




EMI  Presents

Everter

Ductless Series Variable Speed Split Systems

Ductless Series Variable Speed Split Systems

EMI E-verter Ductless Split Systems are an excellent alternative for cooling and heating indoor space when traditional systems are not practical or feasible. E-verter Split Systems are small in size and very flexible for zoning because no ductwork is required.

EMI E-verter Split Systems combination of an outdoor condenser and indoor air handler fits almost anywhere... simple to install and economical to operate and are ideal for a wide range of applications. Computer rooms, restaurants, apartments and condos, nursing homes, warehouse offices, schools, doctors' offices, hotels and motels.

EMI E-verter Split Systems' primary feature is the inverter-driven compressor that can modulate the speed at which it operates, adjusting the capacity to closely match the load and demand. This functioning reduces temperature swings, cycling, compressor noise and energy usage & costs, while more precisely maintaining comfort.

In this brochure you will find a variety of E-verter Split System options that are right for almost any application.

E-verter Benefits

- Variable speed – load matching
- High efficiency
- 3:1 turn down increases reliability with less cycling
- Quiet operation
- Minimal room temperature swings
- Single or dual point power connections (without electric heat only)
- Turbo heat plus two stage heating with optional E-boost electric heat
- Widest selection of energy star eligible ductless products

Inverter Technology

Inverter technology allows the compressor in the outdoor condensing unit to continuously adjust its speed to match the load and demand of the zone. This method is a substantial improvement on a conventional split system's efficiency because the system compressor will run longer, but at a lower speed, as the system approaches the set temperature. When demand is low, the speed of the compressor, and consequently the electric meter, will slow down; running down to ~1/3 of the rated capacity. This helps to maintain the room temperature with a higher degree of consistency and accuracy. When demand is high, the compressor will speed up, running at full capacity. The compressor does not start and stop nearly as often, which provides energy cost savings, as well as extends the life of the compressor, offering a significant overall payback. Since the compressor does not always run at the highest speed, there is a noise reduction at the outdoor condenser, and at the indoor air handler since it doesn't consistently have to run at the highest fan speed to satisfy demand.

