

The relay on which the BRB-100 is connected must always be turned on!

BRB-100 — Principle of operation

The BRB-100 is a security device which ensures the presence of ventilation, of heating and/or of a sufficient air intake in case of failure of the main ventilation system. The backup box uses the same outputs as the ones used by the regular ventilation system. It has 2 different and independent security modes:

The first security mode is used in case of an extreme room temperature; the second security mode is used in case of power failure of the main controller or relay panel.

1. Extreme room temperature: Up to 6 fans (or heaters) can be activated if the temperature in the room exceeds the temperature set point of T1, T2 or T3 thermostats. When the room temperature reaches the set point of a thermostat, the respective output is enabled: (T1 thermostat activates K1 output, T2 = K2, T3 = K3). Each thermostat can enable 2 fans or heating outputs.

If the backup thermostat is used to ensure ventilation, its set point must be greater than the start temperature of the last fan stage of the ventilation control; if it is used for heating, the thermostat's set point must be lower than the start temperature of the last heating stage of the ventilation control.



You must adjust the temperature set point of the thermostats on a regular basis according to the changes made to the temperature set point of the main ventilation control. You must also test your mechanical thermostats at the beginning of each flock or more often.

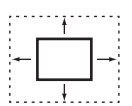
2. Power loss of the ventilation controller or relay panel: If the ventilation stops due to a power loss of the main ventilation controller or of the relay panel, the backup box activates K5 and K6 fans (or heaters) and asks for an opening of the K4 curtains or vent doors.

Backup Loads: The backup loads must be connected to a dedicated circuit breaker. Do not wire the backup loads on the same breaker as the relay panel.

The relay selection of this diagram is shown for illustration purpose only. The actual relay selection has to be determined in the field and wired as shown.

***Using a Thermostat Controller:** A controller can be used to replace mechanical thermostats. Using this type of controller changes the power supply connection of the

BRB-100. It also changes the way actuators and thermostat terminals are connected. If a thermostat controller is used, refer its wiring diagram to make the connections.



Installation Notes: Leave a clearance of at least 12" to the left of the controller's box and 16" to the left of the relay panel to allow covers to be removed for maintenance.

Technical Specifications:
 Supply: 120Vac, 60Hz, 10A Max
 Outputs: K1, K2, K3: 240Vac 15A, 240Vac 3HP
 K4, K5, K6: 250Vac 10A, 250Vac 1HP



WIRING DIAGRAM	
BRB-100	
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