

热泵专用压缩机 Scroll Compressor for Heat Pump Application

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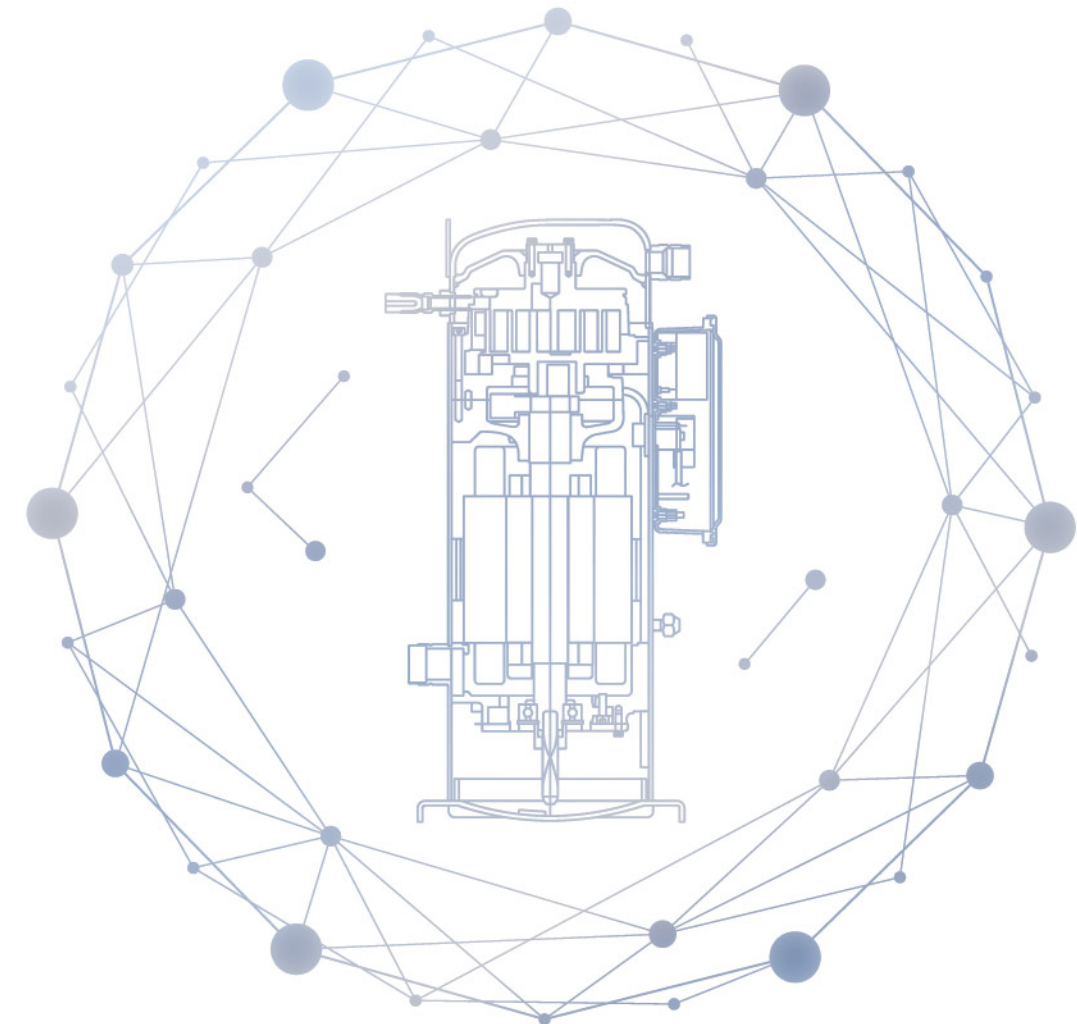
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样本中所有产品图片仅供参考,以实际订货产品为准。
参数如有变动恕不另行通知。

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冰山松洋压缩机(大连)有限公司
Sonyo Compressor (Dalian) Co., Ltd.



7 大产品特点

- 1 国内首创的中间补气专利技术，完美解决低温环境下的制热需求。
- 2 采用成熟的直流变频技术，热泵能效升级，进一步优化用户体验。
- 3 产品结构升级，为热泵机组在-30℃环境温度下的可靠运行保驾护航。
- 4 满足家庭采暖、生活热水的需要，最高可制取65℃热水。
- 5 满足工农业烘干应用的需要，最高出风温度80℃。
- 6 采用先进的内部供油系统和高品质的机械材料，能够满足热泵机组在极端应用工况下的制热需求。
- 7 采用环保的R407C、R410A、R134a、R454C、R455A、R454B、R515B、R32、R290等多种主流制冷剂。

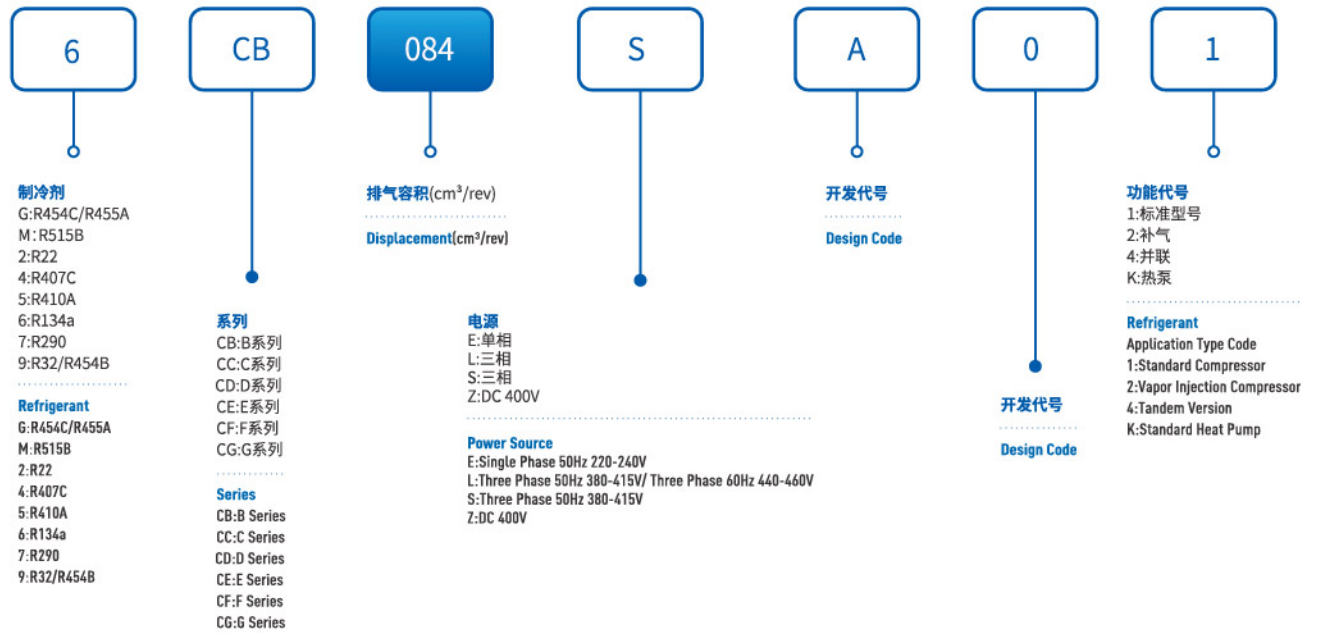
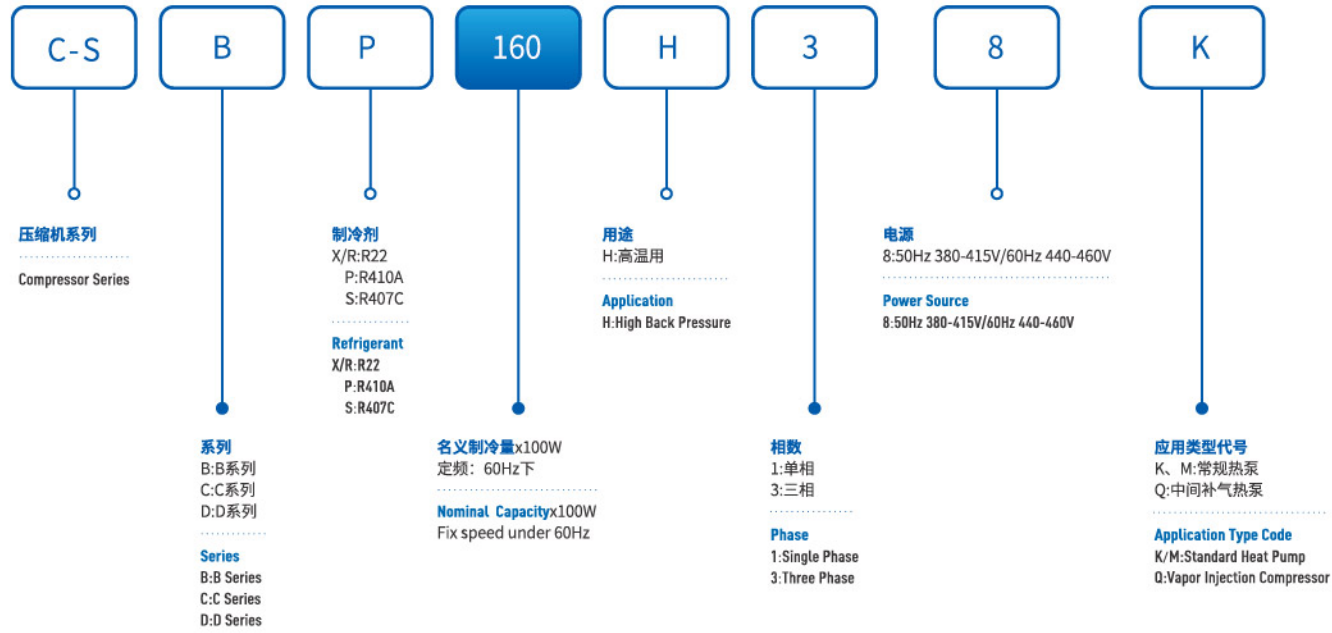
7 PRODUCTS FEATURES

- 1 Patented vapor injection technology, meeting the heating requirement under low ambient temperature conditions.
- 2 Higher COP heat pump supported by mature DC-Inverter technology, further improving customer satisfaction.
- 3 Update product configuration, higher reliability for heat pump operation even under -30°C ambient temperature.
- 4 Maximum to 65°C hot water temperature for house heating and sanitary hot water applications.
- 5 Maximum to 80°C hot wind temperature for industrial and agricultural drying applications.
- 6 Advanced internal oil lubrication system, high quality mechanical materials, meeting the heating requirement under sever condition for heat pump.
- 7 Environmental friendly refrigerant R407C, R410A, R134a, R454C, R455A, R454B, R515B, R32, R290.

