1.9 Cooling system

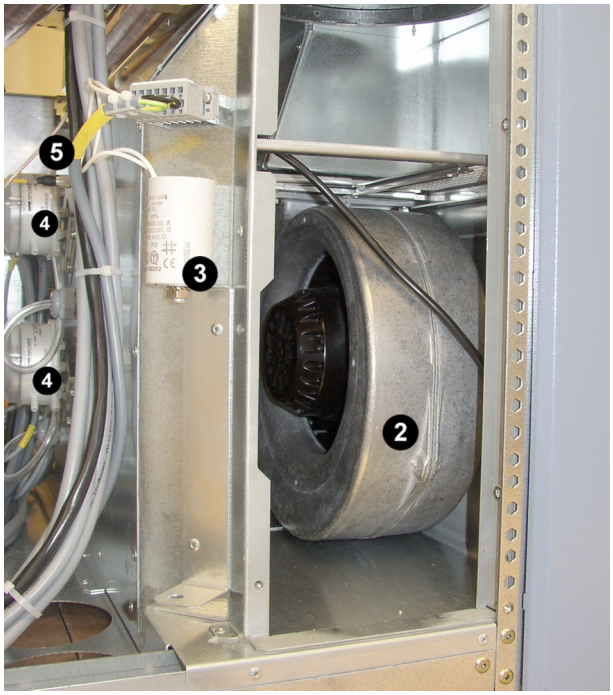

Fig. 30 *Cooling system*

1) Air intake duct
2) Fan
3) Starting capacitor
4) Differential pressure gage
5) Temperature sensor

The cooling system with its two integrated fans (active standby) prevents the transmitter from overheating and contains the following components:

- Air intake/exhaust duct
- Fans (2)
- Starting capacitor (2)
- Differential pressure gages (2)
- Temperature sensors (2)

1.9.1 Air Intake/Exhaust Duct

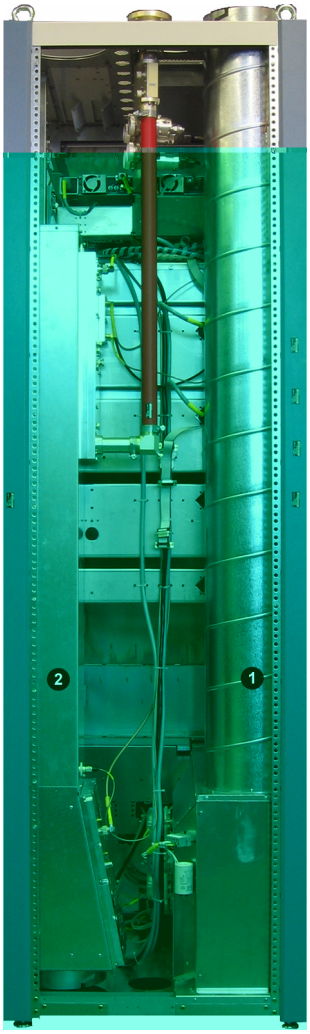

Fig. 31 *Air intake duct (1) and exhaust duct (2)*

The air from the intake duct is drawn in by the fans and forwarded to the distribution shaft. The distribution shaft provides enough air to each amplifier to cool it. The heated air is routed to an air collecting shaft on the opposite site of the amplifier and expelled via the exhaust duct.

Note *The intake/exhaust outputs are located either on the top or bottom of the rack, depending on your order specifications.*

If the intake is at the bottom, there is no intake duct. The connecting flange is located directly beneath the output box.

In addition, the absorber unit is situated at the bottom and it feeds into the exhaust connection.

1.9.2 Fans

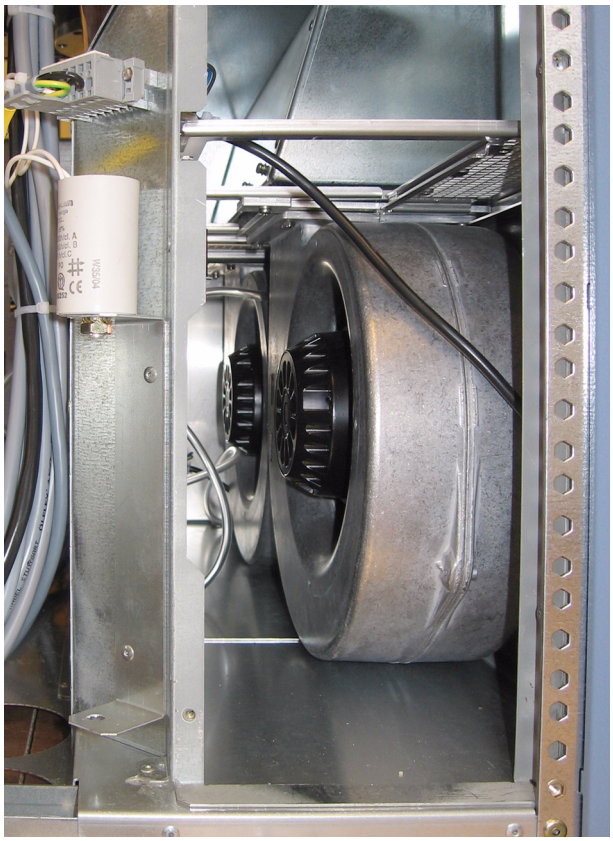

Fig. 32 *Fans*

A standard transmitter rack contains two fans, which adequately cool the transmitter with air. If one of the fans is defective, a warning is sent to the controller but the transmitter continues to operate. If both fans fail, the rack controller switches off the affected rack. The transmitter indicates a cooling malfunction.

