



# **Mini Chiller**



High Efficiency



## **Mini Chiller**

**AEE** small household air-cooled cold water units are a new generation of household air conditioners manufactured for the Iran market based on leading-edge European design concepts to fit well with various graceful upholsteries. Units of this series require no cooling tower or special equipment room.

All accessories of the water system are self contained and can be connected to various indoor terminals through the master unit. Equipped with a smart controller, units of this series can bring you all the comfort that a household central air conditioner could possibly provide.

**AEE** small household air-cooled cold water units feature various merits such as smart control, high efficiency, low operation sound, flexible structure, convenient operation, safe running and easy installation and maintenance. Units of this series can be widely used in houses, villas, stores, top-grade apartments, office buildings and other commercial areas which require separate air conditioning



High Efficiency By using modern controllers, high-tech compressors and high quality fans, the efficiency of device has been increased as much as possible.



Low Noise By using variable speed compressors, engine's noise insulation boxes and the fans which have inverters, the sound of device has been decreased in the level of the world's standards.



Customizable Dimensions Arad Energy Ersa Company by relying on the knowledge of its engineering team, is able to produce mini chillers based on customers' needs and modify them in a way they want.

#### **Comfortable and Stable Water System**

Units of this series feature air conditioner design (chilled water ) for precise temperature control. The units



can provide you with a comfortable, healthy and graceful working/living environment. The units feature a heat sink mechanism using circulatory air and needs no cooling tower. This not only saves the cost of the cooling tower, but also saves precious building space. Units of this series feature various models and dimensions to meet different installation requirements.

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#### **Efficient and Energy Saving**

Units of this series are equipped with fully hermetic compressors which are stable, advanced and reliable. All components have undergone strict integration and compatibility test to ensure optimized performance and efficient/energy-saving operation all year round. The **AEE** series integrated units perfectly unify the parallel compressor technology and electronic throttle technology to quickly modulate the cooling capacity to the set value, thereby

making sure that the units are most energy efficient. The EER is even higher with partial workload. For example , for **AEE** series units, the EER is 6% higher with 75% of workload, 11% higher with 50% of workload, and 16% higher with 25% of workload.



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#### Larger Operational Range, Safe and Reliable

Long and strict tests prove that units of this series can work reliably in an environment as hot as 48°C (cooling) or as cold as -10°C (heating). With a smart split design, all water pipes can be installed indoor to prevent freezing during cold winters. The units can work with boilers to meet heating requirements in areas which are extremely cold in winter. The units feature built-in high/low pressure protection, cooling freezing protection, winter freezing protection, compressor overload protection, water pressure-drop switch etc. to maximize reliability. In case of any failure, the micro-computer controller provides alarms using sound and indicators on a real-time basis.



#### Silent and Comfortable

The units feature a strengthened vibration isolation case and multi grade sound dampening. Thanks to a fully hermetic scroll compressor and a low-rev high-efficiency heat-sink fan, the operation sound and vibration of the units are brought down to an industry-leading level. With an innovative auto silence feature for night time, the **AEE** series units are more quiet at night



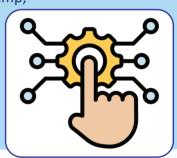
#### Mini Design, Fashionable and Graceful

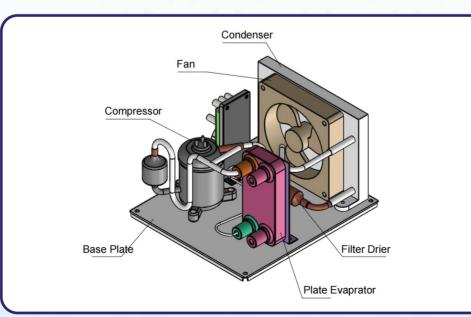
The split series outdoor units feature a super-thin mini-design which occupies less area on the balcony and does not affect day lighting. The integrated series units feature top air supply, compact design, low height, small footprint and a fashionable and elegant exterior.

#### Flexible to Install and Space Saving

The units are small and easy to move, and can be flexibly installed on rooftops, balconies and other suitable outdoor places to save precious building space. There is no need to design or installed a cooling tower, boiler, cooling pump or relevant pipes. All ten major accessories of the water system are optional, including horizontal multi-grade pump,

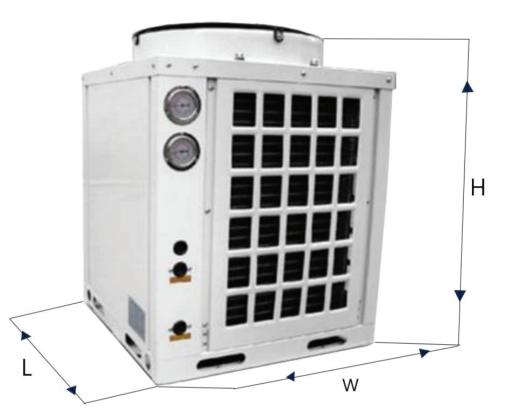
plate heat exchanger, water tank, hermetic expansion water tank, differential water pressure switch, pumpwater filter, relief valve, auto air discharge valve, auto water refill valve and sewage discharge valve. The whole central air conditioner is very easy to install as you just need to connect some water pipes.







### Mini Chiller



Model		Mini Chiller Series					
		EAE-MC-A-2/1	EAE-MC-A-4/1	EAE-MC-A-5/1	EAE-MC-A-6/1	EAE-MC-A-8/1	EAE-MC-A-10/2
Cooling Capacity	Ton	2	4	5	6	8	10
Cooling Capacity	Kw	7	14	17.5	21	28	35
Water	Flow Rate (GPM)	4.8	9.6	12	14.4	19.2	24
	Inlet Temp	12°C					
	Outlet Temp	7°C					
	Water Pipe Size	$\frac{3}{4}$	1″	$1\frac{1}{4}''$	$1\frac{1}{2}''$	$1\frac{1}{2}''$	2″
Compressor	Туре	Hermetic Scroll Compressor					
	Power (Kw)	1.5	3.8	4.5	5.1	7.5	8.5
Fan	Туре	Axial					
	Power Input (Kw)	1×0.37	1×0.55	1×0.55	1×0.55	1×0.75	2×0.55
Water Pump	Туре	Grundfos					
	Power Input (kw)	0.37	0.37	0.5	0.5	0.7	1
	Head(mH₂O)	10	10	10	12	12	12
Refrigerant	Туре	R22/R407c					
Total Power (Kw)	Kw	2.24	4.72	5.55	6.15	8.95	10.6
Length	mm	650	800	1100	1100	1400	1600
Width	mm	650	800	1100	1100	1100	1100
Height	mm	900	900	1000	1000	1000	1200

