

**HEATRAE SADIA**

The quality name in water heating

## Electric flow boiler

Amptec





## Amptec ELECTRIC FLOW BOILER

Amptec electric flow boilers provide wet central heating and can heat a domestic hot water tank/cylinder with the comfort and controllability of a gas central heating boiler.

Whether in rural areas, new housing projects, in multi-floor dwellings or in one of over 2 million homes in Britain with no mains gas supply, Amptec electric flow boilers offer the comfort and convenience of wet central heating and domestic hot water, wherever there is mains electricity.

**Amptec electric flow boilers** can be installed with standard circulating pumps, thermostatic radiator valves, room thermostats and programmers to ensure high levels of comfort and control.

**Available in a range of outputs**, they can be installed singly, or as multiple units, making them suitable for a wide range of properties from mobile homes, flats and apartments up to large family houses.

**They are suitable for use in sealed or open vented installations** and with conventional radiators or underfloor heating systems.

**Domestic hot water can be provided by the boiler** when used in conjunction with an indirect hot water storage cylinder. Alternatively the boiler can provide heating only, with domestic hot water being supplied from a direct hot water storage cylinder.



# Amptec ELECTRIC FLOW BOILER



The Amptec boiler has a host of features that are a benefit to Developers and Builders, Installers, Landlords and End Users and make it a desirable option where gas is not available or fluing restrictions prevent the use of a gas boiler.

### Controllable, efficient wet central heating

Uses standard radiators, programmer, pump, room thermostat and thermostatic radiator valves

Suitable for pressurised or open vented systems

Models available for under floor heating systems

Domestic hot water from boiler in conjunction with an indirect cylinder or separate direct cylinder

No flue and no fuel tanks means flexible installation location

With no flue, no heat is wasted up the chimney, making Amptec Boilers 99.8% efficient

Compact and light weight for ease of installation

Compact dimensions - small and unobtrusive

Silent in operation

The boiler has front panel indication to show boiler state

Solid state technology for long life

Soft start and zero volt switching to avoid power surges

Min/max control adjusts the water temperature output from the boiler

No moving parts for long life

Minimal service and maintenance costs

No requirement for annual safety certificate

2-year on-site parts and labour guarantee

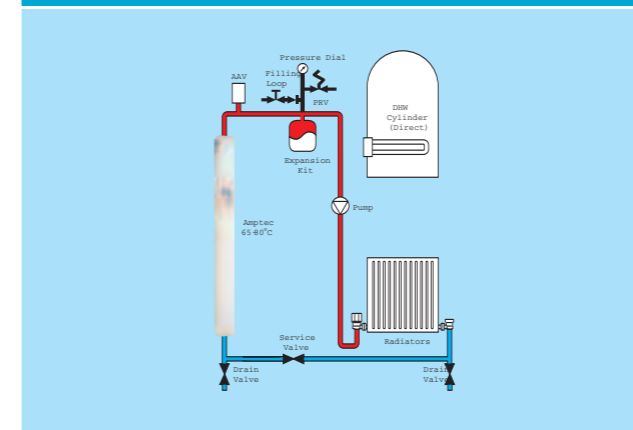


### Central Heating and Hot water systems

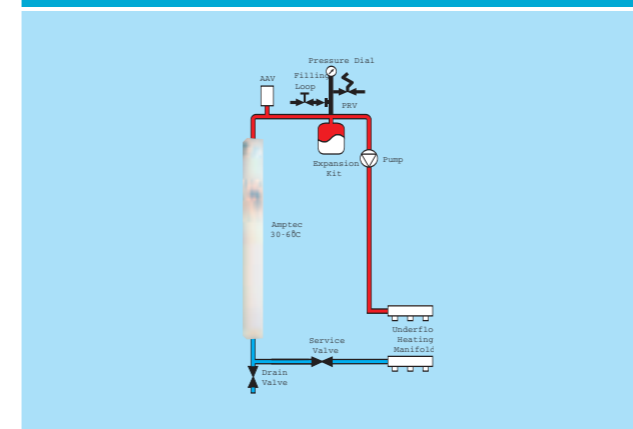
Amptec electric flow boilers are suitable for use with a wide range of heating and domestic hot water systems, either vented or unvented.

