

## YAMAHA EF2400 GENERATOR SIZING

**Question:** Appreciate your column in the *Blue Beret* very much. Your advice in the November issue, however, totally contradicts the folks at Yamaha. We attended an Airstream rally a couple years ago where one of their representatives told us that the 2400 unit would start our 13,500 BTU air conditioner. We were also assured that this would be the case from the sales person when we bought our unit. The Yamaha website (link attached) also boasts this claim very clearly. We have, however, not had occasion to use the inverter with our air conditioning since our purchase. We are confused and concerned about who is correct. <http://www.yamaha-motor.com/outdoor/products/modelfeatures/475/0/features.aspx>

**Answer:** Very interesting David. I checked your reference page and you are right it clearly states that a 13,500 BTU A/C can be run with the EF 2400. I have been asked this question by over six members over the past year and wondered where they were getting the idea that this generator could handle the load. This data is incorrect, the Yamaha page is wrong and you can seriously damage your A/C unit if you try to run it with this generator size.

Here are the detailed specs of the EF2400iS-HC from Yamaha.  
[http://yamahagenerators.com/yamaha\\_generator\\_ef2400ishc\\_pr\\_4.html](http://yamahagenerators.com/yamaha_generator_ef2400ishc_pr_4.html)

It specifically states: 'NOTE: The EF2400iS-HC will NOT run most RV A/C units and does NOT have a 30 amp electrical receptacle'. It further states: '2000-watt class will run air conditioners up to 10,000 BTU, as well as microwave/convection ovens. NOTE: The EF2400iS-HC will NOT run most RV A/C units and does NOT have a 30 amp electrical receptacle'.

The Yamaha Application Charts also states that this generator will not run a 13,500 BTU air conditioner <http://www.yamaha-motor.com/outdoor/generator/application.aspx>. It further states that the 2800 model will.

The Yamaha reference you site does indeed make the claim except it weasel words the statement most high efficiency 13,500 BTU AC .... Clearly Yamaha is making two opposing statements. The specifications indicate a rated output of 2000 watts and a maximum of 2400 watts. This is way under power for the larger RV Air Conditioners.

If you take a look at the Dometic A/C requirements for a Penguin, minimum recommended generator size is 3500 watts for 13,500 BTU. For the Dometic High Performance A/C it also states a 3500 watt generator is required.

Honda states that you need one EU3000is or two 2000is generators to power a 13,500 BTU AC ([http://www.hondapowerequipment.com/products/generators/content.aspx?asset=gg\\_how\\_muchpower](http://www.hondapowerequipment.com/products/generators/content.aspx?asset=gg_how_muchpower)). Also, you're A/C is going to be cycling on and off during the hot weather and you will most probably have other things running while this is going on. This means you really cannot get away with a size that can just handle the A/C. This is why Honda, Yamaha and Dometic talk about 3000 to 3500 watt sizes. You should have at least 2800 watts of generator to start and operate a 13,500 BTU air conditioner by itself.

So back to your question what is going on with Yamaha? I am guessing that the page you referenced (which clearly states the 2400 will start and run the AC) was written by the

Sales Department and not the Engineering Department. It is clear all of the other Yamaha specification data and tables do not support the sales statements. Both Honda and Dometic suggest a 3500 watt generator as a minimum. Further, my experience confirms this especially since I have seen AC units ruined by trying to cycle the compressor on a hot day with an undersized generator.

If I were you I would contact the Dealer you purchased the unit from (who assured you it would work) and ask them to explain. **Do not try** to run your A/C with your 2400 if it damages the unit they will not cover your loss. If the Dealer will not refund your money then contact Yamaha directly. Feel free to use any of the above material since you are not the only member who has been fooled by this Yamaha Internet page. None of the other Yamaha Specification pages confirm the statements in this advertisement. I had never seen this feature ad and I wondered why so many of our members had the idea that you could use this model to run their A/C. Thanks for bringing it to my attention.

**Follow on:** I emailed Yamaha and received the following response:

It is NOT on our website [www.YamahaGenerators.com](http://www.YamahaGenerators.com) (National Supply Company). We actually specify that it will NOT run most A/C units. First red flag is that the EF2400iSHC does not even have a 30 amp receptacle usually needed to start a 13,500 BTU A/C unit. For a 13,500 BTU A/C you need either the EF3000iSEB or, 2- EF2000iS units linked with a Parallel cable. We have addressed this issue with Yamaha but up to this date the information is still listed on their website. That is why we are VERY specific with the information on our website. You would need to contact Yamaha since we are unable to provide assistance with this matter. Yamaha Customer Relations at 714-761-7435.

Evidently, the Yamaha Generator Division is different than the Yamaha Outdoors Sales Department. I have forwarded my email conversation to Yamaha and hope they will finally remove the incorrect Feature page from their Outdoors website.