INSTALLATION AND OPERATING INSTRUCTIONS "carlo" INFRARED BENCH RADIATOR

Carlo III Loysch

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1. GENERAL, WARNINGS, SAFETY

"carlo" infrared bench radiators are designed exclusively for horizontal installation under the seat surface of benches and church pews that are secured in position (or weigh more than 18 kg). They are fixed heaters for dry rooms.



Keep children under the age of 3 away from the appliances or ensure they are supervised at all times. Children between the ages of 3 and 8 are only allowed to switch the appliances on and off when supervised or instructed in the safe usage of the appliances and have understood the resulting risks, assuming that the appliances are positioned or installed in their normal position for use. Children between the ages of 3 and 8 are not allowed to plug in the appliances, regulate them, clean them and/or perform **user maintenance**.

Caution – Some product parts can become very hot and can cause burns. Particular care must be taken if children and vulnerable persons are present.

WARNING: These appliances are not equipped with a room temperature controller. The heaters must not be used in small rooms occupied by people who cannot leave the room voluntarily, unless constant monitoring is guaranteed.

These appliances are equipped with an integrated automatic resetting temperature limiter, which switches the appliance off if overheating occurs. Once the casing has cooled sufficiently, the appliance automatically switches on again. Despite this, it must be ensured that the "carlo" infrared bench radiators are not covered, and that the heat emission is not obstructed - **avoid heat build-up**. Do not insert small objects into the appliance - risk of accidents and damage to the appliance.

<u>Attention:</u> If paints, solvents, adhesives or similar substances with vapours which could ignite due to the temperature of the heating element (approx. 190 °C) are to be used in the room (e.g. to seal the wooden pedestal), it must be ensured that the "carlo" infrared bench heaters are switched off and have cooled to room temperature.

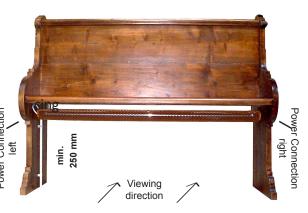
"carlo" infrared bench radiators are so-called dark radiators. A special non-breakable, coated heating element with a high radiation capacity produces gentle, long-wave infrared radiant heat.

The "carlo" infrared bench radiators reach their nominal heat output after a warming-up phase of approximately 15 minutes. Therefore, it is recommended that the heaters are switched on at least 15 minutes before the church service begins. The "carlo" infrared bench radiators can be operated with time controls, room thermostats, power regulators, etc. Therefore, it can be assured that the heating system also switches off after the church service (avoids unwanted usage - saving energy costs!). In the same way, perfect power output adjustment is possible during the service.

The electrical connection must only be performed by a qualified electrician. Please read carefully and follow the instructions and recommendations in Points 1 - 7. Power supply: 230 V 50 Hz

2. INSTALLATION

"carlo" infrared bench radiators are designed to be installed horizontally under benches and church pews that are secured in position (or weigh more than 18 kg). The grill opening must face the front edge of the bench. Ensuring the required spa-(28 mm) when mounting to the underside of the bench using the included mounting brackets. Two mounting brackets are supplied for each appliance, which are screwed into the pre-drilled holes in the top of the appliance using the included self-tapping screws.



The mounting brackets are screwed onto the underside of the bench using woodscrews with max. 4 mm diameter and min. 20 mm length (not included in the delivery), while observing the minimum spacing distances. The distance between the underside of the bench and the top of the appliance must not be increased beyond the 28 mm! The appliances must not be mounted directly beneath a wall socket. The "carlo" infrared bench radiators have an appliance plug and socket, and therefore DO NOT NEED TO BE OPENED for the electrical connection on site.

The distances must NOT BE BELOW the minimum values given here.

Minimum distances:

- From the grill opening to the front edge of the seat: 50 mm
- From the back edge of the casing to the back edge of the sea or the back wall of the bench: 10 mm
- Sideways between the appliance and the bench supports: 60 mm
- Sideways between 2 appliances: 100 mm
- To flammable materials in the grill area: 100 mm
- Between the underside of the appliance and the floor: 250 mm

Fixed distance between the underside of the bench and the top of the appliance: 28 mm. This is ensured by using the original mounting brackets.

Attention:

If the seat has a reinforcing strip at the front, then there is the risk of heat build-up. In this case, contact the appliance manufacturer before installation or cut air ventilation slits in the reinforcing strips.

3. ELECTRICAL CONNECTION

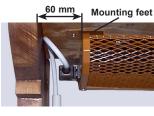
The electrical connection must only be carried out by a qualified electrician. The valid regulations for the installation of high-voltage systems with a nominal voltage up to 1000 V (EN Parts 1-4) must be adhered to during assembly and installation. An all-pole isolator with at least a 3 mm contact opening must be installed for fixed connections to the mains (e.g. automatic circuit breaker, earth leakage circuit breaker). Before installation, it must be checked that the mains voltage conforms to the given working voltage on the specification plate.

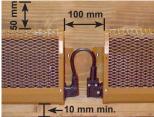
All "carlo" infrared bench radiators are wired with a 1.0 mm² heat-resistant cable so that a bench radiator can be connected to additional appliance up to a max. total nominal power of 2200 W (including the appliance's own power). Each bench group is made up at best of 3 or 6 benches in a star circuit to 3/N/PE~400 V. All the infrared church pew radiators are protection class I appliances with a nominal voltage of 230 V~.

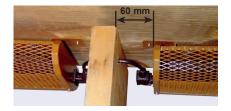
The electrical connection on the mains side is via the included angled socket (clamping area max. 1.5 mm²) on the left or right front side of the appliance (looking from the front at the front edge of the seat).

