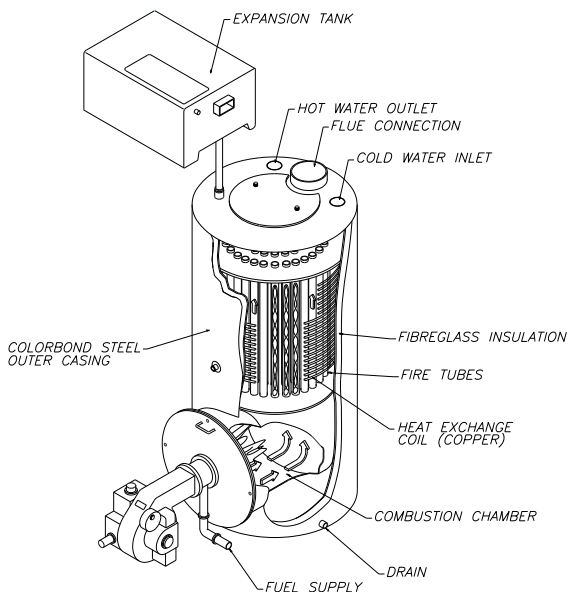


**TYPE** – An indirect heat exchange, open-vented, high-pressure hot-water system with an inbuilt forced-draft burner. It is authorised to Australia Standard AS3498.

**HOW IT WORKS** – The **HEV Series** is an indirect heat exchange gas or oil-fired storage hot water system. The system is designed to provide heavy-duty domestic hot water (55°C to 95°C) and/or process heating from the one unit depending on the application. The storage tank contains neutral water treated with Gendex inhibitor. The treated water is heated by a thermostatically controlled, forced-draft oil or gas burner (**supplied by others**), which fires into the combustion chamber located near the bottom of the storage tank. The heat travels upwards through a number of fire tubes designed to maximise heating surface in contact with the treated water. Located inside the storage tank is a copper heat-exchange coil containing potable, consumable water, which is heated by the treated water, as it passes through the copper coil. The storage tank is open vented to atmosphere, by means of an expansion tank.

**STORAGE TANK** – Is constructed from 6 mm mild steel designed to withstand high water temperatures of up to 99°C on a continual basis. No anode or artificial lining is required to prevent corrosion. All welding is in accordance with Quality System procedures and standards.



**INSULATION** – High-density fibreglass encases the storage tank for maximum efficiency.

**CASING** – Is constructed of durable, 0.4mm Colorbond® for protection against the weather.

**FLUING** – Must comply with Australian Standard AS5601 and relevant local regulations.



**BURNER** – A gas or oil-fired, forced-draft burner is connected to the storage tank. Our standard burner is a Single-Stage-(on/off)-type burner; hi/lo is optional. Combustion efficiency of the system is 80%. The burner heats the treated water and continues to reheat it until the electronic temperature controller sensor on the storage tank achieves its set-point.

**WATER QUALITY** – The potable water supply should not exceed these values:

|           |   |           |
|-----------|---|-----------|
| ph        | = | 6.5 – 9.0 |
| Chloride  | = | 370mg/l   |
| Magnesium | = | 30mg/l    |
| Calcium   | = | 20mg/l    |
| Sodium    | = | 150mg/l   |
| Iron      | = | 1mg/l     |
| TDS       | = | 1000mg/l  |
| Hardness  | = | 250mg/l   |

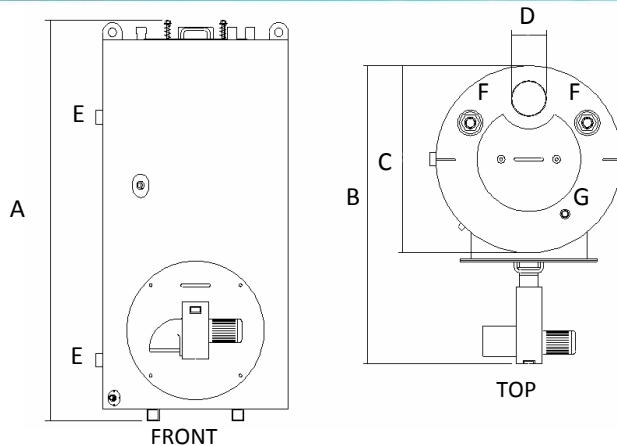
**COLD WATER PLUMBING** – The minimum valving required prior to the heater is a stopcock, non-return valve and a cold water expansion control valve set at 1200kPa. A line trainer is recommended (refer AS3500.1 and AS3500.4).

