Manual for
JEGP series

1. **Installation**
    1. If the heater is not to be used within three months, store in a dry room (max. 40% RH).
    2. Heater is designed for installation in duct systems.
    3. The direction of air through the heater must follow the air flow arrow on the heater.
    4. The heater may be installed in a horizontal or a vertical duct, with the junction box to the side. Installation with the junction box above or below is NOT allowed.
    5. Inlets into rooms must be covered by a fixed grill or air inlet unit that prevents the heating elements from being touched in the case a protective grill is not installed on the heater.
    6. A warning text regarding not covering the heater should be placed next to the outlet air opening.
    7. The minimum distance to duct bends, dampers, filters etc. must be at least the same as the diagonal length of the heater, i.e. the measurement from corner to corner of the heater's duct section. Otherwise there is a risk for irregularities in the air stream through the heater, which may trigger the overheat protection.
    8. The heater came with implemented public regulations for ventilation ducts/ventilation devices.
    9. The insulation must consist of fireproof insulation material.
    10. The heater junction box and lid must not be insulated. The heater must be accessible for replacement and inspections.
    11. The distance from the heater's metal surface to wood or other flammable material must be at least 100 mm at an outgoing temperature of ≤70°C. At an outgoing temperature of 71–120°C, the d istance must be at least 300mm

2. **Maintenance**

    12. In normal situations there is no need for maintenance. A periodic control of functions and re-tightening of power supply connections must be carried out at least once per year.
    13. To maintain insulation in the heating element, the power stage must be connected and run for 24h at least every 3 months.

3. **Overheating**

    14. The heater contains at least two overheating protections (of which at least one is reset manually). If the overheating protection that is reset manually is triggered, the following must be taken into consideration:
    15. Cut off the power supply.
    16. The heater's lid may only be opened by a qualified technician.
    17. Thoroughly investigate the cause for the overheating protection being triggered.
    18. When the fault has been rectified, the overheating protection may be reset.

4. Troubleshooting

19. Full heat without adjustment:
- The fault is not in the heater: Check external regulator thermostat.
- No heat: Check connection to mains electricity to the heater's terminal block.
- If there is electricity at the terminal block check the heating element.
- If there is no electricity, check if the overheating protection has tripped. See "Overheating" for reset. Otherwise, the fault is not in the heater. Check external control/thermostat, interlocking, fuses, switches etc.

5. Connection

20. Heater fitted with overheating protection. The number and their setting depend on the duct dimensions and the intended usage.
21. Heaters with outgoing temperature of >70°C normally only have overheating protection that can be reset manually.
22. Heaters may be supplied with overheating protection that has an alternating contact function, or otherwise a relay may be included in the connection. Alternating contacts, or the relay connectors, can be used as an alarm function to indicate that the overheating protection has been triggered. The relay connectors may not be used for interlocking, only for indication.
23. The heater overheating protection must always be part of the control equipment circuit. It is not recommended that the overheating protection function is controlled by an electronic circuit. It must be established that the heating output is disconnected if the overheating protection is triggered.
24. The heater may have a number of power stages, which is indicated on the wiring diagram on the inside of the heater cover.