



6-30 NOMINAL TONS COMMERCIAL SPLIT SYSTEM AIR CONDITIONERS AND HEAT Pumps



The Arcoaire® CAS & CHS series outdoor units matched with the FAS & FHS series indoor air handlers provide a variety of HVAC application options. Whether it's lowest first cost with the single circuit models or superior part load performance from two stages of cooling with the CAS air conditioner series or year-round energy savings with the CHS heat pump series, these units are designed for long, dependable operation for rooftop or on-the-ground installation. All models use environmentally sound R410A refrigerant. Together, they create a reliable split system that provides easy solutions to a wide range of commercial HVAC needs.

Constructed For Long Life

The CAS single circuit and dual circuit, scroll compressor models are designed and built to last. The outdoor coil construction allows for a more efficient design in a smaller cabinet size providing a reduction in refrigerant charge. Where conditions require, a special coil coating protection is available. Cabinets are constructed of pre-painted galvanized steel, delivering unparalleled protection from the environment. Inside and outside surfaces are protected to ensure long life, good looks, and reliable operation. Safety controls are used for enhanced system protection and reliability.

Each unit utilizes the Comfort Alert® diagnostic and troubleshooting control system. This protects the unit's operation and provides valuable diagnostic information when required.

Efficient Operation

Arcoaire air-cooled condensing units provide ratings up to 11.2 EER[†] and 14.3 IEER[†] with FAS Air Handler, which meet ASHRAE 90.1 efficiency levels. This high efficiency helps reduce overall operating cost and energy consumption.

[†]EER stands for Energy Efficiency Ratio and IEER stands for Integrated Energy Efficiency Ratio.

Dependable Performance

Arcoaire CAS and CHS condensing units offer operating controls and components designed for performance dependability. High efficiency hermetic scroll compressors are engineered for long life and durability. The compressors include vibration isolation for quiet operation. The high-pressure switch protects the entire refrigeration system from abnormally high operating pressures. A low-pressure switch or loss of charge switch protects the system from loss of charge. These units also include anti-short-cycling protection, which helps to protect the units against compressor failure.

All units include a crankcase heater to eliminate liquid slugging at start-up, and the Comfort Alert control system provides:

- System Go LED indicator
- Fault LED indicator
- Compressor fault LED indicator
- Phase loss protection
- Phase reversal protection
- Safety pressure indicator
- Anti-short-cycle protection

Arcoaire heat pumps come standard with a precision-sized factory-installed refrigerant suction line accumulator that is designed to prevent liquid from entering the compressor during low ambient conditions or switching between operations.

Ease of Installation and Service

Certified and pre-engineered factory-installed options (FIOPs) allow units to be installed in less time, reducing installation cost. FIOPs include:

- Low ambient controls, which provide cooling operation down to -20° F (-29° C) ambient temperature
- Non-fused disconnect switch
- 115V GFI (ground fault interrupter) convenience outlet, non-powered available
- Special coil coating protection
- Louvered hail guard

Commercial Air Conditioners and Heat Pumps

- An ideal solution for replacement and new construction
- Rugged, dependable construction
- Available with single circuit and dual circuit, scroll compressor capacity control
- Cooling capability up to 125° F (52° C) ambient and down to 40° F (4° C) ambient standard

CAS SPLIT SYSTEM AIR CONDITIONERS

Air Conditioner Cooling Performance—CAS with FAS Air Handler (AHRI Certified Ratings)

System Combination	Cooling Circuits	Nominal Cooling Ton Size	Net Cooling Capacity (MBH)	EER/IEER	CAS Unit	
					Dimensions (in) (L x W x H)	Approx. Unit Weight (lbs)
CAS072/FAS072	1	6.0	71.0	11.5/14	59 x 46 x 42	389
CAS091/FAS091	1	7.5	92.0	11.2/12.9	59 x 46 x 42	391
CAS121/FAS150	1	10.0	117.0	11.2/12.9	59 x 46 x 50	490
CAS120/FAS150	2	10.0	117.0	11.2/13	59 x 46 x 50	516
CAS150/FAS150	2	12.5	148.0	11/12.5	59 x 46 x 50	545
CAS181/FAS180	1	15.0	184.0	11.2/13.2	86 x 46 x 50	731
CAS180/FAS180	2	15.0	184.0	11.2/12.6	86 x 46 x 50	745
CAS241/FAS240	1	20.0	240.0	11/12.5	86 x 67 x 50	978
CAS240/FAS240	2	20.0	240.0	11/12.5	86 x 67 x 50	988

*Refer to the Equipment Selection Program for all allowable AHRI certified combinations.

*DOE 2018 requires 2 speed VFD on the FAS when replacing a system.

CHS SPLIT SYSTEM HEAT PUMPS

Heat Pump Cooling Performance—CHS with FHS Air Handler (AHRI Certified Ratings)

System Combination	Cooling Circuits	Nominal Cooling Ton Size	Net Cooling Capacity (MBH)	EER/IEER	CHS Unit	
					Dimensions (in) (L x W x H)	Approx. Unit Weight (lbs)
CHS072/FHS072	1	6.0	70.0	11/13.8	59 x 46 x 42	444
CHS091/FHS091	1	7.5	89.0	11/12.7	59 x 46 x 42	483
CHS121/FHS120	1	10.0	112.0	11/13.8	59 x 46 x 50	575
CHS180/FHS180	2	15.0	178.0	10.6/12.5	86 x 46 x 50	768
CHS240/FHS240	2	20.0	222.0	10.7/12.5	86 x 67 x 50	1015

*Refer to the Equipment Selection Program for all allowable AHRI certified combinations.

*DOE 2018 requires 2 speed VFD on the FHS when replacing a system.

FAS/FHS AIR HANDLERS

FAS/FHS Air Handler Weights & Dimensions

Unit Size	Dimensions (in) (L x W x H)	Approx. Unit Weight (lbs)
FAS072/FHS072	49 x 28 x 56	399
FAS091/FHS091	49 x 28 x 56	404
FAS120/FHS120	49 x 28 x 56	425
FAS150/FHS150	89 x 28 x 56	695
FAS180/FHS180	89 x 28 x 56	713
FAS240/FHS240	89 x 28 x 56	730
FAS300	101 x 33 x 66	1050
FAS336	101 x 32 x 66	1062



R410A is an EPA-approved, environmentally sound refrigerant.

All systems tested and listed by the appropriate agencies.



As part of its commitment to quality, the manufacturer reserves the right to change specifications on its products without notice. Illustrations and photographs in this brochure are only representative. Some product models may vary.

CAS/CHS/FAS/FHS Series
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Air Conditioning & Heating

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