



March 19, 2020

DClimate
83 Weldon Parkway
Maryland Heights, MO 63043

This letter clarifies our 4-year warranty commitment for EnerSys batteries used as part of DClimate's APU solution. The application calls for the use of eight dual-purpose NSB-AGM31 batteries or ODX-AGM31, designed for a combination of cycling and vehicle starting.

Based on extensive joint testing we have determined that the system design dictates that the batteries will never discharge more than 60%, and on average no more than 50% on a typical daily cycle. This, coupled with the rapid recharge characteristics of the DClimate system, mean the battery application falls within the design specifications for 4-year minimum life expectancy. As a result, the DClimate warranty will be based solely on months of service.

The Pure Lead AGM technology is ideally suited for heavy duty dual-purpose applications and will provide years of reliable service when used in an appropriate application environment. The following items are critical to maximizing life expectancies and preventing premature and non-warranted failures:

- Based on a 12-volt nominal application, a specific charging voltage range of between 13.8-14.4 volts and a minimum of 240-amp alternator must be maintained to maximize life.
- Heat is another life-limiting factor, maintaining battery temperatures below 104°F/40°C will help to prevent dry out. If batteries are to be placed in close proximity to the engine or other heat generating areas such as exhaust systems, heat shields should be installed to help protect the battery.
- If the potential exists for occasional over discharging, it is recommended a low voltage cut off device be installed and set to cut off at 11.6 volts, based on a 12-volt application.

By observing, the items outlined above and under normal operating conditions, the batteries are designed to exceed a 4-year life and EnerSys will provide a warranty on its batteries for all manufacturing defects during that 4-year period.

The warranty does not cover premature failures that are a direct result of overcharging, or when used in an unsuitable environment.

These product failures can be easily identified through a visual inspection of the battery and an open circuit voltage reading. Unlike flooded batteries, Pure Lead AGM do not experience catastrophic failures, such as shorted cells, so you can quickly determine most non-warranty failures.

If the battery fails but appears to be in good visual condition and has been in operation for less than 48 months, it will most often be a warranty. To help you manage when the battery went into operation we have included a date code on the battery either in the top or back of the battery.

It is our goal at EnerSys to provide you with the highest quality products, outstanding customer service and the support to maximize your product life expectancies.

We hope this letter, along with the copy of our warranty, clarifies our commitments to your DClimate system and removes any guesswork on your part and request you consider us for your Pure Lead AGM battery requirements.

If you have any questions or concerns please contact your EnerSys representative.

Best Regards,



Jeremy Cordray
Director of Technical Sales

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