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* 如需使用其他制冷剂或应用范围，请与我司联系
For more information about other refrigerants products and applications, please contact with us.

命名规则 Model Nomenclature



产品型谱 Product Line-up

产品类别 Product Class	制冷剂 Refrigerant	电源 Power Source	额定功率 Output (HP)													
			3	3.5	4	4.5	5	6	7	8	9	10	11	12	13	15
非补气机型 Standard Model	R410A	三相 3 Phase				●	●	●				●	●	●	●	●
	R134a	三相 3 Phase			●		●	●	●	●		●		●		●
		DC Inverter														
	R407C	三相 3 Phase		●	●		●			●	●	●		●		
	R22	三相 3 Phase			●		●			●	●	●		●		
	R32/R454B	三相 3 Phase	●	●	●	●	●	●	●	●		●	●	●	●	●
	R454C/R455A	三相 3 Phase		●	●		●	●	●							
R515B	三相 3 Phase										●		●		●	
R290	三相 3 Phase		●	●	●	●	●	●	●	●	●	●	●	●	●	●
中间补气机型 Vapor Injection Model	R410A	三相 3 Phase					●	●		●	●	●	●	●	●	●
		DC Inverter														
	R407C(R134a)	三相 3 Phase		●	●		●	●		●		●		●		
		单相 1 Phase		●	●											
	R22	三相 3 Phase		●	●		●	●		●		●		●		
		单相 1 Phase		●	●											
R32	DC Inverter															
R290	DC Inverter															

R410A非补气机型 Standard Model

电制 Power Source		3PH 50Hz 380-415V								
型号 Model		C-SBP 160H38K	5CE 058SA01	C-SBP 205H38K	C-SCP 315H38M	C-SCP 360H38M	C-SCP 400H38M	C-SCP 420H38M	C-SCP 510H38M	
额定功率 Output	HP	4.5	5	6	10	11	12	13	15	
排气量 Displacement	cm ³ /rev	52	58.5	67	104	120	128	141	171	
制热量 Heating Capacity	kW	11.6	14200	15.1	25.0	28.9	29.8	32.5	40.3	
输入功率 Input Power	kW	3.79	4540	4.93	7.60	8.70	9.30	9.50	12.40	
HCOP	W/W	3.06	3.13	3.06	3.29	3.32	3.22	3.42	3.25	
电流 Current	A	7.5	8	9.0	13.7	15.5	16.7	18.2	22.1	
净重 Net Weight(Include Oil)	kg	39	33.2	39	69	72	74	75	76	
冷冻机油 Oil	种类 Category	醚类油 PVE								
	充注量 Charge	ml	1700	1300	1700	2800			3500	
电动机 Motor	种类 Category	三相感应电机 3PH Induction Motor								
	启动电流 Starting Current	A	66	67	73	124	130	130	130	159
	最大持续电流 Maximum Continuous Current	A	12.8	13.6	18.0	27.5	30.2	28.5	29.7	38.6
外观图代号 Outline Graph Code	-	A	-	A	N	*	M		Lt	
吸气接管 Discharge Accepting	mm(φOD)	22.22			34.93					
排气接管 Suction Accepting	mm(φOD)	12.70			22.23					

测试工况: 冷凝温度50°C, 蒸发温度-7°C, 过冷度8.3K, 过热度11.1K.
Rating Condition: Condensing Temperature 50°C, Evaporating Temperature -7°C, SubCooling 8.3K, Superheat 11.1K.

*C-SCP360H38M为防水等级IPX4的特殊外观, 其他机型如有防水等级要求请与我司联系。
C-SCP360H38M has a special appearance of waterproof grade IPX4. If having any requirements of waterproof grade for other models, please contact with us.

R134a非补气机型(高温烘干) Standard Model For Drying Application

电制 Power Source		3PH 50Hz 380-415V								DC Inverter	
型号 Model		6CB 067SA01	6CB 084SA01	6CB 100SA01	6CB 110PB01	6CC 137SA01	6CC 171SA01	6CC 205SA01	6CC 260SA01	*6CD 081ZA01	
额定功率 Output	HP	4	5	6	7	8	10	12	15	16	
排气量 Displacement	cm ³ /rev	67	84	100	110	137	171	205	260	80.5	
制热量 Heating Capacity	kW	10.24	13.00	15.55	16.95	20.70	25.90	30.6	39.20	10700	
输入功率 Input Power	kW	3.58	4.45	5.45	5.95	7.36	9.05	10.90	13.95	3200	
HCOP	W/W	2.86	2.92	2.85	2.85	2.81	2.86	2.81	2.81	3.34	
电流 Current	A	6.5	7.8	9.3	10.5	13.0	15.6	18.9	21.5	10.1	
净重 Net Weight(Include Oil)	kg	36	38	38	38	66	69	70	78	37	
冷冻机油 Oil	种类 Category	醚类油 PVE								FV68S	
	充注量 Charge	1700			1900		2800		3500		1600
电动机 Motor	种类 Category	三相感应电机 3PH Induction Motor									
	启动电流 Starting Current	A	53	66	66	74	80	96	124	159	-
	最大持续电流 Maximum Continuous Current	A	11.7	13.8	15.4	19.9	21.0	27.0	30.7	41.0	15
外观图代号 Outline Graph Code	-	A		N	D	E		Lt	AQ		
吸气接管 Discharge Accepting	mm(øOD)	22.22				25.40					
排气接管 Suction Accepting	mm(øOD)	12.70				19.05					

测试工况: 冷凝温度75℃, 蒸发温度10℃, 过冷度10K, 过热度10K.
Rating Condition: Condensing Temperature 75℃, Evaporating Temperature 10℃, SubCooling 10K, Superheat 10K.
*测试工况: 冷凝温度50℃, 蒸发温度-7℃, 过冷度8.3K, 过热度11.1K.
Rating Condition: Condensing Temperature 50℃, Evaporating Temperature -7℃, SubCooling 8.3K, Superheat 11.1K.

R407C非补气机型 Standard Model

电制 Power Source		3PH 50Hz 380-415V							
型号 Model		C-SBS 120H38A	C-SBS 145H38A	C-SBS 180H38C	C-SCN 603H8H	C-SCN 673H8H	4CC 171LA01	4CC 205SA01	
额定功率 Output	HP	3.5	4	5	8	9	10	12	
排气量 Displacement	cm ³ /rev	56	67	84	137	149	171	205	
制热量 Heating Capacity	kW	8.7	10.3	12.7	19.0	20.5	23.0	27.0	
输入功率 Input Power	kW	2.75	3.16	3.94	5.85	6.25	7.05	8.30	
HCOP	W/W	3.16	3.26	3.22	3.25	3.28	3.26	3.25	
电流 Current	A	5.8	6.1	7.4	11.8	12.8	14.4	17.0	
净重 Net Weight(Include Oil)	kg	38	38	38	66	69	69	70	
冷冻机油 Oil	种类 Category	醚类油 PVE							
	充注量 Charge	1700			2800				
电动机 Motor	种类 Category	三相感应电机 3PH Induction Motor							
	启动电流 Starting Current	A	48	66	66	80	80	96	124
	最大持续电流 Maximum Continuous Current	A	14.6	15.0	13.5	22.2	21.7	26.2	28.5
外观图代号 Outline Graph Code	-	A		D		E			
吸气接管 Discharge Accepting	mm(øOD)	22.22				25.40			
排气接管 Suction Accepting	mm(øOD)	12.70				19.05			

测试工况: 冷凝温度50℃, 蒸发温度-7℃, 过冷度8.3K, 过热度9K.
Rating Condition: Condensing Temperature 50℃, Evaporating Temperature -7℃, SubCooling 8.3K, Superheat 9K.

R22非补气机型 Standard Model

电制 Power Source		3PH 50Hz 380-415V						
型号 Model		C-SBX 145H38A	C-SBR 180H38K	C-SC 603H8H	C-SC 673H8H	2CC 171LA01	2CC 205SA11	
额定功率 Output	HP	4	5	8	9	10	12	
排气量 Displacement	cm ³ /rev	67	84	137	149	171	205	
制热量 Heating Capacity	kW	10.3	12.7	19.0	20.5	23.5	27.5	
输入功率 Input Power	kW	3.08	3.83	5.70	6.10	7.00	8.10	
HCOP	W/W	3.34	3.31	3.33	3.36	3.36	3.40	
电流 Current	A	5.9	6.9	11.4	12.3	14.2	16.5	
净重 Net Weight(Include Oil)	kg	38	38	66	67	69	74	
冷冻机油 Oil	种类 Category	矿物油 Mineral Oil						
	充注量 Charge	1700			2800			
电动机 Motor	种类 Category	三相感应电机 3PH Induction Motor						
	启动电流 Starting Current	A	66	66	80	80	96	130
	最大持续电流 Maximum Continuous Current	A	12.7	13.1	20.0	19.2	26.6	28.9
外观图代号 Outline Graph Code	-	A		D		E	M	
吸气接管 Discharge Accepting	mm(øOD)	22.22			25.40		34.93	
排气接管 Suction Accepting	mm(øOD)	12.70			19.05		22.23	

测试工况: 冷凝温度50℃, 蒸发温度-7℃, 过冷度8.3K, 过热度11.1K.
Rating Condition: Condensing Temperature 50℃, Evaporating Temperature -7℃, SubCooling 8.3K, Superheat 11.1K.

