

Ablemail Electronics

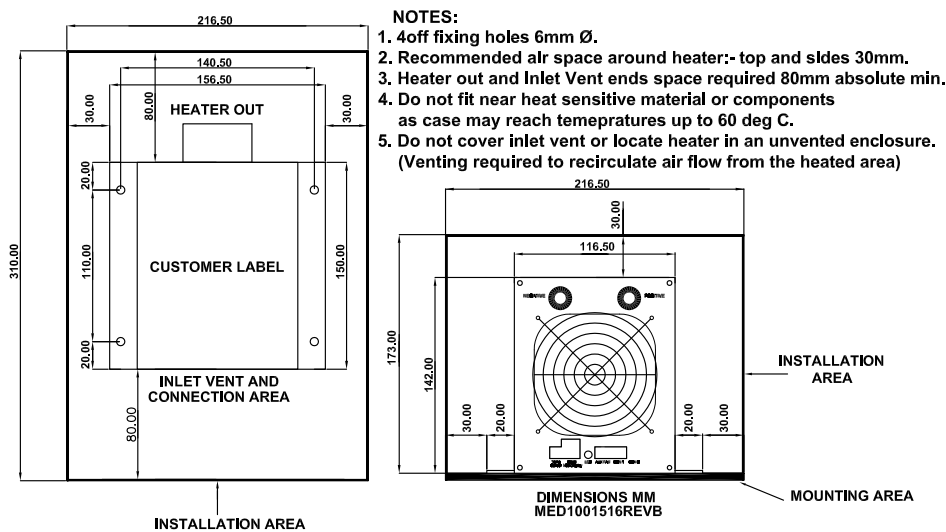
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AHC12-600W ELECTRIC AIR HEATER KIT (12V,24V 48V and 80V) Installation

The AHCXX-600W is a bluetooth enabled compact 600W electric air heater for frost protection and space heating in vans ,campervans , trucks and boats . It does not require expensive fuel tanks, regular maintenance, or refilling, does not generate any dangerous fumes and lastly is one of the most environmentally friendly ways of heating a space. It is easy to install and can be controlled by the in vehicle controller / display, or the Ablemail Device Manager app on a IOS or Android phone. The heating can be set into a high power mode for burst heating . Night mode heats at 200W instead of 600W, and with quieter fan operation is suited for prolonged operation on a reduced capacity shore supply. The timer provides 3 off ,7 day timers for timed heating. The heater can be configured to act as a frost protection heater and boost heating can be initiated from the App. The AHC12-600W Electric Air heater uses 60A of battery energy and so a large battery capacity is required and for sustained running from the vehicle alternator a 60A 12V B2B supply such as a Ablemail AMC12-12-60 with Fan assist is recommended. Higher voltage heaters use less proportionally less current

