

DMZL

Professional Compressor Manufacturer

专业制冷压缩机制造商



浙江大明制冷科技有限公司  
Zhejiang Daming Refrigeration Technology Co.,LTD

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活塞式制冷压缩机  
RECIPROCATING COMPRESSOR

螺杆式制冷压缩机  
SCREW COMPRESSOR

涡旋式制冷压缩机  
SCROLL COMPRESSOR

DMZU

打造民族品牌  
创建百年企业

品质为本

创新为魂

大明制冷秉承质量至上的理念

致力于为世界制造更优、更好的压缩机

Quality-oriented

Innovation-focused

Adhering to the idea of quality-first

We are committed to producing qualified compressor





拥有厂房5万余平米  
Professional manufacturing basement



多年压缩机制造经验  
Well-experienced compressor  
manufacturer



## 大明制冷

DAMING REFRIGERATION

浙江大明制冷科技有限公司，是一家专业从事制冷压缩机和压缩冷凝机组等制冷设备设计、研发、制造和销售的科技型民营企业，旗下拥有半封闭活塞式制冷压缩机品牌、半封闭涡旋式制冷压缩机品牌和半封闭螺杆式制冷压缩机品牌。

公司建有专业的制冷压缩机生产基地，拥有厂房5万余平米，引进了多种高精尖进口加工设备，建立了现代化的制冷压缩机和压缩冷凝机组装配线，并配备有专业的仓储中心和物流配送中心。

Zhejiang Daming Refrigeration Technology Co.,Ltd. is a private company specialized in designing, producing and marketing of refrigeration compressor and condensing unit, including semi-hermetic reciprocating compressor, scroll compressor, screw compressor and air&water cooled condensing unit.

We own a manufacturing base which is over 50,000 square meters, including precise processing workshop with advanced machines and logistic department.

公司拥有三十多年的制冷压缩机制造经验，组建了一支国际国内制冷精英构成的技术团队，技术力量雄厚。公司还聘请专业的管理咨询机构针对性地建立起现代化的高效管理模式，以提升企业的管理水平。

公司以“打造民族品牌、创建百年企业”为目标，遵循“品质为本、创新为魂”的经营理念，以匠心做好产品，以创新求无限生机，努力将“大明制冷”打造成国产压缩机民族品牌、中国一流制冷压缩机制造商。

Meanwhile, Daming has a powerful technical team that consists of experienced engineers and technicians. Every single employee make their best effort to ensure perfect products' quality and operation efficiency.

We aim at building "Daming" into a well-known national brand as well as a century enterprise with quality and creation, being a top compressor manufacturer.





## 生产设备

Facilities & equipment

大明制冷拥有专业的制冷压缩机及冷凝机组生产基地和成熟的生产技术以及精密的制造与测试设备。企业现有厂房五万余平米，拥有现代化的加工车间，其中引进了CNC数控立式加工中心、数控卧式镗床、多孔钻床及超声波清洗机等高精设备，拥有制冷压缩机和冷凝机组自动化生产线，并建立了制冷压缩机性能检测中心，具有完善的加工、生产和检测能力，确保每一件产品的卓越性能。

Daming have a professional manufacturing base, advanced technology, precise equipment and facilities, our factory covers an area more than 50,000 square meters which including a modernized processing workshop with CNC Process Center, horizontal boring machines, two automatic producing lines of compressor & condensing unit, and a properties testing center. Now Daming have the capability of making complete range compressor and ensuring every product's perfect performance.





力求领先，追求专业  
诚信经营，稳健发展

Advanced, Professional  
Credible, Steady

## 资质荣誉

Qualifications and Honors

创建“大明”品牌，是每个员工孜孜不倦追求的目标和理想，高新技术和高起点的产品结构是实现理想和目标的基础，严格的管理和“大明制冷”人严谨、细实的工作作风，是完成目标的软件。“大明”是年轻的，更是充满生机和无限希望的，面对激烈的市场竞争，我们将以更优质的产品服务于社会。

To build "Daming" as a famous national brand is the goal diligently pursued by every employee in Daming group. The high technology, perfect product structure and the strict management, meticulous working principle are hardware and software for achieving this goal. More than young, Daming is full of vigour and infinite hope. Facing fierce competition, we will provide more qualified products to the market.





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## 活塞式制冷压缩机 Reciprocating Compressor

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	R22	24
	R404A/R507A	





## 产品特点 Products features

大明制冷压缩机适用于各种工况工质，力求最大限度地满足您对制冷系统的要求。

The compressors of Daming suit different working condition and refrigerants, try to maximally satisfy your requirements for the refrigeration system.

- 1 技术成熟，结构紧凑 / Developed technology, compact dimension  
体积小，空间要求小 / Small volume and space
- 2 高精度加工，确保压缩机各项指标达标 / High precision machining to ensure the compressor confirm with the standard  
数控加工中心加工壳体 / CNC processing center  
特殊工艺保证三孔同心度 / Concentricity due to specific processing technology  
最小的死点间隙 / minimal dead space
- 3 运行平稳，震动小，噪音低 / steady operation, small vibration and low noise  
绝佳的稳定性 / Excellent stability
- 4 使用R22、R404等工质，符合国际环保要求 / Refrigerant like R22 and R404 are adopted to protect the environment  
适用于低温、中高温等各种工况 / For mid & low temperature application
- 5 电子保护装置，有效保护电机 / Electrical motor protect device  
PTC温度监控装置 / PTC sensor
- 6 耐磨的驱动件，使用寿命长 / wear resistant driver gear  
镀铬的活塞环，铝制活塞 / Chrome plated piston rings and aluminium pistons  
硬化处理过的曲轴 / Hardened crank-shaft  
低摩擦轴套 / Less friction
- 7 高效阀板组设计，制冷量大，能耗低 / Efficient valve plate design, high refrigerating capacity and low energy consumption  
高效的吸排气压缩比率 / Efficient compression rate  
阀片为瑞典进口钢带锻造，耐冲击 / Valve reed made of imported impact resistant spring steel
- 8 零部件通用程度高，拆修维护方便 / General spare parts, convenient for maintenance.

## 型号标识 Nomenclature

### BFS31—BFS151

BF 半封闭  
Semi-hermetic

S 型号  
Model

3 匹数  
Horse-power

1 设计系列编号  
Series code

### 4S151D—6S501G

4/6 缸数  
Cylinders

S 型号  
Model

15 匹数  
Horse-power

1 设计系列编号  
Series code

D/G D指低温，G指中高温  
D for low condensing temperature,  
G for mid & high condensing temperature

### 2YD-2.2—6WG-50.2

2/4/6 缸数  
Cylinders

Y/V/W 指机型  
Type

D/G D指低温，G指中高温  
D for low condensing temperature,  
G for mid & high condensing temperature

2 匹数  
Horse-power

2 设计系列编号  
Series code

### 6WDS-20.2—6WDS-30.2

6 缸数  
Cylinders

W 指机型  
Type

DS 双级压缩  
Double Stage

20 匹数  
Horse-power

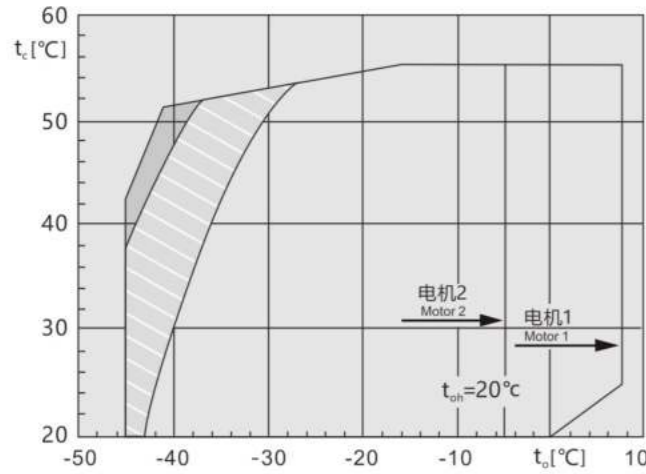
2 设计系列编号  
Series code



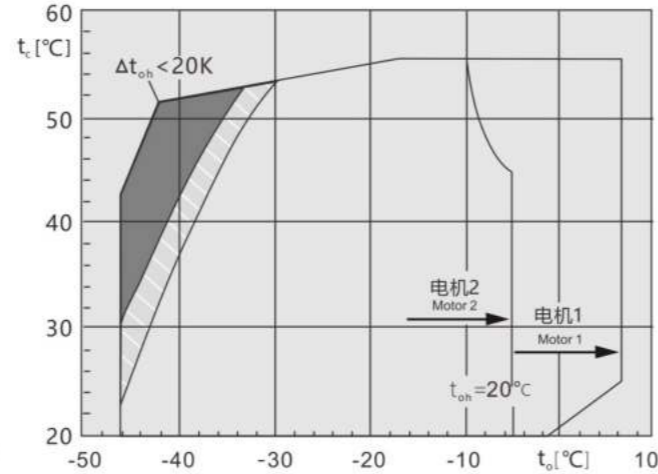
应用范围  
基于吸气温度20°C

Application Scope  
Suction gas temperature 20°C

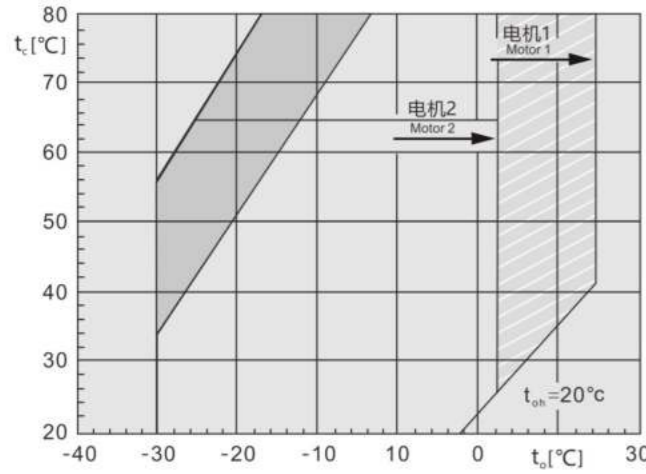
R404A•R507A  
2YD-2.2—4YG-9.2



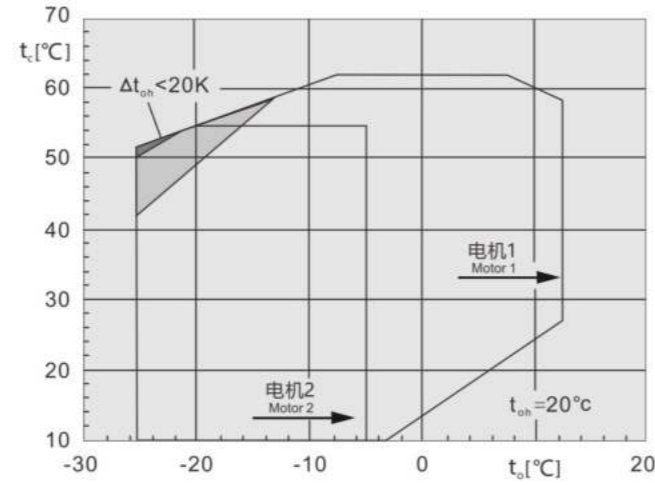
R404A•R507A  
4YD-8.2—6WG-50.2



R134a



R407C



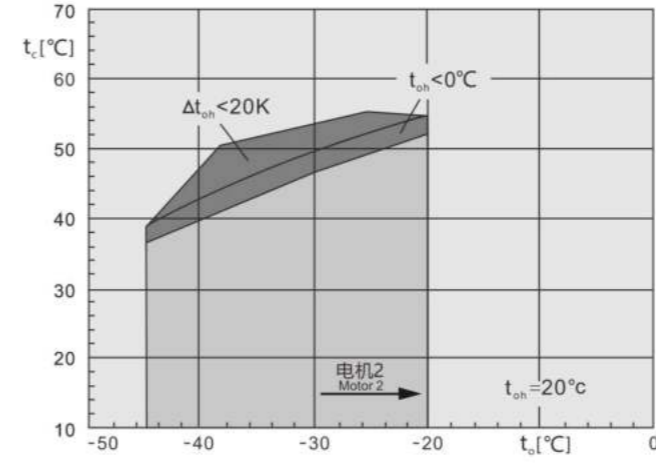
$t_e$  Evaporating temperature(°C)  $t_e$  蒸发温度(°C)  
 $t_{oh}$  Suction gas temperature(°C)  $t_{oh}$  吸气温度(°C)  
 $\Delta t_{oh}$  Suction superheat(K)  $\Delta t_{oh}$  吸气过热度(K)  
 $t_c$  Condensing temperature(°C)  $t_c$  冷凝温度(°C)

Additional cooling or max. 0°C suction gas temperature  
 Additional cooling  
 Additional cooling&limited suction gas temperature  
 Suction superheat>10K  
 附加冷却或最高0°C吸气温度  
 附加冷却  
 附加冷却+限制最高吸气温度  
 吸气过热度 > 10K

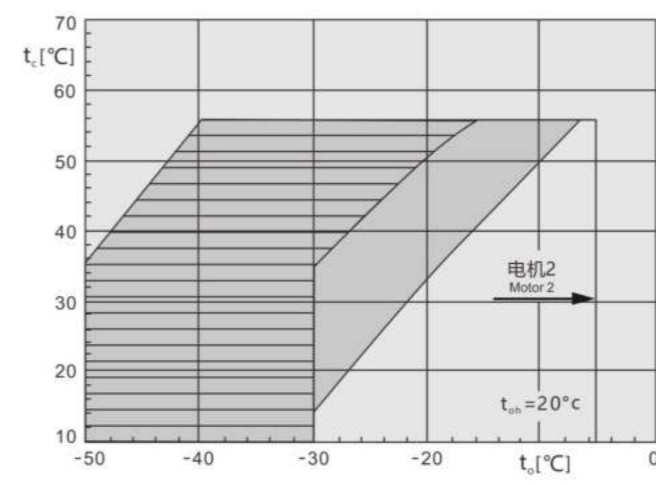
应用范围  
基于吸气温度20°C

Application Envelope  
Suction gas temperature 20°C

R22 空气冷却-直接吸气冷却 Air cooling-direct suction  
2YD-2.2—4YD-5.2

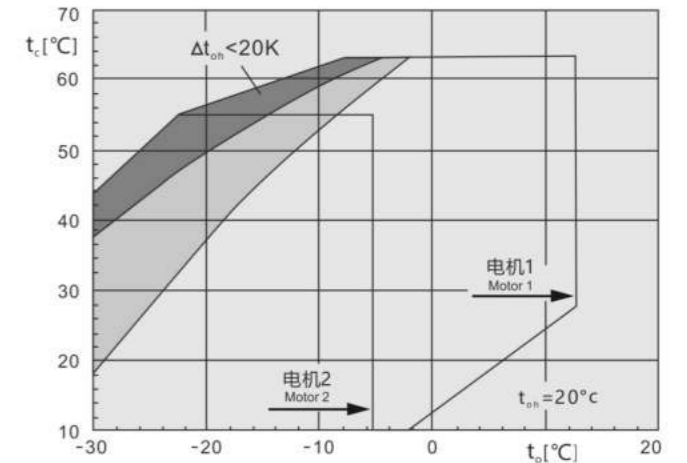


R22  
4YD-7.2—6WD-40.2

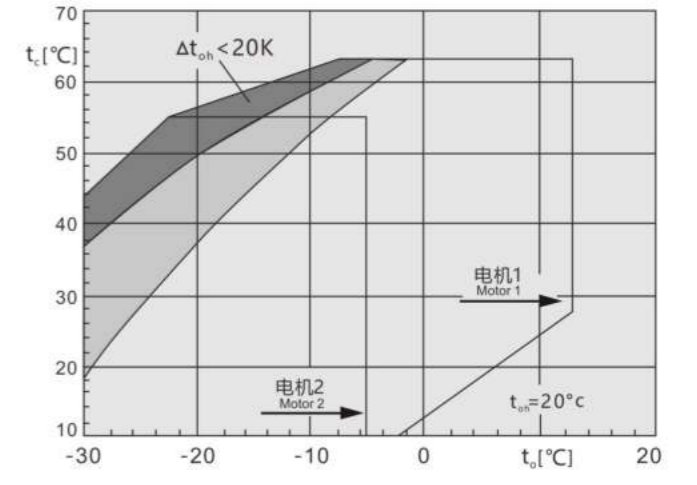


$t_e$  Evaporating temperature(°C)  $t_e$  蒸发温度(°C)  
 $t_{oh}$  Suction gas temperature(°C)  $t_{oh}$  吸气温度(°C)  
 $\Delta t_{oh}$  Suction superheat(K)  $\Delta t_{oh}$  吸气过热度(K)  
 $t_c$  Condensing temperature(°C)  $t_c$  冷凝温度(°C)

R22 吸气冷却 Suction gas cooling  
2YD-2.2—4YG-9.2



R22  
4YD-7.2—6WG-50.2



Additional cooling  
 Additional cooling&limited suction gas temperature  
 Additional cooling&liquid injection cooling system  
 附加冷却  
 附加冷却+限制最高吸气温度  
 附加冷却+喷液冷却系统



技术参数/ Technical Data

压缩机型号 Compressor Model	电机名义功率 Nominal Motor-Power Hp/kW	排气量 Displacement m <sup>3</sup> /h 50/60Hz	缸数x直径x行程 Number Of Cylinder x Diameter x Stroke mm	吸、排气阀接管 Suction, Discharge Line mm		油注入量 Oil Volume L	电源 Power Supply V/Φ/Hz	电气参数 Electrical Parameter		曲轴箱加热器 Crankcase Heater (220V) W	供油方式 Oil Supply Method	重量 Weight kg
				DL Discharge Valve	SL Suction Valve			最大工作电流(A) Max Operating Current	启动、堵转电流(A) Starting/Locked Current			
BFS31	3/2.2	12.2/14.6	2 × Φ47.6 × 39.2	Φ 16	Φ 19.05	1.25	380-420/3/50 440-480/3/60	5.2	24/26	60	飞溅式润滑 Splashing lubrication	62
BFS41	4/3	14.7/17.8	2 × Φ54 × 37	Φ 19.05	Φ 25.4	1.85		7.6	38/44	60		85
BFS51	5/3.7	18.4/22.1	2 × Φ54 × 46	Φ 19.05	Φ 25.4	1.85		7.6	38/44	60		87
BFS81	8/5.5	26.6/32.1	2 × Φ64 × 48	Φ 25.4	Φ 31.75	3.5		15	74/81	120		133
BFS101	10/7.5	36/43.2	2 × Φ64 × 64	Φ 25.4	Φ 31.75	3.5		15.6	93/103	120		137
BFS151	15/10.5	54/64.8	3 × Φ64 × 64	Φ 28	Φ 38.1	4.8		22.3	133/150	180		172
4S151D	15/10.5	73.6/88.8	4 × Φ70 × 55	Φ 28	Φ 42	4		31	81/132	140		183
4S251G	25/18.5	73.6/88.8	4 × Φ70 × 55	Φ 28	Φ 54	4.5		45	116/193	140		203
4S201D	20/15	84.5/101.9	4 × Φ75 × 55	Φ 28	Φ 54	4.5		37	97/158	140	192	
4S301G	30/22	84.5/101.9	4 × Φ75 × 55	Φ 28	Φ 54	4.5		53	135/220	140	206	
6S251D	25/18.5	110.5/133.4	6 × Φ70 × 55	Φ 35	Φ 54	4.75		45	116/193	140	224	
6S351G	35/25.5	110.5/133.4	6 × Φ70 × 55	Φ 35	Φ 54	4.75		61	147/262	140	235	
6S321D	30/22	126.8/153.0	6 × Φ75 × 55	Φ 35	Φ 54	4.75		53	135/220	140	228	
6S401G	40/30	126.8/153.0	6 × Φ75 × 55	Φ 35	Φ 54	4.75		78	180/323	140	238	
6S401D	40/30	151.6/183.0	6 × Φ82 × 55	Φ 42	Φ 54	4.75		78	180/323	140	239	
6S501G	50/37	151.6/183.0	6 × Φ82 × 55	Φ 42	Φ 54	4.75		92	226/404	140	241	

技术参数/ Technical Data

压缩机型号 Compressor Model	电机名义功率 Nominal Motor-Power Hp/kW	排气量 Displacement m <sup>3</sup> /h 50/60Hz	缸数x直径x行程 Number Of Cylinder x Diameter x Stroke mm	吸、排气阀接管 Suction, Discharge Line mm		油注入量 Oil Volume L	电源 Power Supply V/Φ/Hz	电气参数 Electrical Parameter		曲轴箱加热器 Crankcase Heater (220V) W	供油方式 Oil Supply Method	重量 Weight kg
				DL Discharge Valve	SL Suction Valve			最大工作电流(A) Max Operating Current	启动、堵转电流(A) Starting/Locked Current			
2YD-2.2	2/1.5	13.4/16.2	2 × Φ50 × 39.3	Φ 16	Φ 22	1.5	220-240Δ /380-420Y/3/50 265-290Δ /440-480Y/3/60	11.9/6.9	53.7/30.7	120	离心润滑 Centrifugal lubrication	67.5
2YG-3.2	3/2.2	13.4/16.2	2 × Φ50 × 39.3	Φ 16	Φ 22	1.5		13.5/7.8	64/37	120		70.5
2YD-3.2	3/2.2	16.2/19.6	2 × Φ55 × 39.3	Φ 16	Φ 22	1.5		14.8/8.5	64/37	120		70
2YG-4.2	4/3	16.2/19.6	2 × Φ55 × 39.3	Φ 16	Φ 22	1.5		16.4/9.4	76.6/44.2	120		70
4YD-3.2	3/2.2	18.1/21.8	4 × Φ41 × 39.3	Φ 16	Φ 22	2		15.9/9.2	76.6/44.2	120		82
4YG-5.2	5/3.7	18.1/21.8	4 × Φ41 × 39.3	Φ 16	Φ 22	2		18.7/10.8	107.7/62.2	120		86
4YD-4.2	4/3	22.7/27.4	4 × Φ46 × 39.3	Φ 22	Φ 28	2		18.5/10.7	92.7/53.2	120		84
4YG-6.2	6/4.4	22.7/27.4	4 × Φ46 × 39.3	Φ 22	Φ 28	2		22.9/13.2	107.7/62.2	120		86
4YD-5.2	5/3.7	26.8/32.4	4 × Φ50 × 39.3	Φ 22	Φ 28	2		23.4/13.5	107.7/62.2	120	85.5	
4YG-7.2	7/5.1	26.8/32.4	4 × Φ50 × 39.3	Φ 22	Φ 28	2		27.5/15.9	142.8/82.4	120	88.5	
4YD-6.2	6/4.4	32.5/39.2	4 × Φ55 × 39.3	Φ 22	Φ 28	2		27.5/15.9	142.8/82.4	120	90.5	
4YG-9.2	9/6.6	32.5/39.2	4 × Φ55 × 39.3	Φ 22	Φ 28	2		34.5/20	142.8/82.4	120	90.5	
4YD-7.2	7/5.1	34.7/41.9	4 × Φ55 × 42	Φ 22	Φ 28	2.6		14	39/68	140	129	
4YG-10.2	10/7.5	34.7/41.9	4 × Φ55 × 42	Φ 22	Φ 28	2.6		21	59/99	140	139	
4YD-8.2	8/5.5	41.3/49.9	4 × Φ60 × 42	Φ 28	Φ 35	2.6		17	49/81	140	134	
4YG-12.2	12/8.8	41.3/49.9	4 × Φ60 × 42	Φ 28	Φ 35	2.6		24	69/113	140	141	
4YD-10.2	10/7.5	48.5/58.5	4 × Φ65 × 42	Φ 28	Φ 35	2.6	21	59/99	140	139		
4YG-15.2	15/10.5	48.5/58.5	4 × Φ65 × 42	Φ 28	Φ 42	2.6	31	81/132	140	147		

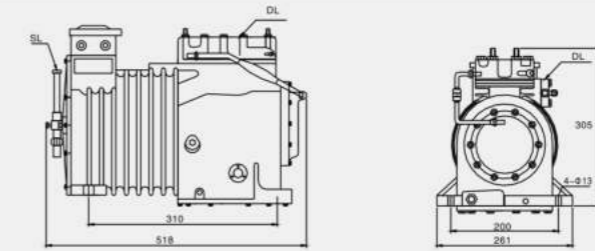


技术参数/ Technical Data

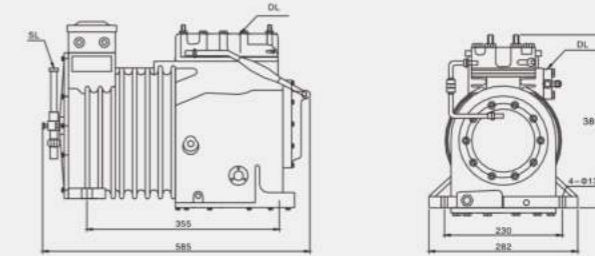
压缩机型号 Compressor Model	电机名义功率 Nominal Motor Power Hp/kW	排气量 Displacement m <sup>3</sup> /h 50/60Hz	缸数x直径x行程 Number Of Cylinder x Diameter x Stroke mm	吸、排气阀接管 Suction, Discharge Line mm		油注入量 Oil Volume L	电源 Power Supply V/Φ/Hz	电气参数 Electrical Parameter		曲轴箱加热器 Crankcase Heater (220V) W	供油方式 Oil Supply Method	重量 Weight kg
				DL Discharge Valve	SL Suction Valve			最大工作电流(A) Max Operating Current	启动、堵转电流(A) Starting/Locked Current			
4YD-12.2	12/8.8	56.2/67.9	4 × Φ70 × 42	Φ28	Φ35	2.6	380- 420YY/3/50 440- 480YY/3/60	24	69/113	140	离心润滑 Centrifugal lubrication	141
4YG-20.2	20/15	56.2/67.9	4 × Φ70 × 42	Φ28	Φ42	2.6		37	97/158	140		150
4VD-15.2	15/10.5	73.6/88.8	4 × Φ70 × 55	Φ28	Φ42	4		31	81/132	140		183
4VG-25.2	25/18.5	73.6/88.8	4 × Φ70 × 55	Φ28	Φ54	4.5		45	116/193	140	203	
4VD-20.2	20/15	84.5/101.9	4 × Φ75 × 55	Φ28	Φ54	4.5		37	97/158	140	192	
4VG-30.2	30/22	84.5/101.9	4 × Φ75 × 55	Φ28	Φ54	4.5		53	135/220	140	206	
6WD-25.2	25/18.5	110.5/133.4	6 × Φ70 × 55	Φ35	Φ54	4.75		45	116/193	140	油泵供油 Forced-lubrication	224
6WG-35.2	35/25.5	110.5/133.4	6 × Φ70 × 55	Φ35	Φ54	4.75		61	147/262	140		235
6WD-30.2	30/22	126.8/153.0	6 × Φ75 × 55	Φ35	Φ54	4.75		53	135/220	140		228
6WG-40.2	40/30	126.8/153.0	6 × Φ75 × 55	Φ35	Φ54	4.75		78	180/323	140	238	
6WD-40.2	40/30	151.6/183.0	6 × Φ82 × 55	Φ42	Φ54	4.75	78	180/323	140	239		
6WG-50.2	50/37	151.6/183.0	6 × Φ82 × 55	Φ42	Φ54	4.75	92	226/404	140	241		
6WDS-20.2	20/15	73.6/36.9 88.8/44.5	6 × Φ70/70 × 55	Φ35	Φ42	4.75	37	97/158	140	220		
6WDS-25.2	25/18.5	84.5/42.3 101.9/51.1	6 × Φ75/75 × 55	Φ35	Φ42	4.75	45	116/193	140	233		
6WDS-30.2	30/22	101.1/50.5 122.0/60.9	6 × Φ82/82 × 55	Φ35	Φ42	4.75	53	135/220	140	234		

压缩机各接口位置和外形尺寸图 Connections and Dimension

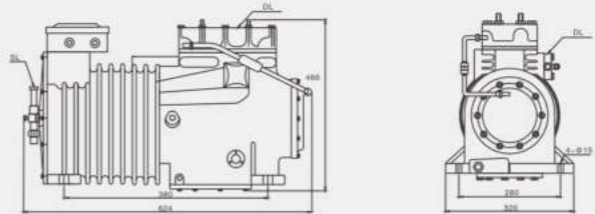
BFS31



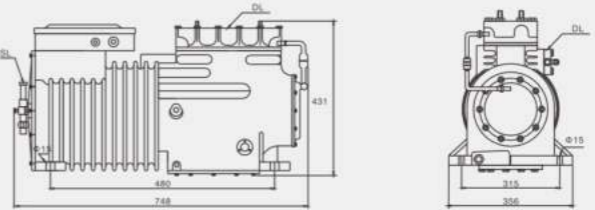
BFS41---BFS51



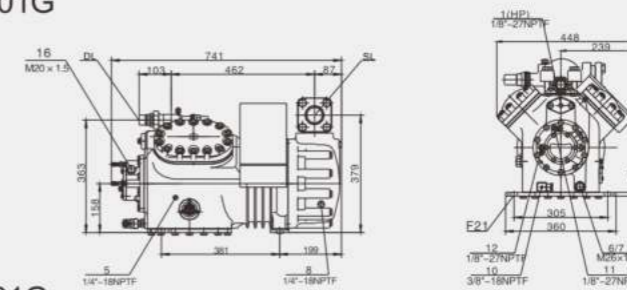
BFS81---BFS101



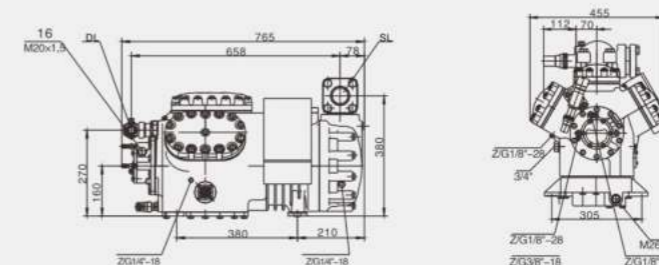
BFS151



4S151D---4S301G



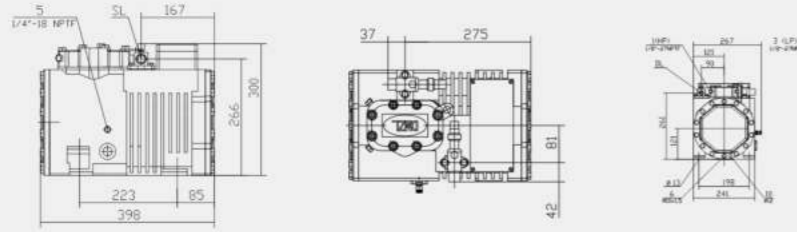
6S251D---6S501G



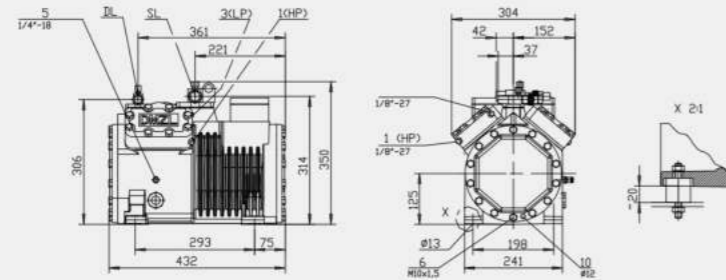


压缩机各接口位置和外形尺寸图 Connections and Dimension

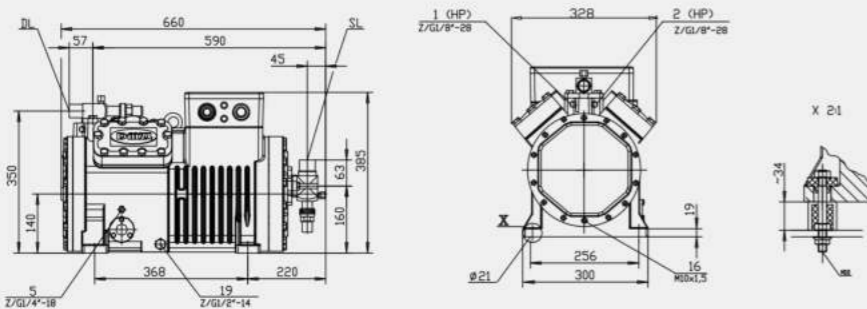
2YD-2.2--2YG-4.2



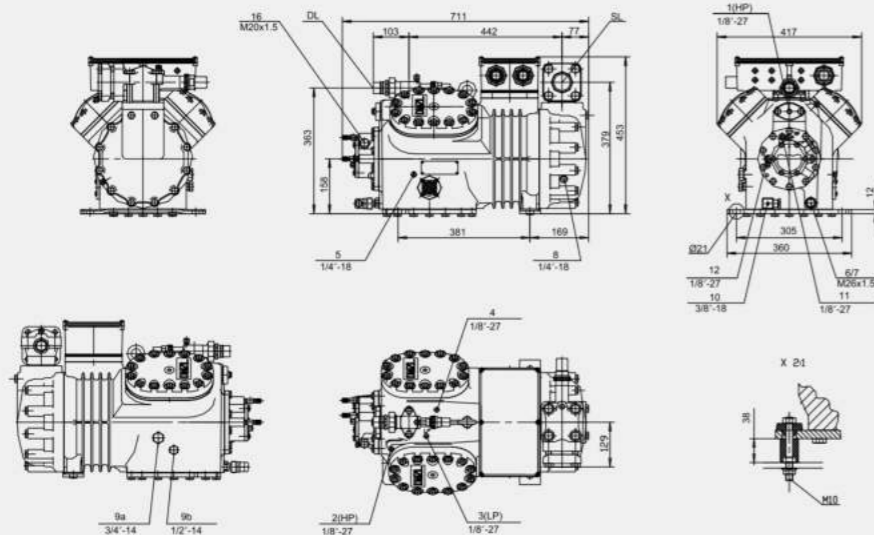
4YD-3.2--4YG-9.2



4YD-7.2--4YG-20.2

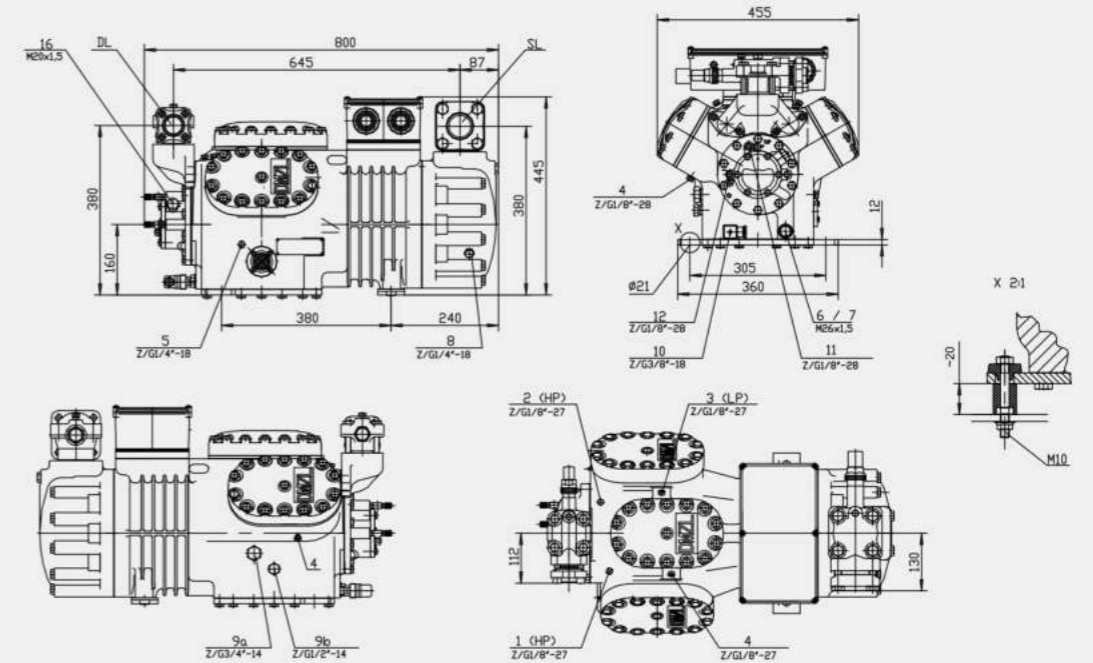


4VD-15.2--4VG-30.2

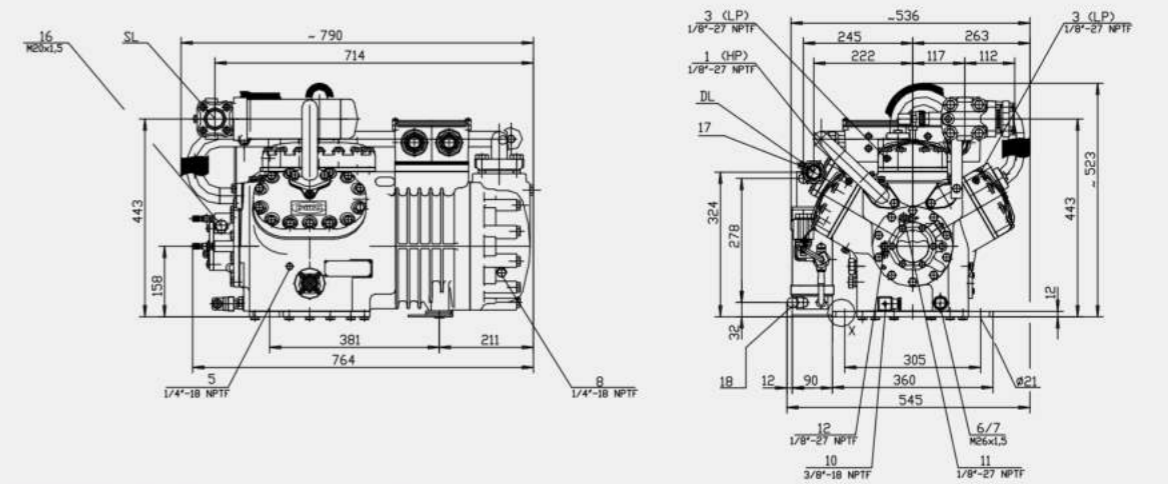


压缩机各接口位置和外形尺寸图 Connections and Dimension

6WD-25.2--6WG-50.2



6WDS-20.2--6WDS-30.2



图示接管位置说明 Connection Positions

- |                             |                                 |                     |   |
|-----------------------------|---------------------------------|---------------------|---|
| 1.高压接口 (HP)                 | 1.High pressure connection(HP)  | 9a.气平衡接口 (并联运行)     | 9a.Gas equalisation(parallel operation)   |
| 2.排气温度探头接口 (HP)             | 2.Discharge gas temp.sensor(HP) | 9b.油平衡接口 (并联运行)     | 9b.Discharge gas temp.sensor(HP)          |
| 3.低压接口 (LP)                 | 3.Low pressure connection(LP)   | 10.曲轴箱加热器           | 10.Crankcase heater                       |
| 4.CIC系统: 喷嘴接口<br>(不带液体过冷运行) | 4.CIC System:spray nozzle       | 11.油压高压接口+          | 11.Oil pessure connection+                |
| 5.加油堵                       | 5.Oil fill plug                 | 12.油压低压接口-          | 12.Oil pessure connection-                |
| 6.放油口                       | 6.Oil drain                     | 16.油压差开关"Delta-p"连接 | 16.Connection for oil monitoring(Delta-p) |
| 7.油过滤器 (带磁螺栓)               | 7.Oil filter(magnetic screw)    | 21.油服务阀接口           | 21.Connection for oil service valve       |
| 8.回油口 (接油分离器)               | 8.Oil return(oil separator)     | SL吸气阀接口             | SLConnection for suction valve            |
|                             |                                 | DL排气阀接口             | DLConnection for discharge valve          |



制冷量表/Performance Data R22

型号 Model	冷凝温度 Condensing Temperature °C	制冷量 Refrigerating Capacity Qo(W) 功率消耗 Power Consumption Pe(kW)															
		蒸发温度 Evaporating Temperature(°C)															
		↓	12.5	10	7.5	5	0	-5	-10	-15	-20	-25	-30	-35	-40	-45	-50
BFS31	30	Qo					8430	6800	5350	4070	2730	1860					
		Pe					2.33	2.28	2.15	1.95	1.70	1.45					
	40	Qo					7380	5820	4530	3370							
		Pe					2.70	2.55	2.35	2.05							
	50	Qo					6300	4940	3840	2820							
		Pe					3.00	2.78	2.48	2.15							
BFS41	30	Qo			14350	12330	10590	8430	6750	5180	3840	2500					
		Pe			3.01	2.93	2.80	2.68	2.50	2.30	2.02	1.68					
	40	Qo			13250	10820	9200	7270	5700	4250							
		Pe			3.60	3.45	3.23	3.00	2.73	2.43							
	50	Qo			11570	9780	7910	6160	4760	3430							
		Pe			4.18	3.93	3.60	3.25	2.88	2.45							
BFS51	30	Qo					13140	10760	8720	6860	5300	3840					
		Pe					3.50	3.35	3.15	2.90	2.63	2.30					
	40	Qo					11750	9600	7620	6050							
		Pe					4.08	3.80	3.50	3.15							
	50	Qo					10380	8370	6570	5030							
		Pe					4.55	4.20	3.78	3.30							
BFS81	30	Qo			28140	22790	19930	15580	12320	9650	7270	5350					
		Pe			5.07	4.91	4.69	4.42	4.10	3.75	3.35	2.95					
	40	Qo			25580	20930	16970	13480	10500	8250							
		Pe			6.25	5.85	5.42	4.97	4.50	4.00							
	50	Qo			23260	19180	14650	11740	9070	6740							
		Pe			7.03	6.55	6.00	5.40	4.75	4.15							
BFS101	30	Qo					26510	21620	17450	13720	10700	8140					
		Pe					7.15	6.75	6.25	5.75	5.20	4.65					
	40	Qo					23730	19420	15350	12100							
		Pe					8.20	7.60	6.90	6.25							
	50	Qo					21040	17090	13490	10580							
		Pe					9.15	8.30	7.50	6.65							
BFS151	30	Qo					38960	31750	25350	20170	15700	11980					
		Pe					10.30	9.80	9.10	8.25	7.40	6.60					
	40	Qo					34890	28260	22560	17800							
		Pe					11.80	10.90	9.90	8.85							
	50	Qo					30700	24880	19650	15580							
		Pe					13.10	11.90	10.75	9.50							
4S151D	30	Qo					52300	42700	34450	27350	21300	16400	12000	8310			
		Pe					12.73	11.93	11.01	9.98	8.82	8.25	7.13	5.98			
	40	Qo					46850	38100	30500	24050	18500	13840	9800	6440			
		Pe					14.91	13.81	12.56	11.19	9.76	8.67	7.30	5.90			
	50	Qo					41700	33700	26800	20900	15800	11500	7920	4970			
		Pe					17.11	15.67	14.13	12.47	10.85	9.21	7.53	5.79			
4S251G	30	Qo	99300	91200	83600	76500	63700	52600	42950	34650	27500	21400	16260				
		Pe	13.89	13.74	13.56	13.34	12.84	12.22	11.48	10.63	9.67	8.59	7.41				
	40	Qo	89700	82300	75400	68900	57300	47150	38350	30800	24250	18670	13940				
		Pe	16.75	16.47	16.16	15.82	15.05	14.17	13.18	12.07	10.85	9.52	8.08				
	50	Qo	80500	73800	67600	61700	51100	41950	33950	27050	21100	16030					
		Pe	19.56	19.16	18.74	18.27	17.25	16.10	14.83	13.44	11.94	10.33					

参数基于吸气温度20℃, 50Hz, 液体无过冷。Suction gas temperature 20℃, 50Hz, without liquid subcooling.