R454C/R455A非补气机型 Standard Model

电制 Power Source		3PH 50Hz 380-415V					
型号 Model		GCB058LA04	GCB067LA04	GCB084LA04	GCB100LA04	GCB110LA04	
额定功率 Output	HP	3.5	4	5	6	7	
排气量 Displacement	cm ³ /rev	59	67	84	100	110	
制热量 Heating Capacity	kW	8.4	9.6	11.8	14.1	15.6	
输入功率 Input Power	kW	2.65	3.03	3.60	4.35	4.81	
HCOP	W/W	3.17	3.17	3.28	3.24	3.23	
电流 Current	A	4.9	5.6	6.6	8.1	8.8	
净重 Net Weight(Include Oil)	kg	36.7	36.5	38.4	38.2	38.1	
冷冻机油 Oil	种类 Category	醚类油 PVE					
	充注量 Charge	1700					
电动机 Motor	种类 Category	三相感应电机 3PH Induction Motor					
	启动电流 Starting Current	A	-	-	66.6	74.3	74.3
	最大持续电流 Maximum Continuous Current	A	-	-	10.9	19.7	19.3
外观图代号 Outline Graph Code	-	B					
吸气接管 Discharge Accepting	mm(øOD)	22.22					
排气接管 Suction Accepting	mm(øOD)	12.70					

测试工况: 冷凝温度50℃, 蒸发温度-7℃, 过冷度8.3K, 过热度11.1K.
Rating Condition: Condensing Temperature 50℃, Evaporating Temperature -7℃, SubCooling 8.3K, Superheat 11.1K.

R32非补气机型
Standard Model

电制 Power Source		3PH 50HZ 380-400V				
型号 Model		9CE034SA04	9CE039SA04	9CE046SA04	9CE051SA04	9CE058SA04
额定功率 Output	HP	3	3.5	4	4.5	5
排气量 Displacement	cm ³ /rev	34.1	39.1	46.1	51.1	58.5
制热量 Heating Capacity	kW	8.8	10	12	12.9	14.9
输入功率 Input Power	kW	3	3.3	3.9	4.1	4.8
HCOP	W/W	2.93	3.03	3.08	3.15	3.10
电流 Current	A	5.5	6.2	7	7.3	8.4
净重 Net Weight(Include Oil)	kg	31.4	32.8	32.6	33.6	33.5
冷冻机油 Oil	种类 Category	FW68S				
	充注量 Charge	1600		1700	1600	
电动机 Motor	种类 Category	三相感应电机 3PH Induction Motor				
	启动电流 Starting Current	-				
	最大持续电流 Maximum Continuous Current	8.3	9	11.5	14.2	14.2
外观图代号 Outline Graph Code	-	EB				
吸气接管 Discharge Accepting	mm(øOD)	22.2				
排气接管 Suction Accepting	mm(øOD)	12.7				

测试工况：冷凝温度50℃，蒸发温度-7℃，过冷度8.3K，过热度2K。
Rating Condition: Condensing Temperature 50℃, Evaporating Temperature -7℃, SubCooling 8.3K, Superheat 2K.

R32非补气机型
Standard Model

电制 Power Source		3PH 50Hz 380-415V							
型号 Model		9CE069SA04	9CB076SA04	9CC089SA04	9CC104SA04	9CC120SA04	9CC128SA04	9CC141SA04	9CC171SA04
额定功率 Output	HP	6	7	8	10	11	12	13	15
排气量 Displacement	cm ³ /rev	68.9	76	89.2	104.1	120.3	128.1	140.2	171.4
制热量 Heating Capacity	kW	17.4	19.9	21.9	25.6	30.4	32.5	34.8	42.2
输入功率 Input Power	kW	5.5	6.20	7.2	8.4	9.3	9.9	10.5	12.7
HCOP	W/W	3.16	3.21	3.04	3.05	3.27	3.28	3.31	3.32
电流 Current	A	9.5	10.8	12.9	15.3	17.6	18.3	19.2	22.7
净重 Net Weight(Include Oil)	kg	34.7	39.3	68.5	69.8	73.2	73.6	74.4	79.2
冷冻机油 Oil	种类 Category	FW68S							
	充注量 Charge	1700	1600	2700				3100	
电动机 Motor	种类 Category	三相感应电机 3PH Induction Motor							
	启动电流 Starting Current	-	87	106	117	130	130	130	159
	最大持续电流 Maximum Continuous Current	15	18.6	20	23.6	26.5	26.3	32.5	40
外观图代号 Outline Graph Code	-	EB	-						
吸气接管 Discharge Accepting	mm(øOD)	22.20		34.93					
排气接管 Suction Accepting	mm(øOD)	12.70		22.22					

测试工况：冷凝温度50℃，蒸发温度-7℃，过冷度8.3K，过热度2K。
Rating Condition: Condensing Temperature 50℃, Evaporating Temperature -7℃, SubCooling 8.3K, Superheat 2K.

R290非补气机型
Standard Model

电制 Power Source		3PH 50HZ 380-415V				
型号 Model		7CE058SA04 7CE058SA01	7CE069SA04 7CE069SA01	7CB083SA04 7CB083SA01	7CB100SA04 7CB100SA01	7CB110SA04 7CB110SA01
额定功率 Output	HP	3.5	4	4.5	5	6
排气量 Displacement	cm ³ /rev	58.5	68.9	83.7	100	110
制热量 Heating Capacity	kW	12020	14060	16300	19840	21210
输入功率 Input Power	kW	2800	3280	3800	4590	4890
HCOP	W/W	4.29	4.29	4.29	4.32	4.34
电流 Current	A	5.7	6.1	7.4	8.4	9.1
净重 Net Weight(Include Oil)	kg	32	32.3	37.7	38	38.3
冷冻机油 Oil	种类 Category	PZ68S				
	充注量 Charge	1600				
电动机 Motor	种类 Category	三相感应电机 3PH Induction Motor				
	启动电流 Starting Current	-				
	最大持续电流 Maximum Continuous Current	-				
吸气接管 Discharge Accepting	mm(øOD)	22.22				
排气接管 Suction Accepting	mm(øOD)	12.70				

测试工况：冷凝温度54.5℃，蒸发温度7℃，过冷度8.5K，过热度11.5K。
Rating Condition: Condensing Temperature 54.5℃, Evaporating Temperature 7℃, SubCooling 8.5K, Superheat 11.5K.

R290非补气机型
Standard Model

电制 Power Source		3PH 50HZ 380-415V						
型号 Model		7CG124LA04 7CG124LA01	7CG145LA04 7CG145LA01	7CG170LA04 7CG170LA01	7CC185LA04 7CC185LA01	7CC220LA04 7CC220LA01	7CC260LA04 7CC260LA01	
额定功率 Output	HP	7	8	9	10	12	15	
排气量 Displacement	cm ³ /rev	124	145	170	185	220	260	
制热量 Heating Capacity	kW	24.5	27.6	33.1	34.9	40.8	48.6	
输入功率 Input Power	kW	5.61	6.32	7.55	7.97	9.48	11.67	
HCOP	W/W	4.37	4.37	4.38	4.37	4.31	4.16	
电流 Current	A	10.9	11.7	14.2	13.7	17.7	20.9	
净重 Net Weight(Include Oil)	kg	55.7	56	60	69.7	74	77.5	
冷冻机油 Oil	种类 Category	PZ68S						
	充注量 Charge	2500		2800			3500	
电动机 Motor	种类 Category	三相感应电机 3PH Induction Motor						
	启动电流 Starting Current	-						
	最大持续电流 Maximum Continuous Current	-						
吸气接管 Discharge Accepting	mm(øOD)	22.23		34.93			22.23	
排气接管 Suction Accepting	mm(øOD)	28.58		22.23			22.23	

测试工况：冷凝温度54.5℃，蒸发温度7℃，过冷度8.5K，过热度11.5K。
Rating Condition: Condensing Temperature 54.5℃, Evaporating Temperature 7℃, SubCooling 8.5K, Superheat 11.5K.

R515B非补气机型 Standard Model

电制 Power Source		3PH 50HZ 380-415V		
型号 Model		MCC171SA01	MCC205SA01	MCC260SA01
额定功率 Output	HP	10	12	15
排气量 Displacement	cm³/rev	171	205	260
制热量 Heating Capacity	kW	17.7	21.2	26.8
输入功率 Input Power	kW	7.17	8.65	11.03
HCOP	W/W	2.47	2.45	2.43
电流 Current	A	-	-	-
净重 Net Weight(Include Oil)	kg	69.7	74.0	77.5
冷冻机油 Oil	种类 Category	FW68S		
	充注量 Charge	2800		3500
电动机 Motor	种类 Category	三相感应电机 3PH Induction Motor		
	启动电流 Starting Current	-		
	最大持续电流 Maximum Continuous Current	-		
外观图代号 Outline Graph Code	-	E		Lt
吸气接管 Discharge Accepting	mm(øOD)	34.93		
排气接管 Suction Accepting	mm(øOD)	22.23		

测试工况：冷凝温度80℃，蒸发温度10℃，过冷度10K，过热度10K。
Rating Condition: Condensing Temperature 80℃, Evaporating Temperature 10℃, SubCooling 10K, Superheat 10K.

