**Category: Heater**

**Document Number:** PI116BC

**Date:** 7/20/2016  Rev: 08/2018

**Description:** PWM CONTROLLER DRIVER 24V

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### Overview

The PWM controller is designed to control the vehicle blower during Webasto heater operation to pre-heat the interior of the cab. The blower speed is adjusted and set during the heater install by turning the dial on the module and changing the duty cycle of the PWM signal.

The controller is installed between the vehicles HVAC blower and vehicles blower controller. The signal from the Webasto heater will disconnect the vehicle blower from the vehicle blower control and provide power through the module.

After ignition is detected, the PWM controller will switch the blower motor back to the vehicles blower control (original vehicle wiring) with a 3 second delay.

**NOTE:** Verify that source ignition is 0 volts when switched off. Any voltage on this circuit when ignition is switched off will not allow the module to activate the vehicle blower circuit during heater operation. If voltage is detected on this ignition circuit, an relay is required. A relay should be installed on the yellow ignition wire between the PWM module and the ignition source as shown below.

![PWM Controller Diagram](image)

**Wire Color** | **Description** | **Wire Size**
--- | --- | ---
Red | Vehicle battery + | 14 AWG
Brown | Vehicle battery - | 14 AWG
Yellow | Vehicle ignition source | 20 AWG
Green | Webasto heater signal | 20 AWG
Orange | Power to motor | 14 AWG
Black | Ground to motor | 14 AWG
White | Ground to vehicle controls | 14 AWG
Blue | Power to vehicle controls | 14 AWG

### Technical Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Nominal Voltage</td>
<td>24V</td>
</tr>
<tr>
<td>Operating Voltage Range</td>
<td>16V – 33V</td>
</tr>
<tr>
<td>Maximum Current Output</td>
<td>15A</td>
</tr>
<tr>
<td>Duty Cycle Range</td>
<td>30 – 70% of input voltage</td>
</tr>
<tr>
<td>Physical Dimensions</td>
<td>96 X 74 X 38 mm - 3.8” x 2.9” x 1.5” (L x H x D)</td>
</tr>
<tr>
<td></td>
<td>119 X 74 X 38 mm - 4.7” x 2.9” x 1.5” (L x H x D) with mounting tabs</td>
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</tbody>
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If you have any questions, contact our technical support team at (800) 860-7866 or via email at: info-us@webasto.com.