SRMTEC

Open-type Two-stage Compound
Refrigeration Screw Compressor Package

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SRMTEC Open-type Two- stage Compound Screw Compressor Package Features

Fully automatic control, excellent energy efficiency performance, reliable and safe design, wide temperature range and highly integrated design.

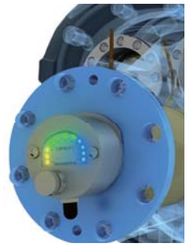
Flexible coupling

Original oil injection system

Intelligent control panel

Best Forged Steel Rotor, "I" Profile With Optimal Teeth Ratio Of 5+7

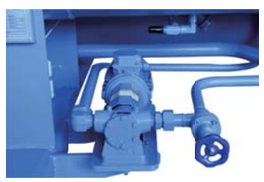
High-strength nodular cast iron housing



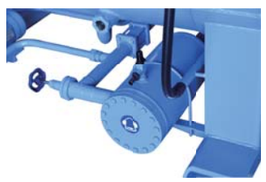
10%~100%
stepless capacity control

Efficient refrigeration compressor

Vi (Optional)



Pre-lubrication oil pump



Large-capacity oil filter

Intelligent control center

Efficient heat-exchanger

Super wear-resistance shaft seal

High accuracy, super wear-resistant
Roller bearing

Package Features

Advanced Intelligent Control Center

- User Friendly interface, one-botton startup, easy operation and intelligent control;
- Real-time package monitoring, with touch screen capable of indicating real-time system pressure, energy adjustment and loading, running time, operation mode and running status, etc., as well as recording historical data;
- Equipped with preventive security protection system, it’s safe under unattended operation;
- Automatic capacity control allows the package to run efficiently in different working conditions;
- Automatic oil temperature control ensures the efficiency in a certain range and stable operation of the package;
- Automatically control pressure to keep discharge pressure and suction pressure of the package in the specified range;
- The package adopts vector inverter control to automatically control speed in accordance with the working conditions, allocate motor rotational torque appropriately to run efficiently and save energy;
- The system can be started and stopped by remote and local controls, also can be real-time linked to monitoring center by reserved bus protocol.

Excellent energy-efficiency performance

- The package is equipped with international leading SRMTEC open-type screw compressor, with patented “i” type profile for screw rotor, high-efficient and energy-saving;
- Highly sensitive capacity control devicespackage for 10%-100% stepless capacity control allows the package to run efficiently in different working conditions;
- Adopting small oil pump for pre-lubrication and then pressure differential for oil supply, to save power and energy;
- Through compressor economizer, absorb sensible heat from high pressure liquid cooling of intercooler to make high pressure liquid from condenser to gain larger re-cooling degree, to improve COP of the system;
- Advanced energy-saving technology allows the package to have quite high running efficiency and excellent IPLV (Integrated Part Load Value) performance.

Safe And Reliable Design

- High standard safety designs keep the package running safely, like high pressure-resistant compressor design, high standard pressure vessel design, safety valve design and preventive safety protection design, etc..
- SSRMTEC compressors fully manufactured according to European industrial product standards and GB/T19410 design standards, to ensure stable and reliable running all day long, with design pressure up to 2.8 MPa.

Wide Applicable Temperature Range

- Two-stage screw compressor package inlet temperature range is -65~-10℃, it has incomparable high efficiency under the larger compression ratio working conditions.

Highly Integrated Design

- Optimal structural design, high integration, small occupation, convenient transportation and installation, short engineering installation period.

Efficient Oil Separation System

- Adopt 4-stage oil separation system， by hitting, gravity, packing, efficient molecular sieve to increase oil separation efficiency to 3-5 ppm, effectively reducing lubrication oil entering into refrigeration system and improving system running efficiency.

Precise and Detachable Filter

- To ensure the cleanness of system, the package is equipped with precise large-capacity oil filter, suction filter to stop foreign matters which might generate during installation, to keep the package running efficiently and stably. Filters are easy to use and can be dismounted for cleaning.

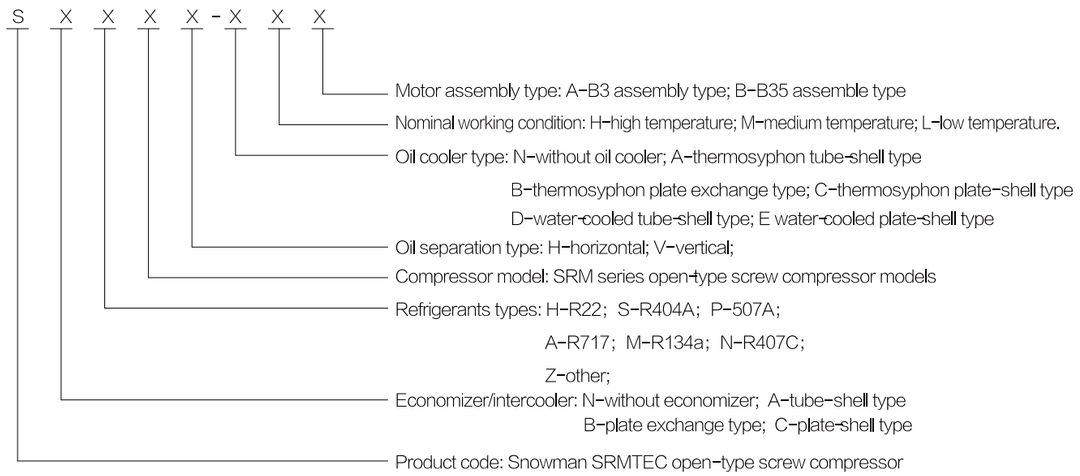
Anti-reverse Flow Design

- In order to prevent the compressor from rotating in reserve during downtime, the package is equipped with check valves on discharge side and suction side. The check valve on discharge side locates on the discharge port of oil separator, and it can also prevent the liquid refrigerant of evaporating condenser from flowing back to oil separator during shut down.

Stable Product Quality

- Hundred years’ technology of SRM has been verified though global applications;
- Full performance test of the package before delivery ensures product stability.

Package Model Naming Rules



Package working condition

Evaporating temperature：-65℃~-10℃

Discharge temperature：≤110℃

Oil supply temperature：30℃~65℃

Package nominal working condition instructions

Low temperature working conditions：-40℃/35℃

Design specifications

The design and manufacture of the package conform to the following standards and specifications;

GB9237-2001 Safety Requirements of Mechanical Refrigeration System for Refrigeration and Heating;

TSGR004-2009 Regulations of Fixed Pressure Vessel Safety and Technical Supervision ;

GB/T19410 Screw Refrigeration Compressor;

GB150 Pressure Vessel;

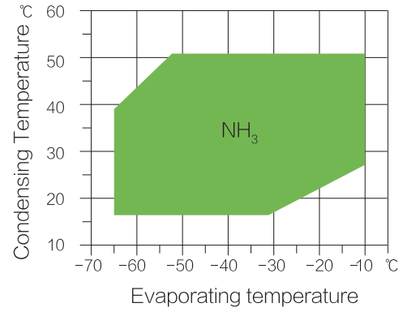
GB/T151 Tube-shell Heat-exchanger;

97/23/EC Pressure Equipment Directive;

GB50054-2011 Code for Design of Low Voltage Electrical Installations;

GB50055-2011 General Electric Equipment Distribution Design Specifications.

SRMTEC Open- type Two-stage Compound Screw Compressor Application Range



Open-type two-stage screw compressor application range

Application Fields

- Food industry

  Systems for dumplings, rice dumplings, noodles, fish balls, food material, margarine, etc.;

- Seafood

  Systems for fish, shrimp, oysters, etc.;

- Dairy industry

  Low temperature drying

- Cold drinks industry

  Coffee and ice cream freezing

- Slaughter processing industry

  Freezing and cold storage for chicken, duck, pork, beef, lamb and others;

- Low temperature cold storage logistics

  Large, medium and small cold storage, ultra-low temperature cold storage, fresh-keeping storehouse, chemicals constant temperature storehouse;

- Chemical pharmaceutical industry

  Chemical process temperature control, pharmaceutical freeze-drying, pharmaceutical process temperature control, etc..

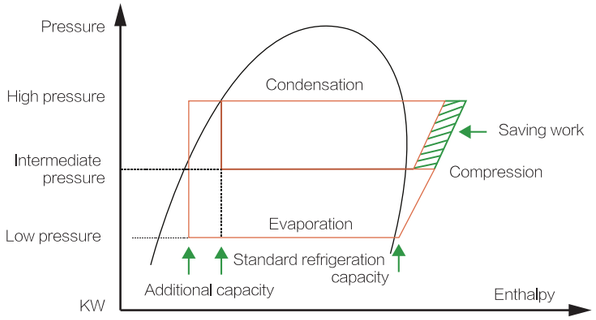
Our Advantages

Under big pressure ratio working conditions, two-stage screw compressor performance is better than single stage screw compressor.

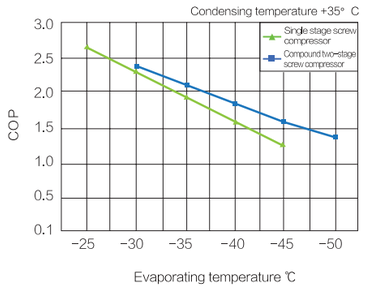
- Each stage of refrigeration cycle has small pressure ratio, less internal leakage, high volumetric efficiency and large refrigeration capacity;
- High adiabatic efficiency, less motor power, energy saving;
- Adopt intercooler to improve refrigeration capacity and system COP;
- Small pressure ratio, low rotor bearing force, long service time.

Compared to two machine two-stage compression system, our compound two-stage has advantages below:

- Compact structure, small occupation, easy operation;
- Simple oil system;
- Refrigeration cycle usually is two-stage compression refrigeration cycle, small intercooler size, easy for integration of the package.
- Only need one motor, and the rating power usually is smaller than the sum of two motors in the two-machine-two-stage compression system.



Under big pressure ratio condition, adopt double-stage compression can dramatically reduce power consumption and improve system COP as well as gain lower evaporating temperature. Pressure ratio >12 shall adopt double stage compression.



Under low temperature working conditions, two-stage compressor has higher energy efficiency and lower running cost than single stage compressor. Taking into account of every factor, we recommend to use Two-stage Compressor Package when the working temperature is below -35° C.

Compressor Design Features

Rotor

- SRM patent protected "I" profile, optimal 5+7 tooth mesh combo, high efficiency, low vibration, running stably;
- Use high quality forged steel material, high wear resistance, high strength, strong liquid impact resistance, applicable to all kinds of refrigerants;
- Big shaft dimension, high torque.

Housing

- Adopt ductile cast iron material for high strength housing design, working pressure can be up to 2.8MPa;
- Can change the economizer port according to real conditions.

Bearing

Precision high wear resistant composition rolling bearings can apply to high density refrigerant load; the design lifetime is 10 0000 hours.

Shaft seal

- Innovative shaft seal structure, even load, stable running, low wear, high sealing, prevent leakage effectively;
- Silicon carbide is used for wear resistant cover and can be suitable for speed up to10000rpm.

Vi Optional

- Select the optimal Vi value and realize efficient operation;
- two-stage compressor has a fixed Vi. Vi value can be set according to actual working conditions. It can be set before delivery or on site.

Capacity control

- 10%-100% stepless capacity control and intelligent controller with accurate positioning;
- Capacity control structure is highly sensitive, may achieve increasing or decreasing in the 30 s;
- When without electricity, the unloading control can be achieved through the design of slide valve;
- Equipped with the exclusive capacity control cylinder explosion protection device.

Multi-points oil injection cooling

Multi-points oil injection cooling can ensure compressor's efficient and stable running.

Optimal flow channel design

With an optimal flow channel design, the gas flow is smooth and the power consumption is small. The whole package's temperature is evenly distributed and safe.

Sealing for whole package

- Adopt high-class O-ring, super sealing, safety with no leakage;
- Highly precise positioning, the compressor can run smoothly.

Motor Features

- The package adopts open-type asynchronous motor. The motor design is safe and reliable, with high efficiency, low vibration and low noise.
- The package is equipped with 380V low voltage motor, and it can also select 6 KV, 10kv or other motors;
- For start-up methods, it can select star-delta start-up, soft start-up or variable frequency start-up(high pressure motor can select direct start-up);
- Assembly type can be B3 or b35;
- Customer can select different motors according to actual working environment.