R454B非补气机型 Standard Model

电制 Power Source		3PH 50Hz 380-415V							
型号 Model		9CE069SA04	9CB076SA04	9CC089SA04	9CC104SA04	9CC120SA04	9CC128SA04	9CC141SA04	9CC171SA04
额定功率 Output	HP	6	7	8	10	11	12	13	15
排气量 Displacement	cm³/rev	68.9	76	89.2	104.1	120.3	128.1	140.2	171.4
制热量 Heating Capacity	kW	17.4	19.9	21.9	25.6	30.4	32.5	34.8	42.2
输入功率 Input Power	kW	5.5	6.20	7.2	8.4	9.3	9.9	10.5	12.7
HCOP	W/W	3.16	3.21	3.04	3.05	3.27	3.28	3.31	3.32
电流 Current	A	9.5	10.8	12.9	15.3	17.6	18.3	19.2	22.7
净重 Net Weight(Include Oil)	kg	34.7	39.3	68.5	69.8	73.2	73.6	74.4	79.2
冷冻机油 Oil	种类 Category	FW68S							
	充注量 Charge	1700	1600	2700				3100	
电动机 Motor	种类 Category	三相感应电机 3PH Induction Motor							
	启动电流 Starting Current	-	87	106	117	130	130	130	159
	最大持续电流 Maximum Continuous Current	15	18.6	20	23.6	26.5	26.3	32.5	40
外观图代号 Outline Graph Code	-	EB		-					
吸气接管 Discharge Accepting	mm(øOD)	22.20			34.93				
排气接管 Suction Accepting	mm(øOD)	12.70			22.22				

测试工况：冷凝温度50℃，蒸发温度-7℃，过冷度8.3K，过热度2K。
Rating Condition: Condensing Temperature 50℃, Evaporating Temperature -7℃, SubCooling 8.3K, Superheat 2K.

R454B非补气机型 Standard Model

电制 Power Source		3PH 50HZ 380-400V				
型号 Model		9CE034SA04	9CE039SA04	9CE046SA04	9CE051SA04	9CE058SA04
额定功率 Output	HP	3	3.5	4	4.5	5
排气量 Displacement	cm³/rev	34.1	39.1	46.1	51.1	58.5
制热量 Heating Capacity	kW	7.7	8.7	10.2	12.9	13.1
输入功率 Input Power	kW	2.7	2.9	3.4	4.1	4.1
HCOP	W/W	2.85	3.00	3.00	3.15	3.20
电流 Current	A	5.2	6.1	7	7.3	7.8
净重 Net Weight(Include Oil)	kg	31.4	32.8	32.6	33.6	33.5
冷冻机油 Oil	种类 Category	FW68S				
	充注量 Charge	1600		1700		
电动机 Motor	种类 Category	三相感应电机 3PH Induction Motor				
	启动电流 Starting Current	-				
	最大持续电流 Maximum Continuous Current	8.3	9	11.5	14.2	14.2
外观图代号 Outline Graph Code	-	EB				
吸气接管 Discharge Accepting	mm(øOD)	22.2				
排气接管 Suction Accepting	mm(øOD)	12.7				

测试工况：冷凝温度50℃，蒸发温度-7℃，过冷度8.3K，过热度2K。
Rating Condition: Condensing Temperature 50℃, Evaporating Temperature -7℃, SubCooling 8.3K, Superheat 2K.

R410A补气机型 Vapor Injection Model

电制 Power Source		3PH 50Hz 380-415V								DC Inverter			
型号 Model		C-SBP170H38Q	C-SBP205H38Q	C-SCP270H38Q	C-SCP315H38Q	C-SCP360H38Q	C-SCP435H38Q	5CC171SA02	5CF277SA12	5CD067ZA02	5CD081ZA02	5CD120ZA02	
额定功率 Output	HP	5	6	8	10	11	13	15	25	12	16	25	
排气量 Displacement	cm³/rev	56	67	90	104	120	145	171	277	67	81	120	
制热量 Heating Capacity	kW	14.6	17.1	23.3	27.8	32.4	40.6	46.0	76.9	34.0	41.0	60.0	
输入功率 Input Power	kW	5.01	5.89	7.64	8.81	10.30	12.60	14.27	22.70	10.50	12.60	18.00	
HCOP	W/W	2.91	2.90	3.05	3.16	3.15	3.22	3.22	3.39	3.24	3.25	3.34	
噪声 Sound Level	A	8.8	10.5	13.2	15.9	18.2	22.2	25.1	39.3	20.0	24.0	39.5	
电流 Current	A	59	61	72	72	72	72	76	80	*71	*72	*71	
净重 Net Weight(Include Oil)	kg	38	39	70	71	72	74	77	105	38	39	45	
冷冻机油 Oil	种类 Category	醚类油 PVE											
	充注量 Charge	1700		2800			3500		4500		1600		2100
电动机 Motor	种类 Category	三相感应电机 3PH Induction Motor										直流无刷电机 DC Brushless Motor	
	额定转速 Rotational Speed	-										90	
	启动电流 Starting Current	69	73	111	106	106	130	159	282	-			
	最大持续电流 Maximum Continuous Current	18.0	19.9	26.3	28.1	32.2	36.7	39.3	74.0	-			
吸气接管 Discharge Accepting	mm(øOD)	22.22			25.40			34.93	41.28	25.40		28.60	
排气接管 Suction Accepting	mm(øOD)	12.70			19.05			22.23	34.93	15.90		22.22	

测试工况：冷凝温度50℃，蒸发温度-7℃，过冷度2K，过热度11.1K。
Rating Condition: Condensing Temperature 50℃, Evaporating Temperature -7℃, SubCooling 2K, Superheat 11.1K.
*转速 60r/s下 at Speet 60r/s

R407C补气机型 Vapor Injection Model

电制 Power Source		3PH 50Hz 380-415V							1PH 50Hz 220-240V		
型号 Model		C-SBS 120H38Q	C-SBS 145H38Q	C-SBS 180H38Q	C-SBS 205H38Q	C-SCS 295H38Q	C-SCS 370H38Q	C-SCS 435H38Q	C-SBS 120H15Q	C-SBS 145H15Q	
额定功率 Output	HP	3.5	4	5	6	8	10	12	3.5	4	
排气量 Displacement	cm ³ /rev	56	67	83	96	137	171	205	56	67	
制热量 Heating Capacity	kW	10.4	12.3	15.0	17.3	25.0	29.6	35.5	10.1	12.4	
输入功率 Input Power	kW	3.25	3.90	4.60	5.35	7.75	9.20	11.30	3.35	3.90	
HCOP	W/W	3.20	3.15	3.26	3.23	3.23	3.22	3.14	3.01	3.18	
噪声 Sound Level	A	6.2	7.0	8.5	9.8	13.4	15.8	19.0	15.5	18.1	
电流 Current	A	62	58	57	61	67	71	72	57	62	
净重 Net Weight(Include Oil)	kg	37	37	38	38	66	70	70	37	37	
冷冻机油 Oil	种类 Category	- 醚类油 PVE									
	充注量 Charge	1700			2800				1700		
电动机 Motor	种类 Category	- 三相感应电机 3PH Induction Motor							- 单相感应电机 1PH Induction Motor		
	启动电流 Starting Current	A	64	64	73	73	80	96	96	103	103
	最大持续电流 Maximum Continuous Current	A	12.0	12.6	13.5	16.5	27.7	32.5	38.0	32.1	39.1
吸气接管 Discharge Accepting	mm(øOD)	22.22				25.40			22.22		
排气接管 Suction Accepting	mm(øOD)	12.70				19.05			12.70		

测试工况：冷凝温度50℃，蒸发温度-7℃，过冷度2K，过热度9K。
Rating Condition: Condensing Temperature 50℃, Evaporating Temperature -7℃, SubCooling2K, Superheat 9K.

R22补气机型 Vapor Injection Model

电制 Power Source		3PH 50Hz 380-415V							1PH 50Hz 220-240V		
型号 Model		C-SBR 120H38Q	C-SBR 145H38Q	C-SBR 180H38Q	C-SBR 205H38Q	C-SCR 295H38Q	C-SCR 370H38Q	C-SCR 435H38Q	C-SBR 120H15Q	C-SBR 145H15Q	
额定功率 Output	HP	3.5	4	5	6	8	10	12	3.5	4	
排气量 Displacement	cm ³ /rev	56	67	83	96	137	171	205	56	67	
制热量 Heating Capacity	kW	10.2	12.1	14.4	16.9	24.5	30.0	35.2	10.1	12.1	
输入功率 Input Power	kW	3.10	3.60	4.35	5.00	7.25	8.90	10.50	3.20	3.70	
HCOP	W/W	3.29	3.36	3.31	3.38	3.38	3.37	3.35	3.16	3.27	
噪声 Sound Level	A	5.6	6.7	8.2	8.9	12.6	15.3	18.0	14.9	17.3	
电流 Current	A	62	58	57	61	67	71	72	57	62	
净重 Net Weight(Include Oil)	kg	37	37	38	38	66	70	70	37	37	
冷冻机油 Oil	种类 Category	- 矿物油 Mineral Oil									
	充注量 Charge	1700			2800				1700		
电动机 Motor	种类 Category	- 三相感应电机 3PH Induction Motor							- 单相感应电机 1PH Induction Motor		
	启动电流 Starting Current	A	64	64	73	73	80	96	96	103	103
	最大持续电流 Maximum Continuous Current	A	12.0	12.7	13.5	16.5	27.8	32.6	38.1	31.2	37.6
吸气接管 Discharge Accepting	mm(øOD)	22.22				25.40			22.22		
排气接管 Suction Accepting	mm(øOD)	12.70				19.05			12.70		

测试工况：冷凝温度50℃，蒸发温度-7℃，过冷度2K，过热度11.1K。
Rating Condition: Condensing Temperature 50℃, Evaporating Temperature -7℃, SubCooling2K, Superheat 11.1K.

