

ELECTRAFLOW

BESPOKE THERMAL STORE RANGE
FOR ELECTRIC HEATING AND HOT WATER



McDonald
Water Storage

Hot Water Storage Solutions

Our new ELECTRAflow is an integrated heating and hot water thermal store, powered by immersion elements and controlled by a new and improved purpose designed controller.

ELECTRAflow provides the comfort and convenience from the most customisable wet central heating and hot water solution for apartment applications, with each unit bespoke designed to meet the homeowners installation requirements.

Discover The Benefits of a **ELECTRAflow** Thermal Store

- Delivers wet central heating and mains pressure hot water with scald protection and inherent safety of an open vented system
- Maximise the benefits of heating the store utilising low cost off peak electricity tariffs, a major benefit to SAP calculations
- New and improved purpose designed control panel for management of your heating and hot water requirements
- Optional rectangular design to take up 27% less space than a cylinder, for space restricted installations
- No discharge pipework – flexibility for installation position
- Fit and forget solution – with no G3 certification required
- Bespoke manufactured support frameworks available, allowing for components to be sited below the unit

WHY ELECTRAFLOW

20 years of experience has contributed to the development of the new ELECTRAflow thermal store

The thermal store unit offers the optimum flexibility, enabling energy to be stored using low cost electricity tariffs, for use when required.

Manufactured from premium grade copper for efficiency and longevity, our ELECTRAflow delivers unrivalled performance thanks, in part, to copper's superior thermal transfer properties.

One of our key advantages is the finned copper coil which we incorporate into every ELECTRAflow which ensures greater flow rates, improves efficiency and reduces ongoing costs.

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Controller Function

The ELECTRAflow thermal store is supplied with a specifically designed control panel for ease of use. The controller is a compact design to provide easy control of both your heating and hot water requirements.

The timer allows you to coincide the charging time of the store with the off peak electricity availability, to heat the complete volume of hot water for the following day.

The controller is supplied pre-programmed for Economy 7 and Economy 10 tariffs, providing ease of installation.

The ELECTRAflow controller provides the 7 day programming functionality for the heating, which works in conjunction with the room thermostat supplied for your comfort.

The two boost options provide the flexibility to either boost the store using the bottom immersions for heating or the top immersion during summer for hot water only.



Added Flexibility

Traditional electrically heated thermal stores control the temperature the store is heated to by using the thermostats built into the immersion heaters. This limited the thermal store to 70 degrees.

The new ELECTRAflow is designed to work with a PT1000 sensor at the top of the store to control the temperature of the thermal store, allowing the thermal store to be taken to higher temperatures, up to 95 degrees.

By heating the thermal store to a higher temperature when the electricity is at a lower cost (ie during an Economy 7 off-peak period), there is more energy provided than standard thermal stores.



Energy Efficiency Rating		Current	Potential
Very energy efficient - lower running costs			
(92-100) A			
(81-91) B			
(69-80) C			73
(55-68) D			
(39-54) E		37	
(21-38) F			
(1-20) G			
Not energy efficient - higher running costs			

SAP Benefits

The ELECTRAflow is an off-peak thermal store, specifically designed to utilise the off peak electricity tariffs to provide both heating and hot water to the property.

This is a major benefit in the SAP calculations, whilst also contributing to the property achieving an EPC rating of C in either new build or renovation projects.



Optional Extras

We are able to supply the ELECTRAflow is available with a range of optional extras to suit the installation including;

- Sealed heating coil
- Heating expansion vessel
- Heating system pump
- Framework to support the rectangular tank option
- Spray foam insulation available
- Combination cylinder or cylinder with separate feed and expansion tank



How To Specify

To decide which unit is most suitable for you, please specify the following:

- Property heat load in kW
- Number of bedrooms and bathrooms
- Proposed electrical tariff
- Open vented or sealed heating system
- Available Space

