HARVIA GRIFFIN COMBI

EN **Control unit**

CZ **Ridici jednotka**



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EN

These instructions for installation and use are intended for owners of saunas, heaters and control units, persons in charge of managing saunas, heaters and control units, and for electricians responsible for installing heaters and control units. Once the control unit is installed, these instructions of installation and use are handed over to the owner of the sauna, heater and control unit, or to the person in charge of maintaining them.

CONTROL UNIT HARVIA GRIFFIN COMBI (CG170C)

Control unit's purpose of use: the control unit is meant for controlling the functions of a sauna heater and/or steamer. It is not to be used for any other purpose.

Congratulations on making an excellent choice!

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CZ

Pokyny k instalaci a používání, jsou urÿeny pro vlastníky a montéry sauny. Jakmile je ÿídicí jednotka nainstalována, tyto pokyny instalace a použití jsou pÿedány majiteli sauny nebo osoba odpovÿdné za jeji provoz.

HARVIA GRIFFIN COMBI (CG170C)

Ridici jednotka je urcena pouze pro ovladani kamen v saune a nesmi byt pouzita pro jine ucel.

Gratulujeme k dobremu vyberu kamen.

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1. HARVIA GRIFFIN COMBI

1.1. General

The purpose of the Harvia Griffin Combi control unit is to control an electric sauna heater and steamer, or a Combi heater, which is their combined version. The control unit consists of a control panel, a power unit, a temperature sensor and a humidity sensor. See figure 1.

The control unit regulates the temperature and humidity in the sauna room based on information given by the sensors. The temperature sensor and the overheat protector are located in the temperature sensor box and the temperature is sensed by an NTC thermistor. The overheat protector can be reset (see chapter 3.5.).

The control unit can be used to preset the start of the heater and/or steamer (pre-setting time). See figure 3a.

1.2. Technical Data

Control panel:

- Temperature adjustment range: 40–110 °C
- Humidity adjustment range: 20–95 rH
- On-time adjustment range: family saunas 1–6 h, public saunas in apartment buildings 1–12 h. *For longer operating times consult the importer/ manufacturer.*
- Pre-setting time adjustment range: 0–12 h
- Control of lighting and fan
- Dimensions: 94 mm x 28 mm x 113 mm
- Length of data cable: 5 m (10 m extension cables available, max. total length 30 m)

Power unit:

- Supply voltage: 400 V 3N~
- Max. load from control unit to heater 11 kW, max. load for a Combi-heater with built-in contactors 17 kW
- Lighting control, max. power: 100 W, 230 V 1N~
- Fan control, max. power: 100 W, 230 V 1N~
- Dimensions: 270 mm x 80 mm x 201 mm

Sensors:

- The temperature sensor WX232 is equipped with a resettable overheat protector and a temperaturesensing NTC thermistor (22 kΩ/ T = 25 °C).

1. HARVIA GRIFFIN COMBI

1.1. Obecne

Jednotka Griffin Combi je navrzena pro ovladani kamen s vyparnikem.
Jednotka reguluje teplotu a vlhkost sauny,
Skládá se z ovladaciho panelu, power boxu cidla teploty a vlhkosti. Viz obr. 1

1.2. Technicke informace

- Rozmezi pouziti: rodinné sauny 1 – 6 h,
- Verejne sauny v obytnych domech 1 – 12 h.
- Delsi dobu provozu konzultujte s dodavatelem / výrobcem.
  Rozmezi nastaveni prednastaveni casu: 0 – 12 h
  Ovladani svetel a ventilatoru
- Rozmery: 94 mm x 28 mm x 113 mm
- Delka dat. kabelu: 5 m
- Zdroj napájení:
- Napajecí napeti: 400 V 3N~
  Maximální zatez: 17 kW
  Regulace osvetleni max. vykon: 100 w, 230 V 1N~
- Regulace ventilatoru – max. vykon: 100 w, 230 V 1N~
- Rozmery: 270 mm x 80 mm x 201 mm

Cidla:

Teplotní senzor je vybaven zaÿízením k zabránÿní prehrati s možností resetování a termistorem NTC (22 k?/T=25 °C), který zjišÿuje teplotu.

- Váha: 175 g s pÿívody (cca 4 m)
- Rozmÿry: 51 mm x 73 mm x 27 mm

Teplotni senzor je vybaven zarizenim k zabraneni

- prehrati s moznosti resetovani a termistorem NTC (22 k?/T=25 °C) ktery zajistuje spravnou teplotu. Vaha: 175 g s privody (cca 4 m)

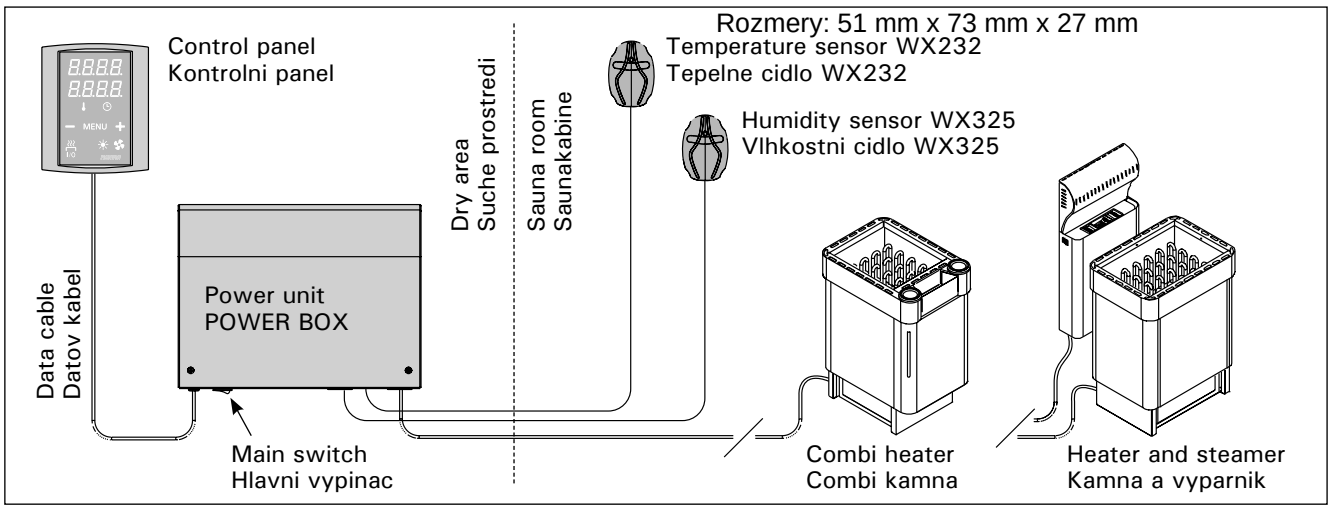


Figure 1. System components
Obrázek 1. Komponenty

- The humidity sensor WX325 measures temperature and relative humidity.
- Weight 175 g with leads (ca 4 m)
- Dimensions: 51 mm x 73 mm x 27 mm

1.3. Troubleshooting

If an error occurs, the heater and/or steamer power will cut off and the control panel will show an error message "E (number)", which helps troubleshooting the cause for the error. Table 1.

Note! All service operations must be done by professional maintenance personnel. No user-serviceable parts inside.

NTC-Termistor
(22 k Ω /T = 25 °C).

