

# Installation and Maintenance Instructions for Cabin Units Type RS35X-CX0-E for CCS MicroVent System

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## 1. Application

Cabin units from Novenco are used for heating, distribution and discharge of air from high-pressure air handling units to rooms and cabins on ships, oil platforms etc.

## 2. Handling

### 2.1 Marking

All cabin units are marked with standard plates (figure 1). The plates provide the name and address of Novenco as well as the product type and serial number, e.g. RS35X. The serial number is unique for each unit.

In addition, the maximum power consumption is also written on the plates. The control boxes (CCU) are also marked with plates showing type, ID and serial number.

| Cabin Unit  |                       | Year of Manufacture 2008 |
|-------------|-----------------------|--------------------------|
| Type / Size | RS 35X #9             |                          |
| Order No.   | 3102xx - 200 / 3102xx |                          |
| Serial No.  | 001                   |                          |
| Voltage     | 1x230V                |                          |
| Power       | 1200 W                |                          |

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Figure 1

### 2.2 Weight

On request from the customer Novenco can add the weights of the cabin units to the marking of the units.

| Type     | Weight [kg] | Dim. (HxWxL) [mm] |
|----------|-------------|-------------------|
| RS 35X   | 16.5        | 600x450x175       |
| Diffuser | 1.5         | 425x425x90        |
| Total    | 18.0        | ---               |

Table 1

### 2.3 Transport

Cabin units from Novenco are packed and delivered on pallets to allow

fork-lift transport.

## 3. Storage

The cabin units must be stored in a dry place and at temperatures not exceeding 45°C. Furthermore, it is recommended to avoid long time storage of the units in humid air conditions (60% RH or more). This is because of risk to the internal electrical components, which are unprotected against rust.

## 4. Installation

The cabin units are available for ceiling suspension (figure 2). Units are delivered with four suspension brackets (A) incl. supply parts (B) for fastening to the ceiling and sides of the units.

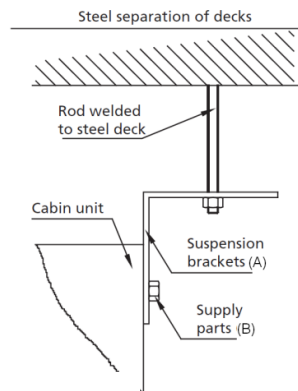


Figure 2

It is important that the cabin units are fastened to prevent sound nuisances, caused by vibration.

## 5. Duct connections

The cabin units are designed for connection to large duct systems on e.g. ships. Connect the cabin units to the systems using insulated flexible hoses and clamping rings.

It is important that the flexible hose is straightened out and that the length does not exceed 300 mm (figure 3).

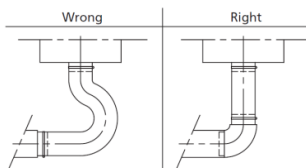


Figure 3

## 6. Electric connection

Power to the unit is supplied by connecting 230V power cables to the terminals L, N and PE as shown in the wiring diagram. Refer also to the electric diagram placed on the inside of the lid of the terminal boxes.

Cables must be fastened by cable glands before feeding the Cabin units. For room thermostat, its cable must be tied up and fixed. Refer to the wiring diagrams for correct connection of cables.

The required output from the heating elements is selected on the three toggle switch (400, 800 and 1200 W) in the outflow connection of the cabin units.

## 7. Wiring diagram

See figure 4 on page 3.

## 8. Thermostat

The cabin units are equipped with both the temperature sensors and the mechanical thermostats for overheating protection. The sensor has a programmed reset function while the mechanical thermostat has a manual reset function.

The sensor will switch off the heating and alarm will on, when the temperature within the cabin unit exceeds 70 °C, and back on when the heating elements have cooled sufficiently off.