R290补气机型 Vapor Injection Model

电制 Power Source		DC Inverter 380V		
型号 Model		7CD081ZA12		7CD081ZA11
额定功率 Output	HP	-		-
排气量 Displacement	cm ³ /rev	81		81
制冷量 Cooling Capacity	kW	15.9		15.9
输入功率 Input Power	kW	4.30		4.30
COP	W/W	3.70		3.70
电流 Current	A	10.3		10.3
净重 Net Weight(Include Oil)	kg	36.8		36.8
冷冻机油 Oil	种类 Category	-		PZ68S
	充注量 Charge	ml		1600
电动机 Motor	种类 Category	-		DC Inverter 380V
	启动电流 Starting Current	A	-	
	最大持续电流 Maximum Continuous Current	A	30	
吸气接管 Discharge Accepting	mm(øOD)	25.40		25.40
排气接管 Suction Accepting	mm(øOD)	15.88		15.88

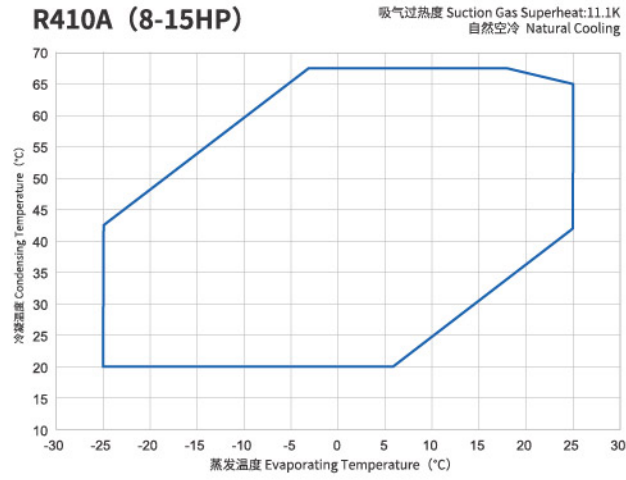
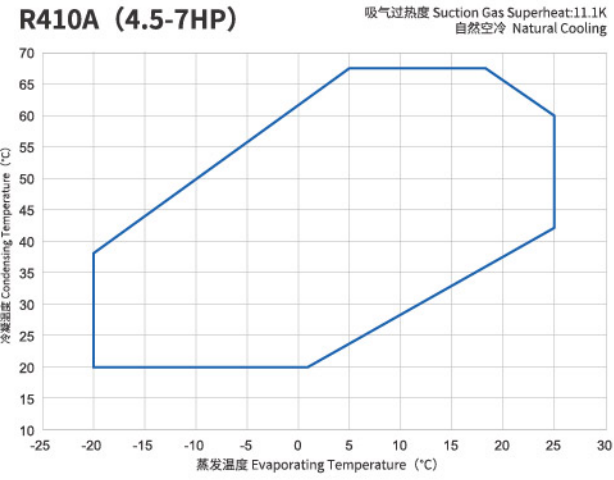
测试工况：冷凝温度54.4℃，蒸发温度7.2℃，过冷度8.3K，过热度11.1K。
Rating Condition: Condensing Temperature 54.4℃, Evaporating Temperature 7.2℃, SubCooling8.3K, Superheat 11.1K.

R32补气机型 Vapor Injection Model

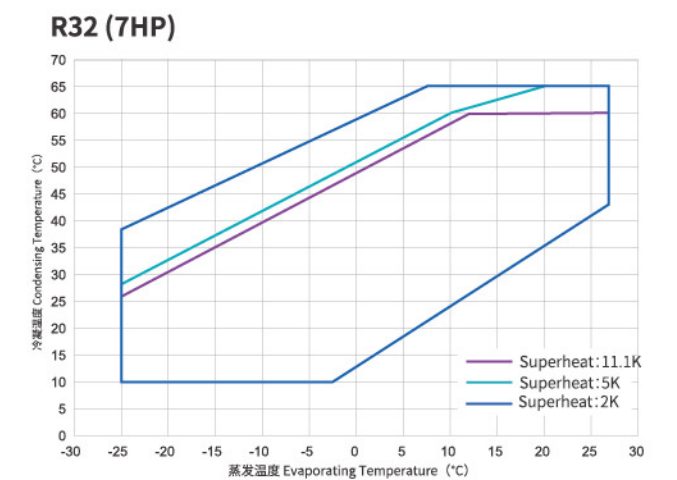
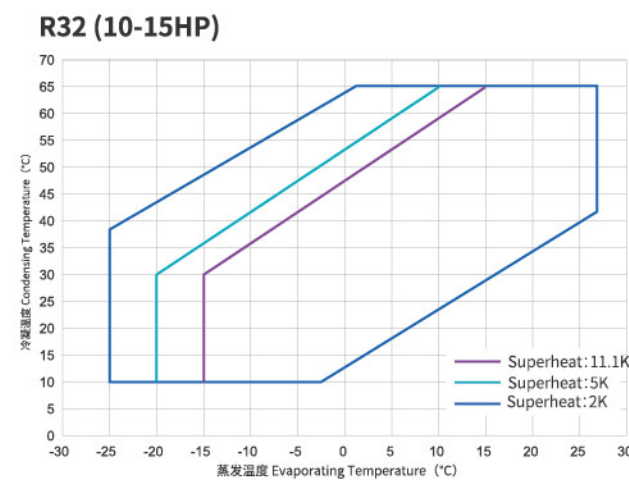
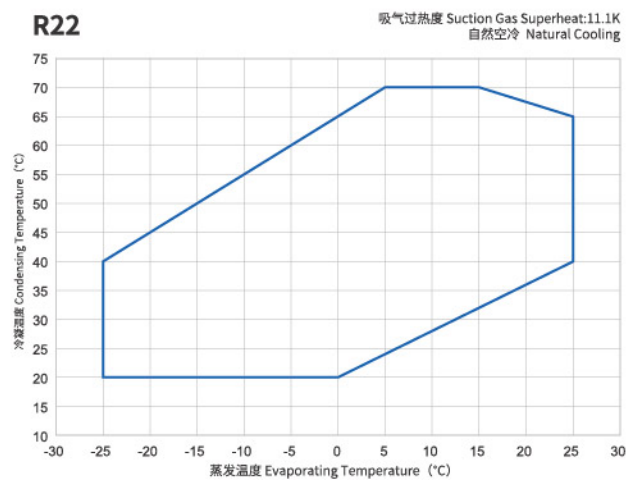
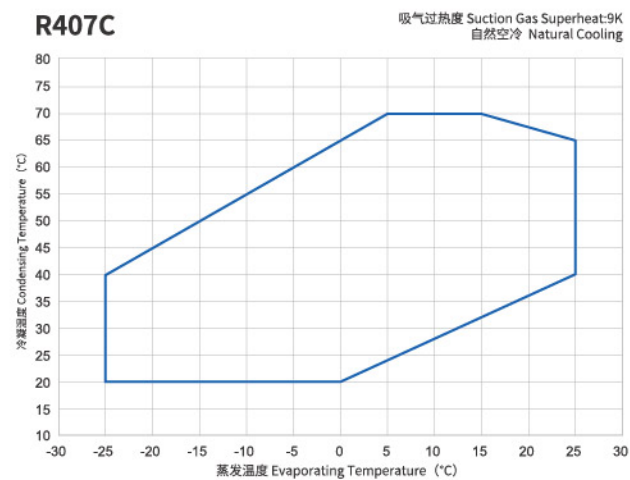
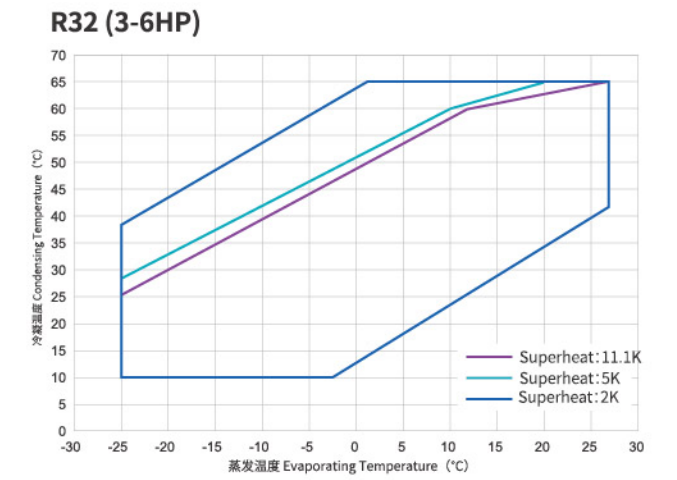
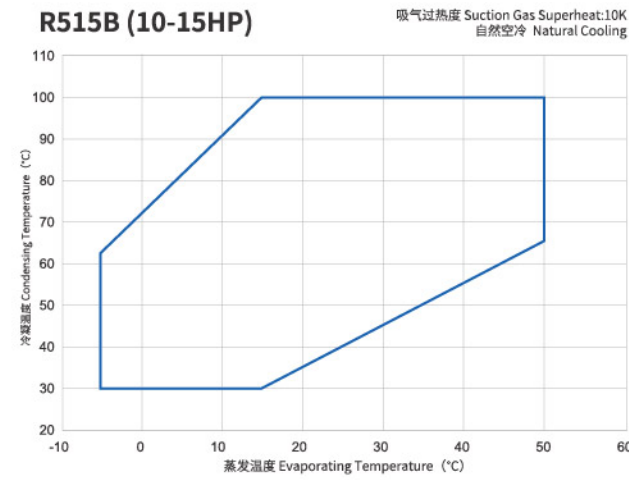
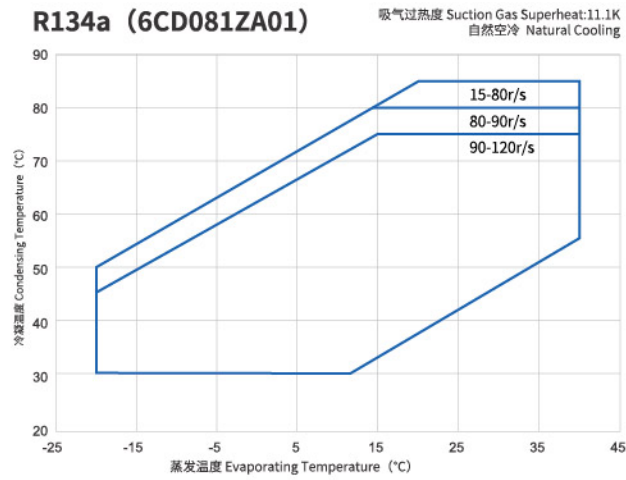
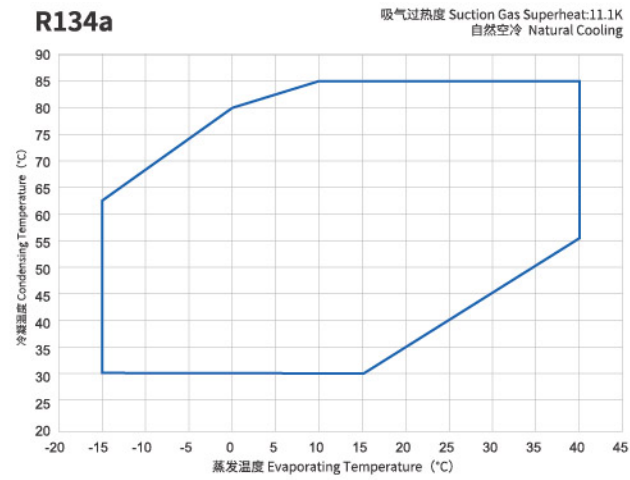
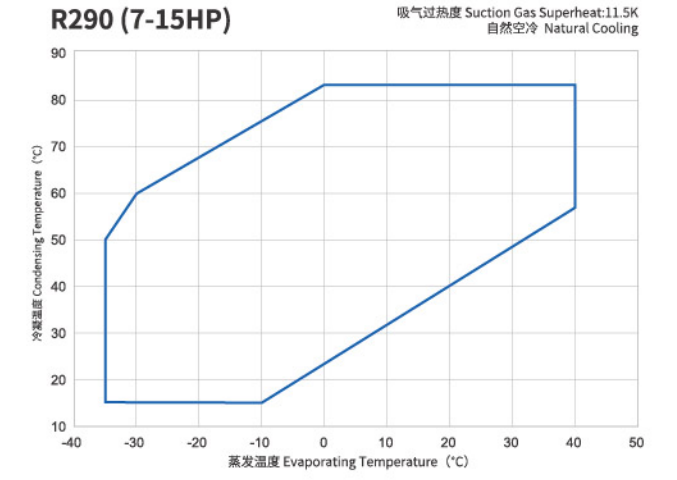
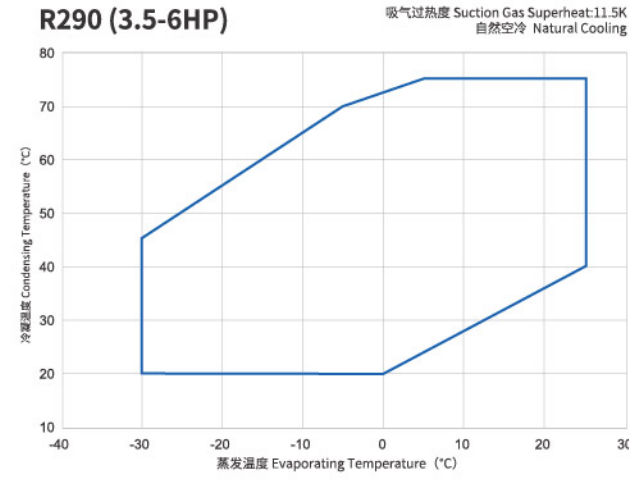
电制 Power Source		DC Inverter 380V		DC Inverter 200V	
型号 Model		9CD067ZA02	9CD081ZA02	9CD067XA02	9CD081XA02
额定功率 Output	HP	-		-	
排气量 Displacement	cm ³ /rev	67		81	
制冷量 Cooling Capacity	kW	24.5	29.6	24.5	29.6
输入功率 Input Power	kW	7.7	9.0	7.8	9.1
COP	W/W	3.20	3.30	3.15	3.25
电流 Current	A	19.6	25.8	-	-
净重 Net Weight(Include Oil)	kg	36.4	41.4	37.7	41.1
冷冻机油 Oil	种类 Category	-			
	充注量 Charge	ml			
电动机 Motor	种类 Category	-		DC Inverter 380V	
	启动电流 Starting Current	A	-	-	-
	最大持续电流 Maximum Continuous Current	A	52		-
吸气接管 Discharge Accepting	mm(øOD)	25.58		19.3	
排气接管 Suction Accepting	mm(øOD)	19.3		25.58	