- Vlhkostni cidlo WX325
- Vaha 175 g a kabel (ca 4 m)
- Rozmery: 51 mm x 73 mm x 27 mm

1.3. Reseni problemu

Objevi-li se chyba, napajení topidla se odpoji a ovladaci panel ukaze chybove hlasení „E (cislo)". Toto chybove hlaseni pomuze urcit pricinu. Viz. Tabulka 1
Pozor! Vsechny servisni operace musi provadet kvalifikovany personal.
Zarizení neobsahuje zadné casti, ktere by bezný uzivatel mohl opravit.

	Description/ Popis	Oprava
E1	Temperature sensor's measuring circuit broken.	Check the red and yellow wires to the temperature sensor and their connections (see figures 6 and 7) for faulties.
	Teplotni cidlo je rozbite.	Podivejte se na cervene a zlute vodice k teplotnimu cidlu a jejich spojeni - (viz obr. 6 a 7)
E2	Temperature sensor's measuring circuit short-circuited.	Check the red and yellow wires to the temperature sensor and their connections (see figures 6 and 7) for faulties.
	Merici elektronika cidla se zacyklila.	Podivejte se na cervene a zlute vodice k teplotnimu cidlu a jejich spojeni - (viz obr. 6 a 7)
E3	Overheat protector's measuring circuit broken.	Press the overheat protector's reset button (see section 3.5.). Check the blue and white wires to the temperature sensor and their connections (see figures 6 and 7) for faulties.
	Ochrana proti prehrati je rozbita.	Stisknete tlacitko reset (viz bod 3.5) Podivejte se na modre a bile draty pro teplotni cidlo a jejich spojeni (viz obr. 6 a 7)
E6	Humidity sensor's temperature measuring component failure.	Check the brown and blue wires to the humidity sensor and their connections (see figures 6 and 7) for faulties. Replace the sensor.
	Vlhkostni cidlo je poskozene.	Zkontrolujte hnede a modre draty k cidlu vlhkosti a jejich spojeni (viz obr. 6 a 7) . Vymente cidlo.
E7	Humidity sensor's humidity measuring component failure.	Check the brown and blue wires to the humidity sensor and their connections (see figures 6 and 7) for faulties. Replace the sensor.
	Vlhkostni cidlo je poskozene.	Zkontrolujte hnede a modre draty k cidlu vlhkosti a jejich spojeni (viz obr. 6 a 7) . Vymente cidlo.
E8	Humidity sensor's humidity measuring circuit broken.	Check the brown and blue wires to the humidity sensor and their connections (see figures 6 and 7) for faulties.
	Obvody cidla vlhkosti jsou rozbite.	Zkontrolujte hnede a modre draty k cidlu vlhkosti a jejich spojeni (viz obr. 6 a 7) . Vymente cidlo.
E9	Connection failure between the control panel and the power unit.	Check the cable and the connectors.
	Spojeni mezi panelem a powerboxem nefunguje.	Zkontrolujte kabely a konektory.
	Water level low or steamer's overheat protector engaged. Water level warning light blinks.	Add water (manual filling models) or check the water supply (automatic filling models). Check the steamer's overheat protector. **See the steamer's or Combi heater's manual for more instructions and safety information.**
	Nizka uroven vody v nadrzce nebo sepnuta ochrana proti prehrati. Blika kontrolka.	Pridejte vodu (manualni modely) nebo zkontrolujte privod vody (automaticke modly) Zkontrolujte tepelnou ochranu vyparniku . Podivejte se do manualu kamen o tomto stavu kamen

Tabulka 1. Error messages. Note! All service operations must be done by professional maintenance personnel.
Chybové zpravy. Pozor! Vsechny servisni ukony musi provadet vyskoleny personal

2. INSTRUCTIONS FOR USE

2.1. Using the Heater and the Steamer

When the control unit is connected to the power supply and the main switch (see figure 1) is switched on, the control unit is in standby mode and ready for use. I/O buttons' background lights glow on the control panel.

WARNING! Before switching the heater on always check that there isn't anything on top of the heater or inside the given safety distance.

2.1.1. Heater and/or Steamer On

Heater and steamer are switched on and off independently.

Start the heater by pressing the heater I/O button on the control panel.

Start the steamer by pressing the steamer I/O button on the control panel.

When the heater and/or steamer starts, the display will show previously set values for five seconds. The shown values (temperature/humidity/on-time) differ depending on which devices are started.

When the desired temperature and/or humidity has been reached in the sauna room, the heating elements are automatically turned off. To maintain the desired temperature and/or humidity, the control unit will automatically turn the heating elements on and off in periods.

If the heater efficiency is suitable and the sauna has been built correctly, the sauna takes no more than an hour to warm up.

2. Instrukce pro pouziti

2.1. Pouzivani kamen a vyparniku

Kdyz je kontrolni panel pripojen
a hlavni spinac na power boxu
sepnut. Panel je v uspornem
rezimu, pozadi tlacitek sviti
a saunu je pripravena ke spusteni.
POZOR! Pred zapnutim zkontrolujte
zda neni nic na kamnech a v okoli kamen.

2.1.1. Zapnuti kamen a vyparniku

Kamna a vyparnik jsou spinany samostane.

Kamna zapnete stiskem tlacitka I/O na kontrolnim panelu.

Kamna zapnete stiskem tlacitka I/O na kontrolnim panelu.

Kdyz kamna nebo vyparnik zapnete,
diplej ukazuje 5 sekund drivejsi nestaveni.
Ukazuje hodnoty (teplota/ vlhkost / cas).
Zmeny zavisi na typu zarizeni.
Kdyz se teplota a/nebo vlhkost dostane
na pozadovanou uroven, spiraly kamen
se vypnou. Pokud nastavene urovne poklesnou,
spiraly zase sepnou.
Pokud jsou spravne zvolena kamna
a sauna dobre postavena.
Vytopi kamna saunu do hodiny.