Typical system layouts are given below for illustration purposes only.

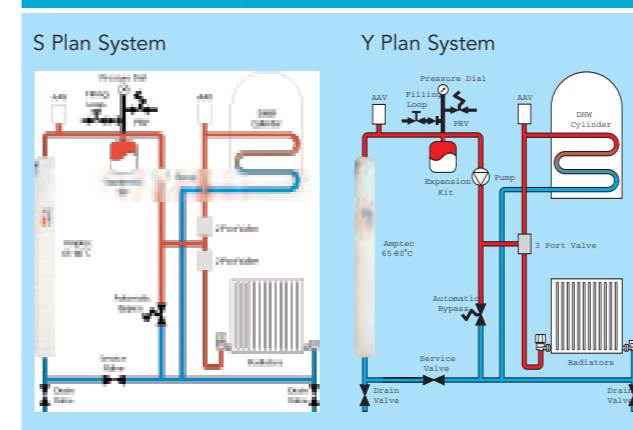
#### For Heating only, with Direct Domestic Hot Water Cylinder



#### For Underfloor Heating System



#### For Heating and Domestic Hot Water with Indirect Hot Water Cylinder



### Controls

The Amptec boiler is designed to work with a standard programmer which will control the time periods that the boiler comes into operation.

The unit is also suitable for use with standard thermostatic radiator valves, circulating pump and room thermostats which bring the boiler into operation when there is a call for heat.



### Running Costs

There are a number of off-peak electricity tariffs now available which provide a lower cost for electricity used for heating and hot water.

The two most common tariffs are Economy 7 and Economy 10.

#### Economy 7

Two rate meter installed in property

Units used at night (during off-peak time\*) charged at lower rate than those used during the day

\*'Night' means the 7 hours that the local distribution company in your area chooses between 10 pm and 10am. 'Day' means at all other times.

#### Economy 10<sup>†</sup>

Only one meter installed in each property

All electricity used at off-peak times charged at the lower rate (such as washing machines, dishwashers etc)

Off-peak times generally set for

Midnight to 5.00 am (GMT) - 5 hours

1.00 pm to 4.00 pm (GMT) - 3 hours

8.00 pm to 10.00 pm (GMT) - 2 hours

<sup>†</sup>Not available in all areas, and details may vary by area. Call 029 2024 9556 for information on latest availability and tariffs.

### Boiler Sizing

The sizing of the boiler is dependent on a number of factors such as size of property, insulation properties of the building, and whether the boiler will be required to heat the domestic hot water cylinder. Please consult with your installer/heating engineer for sizing, or contact our Specification Advice Department: Tel 01603 420220, Fax 01603 420229, E-mail [specifier@heatraesadia.com](mailto:specifier@heatraesadia.com)

