

## Technical Parameters

Item		Unit	1612 Series								
Compressor	Model		SRM-1612MS	SRM-1612LS		SRM-1612LL					
	Theoretical displacement at low pressure stage	m³/h	544	652		652					
	Theoretical displacement at high pressure stage	m³/h	215	215		310					
	Adjustable range		Stepless energy regulation: 10~100%								
Refrigerant	Type		R717	R22	R507A	R717	R22	R507A	R717	R22	R507A
Refrigeration capacity	Low temperature working condition	kW	107	126	143	128	152	171	133	153	174
Motor	Low temperature working condition	kW	90	90	110	110	110	132	110	110	132
	Power supply		3P/ 380V/ 50Hz								
	Rated rotation speed	r/min	2960								
	Steering		It runs anticlockwise when facing the motor shaft.								
Oil pump	Model		GG4195		GG4195		GG4195				
	Motor power	kW	0.75		0.75		0.75				

Item		Unit	2016 Series								
Compressor	Model		SRM-2016MS	SRM-2016LS		SRM-2016LL					
	Theoretical displacement at low pressure stage	m³/h	1100	1270		1270					
	Theoretical displacement at high pressure stage	m³/h	435	435		652					
	Adjustable range		Stepless energy regulation: 10~100%								
Refrigerant	Type		R717	R22	R507A	R717	R22	R507A	R717	R22	R507A
Refrigeration capacity	Low temperature working condition	kW	224	266	303	259	308	349	259	314	353
Motor	Low temperature working condition	kW	160	200	200	200	200	220	200	220	250
	Power supply		380V/ 3P/ 50Hz								
	Rated rotation speed	r/min	2960								
	Steering		It runs anticlockwise when facing the motor shaft.								
Oil pump	Model		GG4195		GG4195		GG4195				
	Motor power	kW	0.75		0.75		0.75				

Item		Unit	2620 Series								
Compressor	Model		SRM-2620MS			SRM-2620LS		SRM-2620LL			
	Theoretical displacement at low pressure stage	m³/h	2075		2478		2478				
	Theoretical displacement at high pressure stage	m³/h	850		850		1270				
	Adjustable range		Stepless energy regulation: 10~100%								
Refrigerant	Type		R717	R22	R507A	R717	R22	R507A	R717	R22	R507A
Refrigeration capacity	Low temperature working condition	kW	431	522	583	515	617	676	514	612	698
Motor	Low temperature working condition	kW	315	315	355	315	355	450	355	400	500
	Power supply		380V/ 3P/ 50Hz ( Optional high voltage power supply: 6kV/10kV/ 3P/ 50Hz )								
	Rated rotation speed	r/min	2960								
	Steering		It runs anticlockwise when facing the motor shaft.								
Oil pump	Model		HJ4195			HJ4195		HJ4195			
	Motor power	kW	1.5			1.5		1.5			