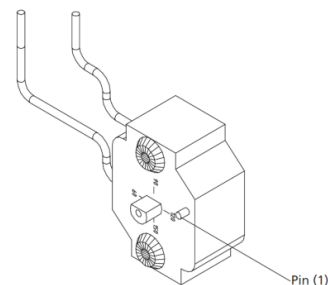


Figure 5

If the sensor fails, the mechanical thermostat will switch off the heating, when the temperature exceeds 110 °C. To re-activate the heating elements, switch off the current to the cabin unit in the fuse box. Remove the bottom part of the diffuser by gently pulling in the corners of the part. The manual thermostat can then be accessed and the small pin on the thermostat

pushed in to reset (figure 5). Remount the diffuser by doing the above procedure in reverse. The current can be switched on when the cabin unit is assembled.

Please note that resetting the mechanical thermostat indicates that the old temperature sensor must be replaced.

## 9. Regulation

To change the basic factory setting (min. 40 m<sup>3</sup>/h at 1200 Pa), remove the ceiling panel and insulation around the cabin unit in case of a B-15 ceiling. The motor box of the cabin unit (figure 6) can then be accessed. Open the box by pulling the lid downwards.

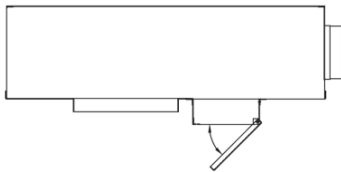


Figure 6

With the required supply pressure on the cabin unit and fully open valve, regulation of the cabin unit is done by inserting a small screwdriver in the square pipe that sticks out of the motor (figure 7).

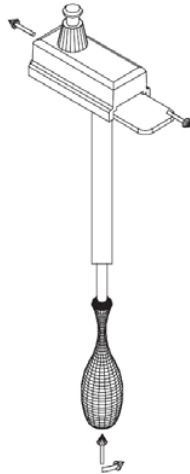


Figure 7

Push the screwdriver up into the pipe and at the same time turn it round. By doing so the regulator is shifted to the side until the cabin unit delivers the required air quality.

Close the lid after regulation of the air quantity is complete. Remount the insulation and the ceiling panel.

## 10. Parts included

Included with each cabin unit are four suspension brackets complete with screws and washers. A diffuser with socket pipe is also included.

In addition, communication cables, plugs and a user panel for the CCU are included as well.

Further documentations with installation and commission details are available on request from Novenco.

## 11. Maintenance

Provided the cabin units are properly installed, little or no maintenance is required. It may, however, under certain circumstances be desirable to clean the inner parts of the cabin units. In these cases it is recommended to contact Novenco for further information about the dismantling and cleaning. Wrong treatment can damage the insulation and other parts.

The same applies if the cabin unit is damaged and various parts have to be replaced.

If cleaning or replacement of parts in the cabin units is required, remove the current and communication cables and also the diffuser and ceiling panel. After removal of the screws along the edge of the bottom part, it is possible to separate by lowering the bottom part from the ceiling (figure 8, below). Lower the part carefully. Be careful to avoid damaging the insulation when dismantling the cabin unit.

Clean the inner parts of the cabin units with a damp cloth or a vacuum cleaner. Assemble the cabin unit in reverse order of the above.

Figure 8

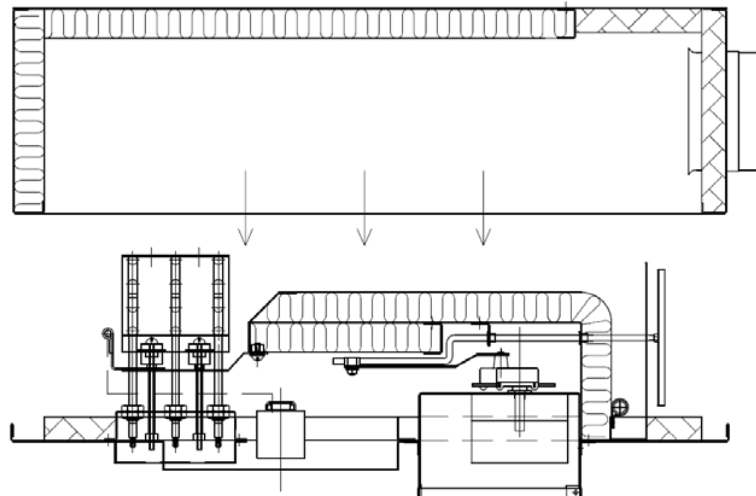


Figure 4