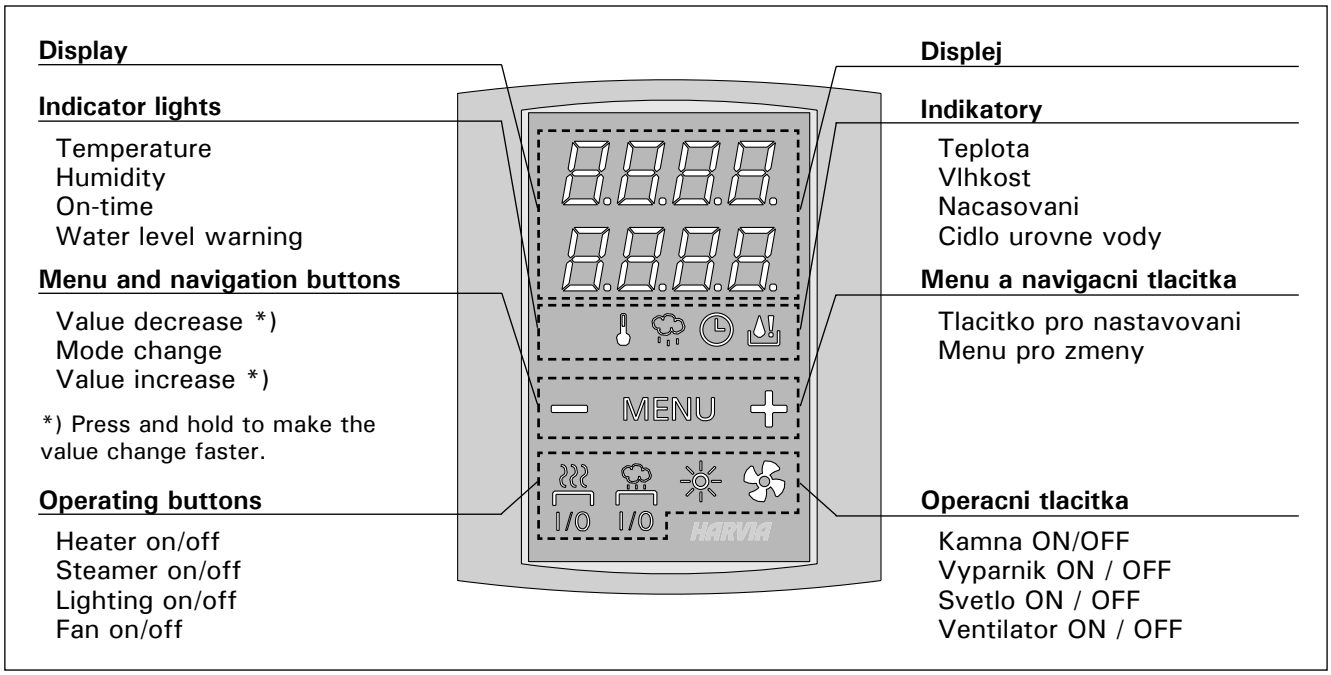


Figure 2. Control panel
Abbildung 2. Bedienfeld

2.1.2. Heater and/or Steamer Off

The heater and/or steamer turn off and the control unit switches to standby-mode when

- the I/O button is pressed
- the on-time has elapsed or
- an error occurs.

If the water container runs empty, the steamer will be turned off, the water level warning light will blink and the display will show the text “OFF”. See table 1.

If the water level sensor develops a failure, the steamer’s overheat protector will engage, the water level warning light will blink and the display will show the text “OFF”. See table 1.

NOTE! It is essential to check that the control unit has cut off power from the heater after the on-time has elapsed, the dehumidification has ended or the heater has been switched off manually.

2.2. Changing the Settings

The settings menu structure and changing the settings is shown in figures 3a and 3b.

The programmed temperature and humidity values and all values of additional settings are stored in memory and will also apply when the devices are switched on next time.

Note! The humidity value determines the maximum temperature in the sauna. The sum of temperature and humidity values can be 140 at maximum (temperature 60 °C + humidity 80 rH). This is due to safety reasons. If the steamer is activated and you try to set the temperature too high, the humidity value will blink in the display.

2.3. Using Accessories

Lighting and ventilation can be started and shut down separately from other functions.

2.3.1. Lighting

The lighting of the sauna room can be set up so that it can be controlled from the control panel. (Max 100 W.)



Switch the lights on/off by pressing the control panel button.

2.3.2. Ventilation

If there is a fan installed in the sauna room, it can be connected to the control unit and be controlled from the control panel.



Start/stop the fan by pressing the control panel button.

2.1.2. Vypnuti kamen a vyparniku

Topidlo je vypnuto a ridici jednotka je prepnuta do pohotovostního režimu po stisknutí tlacitka I/O, poté co vyprší cas zapnutí nebo pokud se objeví nektera z chyb.
POZOR: Je nutné zkontrolovat, že ridici jednotka prerusila privod energie do topidla pote co vyprsel cas zapnutí, bylo ukonceno vysousení nebo poté, co bylo topidlo manuáln vypnuto.

2.2. Zmeny nastaveni

Struktura menu a jeji zmeny je zobrazena na obrazku 3a a 3b.
Nastaveni teploty a vlhkosti jsou ulozeny v pameti. Po naslednem sepnuti budou opet dostupne.
POZOR! Cidlo vlhkosti meri teplotu sauny.
Celkova hodnota vlhkosti a teploty muze byt maximalne 140 - (teplota 60 C a vlhkos 80 rH)
Toto jsou 2 bezpecnostni prvky.
Pokud je je vyparnik aktivovany a teplota se dostane na maximum ktere je dovoleno. Kontrolka vlhkosti zacne blikat.

2.3. Pouziti doplnku

Svetlo a ventilator se zapinaji a vypinaji samostanymi spinaci.

2.3.1. Svetlo

Svetlo se zapina a vypina na kontrolnim panelu a maximalni vykon svetla je 100W.



Svetlo zapnete nebo vypnete po stisknuti tohoto tlacitka.

2.3.2. Ventilator

Ventilator se zapina a vypina na kontrolnim panelu samostanym spinacem.



Ventilator zapnete nebo vypnete po stisknuti

BASIC SETTINGS/ZAKLADNI NASTAVENI



Basic mode (heater and steamer on)
The top row shows the sauna room temperature. The bottom row shows the humidity level (or remaining on-time, if the steamer is not activated).

Zakladni moc (kamna a vyparnik zapnuty)
Horni radek ukazuje teplotu v saune. Spodni radek ukazuje vlhkost sauny nebo cas pokud je vyparnik vypnuty.



Press the MENU button to open the settings menu.

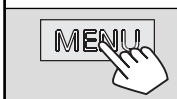
Po stisnuti MENU se otevre menu nastaveni.



Sauna room temperature (shown if the heater is activated)
The display shows the sauna room temperature setting. Temperature indicator light blinks.

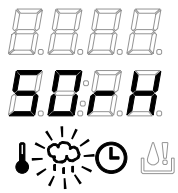
- **Change the setting to the desired temperature with the – and + buttons.**
- The sum of temperature and humidity can be 140 at maximum (see chapter 2.2.)

Teplota sauny (je zobrazena pokud jsou kamna sepnuta)
Displej ukazuje nastaveni teploty.
Kontrolka teploty blika.
Zmenu teploty provadite tlacitky "-" a "+"
Celkova hodnota teploty a vlhkosti nesmi presahnout 140 - viz kapitola 2.2.



Press the MENU button to access the next setting.

Dalsim stiskem menu se dostanete na dalsi nastaveni.



Sauna room humidity level (shown if the steamer is activated)
The display shows the sauna room humidity setting. Humidity indicator light blinks.

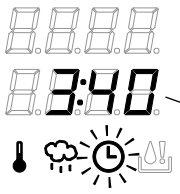
- **Change the setting to the desired humidity with the – and + buttons.**
- The sum of temperature and humidity can be 140 at maximum (see chapter 2.2.)

Vlhkost sauny (je zobrazena pokud je vyparnik sepnut)
Displej ukazuje nastaveni vlhkosti.
Kontrolka vlhkosti blika.
Zmenu teploty provadite tlacitky "-" a "+"
Celkova hodnota teploty a vlhkosti nesmi presahnout 140 - viz kapitola 2.2.



Press the MENU button to access the next setting.

Dalsim stiskem menu se dostanete na dalsi nastaveni.

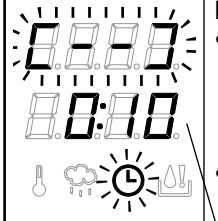


Remaining on-time
Press the – and + buttons to adjust the remaining on-time.

Example: the heater will be on for 3 hours and 40 minutes.

Nastaveni casu
Tlacitky "+" a "-" si nastavujete cas jak dlouho saunu bude sepnuta.

