

7 Inspection and servicing



Risk of electric shock!

The unit is live.

Switch off the power supply before opening, and take suitable precautions to prevent it being switched back on accidentally.

7.1 General

The cooling circuit is designed in the form of a maintenance-free, hermetically sealed system. The cooling unit is filled with the required quantity of coolant at the factory, checked for leaks, and subjected to a functional test run.

The installed maintenance-free fans are mounted on ball bearings, protected against moisture and dust, and fitted with a temperature monitor. The life expectancy is at least 30,000 operating hours.

The cooling unit is thus largely maintenance-free. All that may be required from time to time is to clean the components of the external air circuit using a vacuum cleaner or compressed air if they become visibly dirty. Any stubborn, oily stains may be removed using a non-flammable detergent, such as degreaser.

Maintenance interval: 2000 operating hours.

Depending on the level of contamination in the ambient air, the maintenance interval may be reduced to suit the air pollution intensity.



Caution!

Risk of fire!

Never use flammable liquids for cleaning.

Sequence of maintenance measures:

- Check the level of dirt.
- Filter soiling? Replace the filter if necessary.
- Cooling membranes soiled? Clean if necessary.
- Activate test mode; cooling function OK?
- Check the noise generation of the compressor and fans.

7.1.1 Compressed air cleaning

SK 3304.xxx/SK 3305.xxx



Fig. 39: Disconnect the power cord



Fig. 40: Remove the upper louvred grille

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7.1.1 Compressed air cleaning

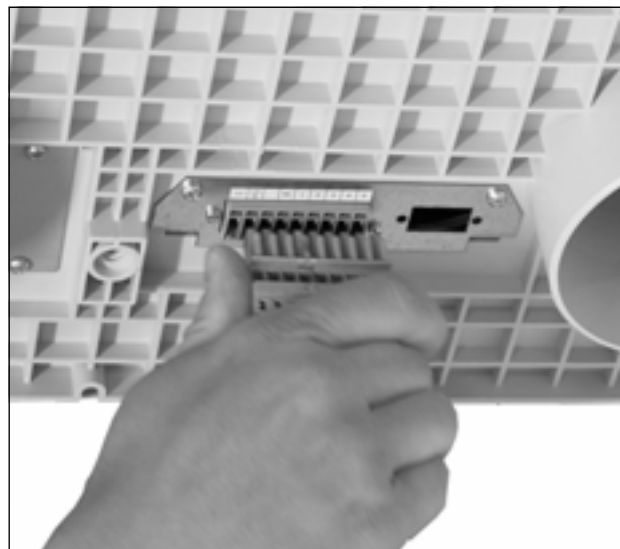


Fig. 27: Disconnect the mains plug



Fig. 28: Release the louvred grille



Fig. 29: Remove the louvred grille

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Fig. 30: Disconnect the connector from the display



Fig. 31: Disconnect the earthing cable



Fig. 32: Remove the assembly screws from the cover (loosen four screws)



Fig. 33: Remove the cover



Fig. 34: Cooling unit without cover (front view)



Fig. 35: Cooling unit without cover (rear view)

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Caution! Risk of damage!

The cooling unit must not be exposed to temperatures above +70°C during storage.

During storage, the cooling unit must stand upright. The closed cooling circuit contains refrigerant and oil which must be properly disposed of for the sake of the environment. Disposal can be carried out at the Rittal plant. Please contact us for advice.



Fig. 36: Clean out the heat exchanger coil and compressor chamber using compressed air

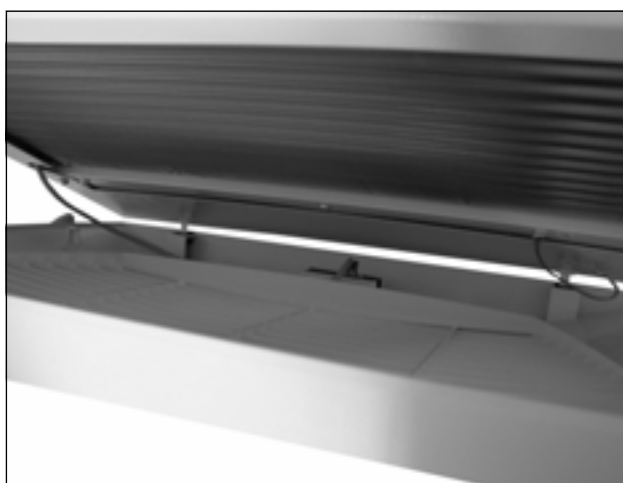


Fig. 37: Install the louvred grille

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Fig. 41: Remove the lower louvred grille



