Heater Relay Kits
For 12 and 24 Volt DC Applications

Overview

A relay kit may be necessary when installing a Racor heater due to power demand. Standard OE fuses, wiring and alternator may be unable to carry the load without overheating or potential shorting, creating a serious condition.

Racor relay kit’s provide higher amperage power to the Racor heater using the relay as an independent ‘switch’. The relay coil is energized either from a manual toggle switch or by means of activation, such as a thermostat.

Note: Ensure the electrical supply system can support the power demands of the fuel heater (and other accessories) prior to installation.

Instruction Part Number 11-2012 Rev A

<table>
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<tr>
<th>VOLT</th>
<th>AMPS</th>
<th>WATT</th>
<th>Part Number</th>
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<tr>
<td>12</td>
<td>25</td>
<td>300</td>
<td>RK 11861</td>
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<td>24</td>
<td>12.5</td>
<td>360</td>
<td>RK 11862</td>
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<tr>
<td>12</td>
<td>60</td>
<td>720</td>
<td>RK 19490-12</td>
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<td>24</td>
<td>60</td>
<td>1440</td>
<td>RK 19490-24</td>
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Note: RK 11861/RK 11862 include fuse and holder, RK 19490 kits have them built in.

Special Notes: Do not use on gasoline applications.
Installation Instructions for all Kits

1. Before beginning, familiarize yourself with the steps to be taken and ensure all hardware, wiring, necessary terminals and tools are on hand.
2. Disconnect vehicle battery ground cable before splicing or connecting the relay unit to avoid electrical shock or fire.
3. The power relay unit should be mounted in a location which offers protection from harsh environments or contact with moving parts. An engine or cab compartment is suitable.
4. Solder all electrical terminals to reduce electrical resistance and ensure a durable connection.
5. Ensure all wires are routed in a manner to offer the best protection from contact with other moving parts which can lead to chaffing and shorting out of components.
6. Use provided wire ‘zip-ties’ to secure wires to avoid vibration and movement - obtain more if needed.
7. Where additional wire lengths may be needed, ensure the same gauge (AWG) and color (if possible) is used. Solder all connections and use shrink tubing to protect exposed wires.
8. Never operate power relay unit when there is no fuel in heated Racor product. This can permanently damage heater and related products and potentially start a fire.
9. Follow Installation and Use Instructions provided with Racor products.
10. In event of a failed fuse, determine reason for failure before replacing.
11. Always disconnect power from the relay unit when servicing it or heated Racor products.

Wiring Diagrams
Refer to applicable diagrams

Schematic A - For Light Duty Power Relay Kits: RK 11861 and RK 11862

Racor 2-wire Heater Connection Diagram
Racor ‘2-wire’ fuel heaters have no polarity! Either wire may be used for hot (+) or ground (-).
Schematic B - For Light Duty Power Relay Kits: RK 11861 and RK 11862

Racor 3-wire Heater Connection Diagram

Racor ‘3-wire’ fuel heaters have polarity!
Red wire is for hot (+)
Black wire is for ground (-) and
White activates the power relay.

Schematic C - For Heavy Duty Power Relay Kits: RK 19490-12 and RK 19490-24

Racor 2-wire Heater Connection Diagram

Alternator:
Positive (+)
Output Terminal
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