Ask Jon Eakes

Dividing available energy from your electrical panel

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YEARS AGO -- CHEATING A CLOTHES DRYER ONTO AN ELECTRICAL STOVE OUTLET TODAY - ADDING AN ELECTRIC VEHICLE CHARGER TO A FULLY LOADED BREAKER BOARD THE HISTORY

Several years ago there existed in Canada a lot of homes with 60amp electrical mains panels. As electrical appliances became more and more common, the household electrical requirements rose quickly beyond the capacity of these small mains. New installations were 100amps and today 200amps is the standard. But during the days of small mains panels and more and more people wanting to run both electrical stoves and electrical clothes dryers, a device called a Load Miser was invented. This specialized automatic switch would prioritize power to the stove. If there was not enough power available for both, the clothes dryer would be cut off until the stove was no longer drawing a large current. It took longer to dry the clothes, but they still got dry eventually.

THEN IT DISSAPEARED -- FOR A WHILE

Although there are still homes with small mains, with fewer and fewer of these low power installations in existence, the Load Miser has almost disappeared. In fact several suppliers told us that it did not exist any more. But then I did find that Federal Pioneer still makes it and it can be special ordered (written in 1998). (Update: Federal Pioneer stopped making TLM Load misers in 2001 - now it is true that they no longer exist!) If there is enough electricity available at the mains panel and you are simply trying to avoid running a new wire from the panel to the laundry room, the new line is now your only option and if there is not enough supply, you have to upgrade your whole electrical system. (that was written in 2001)

NOW IT IS BACK WITH A NEW MISSION

Fast forward to 2016. A radio listener called in to tell me that he did find one in Alberta for his electric car charger. Electric vehicles are now rapidly coming into the market and many people who want to charge their cars overnight might have maxed out electrical panels. To the rescue, the rebirth of LOAD MISERS. To avoid overloading of your electrical system, any appliance using a lot of electricity, like an electric stove, an electric hot water heater and perhaps even an electric clothes dryer can be connected to the vehicle charger in such a manner that the two of them cannot operate at the same time -- but one has priority. If you try to turn them both on, the one designated as more important goes on and the other is cut off. When the priority load is finished and shuts off, the other appliance can go on and catch up on its task. Many people connect the car charger with the stove and set the charger timer to go on only late at night, when ideally, no-one wants to use the stove/oven. So a good device that lost its reason for being with 60amp house circuits is now back on the market with the modern mission of automobile energy efficiency. Here is just one example.

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