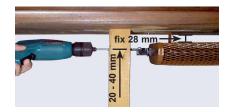
Additional appliances can be plugged into the mains on the opposite side of the appliance socket (max. 2000 W total power). Accessories for this include a 500 mm long connecting cable $3 \times 1 \text{ mm}^2$ with a fixed moulded angled socket.

Where there are central feet, holes may need to be drilled for the cables (\varnothing 10 mm - length see photo).











4. COMMISSIONING

Before commissioning for the first time, check that the mains voltage conforms to the given working voltage on the specification plate. Check that all the socket connections are securely in place.

There may be an apparent odour during the first heating episode. Therefore, it is advised that all the appliances are switched on for at least 45 minutes prior to the first use.

5. HEATING, SAFETY, MAINTENANCE

The "carlo" infrared bench radiators conform to the relevant safety regulations for electrical appliances. Due to low surface temperatures, the "carlo" infrared bench radiators are approved for installation under benches and church pews in accordance with the European Standard EN 60335-2-30. Check the correct functioning at regular intervals (e.g. in the course of the weekly cleaning) (ÖVE-E5 Part 1/1989 and ÖVE-EN50110). The duty to perform the reoccurring test of the electrical equipment of the heating facility in accordance with § 12.1.6 is fulfilled when the appliance is tested at least once per year using cleaning and testing measures, at best before the start of the heating period.

Keep children under the age of 3 away from the appliances or ensure they are supervised at all times.

Children between the ages of 3 and 8 are only allowed to switch the appliances on and off when supervised or instructed in the safe usage of the appliances and have understood the resulting risks, assuming that the appliances are positioned or installed in their normal position for use. Children between the ages of 3 and 8 are not allowed to plug in the appliances, regulate them, clean them and/or **perform user maintenance.**

Caution – Some product parts can become very hot and can cause burns. Particular care must be taken if children and vulnerable persons are present.

WARNING:

These appliances are not equipped with a room temperature controller. The heaters must not be used in small rooms occupied by people who cannot leave the room voluntarily, unless constant monitoring is guaranteed.

These appliances are equipped with an integrated automatic resetting temperature limiter, which switches the appliance off if overheating occurs. Once the casing has cooled sufficiently, the appliance automatically switches on again. Despite this, it must be ensured that the "carlo" infrared bench radiators are not covered, and that the heat emission is not obstructed - avoid heat build-up. Do not insert small objects into the appliance - risk of accidents and damage to the appliance.

<u>Attention:</u> If paints, solvents, adhesives or similar substances with vapours which could ignite due to the temperature of the heating element (approx. 190 °C) are to be used in the room (e.g. to seal the wooden pedestal), it must be ensured that the "carlo" infrared bench heaters are switched off and have cooled to room temperature.

"carlo" infrared bench radiators are so-called dark radiators. A special non-breakable, coated heating element with a high radiation capacity produces gentle, long-wave infrared radiant heat.

The "carlo" infrared bench radiators reach their nominal heat output after a warming-up phase of approximately 15 minutes. Therefore, it is recommended that the heaters are switched on already 15 minutes before the church service begins. The "carlo" infrared bench radiators can be operated with time controls, room thermostats, power regulators, etc. Therefore, it can be assured that the heating system also switches off after the church service (avoids unwanted usage - saving energy costs!). In the same way, perfect power output adjustment is possible during the service. Defective appliances and connections must be replaced. Plugs taken out of the sockets should be plugged in again. Any dust deposits should be removed. This work should only be performed by qualified personnel. The system installer must instruct the user in the correct handling and maintenance of the appliance.

6. DESIGNATION, CE CONFORMITY

ÖVE Test Mark Certificate No.: 55-034-09



Zertifikat Nr.: 55-034-09

This certificate forms the basis for the EC Declaration of Conformity and CE marking by the manufacturer or his authorised person, and confirms conformity with the standards named in the EC Low Voltage Directive 2014/35/EU.

These installation and operating instructions must be stored carefully and passed on with the "carlo" infrared bench radiator in the event of a change of user or owner.

7. TECHNICAL DATA

Nominal voltage: 230 V~ Protection class: I Dimensions: 185 x 60 mm (WxH) + 28 mm

mounting brackets

| Article no. | Power connection | Heater length/ mm | Power | Article no. | Power- connection | Heater length/ mm | Power |
|-------------|------------------|----------------------|-------|-------------|----------------------|----------------------|-------|
| | Connection | 111111 | | | Connection | 111111 | |
| EBST00500 | left | 500 | 200 W | EBST0050R | right | 500 | 200 W |
| EBST00600 | left | 600 | 240 W | EBST0060R | right | 600 | 240 W |
| EBST00700 | left | 700 | 280 W | EBST0070R | right | 700 | 280 W |
| EBST00800 | left | 800 | 320 W | EBST0080R | right | 800 | 320 W |
| EBST00900 | left | 900 | 360 W | EBST0090R | right | 900 | 360 W |
| EBST01000 | left | 1000 | 400 W | EBST0100R | right | 1000 | 400 W |
| EBST01100 | left | 1100 | 440 W | EBST0110R | right | 1100 | 440 W |
| EBST01200 | left | 1200 | 480 W | EBST0120R | right | 1200 | 480 W |
| EBST01300 | left | 1300 | 520 W | EBST0130R | right | 1300 | 520 W |
| EBST01400 | left | 1400 | 560 W | EBST0140R | right | 1400 | 560 W |
| EBST01500 | left | 1500 | 600 W | EBST0150R | right | 1500 | 600 W |
| | | | | | | | |