High-Wall Air Handler Systems



WLHV Series Cooling & Heat Pump

9,000 – 33,400 Btuh,
2.6 – 9.8 kW



Hand-Held
Infrared Remote
Control



Optional
Wired OEM
Wall Control

Indoor Model Outdoor Model	WLHV09 S1CV9000	WLHV09 S1HV9000	WLHV12 S1CV2000	WLHV12 S1HV2000	WLHV18 S1CV8000	WLHV18 S1HV8000	WLHV24 S1CV4000	WLHV24 S1HV4000	WLHV30 S1CV3000	WLHV30 S1HV3000	WLHV36 S1CV6000	WLHV36 S1HV6000
Type	A/C	HP	A/C	HP	A/C	HP	A/C	HP	A/C	HP	A/C	HP
Energy Star Eligible	✓	✓	✓	✓	✓	✓						
Nominal Cooling (Btu/hr)	9,000	9,000	12,000	12,000	18,000	18,000	24,000	24,000	29,800	29,800	33,400	33,400
Min - Max Cooling (Btu/hr)	3,000–9,000	3,000–9,000	4,000–12,000	4,000–12,000	6,000–18,000	6,000–18,000	8,000–24,000	8,000–24,000	10,000–29,800	10,000–29,800	12,000–33,400	12,000–33,400
Nominal Heating (Btu/hr)		8,800		10,000		18,000		21,000		26,000		26,400
Min - Max Heating at 47°F (Btu/hr)		2,900–8,800		3,300–10,000		6,000–18,000		7,000–21,000		8,700–26,000		8,700–26,400
Low Temp Turbo Heating at 17°F (Btu/hr)		7,000		7,000		14,000		14,000		19,500		19,700
SEER	16.7	16.7	17.0	17.0	17.0	17.0	17.0	17.0	14.5	14.5	14.0	14.0
HSPF		8.2		8.5		9.5		9.5		7.7		7.7
EER	13.5	13.5	12.0	12.0	13.0	13.0	11.0	11.0	10.3	10.3	9.0	9.0
COP		3.2		3.0		3.5		3.2		2.8		2.95
Cooling Operating Range (°F)	60–115*	32–115	60–115*	32–115	60–115*	32–115	60–115*	32–115	60–115*	32–115	60–115*	32–115
Heating Operating Range (°F)		0–75		0–75		0–75		0–75		0–75		0–75
Line Length feet	100	100	100	100	100	100	100	100	100	100	100	100
Indoor Unit												
Voltage	208/230v	208/230v	208/230v	208/230v	208/230v	208/230v	208/230v	208/230v	208/230v	208/230v	208/230v	208/230v
Fan Speeds	3+Auto	3+Auto	3+Auto	3+Auto	3+Auto	3+Auto	3+Auto	3+Auto	3+Auto	3+Auto	3+Auto	3+Auto
Sound Levels: High (dBA)	45	45	45	45	56	56	56	56	50	50	50	50
Medium (dBA)	42	42	42	42	54	54	54	54	48	48	48	48
Low (dBA)	40	40	40	40	52	52	52	52	46	46	46	46
Outdoor Unit Transformer Kit required for 115Vac Condenser												
Voltage	208/230v	208/230v	208/230v	208/230v	208/230v	208/230v	208/230v	208/230v	208/230v	208/230v	208/230v	208/230v
Sound Level (low/high) (dBA)	61/64	61/64	61/64	61/64	65/68	65/68	65/69	65/69	66/69	66/69	66/69	66/69
Options												
E-boost Electric Heat (208/230v only) (kW)	3	3	3	3	3 & 5	3 & 5	3 & 5	3 & 5	5	5	5	5
** Low Ambient Cooling Range (°F)	0–32	0–32	0–32	0–32	0–32	0–32	0–32	0–32	0–32	0–32	0–32	0–32

* Becomes 32–115°F with addition of optional Crank Case Heater Kit

** Must add optional Crank Case Heater Kit (S1CV Only) and Wind Baffles Kit

Added Features Include:

- Sweep function on louvers provides a wide conditioned area, and evenly distributed airflow throughout the space.
- Dry mode allows for dehumidification, with minimal change in room temperature.
- Selectable filter indicator notifies occupant when cleaning is required.
- Condensate pump accessory includes integral safety switch, is capable of up to 48" (1.2m) lift, and internally mounted.
- Infrared Remote Test Mode overrides controls for easy start-up and diagnostics.
- Optional Wired OEM Wall Control; a Handheld Infrared Remote Control comes standard with every air handler.

