Hisense

MODULAR AIR COOLED CHILLERS

Catalogue 2020

COMPANY PROFILE



Hisense Air Conditioning Company has owned more advanced and the best HVAC technology, high intelligent laboratory and first-class production equipment. By adopting German technology and optimizing the product structure, Hisense has currently developed various central air conditioning products including Modular Air Cooled Chiller, Modular Water Cooled Chiller, Water Cooled Screw Chillers, Fan Coil Units, Air Handling Units, Air Cooled Packaged Unit, Water Cooled Packaged Unit etc. Our commercial and residential air conditioners are suitable for large, medium and small-sized space from dozens of square meters to hundreds of thousands of square meters.

Hisense has perfect quality management system with ISO9001 certification which effectively ensures the quality of products. With strong consciousness of environmental protection, Hisense has passed ISO14001 environmental and management system certification.

We believe that reputation comes from quality, market share comes from integrity, development comes from innovation. In the future, Hisense will keep customer oriented concept, continuous improvement and providing the most suitable HVAC solutions.



INTRDOUCTION







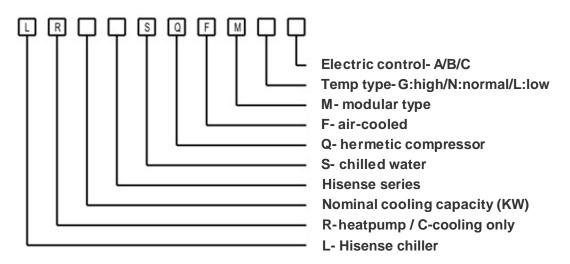
FOUNDED IN 1969







NOMENCLATURE



OPERATION CONDITIONS

Items	Unit	02series	03 series	
Chilled water outlet temperature	$^{\circ}\mathbb{C}$	5-15	5-15	
Hot water outlet temperature	$^{\circ}$	30-50	30-55	
Outdoor dry bulb temperature in summer	$^{\circ}$	21-52	21-52	
Outdoor dry bulb temperature in winter	$^{\circ}\mathbb{C}$	-15-21	-26-21	
Water flow rate	m³/h	Rated flow rate ± 15%		
Voltage range allowed	V	Rated voltage±10%		
Three-phase voltage unbalance rate	/	±2%		
Frequency range allowed	Hz	Rated frequency ±2%		

Note: Failure to follow operation conditions could harm your unit.

FEATURES

Stable and reliable

- ■The system can calculate the runtime of each compressor automatically and operate the compressors with short working time preferentially to balance the compressor wear and extend service life.
- ■Complete protection functions: flow rate protection, LP HP protection, anti-freezing protection, fan overload protection, compressor overheat protection, phase order protection etc.



Patented design

■The shell and tube exchangers use helical baffles patented design technology: circulating water flows along helical curve, no dead zone, high heat transfer coefficient, strong anti freezing performance.

Advanced control system

- ■Fully automatic operation, auto power on& off
- Large screen LCD remote controller provides centralized control and modular control, upto 16 units can be controlled
- ■Three-tier password can ensure safe operation of the unit
- ■Three-tier deadline control system
- ■Remote control function and strong anti-interference ability, remote controller can be installed arbitrarily within 1000m
- ■Self-diagnostic function



STANDARD TYPE

Model		LR6002SQFM	LR9002SQFM	LR6502SQFM	LR13002SQFM	
	kW	60 90		65	130	
Cooling capacity	Kcal/h	51600	77400	55900	111800	
Heating capacity	kW	65	96	69	138	
	Kcal/h	55900	82560	59340	118680	
Total Power	Cooling (kW)	18.4	27.7	19.2	38.3	
	Heating (kW)	19.0	28.1	19.5	38.9	
Running current	Cooling (A)	31.3	47.1	32.7	65.2	
	Heating (A)	32.3	47.7	33.1	66.1	
Compressor	Туре	Scroll compressor				
	Amount	4	6	2	4	
Defeirement	Туре	R22/R407c/R410a				
Refrigerant Flow control		Capillary tube Electronic/thermal expansion va				
Condenser	Туре	High efficiency heat exchanger with hydrophilic aluminum fins and internal screw copper tul				
Fan	Туре	Axial fan w ith low noise				
	Type	High efficiency shell and tube heat exchanger				
	Water flow rate (m³/h)	10.3	15.5	11.2	22.4	
Evaporator	Waterpipe type	Coupling				
Evaporator	Waterpipe specifications	DN50	DN50	DN50	DN65	
W	Water resistance (kPa)	<60	<65	<60	<65	
Operati	on mode	Full automation				
Security	protection	ction flow rate, LP HP, anti-freezing, fan overload, compressor overheat, phase orde			, phase order etc.	
	Length (mm)	2000	2960	2000	2000	
Dimension	Width (mm)	1000	1000	1000	1945	
	Height (mm)	1960	1960	1960	1960	
Weight	kg	700	1050	750	1400	