Heat Exchanger Features

- Equipped with intercooler to make high pressure liquid from condenser gain a higher subcooling and improve system COP;
- The intercooler type can be shell-tube, plate exchange or plate-shell;
- Shell-tube heat exchanger tube box adopts arc welding, safe without leakage.

Oil Supply System Features

Oil Separator

- The package is equipped with efficient horizontal oil separator(it can also use vertical). Adopt 4-stage oil separation system. Oil separation by hitting, gravity, packing, efficient molecular sieve ensures oil separation efficiency to 3-5 ppm;
- Oil separator is equipped with: oil heater, oil sight glass and safety valve etc.

Oil Cooler

- PackageThe package is equipped with high efficiency shell-tube type oil cooler, oil cooling mode can be either water cooling or working medium cooling.
- Shell-tube oil cooler tube box adopts arc welding, safety without leakage;
- Oil cooler can be plate exchange type(working medium cooling), plate-shell type(water cooling and working medium cooling).

Oil Pump

- The package adopts small oil pump for pre-lubrication, no oil pump is needed for oil supply when the operation is stable, which ensures reliablity and power-saving;
- Oil pump is rotor pump, running efficiently, compact structure, less wear part and long lifetime;
- All pressure oil supply can also be used to achieve wider application requirements.

Lubrication Oil

- We will recommend the suitable lubricants according to the type of refrigerant and the temperature condition, and at the same time the user can purchase lubricant according to the specification.

Control center features

System adopts the international famous brand PLC as control core, equipped with 64 k true color touch screen, the whole operation process can be controlled intelligently, and historical data can be saved.

Easy Operation

Friendly interactive interface, multiple languages to choose. One-button operation mode simplifies the boot process.

Dynamic tracking

Real-time monitor, touch screen can display the information of the system pressure, temperature, operation time, operation mode and the running status.
It can automatically record all fault messagespackage, the fault information includes the detailed description of the abnormal situation and the corresponding solution, and it helps the maintenance staff to do rapid diagnosis and troubleshooting.

Safety protection

Equipped with preventive safety protection system, unattended operation is also safe.

Hierarchical password access

It provides the operator with a hierarchical security access password; in case non-professionals input incorrect parameters. There are 3 levels of access, and each level has its own password.

Inverter control

Frequency conversion control can be used, it can rationally distribute motor rotational torque, and enhance the package efficiency.

Various communication modes

The system adopts remote/local control mode to start or stop; it can also be linked to the monitoring center by reserved bus protocol in real time.

Other Options

Refrigerants

Suitablef for R717、R507A、R22、R404A、R134a、R407C etc.

Double oil filter

Can adopt double oil filters, one is for spare, no need to shut down for maintenance.

All valves

It can be equipped with the tee-junction thermostatic control valves to precisely control the oil temperature. Other valves are also available.

Permanent magnet synchronous motor

Permanent magnet synchronous motor for unit is optional.

Design code

ASME pressure vessel code

★ Unit can be customized according to the special requirements of users.

1612 Series Open-type Two-stage Compressor Package Technical Parameters

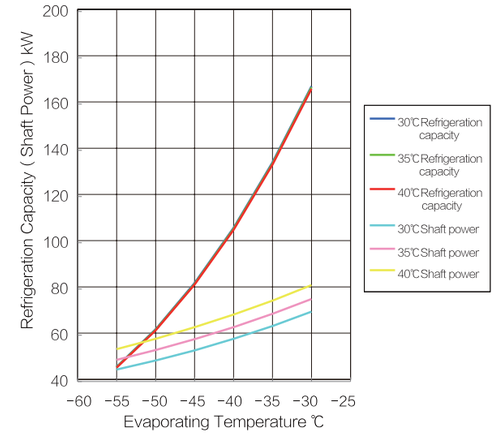
Item			Unit	1612 Series								
Compressor	Model			SRM-1612MS			SRM-1612LS			SRM-1612LL		
	Low Pressure Theoretical Displacement		m^3/h	544			652			652		
	High Pressure Theoretical Displacement		m^3/h	215			215			310		
	Capacity Control Range			Step-Less Capacity Control: 10~100%								
Refrigeran	Type			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								
	R.P.M		r/min	2960								
	Rotational Direction			Face with motor shaft side: anti-clockwise								
Oil Pump	Model			GG4195			GG4195			GG4195		
	Motor Power		kW	0.75			0.75			0.75		
Refrigeration Oil	Grade			SUNISO4GS/3GS/SL-68S								
	Standard			Gb/t16630《Refrigeration Oil》								
	Charge Volume		kg	180			180			180		
External Connecting Pipe Size	Suction Pipe		mm	DN125			DN125			DN125		
	Discharge Pipe		mm	DN50			DN50			DN50		
	Economizer Liquid In/and Pipe		mm	DN50			DN50			DN50		
	Safety Valve Pipe		mm	DN32			DN32			DN32		
	Cooling Method	Working Medium Cooled: Liquid Inlet Tube	mm	DN40	DN40	DN32	DN40	DN40	DN32	DN40	DN40	DN32
		Working Medium Cooled: Gas Outlet Pipe	mm	DN65	DN65	DN50	DN65	DN65	DN50	DN65	DN65	DN50
		Working Medium Cooled: Working Medium Consumption Amount	kg/h	250	933	570	250	933	570	250	933	570
		Water Cooled: Water Inlet Pipe	mm	DN50	DN50	DN40	DN50	DN50	DN40	DN50	DN50	DN40
		Water Cooled: Water Outlet Pipe	mm	DN50	DN50	DN40	DN50	DN50	DN40	DN50	DN50	DN40
		Water Cooled: Cooling Water Amount	m^3/h	15	15	12	15	15	12	15	15	12
Overall Dimension	L×w×h		mm	3350×1500×2100			3350×1500×2100			3350×1500×2100		
Package Weight	Net Weight		kg	3200			3500			3800		
	Operation Weight		kg	4000			4300			4600		

Note:1. Motor power equipped for the package shall be selected according to shaft power under actual running conditions, shaft power parameters shall be obtained according to compressor selection software;
2. Due to the actual operating conditions of the unit, the size and the weight of the unit may be different. The specific parameters shall refer to the actual design;
3. Oil cooling method can be either water cooling or working medium cooling, Snowman recommends to use water cooling.

1612MS Series Two-stage Compressor Package Performance PARAMETERS and Curve

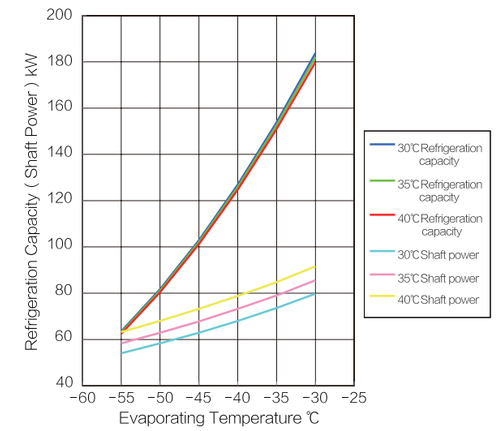
Tc / Te	SAA1612MS-HA (R717) With Intercooler					
	Refrigeration Capacity			Shaft Power		
	+30	+35	+40	+30	+35	+40
-55	46.4	46.2	46.0	45.2	49.4	54.0
-50	62.6	62.4	62.1	49.1	53.6	58.5
-45	82.6	82.2	81.9	53.5	58.3	63.5
-40	106.5	106.1	105.6	58.5	63.5	69.0
-35	134.8	134.3	133.8	64.0	69.3	75.0
-30	167.7	167.3	166.6	70.2	75.7	81.7

SAA1612MS-HA (R717, Condensing Temperature: 30/35/40℃)



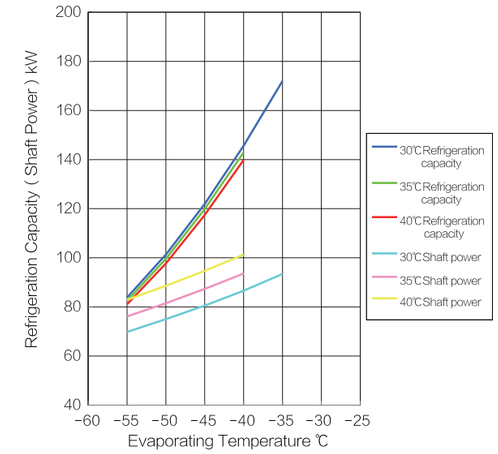
Tc / Te	SAH1612MS-HA (R22) With Intercooler					
	Refrigeration Capacity			Shaft Power		
	+30	+35	+40	+30	+35	+40
-55	63.5	63.0	62.4	54.0	58.3	63.2
-50	81.7	81.1	80.4	58.3	62.9	68.0
-45	102.9	102.1	101.2	62.9	67.8	73.2
-40	126.9	125.9	124.7	68.0	73.2	78.8
-35	153.9	152.6	151.0	73.6	79.0	84.8
-30	183.8	182.0	179.9	79.8	85.6	91.6

SAH1612MS-HA (R22, Condensing Temperature: 30/35/40℃)



Tc / Te	SAP1612MS-HA (R507A) With Intercooler					
	Refrigeration Capacity			Shaft Power		
	+30	+35	+40	+30	+35	+40
-55	83.8	82.5	81.1	69.8	76.1	82.9
-50	101.3	99.6	97.7	75.0	81.5	88.6
-45	121.9	119.8	117.4	80.5	87.3	94.7
-40	145.6	142.9	139.8	86.6	93.6	101.3
-35	172.0	-	-	93.4	-	-
-30	-	-	-	-	-	-

SAP1612MS-HA (R507A, Condensing Temperature: 30/35/40℃)

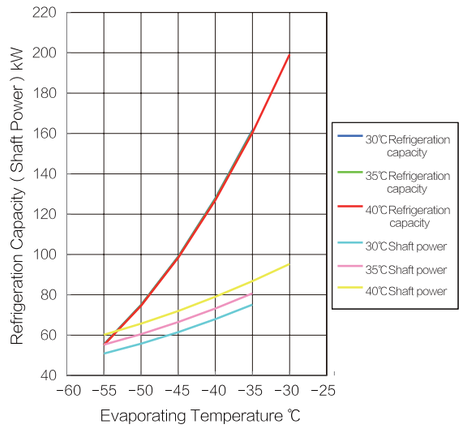


Note:1. Rotational speed 2960rpm; 2. R717 suction superheat 5℃, R22 and R 507 suction superheat 10℃;
3. Tc—condensing temperature ℃, Te— evaporating temperature ℃; 4.Refrigeration capacity (shaft power) , unit KW.