Priklad: Sauna pojede 3 hodiny a 40 minut



Pre-setting time (timed switch-on)

- **Press the + button until you overstep the maximum on-time**. Temperature and humidity indicator lights switch off. Pre-setting time symbol blinks on the screen.
- **Select the desired pre-setting time using the – and + buttons.** The time changes in 10 minute steps.

Example: the heater will start after 10 minutes.

Prednastaveni casu

Pri mackani tlacitka + az na maximalni teplotu a zobrazi se displej tak jak vidite na obrazku. Kontrolky prestanou blikat

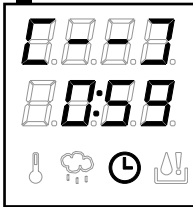
Pak tlacitky + a - nastavime cas za jak dlouho chceme aby se sauna sepla.

Priklad: Kamna se sepnou za 10 minut.



Press the MENU button to exit.

Dalsim stiskem MENU se dostaneme do zakladniho rezimu.



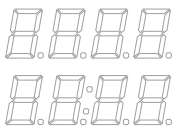
Basic mode (pre-setting time running, heater and steamer off)
The decrease of remaining pre-setting time is shown until zero appears, after which the activated devices (heater and/or steamer) are switched on. The bottom row shows the remaining pre-setting time.

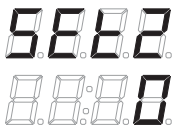
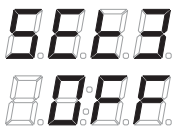
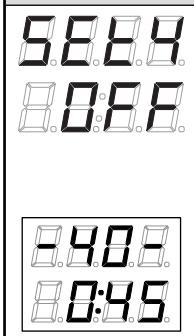
Zakladni mod (prednastaveni casu bezi kamna a vyparnik jsou vypnuty)

Odpocitavani prednastaveni bezi po zobrazeni 0 se kamna a vyparnik zapnou a na spodnim radku se zobrazi nastaveny cas.

Figure 3a. Settings menu structure, basic settings
Obrazrk 3a. Struktura nastaveni menu, zakladni nastaveni.

ADDITIONAL SETTINGS/DALSI NASTAVENI

	**Control unit standby** I/O buttons' background lights glow on the control panel.	**Usporny rezim** I/O tlacitko sviti na ovladacim panelu.

	**Open the settings menu by simultaneously pressing the control panel buttons –, MENU and +. Press for 5 seconds.**	Otevrete menu nastaveni tim, ze soucasne stisknete tlacitka -, MENU a + na ovladacim panelu a podrzte po dobu 5 sekund.
	**Maximum on-time** The maximum on-time can be changed with the – and + buttons. The range is 1–12 hours (6 hours*)). Example: the heater will be on for 6 hours from the start. (Remaining on-time can be changed, see figure 3a.)	**Nastaveni casu** Cas lze nastavi tlacitky - a +. Rozsah je 1-12hodin (6 hodin*)). Priklad: Kamna budou zapnuta 6 hodin. (Zbyvajici cas lze zmenit, viz obr. 3a).
	**Press the MENU button to access the next setting.**	**Stisknete tlacitko MENU abyste se dostali do dalsiho nastaveni**
	**Sensor reading adjustment** The reading can be corrected by +/- 10 units. The adjustment does not affect the measured temperature value directly, but changes the measuring curve.	**Nastaveni cidla** Mereni muze byt upraveno tlacitky +/- (10 jednotek). Uprava nema vliv na namerene hodnoty teploty primo, ale zmeny merici krivky.
	**Press the MENU button to access the next setting.**	**Stisknete tlacitko MENU abyste se dostali do dalsiho nastaveni**
	**Memory for power failures** The memory for power failures can be turned ON or OFF *). • When turned on, the system will start again after a break in electricity. • When turned off, the break will shut the system down. I/O button must be pressed to restart. • The safety regulations for memory usage vary from region to region.	Pamet vypadku el proudu Tato funkce muze byt zapnuta nebo vypnuta*) Kdyz je zapnuta, system se spusti znovu po vypadku elektriny. Kdyz je vypnuta, vypadek elektriny vypne system. I/O tlacitko musi byt stisknuto pro restart. Bezpecnostni predpisy pro vyuziti pameti se lisi stat od statu.
	**Press the MENU button to access the next setting.**	**Stisknete tlacitko MENU abyste se dostali do dalsiho nastaveni**
 ***Sauna dehumidifying in progress***	**Sauna dehumidifying interval** The sauna dehumidifying interval can be turned ON or OFF*). The interval will begin when the devices are switched off from the I/O buttons or when the set on-time runs out. During the interval • the heater is on • the sauna room temperature is set at 40 °C. • If a fan is connected to the control unit, it will also be on. The lenght of the interval is 45 minutes. When the time runs out, the devices turn off automatically. The interval can also be stopped manually at any time by pressing the I/O button. Dehumidifying helps to keep your sauna in a good condition.	Odvlhcovani sauny Odvlhcovaci interval sauny muze byt zapnut nebo vypnut*). Odvlhcovani zacne, kdyz se zarizení vypne pomoci I/O tlacitka nebo pokud se vypne nacasovani. Behem intervalu jsou kamna zapnuta, teplota nastavena na 40 °C Je-li ventilator propojen s ridici jednotkou, bude take zapnut. Delka intervalu je 45 minut. Kdyz vyprsi cas, zarizeni se automaticky vypne. Interval muze byt take rucne kdykoliv zastaven stisknutim I/O tlacitka. Odvlhcovani pomaha saunu udrzovat v dobrem stavu.
	**Press the MENU button. The control unit switches to standby-mode.**	**Stisknete tlacitko MENU abyste se dostali do dalsiho nastaveni**

*) Factory setting/Tovarni nastaveni

Figure 3b. Settings menu structure, additional settings

3. INSTRUCTIONS FOR INSTALLATION

The electrical connections of the control unit may only be made by an authorised, professional electrician and in accordance with the current regulations. When the installation of the control unit is complete, the person in charge of the installation must pass on to the user the instructions for installation and use that come with the control unit and must give the user the necessary training for using the heater and the control unit.

3.1. Installing the Control Panel

Install the control panel outside the sauna room, in a dry place with an ambient temperature of >0 ºC where it can be conveniently accessed. Figure 4.

3. INSTRUKCE PRO INSTALACI

Zapojeni ridici jednotky muze byt provedeno pouze elektrikarem v souladu se soucasnymi predpisy. Kdyz je instalace ridici jednotky kompletni,osoba odpovedna za zarizeni musi predat pokyny pro uzivatele, instalaci a pouziti, ktere jsou pribaleny s ridici jednotkou.

a musi uzivatele proskolit ohledne ovladani kamen a ridici jednotky.

3.1. Instalace ovladaciho panelu

Ovladaci jednotku naistalujte na vnejsi stenu sauny na suche misto s teplotou vyssi nez 0 C a s pohodlnym pristupem.

A. Thread the data cable through the hole in the back cover.
B. Fasten the back cover to a wall with screws.
C. Push the data cable to the connector.
D. Press the front cover into the back cover.

