

Aluminum Evaporators versus Holding Plates when used on small 12v/24v systems.

Holding plates are basically re-freezeable blocks of ice that are designed to be frozen down with a large, powerful condensing unit that is run just once or twice a day. Although 2 sizes of holding plates are available for the Frigomatic series (12/24v, Danfoss compressor), their use is not recommended, as they are less efficient than aluminum evaporators on these systems. This is because the capacity of the compressor for heat removal does not change, but the holding plate must be taken down to a lower temperature, increasing the run time. Although the run-time patterns will be different, the holding plate will require more running time overall. Apart from being less efficient than aluminum evaporators, holding plates are heavier, bulkier, & more expensive. Their use is now restricted to very large boats & charter applications, although even here, the super-efficient 12v/24v Frigomatic systems are replacing expensive, troublesome & noisy holding plate systems.