

STRAIGHT COOL/HEAT PUMP*

Nominal Circuit Capacities: WLH 9,000, 12,000, 18,000, 24,000 Btuh and WLC (only) 30,000 & 36,000 Btuh

* Heat Pump only available for 9,000-24,000 Btuh units.

PRODUCT DESCRIPTION

The AmericaSeries WLC/WLH offers a contemporary design, ductless type evaporator combining attractive appearance in any decor and high efficiency conditioning for small to medium size commercial or residential spaces. The WLC/WLH is equipped with unit mounted infrared compatible controls which also supports 24V remote wall thermostat operation. Optional hand held remote is available.

Heat Pump models provide up to a nominal 24,000 Btuh of cooling and heating. Electric heat options are available for up to 5KW of supplemental heat.

This American-made evaporator offers ease of installation, operation, and service. It can be matched with EMI's S1C/S1H 09-24 and S1C 30-36 Btuh Single-Zone Condensing Units, the S2C side discharge Multi-Zone Condensing Unit, or the T2C, T3C, and T4C top discharge Multi-Zone Condensing Units.

STANDARD FEATURES

▲▼ Unit Mounted Control:

- **Large LCD Backlit Display**
- **Single unit mounted control package**, configurable to either unit mount or remote wall thermostat operation, reducing model number or SKU's required.
- **Universal control** can be used in cooling only, cooling with electric heat, heat pump, or heat pump with second stage electric heat applications.

- **Operational range** set point temperature adjustable between 55°F and 90°F in one-degree increments.
- **Infra red compatible control** allows use of optional IR hand held controller

NOTE: Unit mounted controls are fully functional without the handheld remote.

- **Operation modes** include Heat, Cool, Dry, Fan and Auto Change-over.
- **Fan Operation** – Auto/On. High or Low speed fan
- **Fan Purge** – Fan remains on for 60 seconds after Heat/Cool call is dropped for improved efficiency (Auto mode only)
- **Room air sampling:** Selectable time intervals ensures the fan will cycle on periodically, in Auto Fan Mode.

Benefit: Helps to eliminate room temperature stratification.

- **Selectable Fahrenheit (°F) or Centigrade (°C)** temperature scale.
- **Dry mode** – Operates cooling and electric heat simultaneously to remove humidity. Optional electric heat must be selected.
- **Anti-Short Cycle Compressor Protection.**
- **Minimum on time for heating and cooling.**

Benefit: Helps eliminate room temperature drop and system short cycling.

- **Freeze Protection** – Prevents evaporator freeze up.
- **Test operation** – Allows ease of testing after installation (all timers are eliminated).
- **Non-volatile back-up memory**

Benefit: Control settings are maintained for an indefinite period during a power outage. When power is restored the equipment will resume operation after a three-minute compressor time delay.

- **7-day programmable** with copy feature.
- **Filter change indicator:** A timer feature that indicates the filter should be changed according to the selected time.
- **Motorized supply louver** with optional sweep or six stationary settings.
- **Modular design** – reduces parts required for control

WLC/WLH FEATURES AND OPTIONAL EQUIPMENT

NOTE: Due to ongoing development programs, design and specifications may change without notice.

STANDARD FEATURES Continued

package. Deco panel, relay board, ribbon cables and microprocessor all combined into one package.

- **Integral condensate pump safety-switch connection** where-by the microprocessor monitors the condensate pump safety switch and displays an error code when a fault occurs. (*Applies only with optional condensate pump*)
- **CEC** (California Energy Commission) compliant
- Condensate drain pan over flow protection

▲ Cabinet Features:

- Durable ABS plastic cabinet with a galvanized steel sub-chassis.
- Easily accessible, washable, reusable, nylon mesh filter.
- Horizontal discharge louver, constructed of high temperature ABS plastic, that can be set to oscillate, or can be parked in various pre-set positions.
- Manually adjustable vertical discharge fins.
- Easy access to pipe chase area from cabinet bottom.

Benefit: Allows piping connections and condensate pump installation with the unit mounted on the wall.

- Easily removable end-cap for access to control area for installation and service.

- Condensate drain pan constructed of galvanized steel (G90U), with anti-corrosion coating.
- Modular snap-in, 7-day programmable control with large backlit LCD display, a "Change filter" display feature and selectable Fahrenheit (F°), or Centigrade (C°) temperature scale.
- Operational range between 55°F to 90°F, adjustable in one-degree increments.

OPTIONAL EQUIPMENT

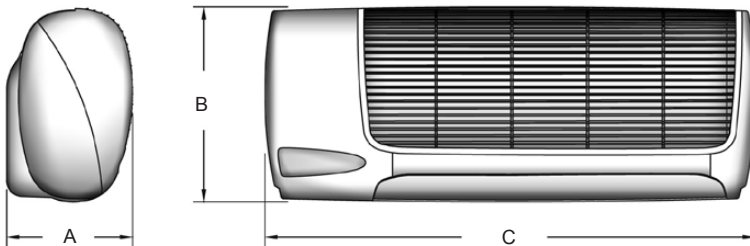
- Condensate pump (field installed)
- 24V remote wall thermostat
- Electric heat with automatic reset high temperature cutout and redundant high temperature fuse link (when heat option is selected)
- Hand held infrared controller.