1612LS Series Two-stage Compressor Package Performance PARAMETERS and Curve

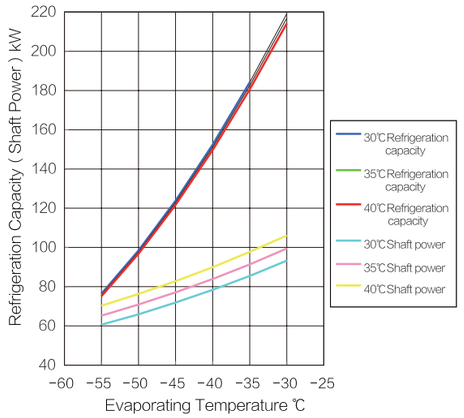
SAA1612LS-HA (R717, Condensing Temperature: 30/35/40℃)

Tc / Te	SAA1612LS-HA (R717)					
	With Intercooler					
	Refrigeration Capacity			Shaft Power		
	+30	+35	+40	+30	+35	+40
-55	55.4	55.2	55.1	50.9	55.3	60.2
-50	75.0	74.8	74.6	55.8	60.5	65.7
-45	99.0	98.7	98.4	61.5	66.5	72.0
-40	127.8	127.4	126.9	67.9	73.2	79.0
-35	161.6	161.0	160.4	75.1	80.7	86.8
-30	-	-	199.2	-	-	95.3



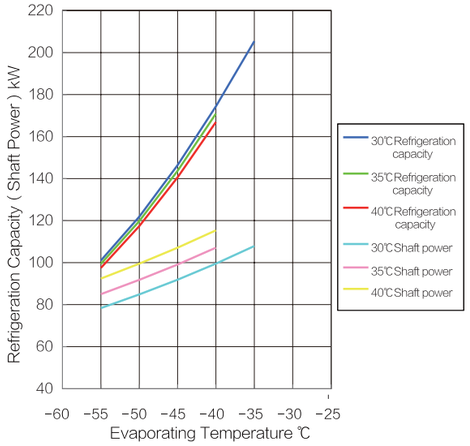
SAH1612LS-HA (R22, Condensing Temperature: 30/35/40℃)

Tc / Te	SAH1612LS-HA (R22)					
	With Intercooler					
	Refrigeration Capacity			Shaft Power		
	+30	+35	+40	+30	+35	+40
-55	76.4	75.7	75.1	60.6	65.2	70.3
-50	98.4	97.6	96.8	65.9	70.9	76.3
-45	123.8	122.8	121.7	71.9	77.1	82.8
-40	152.4	151.1	149.7	78.4	83.9	89.9
-35	184.2	182.5	180.6	85.5	91.4	97.7
-30	219.1	216.9	214.2	93.3	99.5	106.1



SAP1612LS-HA (R507A, Condensing Temperature: 30/35/40℃)

Tc / Te	SAP1612LS-HA (R507A)					
	With Intercooler					
	Refrigeration Capacity			Shaft Power		
	+30	+35	+40	+30	+35	+40
-55	101.0	99.4	97.5	78.4	85.0	92.4
-50	121.9	119.8	117.4	84.9	91.8	99.5
-45	146.4	143.7	140.6	91.9	99.1	107.1
-40	174.4	170.9	166.9	99.5	107.1	115.4
-35	205.4	-	-	107.9	-	-
-30	-	-	-	-	-	-

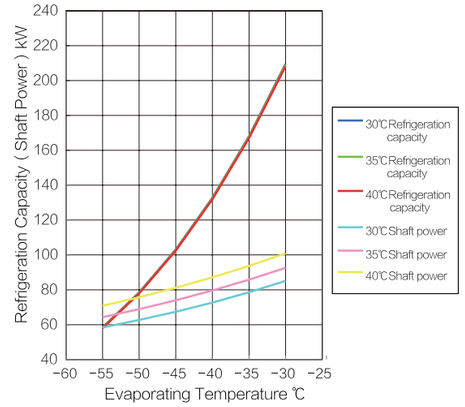


Note:1. Rotational speed 2960rpm; 2. R717 suction superheat 5℃ , R22 and R 507 suction superheat 10℃;
3. Tc—condensing temperature ℃, Te— evaporating temperature ℃; 4.Refrigeration capacity (shaft power) , unit KW.

1612LL Series Two-stage Compressor Package Performance PARAMETERS and Curve

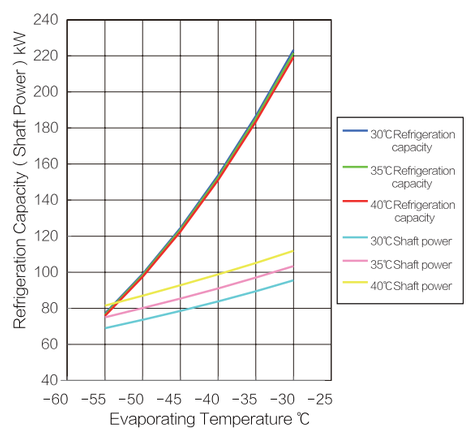
SAA1612LL-HA (R717, Condensing Temperature: 30/35/40℃)

Tc / Te	SAA1612LL-HA (R717)					
	With Intercooler					
	Refrigeration Capacity			Shaft Power		
	+30	+35	+40	+30	+35	+40
-55	58.5	58.2	58.0	58.4	64.3	70.8
-50	78.5	78.2	77.9	62.7	68.9	75.7
-45	103.1	102.7	102.4	67.4	74.0	81.2
-40	132.8	132.4	131.9	72.7	79.6	87.1
-35	168.2	167.7	167.0	78.6	85.8	93.7
-30	209.6	209.0	208.2	85.1	92.6	100.9



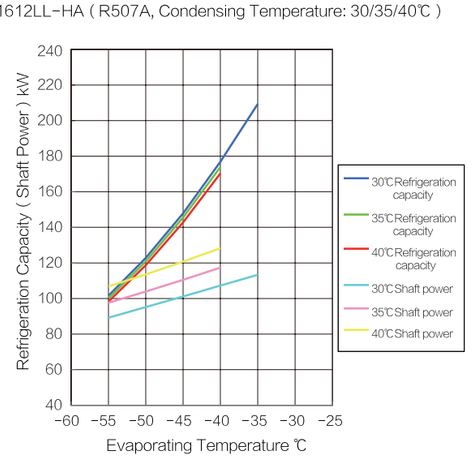
SAH1612LL-HA (R22, Condensing Temperature: 30/35/40℃)

Tc / Te	SAH1612LL-HA (R22)					
	With Intercooler					
	Refrigeration Capacity			Shaft Power		
	+30	+35	+40	+30	+35	+40
-55	77.1	76.5	75.8	68.9	75.0	81.5
-50	99.0	98.3	97.4	73.6	80.1	87.0
-45	124.5	123.6	122.5	78.5	85.4	92.8
-40	153.7	152.5	151.1	83.8	91.0	98.8
-35	186.6	185.2	183.4	89.4	97.0	105.1
-30	223.3	221.5	219.3	95.5	103.4	111.9



SAP1612LL-HA (R507A, Condensing Temperature: 30/35/40℃)

Tc / Te	SAP1612LL-HA (R507A)					
	With Intercooler					
	Refrigeration Capacity			Shaft Power		
	+30	+35	+40	+30	+35	+40
-55	101.6	100.0	98.3	89.2	97.6	106.8
-50	122.8	120.8	118.7	95.2	103.9	113.5
-45	147.9	145.5	142.8	101.2	110.5	120.7
-40	176.8	173.9	170.3	107.3	117.4	128.3
-35	209.3	-	-	113.3	-	-
-30	-	-	-	-	-	-



Note:1. Rotational speed 2960rpm; 2. R717 suction superheat 5℃ , R22 and R 507 suction superheat 10℃;
3. Tc—condensing temperature ℃, Te— evaporating temperature ℃; 4.Refrigeration capacity (shaft power) , unit KW.

2016 Series Two-stage Compound Compressor Package Technical Parameters

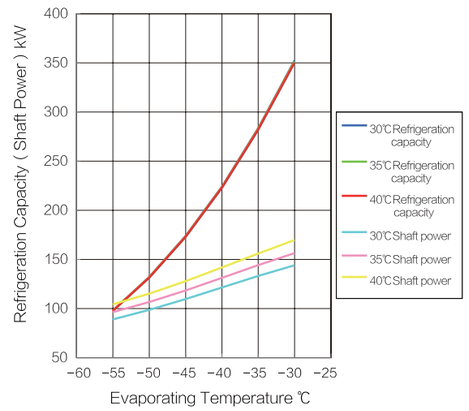
Item			Unit	2016 Series								
Compressor	Model			SRM-2016MS			SRM-2016LS			SRM-2016LL		
	Low pressure theoretical Displacement		m^3/h	1100			1270			1270		
	High pressure theoretical Displacement		m^3/h	435			435			652		
	Capacity control Range			Step-Less Capacity Control: 10~100%								
Refrigerant	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			3P、380V、50Hz								
	R.P.M		r/min	2960								
	Rotational direction			Face with motor shaft side: anti-clockwise								
Oil pump	Model			GG4195			GG4195			GG4195		
	Motor power		kW	0.75			0.75			0.75		
Refrigeration Oil	Grade			SUNISO4GS/3GS/SL-68S								
	Standard			GB/T16630《Refrigeration Oil》								
	Charge volume		kg	360			360			360		
External Connecting Pipe size	Suction pipe		mm	DN150			DN150			DN150		
	Discharge pipe		mm	DN65			DN65			DN65		
	Economizer liquid in /and pipe		mm	DN50			DN50			DN50		
	Safety valve pipe		mm	DN32			DN32			DN32		
	Cooling method	Working medium Cooled: Liquid inlet Tube	mm	DN50	DN50	DN40	DN50	DN50	DN40	DN50	DN50	DN40
		Working medium Cooled: Gas outlet Pipe	mm	DN80	DN80	DN65	DN80	DN80	DN65	DN80	DN80	DN65
		Working medium Cooled: Working medium Consumption Amount	kg/h	530	2330	1642	530	2330	1642	530	2330	1642
		Water cooled: Water inlet Pipe	mm	DN80	DN80	DN65	DN80	DN80	DN65	DN80	DN80	DN65
		Water cooled: Water outlet Pipe	mm	DN80	DN80	DN65	DN80	DN80	DN65	DN80	DN80	DN65
		Water cooled: Cooling water Amount	m^3/h	32	32	24	32	32	24	32	32	24
Overall Dimension	L×w×h		mm	3900×1650×2450			3900×1650×2450			3900×1650×2450		
Package Weight	Net weight		kg	5000			5500			6000		
	Operation weight		kg	6000			6500			7000		

Note:1. Motor power equipped for the package shall be selected according to shaft power under actual running conditions, shaft power parameters shall be obtained according to compressor selection software;
2. Due to the actual operating conditions of the unit, the size and the weight of the unit may be different. The specific parameters shall refer to the actual design;
3. Oil cooling method can be either water cooling or working medium cooling, Snowman recommends to use water cooling.

2016MS Series Two-stage Compressor Package Performance PARAMETERS and Curve

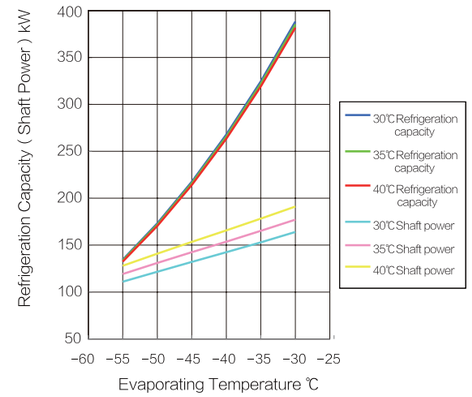
Tc \ Te	SAA2016MS-HA (R717) With Intercooler					
	Refrigeration Capacity			Shaft Power		
	+30	+35	+40	+30	+35	+40
-55	98.2	97.9	97.5	89.0	96.3	104.2
-50	132.2	131.8	131.3	98.6	106.6	115.1
-45	173.9	173.4	172.8	109.7	118.4	127.8
-40	224.1	223.4	222.7	121.4	131.2	141.7
-35	283.5	282.6	281.8	133.1	144.1	155.9
-30	352.4	351.4	350.3	144.0	156.4	169.7

SAA2016MS-HA (R717, Condensing Temperature: 30/35/40℃)



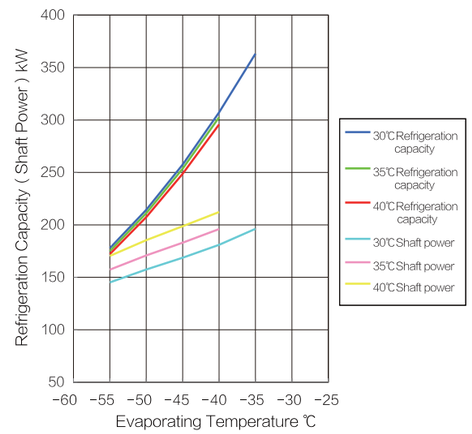
Tc \ Te	SAH2016MS-HA (R22) With Intercooler					
	Refrigeration Capacity			Shaft Power		
	+30	+35	+40	+30	+35	+40
-55	134.6	133.7	132.5	111.0	119.2	128.0
-50	173.2	171.9	170.4	121.7	131.0	140.9
-45	217.5	215.9	214.0	132.1	142.4	153.4
-40	267.8	265.7	263.4	142.4	153.7	165.7
-35	324.5	321.9	319.0	152.9	165.2	178.2
-30	388.2	385.1	381.7	164.0	177.2	191.1

SAH2016MS-HA (R22, Condensing Temperature: 30/35/40℃)



Tc \ Te	SAP2016MS-HA (R507A) With Intercooler					
	Refrigeration Capacity			Shaft Power		
	+30	+35	+40	+30	+35	+40
-55	177.8	175.0	172.1	145.1	157.3	170.4
-50	214.3	211.1	207.3	157.4	170.9	185.5
-45	257.5	253.7	248.8	168.7	183.1	198.8
-40	307.2	302.6	295.8	181.0	196.0	212.3
-35	363.2	-	-	196.2	-	-
-30	-	-	-	-	-	-

SAP2016MS-HA (R507A, Condensing Temperature: 30/35/40℃)

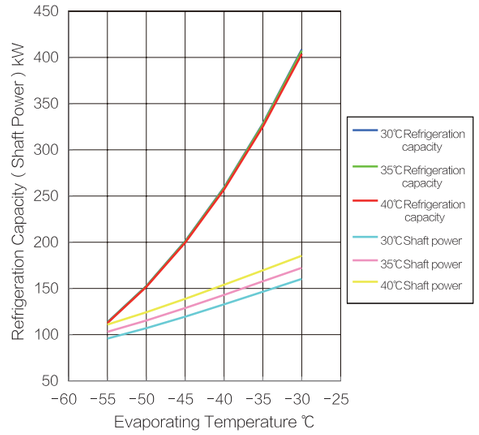


Note:1. Rotational speed 2960rpm; 2. R717 suction superheat 5℃, R22 and R 507 suction superheat 10℃;
3. Tc—condensing temperature ℃, Te— evaporating temperature ℃; 4.Refrigeration capacity (shaft power) , unit KW.

