GF83.70-P-4054-02GH	Electric heater booster function		n

The basic principle of the electric heater booster is comparable with a conventional hot air blower. The heating elements are energized and as a result start to heat up and then start to glow. The design ensures that the fresh air drawn in flows past the electric heater booster and is heated up as a result.

The 3 heating elements in the electric heater booster are actuated by 2 high-current relays (stage 1 = 330W, stage (2 + 3) = 660W).

The following heat outputs can be switched on:
- 330 watts; stage 1
- 660 watts; stage 2 + 3
- 990 watts; stage 1 and stage 2 + 3

The PTC heating element is self-regulating so that for 100% operating time the surface temperature of the ceramic heating elements can assume a maximum of 163°, and a max. temperature of 105°C can occur at the metal mounting frame.

The heater booster is operated at the supply voltage and protected by a fuse. The 2 heater circuits are protected by fuses, 30A for stage 1 and 60A for stage (2 + 3).
A main relay is connected in series with the two control relays which ensures that the complete PTC heater booster is switched off in emergencies or if there are faults in the two control relays. The main relay is connected so that it does not have to switch the entire heating current on or off in an emergency, but instead it just conveys the entire heating current via the closed contact.

Exception: Faults in the relay circuit in full heater operation. The electrical output is 3 x 300W at 13V.