■ 附加冷却或限制吸气温度。Additional cooling or limited suction gas temperature.

■ 附加冷却和喷液冷却系统。Additional cooling & liquid injection cooling system.

制冷量表/Performance Data R22

型号 Model	冷凝温度 Condensing Temperature °C	制冷量 Refrigerating Capacity Qo(W) 功率消耗 Power Consumption Pe(kW)															
		蒸发温度 Evaporating Temperature(°C)															
		↓	12.5	10	7.5	5	0	-5	-10	-15	-20	-25	-30	-35	-40	-45	-50
4S201D	30	Qo					60000	48950	39500	31400	24500	18940	13920	9670			
		Pe					14.64	13.67	12.63	11.51	10.29	9.65	8.40	7.10			
	40	Qo					53700	43700	35100	27750	21500	16080	11430	7530			
		Pe					17.39	16.04	14.60	13.07	11.42	10.35	8.75	7.14			
	50	Qo					47800	38750	30950	24200	18350	13390	9230	5790			
		Pe					20.10	18.40	16.65	14.89	13.14	11.23	9.19	7.06			
4S301G	30	Qo	114200	104800	96000	87800	73100	60400	49300	39800	31650	24700	18840				
		Pe	16.42	16.23	16.01	15.74	15.11	14.33	13.44	12.45	11.36	10.21	9.00				
	40	Qo	103000	94500	86500	79100	65700	54000	44000	35350	27950	21650	16330				
		Pe	19.78	19.46	19.09	18.68	17.74	16.67	15.49	14.20	12.83	11.40	9.92				
	50	Qo	92300	84600	77400	70700	58600	48100	39000	31200	24500	18810					
		Pe	23.40	22.90	22.30	21.70	20.40	19.04	17.57	16.05	14.49	12.91					
6S251D	30	Qo					78500	64100	51700	41050	31950	24600	18010	12460			
		Pe					19.10	17.89	16.51	14.96	13.23	12.34	10.70	8.99			
	40	Qo					70300	57200	45850	36100	27750	20750	14710	9660			
		Pe					22.40	20.70	18.84	16.79	14.83	13.01	10.96	8.86			
	50	Qo					62600	50600	40250	31350	23700	17240	11870	7440			
		Pe					25.60	23.50	21.20	18.68	16.28	13.81	11.27	8.66			
6S351G	30	Qo	149100	136900	125500	114800	95600	79000	64500	52000	41300	32200	24400				
		Pe	20.90	20.60	20.40	20.00	19.27	18.34	17.24	15.96	14.52	12.90	11.12				
	40	Qo	134600	123500	113200	10350	86000	70800	57600	46200	36400	28050	20900				
		Pe	25.20	24.70	24.30	23.70	22.60	21.30	19.78	18.12	16.29	14.30	12.14				
	50	Qo	120900	110800	101400	92700	76800	63000	51000	40600	31700	24050					
		Pe	29.40	28.80	28.10	27.40	25.90	24.20	22.30	20.20	17.92	15.50					
6S321D	30	Qo					90000	73500	59300	47100	36750	28400	20850	14480			
		Pe					22.00	20.50	18.96	17.27	15.43	14.48	12.59	10.65			
	40	Qo					80600	65600	52700	41600	32200	24100	17130	11280			
		Pe					26.10	24.10	21.90	19.61	17.14	15.50	13.10	10.68			
	50	Qo					71700	58200	46500	36300	27500	20050	13840	8670			
		Pe					30.10	27.60	25.00	22.31	19.71	16.85	13.79	10.58			
6S401G	30	Qo	171300	157200	144100	131800	109700	90600	74000	59700	47500	37100	28300				
		Pe	24.60	24.40	24.00	23.60	22.70	21.50	20.20	18.68	17.05	15.32	13.51				
	40	Qo	154600	141800	129800	118600	98500	81100	66000	53000	41900	32450	24500				
		Pe	29.70	29.20	28.60	28.00	26.60	25.00	23.20	21.30	19.26	17.11	14.89				
	50	Qo	138500	127000	116200	106100	88000	72200	58500	46800	36750	28200					
		Pe	35.20	34.40	33.50	32.60	30.70	28.60	26.40	24.10	21.70	19.38					
6S401D	30	Qo					106100	86800	70100	55900	43800	34000	25100	17600			
		Pe					27.40	25.50	23.50	21.20	18.92	17.07	14.95	12.96			
	40	Qo					95300	77700	62600	49650	38700	29150	20900	13960			
		Pe					31.90	29.50	27.00	24.30	21.40	18.61	15.80	13.06			
	50	Qo					85100	69200	55600	43600	33250	24450	17060	10890			
		Pe					36.40	33.50	30.40	27.04	23.71	20.21	16.60				



制冷量表/Performance Data R22

型号 Model	冷凝温度 Condensing Temperature ℃	制冷量 Refrigerating Capacity Qo(W) 功率消耗 Power Consumption Pe(kW)															
		蒸发温度 Evaporating Temperature(℃)															
		↓	12.5	10	7.5	5	0	-5	-10	-15	-20	-25	-30	-35	-40	-45	-50
2YD-2.2	30	Qo					9110	7430	5980	5150	4030	3100	2330	1700			
		Pe					2.42	2.29	2.14	2.02	1.82	1.62	1.43	1.24			
	40	Qo					7970	6430	5110	4370	3370	2550	1870	1330			
		Pe					2.77	2.57	2.35	2.22	1.97	1.73	1.49	1.26			
	50	Qo					6790	5400	4200	3520	2660	1960	1390				
		Pe					3.08	2.80	2.53	2.40	2.09	1.80	1.54				
2YG-3.2	30	Qo	17280	15860	14530	13290	11060	9120	7440	5990	4740	3670	2770				
		Pe	2.01	2.14	2.24	2.31	2.36	2.33	2.24	2.09	1.92	1.74	1.58				
	40	Qo	15400	14110	12910	11780	9750	7980	6450	5120	3970	3000	2160				
		Pe	2.89	2.92	2.93	2.92	2.84	2.69	2.50	2.28	2.06	1.86	1.70				
	50	Qo	13490	12320	11230	10220	8380	6780	5390	4190	3160	2270					
		Pe	3.64	3.59	3.52	3.44	3.23	2.98	2.72	2.45	2.20	2.00					
2YD-3.2	30	Qo						11350	9290	7500	6390	5040	3890	2940	2160		
		Pe						2.85	2.74	2.56	2.40	2.15	1.91	1.70	1.49		
	40	Qo						9880	8010	6380	5400	4160	3140	2290	1600		
		Pe						3.32	3.07	2.79	2.56	2.27	2.00	1.74	1.47		
	50	Qo						8370	6680	5230	4450	3340	2430	1680			
		Pe						3.73	3.39	3.04	2.79	2.46	2.19	1.90			
2YG-4.2	30	Qo	21400	19650	18020	16490	13750	11360	9290	7510	5970	4660	3550				
		Pe	2.48	2.63	2.74	2.83	2.91	2.88	2.78	2.61	2.40	2.17	1.93				
	40	Qo	18960	17380	15910	14540	12050	9890	8020	6390	5000	3800	2780				
		Pe	3.67	3.69	3.68	3.64	3.51	3.31	3.06	2.79	2.51	2.24	2.01				
	50	Qo	16490	15080	13760	12520	10290	8350	6670	5210	3960	2880					
		Pe	4.61	4.51	4.40	4.27	3.99	3.67	3.33	3.01	2.72	2.47					
4YD-3.2	30	Qo						12760	10380	8310	7070	5540	4260	3190	2300		
		Pe						3.25	3.07	2.86	2.68	2.43	2.17	1.93	1.71		
	40	Qo						11220	9030	7140	6010	4650	3510	2560	1790		
		Pe						3.78	3.48	3.16	2.96	2.62	2.28	1.97	1.70		
	50	Qo						9650	7670	5950	4960	3770	2770	1940			
		Pe						4.22	3.82	3.42	3.25	2.88	2.52	2.13			
4YG-5.2	30	Qo	24400	22350	20500	18720	15540	12780	10390	8320	6550	5030	3740				
		Pe	2.84	2.97	3.06	3.13	3.17	3.12	2.99	2.80	2.57	2.32	2.07				
	40	Qo	21800	19960	18250	16650	13750	11230	9040	7150	5530	4130	2950				
		Pe	4.00	4.02	4.02	3.99	3.86	3.66	3.40	3.11	2.80	2.49	2.21				
	50	Qo	19180	17530	15980	14530	11920	9640	7660	5950	4480	3220					
		Pe	5.00	4.93	4.84	4.72	4.45	4.12	3.76	3.39	3.02	2.67					
4YD-4.2	30	Qo						15780	12860	10350	8820	6930	5340	4010	2910		
		Pe						3.97	3.78	3.54	3.31	3.07	2.76	2.41	2.09		
	40	Qo						13840	11180	8880	7550	5860	4440	3270	2300		
		Pe						4.60	4.28	3.92	3.66	3.32	2.94	2.55	2.17		
	50	Qo						11860	9450	7360	6180	4690	3450	2420			
		Pe						5.11	4.68	4.24	4.01	3.57	3.04	2.49			
4YG-6.2	30	Qo	29950	27500	25200	23050	19160	15800	12880	10360	8200	6350	4780				
		Pe	3.43	3.64	3.79	3.90	3.98	3.91	3.73	3.47	3.17	2.86	2.58				
	40	Qo	26750	24500	22400	20450	16930	13860	11190	8890	6910	5210	3770				
		Pe	4.97	5.03	5.03	5.00	4.83	4.56	4.22	3.84	3.46	3.12	2.84				
	50	Qo	23450	21450	19570	17810	14630	11850	9440	7350	5560	4020					
		Pe	6.31	6.22	6.09	5.94	5.56	5.12	4.65	4.19	3.77	3.43					
4YD-5.2	30	Qo						19140	15600	12540	10300	8110	6260	4690	3380		
		Pe						4.77	4.51	4.21	3.93	3.62	3.27	2.91	2.55		
	40	Qo						16830	13590	10800	8830	6880	5220	3820	2650		
		Pe						5.56	5.14	4.70	4.35	3.92	3.49	3.05	2.62		
	50	Qo						14480	11550	9020	7280	5570	4120	2920			
		Pe						6.23	5.66	5.09	4.67	4.23	3.82	3.39			
4YG-7.2	30	Qo	36400	33400	30600	28000	23250	19160	15610	12540	9910	7670	5760				
		Pe	4.21	4.37	4.49	4.57	4.63	4.56	4.40	4.15	3.85	3.51	3.15				
	40	Qo	32500	29750	27200	24850	20550	16830	13600	10800	8400	6340	4590				
		Pe	5.83	5.86	5.86	5.82	5.66	5.40	5.06	4.67	4.24	3.80	3.36				
	50	Qo	28500	26100	23800	21700	17830	14480	11560	9030	6850	4970					
		Pe	7.28	7.19	7.07	6.93	6.57	6.14	5.65	5.13	4.61	4.09					
4YD-6.2	30	Qo						22950	18740	15120	12000	9340	7070				
		Pe						5.76	5.48	5.16	4.80	4.39	3.91				
	40	Qo						20250	16410	13090	10230	7780	5700				
		Pe						6.62	6.18	5.72	5.22	4.68	4.09				
	50	Qo						17510	14010	10990	8390	6160					
		Pe						7.50	6.91	6.30	5.67	5.00					
4YG-9.2	30	Qo	43300	39750	36450	33350	27800	22950	18750	15120	12000	9330	7060				
		Pe	5.50	5.69	5.82	5.90	5.92	5.78	5.53	5.18	4.77	4.34	3.93				
	40	Qo	38900	35650	32600	29800	24700	20250	16420	13100	10240	7790	5710				
		Pe	7.45	7.42	7.36	7.26	7.00	6.64	6.21	5.72	5.20	4.66	4.13				
	50	Qo	34250	31350	28650	26100	21500	17500	14010	10990	8380	6150					
		Pe	9.27	9.05	8.82	8.57	8.06	7.50	6.92	6.30	5.66	4.99					

参数基于吸气温度20℃, 50Hz, 液体无过冷。Suction gas temperature 20℃, 50Hz, without liquid subcooling.  
 ■ VARICOOL系统, 附加冷却, 改变吸气阀位置。VARICOOL system, additional cooling, position of suction valve changed.  
 ■ 附加冷却或限制吸气温度。Additional cooling or limited suction gas temperature.  
 ■ 附加冷却和喷液冷却系统。Additional cooling & liquid injection cooling system.

制冷量表/Performance Data R22

型号 Model	冷凝温度 Condensing Temperature ℃	制冷量 Refrigerating Capacity Qo(W) 功率消耗 Power Consumption Pe(kW)															
		蒸发温度 Evaporating Temperature(℃)															
		↓	12.5	10	7.5	5	0	-5	-10	-15	-20	-25	-30	-35	-40	-45	-50
4YD-7.2	30	Qo						25150	20600	16710	13350	10480	8010	5940	4210		
		Pe						5.96	5.63	5.24	4.79	4.29	3.78	3.23	2.67		
	40	Qo						22200	18140	14620	11600	9010	6730	4850	3280		
		Pe						6.89	6.38	5.83	5.24	4.63	4.06	3.40	2.69		
	50	Qo						19210	15610	12490	9660	7320	5340	3670	2280		
		Pe						7.74	7.06	6.34	5.63	4.90	4.13	3.33	2.49		
4YG-10.2	30	Qo	47700	43800	40150	36750	30600	25250	20650	16630	13170	10220	7700				
		Pe	5.73	5.84	5.91	5.94	5.92	5.77	5.52	5.16	4.73	4.21	3.64				
	40	Qo	42250	38750	35500	32500	27000	22250	18110	14530	11440	8800	6540				
		Pe	7.41	7.38	7.32	7.23	6.97	6.61	6.17	5.66	5.10	4.48	3.84				
	50	Qo	36900	33800	30950	28250	23400	19200	15540	12380	9660	7340					
		Pe	8.99	8.83	8.65	8.44	7.97	7.43	6.82	6.16	5.46	4.73					
4YD-8.2	30	Qo						30700	25200	20450	16370	12880	9830	7320	5220		
		Pe						7.30</									



制冷量表/Performance Data R22

型号 Model	冷凝温度 Condensing Temperature °C	制冷量 Refrigerating Capacity Qo(W) 功率消耗 Power Consumption Pe(kW)															
		蒸发温度 Evaporating Temperature(°C)															
		↓	12.5	10	7.5	5	0	-5	-10	-15	-20	-25	-30	-35	-40	-45	-50
6WD-25.2	30	Qo					78500	64100	51700	41050	31950	24600	18010	12460			
		Pe					19.10	17.89	16.51	14.96	13.23	12.34	10.70	8.99			
	40	Qo					70300	57200	45850	36100	27750	20750	14710	9660			
		Pe					22.40	20.70	18.84	16.79	14.63	13.01	10.96	8.86			
	50	Qo					62600	50600	40250	31350	23700	17240	11870	7440			
		Pe					25.60	23.50	21.20	18.68	16.28	13.81	11.27	8.66			
6WG-35.2	30	Qo	149100	136900	125500	114800	95600	79000	64500	52000	41300	32200	24400				
		Pe	20.90	20.60	20.40	20.00	19.27	18.34	17.24	15.96	14.52	12.90	11.12				
	40	Qo	134600	123500	113200	10350	86000	70800	57600	46200	36400	28050	20900				
		Pe	25.20	24.70	24.30	23.70	22.60	21.30	19.78	18.12	16.29	14.30	12.14				
	50	Qo	120900	110800	101400	92700	76800	63000	51000	40600	31700	24050					
		Pe	29.40	28.80	28.10	27.40	25.90	24.20	22.30	20.20	17.92	15.50					
6WD-30.2	30	Qo					90000	73500	59300	47100	36750	28400	20850	14480			
		Pe					22.00	20.50	18.96	17.27	15.43	14.48	12.59	10.65			
	40	Qo					80600	65600	52700	41600	32200	24100	17130	11280			
		Pe					26.10	24.10	21.90	19.61	17.14	15.50	13.10	10.68			
	50	Qo					71700	58200	46500	36300	27500	20050	13840	8670			
		Pe					30.10	27.60	25.00	22.31	19.71	16.85	13.79	10.58			
6WG-40.2	30	Qo	171300	157200	144100	131800	109700	90600	74000	59700	47500	37100	28300				
		Pe	24.60	24.40	24.00	23.60	22.70	21.50	20.20	18.68	17.05	15.32	13.51				
	40	Qo	154600	141800	129800	118600	98500	81100	66000	53000	41900	32450	24500				
		Pe	29.70	29.20	28.60	28.00	26.60	25.00	23.20	21.30	19.26	17.11	14.89				
	50	Qo	138500	127000	116200	106100	88000	72200	58500	46800	36750	28200					
		Pe	35.20	34.40	33.50	32.60	30.70	28.60	26.40	24.10	21.70	19.38					
6WD-40.2	30	Qo					106100	86800	70100	55900	43800	34000	25100	17600			
		Pe					27.40	25.50	23.50	21.20	18.92	17.07	14.95	12.96			
	40	Qo					95300	77700	62600	49650	38700	29150	20900	13960			
		Pe					31.90	29.50	27.00	24.30	21.40	18.61	15.80	13.06			
	50	Qo					85100	69200	55600	43600	33250	24450	17060	10890			
		Pe					36.40	33.50	30.40	27.04	23.71	20.21	16.60	12.94			
6WG-50.2	30	Qo	201400	184800	169400	155000	129100	106700	87300	70600	56300	44150	33900				
		Pe	31.90	31.40	30.80	30.20	28.70	27.10	25.30	23.30	21.20	18.97	16.66				
	40	Qo	181700	166700	152800	139800	116300	95900	78300	63100	50100	39050	29700				
		Pe	37.60	36.90	36.10	35.20	33.30	31.30	29.00	26.60	24.00	21.30	18.44				
	50	Qo	163200	149700	137100	125300	104100	85700	69700	56000	44250	34250					
		Pe	43.00	42.10	41.10	40.10	37.90	35.50	32.80	29.90	26.80	23.50					
6WDS-20.2	30	Qo									35500	29700	24500	19970	15960	12400	9180
		Pe									15.46	14.21	12.95	11.68	10.41	9.15	7.91
	40	Qo									34750	29100	24050	19560	15560	11940	8590
		Pe									17.61	16.12	14.64	13.15	11.67	10.19	8.71
	50	Qo									34050	28500	23600	19210	15220		
		Pe									19.74	18.00	16.29	14.56	12.80		
6WDS-25.2	30	Qo									40800	34050	28150	22900	18320	14230	10540
		Pe									17.75	16.31	14.86	13.41	11.95	10.51	9.08
	40	Qo									39900	33400	27600	22450	17860	13700	9860
		Pe									20.21	18.51	16.81	15.10	13.40	11.70	10.00
	50	Qo									39100	32750	27100	22050	17470		
		Pe									22.66	20.67	18.70	16.72	14.70		
6WDS-30.2	30	Qo									48800	40750	33700	27400	21900	17030	12610
		Pe									21.23	19.52	17.78	16.04	14.30	12.57	10.86
	40	Qo									47750	39950	33000	26850	21350	16390	11790
		Pe									24.18	22.15	20.11	18.07	16.03	13.99	11.96
	50	Qo									46750	39200	32450	26400	20900		
		Pe									27.12	24.73	22.37	20.01	17.59		

参数基于吸气温度20℃, 50Hz, 液体无过冷。Suction gas temperature 20℃, 50Hz, without liquid subcooling.

■ 附加冷却或限制吸气温度。Additional cooling or limited suction gas temperature.

■ 附加冷却和喷液冷却系统。Additional cooling & liquid injection cooling system.

制冷量表/Performance Data R404A/R507A

型号 Model	冷凝温度 Condensing Temperature °C	制冷量 Refrigerating Capacity Qo(W) 功率消耗 Power Consumption Pe(kW)																	
		蒸发温度 Evaporating Temperature(°C)																	
		↓	7.5	5	0	-5	-10	-15	-20	-25	-30	-35	-40	-45	-50	-55	-60	-65	-70
BFS51	30	Qo	24000	22200	18600	15400	12600	10200	8500	6700	5300	4000	3000						
		Pe	20400	18900	15800	13100	10700	8700	7200	5700	4500	3400	2600						
BFS81	30	Qo	31400	28700	24000	20000	16400	13400	10700	8500	6500	4900	3700						
		Pe	26400	24100	20200	16800	13800	11300	9000	7100	5500	4200	3100						
BFS101	30	Qo	44800	44200	35100	29000	23900	19400	15600	12300	9500	7200	5300						
		Pe	38100	35600	29800	24600	20300	16500	13200	10500	8100	6100	4500						
BFS151	30	Qo	69000	64500	54300	45200	37300	30500	25600	19600	15300	11700	8900						
		Pe	58700	54800	46200	38400	31700	25900	21800	16700	13000	9900	7500						
4S151D	30										58500	48400	39700	32200	25750	20250	15560	11630	8350
											15.78	14.84	13.79	12.63	11.40	10.10	8.77	7.43	6.10
	40										49850	41150	33600	27100	21500	16730	12660	9240	6380
											18.16	16.80	15.34	13.82	12.25	10.65	9.05	7.47	5.93
	50										33950	27600	22050	17330	13270	9820	6920		
											18.50	16.67	14.80	12.91	11.03	9.17	7.37		
4S251G	30		90700	83200	69700	57900	47750	38950	31350	24800	19210	14460	10460						
			16.14	16.07	15.72	15.14	14.36	13.41	12.32	11.11	9.81	8.46	7.08						
	40		77400	71000	59500	49400	40650	33000	26450	20800	15930	11800	8320						
			19.56	19.22	18.37	17.32	16.11	14.76	13.31	11.78	10.20	8.60	7.00						
	50		64500	59100	49500	41000	33600	27200	21600	16830	12740	9260	6340						
			22.78	22.18	20.84	19.33	17.71	15.98	14.18	12.34	10.49	8.65	6.86						
4S201D	30										67100	55500	45400	36750	29350	23000	17600	13060	9260
											18.22	17.12	15.89	14.55	13.12	11.62	10.08	8.53	6.97
	40										57200	47300	38700	31200	24800	19250	14540	10540	7160
											20.94	19.36	17.68	15.93	14.13	12.30	10.47	8.65	6.89
	50										38750	31650	25450	20100	15480	11510	8120		
											21.25	19.15	17.02	14.87	12.73	10.63	8.60		
4S301G	30		103800	95300	79900	66500	54900	44900	36250	28800	22450	17040	12480						



制冷量表/Performance Data R404A/R507A

型号 Model	冷凝温度 Condensing Temperature ℃	制冷量 Refrigerating Capacity Qo(W) 功率消耗 Power Consumption Pe(kW)																	
		蒸发温度 Evaporating Temperature(℃)																	
		↓	7.5	5	0	-5	-10	-15	-20	-25	-30	-35	-40	-45	-50	-55	-60	-65	-70
6S321D	30	Qo				98300	81200	66400	53600	42700	33350	25400	18760	13210					
		Pe				26.77	2.507	23.21	21.20	19.08	16.84	14.54	12.17	9.76					
	40	Qo				84000	69300	56600	45550	36050	27900	21000	15130	10210					
		Pe				30.86	28.50	26.00	23.38	20.68	17.90	15.07	12.21	9.34					
	50	Qo					57600	46900	37600	29550	22600	16720	11710						
		Pe					31.43	28.35	25.18	21.94	18.67	15.37	12.06						
6S401G	30	Qo	156100	143200	120000	99900	82500	67400	54300	43150	33600	25550	18730						
		Pe	30.46	29.91	28.66	27.20	25.57	23.77	21.82	19.75	17.56	15.28	12.93						
	40	Qo	133400	122400	102700	85400	70300	57300	46000	36300	28000	20900	14940						
		Pe	35.49	34.61	32.70	30.62	28.38	26.02	23.54	20.96	18.30	15.57	12.80						
	50	Qo	110800	101800	85400	70900	58300	47350	37800	29550	22500	16450	11330						
		Pe	40.19	38.97	36.42	33.73	30.91	27.99	24.99	21.92	18.79	15.63	12.46						
6S401D	30	Qo				118800	98100	80100	64700	51400	40100	30500	22400	15600					
		Pe				31.46	29.74	27.69	25.37	22.84	20.14	17.34	14.49	11.63					
	40	Qo				100900	83100	67600	54300	42800	32950	24600	17570	11680					
		Pe				36.00	33.43	30.59	27.55	24.36	21.06	17.73	14.40	11.14					
	50	Qo					68300	55300	44050	34300	26050	18990	13060						
		Pe					36.68	33.08	29.33	25.49	21.62	17.76	13.98						
6S501G	30	Qo	184400	169300	142200	118600	98100	80400	65200	52100	40900	31400	23450						
		Pe	36.24	35.76	34.49	32.87	30.95	28.79	26.43	23.94	21.38	18.79	16.23						
	40	Qo	157900	145000	121700	101300	83600	68300	55000	43600	33850	25600	18620						
		Pe	43.13	42.10	39.80	37.22	34.43	31.47	28.40	25.28	22.15	19.09	16.14						
	50	Qo	131000	120200	100800	83800	68900	56000	44800	35150	26950	19960	14090						
		Pe	49.80	48.21	44.85	41.30	37.60	33.83	30.02	26.24	22.53	18.97	15.59						
2YD-2.2	30	Qo				10110	8340	6810	5490	4360	3390	2570	1880	1300					
		Pe				2.72	2.59	2.43	2.25	2.05	1.83	1.59	1.35	1.09					
	40	Qo				8490	6980	5670	4530	3560	2720	2020	1420	920					
		Pe				3.15	2.94	2.7	2.44	2.17	1.88	1.58	1.28	0.98					
	50	Qo				6900	5640	4550	3600	2780	2080	1490	990						
		Pe				3.55	3.25	2.93	2.59	2.25	1.9	1.54	1.19						
2YG-3.2	30	Qo	15940	14630	12260	10200	8420	6870	5540	4400	3420	2590	1890						
		Pe	2.79	2.8	2.77	2.71	2.6	2.45	2.28	2.08	1.86	1.62	1.37						
	40	Qo	13510	12390	10380	8610	7080	5750	4600	3610	2760	2040	1430						
		Pe	3.49	3.44	3.32	3.16	2.96	2.74	2.49	2.21	1.92	1.62	1.31						
	50	Qo	11110	10180	8500	7030	5740	4630	3660	2820	2110	1510	1000						
		Pe	4.11	4.02	3.8	3.55	3.27	2.96	2.63	2.29	1.93	1.57	1.2						
2YD-3.2	30	Qo				12470	10290	8400	6780	5380	4190	3180	2330	1630					
		Pe				3.33	3.15	2.95	2.72	2.48	2.21	1.93	1.64	1.35					
	40	Qo				10510	8650	7040	5640	4440	3420	2550	1810	1200					
		Pe				3.85	3.58	3.29	2.98	2.65	2.32	1.97	1.62	1.27					
	50	Qo				8590	7050	5710	4550	3540	2690	1950	1340						
		Pe				4.35	3.98	3.60	3.21	2.80	2.39	1.98	1.57						

参数基于吸气温度20℃, 50Hz, 液体无过冷。Suction gas temperature 20℃, without liquid subcooling.  
 附加冷却或限制吸气温度。Additional cooling or limited suction gas temperature.

制冷量表/Performance Data R404A/R507A

型号 Model	冷凝温度 Condensing Temperature ℃	制冷量 Refrigerating Capacity Qo(W) 功率消耗 Power Consumption Pe(kW)																
		蒸发温度 Evaporating Temperature(℃)																
		↓	7.5	5	0	-5	-10	-15	-20	-25	-30	-35	-40	-45	-50	-55	-60	-65
2YG-4.2	30	Qo	19440	17840	14960	12450	10280	8400	6770	5380	4190	3170	2320					
		Pe	3.48	3.48	3.42	3.32	3.17	2.98	2.76	2.50	2.23	1.94	1.64					
	40	Qo	16470	15110	12660	10520	8660	7050	5650	4450	3420	2540	1810					
		Pe	4.31	4.25	4.08	3.86	3.61	3.33	3.02	2.69	2.34	1.98	1.61					
	50	Qo	13550	12430	10400	8620	7070	5720	4550	3540	2690	1960	1340					
		Pe	5.08	4.96	4.68	4.36	4.01	3.63	3.23	2.82	2.40	1.98	1.55					
4YD-3.2	30	Qo				13720	11330	9260	7470	5940	4630	3510	2580	1800				
		Pe				3.85	3.66	3.44	3.18	2.90	2.58	2.24	1.88	1.50				
	40	Qo				11560	9520	7740	6200	4880	3750	2790	1980	1310				
		Pe				4.42	4.10	3.76	3.40	3.03	2.63	2.23	1.82	1.40				
	50	Qo				9450	7740	6260	4970	3860	2910	2110	1430					
		Pe				4.91	4.48	4.04	3.59	3.13	2.67	2.22	1.77					
4YG-5.2	30	Qo	21550	19790	16590	13810	11400	9320	7520	5970	4650	3530	2580					
		Pe	3.78	3.79	3.76	3.67	3.52	3.32	3.07	2.79	2.48	2.15	1.81					
	40	Qo	18240	16740	14020	11650	9580	7790	6240	4900	3760	2790	1970					
		Pe	4.65	4.60	4.46	4.25	3.99	3.69	3.35	2.98	2.59	2.18	1.76					
	50	Qo	14970	13730	11470	9500	7780	6280	4980	3860	2900	2090	1410					
		Pe	5.44	5.33	5.07	4.75	4.39	3.98	3.55	3.10	2.62	2.14	1.65					
4YD-4.2	30	Qo				17330	14290	11660	9400	7450	5800	4390	3210	2220				
		Pe				4.61	4.39	4.12	3.81	3.45	3.06	2.65	2.22	1.78				
	40	Qo				14440	11870	9650	7720	6070	4650	3450	2440	1590				
		Pe				5.28	4.93	4.53	4.10	3.64	3.15	2.65	2.14	1.63				
	50	Qo				11650	9550	7720	6130	4760	3590	2590	1750					
		Pe				5.86	5.39	4.87	4.33	3.77	3.19	2.60	2.02					
4YG-6.2	30	Qo	27500	25200	21100	17580	14500	11830	9530	7550	5860	4420	3210					
		Pe	4.73	4.75	4.73	4.62	4.43	4.17	3.85	3.48	3.08	2.65	2.21					
	40	Qo	23150	21250	17780	14750	12120	9840	7860	6160	4700	3470	2420					
		Pe	5.87	5.81	5.62	5.35	5.01	4.61	4.17	3.68	3.17	2.65	2.12					
	50	Qo	18930	17360	14490	11980	9790	7890	6240	4820	3600	2570	1710					
		Pe	6.86	6.72	6.37	5.95	5.47	4.95	4.38	3.79	3.19	2.58	1.97					
4YD-5.2	30	Qo				21100	17420	14220	11470	9100	7080	5370	3930	2730				
		Pe				5.52	5.29	4.99	4.62	4.18	3.70	3.19	2.66	2.11				
	40	Qo				17650	14520	11810	9460	7440	5720	4250	3010	1980				
		Pe				6.34	5.95	5.50	4.99	4.43	3.83	3.22	2.60	1.98				
	50	Qo				14300	11730	9490	7550	5880	4440	3220	2190					
		Pe				7.07	6.53	5.93	5.29	4.62	3.92	3.22	2.52					
4YG-7.2	30	Qo	32600	29900	25000	20800	17120	13950	11210	8860	6860	5160	3720					
		Pe	5.49	5.52	5.51	5.39	5.18	4.88	4.52	4.10	3.63	3.12	2.59					
	40	Qo	27500	25200	21100	17490	14350	11630	9270	7250	5510	4040	2800					
		Pe	6.81	6.75	6.55													



制冷量表/Performance Data R404A/R507A

型号 Model	冷凝温度 Condensing Temperature ℃	制冷量 Refrigerating Capacity Qo(W) 功率消耗 Power Consumption Pe(kW)																	
		蒸发温度 Evaporating Temperature(℃)																	
		↓	7.5	5	0	-5	-10	-15	-20	-25	-30	-35	-40	-45	-50	-55	-60	-65	-70
4YG-9.2	30	Qo	38800	35600	29900	24900	20600	16880	13660	10890	8530	6530	4840						
	Pe	6.85	6.87	6.82	6.64	6.36	5.98	5.53	5.01	4.45	3.86	3.25							
	Qo	32850	30150	25300	21100	17410	14210	11440	9050	7000	5250	3770							
4YD-7.2	30	Qo	27050	24850	20900	17380	14310	11620	9280	7240	5480	3960	2660						
	Pe	9.80	9.62	9.16	8.61	7.98	7.28	6.52	5.71	4.87	4.01	3.14							
	Qo	22750	20600	17190	14640	11600	8990	6780	4920	3370									
4YG-10.2	30	Qo	42750	39200	32800	27250	22400	18240	14610	11490	8810	6530	4580						
	Pe	7.14	7.13	7.01	6.76	6.41	5.96	5.45	4.88	4.27	3.64	3.00							
	Qo	36100	33100	27600	22850	18680	15070	11950	9260	6960	5000	3350							
4YD-8.2	30	Qo	29550	27050	22500	18490	15020	12010	9410	7180	5290	3690	2360						
	Pe	9.97	9.71	9.13	8.44	7.68	6.87	6.01	5.13	4.26	3.39	2.57							
	Qo	27050	24850	20900	17380	14310	11620	9280	7240	5480	3960	2660							
4YG-12.2	30	Qo	51500	47200	39450	32750	26900	21900	17550	13830	10650	7960	5700						
	Pe	8.63	8.63	8.49	8.22	7.81	7.29	6.68	6.00	5.26	4.48	3.68							
	Qo	43500	39850	33300	27550	22600	18260	14530	11320	8590	6270	4320							
4YD-10.2	30	Qo	35400	32400	27050	22350	18230	14650	11550	8880	6590	4650	3020						
	Pe	12.28	11.93	11.17	10.33	9.42	8.45	7.45	6.42	5.39	4.36	3.36							
	Qo	31600	28500	23500	19400	15300	11200	8100	6000	4400	3200	2200							
4YG-15.2	30	Qo	61500	56400	47100	39050	32100	26000	20800	16320	12490	9240	6500						
	Pe	10.23	10.19	9.96	9.58	9.06	8.43	7.70	6.90	6.04	5.14	4.23							
	Qo	52200	47850	39950	33050	27050	21850	17360	13490	10190	7390	5020							
4YD-12.2	30	Qo	42600	39000	32500	26750	21800	17430	13680	10460	7710	5380	3420						
	Pe	14.27	13.78	12.78	11.73	10.66	9.55	8.43	7.28	6.11	4.94	3.75							
	Qo	37300	30600	24800	19810	15510	11840	8740	6120	3950									
4YG-20.2	30	Qo	71000	65100	54500	45250	37200	30250	24250	19070	14640	10860	7660						
	Pe	12.24	12.20	11.94	11.47	10.82	10.04	9.14	8.16	7.12	6.07	5.02							
	Qo	60500	55400	46250	38200	31250	25200	20000	15530	11730	8510	5820							
4YD-15.2	30	Qo	58500	48400	39700	32200	25750	20250	15560	11630	8350	610							
	Pe	15.78	14.84	13.79	12.63	11.40	10.10	8.77	7.43	6.10									
	Qo	49850	41150	33600	27100	21500	16730	12660	9240	6380									
4YG-25.2	30	Qo	90700	83200	69700	57900	47750	38950	31350	24800	19210	14460	10460						
	Pe	16.14	16.07	15.72	15.14	14.36	13.41	12.32	11.11	9.81	8.46	7.08							
	Qo	77400	71000	59500	49400	40650	33000	26450	20800	15930	11800	8320							

参数基于吸气温度20℃, 50Hz, 液体无过冷。Suction gas temperature 20℃, 50Hz, without liquid subcooling.  
     附加冷却或限制吸气温度。Additional cooling or limited suction gas temperature.