Fig. 43: Disconnect the connector from the display (1)



Fig. 42: Remove the infill panel

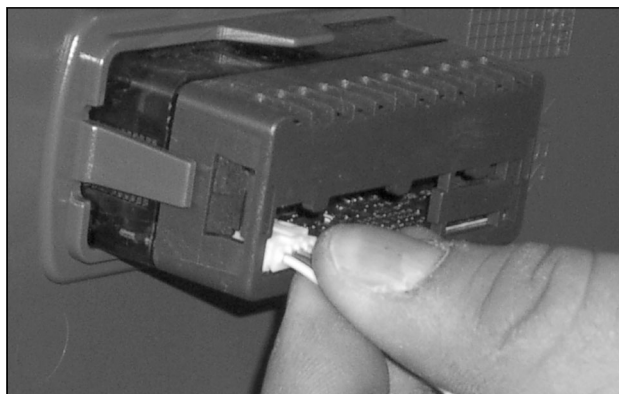


Fig. 44: Disconnect the connector from the display (2)

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Fig. 45: Cooling unit without grille

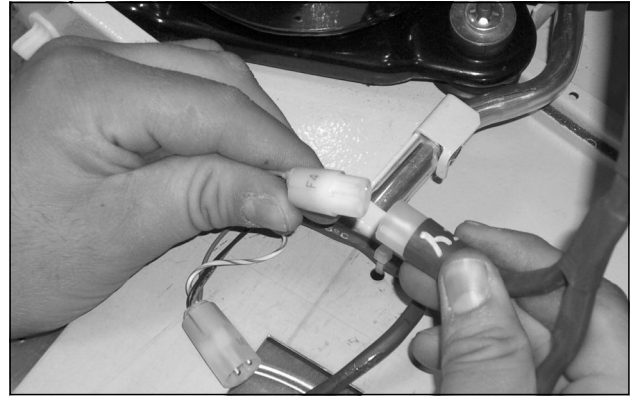


Fig. 48: Disconnect the fan connectors



Fig. 49: Remove the cover (loosen the four screws)

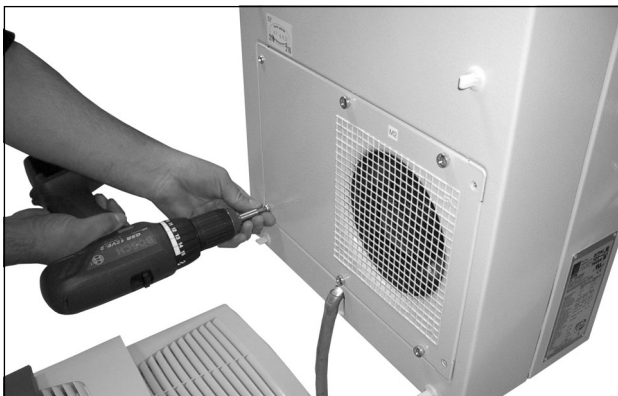


Fig. 46: Remove the external circuit fan
(loosen the four screws)