1.9.3 Starting Capacitor

Fig. 33 *Starting capacitor*

Each motor is equipped with an external starting capacitor.

1.9.4 Differential Pressure Gage

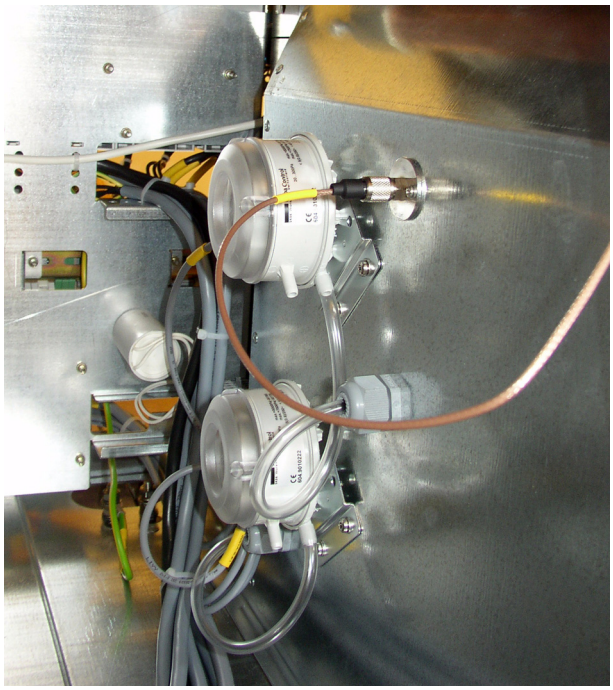

Fig. 34 *Differential pressure gage*

The differential pressure gages (diaphragm switches) measure the differential pressure of each fan between the fan flange (output) and the environment. Thus, fan malfunctions can be selectively sent to the transmitter control unit.

1.9.5 Temperature Sensors

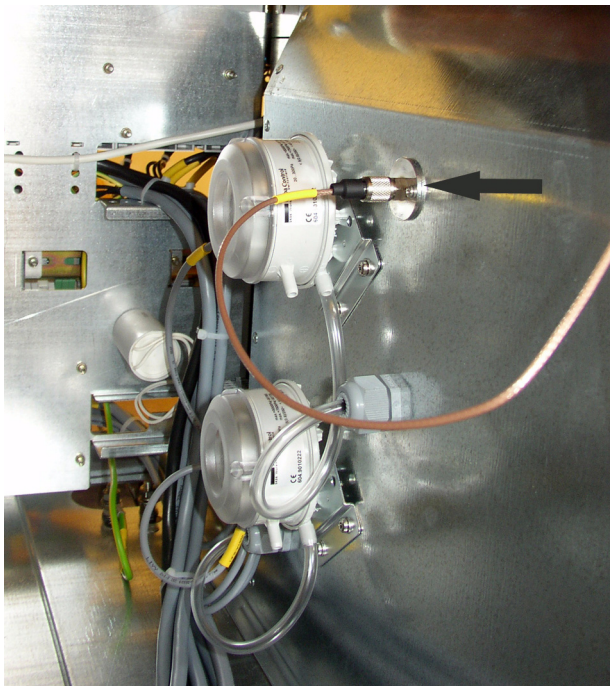

Fig. 35 *Temperature sensors*

The temperature sensors measure the absolute intake and exhaust temperature in °C for display on the NETCCU® and for monitoring in the rack controller.

Note *If the exhaust temperature is higher than 65 °C, the rack controller switches the rack off due to the danger of overheating.*

1.10 Transformer

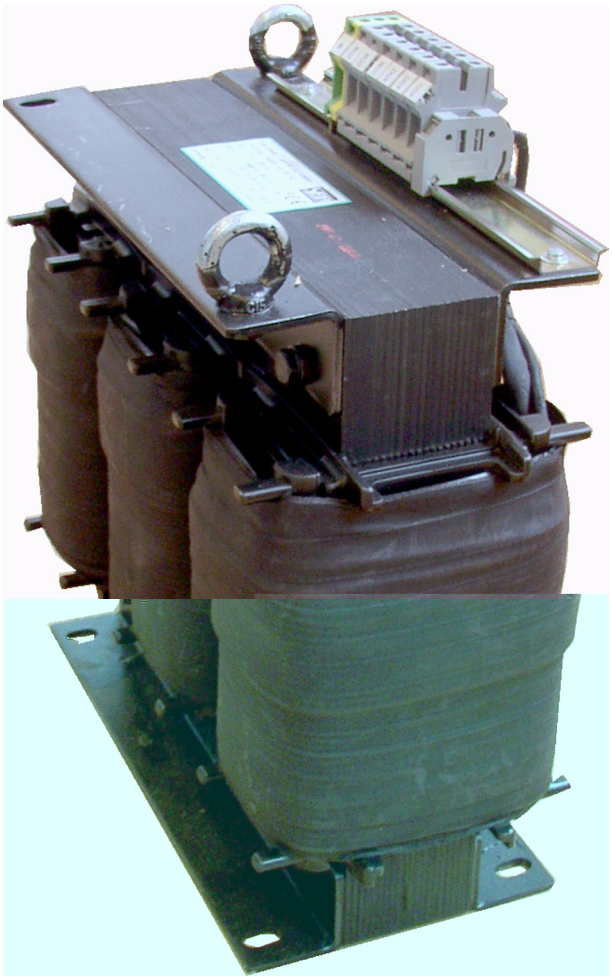

Fig. 36 *Transformer*

The transformer converts the voltage in the event of local voltage differences, e.g. in the United States or Canada (AC power supply 115 V/200 V).

Note *For detailed information about the transformer, refer to the transformer manual.*