制冷量表/Performance Data R404A/R507A

型号 Model	冷凝温度 Condensing Temperature ℃	制冷量 Refrigerating Capacity Qo(W) 功率消耗 Power Consumption Pe(kW)																	
		蒸发温度 Evaporating Temperature(℃)																	
		↓	7.5	5	0	-5	-10	-15	-20	-25	-30	-35	-40	-45	-50	-55	-60	-65	-70
4VD-20.2	30	Qo				67100	55500	45400	36750	29350	23000	17600	13060	9260					
	Pe				18.22	17.12	15.89	14.55	13.12	11.62	10.08	8.53	6.97						
	Qo				57200	47300	38700	31200	24800	19250	14540	10540	7160						
4VG-30.2	30	Qo				103800	95300	79900	66500	54900	44900	36250	28800	22450	17040	12480			
	Pe				19.21	19.07	18.57	17.81	16.84	15.70	14.41	13.02	11.57	10.09	8.61				
	Qo				89100	81800	68600	57000	47000	38250	30700	24200	18610	13860	9850				
6WD-25.2	30	Qo				136000	124800	104500	86900	71600	58400	47000	37200	28800	21700	15720			
	Pe				25.11	24.84	24.07	23.04	21.77	20.29	18.63	16.84	14.91	12.89	10.81				
	Qo				116300	106600	89300	74100	60900	49450	39600	31100	23800	17670	12480				
6WG-40.2	30	Qo				156100	143200	120000	99900	82500	67400	54300	43150	33600	25550	18730			
	Pe				30.46	29.91	28.66	27.20	25.57	23.77	21.82	19.75	17.56	15.28	12.93				
	Qo				133400	122400	102700	85400	70300	57300	46000	36300	28000	20900	14940				
6WDS-20.2	30	Qo				184400	169300	142200	118600	98100	80400	65200	52100	40900	31400	23450			
	Pe				36.24	35.76	34.49	32.87	30.95	28.79	26.43	23.94	21.38	18.79	16.23				
	Qo				157900	145000	121700	101300	83600	68300	55000	43600	33850	25600	18620				
6WDS-25.2	30	Qo				219000	202000	168000	138000	114000	93000	75000	60000	47000	36000	27000			
	Pe				49.80	48.21	44.85	41.30	37.60	33.83	30.02	26.24	22.53	18.97	15.59				
	Qo				184400	169300	142200	118600	98100	80400	65200	52100	40900	31400	23450				
6WDS-30.2	30	Qo				245000	225000	185000	150000	125000	100000	80000	65000	50000	38000	29000			
	Pe				52.50	50.50	46.50	42.50	38.50	34.50	30.50	26.50	22.50	18.50	14.50				
	Qo				219000	202000	168000	138000	114000	93000	75000	60000	47000	36000	27000				

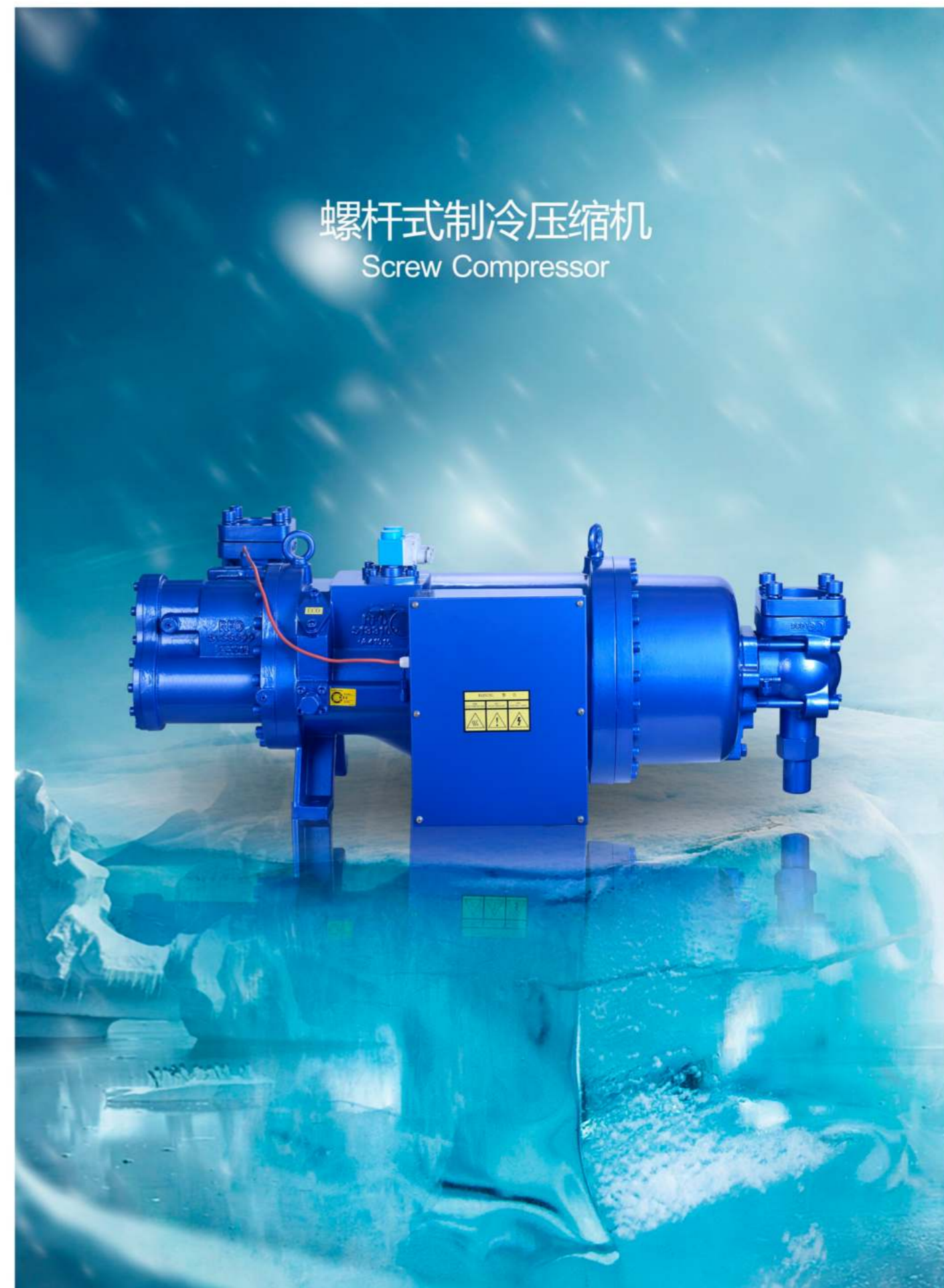
参数基于吸气温度20℃, 50Hz, 液体无过冷。Suction gas temperature 20℃, 50Hz, without liquid subcooling.  
     附加冷却或限制吸气温度。Additional cooling or limited suction gas temperature.  
     附加冷却和喷液冷却系统。Additional cooling & liquid injection cooling system.



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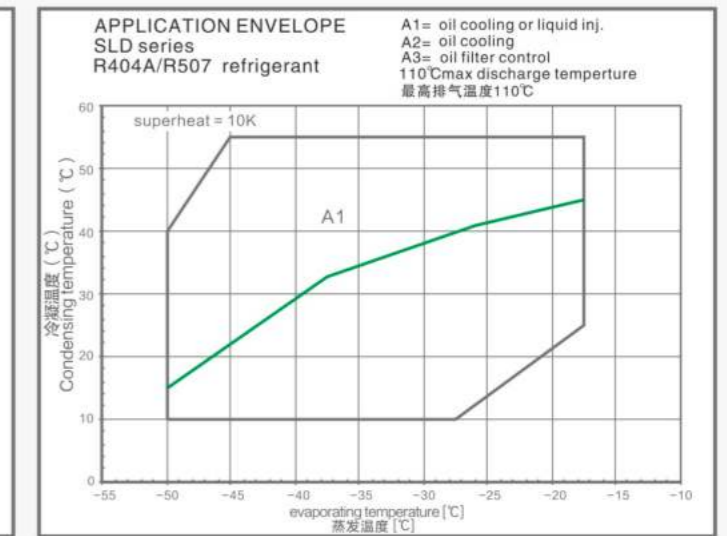
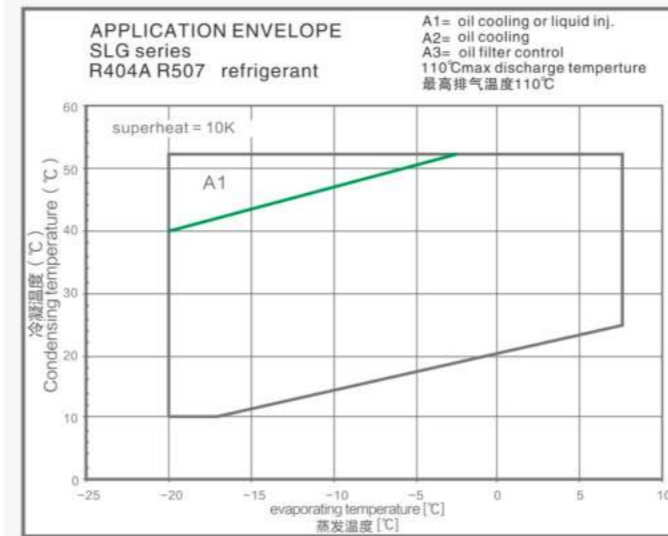
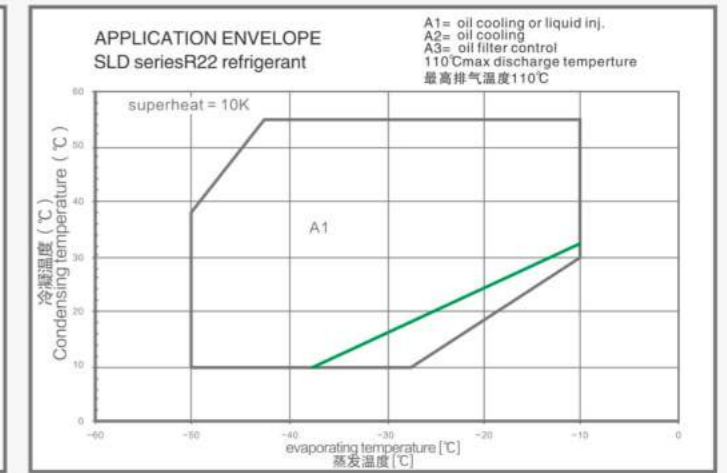
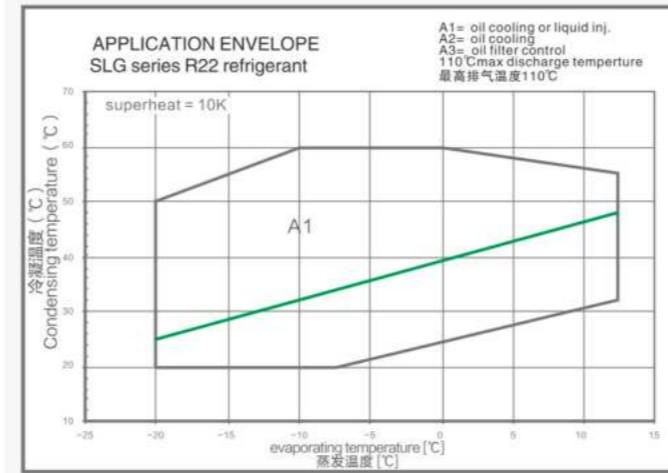


型号标识 Nomenclature

Screw Compressor for Refrigeration  
冷冻螺杆压缩机  
20-300 Hp, 100-1100 m<sup>3</sup>/h

COMPRESSOR / 压缩机	S	L	G	210-70	Y	D	2
COMPRESSOR TYPE / 压缩机型号	S						
SERIES / 系列	L						
TYPE / 类型	G						
PLACEMENT-NOMINAL POWER / 排气量-名义功率	210-70						
CAPACITY / 能量调节	Y						
STAGE / 压缩类型	D						
VERSION / 版本	2						

应用范围 Application Envelope



Key / 图例:

- Q<sub>o</sub> : cooling capacity / 冷量 (kW)
- P<sub>a</sub> : input power / 输入电功率 (kW)
- T<sub>e</sub> : Evaporating temperature / 蒸发温度 (°C)
- T<sub>c</sub> : Condensing temperature / 冷凝温度 (°C)
- 50Hz frequency / 频率
- Liquid subcooling / 液体过冷度 5K
- Suction gas superheat / 吸气过热度 10K

Require additional cooling 后表中, 此工况需要油冷却



技术数据 Technical Data

Model/型号	SLG	120-40	140-50	160-60	190-65	210-70	230-80	250-90	290-100	350-120	420-150	520-180	640-220
Displacement 50Hz 排气量50Hz	m <sup>3</sup> /h	128	145	158	188	205	235	248	293	354	416	520	641
Nominal Motor Power 电机名义功率	Hp/kW	40/30	50/37	60/45	70/52	70/52	80/60	90/68	100/75	120/89	145/108	180/135	210/157
Weight 重量	Kg	245	255	280	405	410	420	460	535	545	675	1030	1050
Discharge line, internal Φ 排气管内径尺寸	mm	45	45	45	57	57	57	57	67	67	76	89	89
Suction line, internal Φ 吸气管内径尺寸	mm	57	57	57	76	76	76	76	89	89	89	108	108
Energy regulation 能量调节		50%,70%,100%有级调节或50%~100%无级调节 50%,70%,100% step regulation or 50%~100% stepless regulation											
Protection module 保护模块		INT 69 RCY											
Standard motor 标准电机		380V/3/50Hz-460/3/60Hz											
Starting current 星/三角启动电流	A	134	139	179	193	193	298	318	338	366	453	595	767
	A	134	182	179	139	193	338	318	318	354	453	595	595
Maximum working current 最大工作电流	A	60	78	83	104	109	126	144	158	187	228	284	331

技术数据 Technical Data

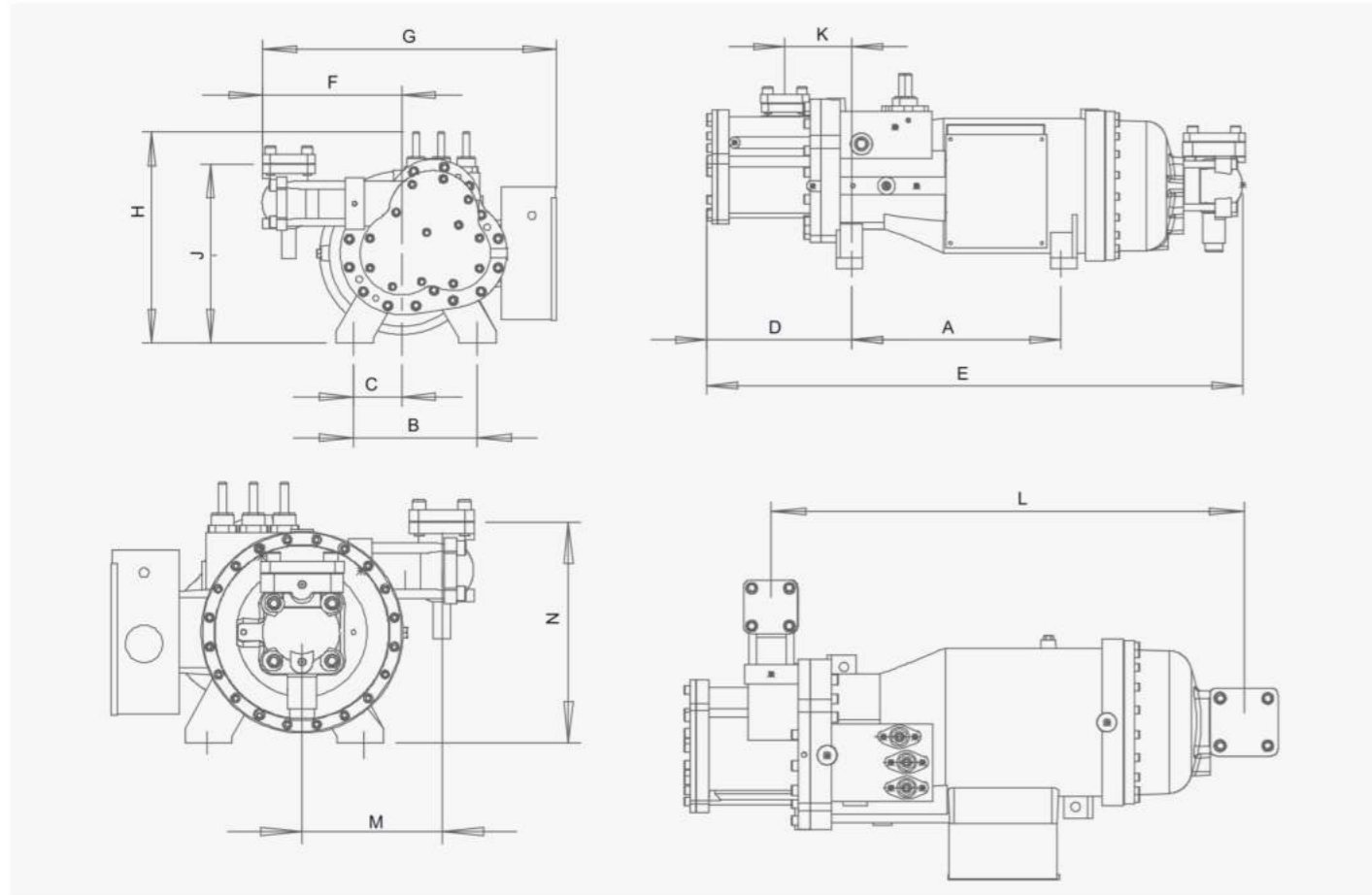
Model/型号	SLD	120-30	140-40	160-50	190-50	210-60	230-70	250-75	290-80	350-100	420-125	520-160	640-200
Displacement 50Hz 排气量50Hz	m <sup>3</sup> /h	128	145	158	188	205	235	248	293	354	416	520	641
Nominal Motor Power 电机名义功率	Hp/kW	30/22	40/30	50/37	60/45	60/45	70/53	75/57	80/60	100/75	120/89	160/120	200/143
Weight 重量	Kg	245	255	260	405	410	420	430	535	545	675	1030	1050
Discharge line, internal Φ 排气管内径尺寸	mm	45	45	45	57	57	57	57	67	67	76	89	89
Suction line, internal Φ 吸气管内径尺寸	mm	57	57	57	76	76	76	76	89	89	89	108	108
Energy regulation 能量调节		50%,70%,100%有级调节或50%~100%无级调节 50%,70%,100% step regulation or 50%~100% stepless regulation											
Protection module 保护模块		INT 69 RCY											
Standard motor 标准电机		380V/3/50Hz-460/3/60Hz											
Starting current 星/三角启动电流	A	131	134	179	182	182	193	230	298	338	416	543	678
	A	131	134	179	182	182	193	230	298	338	416	543	678
Maximum working current 最大工作电流	A	46	63	75	90	95	112	118	126	157	187	251	301

技术数据 Technical Data

型号 Model	SLD-S	230S-50	420S-100	640S-150
蒸发温度 Evaporation temperature	℃	-60 ~ -30(R22); -60 ~ -30(R404A/R507)		
转速 Rotate speed	r/min	2960/3552		
低压级排气量 Low pressure displacement	m <sup>3</sup> /h	235/282	420/504	641/769
高压级排气量 High pressure displacement	m <sup>3</sup> /h	102 / 122	192/230	235/282
低压级套管尺寸 Low pressure casing size	mm	67	80	92
高压级套管尺寸 High pressure casing size	mm	42	54	67
容量调节范围 Capacity adjustment range	%	三段 ( 100, 50, 25 ) 3 segment		
电源 Power supply	V/Hz	3Ph / 380 V / 50 Hz		
Motor form 电机形式		三相, 两极, 半封闭异步电动机 3 phase, 2 pole, semi asynchronous motor		
启动方式 Starting mode		“Y-Δ” 启动或 “Δ” 直接启动 “Y-Δ” starting or “Δ” direct starting		
保护装置 Protection devices		电源欠相, 逆相保护, 绕组内埋温度保护 Protection from phase shortage and negative phase, thermostat inside the winding		
强度试验Bar Strength test	g	42		
额定功率 Rated power	Hp/kW	60/45	125/94	175/131
启动电流 Y-LRA Starting current/Y	A	137	276	374
启动电流 Δ-LRA Starting current/Δ	A	448	878	1155
额定电流 RLA Rated current	A	85	170	237
最大运转电流 RLAmx Maximum working current(A)	A	108	207	290
重量Wight	kg	410	620	870

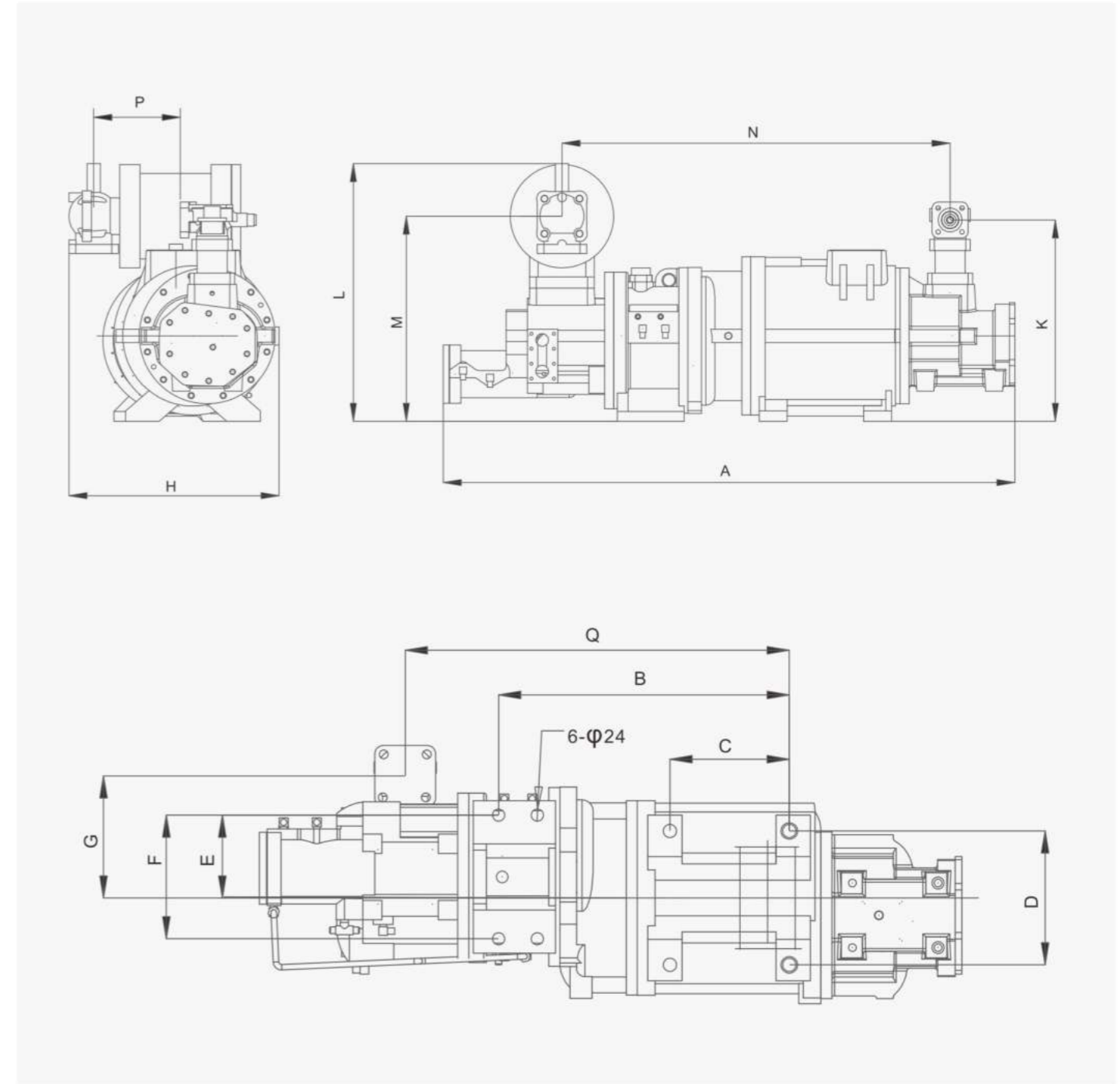


安装尺寸 Dimension



SLG	120-40	140-50	160-60	190-65	210-70	230-80	250-90	290-100	350-120	420-150	520-180	640-220		
SLD	120-30	140-40	160-50	190-50	210-60	230-70	250-75	290-80	350-100	420-125	520-160	640-210		
A		338			390			480		425		540		
B		232			290			290		360		340		
C		96			120			115		145		170		
D		276			309			327		326		417		
E		965			1125			1243		1281		1509		
F		255			285			316		352		377		
G		545			590			646		717		757		
H		410			475			450		495		535		
J		325			371			378		427		465		
K		134			165			150		158		181		
L		766			850			995		1025		1167		
M		208			216			247		286		296		
N		267			290			290		340		350		
供油管 Oil	16 / 5/8"				22 / 7/8"									
排气管 DLΦ	45 / 1-5/8"			57 / 2-1/8"			67 / 2-5/8"			76 / 3-1/8"			89 / 3-5/8"	
吸气管 SLΦ	57 / 2-1/8"			76 / 2-5/8"			89 / 3-1/8"			89 / 3-5/8"			108 / 4-1/8"	

安装尺寸 Dimension



型号Model	A	B	C	D	E	F	G	H	K	L	M	N	P
SLD230S-50	1271	526	216	243	150	224	221	468	448	574	457	863	193
SLD420S-100	1520	637	250	290	198	290	239	530	567	745	618	1094	209



制冷量表/Performance Data R22

SLD 120-30 (R22)												
Tc	20		30		40		45		50		55	
Te	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa
-50	12.3	12.1	10.8	15.2	—	—	—	—	—	—	—	—
-40	22.0	12.8	19.8	15.4	16.4	17.4	14.0	18.8	12.0	20.5	10.7	21.4
-35	28.3	13.5	25.5	16.1	21.8	18.5	19.0	20.2	16.3	21.8	16.8	22.9
-30	35.8	14.4	32.5	17.0	27.9	19.5	25.8	21.0	21.7	22.8	22.1	24.1
-25	44.6	15.6	40.6	18.0	36.2	21.3	32.7	22.5	29.6	23.9	28.5	25.5
-20	54.9	16.9	50.2	19.2	44.9	22.6	41.4	23.4	36.8	24.7	35.9	26.5
-10	—	—	—	—	—	—	—	—	—	—	55.1	28.5

SLD 120-30 (R22) with ECO / 带经济器												
Tc	20		30		40		45		50		55	
Te	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa
-50	16.0	13.7	14.9	17.1	—	—	—	—	—	—	—	—
-40	27.0	13.8	25.8	17.6	23.0	20.0	20.4	23.5	18.2	26.4	17.0	28.7
-35	33.8	14.3	32.5	17.9	29.7	20.9	26.9	24.3	24.0	27.3	25.8	29.7
-30	41.7	14.9	40.1	18.4	37.0	21.5	35.3	24.8	31.0	27.8	32.9	30.2
-25	50.6	15.6	48.8	19.1	46.3	22.8	43.4	25.8	40.9	28.3	40.9	31.2
-20	60.6	16.5	58.7	19.8	55.9	24.0	53.4	26.2	49.3	28.6	50.0	31.6
-10	—	—	—	—	—	—	—	—	—	—	72.0	32.2

制冷量表/Performance Data R22

SLD 210-60 (R22)												
Tc	20		30		40		45		50		55	
Te	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa
-50	21.9	21.6	19.1	27.1	—	—	—	—	—	—	—	—
-40	39.2	22.8	35.2	27.3	29.2	31.0	25.0	33.5	21.3	36.4	19.0	38.1
-35	50.3	24.1	45.4	28.7	38.8	33.0	33.9	35.9	29.0	38.9	29.9	40.7
-30	63.7	25.6	57.8	30.2	49.7	34.8	45.9	37.4	38.7	40.6	39.3	42.8
-25	79.4	27.7	72.2	32.1	64.4	37.8	58.1	40.0	52.7	42.5	50.6	45.4
-20	97.6	30.1	89.3	34.1	79.9	40.3	73.6	41.6	65.5	44.0	63.9	47.2
-10	—	—	—	—	—	—	—	—	—	—	98.0	50.7

SLD 210-60 (R22) with ECO / 带经济器												
Tc	20		30		40		45		50		55	
Te	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa
-50	28.5	24.5	26.5	30.4	—	—	—	—	—	—	—	—
-40	48.0	24.6	45.9	31.2	40.9	35.7	36.4	41.8	32.4	46.9	30.3	51.2
-35	60.2	25.5	57.8	31.9	52.9	37.1	47.8	43.3	42.7	48.7	45.9	52.8
-30	74.1	26.5	71.3	32.8	65.8	38.3	62.9	44.1	55.1	49.5	58.5	53.8
-25	90.0	27.8	86.8	34.0	82.5	40.5	77.2	46.0	72.8	50.4	72.7	55.5
-20	107.9	29.4	104.4	35.3	99.5	42.8	95.0	46.7	87.8	50.9	88.9	56.3
-10	—	—	—	—	—	—	—	—	—	—	128.1	57.3

SLD 140-40 (R22)												
Tc	20		30		40		45		50		55	
Te	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa
-50	14.1	13.9	12.3	17.4	—	—	—	—	—	—	—	—
-40	25.2	14.6	22.6	17.6	18.8	20.0	16.1	21.5	13.7	23.4	12.2	24.5
-35	32.3	15.5	29.2	18.4	24.9	21.2	21.8	23.1	18.6	25.0	19.2	26.1
-30	40.9	16.5	37.1	19.4	32.0	22.4	29.5	24.1	24.9	26.1	25.3	27.5
-25	51.0	17.8	46.4	20.6	41.4	24.3	37.4	25.7	33.9	27.3	32.6	29.2
-20	62.8	19.3	57.4	21.9	51.3	25.9	47.3	26.8	42.1	28.3	41.1	30.4
-10	—	—	—	—	—	—	—	—	—	—	63.0	32.6

SLD 140-40 (R22) with ECO / 带经济器												
Tc	20		30		40		45		50		55	
Te	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa
-50	18.3	15.7	17.0	19.5	—	—	—	—	—	—	—	—
-40	30.9	15.8	29.5	20.1	26.3	22.9	23.4	26.9	20.8	30.2	19.5	32.9
-35	38.7	16.4	37.1	20.5	34.0	23.9	30.8	27.9	27.5	31.3	29.5	33.9
-30	47.7	17.0	45.9	21.1	42.3	24.6	40.4	28.4	35.4	31.8	37.6	34.6
-25	57.8	17.9	55.8	21.8	53.0	26.1	49.6	29.6	46.8	32.4	46.8	35.7
-20	69.4	18.9	67.1	22.7	64.0	27.5	61.1	30.0	56.4	32.7	57.2	36.2
-10	—	—	—	—	—	—	—	—	—	—	82.3	36.8

SLD 230-70 (R22)												
Tc	20		30		40		45		50		55	
Te	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa
-50	24.5	24.1	21.4	30.4	—	—	—	—	—	—	—	—
-40	43.8	25.1	39.3	30.6	32.7	34.7	27.9	37.4	23.8	40.7	21.3	42.7
-35	56.3	27.0	50.8	32.1	43.4	36.9	37.9	40.1	32.5	43.5	33.5	45.5
-30	71.3	28.7	64.7	33.8	55.6	38.9	51.3	41.9	43.3	45.4	44.0	47.9
-25	88.8	31.0	80.8	35.9	72.1	42.4	65.0	44.7	59.0	47.5	56.7	50.8
-20	109.2	33.6	99.9	38.2	89.4	45.1	82.4	46.6	73.3	49.3	71.5	52.9
-10	—	—	—	—	—	—	—	—	—	—	109.6	56.8

SLD230-70 (R22) with ECO / 带经济器												
Tc	20		30		40		45		50		55	
Te	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa
-50	31.9	27.4	29.6	34.0	—	—	—	—	—	—	—	—
-40	53.7	27.6	51.4	35.0	45.7	39.9	40.7	46.8	36.3	52.5	33.9	57.3
-35	67.4	28.5	64.7	35.7	59.2	41.5	53.5	48.5	47.8	54.5	51.4	59.1
-30	83.0	29.6	79.8	36.7	73.7	42.8	70.4	49.4	61.7	55.4	65.4	60.2
-25	100.7	31.2	97.2	38.0	92.3	45.4	86.4	51.5	81.4	56.4	81.4	62.2
-20	120.7	32.9	116.8	39.5	111.4	47.9	106.3	52.2	98.2	57.0	99.5	63.0
-10	—	—	—	—	—	—	—	—	—	—	143.3	64.1

SLD 160-50 (R22)												
Tc	20		30		40		45		50		55	
Te	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa
-50	15.6	15.3	13.6	19.2	—	—	—	—	—	—	—	—
-45	20.7	15.8	17.9	19.5	14.9	21.7	12.5	23.6	—	—	—	—
-40	27.8	16.1	24.9	19.4	20.7	22.0	17.7	23.7	15.1	25.8	13.5	27.1
-35	35.7	17.1	32.2	20.4	27.5	23.4	24.0	25.4	20.6	27.6	21.2	28.9
-30	45.2	18.2	41.0	21.4	35.3	24.7	32.5	26.5	27.4	28.8	27.9	30.4
-25	56.3	19.6	51.2	22.8	45.7	26.8	41.2	28.3	37.4	30.1	35.9	32.2
-20	69.2	21.3	63.3	24.2	56.7	28.6	52.2	29.5	46.4	31.2	45.3	33.5
-15	—	—	79.8	27.0	72.3	30.9	68.1	33.1	63.6	35.8	60.7	37.2
-10	—	—	92.0	28.4	83.4	32.6	78.9	35.5	73.9	37.3	72.3	39.5

SLD 160-50 (R22) with ECO / 带经济器												
Tc	20		30		40		45		50		55	
Te	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa
-50	20.2	17.3	18.8	21.6	—	—	—	—	—	—	—	—
-45	26.6	17.5	25.5	22.0	23.7	25.1	20.5	30.1	—	—	—	—
-40	34.1	17.5	32.6	22.2	29.0	25.3	25.8	29.6	23.0	33.3	21.5	36.3
-35	42.7	18.1	41.0	22.6	37.5	26.3	33.9	30.7	30.3	34.5	32.6	37.5
-30	52.6	18.8	50.6	23.2	46.7	27.1	44.6	31.3	39.1	35.1	41.5	38.2
-25	63.8	19.8	61.6	24.1	58.5	28.8	54.7	32.6	51.6	35.7	51.6	39.4
-20	76.5	20.8	74.1	25.1	70.6	30.4	67.4	33.1	62.3	36.1	63.1	40.0
-15	—	—	91.5	28.4	87.2	33.5	83.9	36.7	81.9	39.9	78.5	43.0
-10	—	—	107.9	29.9	102.7	35.5	99.9	38.8	96.3	42.5	94.5	45.2

SLD 250-75 (R22)												
Tc	20		30		40		45		50		55	
Te	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa
-50	26.1	25.7	22.8	32.3	—	—	—	—	—	—	—	—
-45	34.7	26.5	30.1	32.7	25.0	36.5	20.9	39.5	—	—	—	—
-40	46.6	27.1	41.8	32.5	34.7	37.0	29.7	39.8	25.4	43.3	22.6	45.4
-35	59.9	28.7	54.1	34.2	46.2	39.3	40.3	42.7	34.5	46.3	35.6	48.4
-30	75.8	30.5	68.8	36.0	59.2	41.4	54.6	44.6	46.1	48.3	46.8	51.0
-25	94.5	33.0	86.0	38.2	76.6	45.1	69.2	47.6	62.8	50.6	60.3	54.0
-20	116.2	35.8	106.3	40.6	95.1	48.0	87.6	49.6	77.9	52.4	76.0	56.2
-15	—	—	122.0	41.2								







制冷量表/Performance Data R22

SLG 210-70(R22)												
Tc	30		35		40		45		50		60	
Te	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa
-20	89.2	36.5	84.2	40.3	78.5	45.4	72.0	46.1	64.8	51.1	—	—
-15	109.7	37.0	103.4	40.3	96.3	45.4	88.7	47.0	80.3	52.2	—	—
-10	133.4	37.2	125.9	40.7	117.7	45.6	109.0	48.0	99.8	53.3	80.1	65.4
-5	160.3	37.8	151.8	41.6	142.8	45.8	133.2	49.1	123.4	54.4	102.4	66.8
0	190.5	38.6	181.2	42.2	171.3	46.4	161.3	50.2	150.8	55.6	129.1	68.4
5	223.7	39.4	213.7	42.8	203.5	47.5	193.0	51.5	182.2	56.9	—	—
10	—	—	249.8	44.2	239.1	48.7	228.4	52.5	217.4	58.3	—	—

SLG 210-70 (R22) ECO / 带经济器												
Tc	30		35		40		45		50		60	
Te	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa
-20	102.9	39.3	100.3	43.9	96.9	50.0	92.3	52.7	86.5	58.4	—	—
-15	123.3	39.7	119.9	44.1	115.4	50.1	110.2	52.9	103.8	58.6	—	—
-10	145.8	40.1	141.8	44.1	137.1	50.2	131.5	53.1	124.8	58.8	109.2	71.8
-5	170.6	40.1	166.4	44.5	161.5	50.3	155.8	53.8	149.4	59.0	134.4	72.7
0	197.3	40.3	193.1	44.7	188.2	50.1	182.9	54.2	176.9	59.2	163.5	73.1
5	225.5	40.5	230.2	45.2	223.9	50.6	212.4	54.6	207.2	59.6	—	—
10	—	—	266.1	46.4	261.9	51.0	253.3	55.9	239.7	60.1	—	—

制冷量表/Performance Data R22

SLG 350-120(R22)												
Tc	30		35		40		45		50		60	
Te	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa
-20	152.8	62.6	144.3	69.1	134.5	77.8	123.4	78.9	111.1	87.6	—	—
-15	188.1	63.4	177.2	69.1	165.2	77.8	152.0	80.5	137.7	89.5	—	—
-10	228.7	63.7	215.8	69.8	201.8	78.1	186.9	82.4	171.2	91.3	137.4	112.1
-5	274.8	64.8	260.2	71.3	244.7	78.5	228.4	84.2	211.5	93.2	175.5	114.6
0	326.6	66.2	310.6	72.4	293.7	79.6	276.5	86.1	258.5	95.4	221.3	117.3
5	383.6	67.5	366.4	73.4	348.9	81.4	330.9	88.2	312.3	97.5	—	—
10	—	—	428.2	75.9	409.9	83.5	391.6	90.0	372.7	100.0	—	—

SLG 350-120 (R22) ECO / 带经济器												
Tc	30		35		40		45		50		60	
Te	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa
-20	176.4	67.3	171.9	75.2	166.1	85.7	158.3	90.4	148.4	100.1	—	—
-15	211.3	68.0	205.5	75.6	197.9	85.9	189.0	90.7	177.9	100.4	—	—
-10	250.0	68.8	243.2	75.6	235.0	86.0	225.4	91.1	213.9	100.8	187.1	123.1
-5	292.4	68.8	285.3	76.3	276.9	86.2	267.1	92.2	256.1	101.2	230.4	124.6
0	338.3	69.1	331.1	76.7	322.6	85.9	313.6	92.9	303.3	101.5	280.2	125.3
5	386.6	69.5	394.6	77.4	383.8	86.8	364.2	93.6	355.1	102.2	—	—
10	—	—	456.1	79.6	448.9	87.5	434.2	95.8	410.9	103.0	—	—

SLG 230-80(R22)												
Tc	30		35		40		45		50		60	
Te	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa
-20	99.8	40.9	94.2	45.1	87.8	50.8	80.5	51.5	72.5	57.2	—	—
-15	122.8	41.4	115.7	45.1	107.8	50.8	99.2	52.5	89.9	58.4	—	—
-10	149.3	41.6	140.9	45.6	131.7	51.0	122.0	53.8	111.7	59.6	89.7	73.2
-5	179.4	42.3	169.8	46.5	159.8	51.2	149.1	55.0	138.1	60.8	114.5	74.8
0	213.2	43.2	202.7	47.2	191.7	51.9	180.5	56.2	168.7	62.2	144.4	76.6
5	250.4	44.1	239.2	47.9	227.8	53.1	216.0	57.6	203.9	63.7	—	—
10	—	—	279.5	49.5	267.6	54.5	255.6	58.8	243.3	65.3	—	—