INSTALLER SUPPLIED ITEMS

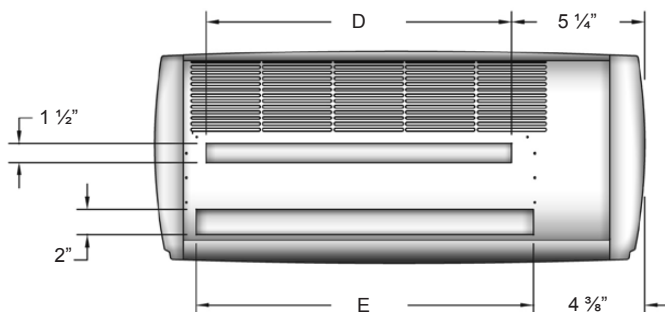
- Low voltage wiring
- Power wiring
- Mounting screws and fasteners
- Condensate piping
- Refrigerant piping (if not supplied)
- Refrigerant (for interconnect charge)

WLC/WLH DIMENSIONS AND SPECIFICATIONS

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WLC/WLH SHIPPING WEIGHT	
Model	Lbs.
WLHA09/12	70
WLHA18/24	108
WLCA30/36	TBD



WLC/WLH PHYSICAL DIMENSIONS					
Model	"A" Depth	"B" Height	"C" Length	"D" Mounting Bracket Clearance	"E" Tubing Access Clearance
WLHA09	9 7/8"	15 1/4"	38 1/2"	24"	26 1/2"
WLHA12	9 7/8"	15 1/4"	38 1/2"	24"	26 1/2"
WLHA24	9 7/8"	15 1/4"	48 1/2"	34"	36 1/2"
WLCA30	9 7/8"	15 1/4"	58 1/2"	44"	46 1/2"
WLCA36	9 7/8"	15 1/4"	58 1/2"	44"	46 1/2"

WLC/WLH SPECIFICATIONS

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WLC/WLH ELECTRICAL SPECIFICATIONS									
MODEL #	VOLTS/HZ/PH	FAN RLA	HP	HEATER K.W.	AMPS	TOTAL AMPS	MIN VOLT	M.C.A.	HACR BRKR
SMALL CABINET 09/12									
09/12	115/60/1	0.64	0.02	–	–	0.64	104	0.8	15
	115/60/1	0.64	0.02	0.75	6.50	7.14	104	8.9	15
	208/230/60/1	0.34	0.02	–	–	0.34	197	0.4	15
	208/230/60/1	0.34	0.02	3.00	13.04	13.38	197	16.7	20
MEDIUM CABINET 18/24									
24	115/60/1	1.20	0.083	–	–	1.20	104	1.5	15
	115/60/1	1.20	0.083	0.75	6.52	7.72	104	9.7	15
	115/60/1	1.20	0.083	1.25	10.90	12.10	104	15.1	20
	208/230/60/1	0.56	0.070	–	–	0.56	197	0.7	15
	208/230/60/1	0.56	0.070	3.00	13.04	13.60	197	17.0	20
	208/230/60/1	0.56	0.070	5.00	21.74	22.30	197	27.9	30
LARGE CABINET 30/36									
30/36	208/230/60/1	0.80	1/10	–	–	0.80	197	1.0	15
	208/230/60/1	0.80	1/10	5.00	21.74	22.54	197	28.2	30

DISCHARGE AIR SPEED AND FLOW @ 230V					
Model	High CFM	Low CFM	Coil	FPM	Throw/Ft.
9/12	400	350	Dry	900	15
18/24	750	675	Dry	1,225	25
30/36	1,170	900	Dry	1,250	27

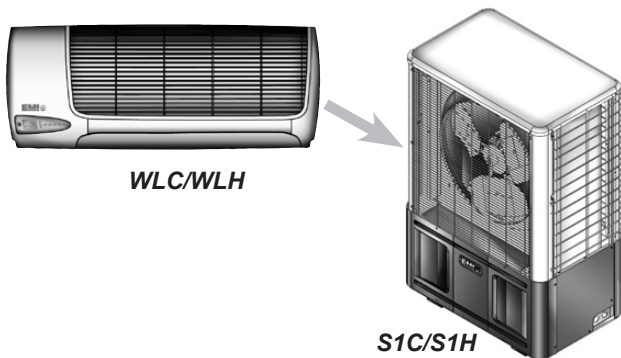
WLC/WLH OBSERVED SOUND VALUES (230V High Speed Fan)	
Model	dBA
09/12	45
18/24	56
30/36	60

WLC/WLH INTERCONNECTING-LINE SIZE			
System Capacity Btuh	Liquid O.D.	Suction O.D.	Condensate I.D.
09	1/4"	1/2"	1/2"
12	1/4"	1/2"	1/2"
18	3/8"	5/8" *	1/2"
24	3/8"	3/4"	1/2"
30	3/8"	3/4" **	1/2"
36	3/8"	3/4" **	1/2"

* WLC/WLH Suction Connection size is 3/4" O.D. and must bush down at the WLC/WLH Unit.