2016LS Series Two-stage Compressor Package Performance PARAMETERS and Curve

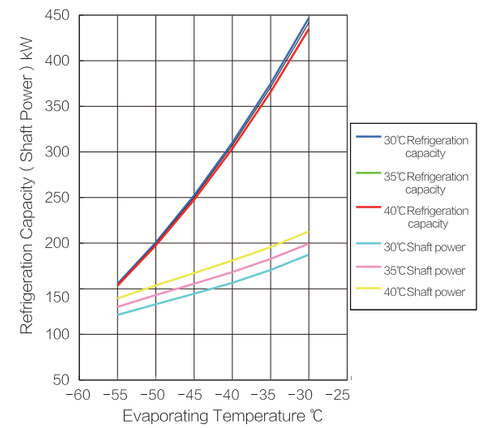
Tc / Te	SAA2016LS-HA (R717)					
	With Intercooler					
	Refrigeration Capacity			Shaft Power		
	+30	+35	+40	+30	+35	+40
-55	113.4	113.0	112.6	95.8	103.1	110.9
-50	152.7	152.3	151.7	107.1	115.4	124.3
-45	201.1	200.6	199.5	119.5	128.8	138.7
-40	259.4	258.7	257.1	132.8	143.0	154.0
-35	328.4	327.5	325.0	146.5	157.7	169.6
-30	408.7	407.3	403.8	160.3	172.4	185.4

SAA2016LS-HA (R717, Condensing Temperature: 30/35/40℃)



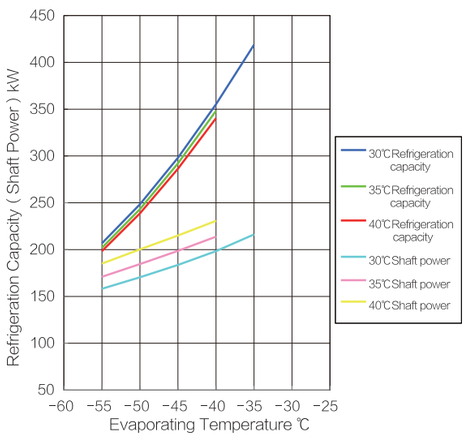
Tc / Te	SAH2016LS-HA (R22)					
	With Intercooler					
	Refrigeration Capacity			Shaft Power		
	+30	+35	+40	+30	+35	+40
-55	155.4	154.4	153.4	121.4	130.2	139.3
-50	200.7	199.2	197.5	133.1	143.2	153.7
-45	252.3	250.2	247.6	144.5	155.5	167.2
-40	310.2	307.3	303.6	156.6	168.3	180.9
-35	374.8	370.9	365.8	170.6	182.7	195.7
-30	446.8	441.7	434.9	187.4	199.5	212.9

SAH2016LS-HA (R22, Condensing Temperature: 30/35/40℃)



SAP2016LS-HA (R507A, Condensing Temperature: 30/35/40℃)

Tc / Te	SAP2016LS-HA (R507A)					
	With Intercooler					
	Refrigeration Capacity			Shaft Power		
	+30	+35	+40	+30	+35	+40
-55	206.7	202.0	198.4	158.2	170.9	185.0
-50	248.4	243.2	238.7	170.5	184.6	200.2
-45	298.1	292.1	286.4	183.6	198.6	215.1
-40	355.3	348.2	340.4	198.4	213.8	230.7
-35	418.8	-	-	216.2	-	-
-30	-	-	-	-	-	-

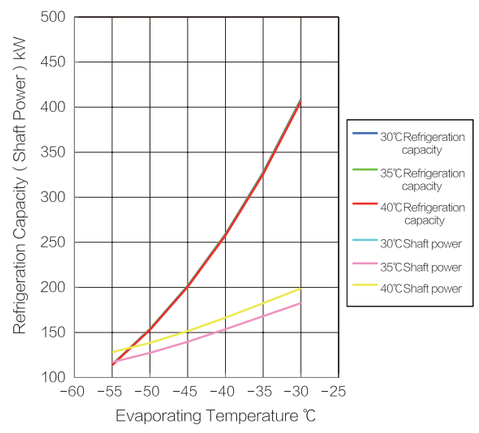


Note:1. Rotational speed 2960rpm; 2. R717 suction superheat 5℃, R22 and R 507 suction superheat 10℃;
3. Tc—condensing temperature ℃, Te— evaporating temperature ℃; 4.Refrigeration capacity (shaft power) , unit KW.

2016LL Series Two-stage Compressor Package Performance PARAMETERS and Curve

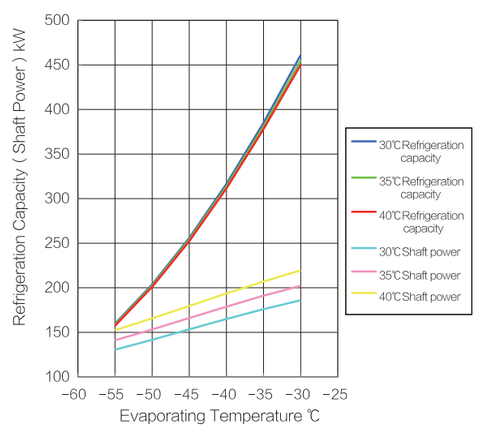
Tc / Te	SAA2016LL-HA (R717)					
	With intercooler					
	Refrigeration capacity			Shaft power		
	+30	+35	+40	+30	+35	+40
-55	114.3	114.0	113.7	106.9	117.0	128.1
-50	153.8	153.4	152.9	117.1	127.3	138.5
-45	201.7	201.1	200.5	128.9	139.7	151.5
-40	259.1	258.4	257.6	141.6	153.6	166.4
-35	327.6	326.6	325.6	154.6	168.1	182.4
-30	409.0	407.8	406.4	167.1	182.6	198.9

SAA2016LL-HA (R717, Condensing Temperature: 30/35/40℃)



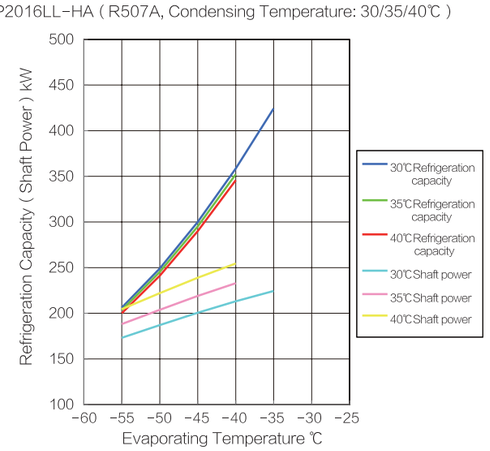
Tc / Te	SAH2016LL-HA (R22)					
	With intercooler					
	Refrigeration capacity			Shaft power		
	+30	+35	+40	+30	+35	+40
-55	159.7	158.7	157.3	130.5	141.1	152.5
-50	203.8	202.5	201.0	141.7	153.3	165.7
-45	255.9	254.1	252.4	153.4	166.1	179.6
-40	316.5	313.8	311.5	165.0	178.8	193.6
-35	385.1	381.1	377.9	176.0	191.1	207.0
-30	461.1	454.9	450.3	186.0	202.3	219.5

SAH2016LL-HA (R22, Condensing Temperature: 30/35/40℃)



SAP2016LL-HA (R507A, Condensing Temperature: 30/35/40℃)

Tc / Te	SAP2016LL-HA (R507A)					
	With intercooler					
	Refrigeration capacity			Shaft power		
	+30	+35	+40	+30	+35	+40
-55	206.2	203.4	200.0	173.1	188.2	204.5
-50	249.1	245.4	241.2	187.1	203.9	222.1
-45	300.0	295.1	290.0	200.6	219.0	238.9
-40	358.6	352.3	345.8	213.2	233.0	254.6
-35	424.4	-	-	224.4	-	-
-30	-	-	-	-	-	-



Note:1. Rotational speed 2960rpm; 2. R717 suction superheat 5℃, R22 and R 507 suction superheat 10℃;
3. Tc—condensing temperature ℃, Te— evaporating temperature ℃; 4.Refrigeration capacity (shaft power) , unit KW.

2620 Series Two-stage Compound Compressor Package Technical Parameters

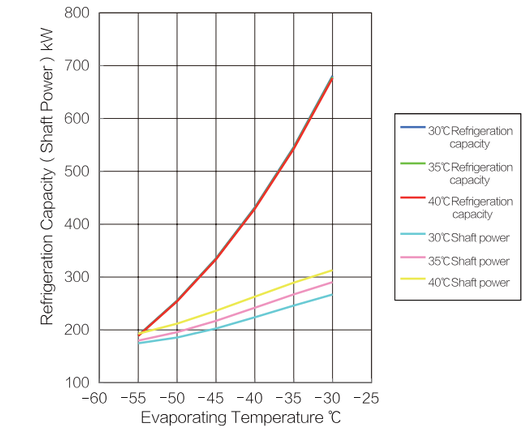
Item			Unit	2620 Series								
Compressor	Model			SRM-2620MS			SRM-2620LS			SRM-2620LL		
	Low pressure theoretical Displacement		m^3/h	2075			2478			2478		
	High pressure theoretical Displacemen		m^3/h	850			850			1270		
	Capacity control			Step-less capacity control:10~100%								
Refrigerant	Type			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			3P、380V、50Hz (Optional high voltage power system: 3P、6kV/10kV、50Hz)								
	R.P.M		r/min	2960								
	Rotational direction			Face With Motor Shaft Side: Anti-Clockwise								
Oil pump	Model			HJ4195			HJ4195			HJ4195		
	Motor power		kW	1.5			1.5			1.5		
Refrigeration Oil	Grade			SUNISO4GS/3GS/SL- 68S								
	Standard			Gb/t16630《 Refrigeration Oil》								
	Charge volume		kg	360			360			360		
External Connecting Pipe size	Suction pipe		mm	DN200			DN200			DN200		
	Discharge pipe		mm	DN80			DN80			DN80		
	Economizer liquid in /and pipe		mm	DN50			DN50			DN50		
	Safety valve pipe		mm	DN32			DN32			DN32		
Cooling Method	Working Medium Cooled	Liquid inlet Tube	mm	DN65	DN65	DN50	DN65	DN65	DN50	DN65	DN65	DN50
		Gas outlet Pipe	mm	DN100	DN100	DN80	DN100	DN100	DN80	DN100	DN100	DN80
		Working medium Consumption amount	kg/h	933	4767	3542	933	4767	3542	933	4767	3542
	Water Cooled	Water inlet Pipe	mm	DN100	DN100	DN80	DN100	DN100	DN80	DN100	DN100	DN80
		Water outlet Pipe	mm	DN100	DN100	DN80	DN100	DN100	DN80	DN100	DN100	DN80
		Cooling water Amount	m^3/h	50	50	40	50	50	40	50	50	40
Overall Dimension	L×w×h		mm	4400×2000×3100			4400×2000×3100			4400×2000×3100		
Package Weight	Net weight		kg	8000			8500			9000		
	Operation weight		kg	9000			9500			10000		

Note:1. Motor power equipped for the package shall be selected according to shaft power under actual running conditions, shaft power parameters shall be obtained according to compressor selection software;
2. Due to the actual operating conditions of the unit, the size and the weight of the unit may be different. The specific parameters shall refer to the actual design;
3. Oil cooling method can be either water cooling or working medium cooling, Snowman recommends to use water cooling.