NOTE

- Cooling standard condition: cold water inlet temp $12^{\circ}\mathbb{C}_{+}$ outlet temp $7^{\circ}\mathbb{C}_{+}$ outdoor dry bulb temperature $35^{\circ}\mathbb{C}_{-}$.
- Heating standard condition: hot water inlet temp 40° C, outlet temp 45° C, outdoor dry bulb temperature 7° C, wet bulb temperature 6° C.
- The data may be modified due to technical progress.

LOW TEMPERATURE TYPE

	Model	LR6503SQFM	LR13003SQFM		
l Wodel kW		65	130		
Cooling capacity					
	Kcal/h	55900	111800		
Heating capacity 1	kW	71	142		
	Kcal/h	61060	122120		
Heating capacity 2	kW	46	92		
- ioag oapaon, _	Kcal/h	39560	79120		
	Cooling (kW)	19.1	38.0		
Total Power	Heating 1 (kW)	19.6	39.1		
	Heating 2 (kW)	17.2	34.7		
	Cooling (A)	32.4	64.6		
Running current	Heating 1 (A)	33.3	66.5		
	Heating 2 (A)	29.3	59.0		
Compressor	Туре	Scroll compressor with vapor injection technology			
	Amount	2	4		
5.4.	Туре	R22/R407c/R410a			
Refrigerant	Flow control	Electronic expansion valve			
Condenser	Туре	High efficiency heat exchanger with hydrophilic aluminum fins and internal screw copper tube			
Fan	Туре	Axial fan w ith low noise			
	Туре	High efficiency shell and tube heat exchanger			
	Water flow rate (m³/h)	11.2	22.4		
Evaporator	Waterpipe type	Coupling			
Σναροιαιοι	Waterpipe specifications	DN50	DN65		
	Water resistance (kPa)	<60	<65		
Operation mode		Full automation			
Security protection		flow rate, LP HP, anti-freezing, fan overload, compressor overheat, phase order etc.			
	Length (mm)	2000	2000		
Dimension	Width (mm)	1000	1945		
	Height (mm)	1960	1960		
Weight	kg	780	1450		
	-				

NOTE

- Cooling standard condition: cold water inlet temp 12° C, outlet temp 7° C, outdoor dry bulb temperature 35° C.
- Heating standard condition 1: hot water inlet temp $40\,^{\circ}$ °C, outlet temp $45\,^{\circ}$ °C, outdoor dry bulb temperature $7\,^{\circ}$ °C, wet bulb temperature $6\,^{\circ}$ °C.
- Heating standard condition 2: hot water inlet temp 36° °C, outlet temp 41° °C, outdoor dry bulb temperature -12° °C, wet bulb temperature -14° °C.
- The data may be modified due to technical progress.

HIGH TEMPERATURE TYPE

High temperature type modular air cooled heat pumps are new energy - efficient water heaters which can heat the water to more than 60° through heat cycling.

Energy-efficient

■High temperature type modular air cooled heat pumps heat water taking air as heat source, the power consumption is only 1/3 -1/4 of the electric water heater, the heat pumps can also save 75% of operation cost compared with water heaters with coal, oil, gas.

Green

■ High temperature type units are environment-friendly products without emissions.

■ Flexible combination

■Units can be combined flexibly based on the load demands.

Security and reliable

■The system has no any inflammable danger, explosive danger, poisoning, short and other danger which may occur in traditional water heaters. It is security and reliable hot-water heating system.

Anti-freezing function

■The system can run stably in low temperature conditions with smart defrosting function.

Easy operation

■ The automatic intelligence control system can start or close down automatically based on the water temperature to make hot water available all day long.

Wide application

■The units can be widely applied in kinds of centralized hot water supply systems like residences, hotels, public buildings etc.