A. Provlecte datovy kabel otvorem v zadnim krytu.
B. Upevnete zadni kryt do steny sauny

C. Pripojte konektor do panelu

D. Zacvaknete predni kryt do zadni casti ovladaci jednotky

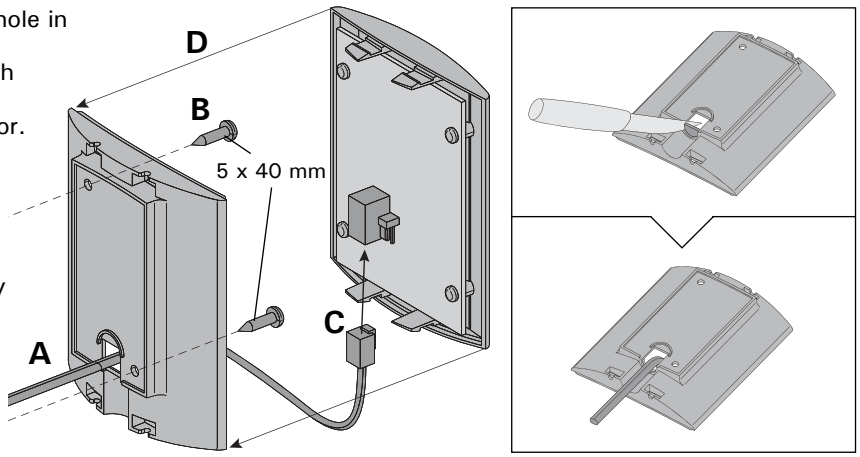


Figure 4. Fastening the control panel
Obr4. Pripevneni ovladaci jednotky

3.2. Installing the Power Unit

Install the power unit to a wall outside the sauna room, in a dry place with an ambient temperature of >0 ºC. See figure 5 for instructions on how to open the power unit cover and how to fix the unit to the wall.

Note! Do not embed the control unit into the wall, since this may cause excessive heating of the internal components of the unit and lead to damage. See figure 5.

3.2. Instalace POWER BOX

POWER BOX naistalujte na vnejsi stenu sauny na suche misto s teplotou vyssi nez 0 C

Podle obr 5 otevrete POVER BOX a upevnete jej na stenu sauny

Poznamka! Nevkladejte ovladaci jednotku do steny sauny, protoze to muze zpusobit nadmerne zahrivani vnitrni casti jednotky a muze to vest k poskozeni. Viz obr. 5.

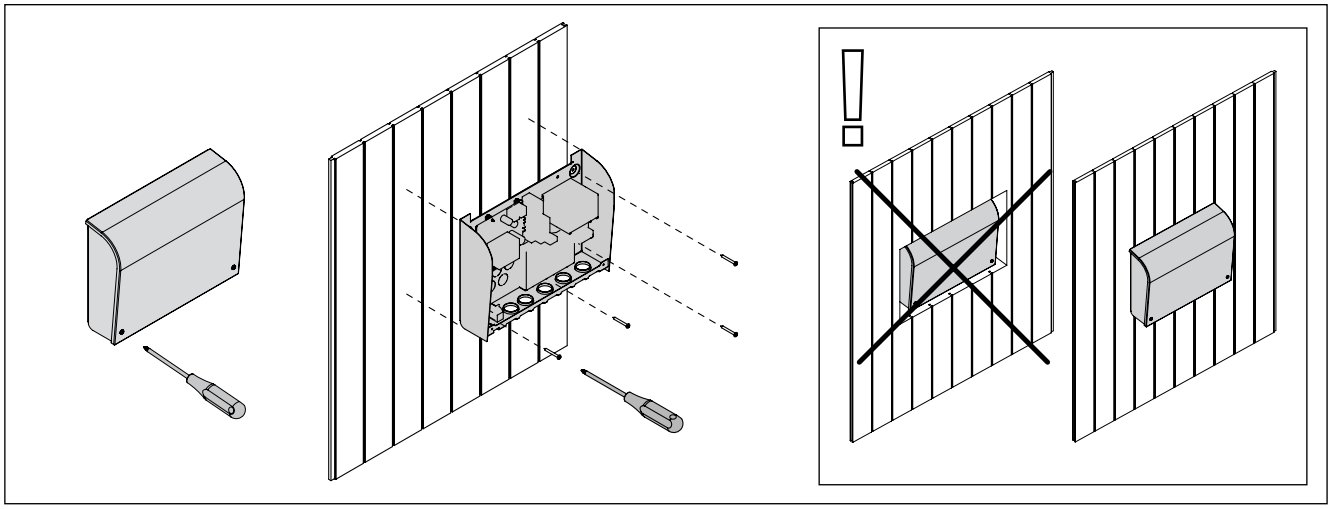


Figure 5. Opening the power unit cover and mounting the unit to a wall
Obr 5. Otevreni POWERBOX a instalace d steny sauny

3.2.1. Electrical Connections

Figures 6 and 7 show the electrical connections of the power unit. Tables 2 and 3 show the wire and fuse sizes, depending on the heater output. For more detailed installation instructions see the instructions for installation and use of the selected heater model.

Maximum load from control unit to heater is 11 kW. Maximum load for a Combi-heater with built-in contactors is 17 kW.

3.2.2. Power Unit Fuse Faults

Replace a blown fuse by a new one with the same value. The placement of the fuses in the power unit is shown in figures 6 and 7.

- If the fuse for the electronic card has blown, there is likely a fault in the power unit. Service is required.
- If the fuse in the line U1, U2 has blown, there

