

## Product Data – Thermal Battery Charger

Energivault is an industrial cold thermal energy storage system utilising a high performance natural refrigerant, ammonia for the charger. It complements new and existing chiller installations enabling flexible, low energy cost, low carbon chiller installations with added resilience.

Energivault is a highly scalable cold energy storage thermal system with its batteries and charger configurable for low and medium charge rates and high storage levels and cooling rates.

Energivault provides ultra quick cooling response to high discharge rates of cooling, from a low power thermal battery charger, capable of delivering cooling support at up to 20 times the charge rate. Energivault has been designed, built and tested in the UK by Organic heat Exchangers.

### Energivault Thermal Battery Charger, EVC-60 Specification

Cooling capacity	Up to 60kW <sub>t</sub>
Heating capacity (heat recovery)	Up to 15kW <sub>t</sub> @ 70°C and 45kW @ 35°C
Refrigeration Type	Ammonia R717 (zero GWP; zero ODP)
Compressor type	Open Screw Compressor (Bitzer)
Refrigerant volume	40kg
Condenser medium	Water Cooled and air-cooled options
Noise – Pressure Level (dB(A) @ 10m)	65
Dimensions (L x W X H)	3.5m x 2.3m x 2.3m
EER (Refrigeration) (excluding heat recovery)	3.98 to 4.96
Power Supply (V / Ph / Hz)	400/ 3/ 50
Power Connection	40kW <sub>e</sub>
Lifetime	20 years
Compliance – Safety Standard	European Pressure Equipment Directive; 2014/68/EU
Approximate Operating Weight	3,500 kg
Standard Installation Interface	
Connection between battery and battery charger	DN75 Fixed stainless steel piping or flexible with camlock hose connectors
Communications	Modbus cabling