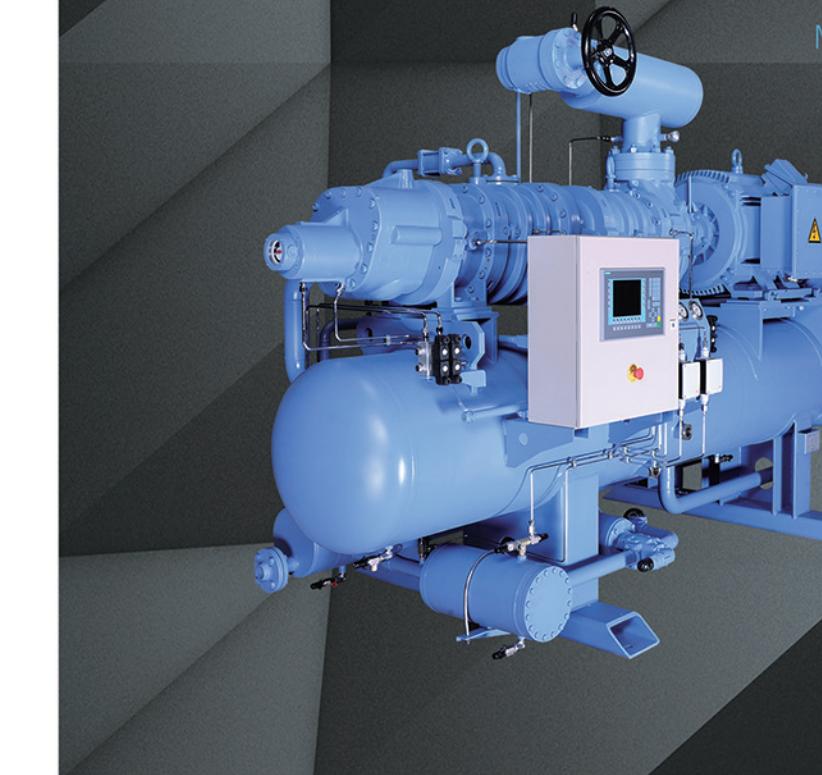
**SRM TEC**

## Open-type Compound Two-stage Refrigeration Screw Compressor Unit



Focus on screw technology  
for one hundred years

More than 3 million screw compressors all over the world  
are technologically licensed by SRM



Item		Unit	3426 Series								
Compressor	Model		SRM-3426MS			SRM-3426LS		SRM-3426LL			
	Theoretical displacement at low pressure stage	m³/h	4280		5084		5084				
	Theoretical displacement at high pressure stage	m³/h	1659		1659		2478				
	Adjustable range		Stepless energy regulation: 10~100%								
Refrigerant	Type		R717	R22	R507A	R717	R22	R507A	R717	R22	R507A
Refrigeration capacity	Low temperature working condition	kW	684	860	1010	802	999	1170	804	1018	1176
Motor	Low temperature working condition	kW	560	630	800	630	710	900	710	800	1000
	Power supply		High voltage power supply: 6kV/10kV/ 3P/ 50Hz								
	Rated rotation speed	r/min	2960								
	Steering		It runs anticlockwise when facing the motor shaft.								
Oil pump	Model		HJ4195			HJ4195		HJ4195			
	Motor power	kW	1.5			1.5		1.5			

**SRM TEC**

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## Unit Application

SRMTEC open-type compound two-stage screw compressor unit covers 12 models in 4 series, with displacement of 544~5,084 m<sup>3</sup>/h. The compound two-stage compressor unit applies to the condition of large pressure ratio in particular. The unit is equipped with: compressor, open-type motor, control center, oil separator, intercooler, oil cooler, large-capacity filter, pre-lubricating oil pump, automatic components, etc..

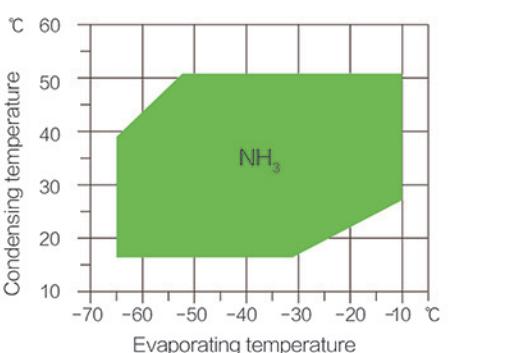
## Applicable refrigerants

The unit is applicable to various natural refrigerants and environmentally-friendly media such as R717, R507A, R22, R404A, R134a and R407C.

## Working conditions

Item	Range
Evaporating temperature (°C)	-65~-10
Displacement temperature (°C)	≤110
Oil supply temperature (°C)	40~60

