

TapCOOL DOMESTIC WATER COOLING SYSTEM

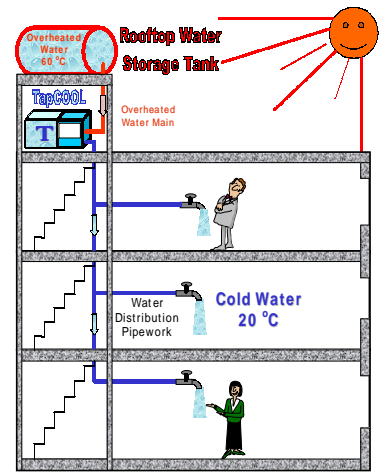
High ambient together with solar gains cause excessively high temperatures within the roof level water storage tank during summer season and it results in unacceptably high tap water supply temperatures.

TapCOOL unit offers a simple, reliable and cost effective solution to overcome this problem. It offers a new way of providing refreshing *Cool Water* on demand without the need for expensive and inefficient continuous cooling methods.

FEATURES;

TapCOOL Domestic Water Cooling is based on a relatively small thermal energy storage volume which can be generated during overnight using lower ambient and electricity prices to store sufficient energy for use during day peak periods.

Factory finished unit consists of an ice storage vessel comprising ice heat exchanger surface, refrigeration unit, water heat exchanger and associated circulation pump complete with a central control panel for fully automated operation.



HEAT EXCHANGER

A combination of plate heat exchanger and pump arrangement provides fast and efficient response as soon as the leaving water temperature exceeds a pre-set level. It is only operational if the water is drawn and therefore this concept offers unmatched energy efficiency and fast response.



COILS

Refrigeration coils are submerged within the insulated double skin tank in order to provide the cooling production and storage facility.

REFRIGERATION

Fully packaged Air cooled condensing unit provides the refrigeration for the cooling coils. It can be supplied in any refrigerant option and it is fully integrated as part of the control. It is designed to run mainly overnight to utilise lower ambient and electricity rates.

WEATHER HOUSING

TapCOOL can be either installed outside at roof floor or alternatively inside the roof void. Optional weather housing protects the refrigeration unit, control panel and electrical components for a safe and reliable operation. Water tank can be installed within the loft area and the associated refrigeration unit can be installed outside in a similar fashion to the split units.

CONNECTIONS

TapCOOL only requires a single phase power supply and the water intake from the water storage tank enters the unit at high temperature and leaves at a pre-set adjustable leaving temperature.

CONTROLS

A digital thermostat controls the unit water leaving temperature at a pre-set user adjustable temperature. The control over the energy storage and the essential safety components are incorporated for fully functional kit ready to operate.



Patent Pending: GB 9826453.4

BENEFITS:

REDUCED RUNNING COST

It runs shorter periods and it is only operated whenever required to satisfy the demand, hence, it eliminates the need for a large water tank cooling load.

QUICK & STEADY RESPONSE

Ice offers unmatched heat transfer efficiency. Hence, large peak loads can be handled without effecting the water supply temperatures.

LOWER MAINTENANCE COST

Totally sealed and factory finished units minimise the maintenance requirement.

TECHNICAL SUPPORT

EPS offers full system design support to assist in proper selection and integration into existing or new installations as part of our customer commitment. Please consult our technical sales team at

sales@epsltd.co.uk for your specific application or visit our web site www.epsltd.co.uk

FLEXIBLE SYSTEM

Multiple units can be connected either in parallel or series arrangements to satisfy any load and system requirements.

EASY INSTALLATION

Fully packaged product requires only a single phase power supply and water connections.

GREEN SOLUTION

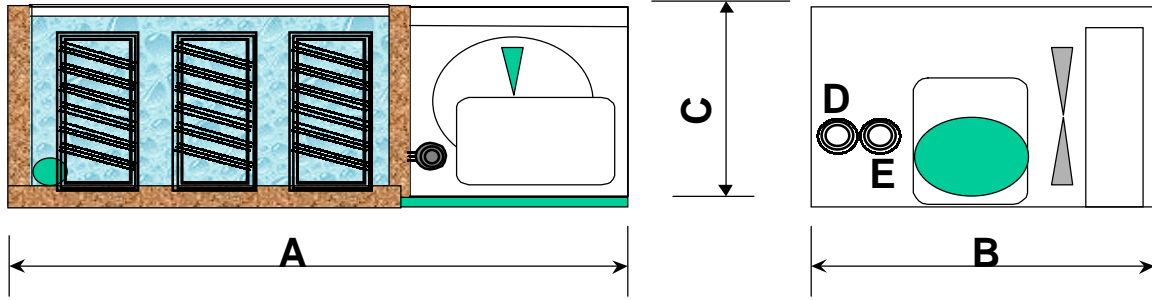
Use of Environmentally Friendly refrigerants and reduced refrigeration machinery leads to reduced refrigerant volume.