2620MS Series Two-stage Compressor Package Performance PARAMETERS and Curve

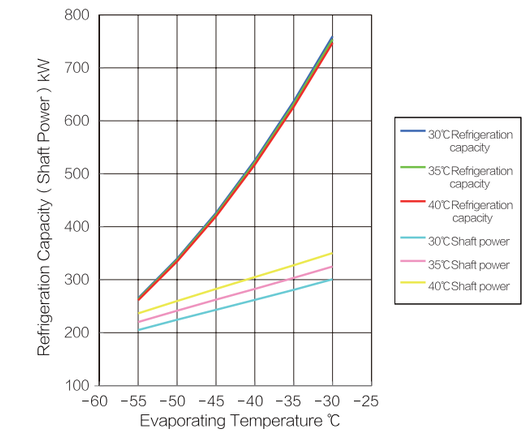
Tc / Te	SAA2620MS-HA (R717) With Intercooler					
	Refrigeration Capacity			Shaft Power		
	+30	+35	+40	+30	+35	+40
-55	189.6	189.1	188.6	174.7	179.9	192.8
-50	255.4	254.7	253.9	185.5	195.7	211.9
-45	335.4	334.5	333.5	202.7	217.3	236.1
-40	431.6	430.3	429.0	223.8	242.0	262.8
-35	545.8	544.2	542.5	246.1	267.2	289.3
-30	680.7	678.6	676.4	267.0	290.4	313.1

SAA2620MS-HA (R717, Condensing Temperature: 30/35/40℃)



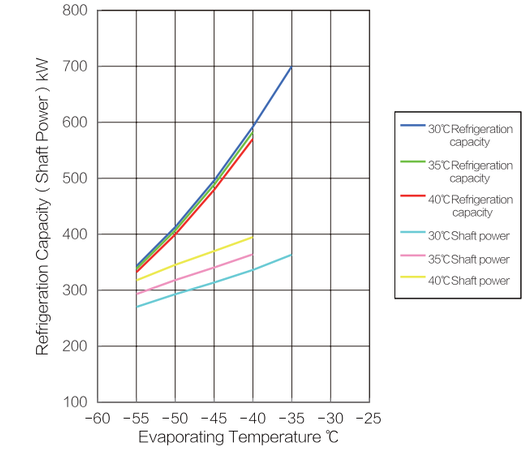
Tc / Te	SAH2620MS-HA (R22) With Intercooler					
	Refrigeration Capacity			Shaft Power		
	+30	+35	+40	+30	+35	+40
-55	265.0	263.2	261.2	205.0	220.2	236.4
-50	339.4	337.0	334.4	224.4	241.6	259.9
-45	426.1	423.0	419.6	243.2	262.3	282.6
-40	525.3	521.3	517.0	261.9	282.7	304.9
-35	636.7	631.8	626.3	281.0	303.4	327.4
-30	759.6	753.6	746.9	300.9	324.8	350.5

SAH2620MS-HA (R22, Condensing Temperature: 30/35/40℃)



Tc / Te	SAP2620MS-HA (R507A) With Intercooler					
	Refrigeration Capacity			Shaft Power		
	+30	+35	+40	+30	+35	+40
-55	342.9	338.1	332.2	270.0	292.9	317.6
-50	412.6	406.7	399.4	292.8	318.0	345.2
-45	495.7	488.3	479.2	313.8	340.6	369.9
-40	591.9	582.3	570.2	336.2	364.1	394.8
-35	700.0	-	-	363.4	-	-
-30	-	-	-	-	-	-

SAP2620MS-HA (R507A, Condensing Temperature: 30/35/40℃)

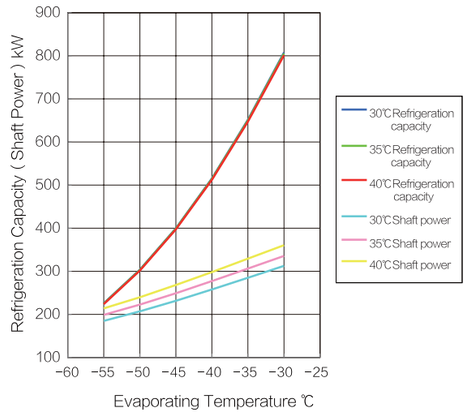


Note:1. Rotational speed 2960rpm; 2. R717 suction superheat 5℃ , R22 and R 507 suction superheat 10℃;
3. Tc—condensing temperature ℃, Te— evaporating temperature ℃; 4.Refrigeration capacity (shaft power) , unit KW.

2620LS Series Two-stage Compressor Package Performance PARAMETERS and Curve

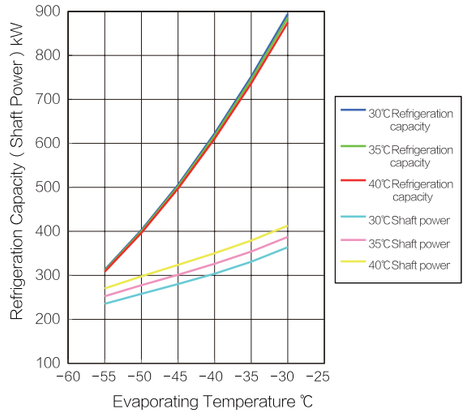
SAA2620LS-HA (R717, Condensing Temperature: 30/35/40℃)

Tc / Te	SAA2620LS-HA (R717)					
	With Intercooler					
	Refrigeration Capacity			Shaft Power		
	+30	+35	+40	+30	+35	+40
-55	225.7	225.0	223.7	184.9	198.8	213.9
-50	303.7	302.9	301.4	207.0	222.7	239.7
-45	399.7	398.8	397.1	231.5	249.0	268.0
-40	515.3	514.1	512.1	257.8	277.1	298.0
-35	651.5	649.7	647.0	285.0	306.2	329.1
-30	807.8	805.0	801.4	312.6	335.6	360.5



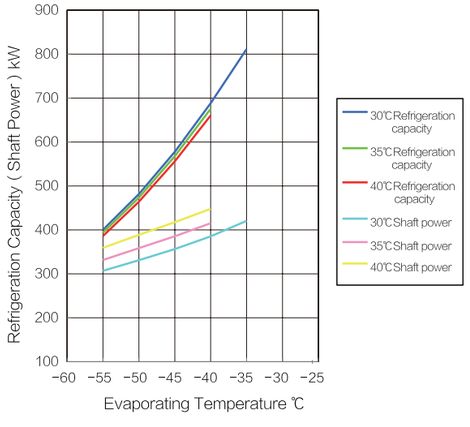
SAH2620LS-HA (R22, Condensing Temperature: 30/35/40℃)

Tc / Te	SAH2620LS-HA (R22)					
	With Intercooler					
	Refrigeration Capacity			Shaft Power		
	+30	+35	+40	+30	+35	+40
-55	312.7	310.6	308.3	235.4	252.5	270.1
-50	402.8	399.8	396.5	258.1	277.6	297.8
-45	505.9	502.0	497.3	280.1	301.4	323.9
-40	622.3	617.0	610.7	303.7	326.2	350.3
-35	751.7	744.9	736.5	330.9	354.1	379.2
-30	894.3	885.7	874.8	363.9	387.3	412.9



SAP2620LS-HA (R507A, Condensing Temperature: 30/35/40℃)

Tc / Te	SAP2620LS-HA (R507A)					
	With Intercooler					
	Refrigeration Capacity			Shaft Power		
	+30	+35	+40	+30	+35	+40
-55	400.1	393.7	386.1	307.0	331.7	359.0
-50	481.4	473.6	464.1	331.1	358.5	388.7
-45	577.6	567.8	556.1	356.4	385.5	417.5
-40	688.1	675.5	660.2	385.4	415.1	447.8
-35	811.4	-	-	420.4	-	-
-30	-	-	-	-	-	-

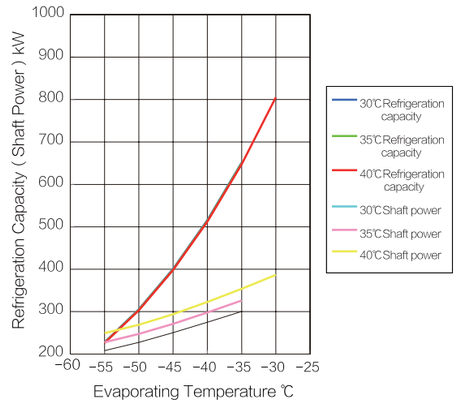


Note:1. Rotational speed 2960rpm; 2. R717 suction superheat 5℃, R22 and R 507 suction superheat 10℃;
3. Tc—condensing temperature ℃, Te— evaporating temperature ℃; 4.Refrigeration capacity (shaft power) , unit KW.

2620LL Series Two-stage Compressor Package Performance PARAMETERS and Curve

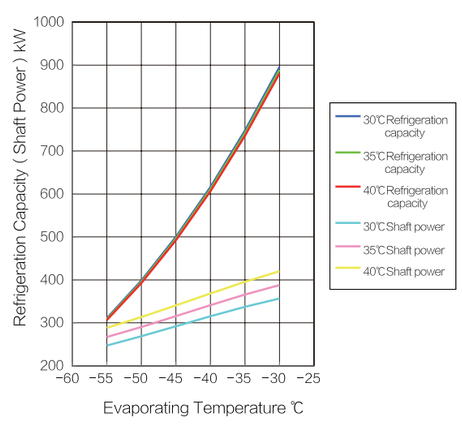
SAA2620LL-HA (R717, Condensing Temperature: 30/35/40℃)

Tc / Te	SAA2620LL-HA (R717)					
	With Intercooler					
	Refrigeration Capacity			Shaft Power		
	+30	+35	+40	+30	+35	+40
-55	227.7	226.7	226.0	208.1	227.8	249.4
-50	305.5	304.2	303.2	227.6	247.3	269.0
-45	400.8	399.2	398.0	250.3	271.2	293.9
-40	515.7	513.8	512.1	275.1	297.9	322.6
-35	651.6	649.6	647.5	300.5	326.3	354.0
-30	-	-	805.4	-	-	386.7



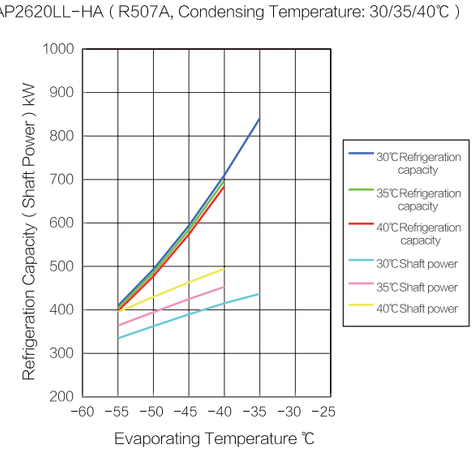
SAH2620LL-HA (R22, Condensing Temperature: 30/35/40℃)

Tc / Te	SAH2620LL-HA (R22)					
	With Intercooler					
	Refrigeration Capacity			Shaft Power		
	+30	+35	+40	+30	+35	+40
-55	310.8	308.6	306.3	247.1	267.0	288.3
-50	398.4	395.6	392.5	268.8	290.5	313.5
-45	500.0	496.3	492.3	292.0	315.6	340.7
-40	616.1	611.5	606.4	315.3	341.2	368.5
-35	747.7	741.9	735.5	337.4	365.7	395.5
-30	895.8	888.6	880.7	356.8	387.8	420.3



SAP2620LL-HA (R507A, Condensing Temperature: 30/35/40℃)

Tc / Te	SAP2620LL-HA (R507A)					
	With Intercooler					
	Refrigeration Capacity			Shaft Power		
	+30	+35	+40	+30	+35	+40
-55	409.5	403.8	397.2	334.7	363.9	395.4
-50	493.2	485.9	477.5	362.5	394.7	429.7
-45	593.6	584.1	573.7	389.8	424.9	463.3
-40	709.9	697.7	684.3	415.1	453.0	494.6
-35	840.7	-	-	437.0	-	-
-30	-	-	-	-	-	-



Note:1. Rotational speed 2960rpm; 2. R717 suction superheat 5℃, R22 and R 507 suction superheat 10℃;
3. Tc—condensing temperature ℃, Te— evaporating temperature ℃; 4.Refrigeration capacity (shaft power) , unit KW.