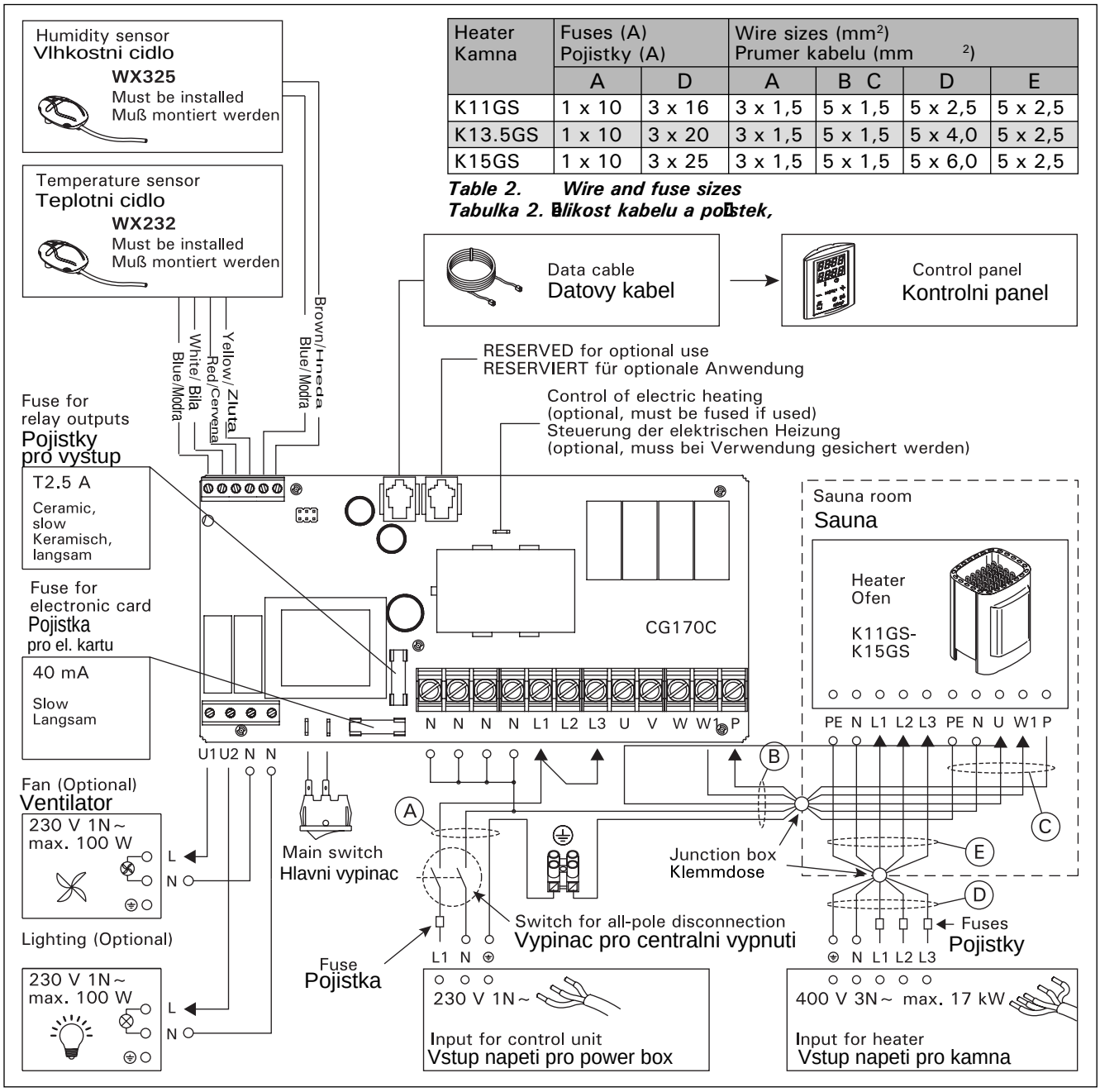
3.2.1. Zapojeni elekriny

Obrazek 6 a 7 zobrazuje elektricke zapojeni POWER BOXU. Tabulky 2 a 3 zobrazuji vodice , velikost pojistek v zavyslosti na kamnech.
Pro vice informaci se podivejte do manualu kamen.
Maximalni vykon kamen ktere muze jednotka ovladat je 11KW. Maximum pro kombi kamna je se 17 KW.

3.2.2. Pojistky v POWER BOXU

Vypalene pojistky vymenujeme za pojistky se stejnou hodnotou. Mista kde jsou pojistky jsou na obrazcich 6 a 7.

- Kdyz je spatna pojistka elektronicke karty. Vetsinou je spatny power box a je potreba jej zkontrolovat.
- Kdyz je pojistka v U1, U2 spatna, pak

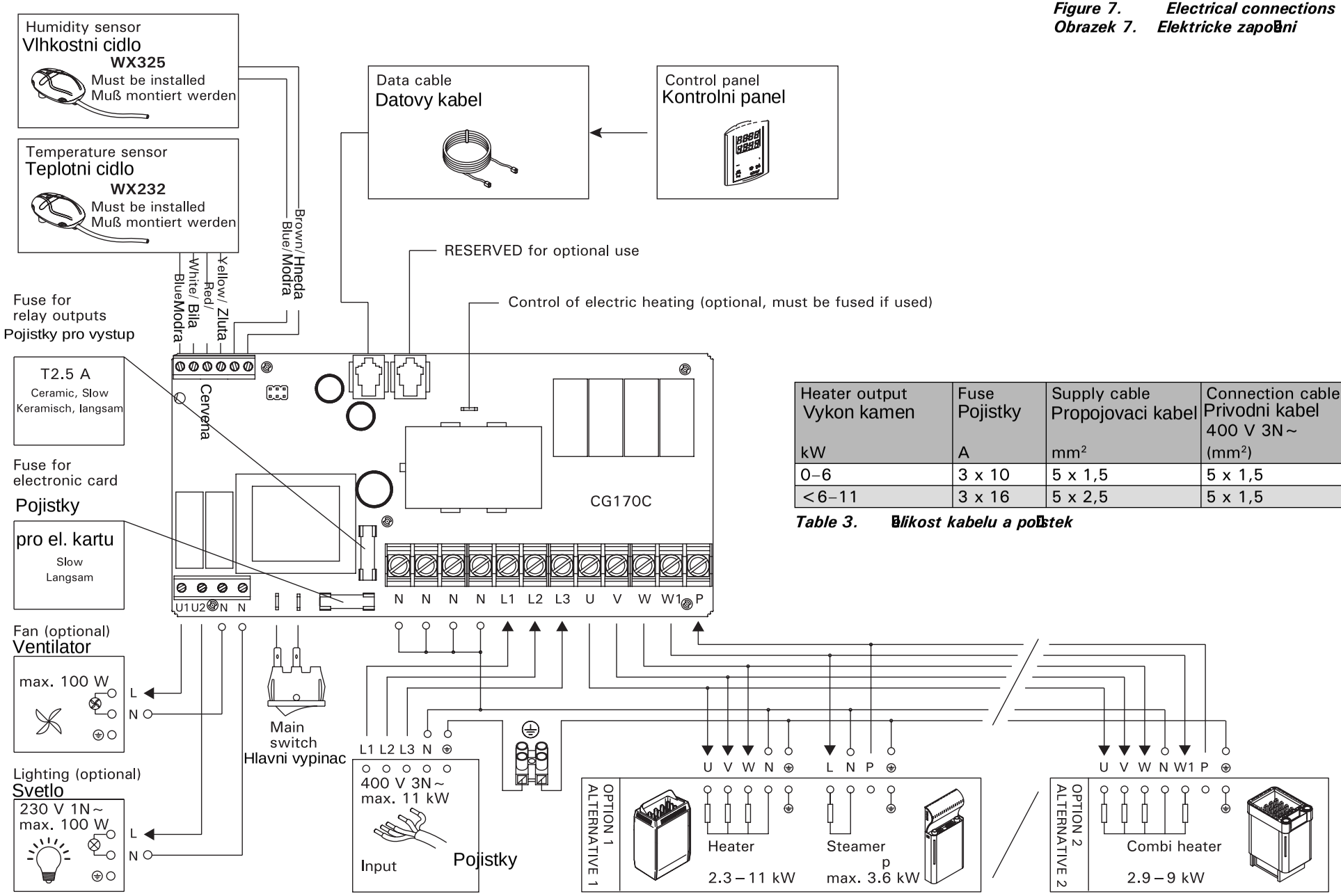


Heater Kamna	Fuses (A) Pojistky (A)		Wire sizes (mm^2) Prumer kabelu (mm ^{2})			
	A	D	A	B C	D	E
K11GS	1 x 10	3 x 16	3 x 1,5	5 x 1,5	5 x 2,5	5 x 2,5
K13.5GS	1 x 10	3 x 20	3 x 1,5	5 x 1,5	5 x 4,0	5 x 2,5
K15GS	1 x 10	3 x 25	3 x 1,5	5 x 1,5	5 x 6,0	5 x 2,5

Table 2. Wire and fuse sizes
Tabulka 2. Velikost kabelu a pojistek,

Figure 6. Electrical connections (K11GS–K15GS)
Obrazek 6. Elektricke zapojeni (K11GS–K15GS)

Figure 7. Electrical connections
Obrazek 7. Elektricke zapojeni



Heater output Vykon kamen kW	Fuse Pojistky A	Supply cable Propojovaci kabel mm²	Connection cable Privodni kabel 400 V 3N~ (mm²)
0–6	3 x 10	5 x 1,5	5 x 1,5
<6–11	3 x 16	5 x 2,5	5 x 1,5

Table 3. Velikost kabelu a pojistek

is a problem with lighting or fan. Check the wiring and functioning of lighting and fan.

