Switch off appliance and allow it to cool down. Fill boiler with water
	Warm air outlets blocked	Check the individual outlet openings
	Circulated air intake blocked	Remove the circulated air intake blockage
E 160 H	Undervoltage < 10.2 V	Check battery voltage, charge if necessary
		Short-term immediate measure. Switch off major consumers or start up the vehicle engine until the heater starts to operate (approx. 4 minutes).
		Battery capacity inadequate, if necessary exchange old battery
E 161 H	Overvoltage > 16.4 V	Check battery voltage / voltage sources such as the charger
E 162 H	Window above cowl open (window switch)	Close window
E 164 H	No 230 V \sim operating voltage	Restore 230 V $oldsymbol{\sim}$ operating voltage
	230 V fuse defective	Replace 230 V fuse (see Combi operating instructions)
	Overheating protection has been triggered	Reset overheating protection (see Combi operating instructions)

Fault code	Cause	Remedy
E 170 H	Risk of low voltage < 11.5 V	Use the electrical power from the battery sparingly, e.g. restrict lighting
		Charge battery
W 255 H	Heater has no 12 V power supply	Ensure that the 12 V power supply is available
	No connection between heater and control panel	Make connection between heater and control panel

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

Troubleshooting guide for air conditioning system (A)

Fault code	Cause	Remedy
E 8A W 8A	IR receiver unplugged or cable broken	Check the connection of the IR receiver
E 17 A W 17 A	Voltage drop at 230 V $oldsymbol{\sim}$ power supply	Check 230 V \sim power supply

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

Service

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