SLG 230-80 (R22) ECO / 带经济器												
Tc	30		35		40		45		50		60	
Te	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa
-20	115.1	43.9	112.2	49.1	108.4	55.9	103.3	59.0	96.9	65.3	—	—
-15	137.9	44.4	134.1	49.4	129.2	56.0	123.4	59.2	116.1	65.6	—	—
-10	163.2	44.9	158.7	49.4	153.4	56.2	147.2	59.5	139.6	65.8	122.2	80.4
-5	190.9	44.9	186.2	49.8	180.7	56.3	174.3	60.2	167.2	66.0	150.4	81.3
0	220.8	45.1	216.1	50.1	210.6	56.1	204.7	60.6	198.0	66.3	182.9	81.8
5	252.3	45.4	257.6	50.5	250.5	56.6	237.7	61.1	231.8	66.7	—	—
10	—	—	297.7	51.9	293.0	57.1	283.4	62.5	268.2	67.2	—	—

SLG 420-150 (R22)												
Tc	30		35		40		45		50		60	
Te	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa
-20	178.3	73.1	168.3	80.6	157.0	90.7	143.9	92.1	129.6	102.2	—	—
-15	219.4	73.9	206.7	80.6	192.7	90.7	177.3	93.9	160.6	104.4	—	—
-10	266.8	74.3	251.8	81.5	235.4	91.1	218.1	96.1	199.7	106.6	160.3	130.8
-5	320.6	75.6	303.6	83.2	285.5	91.6	266.5	98.2	246.8	108.7	204.7	133.6
0	381.0	77.3	362.3	84.4	342.6	92.8	322.6	100.4	301.5	111.2	258.1	136.9
5	447.5	78.7	427.4	85.6	407.1	94.9	386.0	102.9	364.3	113.8	—	—
10	—	—	499.6	88.5	478.2	97.4	456.8	105.0	434.8	116.7	—	—

SLG 420-150 (R22) ECO / 带经济器												
Tc	30		35		40		45		50		60	
Te	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa
-20	205.8	78.5	200.6	87.8	193.7	100.0	184.6	105.4	173.1	116.8	—	—
-15	246.5	79.4	239.7	88.2	230.9	100.2	220.5	105.8	207.6	117.2	—	—
-10	291.7	80.2	283.7	88.2	274.2	100.4	263.0	106.3	249.6	117.6	218.3	143.6
-5	341.1	80.2	332.9	89.0	323.0	100.6	311.6	107.5	298.8	118.0	268.8	145.3
0	394.7	80.6	386.3	89.5	376.4	100.3	365.9	108.4	353.9	118.4	326.9	146.2
5	451.0	81.1	460.3	90.3	447.7	101.2	424.9	109.2	414.3	119.3	—	—
10	—	—	532.1	92.8	523.7	102.1	506.5	111.7	479.4	120.1	—	—

SLG 250-90 (R22)												
Tc	30		35		40		45		50		60	
Te	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa
-20	106.1	43.5	100.2	48.0	93.4	54.0	85.7	54.8	77.1	60.8	—	—
-15	130.6	44.0	123.0	48.0	114.7	54.0	105.5	55.9	95.6	62.1	—	—
-10	158.8	44.3	149.9	48.5	140.1	54.3	129.8	57.2	118.9	63.4	95.4	77.8
-5	190.8	45.0	180.7	49.5	170.0	54.5	158.6	58.5	146.9	64.7	121.8	79.6
0	226.8	46.0	215.7	50.3	203.9	55.3	192.0	59.8	179.5	66.2	153.7	81.5
5	266.4	46.9	254.4	51.0	242.3	56.5	229.8	61.3	216.9	67.7	—	—
10	—	—	297.4	52.7	284.6	58.0	271.9	62.5	258.8	69.4	—	—

SLG 250-90 (R22) ECO / 带经济器												
Tc	30		35		40		45		50		60	
Te	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa
-20	122.5	46.8	119.4	52.3	115.3	59.5	109.9	62.8	103.0	69.5	—	—
-15	146.7	47.3	142.7	52.5	137.4	59.6	131.2	63.0	123.6	69.8	—	—
-10	173.6	47.8	168.9	52.5	163.2	59.8	156.6	63.3	148.5	70.0	130.0	85.5
-5	203.0	47.8	198.1	53.0	192.3	59.9	185.5	64.0	177.9	70.3	160.0	86.5
0	234.9	48.0	229.9	53.3	224.0	59.7	217.8	64.5	210.6	70.5	194.6	87.0
5	268.4	48.3	274.0	53.8	266.5	60.3	252.9	65.0	246.6	71.0	—	—
10	—	—	316.8	55.3	311.8	60.8	301.5	66.5	285.4			



制冷量表/Performance Data R404A

SLD120-30(R404A)												
Tc	20		30		35		40		45		50	
Te	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa
-50	12.4	14.7	10.4	17.7	9.3	19.5	—	—	—	—	—	—
-40	22.5	16.1	19.4	19.2	17.8	21.1	16.0	23.2	14.3	25.4	12.3	27.9
-35	29.1	17.0	25.4	20.1	23.3	22.0	21.3	24.1	19.0	26.4	16.6	29.0
-30	37.1	18.1	32.5	21.2	30.0	23.1	27.5	25.2	24.8	27.6	21.9	30.2
-25	46.6	19.4	41.0	22.4	38.0	24.3	34.9	26.4	31.7	28.9	28.2	31.5
-20	57.9	21.0	51.2	23.9	47.6	25.8	43.9	28.0	40.0	30.4	35.9	33.1
-15	—	—	—	—	—	—	—	—	—	—	44.9	34.9

SLD 120-30 (R404A) with ECO / 带经济器												
Tc	20		30		35		40		45		50	
Te	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa
-50	17.8	17.8	16.4	22.9	15.6	26.0	—	—	—	—	—	—
-40	29.7	18.3	28.0	23.2	27.0	26.2	25.8	29.7	24.2	33.6	22.4	38.1
-35	37.1	18.8	35.2	23.6	33.9	26.5	32.5	30.0	30.7	33.9	28.7	38.3
-30	45.5	19.3	43.4	24.0	42.0	27.1	40.4	30.6	38.3	34.4	36.0	38.9
-25	55.1	20.1	52.7	24.8	51.2	27.7	49.2	31.1	47.0	35.1	44.2	39.5
-20	66.0	21.1	63.2	25.6	61.5	28.5	59.3	31.9	56.8	35.8	53.8	40.2
-15	—	—	—	—	—	—	—	—	—	—	64.7	41.2

制冷量表/Performance Data R404A

SLD 210-60(R404A)												
Tc	20		30		35		40		45		50	
Te	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa
-50	21.8	25.5	18.2	30.7	16.3	33.8	—	—	—	—	—	—
-40	39.3	27.9	34.0	33.2	31.1	36.5	28.1	40.1	25.0	44.0	21.4	48.3
-35	50.9	29.4	44.4	34.8	40.8	38.1	37.3	41.8	33.2	45.8	29.1	50.2
-30	65.0	31.4	56.8	36.7	52.6	40.0	48.2	43.6	43.4	47.8	38.3	52.4
-25	81.5	33.6	71.8	38.9	66.5	42.1	61.1	45.8	55.5	50.0	49.4	54.6
-20	101.3	36.3	89.5	41.4	83.2	44.7	76.8	48.5	69.9	52.7	62.8	57.3
-15	—	—	—	—	—	—	—	—	—	—	78.6	60.4

SLD 210-60 (R404A) with ECO / 带经济器												
Tc	20		30		35		40		45		50	
Te	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa
-50	31.1	30.8	28.8	39.6	27.2	45.1	—	—	—	—	—	—
-40	51.9	31.7	49.0	40.1	47.3	45.4	45.1	51.4	42.4	58.2	39.1	66.0
-35	64.8	32.5	61.6	40.9	59.4	46.0	56.8	52.0	53.8	58.7	50.2	66.4
-30	79.6	33.4	75.9	41.6	73.5	46.9	70.6	52.9	67.1	59.7	63.0	67.3
-25	96.5	34.8	92.2	42.9	89.5	48.0	86.1	53.8	82.2	60.8	77.4	68.4
-20	115.6	36.5	110.6	44.3	107.6	49.4	103.8	55.3	99.4	62.0	94.1	69.7
-15	—	—	—	—	—	—	—	—	—	—	113.2	71.3

SLD 140-40(R404A)												
Tc	20		30		35		40		45		50	
Te	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa
-50	14.6	17.3	12.2	20.8	11.0	22.9	—	—	—	—	—	—
-40	26.4	18.9	22.9	22.5	20.9	24.8	18.9	27.2	16.8	29.8	14.4	32.8
-35	34.2	19.9	29.8	23.6	27.4	25.9	25.0	28.3	22.3	31.1	19.5	34.0
-30	43.6	21.3	38.2	24.9	35.3	27.1	32.3	29.6	29.1	32.4	25.7	35.5
-25	54.7	22.8	48.2	26.4	44.7	28.6	41.0	31.1	37.3	33.9	33.1	37.0
-20	68.0	24.6	60.1	28.1	55.9	30.3	51.5	32.9	47.0	35.8	42.2	38.9
-15	—	—	—	—	—	—	—	—	—	—	52.8	41.0

SLD 140-40 (R404A) with ECO / 带经济器												
Tc	20		30		35		40		45		50	
Te	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa
-50	20.9	20.9	19.3	26.9	18.3	30.6	—	—	—	—	—	—
-40	34.9	21.5	32.9	27.2	31.8	30.8	30.3	34.9	28.5	39.5	26.3	44.8
-35	43.5	22.0	41.4	27.7	39.9	31.2	38.2	35.3	36.1	39.9	33.7	45.1
-30	53.5	22.7	51.0	28.2	49.4	31.8	47.4	35.9	45.0	40.5	42.3	45.7
-25	64.8	23.6	61.9	29.1	60.1	32.6	57.8	36.5	55.2	41.2	52.0	46.4
-20	77.6	24.8	74.3	30.1	72.2	33.5	69.7	37.5	66.7	42.1	63.2	47.3
-15	—	—	—	—	—	—	—	—	—	—	76.0	48.4

SLD 230-70(R404A)												
Tc	20		30		35		40		45		50	
Te	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa
-50	23.9	28.0	19.9	33.6	17.9	37.0	—	—	—	—	—	—
-40	43.1	30.6	37.3	36.4	34.1	40.0	30.8	44.0	27.4	48.2	23.5	53.0
-35	55.7	32.2	48.6	38.2	44.7	41.8	40.8	45.8	36.3	50.2	31.9	54.9
-30	71.2	34.4	62.3	40.2	57.6	43.8	52.7	47.8	47.5	52.4	41.9	57.3
-25	89.3	36.8	78.7	42.6	72.9	46.2	66.9	50.2	60.8	54.7	54.1	59.7
-20	110.9	39.8	98.0	45.4	91.1	49.0	84.1	53.2	76.6	57.7	68.8	62.7
-15	—	—	—	—	—	—	—	—	—	—	86.1	66.1

SLD 230-70 (R404A) with ECO / 带经济器												
Tc	20		30		35		40		45		50	
Te	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa
-50	34.1	33.8	31.5	43.4	29.8	49.4	—	—	—	—	—	—
-40	56.8	34.8	53.7	44.0	51.8	49.8	49.4	56.3	46.4	63.7	42.9	72.3
-35	71.0	35.6	67.5	44.8	65.0	50.4	62.3	56.9	58.9	64.3	55.0	72.7
-30	87.2	36.6	83.1	45.6	80.5	51.4	77.4	57.9	73.4	65.3	69.0	73.7
-25	105.7	38.2	101.0	47.0	98.0	52.6	94.3	58.9	90.0	66.5	84.8	74.9
-20	126.6	40.0	121.2	48.6	117.8	54.2	113.7	60.5	108.9	67.9	103.1	76.3
-15	—	—	—	—	—	—	—	—	—	—	123.9	78.1

SLD 160-50(R404A)												
Tc	20		30		35		40		45		50	
Te	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa
-50	16.1	19.1	13.5	22.9	12.1	25.3	—	—	—	—	—	—
-45	20.9	20.1	18.5	24.0	16.8	26.5	14.2	29.4	12.4	33.0	10.3	35.2
-40	29.1	20.9	25.2	24.9	23.1	27.3	20.8	30.1	18.5	32.9	15.9	36.2
-35	37.7	22.0	32.9	26.1	30.3	28.5	27.6	31.3	24.6	34.3	21.6	37.6
-30	48.2	23.5	42.1	27.5	39.0	29.9	35.7	32.6	32.2	35.8	28.4	39.2
-25	60.4	25.1	53.2	29.1	49.3	31.6	45.3	34.3	41.1	37.4	36.6	40.8
-20	75.0	27.2	66.3	31.0	61.7	33.5	56.9	36.3	51.8	39.5	46.5	42.9
-15	—	—	—	—	—	—	—	—	—	—	58.3	45.2

SLD 160-50 (R404A) with ECO / 带经济器												
Tc	20		30		35		40		45		50	
Te	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa
-50	23.1	23.1	21.3	29.6	20.2	33.7	—	—	—	—	—	—
-45	27.6	22.8	26.6	29.0	25.5	33.0	122.8	37.7	21.0	43.6	18.7	48.1
-40	38.5	23.8	36.3	30.1	35.1	34.0	33.4	38.5	31.4	43.6	29.0	49.4
-35	48.0	24.3	45.6	30.6	44.0	34.4	42.1	38.9	39.8	44.0	37.2	49.7
-30	59.0	25.0	56.2	31.1	54.5	35.1	52.3	39.6	49.7	44.7	46.7	50.4
-25	71.5	26.1	68.3	32.1	66.3	35.9	63.8	40.3	60.9	45.5	57.4	51.2
-20	85.6	27.3	82.0	33.2	79.7	37.0	76.9	41.4	73.6	46.4	69.7	52.2
-15	—	—	—	—	—	—	—	—	—	—	83.8	53.4

SLD 250-75(R404A)												
Tc	20		30		35		40		45		50	
Te	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa
-50	25.4	29.8	21.2	35.7	19.0	39.3	—	—	—	—	—	—
-45	32.8	31.3	29.1	37.3	26.4	41.3	22.4	45.7	19.5	51.3	16.1	54.8
-40	45.8	32.5	39.7	38.7	36.3	42.5	32.7	46.8	29.1	51.2	25.0	56.3
-35	59.3	34.2	51.8	40.6	47.6	44.4	43.4	48.7	38.7	53.4	33.9	58.5
-30	75.7	36.6	66.2	42.7	61.3	46.6	56.1	50.8	50.6	55.7	44.6	61.0
-25	95.0	39.1	83.7	45.3	77.5	49.1	71.2	53.4	64.6	58.2	57.5	63.6
-20	118.0	42.3	104.3	48.3	97.0	52.1	89.4	56.5	81.5	61.4	73.2	66.7
-15	—	—	—	—	—	—	—	—	—	—	91.6	70.4

SLD 250-75(R404A)with ECO / 带经济器												
Tc												



制冷量表/Performance Data R404A

SLD 350-100(R404A)												
Tc	20		30		35		40		45		50	
Te	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa
-50	36.3	40.8	30.3	49.0	27.2	53.9	—	—	—	—	—	—
-40	65.5	44.6	56.7	53.0	51.9	58.3	46.8	64.1	41.7	70.2	35.7	77.2
-35	84.8	46.9	74.0	55.7	68.1	60.9	62.1	66.7	55.3	73.1	48.5	80.1
-30	108.3	50.1	94.7	58.6	87.6	63.8	80.3	69.6	72.3	76.3	63.8	83.6
-25	135.9	53.6	119.7	62.1	110.9	67.3	101.8	73.1	92.5	79.8	82.3	87.1
-20	168.8	58.0	149.2	66.1	138.7	71.4	127.9	77.5	116.6	84.2	104.7	91.5
-15	—	—	—	—	—	—	—	—	—	—	131.0	96.5

SLD 350-100 (R404A) with ECO / 带经济器												
Tc	20		30		35		40		45		50	
Te	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa
-50	51.9	49.2	47.9	63.2	45.4	72.0	—	—	—	—	—	—
-40	86.5	50.7	81.7	64.1	78.9	72.6	75.2	82.2	70.6	93.0	65.2	105.5
-35	108.1	51.9	102.7	65.3	99.0	73.4	94.7	83.0	89.6	93.8	83.7	106.1
-30	132.7	53.3	126.5	66.4	122.5	74.9	117.7	84.5	111.8	95.3	104.9	107.5
-25	160.8	55.7	153.7	68.5	149.2	76.6	143.5	86.0	137.0	97.0	129.1	109.3
-20	192.6	58.3	184.4	70.8	179.3	79.0	173.0	88.3	165.6	99.1	156.8	111.3
-15	—	—	—	—	—	—	—	—	—	—	188.6	113.9

制冷量表/Performance Data R404A

SLG 120-40(R404A)												
Tc	20		30		35		40		45		50	
Te	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa
-20	60.5	21.4	53.5	25.1	50.7	27.8	46.0	30.6	40.1	34.2	34.4	37.5
-15	75.6	21.9	65.8	25.3	63.7	28.4	56.8	31.1	49.4	35.2	44.1	38.3
-10	93.5	22.4	82.2	26.1	76.9	29.0	69.9	31.7	63.0	35.9	56.2	39.2
-5	111.3	22.9	99.3	26.9	92.6	29.8	85.2	32.6	77.2	36.5	68.4	40.0
0	—	—	119.2	27.9	112.4	30.5	103.6	33.2	94.3	37.1	87.4	40.8
5	—	—	143.3	28.9	131.9	31.1	123.6	34.2	113.9	37.5	102.2	41.5

SLG 120-40 (R404A) ECO / 带经济器												
Tc	20		30		35		40		45		50	
Te	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa
-20	74.3	22.9	72.5	27.9	69.8	31.2	65.8	35.2	60.2	38.7	58.5	44.5
-15	88.8	23.1	85.4	28.2	82.0	31.5	77.4	35.4	71.6	39.0	70.4	44.9
-10	104.9	23.5	100.0	28.5	96.1	31.6	90.9	35.7	84.7	39.1	82.9	45.0
-5	122.4	23.6	116.0	28.9	111.7	31.9	106.3	35.9	99.7	39.6	95.0	45.3
0	—	—	133.5	29.2	128.5	32.1	123.3	36.0	116.3	40.0	111.4	45.1
5	—	—	151.7	29.3	146.5	32.2	141.0	36.0	134.2	40.1	127.0	45.4

SLD 420-125 (R404A)												
Tc	20		30		35		40		45		50	
Te	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa
-50	43.6	49.0	36.4	58.7	32.7	64.7	—	—	—	—	—	—
-40	78.6	53.5	68.1	63.6	62.3	69.9	56.2	76.9	50.0	84.3	42.9	92.7
-35	101.8	56.3	88.8	66.8	81.7	73.1	74.5	80.1	66.4	87.8	58.2	96.2
-30	130.0	60.1	113.7	70.3	105.2	76.6	96.3	83.6	86.8	91.6	76.6	100.4
-25	163.0	64.3	143.6	74.5	133.1	80.8	122.2	87.8	111.0	95.8	98.7	104.6
-20	202.5	69.6	179.0	79.4	166.4	85.7	153.5	93.0	139.9	101.1	125.6	109.8
-15	—	—	—	—	—	—	—	—	—	—	157.2	115.7

SLD 420-125 (R404A) with ECO / 带经济器												
Tc	20		30		35		40		45		50	
Te	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa
-50	62.3	59.1	57.5	75.9	54.5	86.4	—	—	—	—	—	—
-40	103.8	60.8	98.0	76.9	94.6	87.1	90.2	98.6	84.8	111.5	78.3	126.6
-35	129.7	62.2	123.2	78.3	118.8	88.1	113.7	99.7	107.6	112.6	100.4	127.3
-30	159.3	64.0	151.8	79.7	147.0	89.9	141.3	101.4	134.1	114.3	125.9	129.0
-25	193.0	66.8	184.5	82.2	179.0	92.0	172.2	103.2	164.4	116.4	154.9	131.1
-20	231.1	69.9	221.2	85.0	215.1	94.8	207.6	106.0	198.8	118.9	188.2	133.6
-15	—	—	—	—	—	—	—	—	—	—	226.3	136.7

SLG 140-50 (R404A)												
Tc	20		30		35		40		45		50	
Te	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa
-20	70.8	25.1	62.6	29.4	59.3	32.5	53.9	35.9	46.9	40.0	40.3	43.9
-15	88.6	25.6	77.0	29.7	74.6	33.3	66.5	36.4	57.9	41.2	51.6	44.8
-10	109.4	26.2	96.2	30.5	90.0	34.0	81.8	37.2	73.7	42.0	65.8	45.9
-5	130.3	26.8	116.2	31.5	108.4	34.8	99.8	38.2	90.4	42.8	80.1	46.8
0	—	—	139.5	32.7	131.6	35.7	121.2	38.9	110.4	43.5	102.3	47.8
5	—	—	167.8	33.8	154.4	36.4	144.7	40.0	133.3	43.9	119.7	48.5

SLG 140-50 (R404A) ECO / 带经济器												
Tc	20		30		35		40		45		50	
Te	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa
-20	87.0	26.8	84.9	32.7	81.7	36.6	77.0	41.2	70.5	45.4	68.5	52.1
-15	103.9	27.1	100.0	33.0	96.0	36.9	90.6	41.5	83.8	45.6	82.4	52.6
-10	122.9	27.5	117.1	33.4	112.5	37.0	106.5	41.8	99.2	45.8	97.1	52.7
-5	143.3	27.6	135.8	33.8	130.8	37.3	124.4	42.0	116.8	46.4	111.2	53.0
0	—	—	156.2	34.1	150.4	37.6	144.4	42.2	136.2	46.8	130.5	52.8
5	—	—	177.6	34.3	171.6	37.7	165.1	42.2	157.1	46.9	148.7	53.1

SLD 520-160(R404A)												
Tc	20		30		35		40		45		50	
Te	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa
-50	53.9	60.6	45.1	72.7	40.5	80.1	—	—	—	—	—	—
-40	97.3	66.2	84.3	78.8	77.1	86.6	69.5	95.2	61.9	104.3	53.1	114.7
-35	126.0	69.7	110.0	82.7	101.1	90.5	92.3	99.1	82.2	108.7	72.1	119.1
-30	161.0	74.5	140.7	87.0	130.2	94.8	119.3	103.5	107.5	113.4	94.8	124.3
-25	201.9	79.7	177.8	92.2	164.8	100.0	151.3	108.7	137.4	118.6	122.2	129.4
-20	250.7	86.2	221.7	98.3	206.1	106.1	190.1	115.2	173.2	125.1	155.5	135.9
-15	—	—	—	—	—	—	—	—	—	—	194.7	143.3

SLD 520-160 (R404A) with ECO / 带经济器												
Tc	20		30		35		40		45		50	
Te	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa
-50	77.1	73.2	71.2	93.9	67.4	106.9	—	—	—	—	—	—
-40	128.5	75.3	121.4	95.2	117.1	107.8	111.7	122.1	104.9	138.1	96.9	156.7
-35	160.6	77.1	152.5	97.0	147.1	109.1	140.7	123.4	133.2	139.4	124.3	157.6
-30	197.2	79.2	187.9	98.7	182.0	111.3	174.9	125.6	166.0	141.6	155.9	159.8
-25	238.9	82.7	228.4	101.7	221.7	113.9	213.2	127.7	203.5	144.2	191.7	162.4
-20	286.1	86.6	273.9	105.2	266.3	117.3	257.1	131.2	246.1	147.2	233.0	165.4
-15	—	—	—	—	—	—	—	—	—	—	280.2	169.3

SLG 160-60 (R404A)												
Tc	20		30		35		40		45		50	
Te	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa
-20	78.2	27.6	69.1	32.4	65.5	35.9	59.4	39.6	51.8	44.2	44.5	48.5
-15	97.7	28.3	85.0	32.7	82.3	36.7	73.4	40.2	63.9	45.4	56.9	49.4
-10	120.8	28.9	106.1	33.7	99.3	37.5	90.3	41.0	81.4	46.4	72.6	50.7
-5	143.8	29.6	128.2	34.8	119.6	38.5	110.1	42.1	99.8	47.2	88.3	51.6
0	—	—	154.0	36.1	145.2	39.4	133.8	42.9	121.9	48.0	112.9	52.8
5	—	—	185.1	37.3	170.3	40.2	159.7	44.2	147.1	48.5	132.0	53.5

SLG 160-60 (R404A) ECO / 带经济器												
Tc	20		30		35		40		45		50	
Te	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa
-20	96.0	29.6	93.7	36.1	90.1	40.4	84.9	45.4	77.8	50.1	75.6	57.5
-15	114.7	29.9	110.4	36.4	106.0	40.7	100.0	45.8	92.5	50.4	90.9	58.0
-10	135.6	30.3	129.2	36.9	124.1	40.8	117.5	46.1	109.5	50.5	107.1	



制冷量表/Performance Data R404A

SLG 210-70 (R404A)												
Tc	20		30		35		40		45		50	
Te	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa
-20	103.3	35.1	91.4	41.1	86.5	45.5	78.5	50.2	68.5	56.0	58.8	61.5
-15	129.2	35.9	112.4	41.5	108.8	46.6	97.0	51.0	84.4	57.6	75.2	62.7
-10	159.6	36.7	140.3	42.7	131.3	47.6	119.3	52.0	107.5	58.8	95.9	64.3
-5	190.1	37.5	169.5	44.1	158.1	48.8	145.5	53.4	131.9	59.9	116.8	65.5
0	—	—	203.5	45.7	191.9	50.0	176.8	54.4	161.1	60.9	149.2	66.9
5	—	—	244.7	47.4	225.1	51.0	211.1	56.0	194.5	61.5	174.5	67.9

SLG 210-70 (R404A) ECO / 带经济器												
Tc	20		30		35		40		45		50	
Te	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa
-20	126.9	37.5	123.8	45.7	119.1	51.2	112.3	57.6	102.8	63.5	100.0	72.9
-15	151.6	37.9	145.9	46.1	140.0	51.6	132.2	58.0	122.2	63.9	120.1	73.6
-10	179.2	38.5	170.8	46.8	164.1	51.8	155.2	58.4	144.7	64.1	141.5	73.8
-5	208.9	38.7	198.0	47.4	190.7	52.2	181.5	58.8	170.3	64.9	162.1	74.2
0	—	—	227.8	47.8	219.3	52.6	210.6	59.0	198.6	65.5	190.3	74.0
5	—	—	259.0	48.0	250.2	52.8	240.8	59.0	229.2	65.7	216.8	74.4

制冷量表/Performance Data R404A

SLG 350-120 (R404A)												
Tc	20		30		35		40		45		50	
Te	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa
-20	177.4	60.2	156.9	70.6	148.6	78.2	134.9	86.2	117.6	96.2	100.9	105.6
-15	221.8	61.6	192.9	71.3	186.8	79.9	166.6	87.6	145.0	99.0	129.2	107.6
-10	274.1	63.0	240.9	73.4	225.4	81.7	204.9	89.3	184.7	101.1	164.7	110.4
-5	326.4	64.4	291.0	75.8	271.6	83.8	249.9	91.7	226.5	102.8	200.5	112.5
0	—	—	349.5	78.6	329.6	85.8	303.7	93.4	276.6	104.5	256.2	114.9
5	—	—	420.2	81.3	386.6	87.6	362.5	96.2	334.0	105.6	299.7	116.6

SLG 350-120 (R404A) ECO / 带经济器												
Tc	20		30		35		40		45		50	
Te	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa
-20	217.9	64.4	212.6	78.6	204.6	87.9	192.8	99.0	176.5	109.0	171.7	125.3
-15	260.3	65.1	250.5	79.3	240.5	88.6	227.0	99.7	209.9	109.7	206.3	126.3
-10	307.7	66.1	293.3	80.3	281.8	88.9	266.6	100.4	248.5	110.1	243.1	126.7
-5	358.8	66.4	340.1	81.3	327.5	89.6	311.6	101.1	292.4	111.4	278.4	127.4
0	—	—	391.3	82.0	376.7	90.3	361.7	101.4	341.1	112.5	326.8	127.0
5	—	—	444.7	82.4	429.7	90.7	413.5	101.4	393.6	112.8	372.3	127.7

SLG 230-80 (R404A)												
Tc	20		30		35		40		45		50	
Te	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa
-20	116.6	39.6	103.1	46.4	97.6	51.4	88.6	56.6	77.3	63.2	66.3	69.4
-15	145.8	40.5	126.8	46.8	122.8	52.5	109.5	57.5	95.3	65.0	84.9	70.7
-10	180.1	41.4	158.3	48.2	148.1	53.7	134.6	58.7	121.3	66.4	108.3	72.5
-5	214.5	42.3	191.3	49.8	178.5	55.0	164.2	60.3	148.8	67.5	131.8	73.9
0	—	—	229.7	51.6	216.6	56.4	199.6	61.4	181.8	68.7	168.4	75.5
5	—	—	276.1	53.4	254.1	57.5	238.2	63.2	219.5	69.4	196.9	76.6

SLG 230-80 (R404A) ECO / 带经济器												
Tc	20		30		35		40		45		50	
Te	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa
-20	143.2	42.3	139.7	51.6	134.4	57.8	126.7	65.0	116.0	71.6	112.8	82.3
-15	171.1	42.8	164.6	52.1	158.0	58.2	149.2	65.5	137.9	72.1	135.6	83.0
-10	202.2	43.4	192.7	52.8	185.2	58.4	175.2	66.0	163.3	72.3	159.7	83.2
-5	235.8	43.7	223.5	53.4	215.2	58.9	204.8	66.4	192.2	73.2	183.0	83.7
0	—	—	257.1	53.9	247.5	59.4	237.7	66.6	224.1	73.9	214.7	83.5
5	—	—	292.3	54.1	282.4	59.6	271.8	66.6	258.6	74.1	244.7	83.9

SLG 420-150 (R404A)												
Tc	20		30		35		40		45		50	
Te	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa
-20	212.9	72.3	188.3	84.7	178.3	93.9	161.9	103.4	141.1	115.5	121.1	126.7
-15	266.2	73.9	231.5	85.6	224.2	95.9	199.9	105.1	174.0	118.8	155.0	129.2
-10	328.9	75.6	289.1	88.0	270.5	98.0	245.8	107.1	221.6	121.3	197.7	132.5
-5	391.7	77.2	349.3	90.9	325.9	100.5	299.9	110.1	271.8	123.3	240.6	135.0
0	—	—	419.4	94.3	395.6	103.0	364.4	112.1	331.9	125.4	307.5	137.9
5	—	—	504.2	97.6	463.9	105.1	434.9	115.5	400.8	126.7	359.6	140.0

SLG 420-150 (R404A) ECO / 带经济器												
Tc	20		30		35		40		45		50	
Te	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa
-20	261.5	77.2	255.2	94.3	245.5	105.5	231.4	118.8	211.8	130.8	206.0	150.3
-15	312.4	78.1	300.6	95.1	288.6	106.3	272.4	119.6	251.8	131.6	247.6	151.6
-10	369.2	79.3	351.9	96.3	338.1	106.7	319.9	120.4	298.1	132.1	291.7	152.0
-5	430.6	79.7	408.1	97.6	393.0	107.6	374.0	121.3	350.9	133.7	334.1	152.8
0	—	—	469.6	98.4	452.0	108.4	434.0	121.7	409.3	135.0	392.1	152.4
5	—	—	533.7	98.8	515.6	108.8	496.2	121.7	472.3	135.4	446.8	153.2

SLG 250-90 (R404A)												
Tc	20		30		35		40		45		50	
Te	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa
-20	125.9	42.7	111.3	50.1	105.5	55.5	95.7	61.2	83.4	68.3	71.6	74.9
-15	157.4	43.7	136.9	50.6	132.6	56.7	118.3	62.1	102.9	70.2	91.7	76.4
-10	194.5	44.7	171.0	52.1	160.0	58.0	145.4	63.4	131.1	71.7	116.9	78.4
-5	231.6	45.7	206.6	53.8	192.7	59.4	177.4	65.1	160.7	72.9	142.3	79.8
0	—	—	248.0	55.8	233.9	60.9	215.5	66.3	196.3	74.2	181.9	81.5
5	—	—	298.2	57.7	274.4	62.1	257.2	68.3	237.0	74.9	212.7	82.8

SLG 250-90 (R404A) ECO / 带经济器												
Tc	20		30		35		40		45		50	
Te	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa
-20	154.6	45.7	150.9	55.8	145.2	62.4	136.8	70.2	125.3	77.4	121.8	88.9
-15	184.7	46.2	177.8	56.2	170.7	62.9	161.1	70.7	148.9	77.9	146.4	89.7
-10	218.4	46.9	208.1	57.0	200.0	63.1	189.2	71.2	176.3	78.1	172.5	89.9
-5	254.7	47.2	241.4	57.7	232.4	63.6	221.2	71.7	207.5	79.1	197.6	90.4
0	—	—	277.7	58.2	267.4	64.1	256.7	72.0	242.1	79.8	231.9	90.1
5	—	—	315.6	58.5	305.0	64.4	293.5	72.0	279.3	80.1	264.2	90.6

SLG 520-180 (R404A)												
Tc	20		30		35		40		45		50	
Te	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa	Qo	Pa
-20	263.6	89.5	233.1	104.9	220.8	116.2	200.4	128.0	174.7	142.9	149.9	156.8
-15	329.5	91.5	286.7	105.9	277.6	118.8	247.6	130.1	215.4	147.1	191.9	159.9
-10	407.2	93.6	357.9	109.0	334.9	121.3	304.3	132.7	274.3	150.1	244.8	164.0
-5	484.9	95.6	432.4	112.6	403.5	124.4	371.3	136.3	336.5	152.7	297.9	167.1
0	—	—	519.2	116.7	489.7	127.5	451.2	138.8	411.0	155.3	380.7	170.7
5	—	—	624.2	120.8	574.4	130.1	538.5	142.9	496.2	156.8	445.3</	



R22 制冷剂油负荷对照表  
R22 Refrigerant Oil Load Control Table

	Tc	20.00		30.00		40.00		45.00		50.00		55.00	
	Te	PO	PO(E)	PO	PO(E)	PO	PO(E)	PO	PO(E)	PO	PO(E)	PO	PO(E)
SLD120-30	-50.00	7.16	7.01	10.68	10.81								
	-40.00	5.44	5.25	9.05	9.14	13.40	14.16	15.95	17.15	18.79	20.43	21.99	24.15
	-35.00	4.38	3.94	8.07	8.04	12.52	13.26	15.13	16.40	18.11	19.98	21.47	24.00
	-30.00	3.27	2.70	7.03	6.86	11.61	12.26	14.31	15.58	17.37	19.38	20.80	23.63
	-25.00	2.15	1.46	5.98	5.63	10.69	11.18	13.49	14.63	16.62	18.56	20.20	23.18
	-20.00	1.07		4.97	4.44	9.82	10.09	12.71	13.64	15.95	17.82	19.68	22.59
	-15.00			4.05	3.35	9.03	9.03	12.02	12.69	15.43	17.00	19.23	21.92
	-50.00	8.38	8.21	12.51	12.65								
SLD140-40	-40.00	6.37	6.14	10.59	10.70	15.69	16.57	18.68	20.07	21.99	23.91	25.75	28.28
	-35.00	5.13	4.62	9.44	9.42	14.66	15.53	17.72	19.20	21.21	23.39	25.13	28.10
	-30.00	3.83	3.16	8.23	8.03	13.59	14.35	16.76	18.24	20.33	22.69	24.35	27.67
	-25.00	2.51	1.71	7.00	6.59	12.51	13.09	15.80	17.12	19.46	21.73	23.65	27.14
	-20.00	1.25		5.82	5.19	11.49	11.82	14.88	15.97	18.68	20.86	23.04	26.44
	-15.00			4.74	3.93	10.57	10.58	14.07	14.85	18.07	19.90	22.52	25.66
	-50.00	9.24	9.06	13.80	13.96								
SLD160-50	-45.00	8.40	8.46	12.96	13.22	18.45	19.44	21.67	23.11	25.13	26.96	29.08	31.39
	-40.00	7.03	6.78	11.69	11.81	17.31	18.29	20.61	22.15	24.27	26.39	28.41	31.20
	-35.00	5.66	5.09	10.42	10.39	16.18	17.13	19.55	21.19	23.40	25.81	27.73	31.01
	-30.00	4.23	3.49	9.08	8.86	14.99	15.83	18.49	20.13	22.44	25.04	26.87	30.53
	-25.00	2.77	1.89	7.72	7.27	13.81	14.45	17.43	18.89	21.48	23.98	26.10	29.95
	-20.00	1.38	0.00	6.42	5.73	12.68	13.04	16.42	17.62	20.61	23.02	25.42	29.18
	-15.00			5.23	4.33	11.66	11.67	15.52	16.39	19.93	21.96	24.85	28.31
SLD190-50	-50.00	9.89	9.70	14.76	14.94								
	-40.00	7.52	7.25	12.51	12.63	18.52	19.57	22.05	23.70	25.96	28.23	30.39	33.38
	-35.00	6.06	5.45	11.15	11.12	17.31	18.33	20.92	22.67	25.04	27.61	29.67	33.18
	-30.00	4.52	3.73	9.72	9.48	16.04	16.94	19.78	21.53	24.01	26.79	28.75	32.66
	-25.00	2.97	2.02	8.26	7.78	14.77	15.45	18.65	20.21	22.98	25.65	27.92	32.04
	-20.00	1.47		6.87	6.13	13.57	13.95	17.57	18.85	22.05	24.62	27.20	31.22
	-15.00			5.59	4.64	12.48	12.49	16.61	17.54	21.33	23.49	26.58	30.29
SLD210-60	-50.00	11.93	11.69	17.80	18.02								
	-40.00	9.07	8.75	15.08	15.23	22.34	23.59	26.59	28.58	31.31	34.04	36.65	40.25
	-35.00	7.31	6.57	13.44	13.41	20.87	22.10	25.22	27.33	30.19	33.30	35.78	40.01
	-30.00	5.45	4.50	11.72	11.43	19.34	20.43	23.85	25.97	28.95	32.30	34.66	39.38
	-25.00	3.58	2.44	9.96	9.38	17.82	18.64	22.49	24.38	27.71	30.94	33.67	38.64
	-20.00	1.78		8.29	7.39	16.36	16.82	21.18	22.74	26.59	29.69	32.80	37.65
	-15.00			6.75	5.59	15.05	15.06	20.03	21.15	25.72	28.33	32.05	36.53
SLD230-70	-50.00	13.79	13.52	20.58	20.83								
	-40.00	10.49	10.11	17.44	17.61	25.83	27.28	30.74	33.04	36.20	39.36	42.37	46.54
	-35.00	8.45	7.60	15.54	15.50	24.13	25.55	29.16	31.60	34.90	38.49	41.37	46.25
	-30.00	6.31	5.20	13.54	13.21	22.36	23.61	27.58	30.02	33.47	37.35	40.07	45.53
	-25.00	4.14	2.82	11.52	10.84	20.60	21.55	26.00	28.18	32.03	35.77	38.93	44.67
	-20.00	2.05		9.58	8.55	18.92	19.45	24.49	26.29	30.74	34.33	37.92	43.52
	-15.00			7.80	6.46	17.39	17.41	23.15	24.45	29.73	32.75	37.06	42.23

