AWSW SERIES SCREW WATER-COOLED CHILLER

AirWellTech
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Product Overview

The AWSW Series Screw Water-Cooled Chillers are high-efficiency and energy-saving central air conditioning units. The units consist of high-performance screw compressors, shell-and-tube heat exchangers, electronic expansion valves, as well as Siemens intelligent control systems and other key components. Featuring a streamlined system design, the units deliver outstanding reliability.



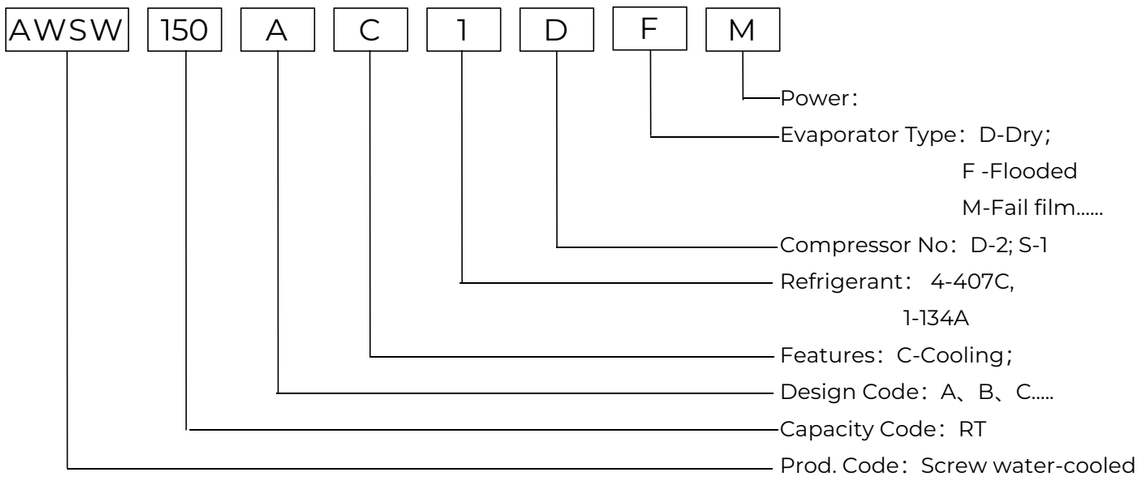
Features

- The advantages including large cooling capacity per single unit, compact structure, small floor space, high energy efficiency and low operating costs.
- It is equipped with screw compressors from world-renowned brands, enabling efficient operation under both full and partial load conditions.
- Adopting high-efficiency heat exchange tube design, it effectively improves the unit's energy efficiency ratio (EER).
- The dual-compressor system adopts independent refrigerant circuits. The two circuits can serve as backups for each other under partial load, enhancing overall unit reliability.

Application

Widely applied in comfort air conditioning and process cooling scenarios, including large commercial office buildings, hotels, cinemas, shopping malls, schools, as well as chemical, nuclear power, food and beverage industries.

Model description



Specifications

Model AWSW***...			100	145	200	250	285	340	400	455
Nominal cooling capacity	KW		355	501	698	881	1001	1194	1397	1599
	x10³Kcal/h		305	430	602	756	862	1028	1201	1376
	USRT		101	142	199	250	285	340	397	455
Nominal Power	KW		68	94	127	161	188	223	255	295
Nominal current	A		125.0	172.4	233.0	293.9	344.8	408.8	465.9	543.4
Max. operating current	A		175.0	241.3	326.1	411.6	508.7	603.2	687.4	760.8
Power supply			380V/3N~/50Hz							
Capacity control			25%~100%				12.5%~100%			
Compressor	Type		Semi-closed screw compressor							
	Start-up method		Y - Δ							
	Qty	Unit	1	1	1	1	2	2	2	2
Condenser	Type		Water cooled shell and tube							
	water flow	m³/h	72.5	102.0	141.5	178.5	203.9	243.0	283.1	324.7
	Resistance	KPa	65	68	75	78	73	73	69	71
	Connection Size		DN125	DN150	DN150	DN200	DN200	DN200	DN250	DN250
Evaporator	Type		Water cooled shell and tube							
	water flow	m³/h	60.8	85.8	119.7	151.0	171.6	204.7	239.4	274.1
	Resistance	KPa	58	62	68	70	82	80	76	80
	Connection Size		DN125	DN125	DN150	DN200	DN200	DN200	DN200	DN250
Dimension	Length	mm	3600		4500		4850		5100	
	Width	mm	1300		1750		2000		2000	
	Hight	mm	1800		2100		2000		2250	
Weight	Net	Kg	2700	3520	3880	4630	5730	6590	7500	8170
	Run	Kg	2916	3802	4190	5000	6168	7290	8100	8780

Note:

- Nominal working condition for cooling: inlet/outlet water temperature(evaporator):12/7℃, inlet/outlet water temperature(condenser):30/35℃;
- The evaporator water side fouling coefficient is 0.018㎡·℃/kW ; while condenser water side fouling coefficient is 0.044 ㎡ ·℃/kW.
- Power supply: 380V/3Ph/50Hz, Allowable fluctuation of voltage±10%, standard start-up way is Y-△.
- The water pressure drop of evaporator and condenser does not include any external pipes and parts resistance.
- The dimension and weight data in the table is just for reference, if you need the detailed dimension, please contact with the company.