3426 Series Two-stage Compound Compressor Package Technical Parameters

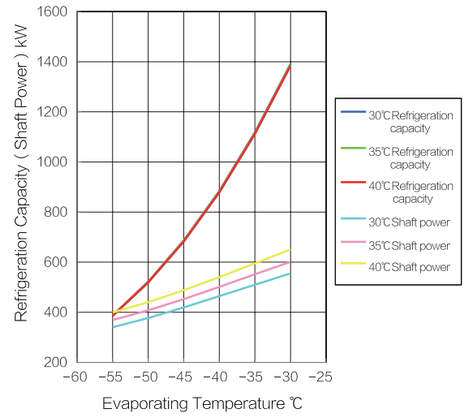
Item			Unit	3426 Series								
Compressor	Model			SRM-3426MS			SRM-3426LS			SRM-3426LL		
	Low pressure theoretical displacement		m^3/h	4280			5084			5084		
	High pressure theoretical displacement		m^3/h	1659			1659			2478		
	Capacity control range			Step-Less Capacity Control: 10~100%								
Refrigerant	Type			R717	R22	R507A	R717	R22	R507A	R717	R22	R507A
Refrigeration capacity	Low temperature working condition		kW	882	1059	1203	1033	1230	1392	1034	1254	1405
Motor	Low temperature working condition		kW	560	630	800	630	710	900	710	800	1000
	Power supply			High pressure power supply: 3P、6kV/10kV、50Hz								
	R.P.M		r/min	2960								
	Rotational direction			Face with motor shaft side: anti-clockwise								
Oil pump	Model			HJ4195			HJ4195			HJ4195		
	Motor power		kW	1.5			1.5			1.5		
Refrigeration oil	Grade			SUNISO4GS/3GS/SL-68S								
	Standard			GB/T16630《Refrigeration Oil》								
	Charge volume		kg	360			360			360		
External connecting pipe size	Suction pipe		mm	DN200			DN200			DN200		
	Discharge pipe		mm	DN80			DN80			DN80		
	Economizer liquid in /and pipe		mm	DN50			DN50			DN50		
	Safety valve pipe		mm	DN32			DN32			DN32		
	Cooling method	Working medium cooled: Liquid inlet tube	mm	DN80	DN80	DN65	DN80	DN80	DN65	DN80	DN80	DN65
		Working medium cooled: Gas outlet pipe	mm	DN125	DN125	DN100	DN125	DN125	DN100	DN125	DN125	DN100
		Working medium cooled: Working medium consumption amount	kg/h	1817	6983	4050	1817	6983	4050	1817	6983	4050
		Water cooled: Water inlet pipe	mm	DN125	DN125	DN100	DN125	DN125	DN100	DN125	DN125	DN100
		Water cooled: Water outlet pipe	mm	DN125	DN125	DN100	DN125	DN125	DN100	DN125	DN125	DN100
		Water cooled: Cooling water amount	m^3/h	120	120	50	120	120	50	120	120	50
Overall dimension	L×W×H		mm	6000×2350×4200			6000×2350×4200			6000×2350×4200		
Package weight	Net weight		kg	14000			15000			16000		
	Operation weight		kg	15500			16500			17500		

Note:1. Motor power equipped for the package shall be selected according to shaft power under actual running conditions, shaft power parameters shall be obtained according to compressor selection software;
2. Due to the actual operating conditions of the unit, the size and the weight of the unit may be different. The specific parameters shall refer to the actual design;
3. Oil cooling method can be either water cooling or working medium cooling, Snowman recommends to use water cooling.

3426MS Series Two-stage Compressor Package Performance PARAMETERS and Curve

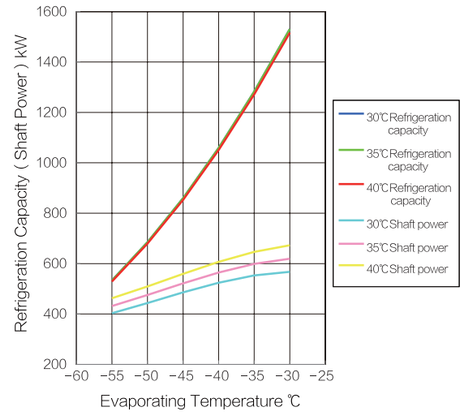
Tc \ Te	SAA3426MS-HA (R717) With Intercooler					
	Refrigeration Capacity			Shaft Power		
	+30	+35	+40	+30	+35	+40
-55	387.9	386.5	385.4	340.2	368.7	399.0
-50	522.1	520.3	518.7	377.3	407.7	440.3
-45	686.4	684.0	681.9	419.3	452.6	488.1
-40	883.9	881.1	878.3	464.3	501.2	540.5
-35	1118.1	1114.6	1111.1	510.2	551.5	595.3
-30	1391.7	1387.8	1383.4	555.0	601.4	650.6

SAA3426MS-HA (R717, Condensing Temperature: 30/35/40℃)



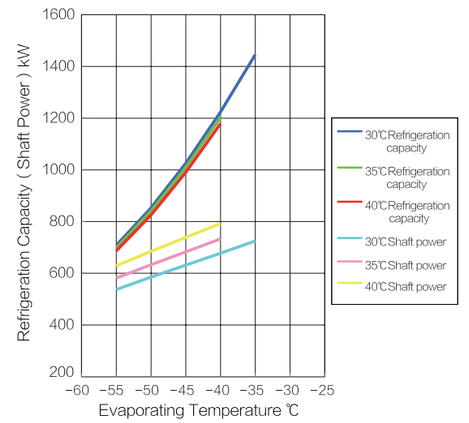
Tc \ Te	SAH3426MS-HA (R22) With Intercooler					
	Refrigeration Capacity			Shaft Power		
	+30	+35	+40	+30	+35	+40
-55	533.0	532.8	528.6	402.8	431.5	462.3
-50	684.4	684.5	679.2	443.8	475.6	509.5
-45	859.4	859.7	853.1	486.0	521.8	559.5
-40	1058.6	1058.9	1050.5	524.3	564.7	606.9
-35	1282.3	1282.4	1271.6	553.1	599.0	646.3
-30	1530.9	1530.4	1516.4	567.3	619.3	672.6

SAH3426MS-HA (R22, Condensing Temperature: 30/35/40℃)



Tc \ Te	SAP3426MS-HA (R507A) With Intercooler					
	Refrigeration Capacity			Shaft Power		
	+30	+35	+40	+30	+35	+40
-55	708.2	698.9	686.7	537.1	581.4	629.1
-50	853.2	840.9	825.7	585.3	633.2	684.9
-45	1025.5	1009.4	990.8	631.5	683.2	738.9
-40	1223.9	1202.9	1179.2	677.6	733.1	792.9
-35	1445.2	-	-	725.1	-	-
-30	-	-	-	-	-	-

SAP3426MS-HA (R507A, Condensing Temperature: 30/35/40℃)

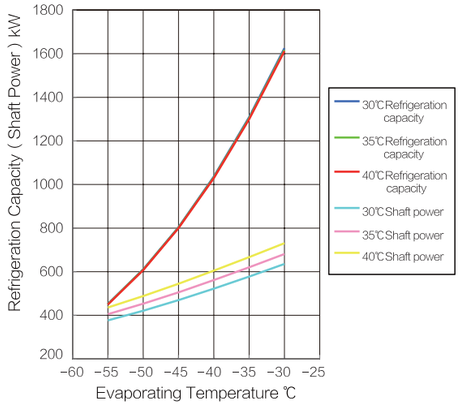


Note:1. Rotational speed 2960rpm; 2. R717 suction superheat 5℃, R22 and R 507 suction superheat 10℃;
3. Tc—condensing temperature ℃, Te— evaporating temperature ℃; 4.Refrigeration capacity (shaft power) , unit KW.

3426LS Series Two-stage Compressor Package Performance PARAMETERS and Curve

SAA3426LS-HA (R717, Condensing Temperature: 30/35/40℃)

Tc / Te	SAA3426LS-HA (R717)					
	With Intercooler					
	Refrigeration Capacity			Shaft Power		
	+30	+35	+40	+30	+35	+40
-55	452.2	451.1	449.6	376.8	405.0	435.8
-50	610.9	609.2	607.4	421.1	453.2	488.2
-45	804.5	801.9	799.6	470.0	505.7	544.8
-40	1036.2	1032.4	1029.3	522.5	561.8	604.6
-35	1309.1	1303.3	1299.2	577.9	620.5	667.0
-30	1625.7	1617.1	1611.4	635.4	681.1	731.0

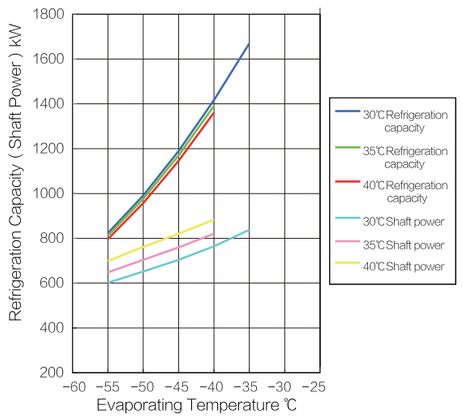


SAH3426LS-HA (R22, Condensing Temperature: 30/35/40℃)

Tc / Te	SAH3426LS-HA (R22)					
	With Intercooler					
	Refrigeration Capacity			Shaft Power		
	+30	+35	+40	+30	+35	+40
-55	624.0	619.6	614.8	446.5	476.8	508.5
-50	801.3	795.9	789.8	493.1	528.1	565.0
-45	1006.0	999.0	990.9	538.7	577.2	618.2
-40	1238.5	1229.1	1218.3	587.1	628.1	672.1
-35	1498.5	1485.8	1471.0	642.3	684.7	730.7
-30	1785.5	1768.2	1748.1	708.5	751.2	798.0

SAP3426LS-HA (R507A, Condensing Temperature: 30/35/40℃)

Tc / Te	SAP3426LS-HA (R507A)					
	With Intercooler					
	Refrigeration Capacity			Shaft Power		
	+30	+35	+40	+30	+35	+40
-55	823.2	811.8	796.6	601.6	647.8	699.4
-50	991.4	976.3	957.2	651.7	703.8	761.5
-45	1189.7	1170.0	1146.4	703.8	759.5	820.8
-40	1416.8	1391.2	1360.9	763.9	820.5	883.1
-35	1669.6	-	-	837.5	-	-
-30	-	-	-	-	-	-

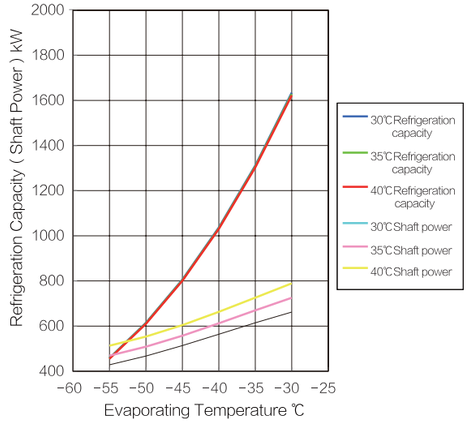


Note:1. Rotational speed 2960rpm; 2. R717 suction superheat 5℃, R22 and R 507 suction superheat 10℃;
3. Tc—condensing temperature ℃, Te— evaporating temperature ℃; 4.Refrigeration capacity (shaft power) , unit KW.