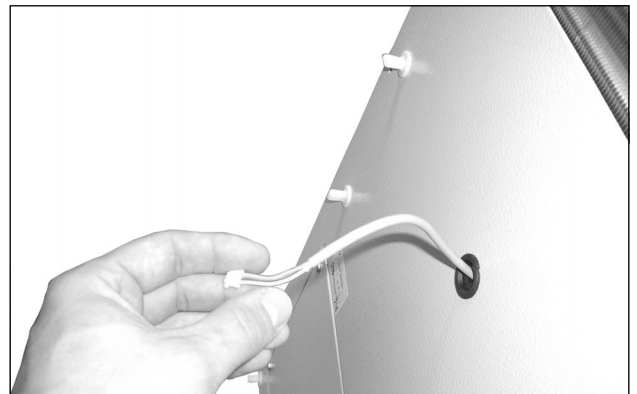


Fig. 50: Push back the display cable

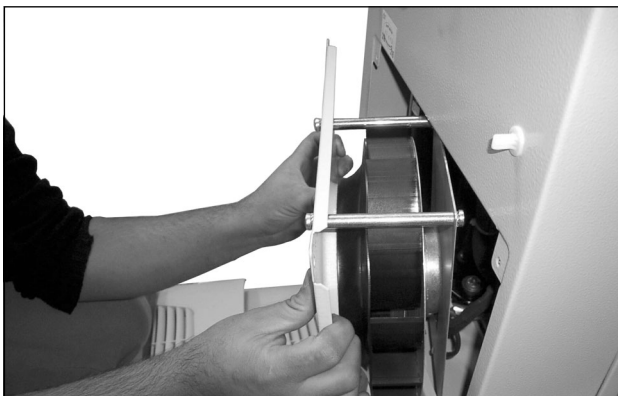


Fig. 47: Remove the fan

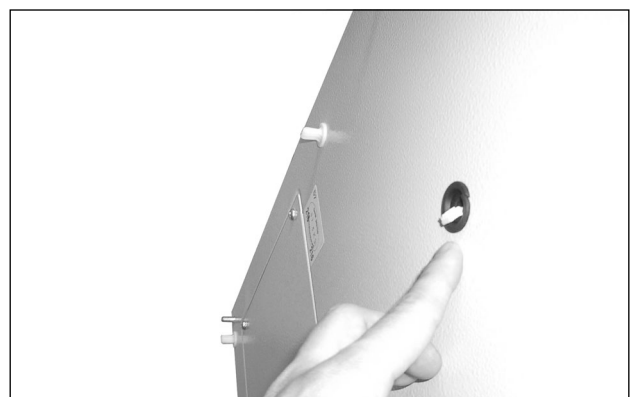


Fig. 51: Push the display cable through the cable gland

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Fig. 52: Remove the cover (1)



Fig. 53: Remove the cover (2)



Fig. 54: Loosen the earthing cable between the cover and the chassis (1)

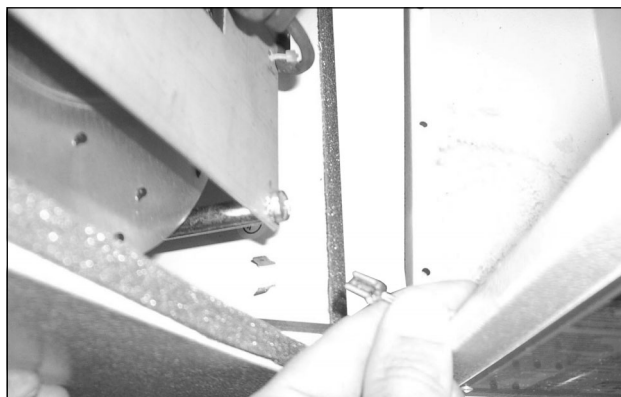


Fig. 55: Loosen the earthing cable between the cover and the chassis (2)



Fig. 56: Clean out the heat exchanger coil and compressor chamber using compressed air (1)



Fig. 57: Clean out the heat exchanger coil and compressor chamber using compressed air (2)

7.1.2 Compressed air cleaning SK 3328.xxx, SK 3329.xxx, SK 3332.xxx



Fig. 58: Disconnect the power cord



Fig. 59: Remove the upper louvred grille (1)

