Edwards Technical Data Sheet

HEV Series Gas/Oil Heater

TYPE - An indirect heat exchange, open-vented, highpressure, 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.



(Photo supplied by Sola Edwards Adelaide)

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.

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DIMENSIONS





ТОР	=	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 st 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	60/55	60/55
Max operating temp – Tank / Coil	°C	95 / 88 (Type D)	95 / 88 (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)

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