测试工况：冷凝温度54.4℃，蒸发温度7.2℃，过冷度8.3K，过热度11.1K。
Rating Condition: Condensing Temperature 54.4℃, Evaporating Temperature 7.2℃, SubCooling8.3K, Superheat 11.1K.

运行范围(非补气)
Operation Envelope(Without Vapor Injection)



运行范围(非补气)
Operation Envelope(Without Vapor Injection)

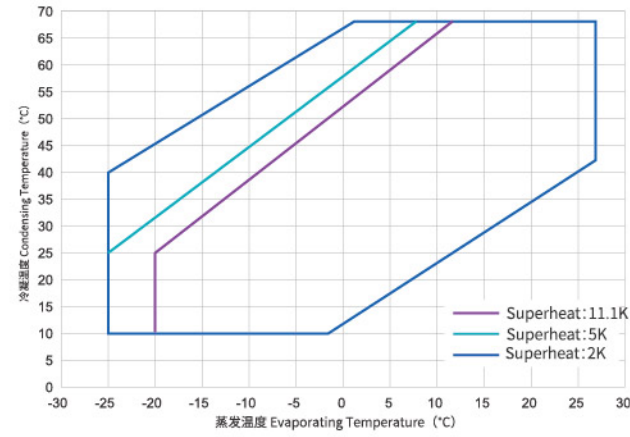


*其他过热度下的运转范围请与我公司确认。
For more information about other superheat operation, please confirm with our company.

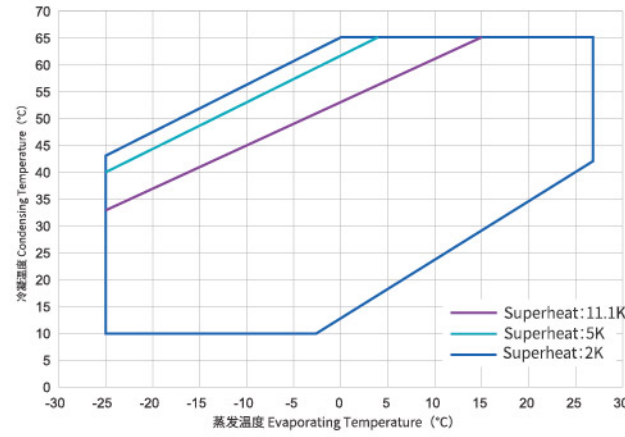
不同机型的运行范围稍有区别, 详见规格书。
The operation envelope is different from models, please refer to the specification for details.

运行范围(非补气)
Operation Envelope(Without Vapor Injection)

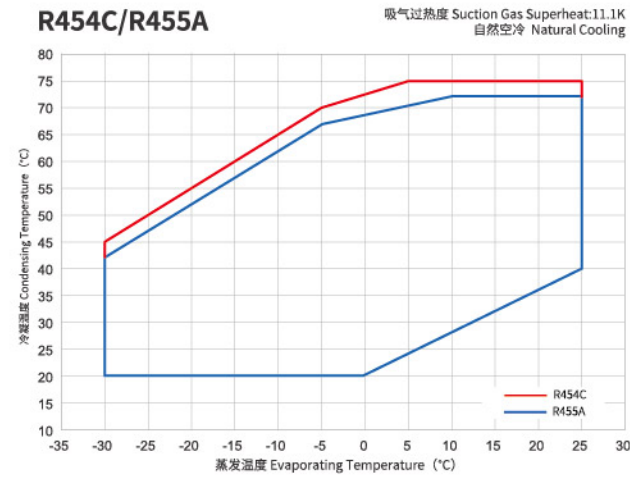
R454B (8-15HP)



R454B (3-7HP)

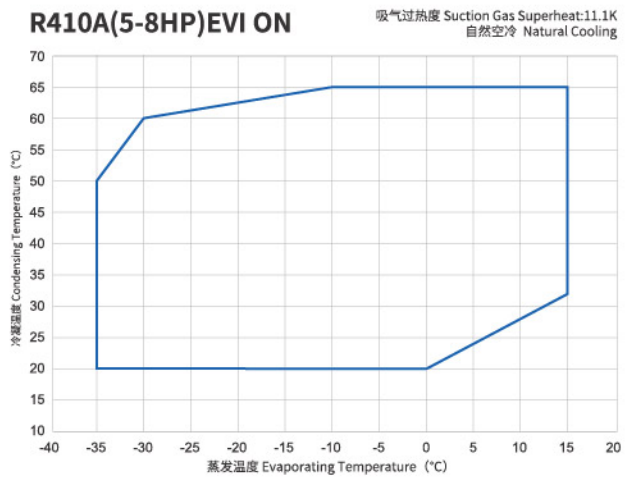


R454C/R455A

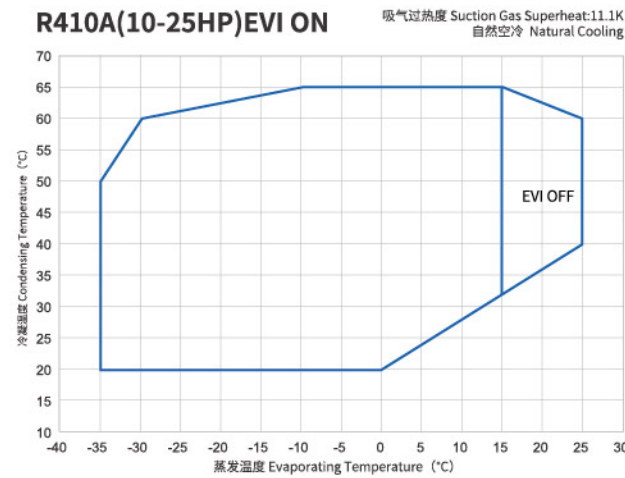


运行范围(补气)
Operation Envelope(Vapor Injection)