PO: 油冷负荷 Oil load PO(E): 带经济器的油冷负荷 Oil load with ECO

R22 制冷剂油负荷对照表  
R22 Refrigerant Oil Load Control Table

	Tc	20.00		30.00		40.00		45.00		50.00		55.00	
	Te	PO	PO(E)	PO	PO(E)	PO	PO(E)	PO	PO(E)	PO	PO(E)	PO	PO(E)
SLD250-75	-50.00	14.67	14.38	21.90	22.16								
	-45.00	13.32	13.43	20.57	20.98	29.28	30.85	34.38	36.67	39.88	42.79	46.15	49.81
	-40.00	11.15	10.76	18.55	18.73	27.47	29.02	32.70	35.15	38.51	41.87	45.08	49.51
	-35.00	8.98	8.08	16.53	16.49	25.67	27.18	31.02	33.62	37.13	40.95	44.01	49.20
	-30.00	6.71	5.53	14.41	14.06	23.79	25.12	29.34	31.94	35.60	39.73	42.63	48.44
	-25.00	4.40	2.99	12.25	11.54	21.91	22.92	27.66	29.98	34.08	38.05	41.41	47.52
	-20.00	2.19	0.00	10.19	9.09	20.12	20.69	26.05	27.96	32.70	36.52	40.34	46.30
	-15.00			8.30	6.88	18.50	18.52	24.63	26.01	31.63	34.84	39.42	44.92
SLD290-80	-50.00	16.64	16.31	24.84	25.13								
	-40.00	12.65	12.20	21.04	21.25	31.17	32.92	37.09	39.87	43.68	47.49	51.13	56.16
	-35.00	10.19	9.17	18.75	18.70	29.12	30.84	35.19	38.13	42.12	46.45	49.92	55.81
	-30.00	7.61	6.27	16.35	15.95	26.99	28.50	33.28	36.23	40.39	45.07	48.36	54.95
	-25.00	4.99	3.40	13.90	13.09	24.86	26.00	31.37	34.01	38.65	43.16	46.97	53.91
	-20.00	2.48		11.56	10.31	22.83	23.47	29.55	31.72	37.09	41.43	45.76	52.52
	-15.00			9.41	7.80	20.99	21.01	27.94	29.50	35.88	39.52	44.72	50.96
SLD350-100	-50.00	20.01	19.62	29.88	30.23								
	-40.00	15.22	14.68	25.31	25.56	37.49	39.59	44.62	47.95	52.54	57.12	61.50	67.55
	-35.00	12.26	11.03	22.56	22.50	35.03	37.09	42.32	45.87	50.66	55.87	60.04	67.13
	-30.00	9.15	7.55	19.66	19.18	32.46	34.27	40.03	43.57	48.58	54.21	58.17	66.09
	-25.00	6.00	4.09	16.72	15.74	29.90	31.27	37.74	40.90	46.49	51.91	56.50	64.84
	-20.00	2.98		13.91	12.40	27.46	28.23	35.55	38.15	44.62	49.83	55.04	63.17
	-15.00			11.32	9.38	25.25	25.27	33.61	35.48	43.16	47.53	53.79	61.29
SLD420-125	-50.00	25.89	25.38	38.65	39.11								
	-40.00	19.69	18.99	32.74	33.06	48.49	51.22	57.72	62.03	67.96	73.90	79.56	87.38
	-35.00	15.86	14.27	29.18	29.10	45.31	47.98	54.75	59.33	65.54	72.28	77.67	86.84
	-30.00	11.84	9.76	25.43	24.81	41.99	44.34	51.78	56.37	62.84	70.12	75.25	85.49
	-25.00	7.77	5.29	21.63	20.36	38.67	40.45	48.82	52.91	60.14	67.15	73.09	83.88
	-20.00	3.86		17.99	16.05	35.52	36.52	45.98	49.35	57.72	64.46	71.20	81.72
	-15.00			14.64	12.14	32.66	32.69	43.48	45.90	55.83	61.49	69.58	79.29
SLD520-160	-50.00	32.70	32.05	48.81	49.39								
	-40.00	24.86	23.98	41.35	41.76	61.24	64.68	72.89	78.34	85.83	93.33	100.48	110.36
	-35.00	20.03	18.02	36.85	36.75	57.22	60.59	69.14	74.93	82.77	91.28	98.09	109.68
	-30.00	14.95	12.33	32.12	31.34	53.03	56.00	65.40	71.19	79.36	88.56	95.03	107.97
	-25.00	9.81	6.68	27.32	25.72	48.84	51.09	61.65	66.83	75.96	84.81	92.30	105.93
	-20.00	4.87		22.72	20.27	44.86	46.12	58.07	62.33	72.89	81.40	89.92	103.20
	-15.00			18.49	15.33	41.25	41.28	54.91	57.97	70.51	77.66	87.88	100.14
SLD640-200	-50.00	40.73	39.92	60.79	61.52								
	-40.00	30.97	29.87	51.50	52.01	76.28	80.56	90.79	97.58	106.91	116.24	125.15	137.45
	-35.00	24.95	22.44	45.90	45.78	71.27	75.47	86.12	93.33	103.09	113.70	122.18	136.61
	-30.00	18.62	15.36	40.01	39.03	66.05	69.75	81.45	88.67	98.85	110.30	118.36	134.48
	-25.00	12.22	8.32	34.02	32.03	60.84	63.64	76.79	83.24	94.61	105.64	114.97	131.94
	-20.00	6.07		28.30	25.24	55.87	57.44	72.33	77.64	90.79	101.39	112.00	128.55
	-15.00			23.04	19.09	51.38	51.42	68.39	72.21	87.82	96.73	109.45	124.73

PO: 油冷负荷 Oil load PO(E): 带经济器的油冷负荷 Oil load with ECO



R404A 制冷剂油负荷对照表  
R404A Refrigerant Oil Load Control Table

	Tc	20.00		30.00		40.00		45.00		50.00		55.00	
	Te	PO	PO(E)	PO	PO(E)	PO	PO(E)	PO	PO(E)	PO	PO(E)	PO	PO(E)
SLD120-30	-50.00	4.05	2.45	5.31	3.65								
	-40.00			3.32	1.35	8.03	6.93	11.15	10.84	14.91	15.73	19.46	
	-35.00			1.07	0.00	6.09	4.70	9.33	8.79	13.19	13.84	17.74	
	-30.00					4.01	2.27	7.46	6.62	11.51	0.10	16.18	
	-25.00					1.77		5.52	4.32	9.85		14.78	
	-20.00							3.45	1.85	8.13		13.39	
	-15.00									6.31		11.90	
SLD140-40	-50.00	4.74	2.86	6.21	4.28								
	-40.00			3.88	1.58	9.40	8.12	13.06	12.69	17.45	18.41	22.78	
	-35.00			1.26		7.13	5.50	10.92	10.29	15.44	16.21	20.77	
	-30.00					4.70	2.66	8.74	7.75	13.47	14.00	18.94	
	-25.00					2.07		6.46	5.05	11.53		17.31	
	-20.00							4.04	2.16	9.52		15.67	
SLD160-50	-50.00	5.23	3.16	6.86	4.72	0.00							
	-45.00			5.67	3.26	12.65	11.45	16.72	16.67	21.26	22.62		
	-40.00			4.29	1.74	10.37	8.96	14.41	14.00	19.26	20.32		
	-35.00			1.39		7.87	6.07	12.05	11.35	17.04	17.88		
	-30.00					5.18	2.94	9.64	8.55	14.87	15.45		
	-25.00					2.28	0.00	7.13	5.58	12.72	13.22		
	-20.00							4.46	2.39	10.51	10.91		
SLD190-50	-50.00	5.59	3.38	7.34	5.05								
	-40.00			4.58	1.86	11.10	9.58	15.41	14.98	20.61	21.74	26.89	
	-35.00			1.48		8.42	6.49	12.89	12.15	18.23	19.13	24.52	
	-30.00					5.54	3.14	10.31	9.15	15.91	16.53	22.36	
	-25.00					2.44		7.62	5.97	13.61		20.43	
	-20.00							4.77	2.56	11.24		18.50	
	-15.00									8.72		16.44	
SLD210-60	-50.00	6.75	4.08	8.85	6.09								
	-40.00			5.53	2.25	13.38	11.55	18.59	18.06	24.85	26.22	32.43	
	-35.00			1.79		10.15	7.83	15.54	14.65	21.98	23.07	29.57	
	-30.00					6.68	3.79	12.44	11.03	19.18	19.93	26.96	
	-25.00					2.94		9.19	7.19	16.41		24.64	
	-20.00							5.75	3.08	13.55		22.31	
	-15.00									10.51		19.83	
SLD230-70	-50.00	7.80	4.71	10.23	7.04								
	-40.00			6.39	2.60	15.47	13.36	21.49	20.88	28.73	30.31	37.49	
	-35.00			2.07		11.74	9.05	17.97	16.93	25.41	26.67	34.19	
	-30.00					7.73	4.38	14.38	12.75	22.18	23.04	31.17	
	-25.00					3.40		10.63	8.32	18.97		28.48	
	-20.00							6.65	3.56	15.67		25.80	
-15.00									12.15		22.92		

PO: 油冷负荷 Oil load PO(E): 带经济器的油冷负荷 Oil load with ECO

R404A 制冷剂油负荷对照表  
R404A Refrigerant Oil Load Control Table

	Tc	20.00		30.00		40.00		45.00		50.00		55.00	
	Te	PO	PO(E)	PO	PO(E)	PO	PO(E)	PO	PO(E)	PO	PO(E)	PO	PO(E)
SLD250-75	-50.00	8.30	5.01	10.88	7.49								
	-45.00			9.00	5.17	20.07	18.17	26.52	26.45	33.74	35.89		
	-40.00			6.80	2.77	16.46	14.21	22.86	22.22	30.56	32.25		
	-35.00			2.20		12.48	9.63	19.12	18.02	27.03	28.38		
	-30.00					8.22	4.66	15.30	13.57	23.59	24.51		
	-25.00					3.62		11.31	8.85	20.19	20.97		
	-20.00							7.07	3.79	16.67	17.32		
	-15.00									12.93	13.43		
SLD290-80	-50.00	9.41	5.69	12.34	8.49								
	-40.00			7.71	3.14	18.67	16.12	25.93	25.20	34.67	36.57	45.24	
	-35.00			2.50		14.16	10.92	21.68	20.44	30.66	32.19	41.25	
	-30.00					9.33	5.29	17.35	15.39	26.76	27.80	37.61	
	-25.00					4.11		12.83	10.04	22.90		34.37	
	-20.00							8.03	4.30	18.91		31.13	
	-15.00									14.66		27.66	
SLD350-100	-50.00	11.32	6.84	14.84	10.22								
	-40.00			9.28	3.77	22.45	19.39	31.19	30.31	41.70	43.99	54.41	
	-35.00			3.00		17.03	13.13	26.08	24.58	36.88	38.72	49.62	
	-30.00					11.22	6.36	20.87	18.51	32.19	33.44	45.24	
	-25.00					4.94		15.43	12.07	27.54		41.34	
	-20.00							9.65	5.17	22.75		37.44	
	-15.00									17.64		33.27	
SLD420-125	-50.00	14.64	8.85	19.20	13.22								
	-40.00			12.00	4.88	29.05	25.08	40.35	39.21	53.94	56.91	70.39	
	-35.00			3.88		22.03	16.99	33.74	31.80	47.71	50.08	64.19	
	-30.00					14.51	8.23	27.00	23.95	41.64	43.26	58.52	
	-25.00					6.39		19.96	15.62	35.63		53.48	
	-20.00							12.49	6.69	29.42		48.44	
	-15.00									22.82		43.04	
SLD520-160	-50.00	18.49	11.17	24.25	16.69								
	-40.00			15.16	6.16	36.68	31.68	50.95	49.52	68.12	71.87	88.90	
	-35.00			4.90		27.83	21.46	42.61	40.16	60.25	63.25	81.06	
	-30.00					18.32	10.39	34.09	30.25	52.59	54.63	73.91	
	-25.00					8.07		25.20	19.72	44.99		67.54	
	-20.00							15.77	8.45	37.16		61.17	
	-15.00									28.82		54.36	
SLD640-200	-50.00	23.04	13.92	30.21	20.79								
	-40.00			18.88	7.68	45.69	39.45	63.47	61.68	84.85	89.52	110.73	
	-35.00			6.11		34.66	26.73	53.07	50.02	75.05	78.78	100.97	
	-30.00					22.82	12.94	42.47	37.67	65.50	68.05	92.06	
	-25.00					10.05		31.39	24.56	56.04		84.13	
	-20.00							19.64	10.52	46.28		76.19	
	-15.00									35.89		67.71	

PO: 油冷负荷 Oil load PO(E): 带经济器的油冷负荷 Oil load with ECO



R22 双级压缩机数据表  
R22 Compressor Data Table

型号 Model	SLD230S-50									
Tc(°C)	25		30		35		40		45	
Te(°C)	Q(kW)	P(kW)	Q(kW)	P(kW)	Q(kW)	P(kW)	Q(kW)	P(kW)	Q(kW)	P(kW)
-60	22.46	22.16	22.07	24.13	21.68	26.23	21.29	26.21	20.89	29.96
-55	29.31	21.96	28.86	24.69	28.41	26.67	27.95	28.21	27.48	32.61
-50	37.59	22.86	37.05	24.79	36.51	28.17	35.97	30.22	35.42	35.05
-45	47.49	23.96	46.85	26.13	46.19	28.84	45.58	32.41	44.93	37.67
-40	59.29	25.46	58.49	27.83	57.72	30.88	56.95	34.92	56.17	40.61
-35	73.14	27.46	72.17	30.02	71.23	33.41	70.29	37.88	69.36	44.09
-30	89.26	30.08	88.09	32.86	86.93	36.55	85.81	41.47	84.68	48.27

型号 Model	SLD420S-100									
Tc(°C)	25		30		35		40		45	
Te(°C)	Q(kW)	P(kW)	Q(kW)	P(kW)	Q(kW)	P(kW)	Q(kW)	P(kW)	Q(kW)	P(kW)
-60	41.21	41.98	41.44	45.75	40.71	50.24	39.97	55.63	39.20	65.80
-55	55.05	41.22	54.21	46.11	53.34	51.21	52.48	57.54	51.60	68.82
-50	70.58	42.91	69.56	46.55	68.56	52.67	67.54	59.74	66.49	71.91
-45	89.17	44.99	87.96	49.06	86.74	54.14	85.57	62.66	84.36	75.74
-40	111.32	47.80	109.81	52.25	108.38	57.99	106.93	66.50	105.47	80.44
-35	137.32	51.56	135.52	56.38	133.75	62.72	131.98	71.52	130.24	86.38
-30	167.59	56.51	165.40	61.69	163.23	68.61	161.11	77.93	158.99	93.78

型号 Model	SLD640S-150									
Tc(°C)	25		30		35		40		45	
Te(°C)	Q(kW)	P(kW)	Q(kW)	P(kW)	Q(kW)	P(kW)	Q(kW)	P(kW)	Q(kW)	P(kW)
-60	62.85	60.79	59.03	66.73	57.99	73.91	56.92	84.17	55.84	100.82
-55	82.03	60.18	77.20	66.40	75.98	74.25	74.76	85.58	73.50	103.27
-50	105.20	61.12	99.09	67.14	97.65	75.65	96.19	87.84	94.72	106.39
-45	132.90	64.09	125.29	69.87	123.55	78.27	121.97	91.42	120.16	111.00
-40	165.89	68.09	156.41	74.41	154.36	82.60	152.30	96.48	150.23	117.11
-35	204.63	73.43	193.02	80.30	190.50	89.34	187.98	103.35	185.50	125.15
-30	249.74	80.49	235.58	87.86	232.51	98.05	229.47	112.30	226.48	135.41

说明: Remark:  
 1. Tc= 冷凝温度, Te= 蒸发温度; 1. Tc = Condensing Temp., Te = Evaporating Temp.;  
 2. 吸气过热度: 5°C, 液体过冷度: 5°C; 2. Suction superheat: 5°C; liquid subcooling: 5°C;  
 3. Q= 名义工况制冷量, P= 名义工况功耗; 3. Q = Cooling capacity, P = Power consumption;  
 Require additional cooling 此工况需要油冷却

R22 双级压缩机数据表  
R22 Compressor Data Table

型号 Model	SLD230S-50 油冷负荷				
Tc(°C)	25	30	35	40	45
Te(°C)	Q(kW)	P(kW)	Q(kW)	P(kW)	Q(kW)
-60	10.51	12.04	13.73	15.88	18.98
-55	8.75	10.53	12.63	15.33	18.96
-50	6.7	9.74	12.23	14.97	18.78
-45	4.49	6.77	11.64	14.43	18.64
-40	2.25	4.78	8.04	14.35	18.05
-35	0.5	2.89	6.53	14.18	17.8
-30	0	1.5	5.28	12.87	17.86

型号 Model	SLD420S-100 油冷负荷				
Tc(°C)	25	30	35	40	45
Te(°C)	Q(kW)	P(kW)	Q(kW)	P(kW)	Q(kW)
-60	20.8	23.76	27.11	31.37	37.62
-55	17.3	20.79	24.93	30.27	37.43
-50	13.3	17.24	22.16	28.56	37.08
-45	8.9	13.36	19.04	26.52	36.42
-40	4.5	9.42	15.86	24.38	35.65
-35	0.5	5.69	12.89	22.46	35.1
-30	0	2.5	10.43	21.09	35.08

型号 Model	SLD420S-150 油冷负荷				
Tc(°C)	25	30	35	40	45
Te(°C)	Q(kW)	P(kW)	Q(kW)	P(kW)	Q(kW)
-60	29.75	33.85	38.7	45.2	53.9
-55	24.62	29.63	35.63	43.2	53.6
-50	18.84	24.56	31.62	40.85	52.85
-45	12.63	19.03	27.31	37.9	51.95
-40	6.34	13.42	22.6	34.8	50.88
-35	0.35	8.11	19.36	32.2	50.21
-30	0	3.51	14.86	30.2	49.98

说明: Remark:  
 1. Tc= 冷凝温度, Te= 蒸发温度; 1. Tc = Condensing Temp., Te = Evaporating Temp.;  
 2. 吸气过热度: 5°C, 液体过冷度: 5°C; 2. Suction superheat: 5°C; liquid subcooling: 5°C;  
 3. Q= 名义工况制冷量, P= 名义工况功耗; 3. Q = Cooling capacity, P = Power consumption;

型号 Model	SLD230-S 经济器负荷				
Tc(°C)	25	30	35	40	45
Te(°C)	Q(kW)	Q(kW)	Q(kW)	Q(kW)	Q(kW)
-60	5.8	6.2	6.5	6.9	7.4
-55	6.9	7.5	8.1	8.6	9.3
-50	8.3	8.9	9.7	10.4	11.2
-45	9.5	10.5	11.4	12.5	13.4
-40	10.9	12.2	13.3	14.5	15.8
-35	12.2	13.7	15.2	16.6	16.9
-30	13.4	15.2	16.9	18.7	20.6

型号 Model	SLD420S-100 经济器负荷				
Tc(°C)	25	30	35	40	45
Te(°C)	Q(kW)	Q(kW)	Q(kW)	Q(kW)	Q(kW)
-60	11.2	12.1	12.9	13.8	14.5
-55	13.7	14.8	15.9	17.1	18.2
-50	16.2	17.6	19.2	20.6	22.1
-45	18.9	20.7	22.5	24.5	26.4
-40	21.6	23.9	26.2	28.6	30.9
-35	24.2	27.1	29.8	32.8	35.7
-30	26.6	30.1	33.4	36.9	40.7

型号 Model	SLD420S-150 经济器负荷				
Tc(°C)	25	30	35	40	45
Te(°C)	Q(kW)	Q(kW)	Q(kW)	Q(kW)	Q(kW)
-60	15.9	17.1	18.2	19.5	20.6
-55	19.4	21	22.5	24.2	25.8
-50	23.1	24.1	27.2	29.2	31.4
-45	26.9	29.5	32	34.8	37.6
-40	30.8	33.9	37.3	40.7	44.2
-35	34.5	38.5	42.5	46.7	50.9
-30	37.9	42.8	47.6	52.8	58.2



R404A 双级压缩机数据表  
R404A Compressor Data Table

型号Model		SLD230S-50									
Tc(°C)	25		30		35		40		45		
Te(°C)	Q(kW)	P(kW)	Q(kW)	P(kW)	Q(kW)	P(kW)	Q(kW)	P(kW)	Q(kW)	P(kW)	
-65	19.70	22.30	19.25	23.30	18.84	24.25	18.39	25.27	17.91	26.68	
-60	26.10	24.21	25.60	25.27	25.09	26.34	24.55	27.62	24.01	29.44	
-55	33.90	26.34	33.28	27.50	32.66	28.81	32.04	30.49	31.36	32.77	
-50	43.31	28.66	42.54	30.06	41.79	31.72	41.01	33.85	40.20	36.74	
-45	54.53	31.27	53.59	32.96	52.66	35.00	51.72	37.70	50.72	41.30	
-40	67.81	34.08	66.67	36.17	65.52	38.74	64.34	42.07	63.12	46.43	
-35	83.43	37.18	81.97	39.71	80.52	42.88	79.05	46.91	77.56	52.13	
-30	101.43	40.51	99.67	43.61	97.87	47.43	96.07	52.26	94.23	58.42	

型号Model		SLD420S-100									
Tc(°C)	25		30		35		40		45		
Te(°C)	Q(kW)	P(kW)	Q(kW)	P(kW)	Q(kW)	P(kW)	Q(kW)	P(kW)	Q(kW)	P(kW)	
-65	36.99	41.86	19.25	23.30	18.84	24.25	18.39	25.27	17.91	26.68	
-60	49.01	45.44	25.60	25.27	25.09	26.34	24.55	27.62	24.01	29.44	
-55	63.64	49.46	33.28	27.50	32.66	28.81	32.04	30.49	31.36	32.77	
-50	81.32	53.88	42.54	30.06	41.79	31.72	41.01	33.85	40.20	36.74	
-45	102.39	58.70	53.59	32.96	52.66	35.00	51.72	37.70	50.72	41.30	
-40	127.32	63.98	66.67	36.17	65.52	38.74	64.34	42.07	63.12	46.43	
-35	156.64	69.82	81.97	39.71	80.52	42.88	79.05	46.91	77.56	52.13	
-30	190.52	76.08	99.67	43.61	97.87	47.43	96.07	52.26	94.23	58.42	

型号Model		SLD640S-150									
Tc(°C)	25		30		35		40		45		
Te(°C)	Q(kW)	P(kW)	Q(kW)	P(kW)	Q(kW)	P(kW)	Q(kW)	P(kW)	Q(kW)	P(kW)	
-65	55.12	59.63	51.50	62.32	50.39	64.85	49.18	67.60	47.91	71.36	
-60	73.03	64.73	68.47	67.57	67.13	70.45	65.67	73.86	64.21	78.72	
-55	94.84	70.44	89.00	73.57	87.35	77.04	85.69	81.55	83.86	87.63	
-50	121.18	76.74	113.76	80.41	111.78	84.82	109.71	90.51	107.52	98.39	
-45	152.57	83.61	143.33	88.12	140.86	93.62	138.31	100.83	135.67	110.44	
-40	189.74	91.14	178.33	96.74	175.22	103.61	172.06	112.49	168.81	124.17	
-35	233.44	99.44	219.21	106.23	215.25	114.67	211.41	125.50	207.41	139.43	
-30	283.91	108.36	266.55	116.64	261.74	126.86	256.91	139.77	251.99	156.23	

说明:  
1. Tc= 冷凝温度, Te= 蒸发温度;  
2. 吸气过热度: 5°C, 液体过冷度: 5°C;  
3. Q= 名义工况制冷量, P= 名义工况功耗;

Remark:  
1. Tc= Condensing Temp., Te = Evaporating Temp.;  
2. Suction superheat: 5°C; liquid subcooling: 5°C;  
3. Q = Cooling capacity, P = Power consumption;

R404A 双级压缩机数据表  
R404A Compressor Data Table

型号Model		SLD230S-50				
Tc(°C)	25	30	35	40	45	
Te(°C)	Q(kW)	P(kW)	Q(kW)	P(kW)	Q(kW)	
-65	4.7	5.5	6	7	8.5	
-60	1.8	2.5	3.5	4.5	6	
-55			0.5	2.5	4	
-50					1.5	
-45						
-40						
-35						
-30						

型号Model		SLD420S-100				
Tc(°C)	25	30	35	40	45	
Te(°C)	Q(kW)	P(kW)	Q(kW)	P(kW)	Q(kW)	
-65	8.5	10.5	11.8	13.6	16.5	
-60	3	5	6.5	8.5	11.8	
-55			1.5	3.5	7.5	
-50					3.5	
-45						
-40						
-35						
-30						

型号Model		SLD420S-150				
Tc(°C)	25	30	35	40	45	
Te(°C)	Q(kW)	P(kW)	Q(kW)	P(kW)	Q(kW)	
-65	12	14.5	16.5	18.95	22.6	
-60	4.5	6.5	8.8	11.8	16.5	
-55			1.5	4.5	10.2	
-50					3.9	
-45						
-40						
-35						
-30						

说明:  
1. Tc= 冷凝温度, Te= 蒸发温度;  
2. 吸气过热度: 5°C, 液体过冷度: 5°C;  
3. Q= 名义工况制冷量, P= 名义工况功耗;

Remark:  
1. Tc= Condensing Temp., Te = Evaporating Temp.;  
2. Suction superheat: 5°C; liquid subcooling: 5°C;  
3. Q = Cooling capacity, P = Power consumption;

型号Model		SLD230S-50				
Tc(°C)	25	30	35	40	45	
Te(°C)	Q(kW)	Q(kW)	Q(kW)	Q(kW)	Q(kW)	
-65	7.8	8.4	9	9.4	10	
-60	9.7	10.5	11.2	11.9	12.8	
-55	11.7	12.7	13.8	14.8	15.9	
-50	13.9	15.2	16.5	18	19.5	
-45	16.3	17.9	19.6	21.4	23.1	
-40	18.5	20.5	22.6	24.9	27.1	
-35	20.8	23.3	25.9	28.5	31.3	
-30	22.7	25.8	28.9	32.1	35.5	

型号Model		SLD420S-100				
Tc(°C)	25	30	35	40	45	
Te(°C)	Q(kW)	Q(kW)	Q(kW)	Q(kW)	Q(kW)	
-65	15.3	16.4	17.5	18.5	19.6	
-60	19.1	20.6	22.1	23.6	25.2	
-55	22.2	25.1	27.2	29.3	31.3	
-50	27.5	30	32.7	35.4	38	
-45	31.9	35.1	38.6	41.9	45.6	
-40	36.3	40.4	44.7	48.8	53.5	
-35	40.7	45.6	50.8	55.9	61.6	
-30	44.6	50.5	56.9	63.2	69.9	

型号Model		SLD420S-150				
Tc(°C)	25	30	35	40	45	
Te(°C)	Q(kW)	Q(kW)	Q(kW)	Q(kW)	Q(kW)	
-65	21.9	23.3	24.9	26.4	27.9	
-60	27.1	29.2	31.6	33.5	35.8	
-55	32.8	35.7	38.7	41.5	44.4	
-50	38.9	42.6	46.5	50	53.9	
-45	45.3	49.8	54.6	59.5	64.5	
-40	51.6	57.4	63.3	69.5	75.6	
-35	57.8	64.7	71.8	79.6	86.9	
-30	63.3	71.5	80.4	89.5	98.8	



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## 涡旋制冷压缩机 Scroll Compressor

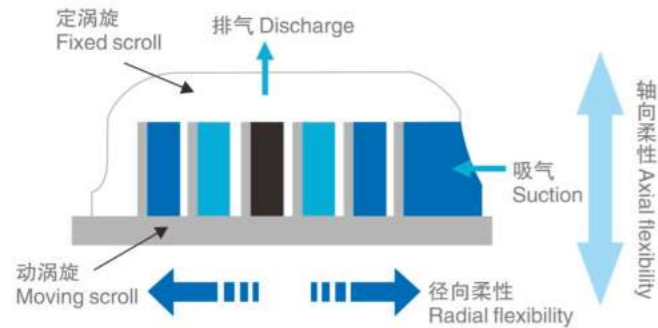
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### 特点及优势 Features & Advantages

- \*双柔性设计 Double flexible design  
确保涡旋盘间的密封 Make sure the seal between the scrolls  
允许涡旋盘沿径向和轴向分开, 碎屑或液体可通过涡旋盘而不损害压缩机  
Allowing the scrolls to be radially and axially separated, Debris or Liquid can pass through the scrolls without damaging the compressor
- \*更高的寿命和可靠性  
Higher usage time and reliability
- \*更好的液体容忍度  
Better liquid tolerance
- \*更好的杂质容忍度  
Better impurity tolerance



- \*更低的噪音和振动水平 Lower noise & vibration levels  
平滑的声音频谱和柔和的声音质量  
Smooth sound spectrum & soft sound quality
- \*压缩腔永远是对称的  
Compression chamber is always symmetrical
- \*很低的不平衡应力  
Very low unbalanced stress
- \*高精度的制造工艺  
High-precision manufacturing process
- \*无需振动吸收装置  
No vibration absorption device

- \*高强度的金属复合轴承  
High strength metal composite bearing
- \*太空时代材料  
Space-age materials
- \*多孔渗透型青铜  
Porous bronze
- \*聚四氟乙烯 PTFE 涂层  
PTFE coating
- \*在没有完全润滑的情况下延长运行时间  
Extend the running time without full lubrication
- \*非常小的摩擦系数  
Very small friction coefficient

- \*卸载启动技术  
Unloading startup technology  
压缩部件在停机后相互分开压缩机内部全面的压力平衡, 无需附加启动装置。  
The compressed parts are separated from each other after the shutdown to balance the internal pressure of the compressor, no need additional starting device.

- \*高能效比  
High energy efficiency ratio
- \*涡旋盘磨合而不是磨损  
The scrolls are running-in rather than abrasion
- \*随运行时间的增加表现更好  
Increased performance with running time
- \*容积效率高  
High volumetric efficiency

**\*大明——冷冻涡旋压缩技术为冷冻应用提供了出众的解决方案**  
Daming's scroll compression technology provides excellent solution for refrigeration application

涡旋压缩机是高可靠性、高能效比, 紧凑型系统设计的理想选择  
Scroll compressor is the ideal choice for high reliability & compacted designed system

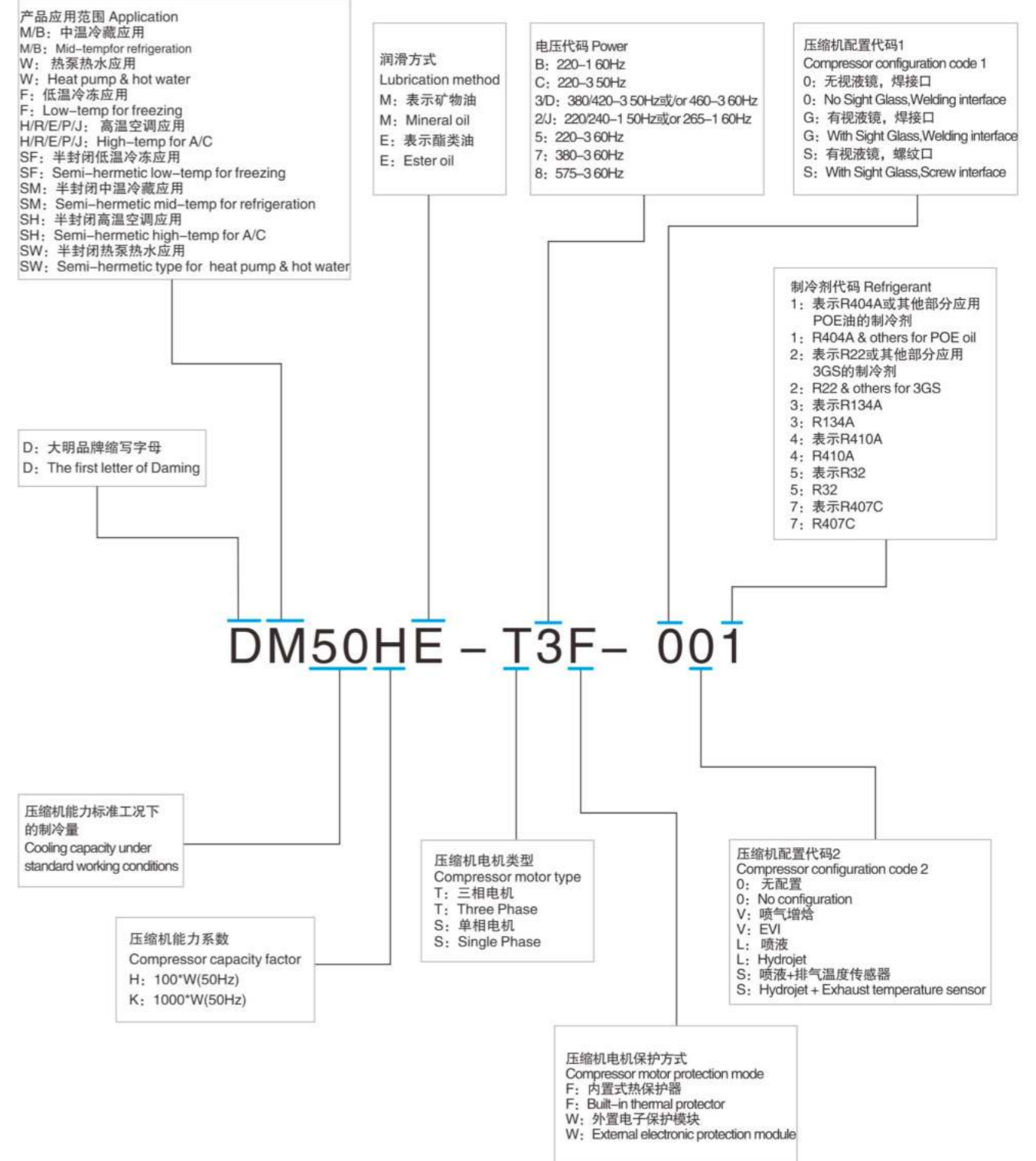
大明涡旋压缩机提供2-12HP的产品, 其适用的制冷剂包括R22、R404A、R134A等  
Daming's scroll compressors range from 2-15HP, suitable for different refrigerants

#### \*制冷量数据 Refrigeration Capacity

本样本所列压缩机制冷量数据, 无液体过冷度, 电源频率50Hz(电机同步转速2900rpm)。当压缩机在60Hz频率(电机转速3500rpm)运行时, 制冷量以及输入功率相应约增加20%, 压缩机不宜在应用范围外使用。

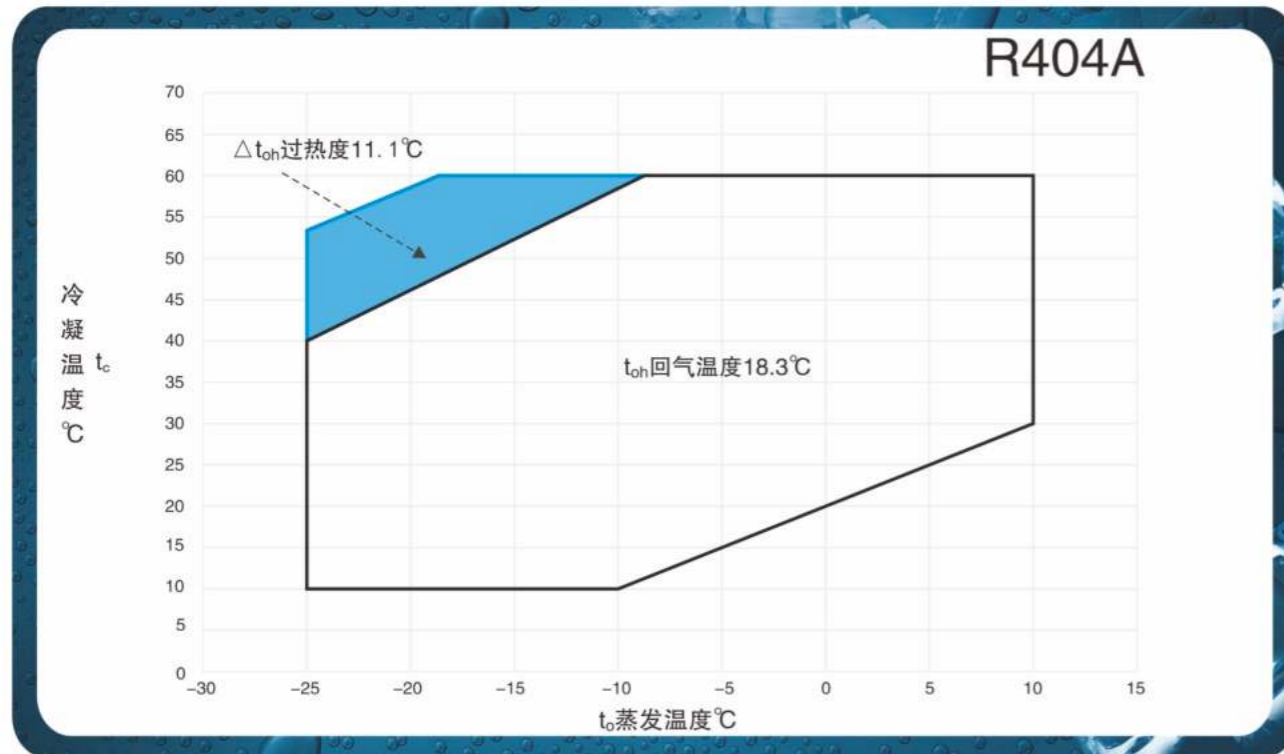
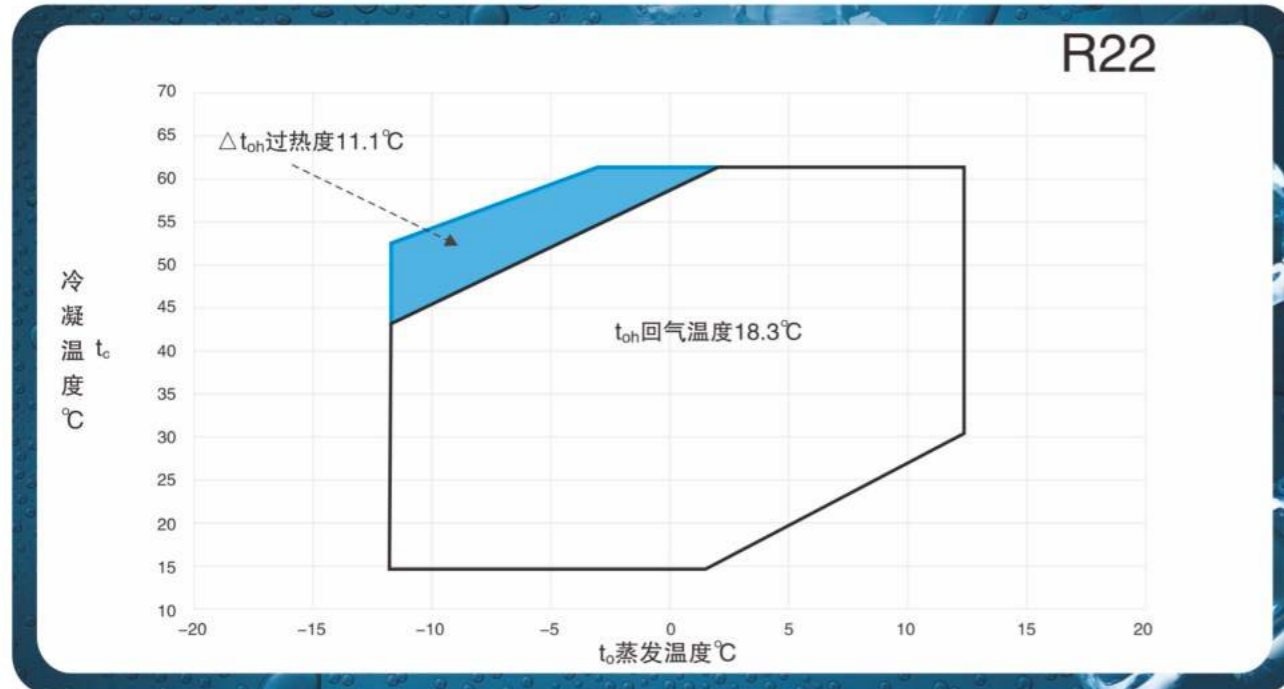
The refrigeration capacity test condition: no supercooling, power frequency 50Hz, motor rotation speed 2900RPM. The refrigeration capacity and power consumption increase 20% when power frequency is 60Hz and motor rotation speed 3500RPM. Working condition out of application range is not recommended.