3.3. Installing the Temperature Sensor

Wall-mounted heaters (see figure 8)

- Fasten the temperature sensor on the wall above the heater, along the vertical centre line running parallel to the sides of the heater, at a distance of 100 mm from the ceiling.

Floor-mounted heaters (see figure 9)

- Option 1: Fasten the temperature sensor on the wall above the heater, along the vertical centre line running parallel to the sides of the heater, at a distance of 100 mm from the ceiling.
- Option 2: Fasten the temperature sensor to the ceiling above the heater, at a distance of 200 mm from the vertical centre line of the heater's side.

With a separate steamer SS20(A), observe that the temperature sensor must not be installed in the area affected by steam.

Note! Do not install the temperature sensor closer than 1000 mm to an omnidirectional air vent or closer than 500 mm to an air vent directed away from the sensor. See figure 10. The air flow near an air vent cools down the sensor, which gives inaccurate temperature readings to the control unit. As a result, the heater might overheat.

je problem se svetlem nebo ventilatorem. Zkontrolujte kabely s funkcnost svetla a ventilatoru.

3.3. Instalace teplotniho cidla

Kamna pripevnena na zed (obr. 8)

Teplotni cidlo pripevnete na zed v linii kamen - 10 cm od stropu tak jak vidite na obrazku 8.

Kamna pripevnena na zem (Obr. 9)

A Teplotni cidlo pripevnete na zed v linii kamen - 10 cm od stropu tak jak vidite na obrazku 8.

B Teplotni cidlo pripevnime na zed nad kamna, max 20cm od kraje kamen.