R410A(5-8HP)EVI ON



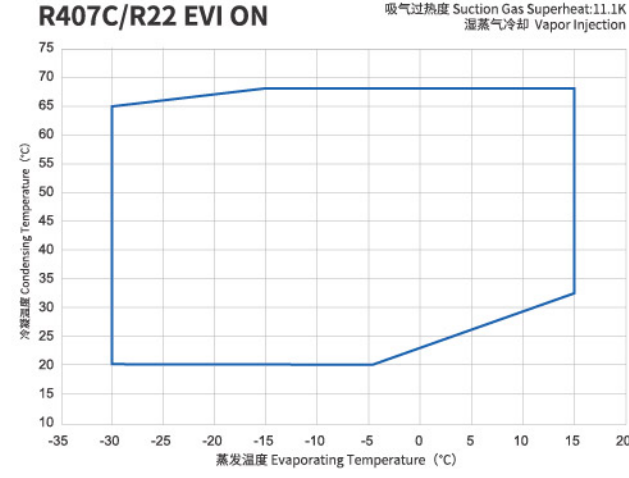
R410A(10-25HP)EVI ON



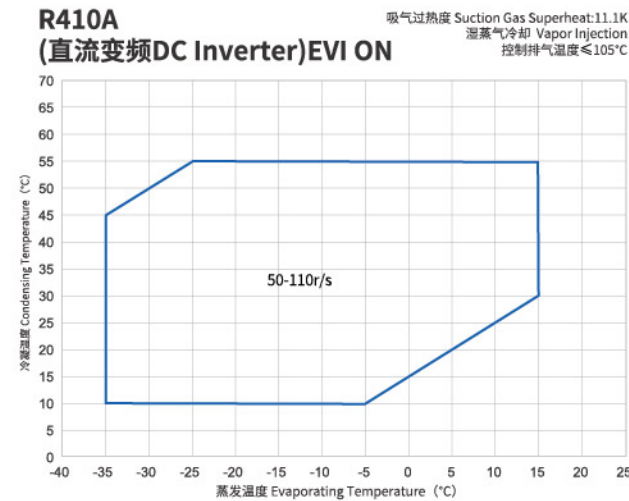
*其他过热度下的运转范围请与我公司确认。
For more information about other superheat operation, please confirm with our company.

运行范围(补气)
Operation Envelope(Vapor Injection)

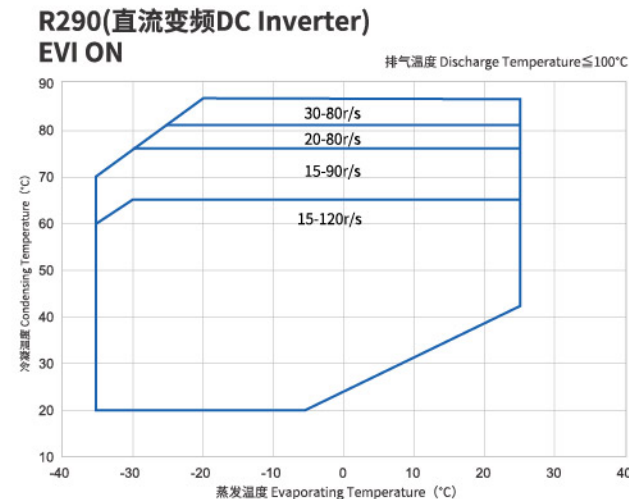
R407C/R22 EVI ON



R410A (直流变频DC Inverter)EVI ON

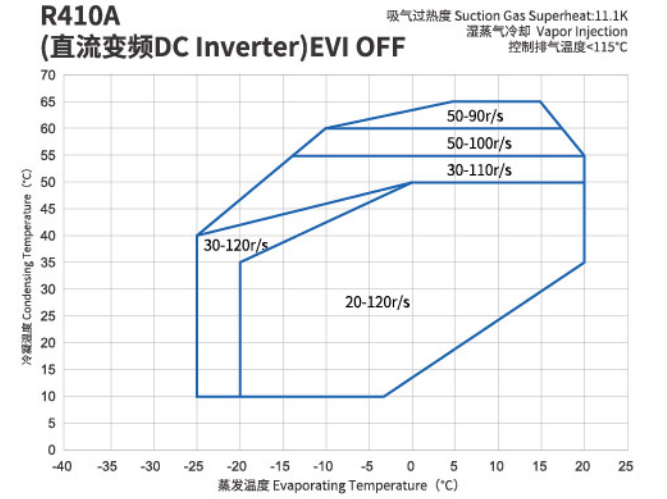


R290(直流变频DC Inverter) EVI ON

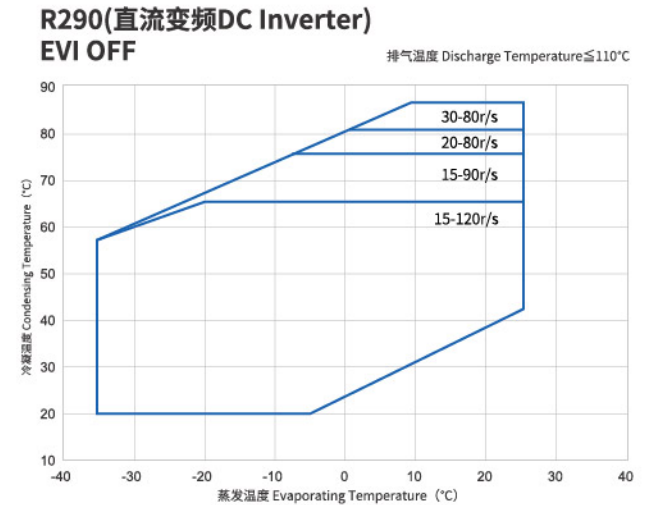


*其他过热度下的运转范围请与我公司确认。
For more information about other superheat operation, please confirm with our company.

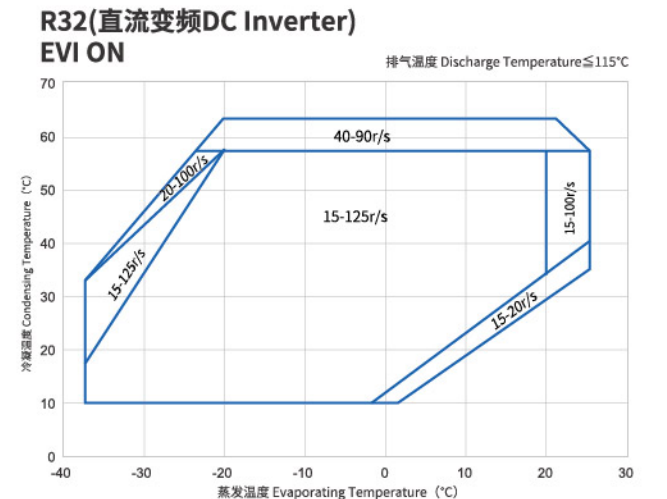
R410A (直流变频DC Inverter)EVI OFF



R290(直流变频DC Inverter) EVI OFF



R32(直流变频DC Inverter) EVI ON



不同机型的运行范围稍有区别, 详见规格书。
The operation envelope is different from models, please refer to the specification for details.

R410A制热量(非补气)(kW)
Heating Capacity R410A (Without Vapor Injection)

型号 Model	冷凝温度 Codensing Temp.(°C)	蒸发温度 Evaporating Temp(°C)							
		-25.0	-20.0	-15.0	-10.0	0	7.2	15	25
C-SBP160H38K	30.0	—	8.45	10.02	11.90	16.60	20.75	—	—
	35.0	—	8.51	9.96	11.71	16.12	20.04	25.01	—
	40.5	—	—	9.89	11.50	15.61	19.29	23.98	—
	45.0	—	—	9.84	11.34	15.20	18.71	23.18	29.94
	50.0	—	—	—	11.16	14.77	18.08	22.32	28.76
	54.4	—	—	—	—	14.41	17.55	21.59	27.76
65.0	—	—	—	—	—	16.35	19.96	—	
5CE058SA01	30.0	8.95	10.15	11.62	13.46	18.55	23.71	31.04	43.58
	35.0	9.04	10.22	11.61	13.32	17.99	22.71	29.44	41.02
	40.5	—	10.30	11.64	13.23	17.48	21.76	27.86	38.44
	45.0	—	10.38	11.69	13.20	17.16	21.09	26.72	36.51
	50.0	—	—	11.78	13.22	16.88	20.47	25.60	34.56
	54.4	—	—	11.88	13.29	16.72	20.04	24.75	33.01
65.0	—	—	—	—	—	19.39	23.21	—	
C-SBP205H38K	30.0	—	11.30	13.16	15.36	21.02	26.37	—	—
	35.0	—	11.27	13.08	15.20	20.56	25.59	32.41	—
	40.5	—	—	12.97	15.00	20.06	24.77	31.14	—
	45.0	—	—	12.87	14.83	19.67	24.13	30.14	40.01
	50.0	—	—	—	14.64	19.25	23.45	29.08	38.33
	54.4	—	—	—	—	18.89	22.87	28.19	36.90
65.0	—	—	—	—	—	21.58	26.19	—	
C-SCP315H38M	30.0	12.67	17.15	21.43	26.02	35.46	43.06	52.44	—
	35.0	11.87	16.23	20.94	24.91	33.39	41.53	51.95	—
	40.5	11.21	15.44	20.40	24.10	32.00	39.60	50.26	61.56
	45.0	—	14.97	19.98	23.58	31.02	38.18	48.25	59.46
	50.0	—	—	19.69	23.12	30.07	36.78	46.22	57.23
	54.4	—	—	—	22.84	29.37	35.70	44.61	55.37
65.0	—	—	—	—	28.23	33.67	41.37	51.24	
C-SCP360H38M	30.0	19.34	22.35	25.80	29.84	40.32	50.45	64.47	—
	35.0	18.88	21.77	25.03	28.83	38.67	48.14	61.40	—
	40.5	18.50	21.27	24.33	27.88	37.04	45.88	58.26	79.27
	45.0	—	20.97	23.91	27.25	35.88	44.22	55.91	75.88
	50.0	—	—	23.59	26.71	34.78	42.57	53.54	72.37
	54.4	—	—	—	26.36	33.96	41.30	51.64	69.52
65.0	—	—	—	—	32.58	38.91	47.86	63.51	
C-SCP400H38M	30.0	18.41	21.44	24.98	29.16	39.94	50.14	—	—
	35.0	18.38	21.39	24.83	28.84	39.04	48.62	61.59	—
	40.5	18.24	21.25	24.62	28.47	38.07	47.00	59.07	—
	45.0	—	21.09	24.41	28.14	37.29	45.73	57.09	75.75
	50.0	—	—	24.14	27.76	36.45	44.36	54.97	72.38
	54.4	—	—	—	27.40	35.73	43.21	53.17	69.52
65.0	—	—	—	—	34.06	40.58	49.12	63.04	
C-SCP420H38M	30.0	20.97	24.31	28.34	33.29	46.80	60.32	79.42	—
	35.0	20.73	23.96	27.70	32.30	44.56	56.72	74.25	—
	40.5	20.40	23.59	27.06	31.30	42.49	53.51	69.28	97.04
	45.0	—	23.28	26.68	30.64	41.04	51.20	65.66	91.45
	50.0	—	—	26.41	30.09	39.67	48.97	62.10	85.79
	54.4	—	—	—	29.76	38.69	47.30	59.38	81.31
65.0	—	—	—	—	37.17	44.36	54.30	72.37	
C-SCP510H38M	30.0	26.85	30.91	35.67	41.37	56.57	71.53	92.47	—
	35.0	26.33	30.25	34.73	40.07	54.11	67.83	87.35	—
	40.5	25.82	29.64	33.85	38.80	51.71	64.29	82.14	112.65
	45.0	—	29.22	33.32	37.96	50.04	61.75	78.32	106.88
	50.0	—	—	32.93	37.27	48.47	59.29	74.55	101.03
	54.4	—	—	—	36.85	47.35	57.45	71.63	96.36
65.0	—	—	—	—	45.65	54.23	66.15	86.98	
6CD081ZA01	30.0	8.34	9.70	10.77	13.43	15.62	17.24	19.06	22.87
	35.0	8.42	9.70	10.71	13.19	15.24	16.73	18.42	21.92
	40.5	8.52	9.75	10.70	13.06	14.99	16.40	17.97	21.25
	45.0	8.68	9.86	10.75	12.98	14.78	16.10	17.56	20.60
	50.0	8.86	9.99	10.85	12.96	14.67	15.91	17.29	20.13
	54.4	—	10.21	11.02	13.02	14.61	15.76	17.03	19.64
65.0	—	—	11.24	13.13	14.63	15.71	16.90	19.34	