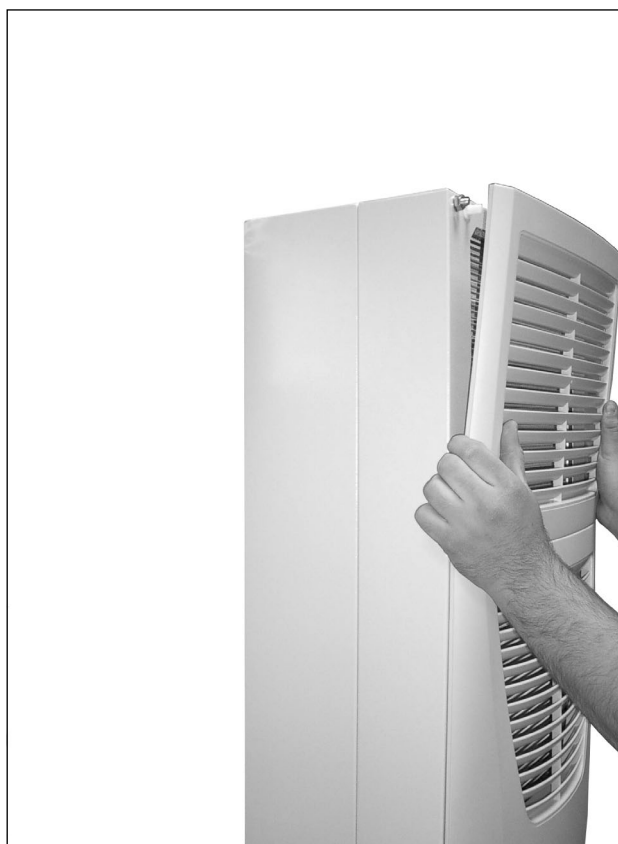


Fig. 60: Remove the upper louvred grille (2)

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Fig. 61: Remove the upper louvred grille (3)



Fig. 63: Remove the lower louvred grille (2)



Fig. 62: Remove the lower louvred grille (1)



Fig. 64: Remove the infill panel

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Fig. 65: Disconnect the display cable



Fig. 69: Remove the external circuit fan



Fig. 66: Push back the display cable and press it through the cable gland (1)



Fig. 70: Disconnect the fan connectors (1)

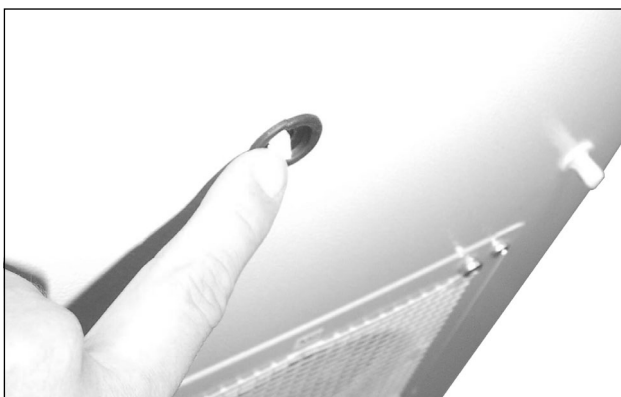


Fig. 67: Push back the display cable and press it through the cable gland (2)

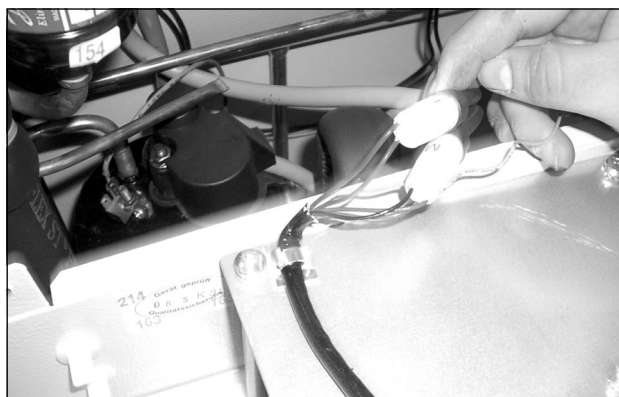


Fig. 71: Disconnect the fan connectors (2)



Fig. 68: Loosen the four screws of the external circuit fan



Fig. 72: Disconnect the fan connectors (3)

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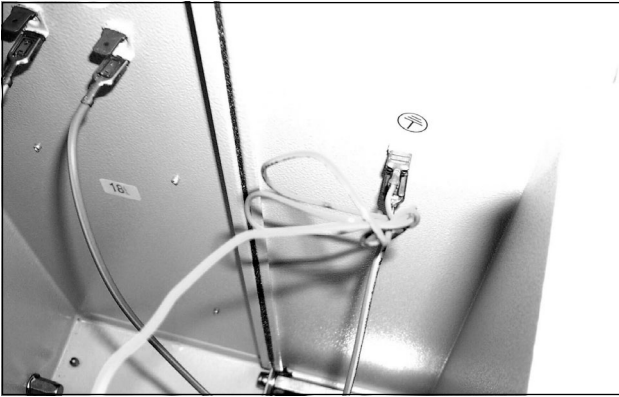