Ceiling Cassette Air Handler Systems



CAHV Series Cooling & Heat Pump

9,000 – 36,000 Btuh,
2.6 – 10.5 kW



Hand-Held
Infrared Remote
Control

Optional
Wired OEM
Wall Control

Indoor Model Outdoor Model	CAHV09 S1CV9000	CAHV09 S1HV9000	CAHV12 S1CV2000	CAHV12 S1HV2000	CAHV18 S1CV8000	CAHV18 S1HV8000	CAHV24 S1CV4000	CAHV24 S1HV4000	CAHV30 S1CV3000	CAHV30 S1HV3000	CAHV36 S1CV6000	CAHV36 S1HV6000
Type	A/C	HP	A/C	HP	A/C	HP	A/C	HP	A/C	HP	A/C	HP
Energy Star Eligible	✓	✓	✓	✓	✓	✓						
Nominal Cooling (Btu/hr)	9,000	9,000	12,000	12,000	18,000	18,000	24,000	24,000	30,000	30,000	35,600	35,600
Min - Max Cooling (Btu/hr)	3,000–9,000	3,000–9,000	4,000–12,000	4,000–12,000	6,000–18,000	6,000–18,000	8,000–24,000	8,000–24,000	10,000–30,000	10,000–30,000	12,000–36,600	11,500–35,600
Nominal Heating (Btu/hr)		8,400		8,800		17,000		19,000		29,000		29,000
Min - Max Heating at 47°F (Btu/hr)		2,800–8,400		2,900–8,800		5,600–17,000		6,200–19,000		9,500–29,000		9,500–29,000
Low Temp Turbo Heating at 17°F (Btu/hr)		7,000		7,000		14,000		14,000		19,500		19,500
SEER	15.0	15.0	15.8	15.8	17.0	17.0	17.0	17.0	14.6	14.6	14.25	14.25
HSPF		7.7		7.7		9.0		9.0		7.9		7.9
EER	13.0	13.0	12.0	12.0	13.0	13.0	11.0	11.0	10.5	10.5	9.9	9.9
COP		3.0		3.0		3.1		3.0		3.1		3.1
Cooling Operating Range (°F)	60–115*	32–115	60–115*	32–115	60–115*	32–115	60–115*	32–115				
Heating Operating Range (°F)		0–75		0–75		0–75		0–75		0–75		0–75
Line Length (feet)	100	100	100	100	100	100	100	100	100	100	100	100
Indoor Unit												
Voltage	208/230v	208/230v	208/230v	208/230v	208/230v	208/230v	208/230v	208/230v	208/230v	208/230v	208/230v	208/230v
Fan Speeds	3+Auto	3+Auto	3+Auto	3+Auto	3+Auto	3+Auto	3+Auto	3+Auto	3+Auto	3+Auto	3+Auto	3+Auto
Sound Levels: High (dBA)	41	41	41	41	44	44	44	44	51	51	51	51
Medium (dBA)	40	40	40	40	43	43	43	43	50	50	50	50
Low (dBA)	39	39	39	39	42	42	42	42	49	49	49	49
Outdoor Unit												
Voltage	208/230v	208/230v	208/230v	208/230v	208/230v	208/230v	208/230v	208/230v	208/230v	208/230v	208/230v	208/230v
Sound Level (low/high) (dBA)	61/64	61/64	61/64	61/64	65/68	65/68	65/69	65/69	66/69	66/69	66/69	66/69
Options												
E-boost Electric Heat (208/230v only) (kW)	1½	1½	1½	1½	3	3	3	3	5	5	5	5
** Low Ambient Cooling Range (°F)	0–115	0–115	0–115	0–115	0–115	0–115	0–115	0–115	0–115	0–115	0–115	0–115

* Becomes 32–115°F with addition of optional Crank Case Heater Kit

** Must add optional Crank Case Heater Kit (S1CV Only) and Wind Baffles Kit

Added Features Include:

- Factory installed condensate pump includes integral safety switch with 30" (0.76 m) available lift.
- Easily configured for fresh air intake and up to 2 branch discharge locations.
- Motorized discharge vanes on CAHV18-24.
- Optional Wired OEM Wall Control; a Handheld Infrared Remote Control comes standard with every air handler.
- Selectable filter indicator notifies occupant when unit needs filter cleaning.

Universal Air Handler Systems – Ceiling/Floor-mounted



UNHV Series Cooling & Heat Pump

9,000 – 33,400 Btuh,
2.6 – 9.8 kW

The air handler can be used in either
a ceiling or floor mount application.