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TapCOOL

Design Data

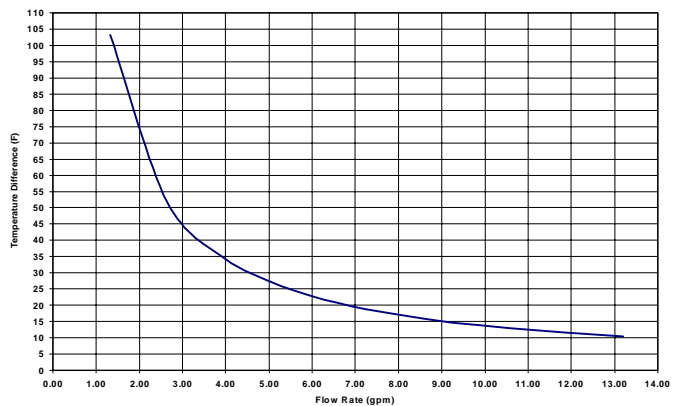
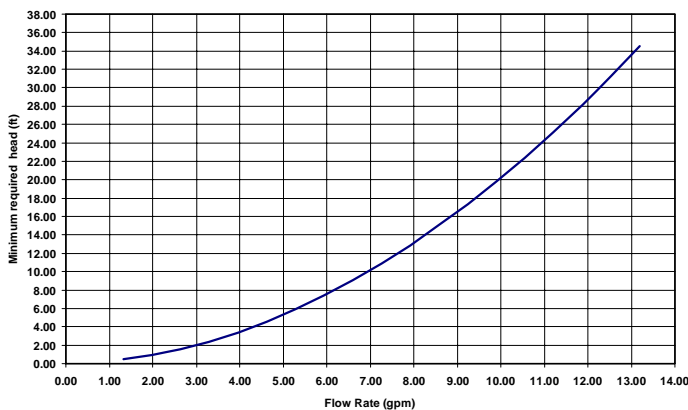
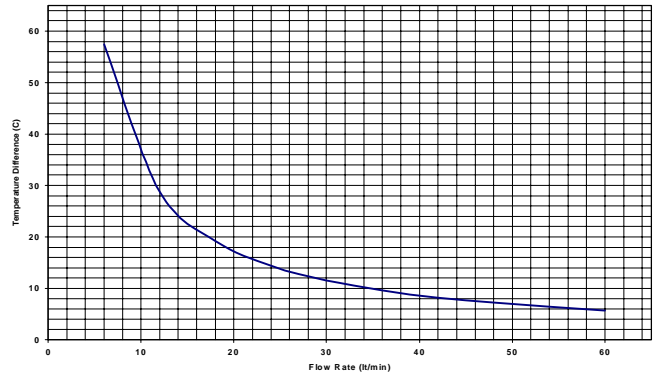
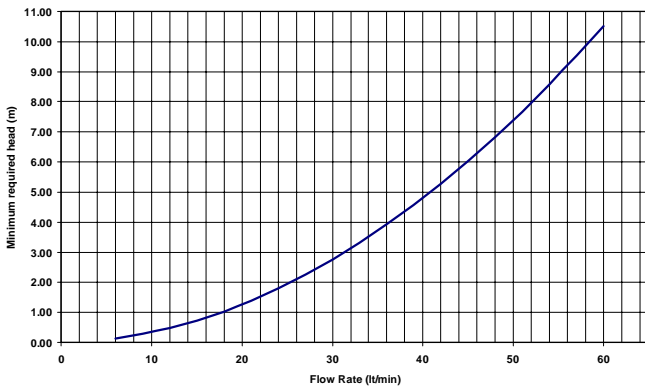


Dimensions			Water Connections		Weight (kg)		Supply (1)	Power (5) (kW)	Starting Current (Am ps)	Running Current (Am ps)
A (mm)	B (mm)	C (mm)	(D) Inlet	(E) Outlet	Shipping	Working				
1700	1150	540	DN 25	DN 25	150	650	230V/1Ph/50Hz	1.9	45	9.1

Notes;

- 1) Other power supplies (110 V/1 Ph / 60 Hz) available on request.
- 2) Standard unit supplied with R22 refrigerant and other refrigerants available on request.
- 3) Standard unit for an average family home but larger unit can be supplied to match the larger loads.
- 4) Unit fully factory finished and ready to operate.
- 5) Design data is based on 38 DegC ambient. 43 DegC ambient power consumption increases to 2.1 kW.

Application Data



TECHNICAL SUPPORT

TapCOOL standard unit is designed to handle an average family domestic water cooling requirement. EPS also offers full range of custom-made units for larger capacities as well as industrial and food processing applications.

For your specific application please consult our sales team.