AHCXX-600W Mechanical Installation Guide



AHXX-600W Electrical Installation Guide

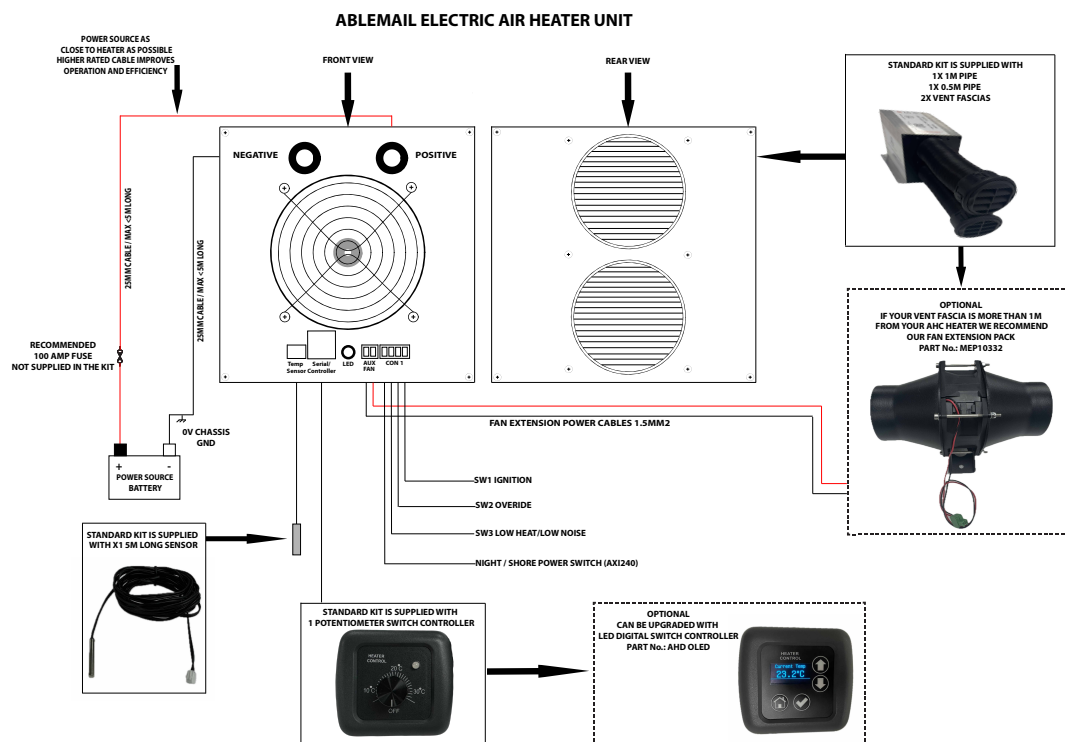


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ELECTRIC AIR HEATER INSTALLATION

IMPORTANT INFORMATION !!!

It is the sole responsibility of the Electric Air Heater installer to fit the correct system cable, wiring, fuses, quality fuse holders into the installation to protect the vehicle, Electric Heater ,cabling, and wiring. Failure to correctly install the electric heater could result in damage to the vehicle, components, electric heater , cables or wiring and is not covered under the unit warranty terms and conditions of the AHCXX-600W Electric Heater . Ablemail Electronics hold no liability on vehicle or unit installation.

Connection Procedure / Power up Sequence:

To ensure normal operation:

1. The temperature sensor should be fitted in a position to measure area temperature (usually chest height)
2. Connect Ignition/Override/Night/400W inputs (if required)
3. Connect the Ablemail Heating controller into the Ablemail heater using the supplied RJ12 cable.
4. The vehicle or auxiliary battery should now be connected to the AHC heater Positive and Negative Inputs as the installation requires . **(Pay Attention to Polarity)**
5. Install Ablemail Device Manager Ios or Google App on mobile device and connect to the heater. Ensure Frost, Night, Timer and Ignition settings should be configured as required
6. Turn on heater using Ablemail Heating Controller or the Ablemail Device Manager as required

Operation:

The Heater operation is described below:

- The heater operates with an input voltage between 10.5V & 15V . Adjust Battery Guard Threshold in Ablemail Device Manager APP as required
- Turn the pot or adjust display to the desired temperature. The heater and fan should energise and warm air should be felt coming out of the nozzles after 30s. The led on the control panel will be amber.(Target temperature must be greater than ambient)
- When the air temperature reaches the target temperature the heater led will become solid green and the heater will switch into automatic temperature maintain mode. The heater will turn on and off automatically as it maintains the required temperature and the led will switch between green and amber.
- When pot is turned back to the off position the heater fan will operate for 30s to ensure the elements are cool before switching off.
- If during operation the supply voltage falls below 10.5V(Battery Guard threshold) the heater will be disabled and the led will flash red.

The Heater can be controlled from the Ablemail Device Manager App and will operate exactly as above. The App also allows timed operation and frost protection to be configured and enabled :

NOTE: The LED shows the heater state :

- Flashing Red - In fault mode ; supply voltage below 10.5V or the unit is overtemperature
- Amber - Heater operating and trying to reach target temperature
- Green - Temperature of space has reached target temperature

Fault Finding

- 1 Check Supply voltage and wiring to the control panel
- 2 Check temperature sensor is correctly located
- 3 Use App to check the status of the heater

Maintenance -

The Heater works best when any dust and dirt build up is removed . Every 12 months it is advised to clean dirt and dust from the fan and heater element using a brush

Optional Extras available with all units :

An AHD Oled Controller is available to replace the standard AHP Pot Controller allowing timed operation and quiet mode to be selected from the cab . The AMC12-12-60F battery to battery charger is good for charging an auxiliary battery and running the heater while driving when you need to keep rear cab area warm on long journeys. An AXI240 or an AES001 is helpful for running in night mode when connected to a shore supply /mains hookup as it converts the mains supply to a 12V signal. The AES001 /AXI230 can also be used for Scheduled Pre-Conditioning as offered by Ford to remotely optimise the cabin and battery temperature while still on charge before departure . The standard kit is supplied with 2 lengths of 0.5m hot air tubing . Different lengths can be supplied on request and a Fan Assisted Vent extension Kit (MEP100332) is recommended where hot air tubing over 1m in length is required .



Other Products in the Range

AHB600 600W Booster heater -Adds 600W extra heating capacity within 5 meters of AHC600W

AHC1200 -1200W heater -1200W heating capability

AHC1800 - 1800W heater -1800W heating capability

The full range of AHC products are available for operation from a 24V DC supply, a 48V DC supply and a 72V DC supply

If you require any assistance or advice on this product & or its safe integration with other electrical equipment, Please contact Ablemail Technical on +44(0)161 745 7697.