Hand-Held
Infrared Remote
Control



Optional
Wired OEM
Wall Control

Indoor Model Outdoor Model	UNHV09 S1CV9000	UNHV09 S1HV9000	UNHV12 S1CV2000	UNHV12 S1HV2000	UNHV18 S1CV8000	UNHV18 S1HV8000	UNHV24 S1CV4000	UNHV24 S1HV4000	UNHV30 S1CV3000	UNHV30 S1HV3000	UNHV36 S1CV6000	UNHV36 S1HV6000
Type	A/C	HP	A/C	HP	A/C	HP	A/C	HP	A/C	HP	A/C	HP
Energy Star Eligible	✓	✓	✓	✓	✓	✓						
Nominal Cooling (Btu/hr)	9,000	9,000	12,000	12,000	18,000	18,000	24,000	24,000	29,800	29,800	33,400	33,400
Min - Max Cooling (Btu/hr)	3,000–9,000	3,000–9,000	4,000–12,000	4,000–12,000	6,000–18,000	6,000–18,000	8,000–24,000	8,000–24,000	10,000–29,800	10,000–29,800	12,000–33,400	12,000–33,400
Nominal Heating (Btu/hr)		8,800		10,000		18,000		21,000		26,000		26,400
Min - Max Heating at 47°F (Btu/hr)		2,900–8,800		3,300–10,000		6,000–18,000		7,000–21,000		8,700–26,000		8,700–26,400
Low Temp Turbo Heating at 17°F (Btu/hr)		7,000		7,000		14,000		14,000		19,500		19,700
SEER	16.7	16.7	17.0	17.0	17.0	17.0	17.0	17.0	14.5	14.5	14.0	14.0
HSPF		8.2		8.5		9.5		9.5		7.7		7.7
EER	13.5	13.5	12.0	12.0	13.0	13.0	11.0	11.0	10.3	10.3	9.0	9.0
COP		3.2		3.0		3.5		3.2		2.8		2.95
Cooling Operating Range (°F)	60–115*	32–115	60–115*	32–115	60–115*	32–115	60–115*	32–115	60–115*	32–115	60–115*	32–115
Heating Operating Range (°F)		0–75		0–75		0–75		0–75		0–75		0–75
Line Length feet	100	100	100	100	100	100	100	100	100	100	100	100
Indoor Unit												
Voltage	208/230v	208/230v	208/230v	208/230v	208/230v	208/230v	208/230v	208/230v	208/230v	208/230v	208/230v	208/230v
Fan Speeds	3+Auto	3+Auto	3+Auto	3+Auto	3+Auto	3+Auto	3+Auto	3+Auto	3+Auto	3+Auto	3+Auto	3+Auto
Sound Levels: High (dBA)	45	45	45	45	56	56	56	56	50	50	50	50
Medium (dBA)	42	42	42	42	54	54	54	54	48	48	48	48
Low (dBA)	40	40	40	40	52	52	52	52	46	46	46	46
Outdoor Unit												
Voltage	208/230v	208/230v	208/230v	208/230v	208/230v	208/230v	208/230v	208/230v	208/230v	208/230v	208/230v	208/230v
Sound Level (low/high) (dBA)	61/64	61/64	61/64	61/64	65/68	65/68	65/69	65/69	66/69	66/69	66/69	66/69
Options												
E-boost Electric Heat (208/230v only) (kW)	3	3	3	3	3 & 5	3 & 5	3 & 5	3 & 5	5	5	5	5
** Low Ambient Cooling Range (°F)	0–32	0–32	0–32	0–32	0–32	0–32	0–32	0–32	0–32	0–32	0–32	0–32

* Becomes 32–115°F with addition of optional Crank Case Heater Kit

** Must add optional Crank Case Heater Kit (S1CV Only) and Wind Baffles Kit

Added Features Include:

- Multiple drain pans are factory installed, no field modification required.
- Dry mode allows for dehumidification, with minimal change in room temperature.
- Selectable filter indicator notifies occupant when cleaning is required.
- Easily configured for fresh air intake.
- Plastic filter grille standard, optional metal grille available.
- Condensate pump accessory includes integral safety switch with 48" (1.2 m) or 144" (3.6 m) available lift
- Optional Wired OEM Wall Control; a Handheld Infrared Remote Control comes standard with every air handler.

Single Zone Condensers



Single Zone Series Cooling Rated Cooling Range

(9,000 - 36,600 Btuh, 2.64 - 10.73 kW)

Single Zone Series Rated Heating Range

(8,400 - 29,000 Btuh, 2.46 - 8.50 kW)

Side Discharge Condensers – Single Zone

Model	Number of Circuits	Nominal Cooling Capacity Btuh	Model	Number of Circuits	Nominal Cooling Capacity Btuh	Nominal Heating Capacity Btuh
S1CV9000	1	9,000	S1HV9000	1	9,000	8,800 / 8,400*
S1CV2000	1	12,000	S1HV2000	1	12,000	10,000 / 8,800*
S1CV8000	1	18,000	S1HV8000	1	18,000	18,000 / 17,000*
S1CV4000	1	24,000	S1HV4000	1	24,000	21,000 / 19,000*
S1CV3000	1	28,800 / 29,800† / 30,000*	S1HV3000	1	29,800 / 30,000*	26,000 / 29,000*
S1CV6000	1	33,400 / 36,600*	S1HV6000	1	33,400 / 35,600*	26,400 / 29,000*