## Applicable temperature range



## Nominal condition

Working condition of low temperature: -40°C/ 35°C

## Applications

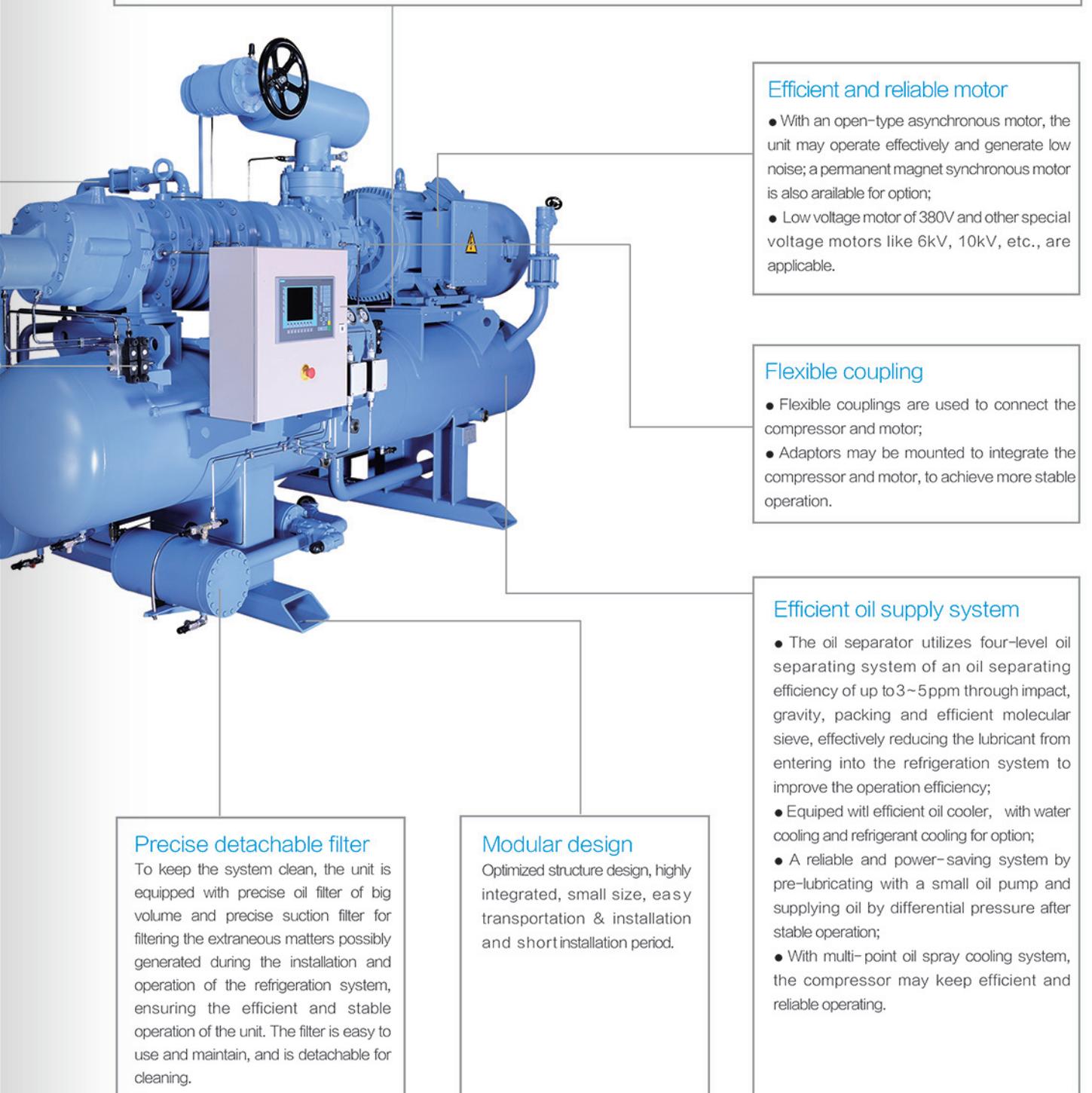
- Food industry  
Systems for dumpling, rice dumpling, pasta, fish ball, cooked food, margarine, etc.;
- Fishing industry  
Systems for fish, shrimp, shellfish, etc.;
- Dairy industry  
Cold drying;
- Cold drink industry  
Quick-freezing of coffee and ice cream;
- Butchery and processing industry  
Quick-freezing and cold storage of chicken, duck, pork, beef, lamb, etc.;
- Cryogenic storage and logistics  
Large/medium/small cold storage, ultra low temperature cold storage, fresh keeping house and constant temperature storage of chemicals;
- Chemical and pharmaceutical industry  
Temperature control in chemical process, freeze drying of medicine and temperature control in pharmaceutical process.

## Intermediate cooler

- The unit is equipped with intermediate cooler to make the high pressure liquid from the condenser achieve relatively large overcooling degree and improve the system's COP.

