

The Appetite for Amps Goes Down

Written by Ed Sherman

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Cruisair units like this actually use less power today than ten years ago, in effect they are greener units, not just because of the new refrigerants used, but also because they use less electricity

For some years now I've written that it seems like the average boat owner's appetite for amps is insatiable. I'm referring to all of the electrical and electronic toys and gadgets that we seemingly can't live without. But, after thinking about it for a bit, I began to question myself on this very premise. Sure the gadget count keeps growing, but what about the actual power usage?

I spend a part of every fall inspecting boats as a part of the Cruising World Boat of The Year judging team. This year one of the big themes from the sales folks was the use of LED lighting on board and the huge difference it makes in terms of electrical power usage. It true, LED's use milliamps vs. multiple amps to shine a light. This all got me to thinking about other commonly used appliances on board, and what their power usage looked like. So, I made a little bet with the folks at Dometic about their air-conditioning systems. Simple enough, but noone in their

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display booth at IBEX could answer me immediately. My bet was that their air-conditioning units used less electrical power today than a similar unit of ten years ago. They weren't sure but agreed to check for me and get back to me. This is significant because things like air conditioners and refrigeration systems in general are notorious users of big power.

Even things like electronic equipment use less power today. I haven't yet done an apples for apples comparison, but I do know for example, that an HD digital radar unit uses far less power than a conventional unit. LCD display screens consume far less power than their cathode ray tube counterparts from yesteryear.

Dometic (the makers of Cruisair products) supplied me with some numbers for their modern vs. old tech airconditioning systems and although the numbers may seem small in terms of actual amperage, the percentage of gain is notable.

Examples: 10,000 BTU unit @ 115 volts= 8 amps (old style unit) New tech unit: 5.6 amps or a 35% average improvement. A 16,000 BTU unit for years gone by, 11.4 amps. A new unit, 8.8 amps or a 27% gain.

So, all of this has got me thinking about a really comprehensive article where I take a new 40 ft. boat let's say, and equip it for today's market and do a total load analysis for both AC and DC systems. Then compare it to a 12 year old boat with the same equipment and see what the comparative appetite for amps actually is. I'll bet we're going to see a significant difference. sound like a good winter project. Got to get ready now to deal with yet another huge east coast storm coming at me overnight.