† For Universal Air Handler

* For Cassette Air Handler

Comfort Features:

- 3:1 turn down for increased comfort with decreased temperature swings.
- Single point power connection is standard.
(Electric Heat models require Dual Point power connection.)
- Standard cooling operation down to:
S1CV ~ 60°F/15.5°C & S1HV ~ 32°F/0°C.
- Turbo-heat logic allows heat & heat pump to function at the same time.
- Up to 100 EQUIVALENT feet (30.5 m) of interconnecting refrigerant tubing, supporting up to a 35' (10.6 m) elevation differential.
- Side discharge cabinet with durable injection molded base and enclosed compressor compartment for reduced noise.
- Coil ground clearance of 12" (0.3 m) provides added protection from the environment year round.
- Environmentally friendly R-410A refrigerant, with no Ozone Depletion Potential.
- Easy access connections for refrigerant gauges.
- Corrosion resistant, powder-coated steel cabinet with PVC coated wire guard coil protection.
- One year parts, five year compressor warranty.
- Full range heat pump operation.

Options:

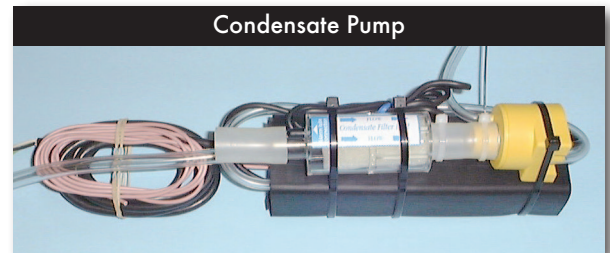
- Field-installed wind baffles kit allows for low ambient cooling operation down to 0°F/32°C (S1CV also requires a field-installed crank case heater).

Hail Guard/Wind Baffle Accessory



Field-Installed Optional Accessories

- **115v Transformer Kit** – field installed for 9,000 and 12,000 Btuh models (not available on systems with E-boost electric heat)
- **Condensate Pump** – includes Integral Safety Switch. Provides available lift from the bottom of the air handler as follows:
 Internal Unit Mounted – to 48" (1.2m)
 External Wall/Floor Mounted – to 144" (3.6m)
- **Handheld Infrared Remote Control** (standard)
 Convenient full function cooling and heating control included with every Air Handler.
- **Wired OEM Wall Control** –
 Provides unit control functions in a fixed location, up to 150' away from the air handler. (Includes a single 15' interconnecting cord extension).
- **Interconnecting Cord Extension** –
 Comes in 15' sections to locate Wired OEM Wall Control up to 150' away from the air handler.
- **Bi-Flow Filter Dryer** – Keeps moisture and particulates out of refrigerant system.
- **Crank Case Heater Kit** – required for low ambient cooling to 32°F/0°C on S1CV (Straight Cool) Models (Standard component on S1HV (Heat Pump) Models)
- **Sweat Connection Line Sets** – in convenient 25' or 50' lengths, both tubes are insulated.
- **Wind Baffles/Hail Guard/Stamped Louver Kit** – required for low ambient cooling to 0°F/-13°C
- **Discharge Air Branch Duct Collars**
 (for Cassette Air Handlers)
- **MERV 11 High Efficiency Filter Kits**
 (for Universal Air Handlers)
- **Floor Mount Trim/Kick-plate Kits**
 (for Universal Air Handlers)
- **Metal Return Air Grilles with Filter**
 (for Universal Air Handlers)
- **Fresh Air Intake Duct Collar(s)**



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Ductless Series Variable Speed Split Systems

www.e-verter.com

For complete product information, please refer to individual unit specifications, installation and operation manual, and other product literature found on www.enviromaster.com. Due to on-going product development, specifications are subject to change without notice.

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