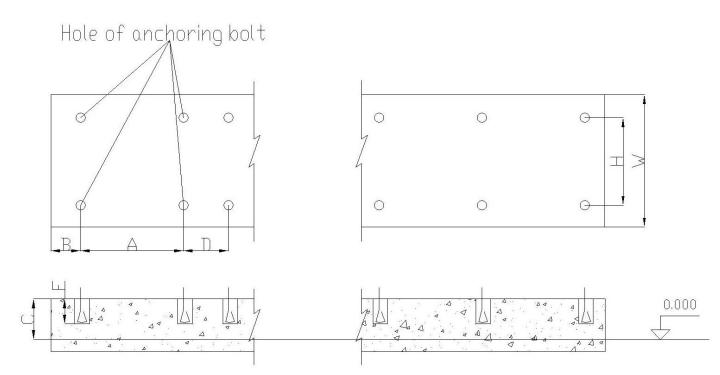
TECHNICAL DATA

	Model	LR3006SQFMG	LR6802SQFMG	LR13602SQFMG			
Heating capacity	kW	38	82	164			
Hot water supply	M³/h	0.82	1.76	3.52			
Total Power	kW	10.3	22.2	44.3			
Running current	A	17.5	37.7	75.4			
0	Туре						
Compressor	Amount						
D. (:	Туре	R22/R407c/R410a					
Refrigerant	Flow control	Capillary tube	l expansion valve				
Condenser	Туре	High efficiency heat exchanger with hydrophilic aluminum fins and internal sc					
Fan	Туре	Axial fan w ith low noise					
	Туре	High efficiency plate heat exchanger High efficiency shell and tube heat exchange					
	Waterflow rate (m³/h)	6.5	14.1	28.2			
Evaporator	Waterpipe type	External screw thread Coupling					
	Waterpipe specifications	DN32	DN50 E				
	Water resistance (kPa)	<60	<60	<65			
Operat	Operation mode		Full automation				
Security	protection	flow rate, voltage, anti-freezing	ng, fan overload, compresso	roverheat, phase order e			
A 91	Mode	Provided by users					
Auxiliary electric heating		20	48				
	Length (mm)	1370	2000	2000			
Dimension	Width (mm)	750	1000	1945			
	Height (mm)	1820	1960	1960			
Weight	kg	380	750	1400			

NOTE

- Heating condition : hot water inlet temp 15 $^{\circ}$ C outlet temp 55 $^{\circ}$ C, outdoor dry bulb temperature 20 $^{\circ}$ C, wet bulb temperature 15 $^{\circ}$ C.
- The data may be modified due to technical progress.

PLATFORM DATA



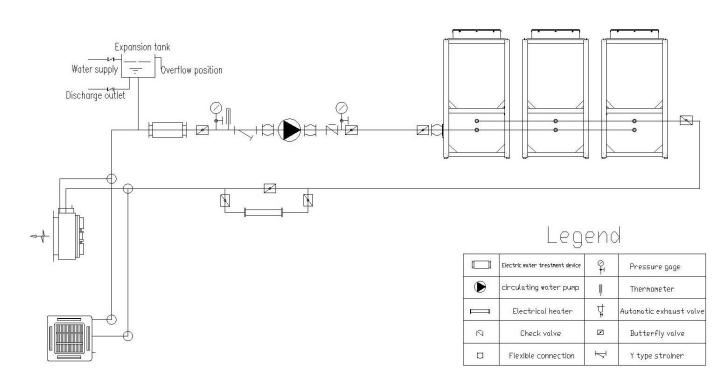
Unit: mm

Model	А	В	Н	D	W	С	Е
30kW series	695	200	1185	≥450	1400	150-200	150
60kW、65kW series	945		1815		2400		
90kW series	945		2775		3300		
120kW、130kW series	1890		1815		2400		

Note:

- ■1.If the unit is installed on the ground, concrete platform need appropriate height (around 150-200mm) above foundation; if the unit is installed on the top of the building, the concrete platform is no need to be added.
- ■2. The rubber pad(more than 20mm) need to be placed between the unit and platform.
- ■3、30kW series units need to be fixed by M10 anchoring bolts, other series units need to be fixed by M14 anchor bolts.

SCHEMATIC





PROJECTS













Reimagine your solution



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* Design and specifications are subject to change without notice. Pictures and diagrams are for reference only and are subject to change without notice.