Fig. 73: Disconnect the fan earthing cable (1)



Fig. 74: Disconnect the fan earthing cable (2)



Fig. 76: Remove the cover



Fig. 75: Loosen the four screws of the cover

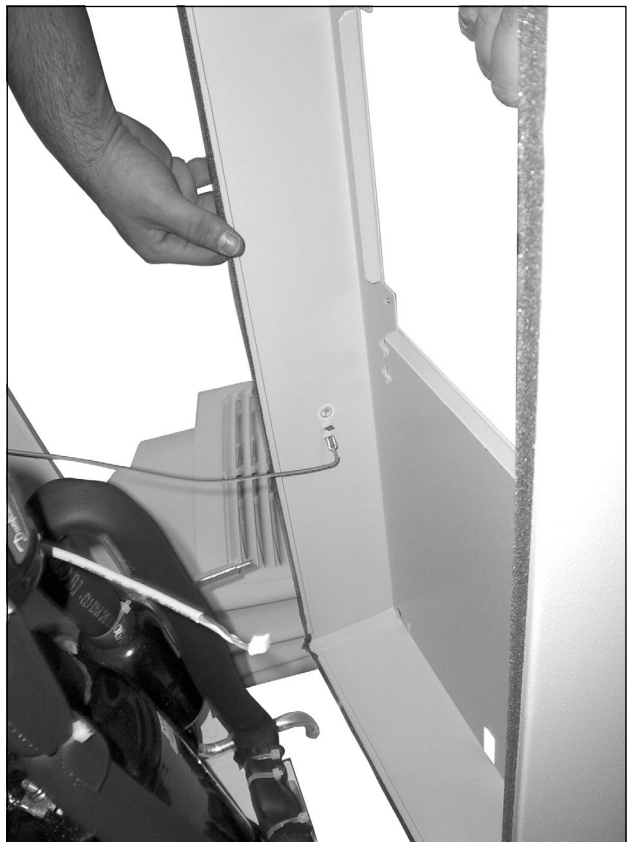


Fig. 77: Disconnect the earthing cable (1)

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Fig. 78: Disconnect the earthing cable (2)



Fig. 80: Clean out the heat exchanger coil and compressor chamber using compressed air (2)

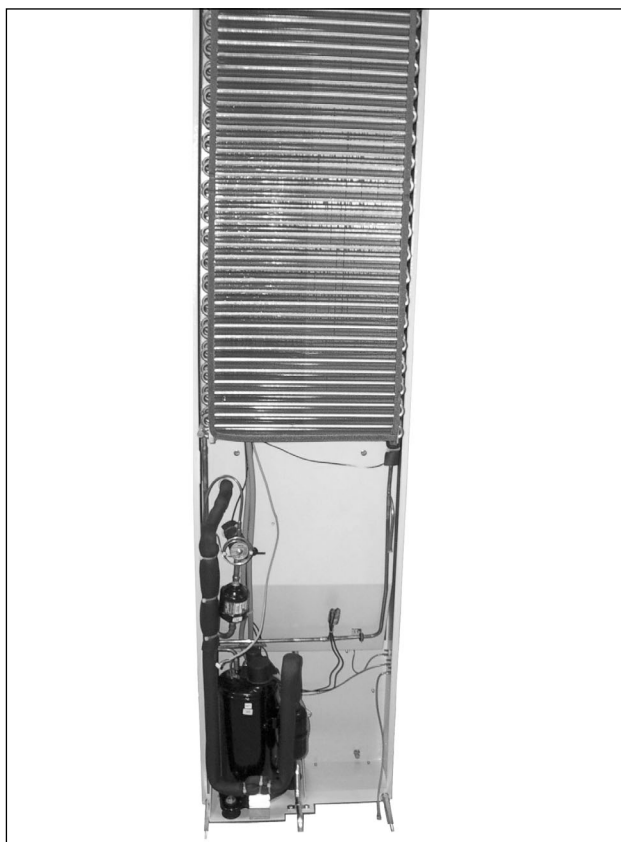


Fig. 79: Clean out the heat exchanger coil and compressor chamber using compressed air (1)



Fig. 81: Clean out the heat exchanger coil and compressor chamber using compressed air (3)

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