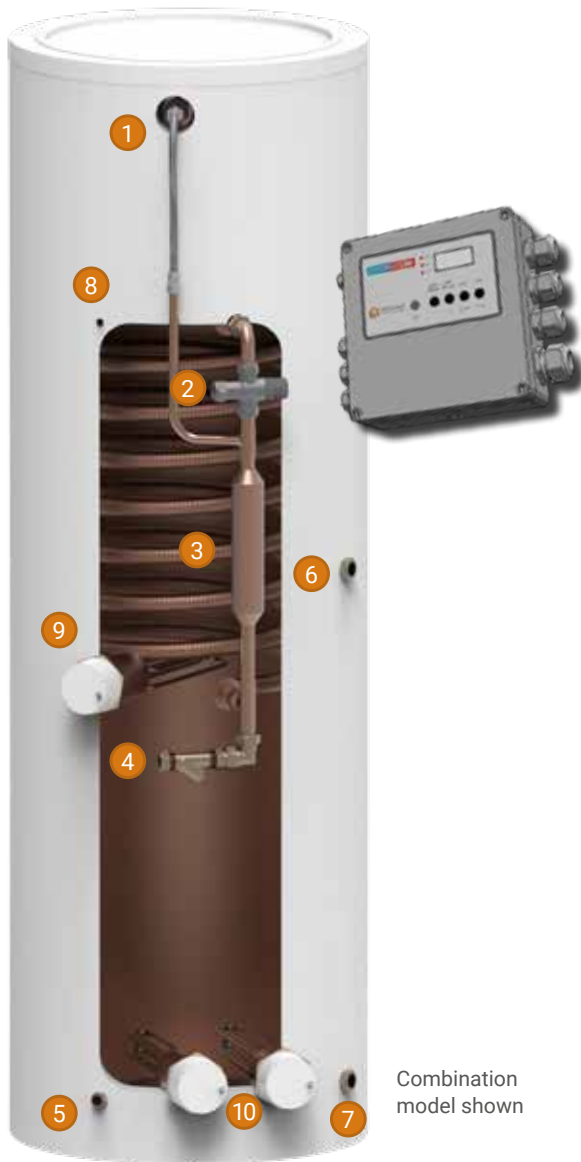
Cylinder/Combination Variant

The ELECTRAflow cylinder / combination style units provide both heating and mains pressure hot water to the property, utilising electricity only.

The unit is supplied with three 3kW immersion heaters, with the two at the base connected to the low cost electricity supply (where available) to heat the complete store. The controller allows the flexibility to either boost the store using the bottom immersions for heating or the top immersion during summer for hot water.

The unit is suitable for either open vented heating systems or sealed heating systems.

The ELECTRAflow is a bespoke designed product with indicative sizes for reference shown below. Larger volumes and different configurations other than shown are available to suit the available space and application.



COMPONENTS

- | | |
|-----------------------------------|---|
| 1. Ballvalve | 8. PT1000 Sensor Pocket |
| 2. Hot Draw Out – c/w TMV | 9. Immersion (Hot Water Boost) |
| 3. Expansion Chamber | 10. Immersion (Central Heating) |
| 4. Cold Mains In – c/w Y-Strainer | |
| 5. Drain | |
| 6. Heating Flow * | * Sealed System Heating Coil can be supplied. |
| 7. Heating Return * | |

KEY BENEFITS

- Maximises the benefit of off-peak electricity supply
- Provides both wet central heating and hot water
- No discharge pipework
- No annual maintenance
- No G3 certification required for installation
- Units are bespoke manufactured to suit installation

All Units to Following Specification:

- Feed and expansion tank can be provided separately or incorporated into the combination units
- 22mm DHW Coil & Mixing Valve
- 22mm Heating connections
- Room thermostat
- 3kW LWD Immersion Heaters (inc. thermostats) Fitted

COMBINATION STYLE	180	210	250	300
ERP Class	C	C	C	C
Height	1500	1700	1700	2050
Diameter	550	550	600	600
Heating Expansion	20	20	25	25

Sizes shown above are indicative only, and include insulation and standard heating expansion which can be increased at the time of order

CYLINDER STYLE	180	210	250	300
ERP Class	C	C	C	C
Height	1350	1550	1850	1850
Diameter	550	550	550	600

Sizes shown above are indicative only, and include insulation but space will need to be allowed for the expansion tank