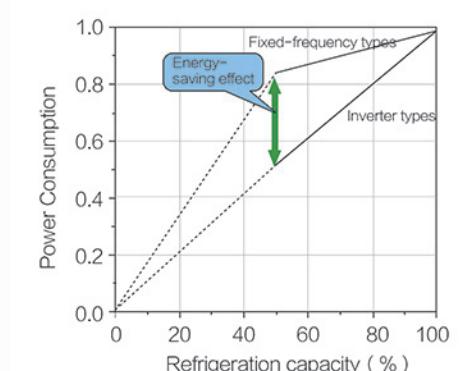
## Advanced control center

- User-friendly interface, startup with "one-push" button, easy operation and intelligent control;
- Real-time monitoring of the unit, touch panel capable of displaying system pressure, energy regulation load position, run time, operation mode, operating condition, etc. and capable of storing historical information;
- The center is equipped with a preventive safety device system which allows unattended operation to be safe and reliable;
- Automatic energy regulation allows the unit to operate effectively under different working conditions;
- Automatic management of oil temperature limits the oil temperature in a certain range, ensuring the efficient and stable operation of the unit;
- Automatic control of pressure ensuring the exhaust pressure, suction pressure, etc. are within the setting ranges;
- With vector frequency conversion control, the unit is capable of adjusting the rotational speed according to the conditions and reasonably distribute motor rotational torque, allowing energy-saving efficient operation and low cost;
- Adopting remote operation, local operation and other operation modes are available for the system to turn on and turn off the equipment.



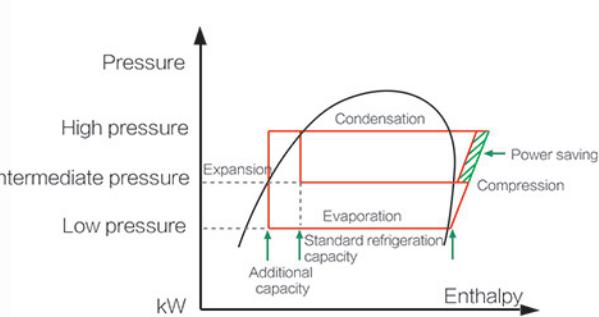
## Energy-saving Analysis

### Frequency conversion control

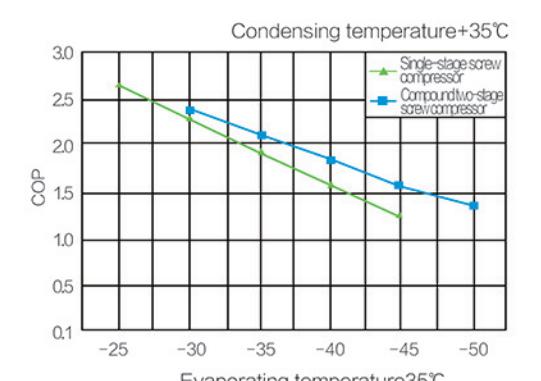


Vector frequency control is applied to reasonably distribute motor rotational torque to improve energy efficiency and save up to 38 % energy under some load conditions.

### Two-stage compression

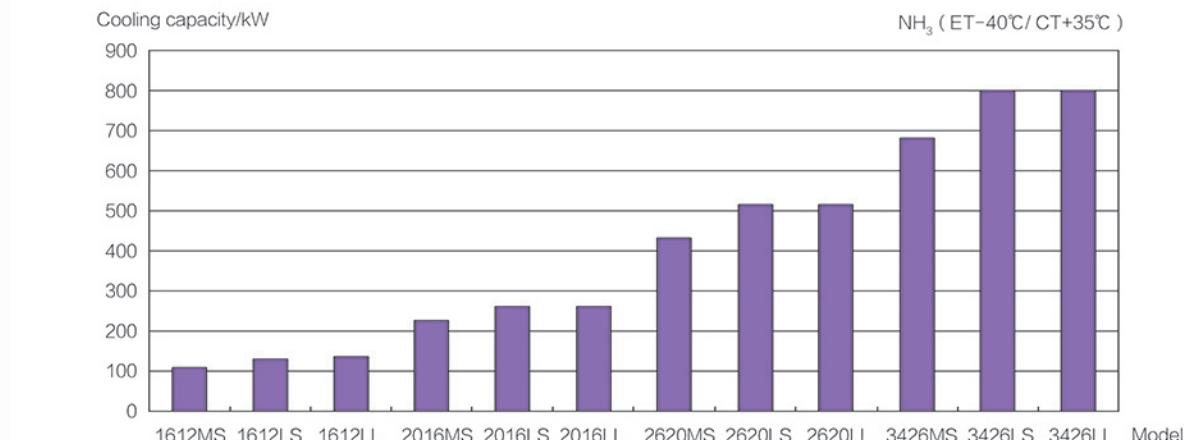


Under high compression ratio, two-stage compression makes it possible to reduce power consumption, improve system COP, and obtain lower evaporating temperature.



Compared with single-stage compressor, the compound two-stage screw compressor is more advantageous in the energy efficiency under low temperature conditions, and reducing the operation cost.

## Unit Refrigeration Capacity



Notes: Refrigeration capacity at the rotational speed of 2,960 rpm and suction superheat of 5 °C, and with an intercooler.