### 命名规则 Model Identification





DM/DSM 中温应用范围 DM/DSM Mid-temp. Application Range



$t_e$ (°C): Evaporating temperature(°C)  
 $t_{oh}$ (°C): Suction gas temperature(°C)  
 $\Delta t_{oh}$ (K): Suction superheat(K)  
 $t_c$ (°C): Condensing temperature(°C)

蓝线框内最大吸气过热度11.1K Maximum inspiratory superheat in blue wire 11.1K  
 黑线框内回气温度18.3°C Return temperature in black wire frame 18.3°C

DM全封制冷量 DM Cooling Capacity(C/C) R22  
380V/420V, 3Ph, 50Hz

型号 Model	冷凝温度°C Condensing Temp. (°C)- $t_c$	蒸发温度 Evaporating Temperature(°C)						
		-12	-10	-5	0	5	10	
DM34HM	Q(Kw)	30	3.49	4.21	5.01	5.86	6.74	7.66
		40	3.07	3.76	4.54	5.40	6.31	7.29
		50	2.45	3.01	3.96	4.75	5.61	6.57
	P(Kw)	30	1.15	1.20	1.26	1.33	1.43	1.55
		40	1.37	1.42	1.47	1.53	1.60	1.70
		50	1.60	1.68	1.75	1.81	1.87	1.95
DM50HM	Q(Kw)	30	5.19	5.65	6.85	8.19	9.69	11.45
		40	4.65	5.09	6.19	7.45	8.89	10.49
		50	3.79	4.19	5.49	6.65	7.95	9.45
	P(Kw)	30	1.61	1.61	1.62	1.66	1.71	1.73
		40	1.99	1.99	2.01	2.04	2.08	2.11
		50	2.48	2.48	2.51	2.53	2.56	2.57
DM70HM	Q(Kw)	30	6.78	8.19	9.74	11.39	13.10	14.91
		40	5.98	7.31	8.83	10.49	12.27	14.18
		50	4.78	5.86	7.71	9.23	10.92	12.79
	P(Kw)	30	2.08	2.17	2.27	2.40	2.57	2.80
		40	2.47	2.57	2.66	2.77	2.89	3.06
		50	2.90	3.04	3.16	3.27	3.38	3.52
DM86HM	Q(Kw)	30	8.65	9.39	11.39	13.65	16.15	19.05
		40	7.75	8.45	10.29	12.39	14.79	17.55
		50	6.35	6.95	9.19	11.05	13.25	15.75
	P(Kw)	30	2.58	2.58	2.61	2.66	2.73	2.79
		40	3.21	3.21	3.23	3.29	3.34	3.37
		50	3.98	3.99	4.02	4.07	4.12	4.14
DM102HM	Q(Kw)	30	11.49	12.45	15.05	18.05	21.45	25.39
		40	10.39	11.29	13.69	16.45	19.59	23.19
		50	8.39	9.25	12.19	14.69	17.55	20.85
	P(Kw)	30	3.25	3.27	3.31	3.35	3.39	3.49
		40	4.08	4.11	4.14	4.16	4.19	4.24
		50	5.12	5.14	5.18	5.21	5.21	5.22
DM132HM	Q(Kw)	30	13.35	14.51	17.71	21.39	25.69	30.49
		40	11.79	12.95	16.09	19.59	23.49	27.99
		50	10.15	11.05	14.15	17.39	21.09	25.29
	P(Kw)	30	3.89	3.91	3.92	3.97	4.05	4.19
		40	4.88	4.88	4.88	4.91	4.96	5.05
		50	5.99	6.15	6.09	6.09	6.09	6.19
DM182HM	Q(Kw)	30	17.99	19.59	23.79	28.09	32.99	38.49
		40	16.39	17.79	21.69	25.79	30.49	35.49
		50	14.69	15.79	19.49	23.39	27.69	32.49
	P(Kw)	30	4.98	4.99	5.09	5.59	5.69	5.85
		40	6.29	6.29	6.35	6.79	6.85	6.95
		50	7.75	7.95	7.99	8.25	8.29	8.39
DM200HM	Q(Kw)	30	20.99	22.59	27.39	32.99	38.99	45.49
		40	18.79	20.39	24.89	29.99	35.99	41.99
		50	16.59	17.79	21.99	26.79	31.99	37.99
	P(Kw)	30	5.65	5.69	5.75	5.89	6.09	6.39
		40	7.09	7.15	7.19	7.29	7.39	7.59
		50	8.69	8.95	9.05	9.09	9.15	9.25

注: 1.测试条件: 回气温度18.3°C, 过冷度0K NOTE: 1. Test Condition: Suction gas temperature 18.3°C, supercooling degree 0K  
 2.最低蒸发温度保持-12°C 2. The lowest evaporation temperature: -12°C  
 3. 区域: 最大吸气过热度为11.1K 3. area: Maximum Suction superheat: 11.1K



DM全封制冷量 DM Cooling Capacity(C/C)R404A  
380V/420V, 3Ph, 50Hz

型号 Model		冷凝温度 Condensing Temperature °C	蒸发温度 Evaporating Temperature(°C)						
			-25	-20	-15	-10	-5	0	5
DM34HE	Q(Kw)	30	2.45	3.06	2.81	4.51	5.41	6.37	7.23
		40	2.2	2.7	3.25	3.89	4.73	5.59	6.68
		50	1.83	2.32	3.75	3.32	4.04	4.80	5.65
	P(Kw)	30	1.23	1.30	1.36	1.43	1.51	2.19	1.64
		40	1.45	1.56	1.62	1.71	1.77	1.85	1.92
		50	1.75	1.85	1.93	2.03	2.11	1.56	2.27
DM50HE	Q(Kw)	30	3.45	4.29	5.25	6.35	7.65	9.09	10.75
		40	2.99	3.69	4.55	5.49	6.59	7.89	9.35
		50	2.43	3.09	3.75	4.55	5.49	6.55	7.79
	P(Kw)	30	1.77	1.77	1.77	1.76	1.76	1.75	1.75
		40	2.24	2.24	2.24	2.23	2.22	2.21	2.19
		50	2.85	2.83	2.83	2.82	2.81	2.79	2.77
DM70HE	Q(Kw)	30	4.86	5.96	7.26	8.75	10.25	12.58	15.10
		40	4.35	5.26	6.38	7.68	9.22	10.92	12.96
		50	3.65	4.51	5.35	6.55	7.83	9.25	10.94
	P(Kw)	30	2.16	2.25	2.35	2.48	2.58	2.70	2.82
		40	2.57	2.71	2.78	2.92	3.05	3.18	3.28
		50	3.02	3.18	3.36	3.52	3.65	3.78	3.95
DM86HE	Q(Kw)	30	5.89	7.29	8.89	10.79	12.95	15.39	18.19
		40	5.09	6.25	7.69	9.29	11.19	13.35	15.79
		50	3.82	5.19	6.35	7.75	9.35	11.19	13.29
	P(Kw)	30	2.99	2.99	2.99	2.99	2.97	2.95	2.92
		40	3.75	3.76	3.76	3.76	3.76	3.74	3.71
		50	4.67	4.67	4.68	4.68	4.68	4.67	4.65
DM102HE	Q(Kw)	30	7.03	8.51	10.39	12.61	15.15	18.15	21.45
		40	5.57	7.35	9.05	10.95	13.15	15.75	18.55
		50	4.43	6.05	7.55	9.15	10.95	13.05	15.45
	P(Kw)	30	3.35	3.35	3.35	3.35	3.34	3.32	3.31
		40	4.24	4.24	4.24	4.23	4.21	4.19	4.15
		50	5.36	5.36	5.36	5.35	5.32	5.29	5.24
DM132HE	Q(Kw)	30	8.89	11.25	13.95	16.99	20.59	24.59	29.19
		40	7.05	9.25	11.69	14.39	17.49	20.99	24.89
		50	5.81	6.89	9.09	11.49	14.15	17.09	20.39
	P(Kw)	30	4.56	4.57	4.59	4.61	4.64	4.67	4.69
		40	5.85	5.79	5.75	5.75	5.75	5.75	5.75
		50	6.55	7.45	7.35	7.25	7.21	7.15	7.15
DM182HE	Q(Kw)	30	12.39	15.39	18.79	22.79	27.39	32.49	38.49
		40	10.89	13.29	16.09	19.39	23.29	27.79	32.99
		50	7.45	11.19	13.19	15.69	18.69	22.19	26.39
	P(Kw)	30	5.79	5.89	5.99	6.05	6.15	6.25	6.39
		40	7.25	7.29	7.39	7.45	7.49	7.59	7.69
		50	8.48	9.15	9.19	9.25	9.25	9.31	9.39
DM200HE	Q(Kw)	30	15.46	17.85	21.56	26.67	31.79	37.81	45.61
		40	11.09	14.75	19.06	22.99	27.48	33.36	38.54
		50	8.97	11.56	13.24	17.11	22.02	27.45	32.49
	P(Kw)	30	5.99	6.71	6.62	6.57	6.68	7.08	7.91
		40	7.65	8.77	8.81	8.85	8.89	8.93	8.98
		50	9.67	9.98	10.88	10.91	10.98	11.01	11.07

注: 1.测试条件: 回气温度18.3℃, 过冷度0 K  
2.最低蒸发温度保持-25℃  
3. 区域: 最大吸气过热度为11.1 K

NOTE: 1. Test Condition: Suction gas temperature 18.3℃, supercooling degree 0 K  
2. The lowest evaporation temperature: -25℃  
3. area: Maximum Suction superheat: 11.1 K

DSM半封制冷量 DSM Cooling Capacity(C/C)R22  
380V/420V, 3Ph, 50Hz

型号 Model		冷凝温度 Condensing Temperature °C	蒸发温度 Evaporating Temperature(°C)					
			-12	-10	-5	0	5	10
DSM86HM	Q(Kw)	30	8.65	9.39	11.39	13.65	16.15	19.05
		40	7.75	8.45	10.29	12.39	14.79	17.55
		50	6.35	6.95	9.19	11.05	13.25	15.75
	P(Kw)	30	2.58	2.58	2.61	2.66	2.73	2.79
		40	3.21	3.21	3.23	3.29	3.34	3.37
		50	3.98	3.99	4.02	4.07	4.12	4.14
DSM102HM	Q(Kw)	30	11.49	12.45	15.05	18.05	21.45	25.39
		40	10.39	11.29	13.69	16.45	19.59	23.19
		50	8.39	9.25	12.19	14.69	17.55	20.85
	P(Kw)	30	3.25	3.27	3.31	3.35	3.39	3.49
		40	4.08	4.11	4.14	4.16	4.19	4.24
		50	5.12	5.14	5.18	5.21	5.21	5.22
DSM132HM	Q(Kw)	30	13.35	14.51	17.71	21.39	25.69	30.49
		40	11.79	12.95	16.09	19.59	23.49	27.99
		50	10.15	11.05	14.15	17.39	21.09	25.29
	P(Kw)	30	3.89	3.91	3.92	3.97	4.05	4.19
		40	4.88	4.88	4.88	4.91	4.96	5.05
		50	5.99	6.15	6.09	6.09	6.09	6.19
DSM182HM	Q(Kw)	30	17.99	19.59	23.79	28.09	32.99	38.49
		40	16.39	17.79	21.69	25.79	30.49	35.49
		50	14.69	15.79	19.49	23.39	27.69	32.49
	P(Kw)	30	4.98	4.99	5.09	5.59	5.69	5.85
		40	6.29	6.29	6.35	6.79	6.85	6.95
		50	7.75	7.95	7.99	8.25	8.29	8.39
DSM200HM	Q(Kw)	30	20.99	22.59	27.39	32.99	38.99	45.49
		40	18.79	20.39	24.89	29.99	35.99	41.99
		50	16.59	17.79	21.99	26.79	31.99	37.99
	P(Kw)	30	5.65	5.69	5.75	5.89	6.09	6.39
		40	7.09	7.15	7.19	7.29	7.39	7.59
		50	8.69	8.95	9.05	9.09	9.15	9.25
DSM260HM	Q(Kw)	30	26.69	28.99	35.39	42.49	50.39	59.29
		40	23.19	25.49	31.69	38.49	46.09	54.49
		50	18.75	21.91	26.99	33.69	40.99	48.89
	P(Kw)	30	7.75	7.79	7.92	8.09	8.33	8.63
		40	9.61	9.63	9.71	9.83	9.99	10.19
		50	11.07	11.58	12.05	12.09	12.19	12.35

注: 1.测试条件: 回气温度18.3℃, 过冷度0 K  
2.最低蒸发温度保持-12℃  
3. 区域: 最大吸气过热度为11.1 K

NOTE: 1. Test Condition: Suction gas temperature 18.3℃, supercooling degree 0 K  
2. The lowest evaporation temperature: -12℃  
3. area: Maximum Suction superheat: 11.1 K



DSM半封制冷量 DSM Cooling Capacity(C/C)R404A  
380V/420V, 3Ph, 50Hz

型号 Model	冷凝温度 Condensing Temperature °C	蒸发温度 Evaporating Temperature(°C)							
		-25	-20	-15	-10	-5	0	5	
DSM86HE	Q(Kw)	30	5.89	7.29	8.89	10.79	12.95	15.39	18.19
		40	5.09	6.25	7.69	9.29	11.19	13.35	15.79
		50	3.82	5.19	6.35	7.75	9.35	11.19	13.29
	P(Kw)	30	2.99	2.99	2.99	2.99	2.97	2.95	2.92
		40	3.75	3.76	3.76	3.76	3.76	3.74	3.71
		50	4.67	4.67	4.68	4.68	4.68	4.67	4.65
DSM102HE	Q(Kw)	30	7.03	8.51	10.39	12.61	15.15	18.15	21.45
		40	5.57	7.35	9.05	10.95	13.15	15.75	18.55
		50	4.43	6.05	7.55	9.15	10.95	13.05	15.45
	P(Kw)	30	3.35	3.35	3.35	3.35	3.34	3.32	3.31
		40	4.24	4.24	4.24	4.23	4.21	4.19	4.15
		50	5.36	5.36	5.36	5.35	5.32	5.29	5.24
DSM132HE	Q(Kw)	30	8.89	11.25	13.95	16.99	20.59	24.59	29.19
		40	7.05	9.25	11.69	14.39	17.49	20.99	24.89
		50	5.81	6.89	9.09	11.49	14.15	17.09	20.39
	P(Kw)	30	4.56	4.57	4.59	4.61	4.64	4.67	4.69
		40	5.85	5.79	5.75	5.75	5.75	5.75	5.75
		50	6.55	7.45	7.35	7.25	7.21	7.15	7.15
DSM182HE	Q(Kw)	30	12.39	15.39	18.79	22.79	27.39	32.49	38.49
		40	10.89	13.29	16.09	19.39	23.29	27.79	32.99
		50	7.45	11.19	13.19	15.69	18.69	22.19	26.39
	P(Kw)	30	5.79	5.89	5.99	6.05	6.15	6.25	6.39
		40	7.25	7.29	7.39	7.45	7.49	7.59	7.69
		50	8.48	9.15	9.19	9.25	9.25	9.31	9.39
DSM200HE	Q(Kw)	30	15.46	17.85	21.56	26.67	31.79	37.81	45.61
		40	11.09	14.75	19.06	22.99	27.48	33.36	38.54
		50	8.97	11.56	13.24	17.11	22.02	27.45	32.49
	P(Kw)	30	5.99	6.71	6.62	6.57	6.68	7.08	7.91
		40	7.65	8.77	8.81	8.85	8.89	8.93	8.98
		50	9.67	9.98	10.88	10.91	10.98	11.01	11.07
DSM260HE	Q(Kw)	30	17.88	21.91	26.99	32.75	39.35	46.79	55.35
		40	12.87	18.29	23.05	28.25	34.09	40.69	48.19
		50	10.88	12.87	18.25	22.99	28.19	33.95	40.45
	P(Kw)	30	8.55	8.94	9.05	9.17	9.31	9.45	9.61
		40	10.83	11.22	11.26	11.31	11.38	11.47	11.57
		50	12.99	13.56	14.19	14.15	14.12	14.11	14.13

注: 1.测试条件: 回气温度18.3℃, 过冷度0 K  
2.最低蒸发温度保持-25℃  
3. 区域: 最大吸气过热度为11.1 K

NOTE: 1. Test Condition: Suction gas temperature 18.3℃, supercooling degree 0 K  
2. The lowest evaporation temperature: -25℃  
3. area: Maximum Suction superheat: 11.1 K

DM技术参数 DM Technical Data  
380V/420V, 3Ph, 50Hz

型号 Model	DM34 DM34	DM50 DM50	DM50 DM50	DM70 DM70	DM86 DM86	DM102 DM102	DM132 DM132	DM182 DM182	DM200 DM200	
电机类型 Motor Type	3 Ph	1 Ph	3 Ph							
名义功率 Nominal Power	HP	2	3	3	4	5	6	8	10	12
排气量 Displacement	m³/h	5.8	8.6	8.6	11.8	14.5	17.2	21.6	29.1	33.1
堵转电流 Locked-rotor ampere (RLA)	A		82							
额定负载电流 Rated load ampere (RLA)	A	26		40	50	65.5	74	115	118	121
最大持续运行电流 Maximum continuous operating current (MCC)	A	15.2		5.7	7.6	8.7	11.3	14.3	19.2	22.1
电容 Run capacitor			60 μ F							
曲轴箱加热功率 Crankcase heating power	W	70	70	70	70	70	70	90	90	90
接管外径尺寸 Outside Dimension (OD)	排气管 Discharge 吸气管 Suction	Inch	1/2	1/2	1/2	1/2	1/2	7/8	7/8	7/8
外形尺寸 Dimensions	长(L) 宽(W) 高(H)	mm	242	242	242	242	242	242	242	242
底脚安装尺寸(孔径) Foot mounting dimensions (Aperture)	190 x 190(8.5)									
油充注量 Oil Volume	L	1.4	1.4	1.4	1.4	1.9	1.9	3.4	3.4	3.4
重量 Weight	净重 N.W. 毛重 G.W.	kg	28	28	28	28	37	38	54	56
			29	29	29	29	38	39	55	57

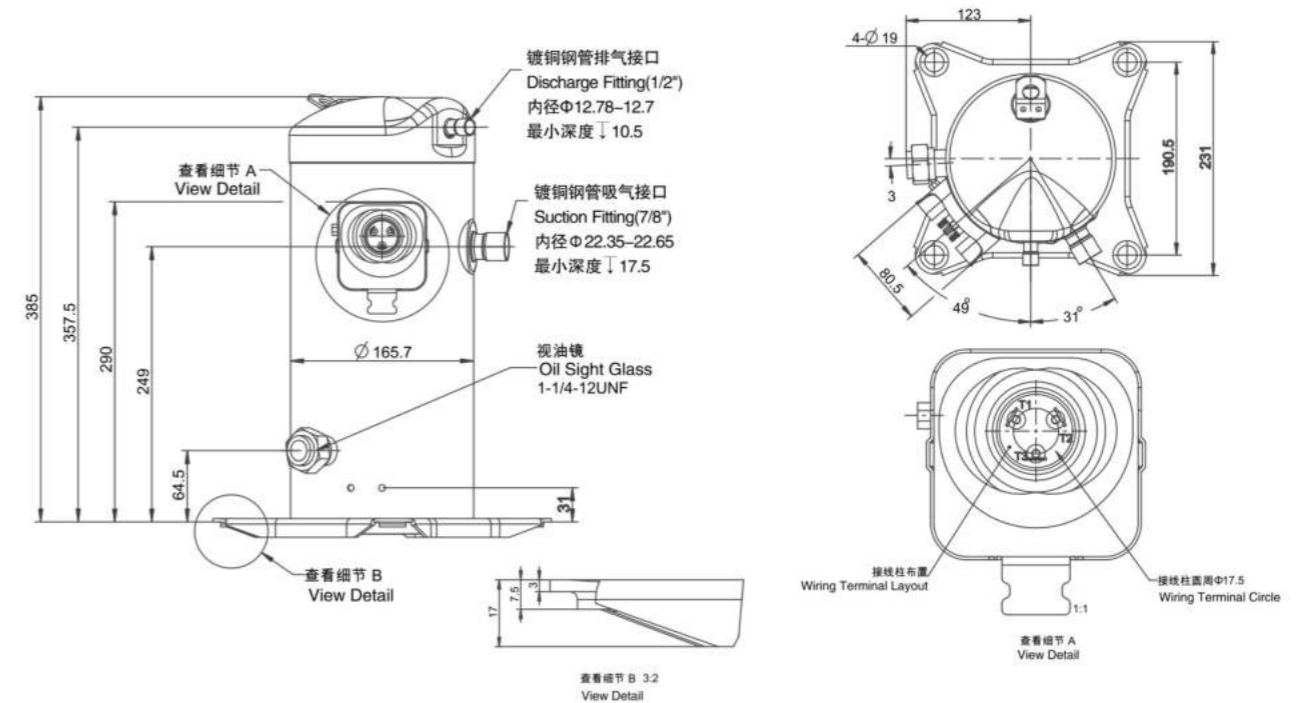


DSM技术参数 DSM Technical Data  
380V/420V, 3Ph, 50Hz

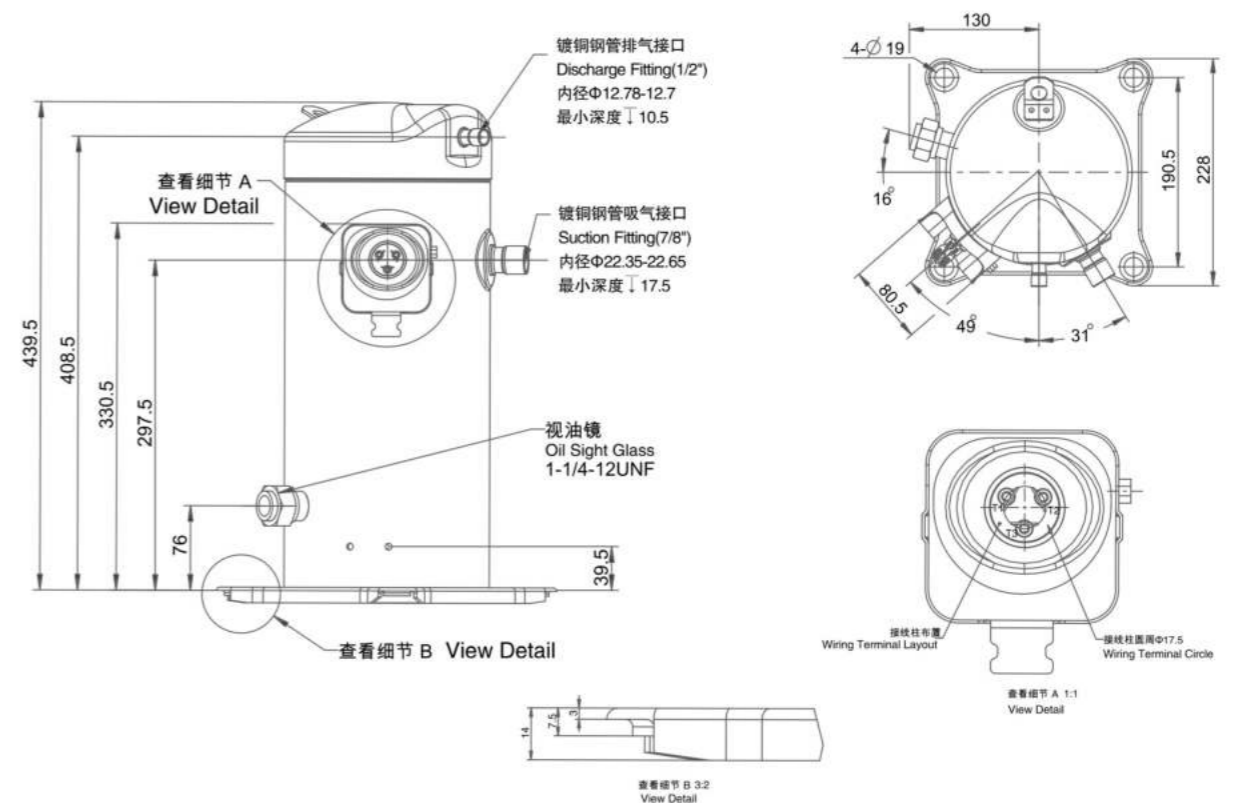
型号 Model		DSM86 DSM86	DSM102 DSM102	DSM132 DSM132	DSM182 DSM182	DSM200 DSM200	DSM260 DSM260	
电机类型 Motor Type		T3F(3 Ph)						
名义功率 Nominal Power	HP	5	6	8	10	12	15	
排气量 Displacement	m <sup>3</sup> /h	14.5	17.2	21.6	29.1	33.1	42.6	
堵转电流 Locked-rotor ampere (RLA)	A	65.5	75	115	118	121	145	
额定负载电流 Rated load ampere (RLA)	A	8.7	11.5	14.3	19.2	22.1	27.1	
最大持续运行电流 Maximum continuous operating current (MCC)	A	13.5	16.1	19.8	26.9	31.1	38.2	
曲轴箱加热功率 Crankcase heating power	W	70	70	90	90	90	90	
接管外径尺寸 Outside Dimension (OD)	排气管 Discharge	Inch	5/8	5/8	3/4	3/4	7/8	7/8
	吸气管 Suction		7/8	7/8	1-1/8	1-1/8	1-3/8	1-3/8
外形尺寸 Dimensions	长(L)	mm	256	256	257	257	257	257
	宽(W)		256	256	257	257	257	257
	高(H)		497	497	523	523	523	523
底脚安装尺寸(孔径) Foot mounting dimensions (Aperture)		190 x 190 ( 8.5 )						
油充注量 Oil Volume	L	2	2	3.4	3.4	3.4	3.4	
重量 Weight	净重 N.W.	kg	72	73	85	87	89	91
	毛重 G.W.		73	74	86	88	90	92

DM/DSM外形尺寸图 DM/DSM Dimension Drawing

DM34---70 焊接接口和油视镜 Welding interface & Oil sight glass



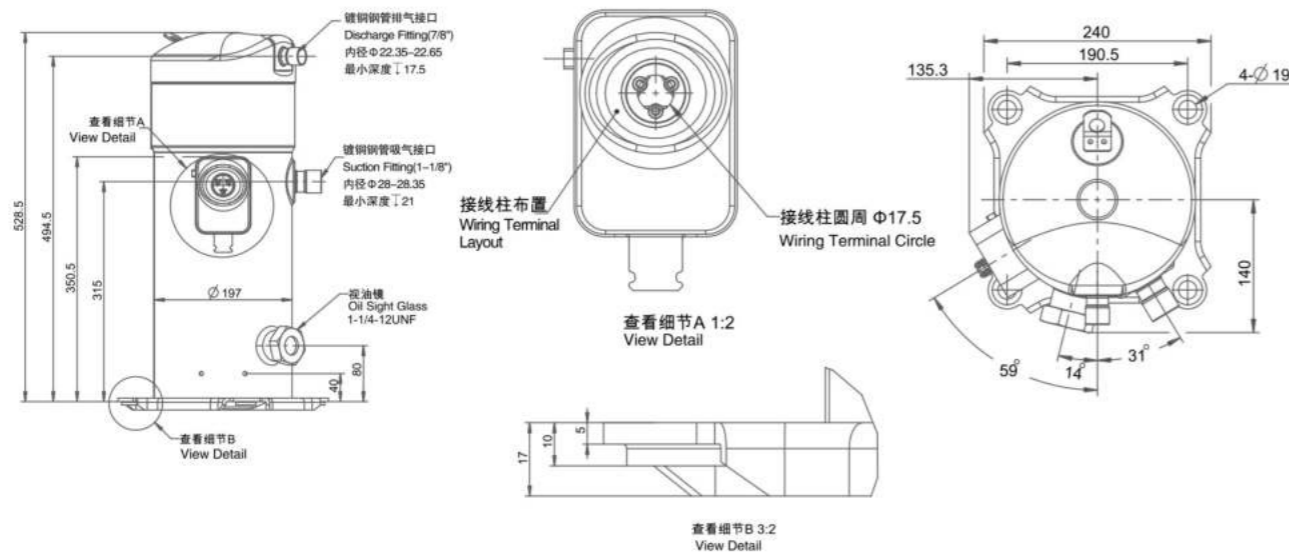
DM86---102 焊接接口和油视镜 Welding interface & Oil sight glass



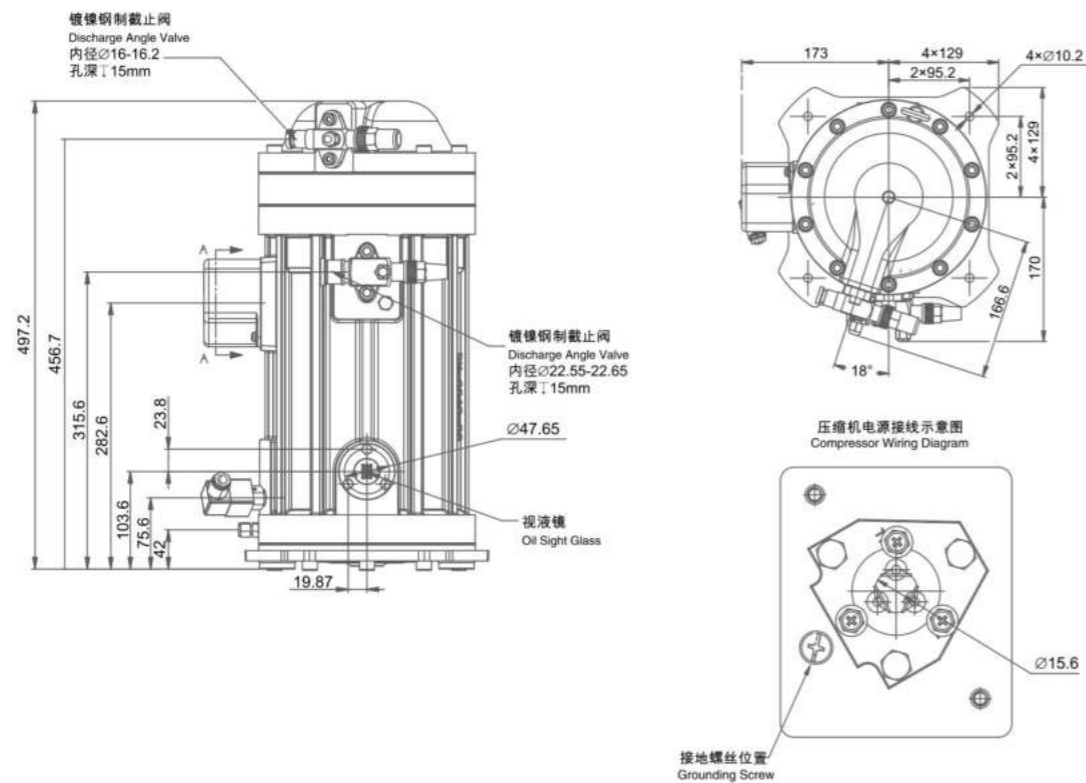


DM/DSM外形尺寸图 DM/DSM Dimension Drawing

DM132——200 焊接接口和油视镜 Welding interface & Oil sight glass

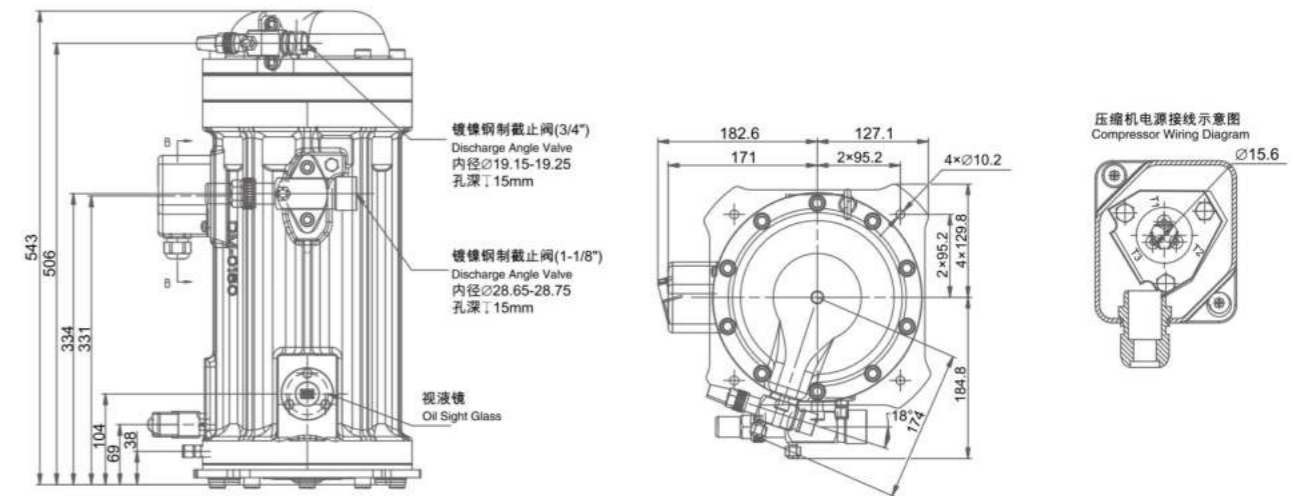


DSM86——102 角阀和油视镜 Angle valve & Oil sight glass

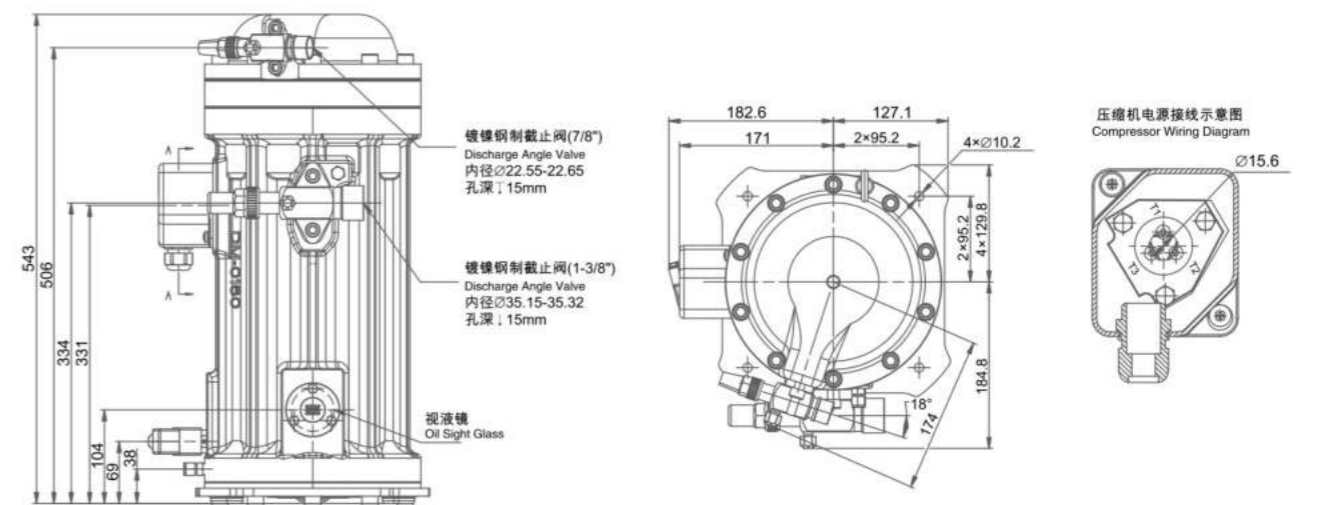


DM/DSM外形尺寸图 DM/DSM Dimension Drawing

DSM132——182 角阀和油视镜 Angle valve & Oil sight glass

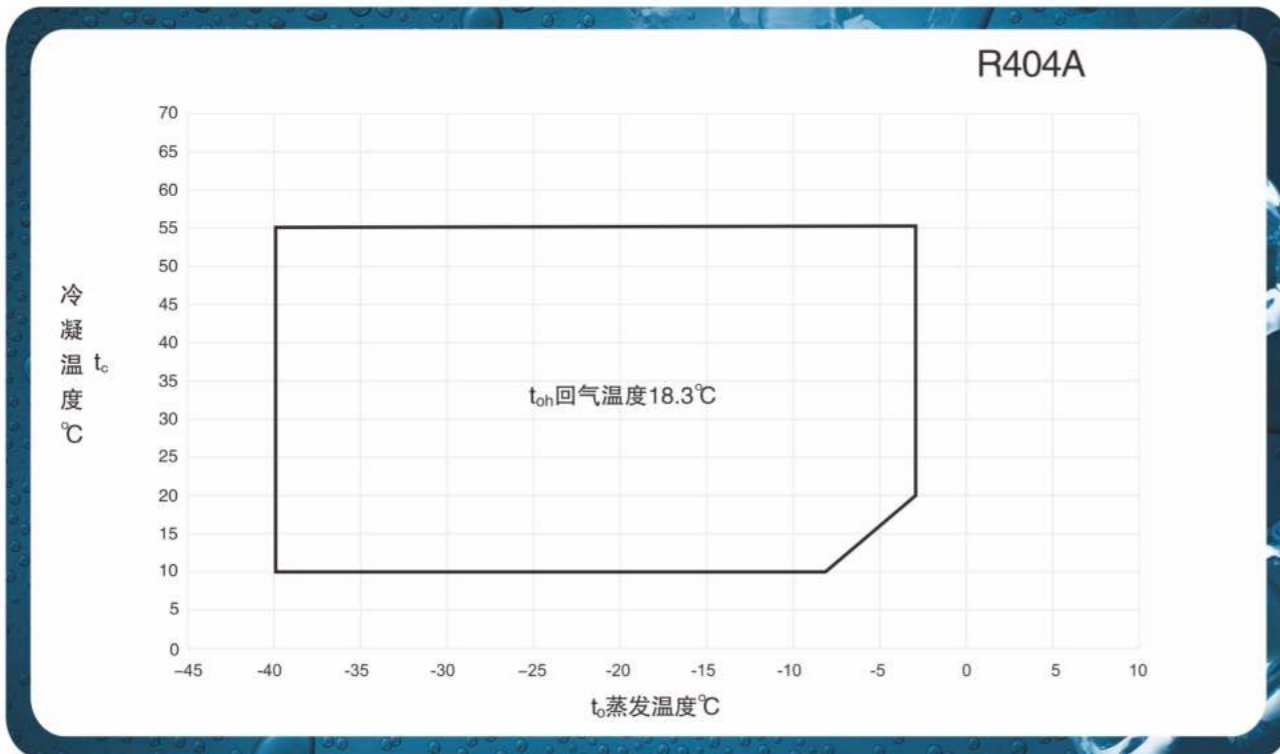
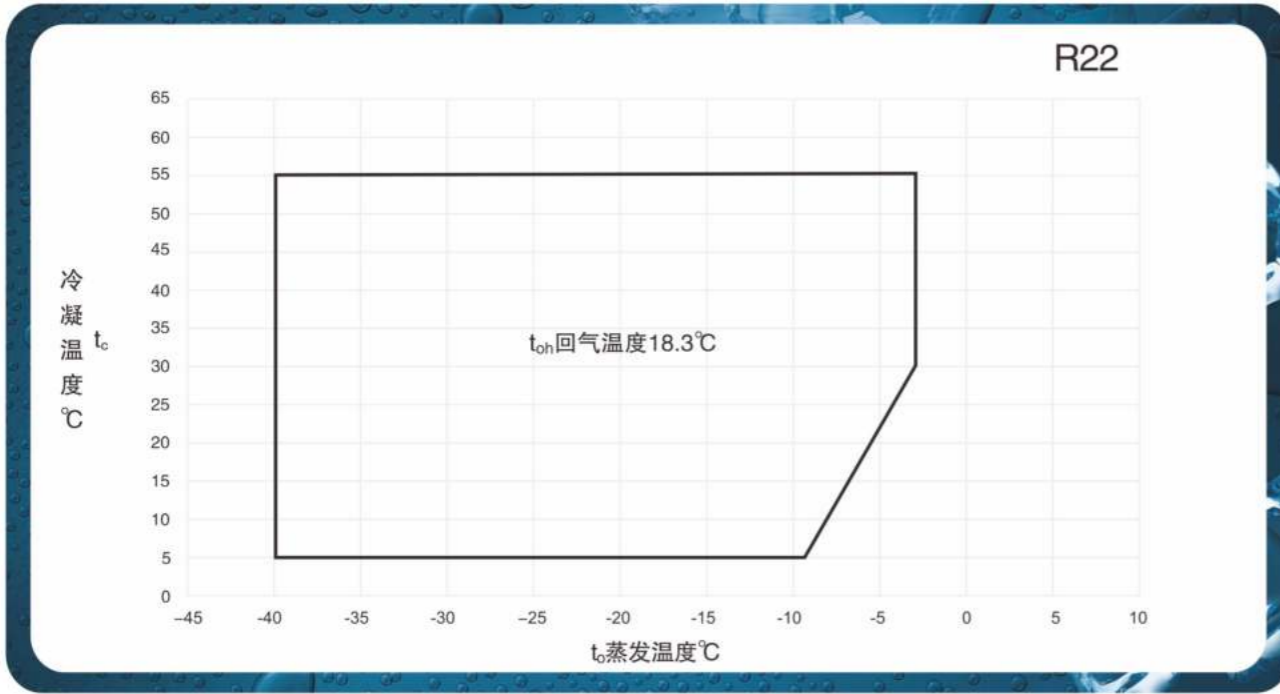