** WLC/WLH Suction Connection size is 5/8" O.D. a factory supplied kit is provided to transition to 3/4" O.D. interconnect.

WLC/WLH SYSTEM OPTIONS



COOLING SYSTEMS WITH WALL UNITS						
Condenser	Wall Unit	Btuh	SEER	SHR	EER	Ref.
S1CA9	WLHA09	9,000	13.0	.79	11.8	R22
S1CA2	WLHA12	12,000	13.0	.74	12.9	R22
* S1CA8	WLHA24	18,000	14.0	.78	13.0	R22
S1CA4	WLHA24	24,000	13.0	.70	12.5	R22
S1CA3	WLCA36	30,000	13.0	.72	12.6	R22
S1CA6	WLCA36	33,600	13.0	.69	12.1	R22

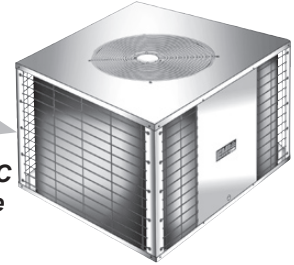
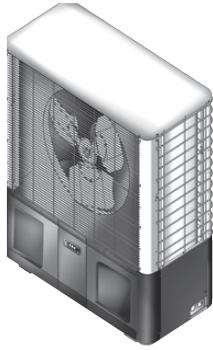
* **Important** - This system has been designed and manufactured to meet ENERGY STAR criteria for energy efficiency. However, proper refrigerant charge and proper air flow are critical to achieve rated capacity and efficiency. Installation of this product should follow the manufacturer's refrigerant charging and air flow instructions. Failure to confirm proper charge and air-flow may reduce energy efficiency and shorten equipment life.



HEAT PUMPS SYSTEM OPTIONS WITH WALL UNITS									
Condenser	Wall Unit	Cooling Btuh	Heating Btuh	SEER	HSPF	SHR	EER	COP	Ref.
* S1HA9	WLHA09	9,000	8,600	14.0	8.2	.75	12.0	3.6	R22
S1HA2	WLHA12	12,000	10,600	13.0	8.2	.73	11.1	3.4	R22
S1HA8	WLHA24	18,000	16,400	13.0	7.7	.73	12.1	3.8	R22
S1HA4	WLHA24	23,000	20,600	13.0	8.3	.71	11.9	3.5	R22

WLC/WLH SYSTEM OPTIONS

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S2C
Side Discharge

WLC

T2C, T3C & T4C
Top Discharge

COOLING SYSTEMS WITH S2C SIDE DISCHARGE

Wall Unit (s)	Condenser	Btuh	SEER	SHR	EER	Ref.
WLHA09	S2CA99	18,000	13	.80	11.9	R22
WLHA12	S2CA22	23,000	13	.72	12.4	R22
WLHA09+WLHA12	S2CA92	21,000	13	.72	12.0	R22

SYSTEM OPTIONS WITH T2C TOP DISCHARGE

Wall Unit(s)	Condenser	Btuh	SEER	SHR	EER	Ref.
WLHA24	T2CA88	36,000	13	.79	12.1	R22
WLHA24	T2CA44	45,000	13	.73	11.8	R22
WLHA09+WLHA24	T2CA98	27,000	13	.80	11.8	R22
WLHA24	T2CA84	41,000	13	.76	11.8	R22
WLHA12+WLHA24	T2CA24	34,000	13	.72	11.8	R22

SYSTEM OPTIONS WITH T3C TOP DISCHARGE

Wall Unit(s)	Condenser	Btuh	SEER	SHR	EER	Ref.
WLHA09+WLHA24	T3CA994	41,000	13	.77	11.9	R22
WLHA09	T3CA999	27,000	13	.80	11.7	R22
WLHA12	T3CA222	34,000	13	.71	11.7	R22
WLH09A+WLHA24	T3CA928	39,000	13	.77	11.9	R22
WLHA09+WLHA12+WLHA24	T3CA924	43,000	13	.75	11.8	R22
WLHA12+WLHA24	T3CA228	41,000	13	.74	11.8	R22
WLHA09+WLHA12	T3CA922	32,000	13	.74	11.8	R22
WLHA09+WLHA12	T3CA992	30,000	13	.77	11.9	R22
WLHA09+WLHA24	T3CA998	36,000	13	.80	11.8	R22
WLHA12+WLHA24	T3CA224	46,000	13	.72	11.7	R22

SYSTEM OPTIONS WITH T4C TOP DISCHARGE

Wall Unit(s)	Condenser	Btuh	SEER	SHR	EER	Ref.
WLHA09	T4CA9999	36,000	13	.80	11.8	R22
WLHA12	T4CA2222	45,000	13	.73	11.7	R22
WLHA09+WLHA12	T4CA9222	42,000	13	.71	11.8	R22
WLHA09+WLHA12	T4CA9992	38,000	13	.71	11.8	R22
WLHA09+WLHA12	T4CA9922	41,000	13	.73	11.9	R22