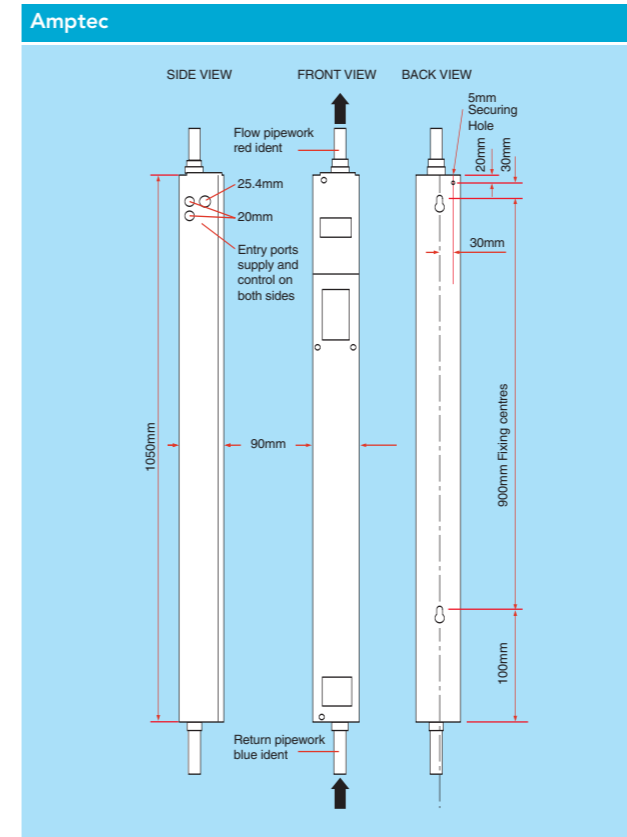
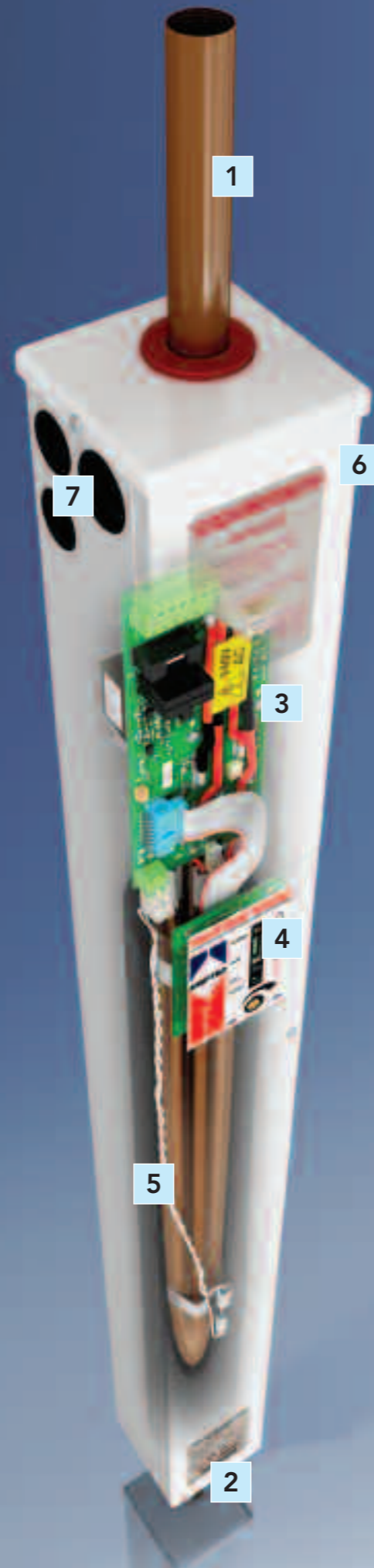
- 1 22mm copper connection (flow)
- 2 22mm copper connection (return)
- 3 Solid state electronics
- 4 Control panel
- 5 Long life elements
- 6 Compact, painted steel outercase
- 7 Entry ports for power and control

**Accessories**

Relay accessories are available for multiple boiler applications, and/or load sharing – for example when installed in conjunction with an electric shower, to prevent supply over-load.

RL1 – Where an electric shower and an Amptec electric boiler are installed in the same dwelling, the RL1 relay prevents circuits from overloading by shutting down the Amptec electric boiler when the shower is in operation.

RL2 and RL3 – Required where more than one Amptec electric boiler is installed to meet heating loads.



**Specification**

**Capacities** Nominal Capacity 1.3 litres.

**Rating**  
 4kW @ 240V, (3.7kW @ 230V).  
 6kW @ 240V, (5.5kW @ 230V).  
 9kW @ 240V, (8.3kW @ 230V).  
 11kW @ 240V, (10.1kW @ 230V).  
 12kW @ 240V, (11.0kW @ 230V).

**Element** Long life, low watts density, copper elements in a copper heat exchanger.

**Outer Casing** White stove-enamelled corrosion-resistant steel.

**Thermal Insulation** Armaflex – Closed cell insulation. Dust, fibre and CFC Free (ODP ZERO).

**Inner Container** Copper.

**Thermostat** Electronic dual control, user adjustable - C series 65°C to 80°C, U series 30°C to 60°C.

**Safety Features** 2 amp fused pump supply, Dual control circuits, Dual switching of the elements, Self check circuitry and fault indication. Re-settable cut-outs.

**Approvals** BEAB Approved. UK manufactured in a BS EN ISO9001:2000 registered factory, CCA, CE.



**Power supply**

Model	Boiler Output	Power Supply to boiler		Recommended MCB Amps
		Kw	Btu/h	
C400	4	13600	17	20
C600	6	20500	25	32
C900	9	30700	38	50
C1100	11	38000	45	63
C1200	12	41000	50	63

**Installation of all Amptec models**

**Fixing** Wall mounting by two keyhole slots. A template is provided to assist in positioning. Must be mounted vertically.