DSM200——260 角阀和油视镜 Angle valve & Oil sight glass





DF/DSF 低温应用范围 DF/DSF Low-temp.ApplicationRange



$t_0$ (°C):Evaporating temperature(°C)  
 $t_{oh}$ (°C):Suction gas temperature(°C)  
 $t_c$ (°C):Condensing temperature(°C)

DF全封制冷量 DF Cooling Capacity(C/C) R22  
380V/420V, 3Ph, 50Hz

型号 Model	冷凝温度 Condensing Temperature °C	蒸发温度 Evaporating Temperature(°C)								
		-40	-35	-30	-25	-20	-15	-10	-5	
DF13HM	Q(Kw)	30	1.16	1.46	1.83	2.26	2.79	3.37	4.06	4.78
		40	1.07	1.35	1.68	2.09	2.56	3.11	3.74	4.43
		50	0.97	1.23	1.52	1.91	2.33	2.84	3.41	4.03
	P(Kw)	30	1.02	1.04	1.07	1.11	1.16	1.21	1.27	1.34
		40	1.19	1.22	1.26	1.30	1.34	1.40	1.45	1.51
		50	1.39	1.43	1.47	1.52	1.56	1.62	1.68	1.74
DF20HM	Q(Kw)	30	1.59	2.01	2.49	3.09	3.78	4.58	5.51	6.58
		40	1.46	1.85	2.31	2.84	3.48	4.22	5.07	6.06
		50	1.34	1.69	2.11	2.59	3.16	3.83	4.61	5.51
	P(Kw)	30	1.52	1.57	1.61	1.67	1.72	1.79	1.86	1.94
		40	1.81	1.85	1.91	1.95	2.01	2.07	2.14	2.22
		50	2.11	2.16	2.22	2.28	2.34	2.41	2.48	2.56
DF29HM	Q(Kw)	30	2.29	2.88	3.60	4.46	5.50	6.63	7.99	9.42
		40	2.11	2.67	3.32	4.13	5.05	6.13	7.37	8.72
		50	1.91	2.42	2.99	3.76	4.59	5.60	6.71	7.94
	P(Kw)	30	1.85	1.90	1.95	2.03	2.11	2.22	2.31	2.44
		40	2.17	2.23	2.29	2.37	2.45	2.55	2.64	2.75
		50	2.54	2.61	2.68	2.77	2.86	2.96	3.06	3.18
DF35HM	Q(Kw)	30	2.79	3.52	4.39	5.42	6.63	8.03	9.63	11.47
		40	2.57	3.25	4.05	5.01	6.12	7.42	8.91	10.62
		50	2.34	2.95	3.68	4.54	5.56	6.74	8.11	9.68
	P(Kw)	30	2.47	2.53	2.61	2.71	2.82	2.95	3.11	3.29
		40	2.89	2.97	3.06	3.15	3.27	3.41	3.55	3.74
		50	3.38	3.47	3.58	3.68	3.81	3.94	4.11	4.28
DF41HM	Q(Kw)	30	3.25	4.12	5.17	6.42	7.89	9.61	11.58	13.84
		40	2.98	3.78	4.75	5.91	7.25	8.82	10.64	12.73
		50	2.69	3.42	4.31	5.34	6.56	7.99	9.65	11.55
	P(Kw)	30	3.13	3.18	3.25	3.33	3.43	3.55	3.69	3.86
		40	3.68	3.75	3.82	3.91	4.02	4.14	4.29	4.46
		50	4.31	4.39	4.49	4.61	4.72	4.86	5.02	5.21
DF55HM	Q(Kw)	30	4.08	5.17	6.48	8.04	9.89	12.04	14.52	17.35
		40	3.73	4.74	5.95	7.39	9.09	11.06	13.34	15.96
		50	3.37	4.29	5.39	6.69	8.22	10.02	12.09	14.48
	P(Kw)	30	3.93	3.99	4.07	4.17	4.31	4.45	4.63	4.84
		40	4.62	4.71	4.79	4.91	5.04	5.19	5.38	5.59
		50	5.41	5.51	5.62	5.76	5.92	6.09	6.29	6.52
DF76HM	Q(Kw)	30	5.31	6.77	8.52	10.59	13.01	15.82	19.06	22.74
		40	4.81	6.19	7.83	9.75	12.01	14.59	17.58	20.99
		50	4.22	5.51	7.03	8.79	10.84	13.22	15.95	19.06
	P(Kw)	30	4.32	4.51	4.68	4.87	5.06	5.26	5.46	5.66
		40	4.95	5.21	5.46	5.71	5.95	6.19	6.42	6.64
		50	5.67	6.02	6.36	6.68	6.98	7.27	7.53	7.77
DF91HM	Q(Kw)	30	6.35	8.03	10.03	12.41	15.21	18.48	22.26	26.61
		40	5.81	7.41	9.27	11.46	14.03	17.01	20.46	24.42
		50	5.09	6.61	8.36	10.38	12.72	15.43	18.56	22.15
	P(Kw)	30	5.24	5.49	5.75	6.01	6.27	6.53	6.81	7.06
		40	6.05	6.38	6.71	7.03	7.35	7.66	7.97	8.27
		50	6.95	7.36	7.76	8.16	8.53	8.91	9.26	9.61

注: 1.测试条件: 回气温度18.3°C, 过冷度0K  
2.最低蒸发温度保持-40°C

NOTE:1.Test Condition: Suction gas temperature18.3°C, supercooling degree 0 K  
2.The lowest evaporation temperature : -40 °C



DSF半封制冷量 DSF Cooling Capacity(C/C) R22  
380V/420V, 3Ph, 50Hz

型号 Model		冷凝温度 Condensing Temperature °C	蒸发温度 Evaporating Temperature(°C)							
			-40	-35	-30	-25	-20	-15	-10	-5
DSF35HM	Q(Kw)	30	2.79	3.52	4.39	5.42	6.63	8.03	9.63	11.47
		40	2.57	3.25	4.05	5.01	6.12	7.42	8.91	10.62
		50	2.34	2.95	3.68	4.54	5.56	6.74	8.11	9.68
	P(Kw)	30	2.47	2.53	2.61	2.71	2.82	2.95	3.11	3.29
		40	2.89	2.97	3.06	3.15	3.27	3.41	3.55	3.74
		50	3.38	3.47	3.58	3.68	3.81	3.94	4.11	4.28
DSF41HM	Q(Kw)	30	3.25	4.12	5.17	6.42	7.89	9.61	11.58	13.84
		40	2.98	3.78	4.75	5.91	7.25	8.82	10.64	12.73
		50	2.69	3.42	4.31	5.34	6.56	7.99	9.65	11.55
	P(Kw)	30	3.13	3.18	3.25	3.33	3.43	3.55	3.69	3.86
		40	3.68	3.75	3.82	3.91	4.02	4.14	4.29	4.46
		50	4.31	4.39	4.49	4.61	4.72	4.86	5.02	5.21
DSF55HM	Q(Kw)	30	4.08	5.17	6.48	8.04	9.89	12.04	14.52	17.35
		40	3.73	4.74	5.95	7.39	9.09	11.06	13.34	15.96
		50	3.37	4.29	5.39	6.69	8.22	10.02	12.09	14.48
	P(Kw)	30	3.93	3.99	4.07	4.17	4.31	4.45	4.63	4.88
		40	4.62	4.71	4.79	4.91	5.04	5.19	5.38	5.59
		50	5.41	5.51	5.62	5.76	5.92	6.09	6.29	6.52
DSF76HM	Q(Kw)	30	5.31	6.77	8.52	10.59	13.01	15.82	19.06	22.74
		40	4.81	6.19	7.83	9.75	12.01	14.59	17.58	20.99
		50	4.22	5.51	7.03	8.79	10.84	13.22	15.95	19.06
	P(Kw)	30	4.32	4.51	4.68	4.87	5.06	5.26	5.46	5.66
		40	4.95	5.21	5.46	5.71	5.95	6.19	6.42	6.64
		50	5.67	6.02	6.36	6.68	6.98	7.27	7.53	7.77
DSF91HM	Q(Kw)	30	6.35	8.03	10.03	12.41	15.21	18.48	22.26	26.61
		40	5.81	7.41	9.27	11.46	14.03	17.01	20.46	24.42
		50	5.09	6.61	8.36	10.38	12.72	15.43	18.56	22.15
	P(Kw)	30	5.24	5.49	5.75	6.01	6.27	6.53	6.81	7.06
		40	6.05	6.38	6.71	7.03	7.35	7.66	7.97	8.27
		50	6.95	7.36	7.76	8.16	8.53	8.91	9.26	9.61
DSF108HM	Q(Kw)	30	7.81	9.82	12.31	15.28	18.78			
		40	7.11	8.99	11.31	14.08	17.33			
		50	6.23	8.01	10.16	12.72	15.71			
	P(Kw)	30	6.48	6.68	6.94	7.25	7.59			
		40	7.52	7.76	8.08	8.45	8.86			
		50	8.78	9.07	9.43	9.86	10.32			

注: 1.测试条件: 回气温度18.3℃, 过冷度0K NOTE:1.Test Condition: Suction gas temperature18.3℃, supercooling degree 0 K  
2.最低蒸发温度保持-40℃ 2.The lowest evaporation temperature : -40℃

DF全封制冷量 DF Cooling Capacity(C/C) R404  
380V/420V, 3Ph, 50Hz

型号 Model		冷凝温度 Condensing Temperature °C	蒸发温度 Evaporating Temperature(°C)							
			-40	-35	-30	-25	-20	-15	-10	-5
DF13HE	Q(Kw)	30	1.18	1.58	1.96	2.47	2.95	3.84	4.45	5.32
		40	1.09	1.36	1.75	2.16	2.58	3.32	4.16	4.98
		50	0.95	1.18	1.46	1.76	2.14	2.89	3.35	3.94
	P(Kw)	30	1.12	1.12	1.21	1.22	1.31	1.42	1.52	1.53
		40	1.32	1.29	1.42	1.52	1.45	1.61	1.73	1.71
		50	1.65	1.45	1.72	1.84	1.79	1.92	2.02	2.53
DF20HE	Q(Kw)	30	1.71	2.17	2.71	3.35	4.11	4.97	5.97	7.13
		40	1.53	1.94	2.41	2.96	3.61	4.35	5.23	6.23
		50	1.32	1.67	2.07	2.52	3.06	3.69	4.42	5.27
	P(Kw)	30	1.46	1.48	1.52	1.57	1.65	1.74	1.84	1.96
		40	1.77	1.78	1.81	1.86	1.92	2.01	2.11	2.21
		50	2.16	2.16	2.18	2.22	2.27	2.34	2.43	2.53
DF29HE	Q(Kw)	30	2.38	3.15	3.92	4.89	5.81	7.26	9.12	10.78
		40	2.16	2.76	3.89	4.28	5.23	6.32	7.85	9.56
		50	1.75	2.34	2.85	3.51	4.32	5.17	6.48	7.69
	P(Kw)	30	1.84	2.05	2.12	2.21	2.32	2.51	2.61	2.82
		40	2.27	2.47	2.43	2.58	2.85	2.92	3.02	3.26
		50	2.82	3.05	2.87	3.20	3.43	3.58	3.70	3.83
DF35HE	Q(Kw)	30	3.01	3.89	4.91	6.08	7.44	9.01	10.82	12.89
		40	2.66	3.42	4.29	5.31	6.47	7.84	9.43	11.26
		50	2.36	2.95	3.64	4.44	5.41	6.53	7.86	9.41
	P(Kw)	30	2.21	2.33	2.45	2.58	2.73	2.91	3.09	3.31
		40	2.68	2.82	2.95	3.09	3.24	3.41	3.61	3.81
		50	3.26	3.42	3.58	3.73	3.91	4.07	4.25	4.45
DF41HE	Q(Kw)	30	3.71	4.71	5.85	7.21	8.78	10.64	12.81	15.33
		40	3.29	4.17	5.17	6.34	7.71	9.31	11.17	13.36
		50	2.81	3.57	4.41	5.37	6.51	7.83	9.41	11.25
	P(Kw)	30	2.79	2.89	3.01	3.14	3.29	3.46	3.65	3.85
		40	3.29	3.41	3.53	3.67	3.83	4.01	4.18	4.38
		50	3.92	4.04	4.18	4.33	4.49	4.67	4.85	5.05
DF55HE	Q(Kw)	30	4.59	5.81	7.32	9.08	11.09	13.32	15.75	18.37
		40	4.09	5.12	6.42	7.96	9.73	11.71	13.87	16.21
		50	3.63	4.45	5.51	6.79	8.28	9.96	11.81	13.82
	P(Kw)	30	3.03	3.31	3.54	3.76	4.01	4.31	4.67	5.16
		40	3.43	3.81	4.11	4.39	4.69	5.03	5.44	5.95
		50	3.84	4.31	4.72	5.09	5.46	5.85	6.32	6.87
DF76HE	Q(Kw)	30	6.03	7.72	9.67	11.94	14.57	17.62	21.16	25.23
		40	5.31	6.82	8.54	10.51	12.79	15.44	18.51	22.06
		50	4.47	5.79	7.25	8.91	10.81	13.01	15.59	18.58
	P(Kw)	30	4.18	4.41	4.67	4.93	5.22	5.53	5.85	6.21
		40	4.85	5.16	5.46	5.77	6.08	6.41	6.73	7.07
		50	5.66	6.04	6.41	6.77	7.13	7.48	7.82	8.16
DF91HE	Q(Kw)	30	7.57	9.62	11.96	14.69	17.88	21.62	25.98	31.04
		40	6.71	8.56	10.62	12.98	15.71	18.91	22.64	26.99
		50	5.65	7.29	9.06	11.04	13.31	15.96	19.05	22.68
	P(Kw)	30	5.07	5.41	5.75	6.11	6.48	6.88	7.31	7.75
		40	5.95	6.33	6.72	7.12	7.52	7.94	8.36	8.81
		50	6.95	7.41	7.85	8.29	8.74	9.18	9.63	10.09

注: 1.测试条件: 回气温度18.3℃, 过冷度0K NOTE:1.Test Condition: Suction gas temperature18.3℃, supercooling degree 0 K  
2.最低蒸发温度保持-40℃ 2.The lowest evaporation temperature : -40℃



DSF半封制冷量 DSF Cooling Capacity(C/C) R404  
380V/420V, 3Ph, 50Hz

型号 Model		冷凝温度 Condensing Temperature °C	蒸发温度 Evaporating Temperature(°C)							
			-40	-35	-30	-25	-20	-15	-10	-5
DSF35HE	Q(Kw)	30	3.01	3.89	4.91	6.08	7.44	9.01	10.82	12.89
		40	2.66	3.42	4.29	5.31	6.47	7.84	9.43	11.26
		50	2.36	2.95	3.64	4.44	5.41	6.53	7.86	9.41
	P(Kw)	30	2.21	2.33	2.45	2.58	2.73	2.91	3.09	3.31
		40	2.68	2.82	2.95	3.09	3.24	3.41	3.61	3.81
		50	3.26	3.42	3.58	3.73	3.91	4.07	4.25	4.45
DSF41HE	Q(Kw)	30	3.71	4.71	5.85	7.21	8.78	10.64	12.81	15.33
		40	3.29	4.17	5.17	6.34	7.71	9.31	11.17	13.36
		50	2.81	3.57	4.41	5.37	6.51	7.83	9.41	11.25
	P(Kw)	30	2.79	2.89	3.01	3.14	3.29	3.46	3.65	3.85
		40	3.29	3.41	3.53	3.67	3.83	4.01	4.18	4.38
		50	3.92	4.04	4.18	4.33	4.49	4.67	4.85	5.05
DSF55HE	Q(Kw)	30	4.59	5.81	7.32	9.08	11.09	13.32	15.75	18.37
		40	4.09	5.12	6.42	7.96	9.73	11.71	13.87	16.21
		50	3.63	4.45	5.51	6.79	8.28	9.96	11.81	13.82
	P(Kw)	30	3.03	3.31	3.54	3.76	4.01	4.31	4.67	5.16
		40	3.43	3.81	4.11	4.39	4.69	5.03	5.44	5.95
		50	3.84	4.31	4.72	5.09	5.46	5.85	6.32	6.87
DSF76HE	Q(Kw)	30	6.03	7.72	9.67	11.94	14.57	17.62	21.16	25.23
		40	5.31	6.82	8.54	10.51	12.79	15.44	18.51	22.06
		50	4.47	5.79	7.25	8.91	10.81	13.01	15.59	18.58
	P(Kw)	30	4.18	4.41	4.67	4.93	5.22	5.53	5.85	6.21
		40	4.85	5.16	5.46	5.77	6.08	6.41	6.73	7.07
		50	5.66	6.04	6.41	6.77	7.13	7.48	7.82	8.16
DSF91HE	Q(Kw)	30	7.57	9.62	11.96	14.69	17.88	21.62	25.98	31.04
		40	6.71	8.56	10.62	12.98	15.71	18.91	22.64	26.99
		50	5.65	7.29	9.06	11.04	13.31	15.96	19.05	22.68
	P(Kw)	30	5.07	5.41	5.75	6.11	6.48	6.88	7.31	7.75
		40	5.95	6.33	6.72	7.12	7.52	7.94	8.36	8.81
		50	6.95	7.41	7.85	8.29	8.74	9.18	9.63	10.09
DSF108HE	Q(Kw)	30	9.14	11.54	14.39	17.75	21.67			
		40	8.07	10.21	12.72	15.65	19.05			
		50	6.81	8.66	10.81	13.27	16.14			
	P(Kw)	30	6.24	6.53	6.91	7.33	7.81			
		40	7.36	7.67	8.06	8.52	9.02			
		50	8.73	9.07	9.48	9.97	10.51			

注: 1.测试条件: 回气温度18.3℃, 过冷度0K NOTE:1.Test Condition: Suction gas temperature18.3℃, supercooling degree 0K  
2.最低蒸发温度保持-40℃ 2.The lowest evaporation temperature : -40℃

DF技术参数 DF Technical Data  
380V/420V, 3Ph, 50Hz

型号 Model		DF13	DF20	DF29	DF35	DF41	DF55	DF76	DF91	
		DF13	DF20	DF29	DF35	DF41	DF55	DF76	DF91	
名义功率 Nominal Power	HP	2	3	4	5	6	8	10	12	
排气量 Displacement	m³/h	5.9	8.6	11.8	14.5	17.2	21.4	29.1	33.1	
电机类型 Motor Type	380V/420V, 3Ph, 50Hz									
堵转电流 Locked-rotor ampere (RLA)	A	40	40	60	64	74	102	100	118	
最大运行电流 Maximum operating current (MOC)	A	6	6	10	10	12.5	13.7	25	29	
最大持续运行电流 Maximum continuous operating current (MCC)	A	3.8	6.5	8.8	12	13.5	16.6	25	27	
额定负载电流 Rated load ampere (RLA)	A	2.7	4.6	5.2	8.6	8.9	11.9	17.9	19.3	
曲轴箱加热功率 Crankcase heating power	W	70	70	70	70	70	90	90	90	
焊接接口外径尺寸 Outside diameter of welded joint	排气管 Discharge	Inch	1/2	1/2	1/2	1/2	1/2	7/8	7/8	7/8
	吸气管 Suction		7/8	7/8	7/8	7/8	7/8	1-1/8	1-1/8	1-1/8
	喷射口 Injection orifice		11/16							
外形尺寸 Dimensions	长(L)	mm	231	231	231	231	231	242	242	242
	宽(W)		231	231	231	231	231	242	242	242
	高(H)		415	415	455	455	455	540	540	540
底脚安装尺寸(孔径)Foot mounting dimensions.(Aperture)	190 x 190 ( 8.5 )									
油充注量 Oil Volume	L	1.4	1.4	1.9	1.9	1.9	3.4	3.4	3.4	
重量 Weight	净重 N.W.	kg	28	28	37	37	37	54	54	56
	毛重 G.W.		29	29	38	38	38	55	55	57

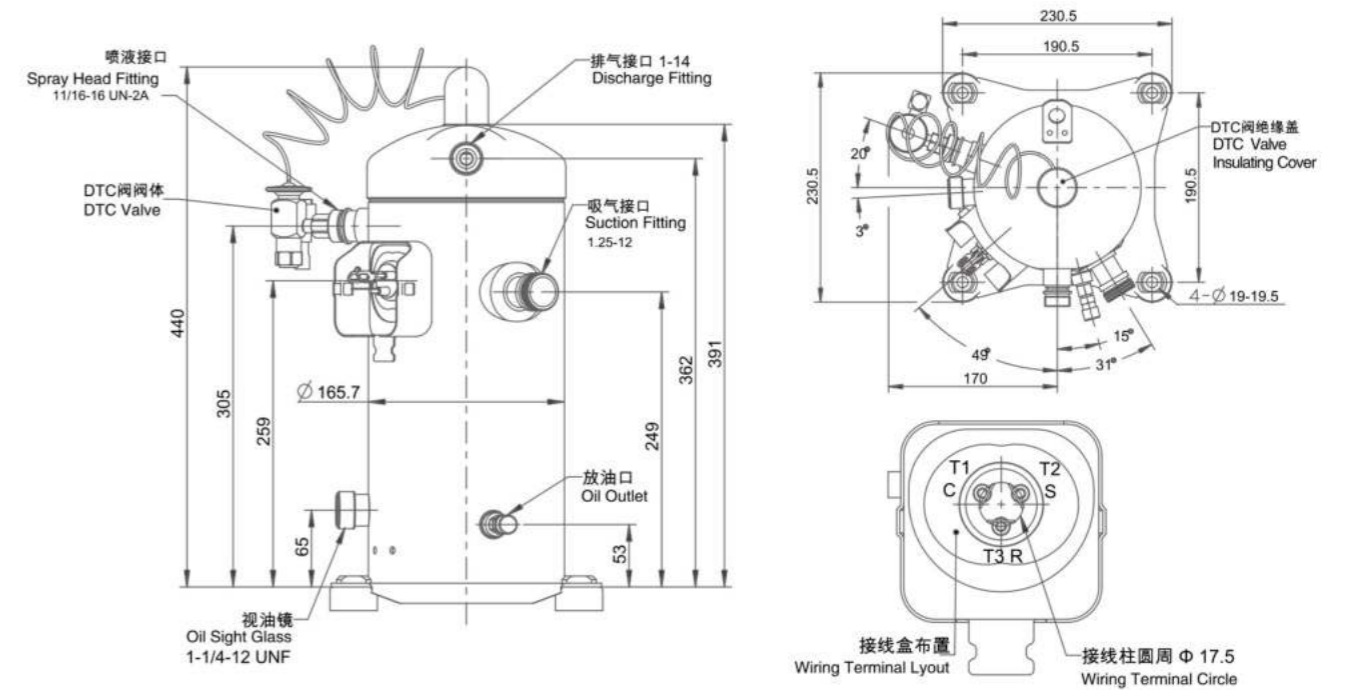


DSF技术参数 DSF Technical Data  
380V/420V, 3Ph, 50Hz

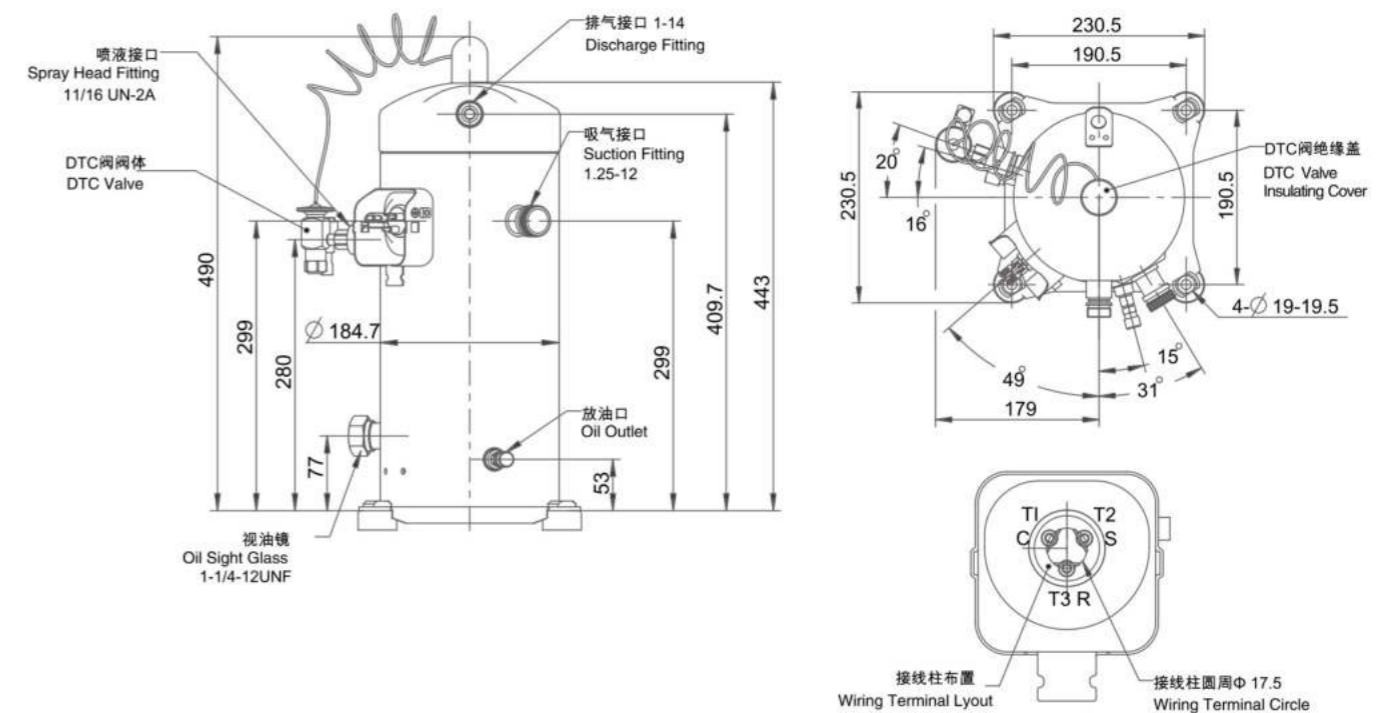
型号 Model		DSF35 DSF35	DSF41 DSF41	DSF55 DSF55	DSF76 DSF76	DSF91 DSF91	DSF108 DSF108	
名义功率 Nominal Power	HP	5	6	8	10	12	15	
排气量 Displacement	m³/h	14.5	17.2	21.4	29.1	33.1	42.4	
电机类型 Motor Type		380V/420V, 3Ph, 50Hz						
堵转电流 Locked-rotor ampere (FLA)	A	64	74	102	100	118	139	
最大运行电流 Maximum operating current (MOC)	A	10	12.5	13.7	23	27	28.3	
最大持续运行电流 Maximum continuous operating current (MCC)	A	12	12.5	16.6	25	29	30	
额定负载电流 Rated load ampere (RLA)	A	8.6	8.9	11.9	17.9	19.3	20.2	
曲轴箱加热功率 Crankcase heating power	W	70	70	90	90	90	90	
焊接接口外径尺寸 Outside diameter of welded joint	排气管 Discharge	Inch	5/8	5/8	3/4	3/4	7/8	7/8
	吸气管 Suction		7/8	7/8	1-1/8	1-1/8	1-3/8	1-3/8
	喷射口 Injection orifice		11/16					
外形尺寸 Dimensions	长(L)	mm	256	256	257	257	257	257
	宽(W)		256	256	257	257	257	257
	高(H)		497	497	523	523	523	523
底脚安装尺寸(孔径) Foot mounting dimensions (Aperture)		190 × 190 ( 10.2 )						
油充注量 Oil Volume	L	2	2	3.4	3.4	3.4	3.4	
重量 Weight	净重 N.W.	kg	72	73	85	87	89	91
	毛重 G.W.		73	74	86	88	90	92

DF/DSF外形尺寸图 DF/DSF Dimension Drawing

DF13—29 焊接接口和油视镜 Welding interface & Oil sight glass



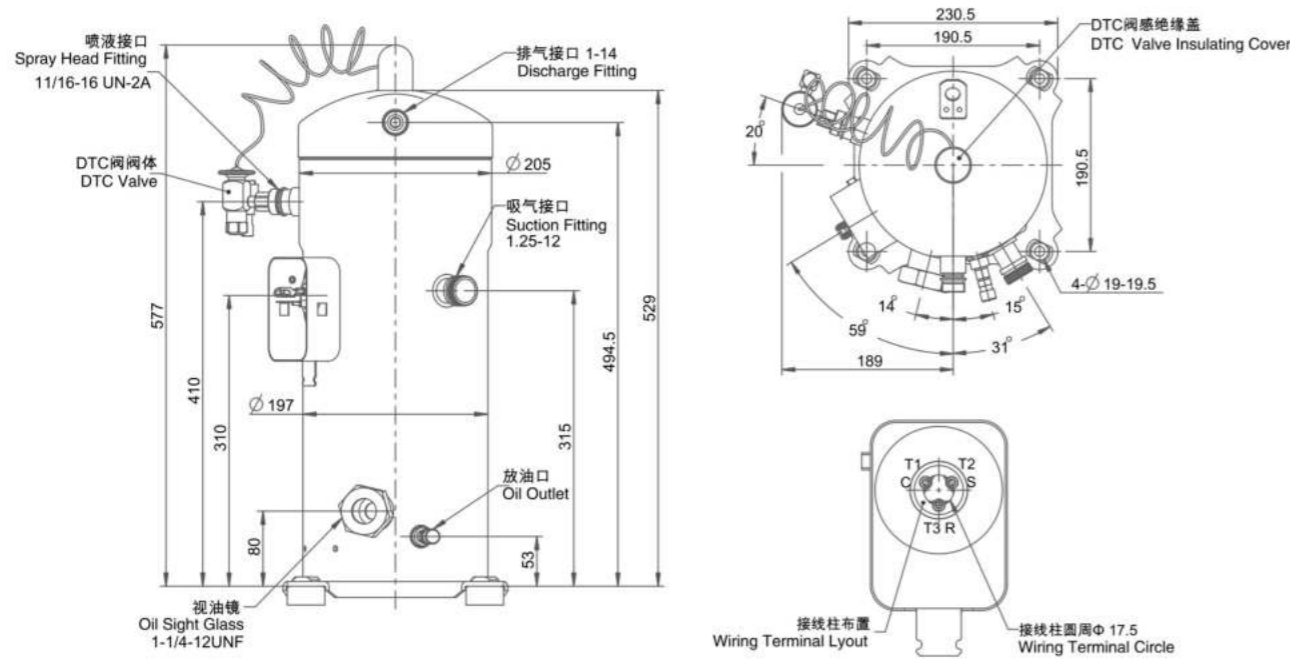
DF35—41 焊接接口和油视镜 Welding interface & Oil sight glass



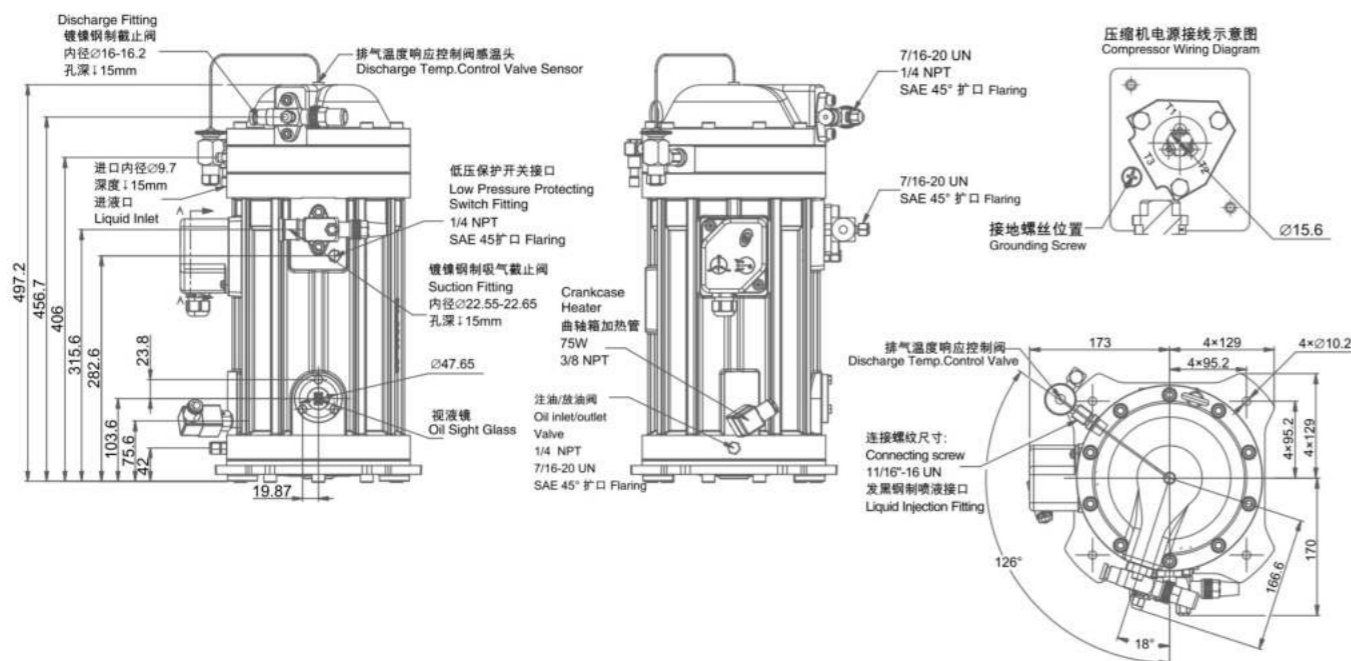


DF/DSF外形尺寸图 DF/DSF Dimension Drawing

DF55——91 焊接接口和油视镜 Welding interface & Oil sight glass

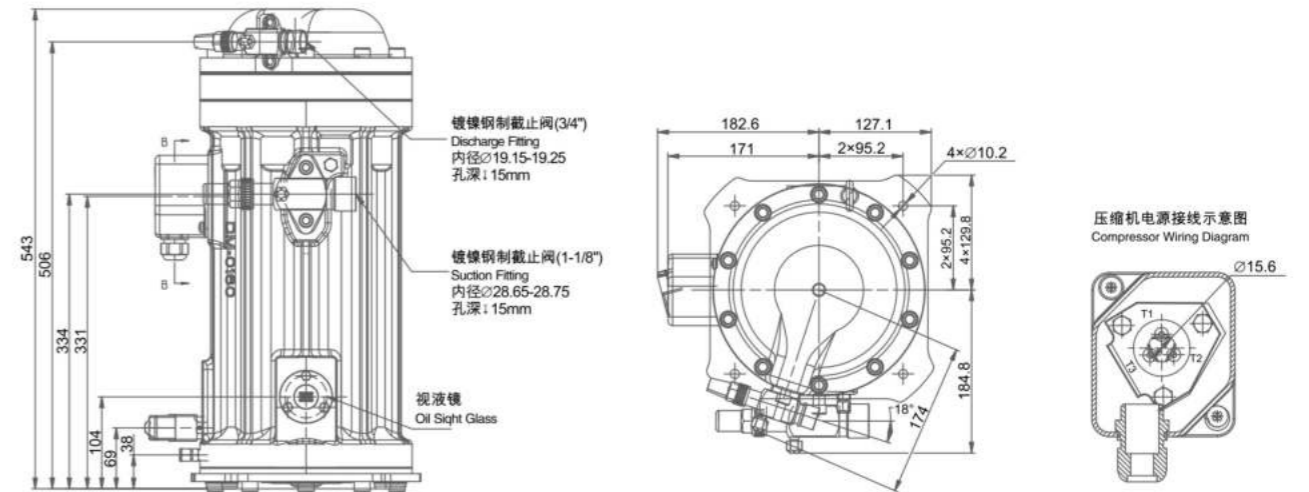


DSF35——41 焊接接口和油视镜 Welding interface & Oil sight glass

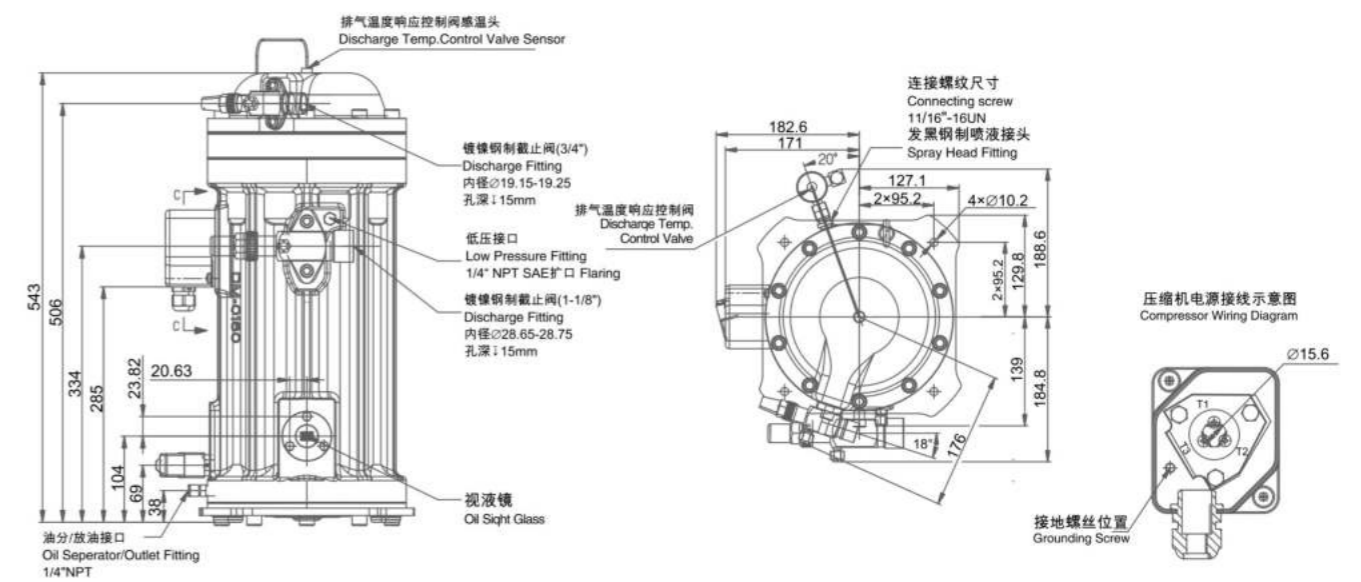


DF/DSF外形尺寸图 DF/DSF Dimension Drawing

DSF55——76角阀和油视镜 Angle valve & Oil sight glass



DSF91——108 角阀和油视镜 Angle valve & Oil sight glass





## 应用指南 Application Guide

### 涡旋压缩机的工作原理 The working principle of scroll compressor

涡旋的简单观念首次发明于1905年。涡旋盘是一个渐开线型螺旋线,如上图那样和相配的涡旋盘啮合,形成一系列逐渐扩大的存在于两个部件间的空间。当压缩时,一个涡旋盘保持静止(固定涡旋盘)而另一个涡旋盘(旋转涡旋盘)被允许作围绕第一个盘的行星运动(但不旋转)。当发生该运动时,两个盘之间的空间慢慢地被推移至二个涡旋盘的中央,而同时容积也被减小。当空间到达涡旋盘的中央,处于高压状态的气体通过位于中央的通道排出。在压缩过程中,几个气室被同时压缩,形成非常平滑的过程。吸气过程(涡旋盘的外侧部分)和排气过程(内侧部分)是连续的。

The simple concept of scroll was first invented in 1905 year. The scroll is an involute spiral that meshes with the mating scroll as shown above to create a series of increasingly enlarged spaces that exist between the two components. When compressed, one scroll remains stationary (fixed scroll) while the other scroll (orbiting scroll) is allowed to move around the first disk (but not rotate). When this movement occurs, the space between the two discs is slowly moved to the center of the two scrolls while at the same time the volume is also reduced. When the space reaches the center of the scroll, the gas at a high pressure is discharged through the centrally located passage. During compression, several chambers are simultaneously compressed, forming a very smooth process. The gas suction process (the outer part of the scroll) and the gas discharge process (the inner part) are continuous.