**HOT WATER PLUMBING** – It is good practice to insulate pipework to reduce heat loss.

**HEAT EXCHANGER** – Is constructed of multi-start windings of Ø12.7mm Type B copper tube. Large inlet/outlet headers ensure full mains pressure water flow.

**CONTROLS** – An electronic temperature control box (**supplied as standard**) is connected to the HEV series to operate the forced draft burner. It contains accurate operating and over-temperature thermostats.

### DIMENSIONS



### CLEARANCES

|       |   |       |
|-------|---|-------|
| TOP   | = | 300mm |
| FRONT | = | 450mm |
| SIDE  | = | 150mm |

|   | UNITS     | HEV 95/490        | HEV 330/1000     |
|---|-----------|-------------------|------------------|
| Neutral Water Storage                   | litres    | 430               | 1587             |
| Energy Input                            | MJ/h      | 646               | 1318             |
| Energy Output                           | kW        | 143               | 293              |
| 1 <sup>st</sup> Hour Hot Water Delivery |           |                   |                  |
| - Based on 65°C outlet temp             | litres    | 2546              | 5245             |
| - Based on 85°C outlet temp             |           | 1893              | 3806             |
| Recovery Rate                           |           |                   |                  |
| - Based on 65°C outlet temp             | litres/hr | 2457              | 5035             |
| - Based on 85°C outlet temp             |           | 1755              | 3596             |
| Min operating temp - Tank / Coil        | °C        | 65/60             | 65/60            |
| Max operating temp – Tank / Coil        | °C        | 99 / 95 (Type D0) | 99 / 95 (Type D) |
| Heat Exch. Continuous Flow Rate         |           |                   |                  |
| - Based on 65°C outlet temp             | l/min     | 40.9              | 83.9             |
| - Based on 85°C outlet temp             |           | 29.2              | 59.9             |
| Heat Exchange Peak Flow Rate            | l/min     | 84                | 210              |
| Coil Surface Area                       | sq.m      | 4                 | 9.5              |
| Min / Max Coil working Press            | kPa       | 140/1200          | 140/1200         |
| Combustion Chamber Efficiency           | %         | 80                | 80               |
| Max Tank Working Pressure               | kPa       | 100               | 100              |
| Max Pressure Drop – Tank / Coil         | kPa       | 2 / 33            | 2/33             |
| Weight – Wet / Dry                      | kg        | 846 / 416         | 2723 / 1136      |
| Power Supply                            |           | 240 Volt 1 Phase  | 240 Volt 1 phase |
| Height Tank – A                         | mm        | 1910              | 2036             |
| Depth (Including Burner) – B            | mm        | 1380              | 2000             |
| Tank Diameter – C                       | mm        | 812               | 1362             |
| Flue Ø - D                              | mm        | Ø200              | Ø250             |
| Process Flow & Return Socket - E        | mm        | 65 BSP            | 80 BSP           |
| Cold and Hot Water Connections – F      | mm        | Ø40 copper        | Ø65 copper       |
| Expansion Socket - G                    | mm        | 32 BSP            | 40 BSP           |

Units may be connected in parallel for greater versatility and output.

Care has been taken to ensure that all information is as accurate as possible at the time of publication.

However, specifications, methods and figures are subject to change without prior notice.

**DISTRIBUTOR:**



For more information

Call Sales 1300 132 949 (Australia only)

Call Service 1300 132 948 (Australia only)



**Edwards Commercial Hot Water**  
39 Koornang Road, Scoresby, Victoria 3179  
A division of Rheem Australia Pty Ltd ABN 21 098 823 511

Ph 61 (3) 9757 3333 – Fax 61 (3) 9757 3380

website: [www.edwards.com.au](http://www.edwards.com.au)

email: [info@edwards.com.au](mailto:info@edwards.com.au)

EDTS-HEV-VER1-251108