3426LL Series Two-stage Compressor Package Performance PARAMETERS and Curve

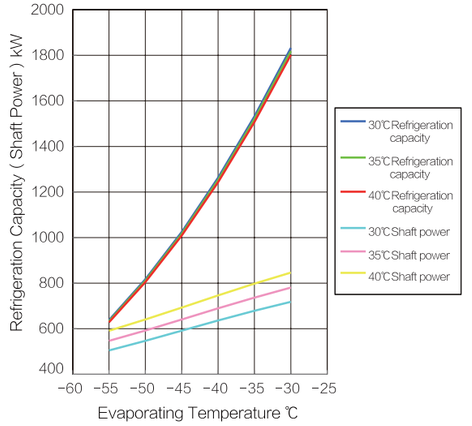
SAA3426LL-HA (R717, Condensing Temperature: 30/35/40℃)

Tc / Te	SAA3426LL-HA (R717)					
	With Intercooler					
	Refrigeration Capacity			Shaft Power		
	+30	+35	+40	+30	+35	+40
-55	458.7	456.8	455.3	428.4	468.6	512.9
-50	614.8	612.5	610.7	467.4	508.7	553.3
-45	806.1	803.4	801.1	513.6	557.7	604.5
-40	1036.9	1033.5	1030.5	563.8	612.5	663.1
-35	1311.5	1307.1	1303.0	614.5	669.6	725.9
-30	1634.0	1628.0	1622.3	662.5	725.8	789.5



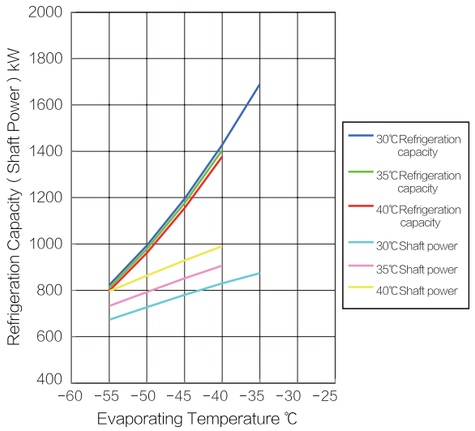
SAH3426LL-HA (R22, Condensing Temperature: 30/35/40℃)

Tc / Te	SAH3426LL-HA (R22)					
	With Intercooler					
	Refrigeration Capacity			Shaft Power		
	+30	+35	+40	+30	+35	+40
-55	637.3	632.9	628.1	504.6	546.3	590.7
-50	816.6	810.8	804.4	546.8	592.0	640.2
-45	1024.6	1017.2	1008.9	591.3	640.4	692.6
-40	1262.8	1253.3	1242.8	636.0	689.3	745.9
-35	1531.9	1520.1	1507.0	678.9	736.6	797.8
-30	1832.8	1818.2	1802.0	717.7	780.1	846.3



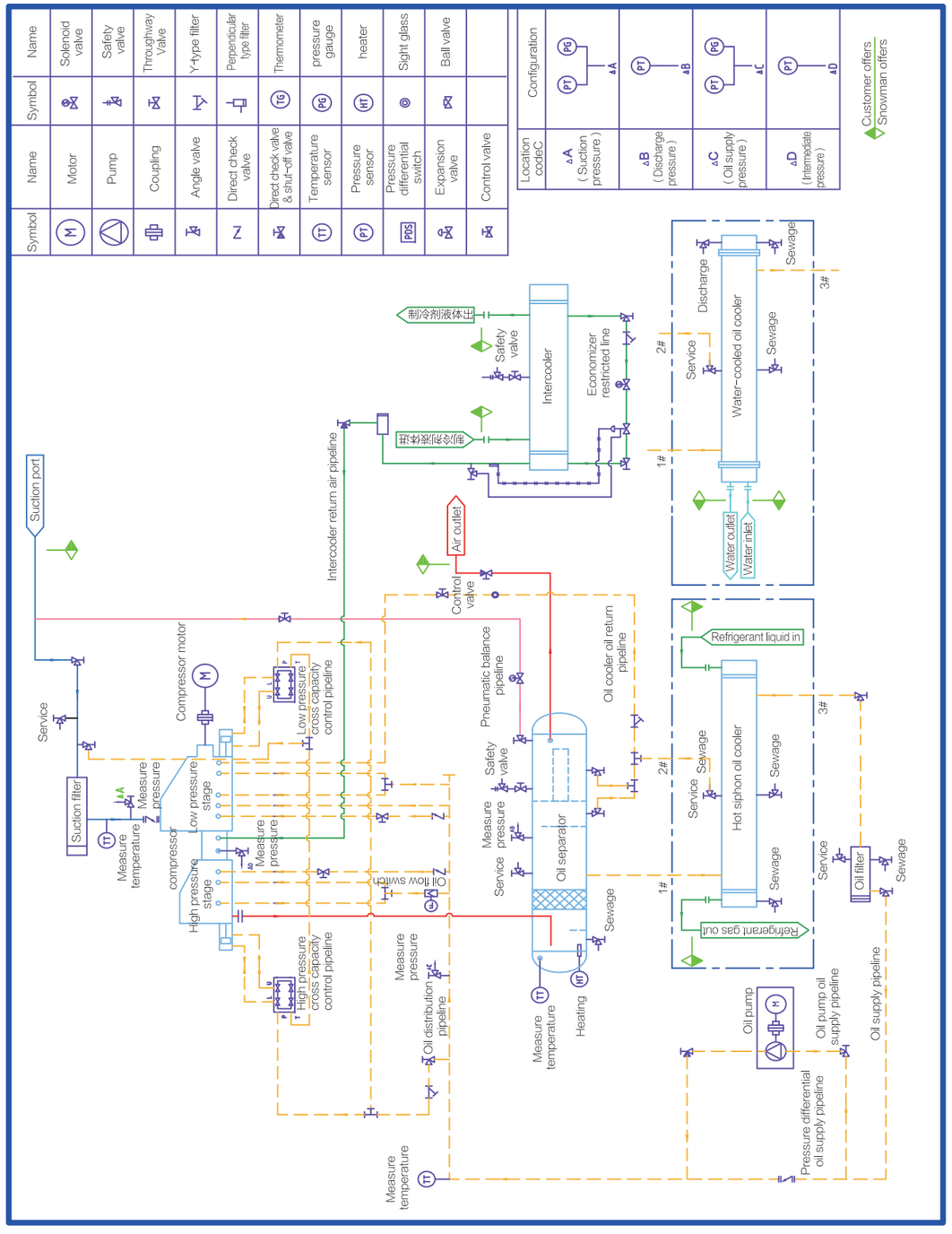
SAP3426LL-HA (R507A, Condensing Temperature: 30/35/40℃)

Tc / Te	SAP3426LL-HA (R507A)					
	With Intercooler					
	Refrigeration Capacity			Shaft Power		
	+30	+35	+40	+30	+35	+40
-55	822.6	810.8	797.7	673.1	732.4	796.4
-50	992.7	977.9	961.1	727.1	792.5	863.5
-45	1194.7	1176.0	1155.0	780.3	851.5	929.1
-40	1427.7	1404.3	1377.1	830.1	906.6	990.5
-35	1689.6	-	-	873.9	-	-
-30	-	-	-	-	-	-



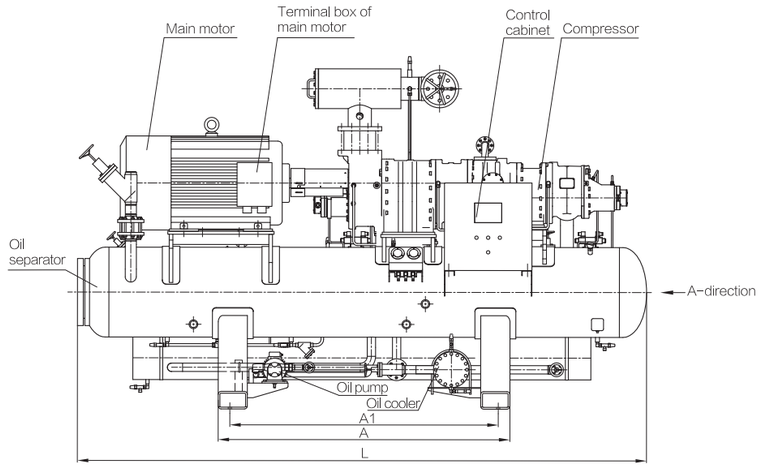
Note:1. Rotational speed 2960rpm; 2. R717 suction superheat 5℃, R22 and R 507 suction superheat 10℃;
3. Tc—condensing temperature ℃, Te— evaporating temperature ℃; 4.Refrigeration capacity (shaft power) , unit KW.

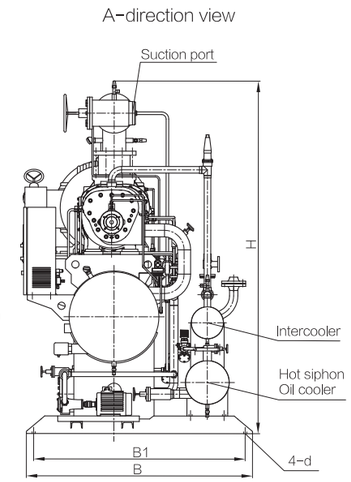
Two-stage Compressor Package system diagram

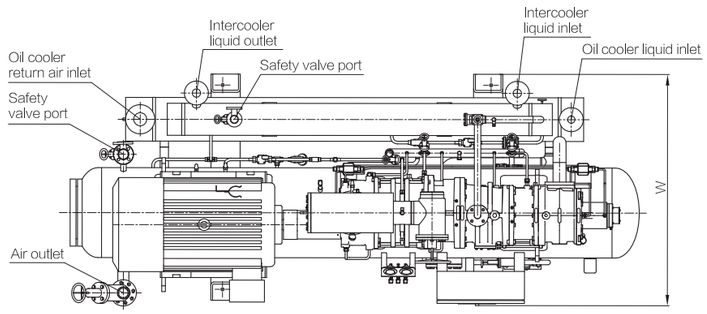


Note: underlined sections are compressor economizer kits. The package shall choose whether equipping with economizer kits or not according to actual running conditions.

Two-stage Compressor Package overall dimensions (Hot Siphon Oil Cooler)



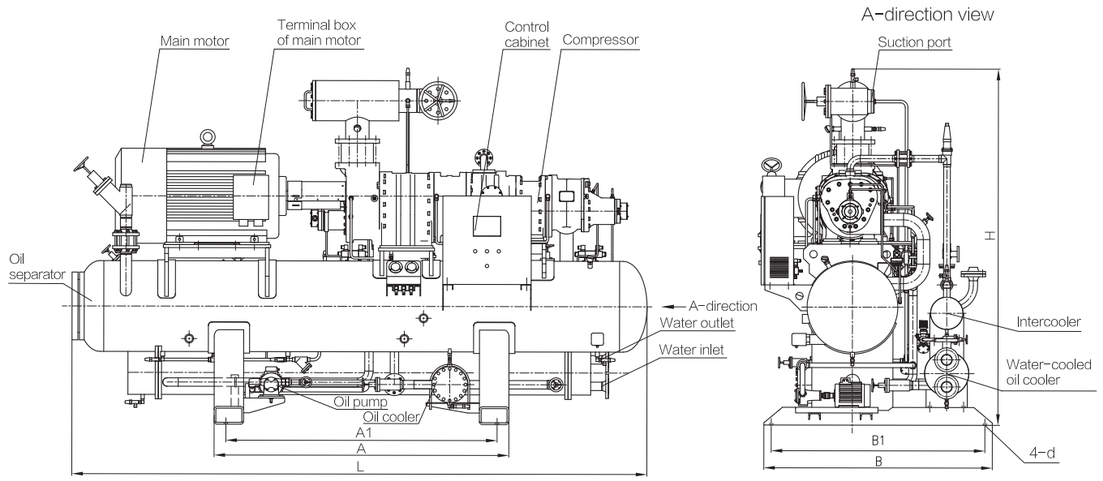


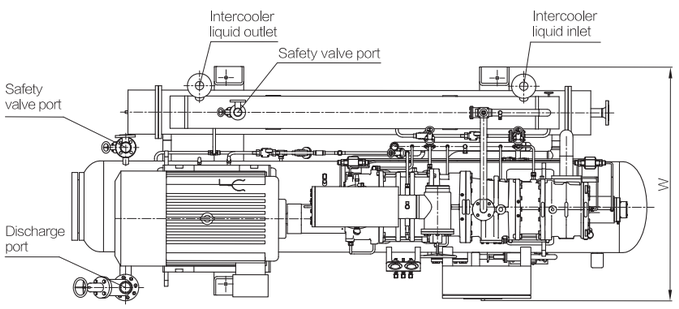


Dimension \ Model		1612 Series	2016 Series	2620 Series	3426 Series
Outline	L	3350	3900	4400	6000
	W	1500	1650	2000	2350
	H	2100	2450	3100	4200
Support	A	1800	2000	2200	2860
	A1	1640	1840	2040	2650
	B	1400	1550	1850	2220
	B1	1300	1450	1750	2100
	d	ϕ 22	ϕ 22	ϕ 22	ϕ 22

Note:1. This outline drawing is only for reference, actual package situation shall be defined by detailed design;
2. For unspecified standard, please perform according to our company standard.