涡旋压缩机的压力是由于作行星运动的涡旋盘之间的相互作用产生的。当涡旋盘之一作行星运动时气体从外开口进入。

The pressure of the scroll compressor is due to the the opening is closed. When one of the scrolls is a planetary motion, the gas comes in from the outside.



气体进入涡旋后,开口封闭。  
After the gas enters the scrolls, As the scroll continued planetary motion.



随着涡旋盘继续作行星运动气体被压入越来越小的空间  
The gas is pressed into interaction between the scroll disks of the planetary motion, smaller and smaller spaces.



当气体到达中央时,达到排气压力  
When the gas reaches the center, it reaches the discharge gas pressure.



事实上,在运作中,所有6个气体通道均处于不同的压缩阶段,从而保证吸气和排气过程基本连续而不间断。  
In fact, in operation, all six gas channels are in different compression stages to ensure that the gas suction and discharge processes are basically continuous without interruption.

DM涡旋压缩机配置 DM Scroll compressor configuration

压缩机型号 Model	内置释压阀 Built-in pressure relief valve	电机保护器 Motor protector
DM50	IPR	中点保护器 Midpoint protector
DM86	IPR	中点保护器 Midpoint protector
DM260	IPR	中点保护器 Midpoint protector

### 内置释压阀-IPR阀 Built-in pressure relief valve – IPR valve

内置释压阀位于压缩机高压侧和低压侧之间,当高压侧和低压侧之间的压力差超过26-32bar时开启。当内置释压阀打开时,热的排气体接触电机保护器感应的部位,电机中点保护器跳开。此时电机三相绕组开路,压缩机必须被充分冷却后,电机中点保护器才会复位。

The built-in pressure relief valve is located between the high-pressure side of the compressor and the low pressure side. When the pressure difference between the high pressure side and the low pressure side is over 26-32bar, it is opened. When the built-in pressure relief valve is opened, the hot discharge gas contacts the temperature sensor of the motor protector, and the motor midpoint protector jumps. At this time, the motor 3-phase winding opens, the compressor must be fully cooled, and the midpoint protector of the motor will be reset.

为了保证压缩机安全运行,在任何应用中都应该给系统配置一个设定压力不超过30bar(表压)的高压压力开关。  
In order to ensure the safe operation of the compressor, the system should be equipped with a high-pressure pressure switch with no more than 30bar(Gage pressure) in any application.

### 最小运行时间 Minimum running time

关于涡旋压缩机在1小时内究竟能启动和停机多少次并没有肯定的答复,因为它很大程度上取决于系统的配置。因为涡旋压缩机是在卸载条件下启动的,即使在不平衡压力下也是在卸载条件下启动的,所以没有最短停机时间的规定。最关键的考虑是在启动后需要让油返回压缩机的最小运行时间。最简单的测定方法是使用一台带玻璃视镜的样机,同时将系统允许的最长的连接管连接起来。最短的运行时间就是当压缩机启动时失油至油返回压缩机油池至恢复视镜中正常油位所需要的时间。如果将压缩机在比该时间短的时间间隔进行循环停开,例如为了保持非常精确的温度控制,会造成逐渐失去润滑油以致损坏压缩机。

## 应用指南 Application Guide

There is no definite answer to how many times the scroll compressor can start and stop in an hour, because it depends heavily on the configuration of the system. Because the scroll compressor is started under the unloading condition, even under unbalanced pressure, it is started under the unloading condition, so there is no provision for minimum downtime. The most critical consideration is the minimum running time required to return the oil to the compressor after startup. The easiest way to do this is to use a prototype with a glass mirror, and to connect the longest connected pipe that the system allows. The shortest running time is when the compressor is started and the oil is returned to the oil tank to restore the normal oil level in the mirror. If the compressor is stopped at a shorter time interval than the time interval, for example, to maintain a very accurate temperature control, it will gradually lose the lubricant and damage the compressor.

### 排气温度保护装置 Discharge temperature protection device

如果系统设计不能保证压缩机运行在列表的工况内,即超出允许的工况运行;或者是不当的系统布置,都可能产生很高的排气温度,从而导致润滑油结碳,此时应该在控制回路安装排气温度保护装置。

If the system design does not guarantee that the compressor runs in the operating condition of the table column, that is, the operating condition of the compressor is exceeded. Or improper system layout, can produce very high discharge temperature, resulting in lubricating oil carbon, at this time should be in the control loop to install the discharge temperature protection device.

排气温度传感器的安装位置,压缩机不带截止阀时,安装在距离排气口178mm处的排气管上;压缩机带截止阀时,安装在距离截止阀接口的127mm的排气管上。安装时把排气温度传感器探头紧贴在排气管表面,并用组件中自带的固定夹固定。

The installation position of the discharge temperature sensor is installed on the exhaust pipe at 178mm from the exhaust outlet when the compressor is not equipped with the stop valve. The compressor belt globe valve is installed on the 127mm discharge pipe from the cut-off valve interface. The discharge temperature sensor probe is attached to the surface of the discharge pipe and is fixed with the fixed clip in the assembly.

### 喷液冷却 Liquid injecting cooling

在低温涡旋压缩机(DF系列)机体上,有一个喷液接口,压缩机内部结构使得这个喷液口连接到涡旋盘的中压腔,而该中压腔和吸气腔是隔离的,这样的结构使得喷液时不会导致冷量损失。排气温度控制阀(DTC阀)用于低温应用的喷液冷却控制。阀的打开设定点为 $89.4 \pm 2.8$  °C。DTC阀供液管管径要求使用3/8英寸(9.5mm)连接到系统液管过滤器后,必须保证有充足的连续的液体供给,液体要求至少有2K过冷。

In a low-temperature scroll compressor (DF series), a spray interface, compressor internal structure makes the spray mouth is connected to the scroll dish medium pressure chamber, and breathe in and the medium pressure cavity is isolated, such structure makes the spray will not lead to a loss of cold energy. The discharge temperature control valve (DTC valve) is controlled by the spray cooling of low temperature application. The beat of the valve to open fixed point was  $89.4 \pm 2.8$  °C. The DTC valve supply pipe diameter requires 3/8" (9.5mm) to connect to the system liquid tube filter. There must be sufficient continuous liquid supply, and the liquid requires at least 2K overcooling.

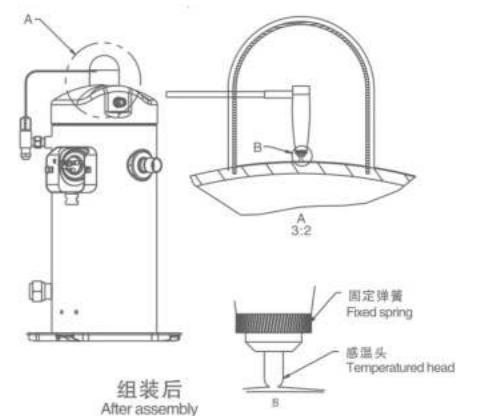
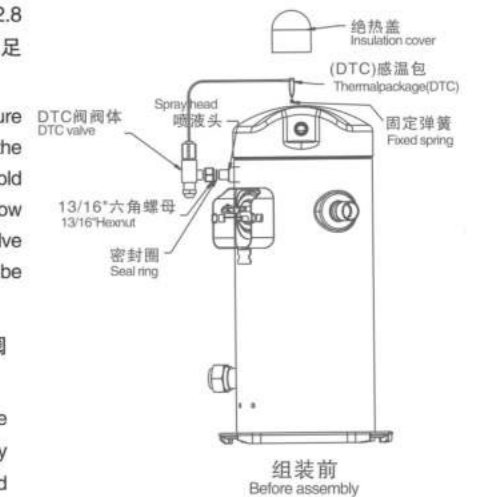
更换DTC阀的压缩机时,强烈建议同时更换DTC阀;如果仍想继续使用原DTC阀,必须把阀体内过滤器拆出进行清洗。更换DTC阀时,必须检查液管过滤器,保证没有堵塞,必要时更换。

When replacing the compressor of DTC valve, it is strongly recommended to replace the DTC valve simultaneously. If you still want to use the original DTC valve, you must remove the inner filter of the valve body for cleaning. When replacing the DTC valve, the liquid tube filter must be checked to ensure that it is not blocked and replaced when necessary.

### 安装注意事项 Installation precautions

1. 确认固定弹簧在感温包安装孔中槽内
2. DTC阀紧固扭矩: 24-27Nm
3. 把DTC感温包插入到压缩机顶盖安装孔,要求插到孔底
4. 套上绝热盖
5. DTC阀感温包正确安装后,露在压缩机顶盖外面的长度约为3.2mm

1. Confirm that the fixed spring is in the slot in the thermal package
2. DTC valve tightening torque: 24-27Nm
3. When the DTC temperature package is inserted into the mounting hole of the compressor top cover, it is required to be inserted into the hole bottom
4. When the DTC valve is properly installed, the length of the exposed top cover of the compressor is about 3.2mm





## 应用指南 Application Guide

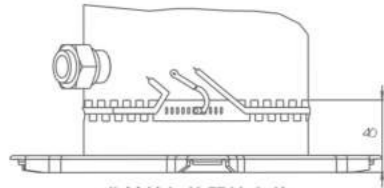
### 曲轴箱加热器 Crankcase heater

单相涡旋压缩机不需要使用曲轴箱加热器

Single-phase scroll compressor does not need to use crankcase heater.

对于三相压缩机来说，当制冷剂充注量超过下表所列，或者在现场充注制冷剂时，需要使用曲轴箱加热器。

For the three-phase compressor, the crankcase heater should be used when the refrigerant charge is higher than the following table, or when the refrigerant is filled in the field.



曲轴箱加热器的安装  
Installation of crankcase heater

压缩机型号 Model	制冷剂充注量 (kg) Refrigerant Volume	曲轴箱加热器功率 (W) Crankcase heater power
DM50HM	4.5	70
DM86HM	4.5	70
DM200HM	7.7	90

压缩机型号 Model		R22	R404A
DM	高压 (最大值) High pressure(Max.)	26.8	31.9
	低压 (最小值) Low pressure(Min.)	1.3	1.2
DF	高压 (最大值) High pressure(Max.)	28	28
	低压 (最小值) Low pressure(Min.)	0	0.3

### 压力控制器 Pressure controller

为保证制冷系统的安全运行，建议所有系统都要配备高压开关和低压开关，建议的切断设定值见右表（表压：bar）：

In order to ensure the safe operation of the refrigeration system, it is recommended that all systems should be equipped with high voltage switch and low voltage switch, and the recommended cut-off value is shown in the table below(GP:bar):

### 气液分离器 Gas-liquid separator

由于涡旋压缩机的内在特性，它有较强的抗液击能力。在大多数系统中可以不使用气液分离器。但是在正常停机时间内或在融霜或者负荷变动时，系统有大量液体制冷剂不停地返回压缩机。不管系统的充注量是多少，如果长期有回液现象或带液启动而不能对其进行控制，由于对润滑油产生稀释作用，轴承会由于得不到充分润滑而发生磨损。在这种情况下，建议使用气液分离器。

Because of the inherent characteristics of the scroll compressor, it has strong anti-liquid strike capability. In most systems, the gas-liquid separator is not used. However, if the system has a large amount of liquid refrigerant to return to the compressor during normal shutdown time or during defrost or load fluctuation. No matter how much is the amount of filling system, if they have long back to liquid or liquid to start not to control, due to the effect on the lubricating oil dilution, bearing would occur due to inadequate lubrication and wear. In this case, the gas-liquid separator is recommended.

如果系统使用气液分离器，建议回油小孔尺寸范围为1-1.9mm。需要有一个较大面积的保护用滤网，不细于30×30网面（0.6mm孔径，不推荐在系统中任何地方使用细于30×30网面的滤网），以保护小孔避免由于系统脏物引起的污堵。

If the system uses gas-liquid separator, it is recommended that the size range of the return oil hole should be 1-1.9mm. Need a large-area protection with mesh, not fine to 30×30 net surface (0.6 mm diameter, anywhere in the system is not recommended to use in 30×30 net surface mesh), in order to protect avoid fouling due to dirt system through the holes.

### 干燥过滤器和湿度指示仪 Dry filter and humidity indicator

安装在液体管道的干燥过滤器应有足够的容量并适合连续运行，其选型应根据制冷剂的流量。不能使用诸如氯化钾等吸收大量湿气后变成液体状态的干燥剂。建议用多孔性的块状干燥剂以吸附湿气和酸，阻止脏物和金属碎屑。干燥过滤器的安装必须在第二次抽空工序后才能进行。湿度指示仪的视镜应安装在液体管道的易观察部位已达到检查制冷剂流量的目的。

The drying filter installed in the liquid pipe shall have sufficient capacity and is suitable for continuous operation, and its selection shall be based on the flow of refrigerant. You cannot use a desiccant, such as potassium chloride, that absorbs a large amount of moisture and becomes a liquid state. It is recommended to use porous block desiccant to absorb moisture and acid to prevent dirt and metal debris. The installation of the drying filter must be carried out after the second evacuation procedure. The visual mirror of the humidity indicator should be installed in the easy-to-observe part of the liquid pipe to check the purpose of refrigerant flow.

### 油分离器 Oil separator

在安装油分离器时，其中必须预注润滑油至溢流阀刚开始打开，油分离器中必须总是保持这些油量，否则压缩机中的润滑油将被油分离器取出而减少。预注油量可参考油分离器生产商说明书。

When installing the oil separator, which must be pre-lubricated to the beginning of the overflow valve open, must always keep the oil in the oil separator, otherwise the lubricating oil in compressor will be removed and reduce the oil separator. The pre-injection quantity can refer to the manufacturer's manual of oil separator.

### 制冷剂和冷冻油 Refrigerant and frozen oil

DM/DF涡旋压缩机可按压缩机型号和用途使用R22,R404A等在制冷剂。使用R404A等环保型制冷剂时，必须用酯类润滑油（POE油）。使用POE润滑油的系统要求其中的残余含水率必须低于50ppm，有关测定必须在系统运行48小时后进行。相应的措施之一就是针对不同的系统和制冷剂安装在一个足够容量的过滤干燥器。这类系统在试运行和维修时也要求必须有合适的抽真空工艺。

## 应用指南 Application Guide

The DM/DF scroll compressor can be used for compressor type and use R22,R404A and other refrigerant. When using an environmentally friendly refrigerant such as R404A, it is necessary to use ester oil (POE oil). The system using POE lubricating oil requires that the residual moisture content must be lower than 50ppm, and the determination must be carried out 48 hours after the system runs. One of the corresponding measures is to install a filter dryer with sufficient capacity for different systems and refrigerants. This kind of system also requires the proper evacuation process in the trial operation and maintenance.

运行新型制冷剂系统的部件选用必须符合新型制冷剂的特性（具体可咨询部件生产商）：

The selection of parts to run the new refrigerant system must conform to the characteristics of the new refrigerant (specific consulting parts manufacturer) :

\*必须使用与新型制冷剂相容的膨胀阀

\*The expansion valve compatible with the new refrigerant must be used

\*必须使用与新型制冷剂相容的足够容量的干燥过滤器

\*A dry filter with sufficient capacity that is compatible with a new refrigerant must be used

\*选用有关阀门控制器时必须考虑R404A等新型制冷剂产生的质量流量改变

\*The quality flow of the new refrigerant such as R404A must be considered when selecting the valve controller

矿物油不能用于运行HFC新制冷剂的制冷系统中，因为矿物油不能与此类制冷剂混溶。POE润滑油已被确证可以取代矿物油而很好的用于这种场合。为了保证使用寿命，必须特别注意这种多元酯油的性能和使用特点。已经过认证的酯类油，它们可用于R404A,R407,CR134A系统中，并且可以相互混合使用。为了防止矿物油和多元酯油的互相污染，应将相应于传统制冷剂和新型制冷剂的各种器件如真空泵，管接件，加注和回收设备及零部件等严格分开使用。

Mineral oil cannot be used in the refrigeration system of HFC new refrigerant because mineral oil cannot be mixed with such refrigerant. POE lubricants have been proven to replace mineral oils and are well used for such occasions. In order to ensure the service life, special attention must be paid to the properties and characteristics of the polyester oil. Certified ester oils, which can be used in R404A,R407C and R134A systems, can be used in combination with each other. In order to prevent the mineral oil and diverse ester oil pollution, each other should be used for corresponding traditional refrigerants and all sorts of new refrigerant components such as vacuum pump, pipe fittings, filling and recycling equipment and parts such as strictly used separately.

酯类油有很强的吸湿特性，吸入湿气后会影响到润滑油的化学稳定性。在压缩机保存，运输的过程中，要充注干燥的氮气避免湿气进入。安装的过程中，要尽量缩短压缩机吸排气口的敞开时间。

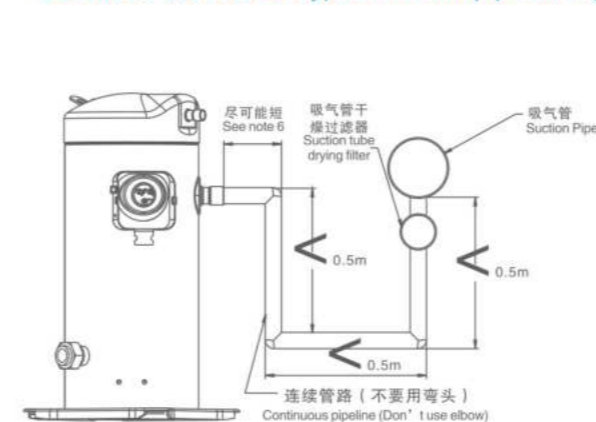
Ester oil has a strong hygroscopic property, which can affect the chemical stability of lubricants after inhalation of moisture. In the process of storage of the compressor, it is necessary to fill the dry nitrogen to avoid moisture entering. In the process of installation, it is necessary to shorten the opening time of the compressor suction and discharge opening.

### 吸气管过滤器 Suction strainer

为避免压缩机故障，在运行前必须把所有的杂质（污垢、焊接氧化皮、硼砂、金属屑等）从系统中清除。许多杂质非常微小，可通过微孔过滤器进入压缩机吸气侧。在进行现场装配或无法保证所有清洁度时，建议使用大容量的吸气管过滤器（仅产生极小的压降）。在过滤器前应设置压力接口用以检测由过滤器引起的压降。

In order to avoid compressor failure, all impurities (dirt, welding oxide skin, borax, metal chip, etc.) must be removed from the system before operation. Many impurities are very small and can be entered through the microporous filter into the suction side of the compressor. When assembling or failing to ensure all cleanliness, it is recommended to use a large capacity inhalation tube filter (with minimal pressure drop). The pressure gauge interface should be set in front of the filter to detect the pressure drop caused by the filter.

### 典型的吸气管布置图 Typical suction pipe arrangement



注意

1. 上述管路布置图目的是尽量降低管路应力
  2. 排气管或回油管也要按此原则布置
  3. 如果管长大于0.5米，应采取固定措施
  4. 如果管路上有较重的部件（如干燥过滤器），一定要采取固定措施
  5. 不推荐管长小于0.2米
  6. 这段管路尽量要短（50mm或更短），同时应保证足够的焊接长度
  7. 这段管路不建议使用弯头连接，建议使用连续铜管
- 要根据应用方式来选择压缩机的安装方式，所选择的安装方式和管路布置，要尽量减小噪音和振动的传递。

NOTE:

1. The above piping layout is designed to minimize pipe stress.
  2. The discharge pipe or the return pipe should also be arranged according to this principle.
  3. If the tube length is greater than 0.5 m, fixed measures should be taken.
  4. If there are heavy parts (such as drying strainers) on the road, you must take fixed measures.
  5. The pipe length is less than 0.2 meters.
  6. The pipe shall be as short as possible (50mm or shorter) and sufficient welding length shall be ensured.
  7. The pipe is not recommended to use elbow connection, and continuous copper pipe is recommended.
- It is necessary to choose the installation mode of the compressor according to the application mode, and the installation method and piping layout should be selected to minimize the transmission of noise and vibration.



## 应用指南 Application Guide

### 安装底脚 Foot installation

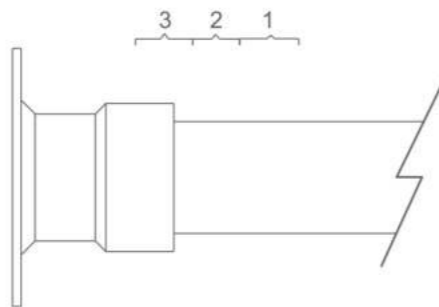
单压缩机冷凝机组使用软底脚安装。压缩机用于并联机组时，要使用专用的硬底脚安装。  
Single compressor condensing unit is installed with soft sole. When the compressor is used in parallel units, use the special hard sole to install.

### 管道 The pipe

制冷设备中的管道安装要求非常小心并保持高度的清洁。原则上只能使用内部清洁干燥、无氧化皮、无锈蚀、无磷酸盐层的管道。管道焊接时必须在管内通以干燥氮气。为防止管道内焊接处产生污垢，必须尽量控制材料熔化的程度。不能在有制冷剂的管道上进行焊接工作，（即便制冷剂处于非压力状态）。因为受热的制冷剂、油及空气会形成有毒气体。管路的设计必须能够保证即使在部分负荷时，吸气管和排气管中的气体最低速度能够保证回油。

Piping installation in refrigeration equipment requires very careful and high cleanliness. In principle, only clean, dry, non-oxidized skin, no rust, and no phosphate layer can be used. The pipe must be filled with dry nitrogen when welding. In order to prevent dirt from welding in the pipe, the degree of material melting must be controlled as far as possible. Do not weld on the pipe with refrigerant (even if the refrigerant is in non-pressure condition). Because heated refrigerants, oils and air can form toxic gases. The piping design must be able to ensure that the gas in the suction pipe and the discharge pipe can be guaranteed to return to oil even at a partial load.

### 涡旋压缩机管的焊接 Welding of scroll compressor tube



### 初次安装 For the first time to install

- \*涡旋压缩机的镀铜吸气管可类似其他铜管一样焊接。
- \*The copper suction pipe of the scroll compressor can be welded like other copper tubes.
- \*推荐使用的焊接材料：任何铜银合金材料均可使用，最好含至少5%的银。
- \*Recommended welding materials: any copper and silver alloy material can be used, preferably with at least 5% silver.
- \*安装前保证吸气管接头内径和吸气管外径清洁。
- \*Before installation, make sure both the inner & outer diameter of the suction pipes are clean.
- \*用双嘴枪在1区加热。在管温接近焊接温度后，将焊枪火焰移至2区。
- \*Use a double-mouth gun to heat the zone 1. After the tube temperature is close to the welding temperature, remove the torch flame to zone 2.
- \*加热2区直至达到焊接温度，上下移动焊枪，必要时绕管转动，使管子均匀加热，在接头处加焊料，同时绕接头转动焊枪，使焊料沿周边流动。
- \*Move up and down until the heating zone 2 is up to the welding temperature, welding torch, turn round tube, when necessary to evenly heating pipe, in the add solder joint, and at the same time around the joint rotation welding torch, flowing solder in the surrounding.
- \*在焊料流遍接头四周后，将焊枪移至3区加热。这样可使焊料进入接头，加热3区所用时间最短。
- \*Move the welding gun to zone 3 after the solder flow is around the joint. This allows the solder to enter the joint, and the shortest time for heating zone 3.
- \*对任何焊接接头，过分加热都会产生不良影响。
- \*Excessive heating can have undesirable effects on any welded joint.

### 并联运行时油的控制 Control of oil in parallel operation

冷冻涡旋压缩机可以由并联运行。在并联系统中，必须有好的油管理系统来保证压缩机内有足够的油位。  
The frozen scroll compressor can be operated in parallel. In parallel systems, a good oil management system is required to ensure sufficient oil level in the compressor.

## 应用指南 Application Guide

### 电气连接 Electrical connections

供电电压和接线端子 Supply voltage and terminal

请注意接线盒盖中接线端子的方向，为保证压缩机的正常启动和运行，供电电压不能低于压缩机额定电压的10%。

Please pay attention to the direction of the terminal in the junction box cover. To ensure the normal start and operation of the compressor, the supply voltage shall not be less than 10% of the rated voltage of the compressor.

单相压缩机的启动特性 The starting characteristics of single-phase compressor

单相涡旋压缩机使用永久性分电容电机（PSC），在绝大部分应用中不需要辅助启动装置。在某些应用场合（例如启动时电压较低），需要辅助启动装置，比如启动电容和辅助继电器来帮助启动。

The single-phase scroll compressor uses a permanent sub-capacitance motor (PSC), which does not require an auxiliary starter in most applications. In some applications, such as low voltage at startup, you need an auxiliary starter, such as starting capacitors and auxiliary relays to help start up.

三相压缩机的旋转方向 The rotation direction of the three-phase compressor

涡旋压缩机只能在一个旋转方向进行压缩。单相压缩机总是按照正确的方向启动和运行（瞬间断电的情况除外）。三相压缩机的旋转方向由电源相序决定，因此压缩机有50%的可能性发生“反转”。

Scroll compressors can only be compressed in one rotation direction. Single-phase compressors always start and run in the right direction (except in the case of instant power outages). The rotation direction of the three-phase compressor is determined by the power phase sequence, so the compressor has a 50% chance of "inversion".

在现场安装时，可以根据吸气压力的降低和排气压力的升高来判断压缩机旋转在正确的方向上。另外，如果压缩机是反转的话，压缩机噪音比较异常，运行电流也明显比正常运行低。

When installing on site, it is possible to judge the compressor rotation in the correct direction according to the decrease of suction pressure and the increase of discharge pressure. In addition, if the compressor is inverted, the compressor noise is abnormal, and the running current is significantly lower than the normal operation.

短时间反转对压缩机是没有危害的，但是长时间反转会损害压缩机。

Short time reversal is not harmful to the compressor, but long time anti-transfer damage compressor.

设备制造商可以在控制回路中设置相序保护模块来保证在相序不对的情况下不运行。

The device manufacturer can set the phase sequence protection module in the control loop to ensure that the phase sequence is not running.

瞬间断电 Instantaneous power failure

瞬间断电（停电时间少于0.5秒），可能会导致单相压缩机的旋转方向发生改变。重新来电后压缩机会在反向持续运行几分钟，直到压缩机电机保护器动作。这对压缩机没有影响，电机保护器复位后压缩机会以正确的方向重新启动和运行。

Instantaneous power failure (less than 0.5 seconds) may cause the rotation direction of the single-phase compressor to change. The compression opportunity will continue to run for a few minutes on the reverse side until the compressor motor protector moves. This has no effect on the compressor, and the motor protector is reset and the compression opportunity is restarted and operated in the correct direction.

建议用一个能够感应到瞬间断电的继电器，当发生瞬间断电时，锁定压缩机两分钟后再允许压缩机重新启动。

It is suggested to use a relay that can sense the instantaneous power failure. When the instantaneous power failure occurs, the compressor will be locked for two minutes before allowing the compressor to restart.

三相压缩机不需要使用该继电器。

The three-phase compressor does not need to use this relay.

耐高电压测试 High voltage resistance testing

冷冻涡旋压缩机的电机在壳体下部，系统内充注制冷剂后，电机可能会浸泡在制冷剂液体中。当壳体内制冷剂液位较高时由于制冷剂液体较之气体或润滑油的电导率值较高，耐高电压测试可能会显示较高的漏电值。这种现象会在所有电机沉浸在液体制冷剂的压缩机上发生，并没有安全隐患。要降低漏电值的读数，短时间运转系统，并确保没有制冷剂液体回到压缩机壳体后再重新测试。

The motor of the frozen scroll compressor is in the lower part of the shell, and the motor may be immersed in the refrigerant liquid after the system is filled with refrigerant. When the liquid level of refrigerant in the shell is high, the high conductivity value of the refrigerant liquid is higher than that of gas or lubricating oil, and the high-voltage test may show higher leakage value. This phenomenon occurs when all motors are immersed in a liquid refrigerant compressor, and there is no safety hazard. To reduce the leakage value of the reading, the short running system, and ensure that no refrigerant liquid return to the compressor housing and retest.



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## 抽真空 (干燥) Vacuum (dry)

系统在检漏测试后必须抽真空。抽真空必须使用真空泵，不允许压缩机自行抽真空。为了便于抽真空操作，建议在吸气管道和液体管道上安装抽真空阀。抽真空阀与真空泵之间的连接管道内径至少为8mm，抽真空阀上的接口截面应不小于连接管的截面。所有连接管截面之和不应小于真空泵吸气口截面。

The system must vacuum after leak testing. Vacuum pump must be used in vacuum pump, not allow the compressor to vacuum. In order to facilitate the vacuum operation, it is recommended to install the vacuum valve in the suction pipe and the liquid pipe. The inner diameter of the connecting pipe between the vacuum valve and the vacuum pump is at least 8mm, and the interface section of the vacuum valve should not be less than the cross section of the connecting pipe. The sum of all connecting pipe sections shall not be less than the suction section of the vacuum pump.

真空泵的连接管 (高压橡胶管或直径为10×1mm铜管) 应尽量短，而且不能有狭窄或急剧弯曲的地方。抽真空能力会因狭窄的接口和连接管道而明显降低。还应注意的是由于真空表通常位于真空泵上，其指示值难以和系统末端的真空度相一致，所以应增加额外的抽真空时间，以便系统各个部位都达到相同的真空度。一台抽气速率40–50L/min的真空泵足以应付中小型机器。大型设备应配备内径为10mm以上的连接管或直径为12×1mm的铜管，并配有相应大规格的抽真空阀及真空泵，也许还必须使用双级真空泵。真空度不能用常规压力表而必须使用真空表测量。应先后两次将系统抽真空至2mbar (1.5torr)，这样可避免某些运行故障。两次抽真空之间加入所用制冷剂 (可吸收大量气态水分) 至表压0.15bar。然后加注干燥气体，接着将包括压缩机或机组在内的整个系统第三次抽真空至0.7mbar (约0.5torr)。最后关闭真空泵，向系统中加入所用制冷剂至表压0.15bar。

The connection tube of the vacuum pump (high pressure rubber hose or 10 x 1mm copper tube) should be as short as possible, and there should be no narrow or sharp bend. The vacuum can be significantly reduced by narrow interfaces and connections. Also should pay attention to is due to the vacuum gauge on the vacuum pump, usually the indicated value is difficult to match at the end of the vacuum system, so should add additional vacuum time, so that the parts are at the same vacuum system. A vacuum pump with a pumping rate of 40–50L/min is sufficient for small and medium sized machines. Large equipment shall be equipped with a connecting pipe with a diameter of 10mm or above and a copper tube with a diameter of 12 x 1mm, and a large sized vacuum valve and vacuum pump shall be used, and a double-stage vacuum pump may also be necessary. Vacuum gauges cannot be measured using a conventional pressure gauge. The system should be vacuumed to 2mbar (1.5torr) twice, so that some operation failure can be avoided. Join the refrigerant used between two vacuum (can absorb a large number of gaseous water) to table 0.15 bar pressure. And then filling dry gas, then the whole system, including compressor unit or third vacuum 0.7 mbar (about 0.5 torr). Finally, close the vacuum pump and add the refrigerant to the system to 0.15bar.

注意：不允许在真空状态下启动压缩机及进行绝缘强度试验，以免损坏电机。在真空状态下，绝对不允许运行压缩机。

Note: it is not allowed to start the compressor in the vacuum state and conduct insulation strength test to avoid damaging the motor. No compressor is allowed to operate in a vacuum.

抽真空及干燥的操作时应特别仔细和准确，因为在安装设备时遗留在系统中的空气将导致排气温度升高，使润滑油结碳而影响润滑油质量并引起压缩机故障。与空气同时进入的湿气会产生酸性物质及腐蚀性金属，并在酸的作用下使润滑油变质，这些情况在高温高压气体影响下将加速生成。

Vacuum and drying operation should be particularly careful and accurate, because the left when the installation of the equipment in the system of air will lead to discharge temperature, the lubricating oil and carbon and affects the quality of lubricating oil and cause to a bad compressor. The moisture that enters the air at the same time produces acid and corrosive metals and deteriorates the lubricant under the action of acid, which will be accelerated under the influence of high temperature and pressure gases.

## 制冷剂的充注 The filling of refrigerant

制冷设备只能加注其设计选择的制冷剂。制冷或空调机组的运行能效取决于制冷剂的正确充注量。如果制冷剂充注不足，则蒸发器中制冷剂也将不足。使吸气压力和排气效率降低，还可能引起电机过热。如果制冷剂加注量过度，则冷凝器中液体过多，导致冷凝压力过高及蒸发器回液而可能损坏压缩机。

Refrigeration equipment can only be added to its design choice of refrigerant. The energy efficiency of refrigeration or air conditioning unit depends on the correct filling amount of refrigerant. If the refrigerant is insufficient, the evaporator will not be refrigerant. Reduce the suction pressure and discharge efficiency, and may cause the motor to overheat. If the refrigerant is overcharged, there is too much liquid in the condenser, which can cause the condensation pressure too high and the evaporator return fluid, which may damage the compressor.

应该在涡旋压缩机高压和低压侧同时充注制冷剂液体，大部分充注量应该放在系统高压侧。加注前后应称重制冷剂钢瓶以确定实际充注量。It is necessary to fill the refrigerant liquid at the high and low pressure side of the scroll compressor, and most of the filling should be placed on the high side of the system. Before and after the injection should be weighed refrigerant cylinder to determine the actual filling amount.

液体制冷剂加注的基本方法是将制冷剂通过一个特设在加液管上的干燥过滤器，通过储液器上带加注口的截止阀或加注阀加入设备中。

The basic method of liquid refrigerant injection is to add the refrigerant through a dry strainer on the liquid pipe and add the stop-valve or the filling valve with the filler on the reservoir.

确定制冷剂充注量最常用的方法是观察液体管道视镜中制冷剂的流动情况。由于膨胀阀的正常工作必须依靠制冷剂液体的不间断供给，所以当液体流动清晰可见时，就可假设制冷剂已正确加注。气泡或泡沫的出现通常说明制冷剂不足。然而必须注意，有时尽管加注了足够量的制冷剂，视镜中也可见气泡，其原因之一是视镜液前的液管存在束口，使制冷剂压力下降而突然蒸发。另外，冷凝温度的快速变化如打开冷凝风机，也会引起这种突然蒸发。因此虽然视镜可作为一种确定制冷剂加注量的有效工具，但仅通过观察制冷剂流动来确定制冷剂的正确加注量仍是不足取的。判断制冷剂是否合适的标准是系统回气过热度和液体过冷度。

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The most common method to determine the filling amount of refrigerant is to observe the flow of refrigerant in liquid pipeline. As the normal operation of the expansion valve must depend on the continuous supply of refrigerant liquid, it can be assumed that the refrigerant has been correctly added when the liquid flow is clearly visible. The appearance of bubbles or bubbles usually indicates a shortage of refrigerants. But must pay attention to, and sometimes even though filling a sufficient quantity of refrigerant, depending on the fluid bubbles may also be seen in the mirror, one of the reasons is the mirror of the liquid tube bundle of mouth, the refrigerant pressure drop and the sudden evaporation. In addition, the rapid change of condensation temperature, such as the opening of a condensing fan, can also cause this sudden evaporation. Therefore, although it can be used as an effective tool to determine the dosage of refrigerant, it is still not sufficient to determine the correct amount of refrigerant by observing the flow of refrigerant. The criterion for determining whether the refrigerant is suitable is that the system returns to excess heat and the liquid is too cold. temperature. And pay attention to personal safety. Do not touch the discharge cavity or discharge pipe with your hands or other body parts.

## 壳体温度 Shell temperature

压缩机运行时，排气腔包括排气管路的温度会非常高。注意不要让容易被高温损伤的电线或其它材料触碰到这些部件。并注意人身安全，不要用手或其它身体部位去触碰排气腔或排气管。

When the compressor runs, the discharge cavity, including the discharge pipe, will be very hot. Be careful not to touch these parts with wires or other materials that are easily damaged by high temperature. And pay attention to personal safety. Do not touch the discharge cavity or discharge pipe with your hands or other body parts.

## 焊下系统部件 Weld the system parts

小心！在打开系统前，必须将制冷剂从高压侧和低压侧同时释放出来，并用压力表确认高低压两侧的压力已经为0 (表压)，再进行焊下工作，或采取切断管路的方式。

Be careful! In front of the open system, refrigerant must be released from the high side and low voltage side and at the same time, with the pressure gauge to confirm the pressure on both sides of the high and low voltage to zero (table), then under the welding work, or to cut off the line.

## 更换压缩机 Replace compressor

遇到电机烧坏时，部分受污染的油会与损坏的压缩机一起被更换，其余部分的油可以通过使用吸气管路和液体管路的干燥过滤器进行清洗。推荐采用100%活性铝吸气干燥过滤器，但必须在72小时后拆除。如果系统上有气液分离器，强烈建议将其更换。这是因为在压缩机损坏后的短时间内气液分离器中的回油孔或滤网可能被阻塞而不通畅。这可能会导致新更换的压缩机因为缺油而再次损坏。

When you meet the motor burn out part of contaminated oil will be replaced with damage to the compressor and the rest of the oil can be through the use of suction pipe and the liquid line filter driers for cleaning. It is recommended to use 100% active aluminum inhalation dry filter, but must be removed after 72 hours. If there is a gas-liquid separator on the system, it is strongly recommended to replace it. This is due to the possibility of blockage of the back oil hole or filter in the gas-liquid separator in the short time after the compressor is damaged. This may lead to a new compressor that is damaged due to lack of oil.

## 涡旋压缩机功能检测 Scroll compressor function test

不能用关闭吸气阀来检查吸气压力能达到的最低数值的方法来测试压缩机的性能。这种实验会损坏涡旋压缩机。以下一些诊断方法可以用来判断一台涡旋压缩机是否功能正常。

The performance of the compressor can not be tested by closing the suction valve to check the minimum numerical value of the suction pressure. This kind of experiment can damage the scroll compressor. The following diagnostic methods can be used to determine whether a scroll compressor functions properly.

检查供电电压是否正常。

Check whether the power supply voltage is normal.

应进行电机绕组导通性和对地短接的常规检查，以确定电机绕组是否短路或对地是否短路。如果电机中点保护器跳闸，压缩机必须充分冷却使保护器重新闭合。

Motor winding conductance and regular inspection of the ground short circuit shall be carried out to determine whether the motor winding is short or short. The compressor must be cooled sufficiently to make the protector reclosed if the motor midpoint protector trips.

检查蒸发器风扇和冷凝器风扇是否正常运行。

Check whether the evaporator fan and condenser fan are working properly.

吸排气侧连接压力表，接通压缩机电源。如果吸气压力低于正常值，有可能是充注量少，或系统内部有堵塞。

Connect the pressure gauge to the discharge side and connect the compressor power. If the suction pressure is lower than normal, it may be a small amount of filling or a blockage within the system.

对于三相压缩机，如果吸气压力不下降，排气压力上升不到正常值，调换压缩机的任意两根接线柱的电源线，确保压缩机的运转方向正确。如果压缩机的压力仍然没有达到正常值，可能压缩机已经损坏。

For three-phase compressor, if you don't fall in inspiratory pressure, discharge pressure rise less than normal, changing any two terminal of the compressor of the power cord, to ensure the compressor running in the right direction. If the compressor's pressure is still not up to normal, the compressor may be damaged.

为了测试压缩机是否正常排气，必须将压缩机消耗的电流和公布的压缩机性能曲线在相同运行压力和系统电压下进行比较。如果测量的平均电流和公布值偏差超过±15%，可能表明电压不平衡，应进行进一步的检查。

In order to test whether the compressors discharge gas normally, it is necessary to compare the current of the compressor consumption with the reported performance curve of the compressor under the same operating pressure and system voltage. If the average current and published value deviation of the measurement are above or minus 15%, it may indicate that the voltage imbalance should be further examined.

在更换或退回压缩机之前，必须确定压缩机是真正的损坏了。在返回之前至少要对它进行耐高压测试，电机绕组电阻和启动能力的复查。

Before replacing or returning the compressor, it must be determined that the compressor is truly damaged. At least the high voltage test, the motor winding resistance and the starting ability are reviewed before returning.