



THERMflow

THERMAL STORAGE SYSTEM

Specifications

Nominal Capacity (litres)	120	140	180	210	250	300	400
Combination Height (mm)	1130	1250	1500	1700	1700	2050	1950
Combination Diameter (mm)	570	570	570	570	640	640	740
Cylinder Height (mm)	960	1120	1360	1560	1870	1870	1670
Cylinder Diameter	570	570	570	570	590	640	740
Insulation Thickness (mm)	60	60	60	60	70	70	70
Immersion heater rating (kW)	3	3	3	3	3	3	3
Weight empty (kg)	35	39	50	59	68	82	108
Weight full (kg)	155	179	230	269	318	382	508

Technical Specifications

Maximum incoming pressure to pressure reducing valve if supplied	12 Bar
Minimum recommended supply pressure and flow rate	1.5 Bar and 20 litres per minute
Maximum recommended incoming pressure	3.0 Bar
Material	Copper
Insulation material (nominal thickness 60mm)	CFC/HCFC free, fire retardant expanded polyurethane foam ZERO ozone depletion potential (ODP) Global warming potential (GWP) = 3.1. Cased Units 1.0.
Immersion heater/s	3kW at 240V
Connections (standard)	22mm compression. Solid Fuel 28mm compression
Domestic hot water expansion	Factory fitted expansion bottle 2L Expansion Vessel on larger models

ERP / Heat Loss Data

Capacity (litres)	120	140	180	210	250	300	400
Insulation Thickness (mm)	60	60	60	60	70	70	70
Standing loss (W)	68	72	80	85	69	76	89
Standing loss (kWh/24h)	1.63	1.73	1.92	2.04	1.66	1.82	2.14
Water heating energy efficiency class	C	C	C	C	C	C	C

Other Insulation thicknesses are available.

ERP Data (Electric Units)

Capacity (litres)	120	140	180	210	250	300	400
Water heating energy efficiency class	C	C	C	C	C	C	C
Load Profile	M	M	L	L	L	L	L
Annual Elec. Consumption (kWh/annum)	1444	1922	2456	2813	3172	3374	4596
Annual Elec. Consumption (GJ/annum)	5	7	9	10	11	12	17
Sound Level (dB)	15	15	15	15	15	15	15

Components

The following components are supplied as standard with THERMflow

Immersion/s	Low Watts Density Immersion heater/s with combined control/limit stat
Cold Water	22mm Y Strainer
Safety	Thermostatic Mixing Valve (BS EN15092), Temp. range = 45 to 65°C Control Thermostat and Overheat Stat for Solid Fuel Models Factory fitted expansion pipework (Combination units)

Codes of Practice/Legislation

Legislation

- Building Regulations Part G and Part L
- Scottish Building Standards: Section 4 and Section 6.
- Building Regulations (Northern Ireland): Part F1, F2 & P
- Water Supply (Water Fittings) Scotland Byelaws 2014
- The Water Supply (Water Fittings) Regulations 1999
- The Water Supply (Water Fittings) Regulations (Northern Ireland) 2009

Standards

- HWA Performance Specification for Thermal Stores

Materials chosen, adhering to:

- BS 2871-1:1971 "Specification for copper and copper alloys. Tubes. Copper tubes for water, gas and sanitation."
- BS EN 1057:2006 + A1:2010 "Copper and copper alloys. Seamless, round copper tubes for water and gas in sanitary and heating applications."
- BS EN 1254:1998 (1 - 5) "Copper and copper alloys. Plumbing fittings."

Factory manufactured, adhering to:

- BS EN ISO 9001:2008 "Quality management systems. Requirements."

ERP Regulations:

- Commission Delegated Regulation (EU) No 812/2013



Brian Patrick

Production Manager
McDonald Water Storage



McDonald Water Storage Hot Water Storage Solutions

Queensway Industrial Estate, Glenrothes, Fife, KY7 5QF

T: 01592 611123

F: 01592 611166

E: sales@mcdonaldwaterstorage.com

www.mcdonaldwaterstorage.com