**Plumbing Connections** 22mm pipework connections on all models.

**Flow Rates** 6 litres/minute minimum required for 4 and 6kW models.

12 litres/minute minimum required for 9, 11 and 12kW models.

**Operating Pressure** 3 bar maximum.

**Operating Temperature** C series 65°C to 80°C, U series 30°C to 60°C.

**Heating systems** Sealed or open vented systems.

**Pressure Testing** Tested to 15 bar.

**Electrical** The unit must be permanently connected to the electrical supply through a double-pole linked switch with minimum breaking capacity suitable for the loading. Must conform to current IEE wiring regulations.

**Controls (not supplied with boiler)** Can be installed with standard pump, programmer, room thermostat and thermostatic radiator valves.

**Relay accessory** Relay accessories are available for multiple boiler applications, and/or load sharing – for example when installed in conjunction with an electric shower, to prevent supply over-load.

**Guarantee for all Amptec models and accessories**

Two year product guarantee with on-site service support from date of purchase. For more detailed guarantee information contact Heatrae Sadia.



**Product range**

Model	Rating @240V kW	Description	B.Gas Gas council no.	Temp Range	Weight kg
C400	4	Standard	EB 205 06	65° - 80°C	7.5
C600	6	Standard	EB 205 02	65° - 80°C	7.5
C900	9	Standard	EB 205 03	65° - 80°C	8.5
C1100	11	Standard	EB 205 01	65° - 80°C	8.5
C1200	12	Standard	EB 205 04	65° - 80°C	8.5
U401	4	Underfloor	EB 205 08	30° - 60°C	7.5
U601	6	Underfloor	EB 205 09	30° - 60°C	7.5
U901	9	Underfloor	EB 205 10	30° - 60°C	8.5
U1101	11	Underfloor	EB 205 11	30° - 60°C	8.5
U1201	12	Underfloor	EB 205 12	30° - 60°C	8.5

**Ordering guide**

Model	Product code
C400	95:022:001
C600	95:022:002
C900	95:022:003
C1100	95:022:004
C1200	95:022:005
U401	95:022:101
U601	95:022:102
U901	95:022:103
U1101	95:022:104
U1201	95:022:105
Relay RL1	95:970:134
Relay RL2	95:970:135
Relay RL3	95:970:136

## HEATRAE SADIA

The quality name in water heating

# Products

**Boiling water** Supreme | Supreme SS

**Chilled water** SuperChill

**Cistern-fed water heating** Megalife HE | Megalife Solar

**Cistern-type water heating** FBM

**Electric space heating** Amptec | Electromax | Aerheat

**Electric showers** Accolade | Carousel | Sapphire | Cameo

**Hand hygiene** Handy | Concept | Hair Drier | Handy Dri

**Immersion heaters** Titanium | Superloy | Gold Dot | Maxistore | RDT Thermostats

**Point of use** Streamline | Express | UTC 99 | B3M | C3M | Vented tap range

**Small unvented water heating** Hotflo | Multipoint

**Unvented water heating** Megaflo HE | Megaflo HE SystemFit | Megatech Solar

For free product brochure(s) call our literature hotline on 01603 420127

# Contact

**Specification** T: 01603 420220 F: 01603 420229 E: [specifier@heatraesadia.com](mailto:specifier@heatraesadia.com)

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**Service** T: 08701 600125 F: 08701 600181 E: [heatraesadiaservice@heateam.co.uk](mailto:heatraesadiaservice@heateam.co.uk)

**Web** [www.heatraesadia.com](http://www.heatraesadia.com)

### National service network

Heatrae Sadia products are inherently reliable and are designed to meet the demanding needs of all users.

A nationwide network of experienced engineers is available to provide fast and efficient on-site service support.

In addition, spare parts for the complete range of products are readily available through a wide variety of stockists.



Heatrae Sadia Heating Hurricane Way Norwich Norfolk NR6 6EA

Heatrae Sadia Heating may introduce modifications to their products from time to time. Consequently, the details given in this brochure are subject to alteration without notice.

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