

ECW series air handlers for above the water heater

Small Profile Heating and Cooling Air handler with built in heating and cooling coils (external heating pump)

- Works with domestic water heaters, boilers or heat pumps to provide space heating and cooling for residential homes.
- Designed to fit above tank type heater or where low profile is required.
- Reversible design. Access doors on both front and back. Coils and drain pan slide out for easy reversing so unit can be field adapted for left hand or right hand supply and side or top return air.
- High efficiency ECM blower motor with five potential fan speeds for 100% down to 30%.
- Cycle timer built in for exercising pump every 24 hours. Test button on circuit board allows fast verification of cycle timer function.
- Heating, cooling and continuous fan speeds are all independently and easily selectable using rotary switches for maximum flexibility. All 24V controls located inside electrical box, accessible through front cover. Robust surge suppression for protection against lightning strikes.
- Compatible with all 24-volt heat/cool and heat pump thermostats (available separately).
- Push button connectors for thermostat wires for fast installation. High quality wire harnesses for quick servicing and component swap out. Lighted service area provides high visibility in poorly lit locations. LED indicators on all thermostat inputs and control outputs. LED status tables and trouble codes for easy diagnostics.
- Stainless steel drain pan for long service life. Stainless steel float switch with sealed magnetic reed switch to protect against drain pan overflow with audible and visual alarms.
- Heating coil comes complete with externally mounted pump and check valve.
- Cooling coil comes with fixed orifice. Can be factory or field fitted with TX valve kit if desired. Completely compatible with R410a, R22 R407c and many other refrigerants.
- All service access is through front panels.
- Integral filter slot and internal frame fits standard one inch 16"x24" washable or disposable filter.



Physical Properties

MODEL:	ECW33	ECW40
Dimensions (W x D x H) inches	26"x24"x16.25"	26"x24"x16.25"
Supply Air Opening (WxD) inches	Adjustable	Adjustable
Return Air Opening (WxD) inches	20"x8"	20"x8"
Filter Rack Size (WxD) inches	16"x24"	16"x24"
Water inlet and outlet	½"	½"
Water Coil (length x width x rows)	13 x 20 x 2 row	13 x 20 x 3 row
AC Coil (length x width x rows)	16x20x2	16x20x3
Shipping weight – pounds	60	65
Power (V/Ph/Hz)	230/1/60	230/1/60
Total Unit FLA	1.8	1.8
Minimum Ampacity	2.1	2.1
Max over current (max fuse size) Amps	15	15

PERFORMANCE Specifications

MODEL:	ECW33	ECW40
Heating Capacity (Btu/h) 100F water	14,000	17,000
Heating Capacity (Btu/h) 110F water	18,600	22,700
Heating Capacity (Btu/h) 120F water	23,200	28,400
Heating Capacity (Btu/h) 130F water	27,900	34,100
Heating Capacity (Btu/h) 140F water	33,000	39,800
Cooling Capacity – (Tons)	1.5	2.0
Continuous run speeds	Low ML-Med-MH High	Low ML-Med-MH High
Heating Air flow speeds - cfm	240 320 480-650-800	240 320 480-650-800
Cooling air flow speeds – cfm	240 320 480-650-800	240 320 480-650-800
Circulator Pump Flow(GPM)	4.0	4.0
Maximum Heating Airflow (CFM)	800	800
Max. Ext. Static Pressure (in.wc)	0.6	0.6

Heating capacities are based on 70F return air, high fan speed. For medium speed de-rate capacity by 20%. For low speed de-rate capacity by 40%. Air handler can deliver the programmed airflow at any static pressure below the maximum external static pressure.