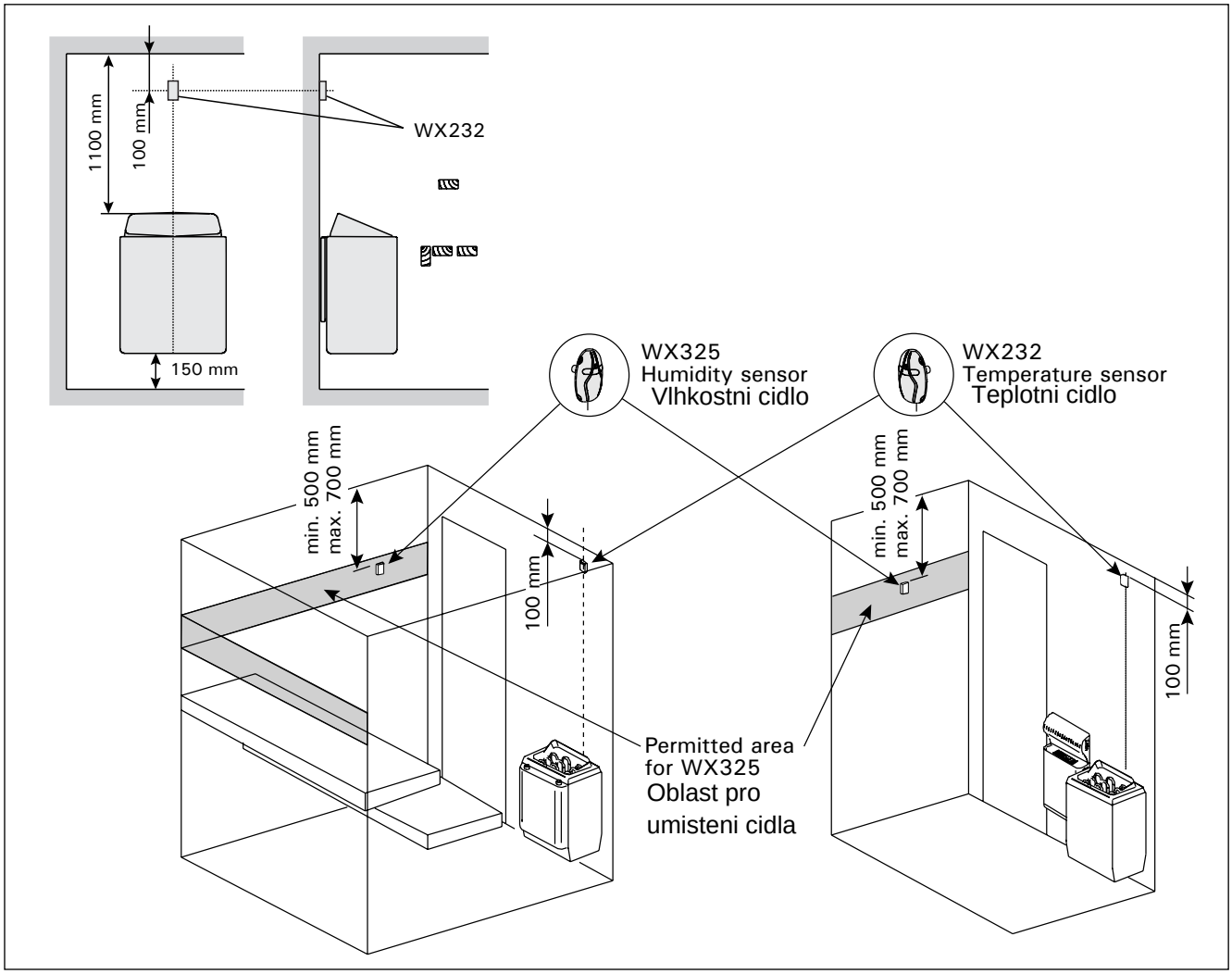


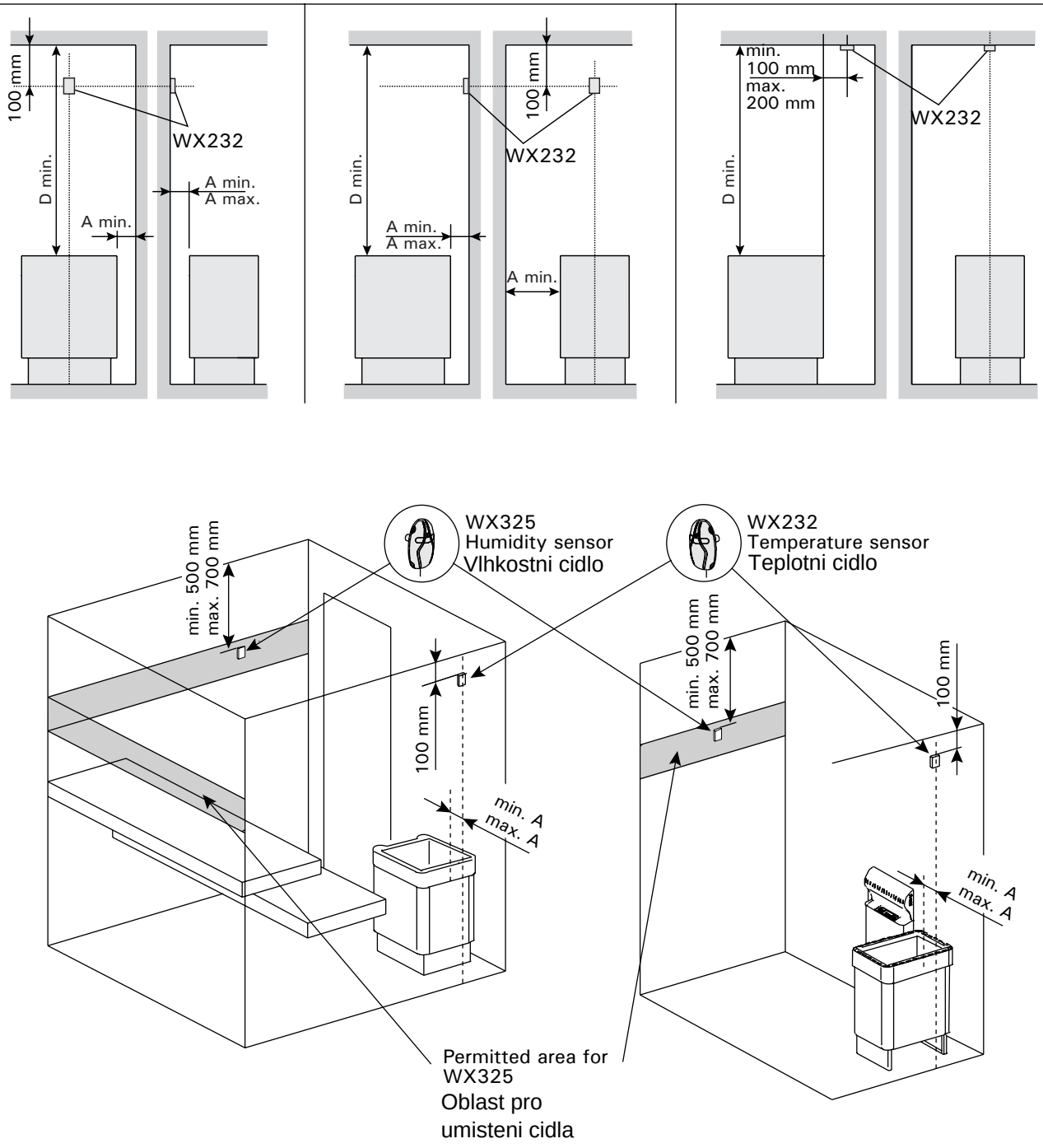
Figure 8. The place of the temperature and humidity sensors in connection with wall-mounted heaters
Obrazek 8. Umisteni cidel na zed sauny

3.4. Installing the Humidity Sensor

Fasten the humidity sensor on the wall as far from the heater as possible and at a distance of 500–700 mm from the ceiling. See figures 8 and 9.

3.4. Instalace cidla vlhkosti

Cidlo umistime na stenu jak vidite na obrazku 8 a 9 do mist 50 až 70 cm pod stropem.



Heater Kamna	A min. mm	A max. mm	D min. mm
BC105	50	150	1250
F10.5	100	200	1400
K11G/K11GS	70	170	1200
K13.5GS	100	200	1400
K15GS	100	200	1400

Heater Kamna	A min. mm	A max. mm	D min. mm
T7C	100	130	1250
T9C	120	150	1250
T9	120	150	1250
T10.5	150	180	1250

Figure 9. The place of the temperature and humidity sensors in connection with floor-mounted heaters
Obrazek 8. Umisteni cidel na zed sauny

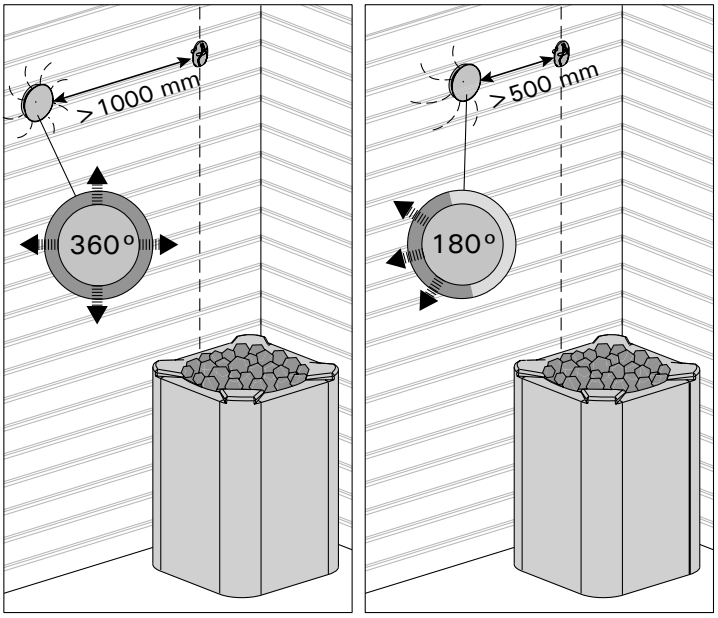


Figure 10. Sensor's minimum distance from an air vent
Obrazek 10. Minimalni rozmery pro umisteni cidla

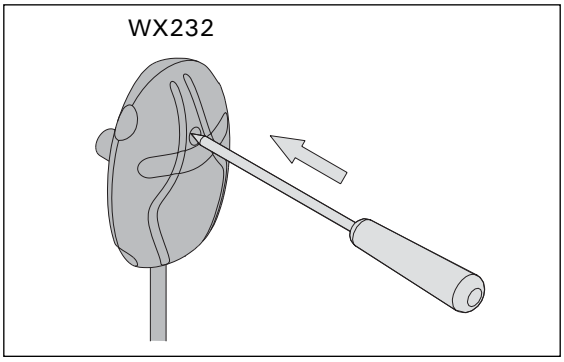


Figure 11. Reset button of the overheat protector
Obrazek 11. Reset tlacitko tepelne ochrany

3.5. Resetting the Overheat Protector

The sensor box (WX232) contains a temperature sensor and an overheat protector. If the temperature in the sensor's environment rises too high, the overheat protector cuts off the heater power. Resetting the overheat protector is shown in figure 11.

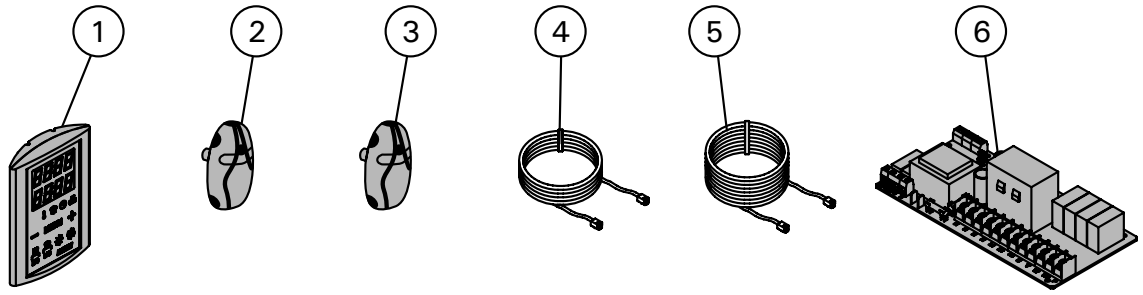
Note! The reason for the going off must be determined before the button is pressed.

3.5. Resetovani ochrany prehrati

Duvod resetovani musi byt predem znam. Nesmi se resetovat bezduvodne.

4. SPARE PARTS

4. Seznam dilu



1	Control panel (CG170C)	Jednotka(CG170C)	WX355
2	Temperature sensor	Teplotni cidlo	WX232
3	Humidity sensor	Vlhkostni cidlo	WX325
4	Data cable 5 m	Datovy kabel 5 m	WX311
5	Data cable extension (optional) 10 m	Datovy kabel I (ovladaci) 10 m	WX313
6	Circuit board	Zakladni deska	WX356

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