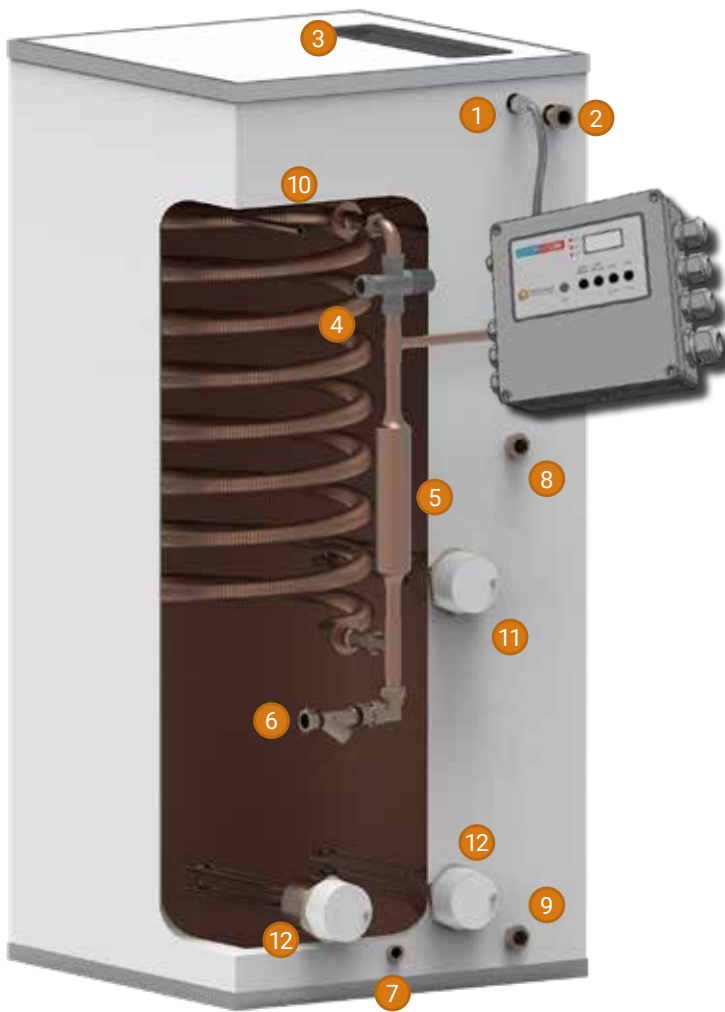
Rectangular Tank Variant

The ELECTRAflow rectangular tank style units provide both heating and mains pressure hot water to the property, utilising electricity only.

The rectangular design of the store takes up to 27% less space than an equivalent volume cylinder, perfect for space restricted applications.

The unit is supplied with three 3kW immersion heaters, with the two at the base connected to the low cost electricity supply (where available) to heat the complete store. The controller allows the flexibility to either boost the store using the bottom immersions for heating or the top immersion during summer for hot water.

The unit is suitable for either open vented heating systems or sealed heating systems. The ELECTRAflow is a bespoke designed product with indicative sizes for reference shown below. Larger volumes and different configurations other than shown are available to suit the available space and application.



COMPONENTS

- | | |
|-----------------------------------|---|
| 1. Ballvalve | 9. Heating Return * |
| 2. Overflow – Header Tank | 10. PT1000 Sensor Pocket |
| 3. Inspection Lid (Header Tank) | 11. Immersion (Hot Water Boost) |
| 4. Hot Draw Out – c/w TMV | 12. Immersion (Central Heating) |
| 5. Expansion Chamber | |
| 6. Cold Mains In – c/w Y-Strainer | |
| 7. Drain | * Sealed System Heating Coil can be supplied. |
| 8. Heating Flow * | |

KEY BENEFITS

- Maximises the benefit of off-peak electricity supply
- Provides both wet central heating and hot water
- No discharge pipework
- No annual maintenance
- No G3 certification required for installation
- Units are bespoke manufactured to suit installation

All Units to Following Specification:

- Incorporated feed and expansion tank
- 22mm DHW Coil & Mixing Valve
- 22mm Heating connections
- Room thermostat
- 3kW LWD Immersion Heaters (inc. thermostats) Fitted

STORAGE CAPACITY	180	210	250	300
ERP Class	C	C	C	C
Height	1285	1285	1260	1285
Width	540	585	600	640
Depth	540	570	600	640
Heating Expansion	20	20	20	20

Sizes shown above are indicative only, and include insulation and standard heating expansion which can be increased at the time of order

MAXIMISE THE AVAILABLE SPACE WITH THE TANK DESIGN, WITH 27% LESS SPACE REQUIRED THAN A CYLINDER



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