Two-stage compressor overall dimension(water-cooled oil cooler)

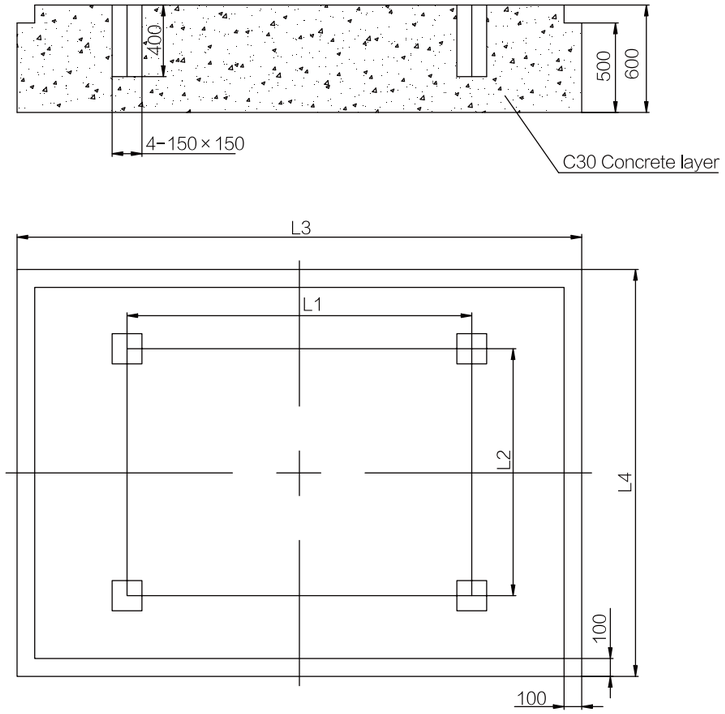




Dimension \ Model		1612 Series	2016 Series	2620 Series	3426 Series
Outline	L	3350	3900	4400	6000
	W	1500	1650	2000	2350
	H	2100	2450	3100	4200
Support	A	1800	2000	2200	2860
	A1	1640	1840	2040	2650
	B	1400	1550	1850	2220
	B1	1300	1450	1750	2100
	d	ϕ22	ϕ22	ϕ22	ϕ22

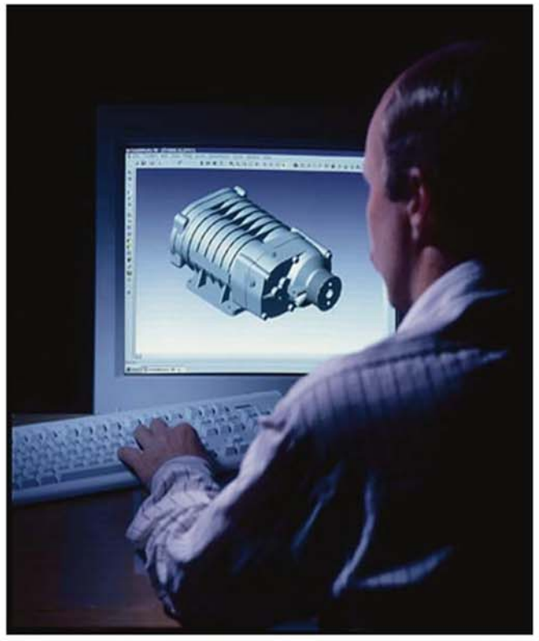
Note:1. This outline drawing is only for reference, actual package situation shall be defined by detailed design;
2. For unspecified standard, please perform according to our company standard.

Compressor package foundation schematic diagram



Package Model	L1	L2	L3	L4
1612 Series	1640	1300	2100	1750
2016 Series	1840	1450	2300	1900
2620 Series	2040	1750	2500	2200
3426 Series	2650	2100	3100	2550

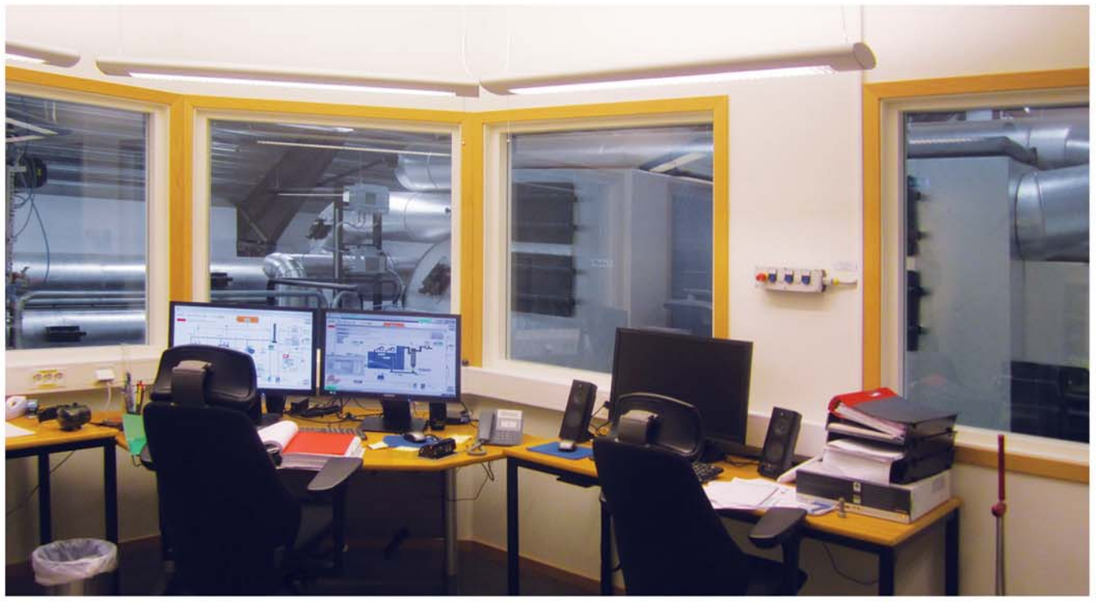
Note: ensure the foundation settlement of compressor package is no more than 2 mm.

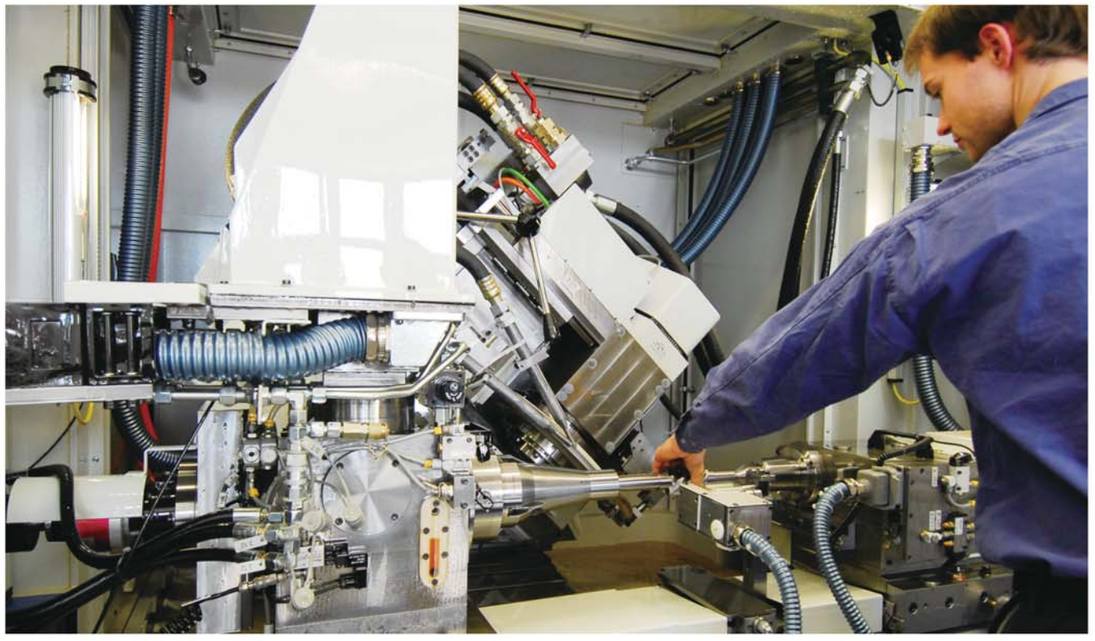


Compressor R&D technology

SRMTEC high-efficient and advanced screw compressor is developed based on SRM latest rotor “i” profile. The successful application of this “i” profile is the outcome of several generation’s hard work. It not only realizes the big breakthrough of screw rotor technology, also opens up a new epoch in the development of refrigeration screw compressor

High speed screw compressor is the integration of contemporary high technologies; it covers the mechanical design and manufacture, power electronics, materials, automatic control, fluid mechanics, solid mechanics, chemistry and other multi-disciplinary, and so on. It is one important symbol and epitome for every country’s science and technology, manufacturing industry innovation ability, comprehensive strength, and modernization.

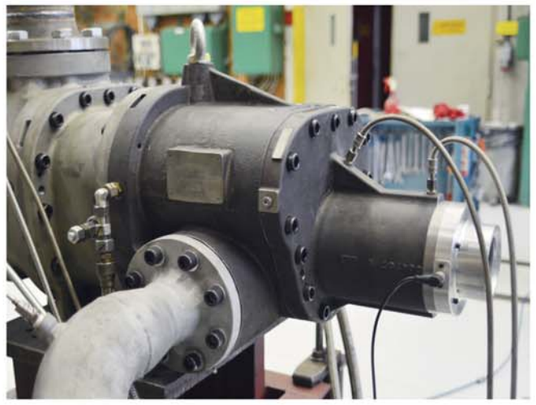




Compressor manufacture technology

The ductile iron casting housing has high breakdown pressure and toughness, and is applicable to wide temperature range. High-quality screw rotor materials are strictly forged, thus it improves the strength of metal and reduces the friction coefficient, which is good for compressor to run at high speed and improve efficiency.

The world’s most advanced screw compressor machining facilities, manufacturing process and strict manufacturing management system as well as SRM quality standard and professional technical team contributes to Snowman’s worldwide high performance screw compressor products.



Full performance test technology

Snowman’s large full performance test center has 4 independent laboratories, used to test compressor frequency converter motor with motor power range from 22kW to 1220kW.

Tests are carried out in accordance with current national standard and ISO standard and can be applied to frequently-used refrigerants and other gas. Equipped with closed loop circuit and open type test device. The test contents include full performance refrigeration capacity, refrigeration coefficient, shaft power, noise limit, vibration limit, strength, sealing and electronics etc.

−33℃ pharmaceutical and chemical industry

Pharmaceutical and chemical process cooling for fine chemical engineering reaction and temperature control.

−35℃ low temperature cold storage

Food industry is one of the important applications for refrigeration technology. Refrigeration plays a decisive role in food processing, cold storage, preservation. The invention and application of screw compressor, not only promoted the development of food industry, but also promoted the development and utilization of food resources.

−45℃ Food freezing

Ice crystal particles formed by rapid freezing is smaller, and has less destructive to the cells of food and the dangers of freezing shrinkage also dropped to the lowest degree. Also inhibit the growth of microbes and enzymes within the food and secure the stability of food during cold storage.

−60℃ ultralow temperature cold storage

Ultra−low temperature cold storage is widely used in refrigeration for tuna, cod and other rare aquatic products and biological products. Keeping food with original color, aroma, taste and nutrients, effectively improves and enriches people's life.