测试条件Rating Condition: 自然空冷Natural Cooling, 过热度 Superheat 11.1K, 过冷度 Sub-cooling 8.3K

R410A制热量(中间补气)(kW)
Heating Capacity R410A (Vapor Injection)

型号 Model	冷凝温度 Codensing Temp.(°C)	蒸发温度 Evaporating Temp(°C)							
		-30.0	-20.0	-15.0	-10.0	0	7.2	10	12
C-SBP170H38Q	30.0	7.99	9.06	11.63	14.30	16.91	20.24	—	—
	35.0	8.21	9.26	11.79	14.40	16.92	20.13	21.54	—
	40.5	8.46	9.50	11.97	14.51	16.94	20.01	21.35	23.96
	45.0	8.67	9.70	12.12	14.59	16.95	19.91	21.19	23.70
	50.0	8.91	9.92	12.29	14.69	16.96	19.80	21.02	23.40
	54.4	9.13	10.12	12.45	14.78	16.97	19.70	20.87	23.15
60.0	9.41	10.38	12.64	14.89	16.99	19.58	20.69	22.83	
65.0	—	—	—	14.99	17.00	19.47	20.52	22.55	
C-SBP205H38Q	30.0	9.35	10.61	13.66	16.85	19.95	23.93	—	—
	35.0	9.62	10.86	13.84	16.93	19.92	23.72	25.38	—
	40.5	9.93	11.14	14.05	17.02	19.88	23.48	25.05	28.13
	45.0	10.18	11.38	14.21	17.10	19.84	23.29	24.79	27.71
	50.0	10.47	11.65	14.40	17.18	19.81	23.08	24.50	27.24
	54.4	10.74	11.89	14.57	17.26	19.78	22.90	24.24	26.84
60.0	11.08	12.20	14.79	17.35	19.74	22.67	23.92	26.34	
65.0	—	—	—	17.44	19.70	22.47	23.64	25.90	
C-SCP270H38Q	30.0	11.87	13.14	17.04	21.65	26.27	32.14	—	—
	35.0	12.25	13.61	17.57	22.10	26.58	32.21	34.63	—
	40.5	12.66	14.11	18.11	22.56	26.89	32.28	34.59	38.99
	45.0	13.08	14.61	18.66	23.02	27.20	32.35	34.54	38.70
	50.0	13.52	15.13	19.23	23.50	27.53	32.43	34.50	38.42
	54.4	13.92	15.61	19.74	23.93	27.82	32.50	34.46	38.16
60.0	14.45	16.23	20.40	24.48	28.19	32.59	34.42	37.84	
65.0	—	—	—	24.99	28.54	32.68	34.38	37.54	
C-SCP315H38Q	30.0	13.67	15.69	20.66	25.96	31.22	38.06	—	—
	35.0	14.35	16.37	21.28	26.46	31.54	38.10	41.00	—
	40.5	15.08	17.08	21.92	26.96	31.87	38.14	40.90	46.33
	45.0	15.84	17.83	22.58	27.48	32.20	38.18	40.79	45.92
	50.0	16.64	18.60	23.27	28.01	32.54	38.22	40.69	45.50
	54.4	17.37	19.32	23.88	28.48	32.83	38.25	40.59	45.14
60.0	18.36	20.27	24.70	29.10	33.22	38.30	40.47	44.68	
65.0	—	—	—	29.66	33.56	38.33	40.37	44.27	
C-SCP360H38Q	30.0	15.55	17.86	23.59	29.72	35.81	43.75	—	—
	35.0	16.28	18.60	24.27	30.28	36.20	43.86	47.25	—
	40.5	17.04	19.36	24.97	30.85	36.60	43.97	47.22	53.63
	45.0	17.84	20.15	25.69	31.44	37.00	44.07	47.18	53.28
	50.0	18.68	20.97	26.43	32.03	37.40	44.18	47.14	52.92
	54.4	19.45	21.73	27.10	32.56	37.76	44.28	47.11	52.62
60.0	20.48	22.72	27.98	33.25	38.23	44.40	47.07	52.23	
65.0	—	—	—	33.88	38.64	44.51	47.03	51.88	
C-SCP435H38Q	30.0	20.10	23.23	31.04	39.48	47.94	59.07	—	—
	35.0	20.79	23.86	31.44	39.53	47.55	57.99	62.65	—
	40.5	21.57	24.57	31.88	39.57	47.12	56.83	61.13	69.63
	45.0	22.24	25.17	32.25	39.61	46.77	55.90	59.92	67.82
	50.0	23.00	25.85	32.66	39.66	46.38	54.88	58.59	65.86
	54.4	23.70	26.47	33.03	39.69	46.04	54.00	57.45	64.18
60.0	24.61	27.28	33.51	39.74	45.62	52.90	56.03	62.10	
65.0	—	—	—	39.79	45.24	51.93	54.80	60.31	
5CC171SA02	30.0	23.84	27.23	35.55	44.36	53.03	64.25	—	—
	35.0	24.76	28.13	36.33	44.91	53.30	64.07	68.82	—
	40.5	25.82	29.16	37.20	45.53	53.59	63.86	68.36	77.21
	45.0	26.72	30.03	37.93	46.04	53.83	63.69	67.99	76.41
	50.0	27.76	31.02	38.75	46.61	54.11	63.50	67.59	75.54
	54.4	28.71	31.93	39.50	47.13	54.34	63.34	67.23	74.77
60.0	29.96	33.12	40.46	47.79	54.65	63.13	66.77	73.81	
65.0	—	—	—	48.38	54.93	62.95	66.37	72.96	

测试条件Rating Condition: 补气Vapor Injection, 过热度 Superheat 11.1K, 过冷度 Sub-cooling 2K

R410A制热量(中间补气)(kW) Heating Capacity R410A (Vapor Injection)

型号 Model	冷凝温度 Codensing Temp.(°C)	蒸发温度 Evaporating Temp(°C)							
		-30.0	-25.0	-15.0	-6.7	0	7.2	10	15
5CF277SA12	30.0	40.65	46.49	60.80	75.97	90.94	110.32	118.93	136.01
	35.0	42.11	47.90	61.99	76.78	91.26	109.87	118.10	134.35
	40.5	43.77	49.50	63.32	77.68	91.61	109.38	117.19	132.54
	45.0	45.18	50.85	64.43	78.42	91.90	108.98	116.45	131.08
	50.0	46.79	52.39	65.69	79.26	92.22	108.53	115.63	129.47
	54.4	48.26	53.79	66.82	80.00	92.51	108.14	114.91	128.08
	60.0	50.20	55.62	68.28	80.95	92.87	107.65	114.01	126.32
65.0	—	—	—	81.81	93.20	107.21	113.21	124.77	

型号 Model	冷凝温度 Codensing Temp.(°C)	蒸发温度 Evaporating Temp(°C)							
		-30.0	-20.0	-15.0	-6.7	0	7.2	10	12
5CD067ZA02 (转速Speed 60r/s)	35.0	12.09	15.48	17.52	21.51	25.39	30.34	32.52	34.17
	40.5	12.79	16.18	18.19	22.11	25.87	30.64	32.72	34.29
	45.0	13.40	16.77	18.76	22.60	26.27	30.88	32.89	34.40
	50.0	14.10	17.45	19.41	23.17	26.72	31.16	33.07	34.51
	54.4	—	18.07	20.00	23.68	27.13	31.40	33.24	34.62
	60.0	—	—	20.78	24.34	27.65	31.71	33.45	34.75
5CD067ZA02 (转速Speed 90r/s)	35.0	23.43	28.80	31.92	37.88	43.49	50.45	53.45	55.70
	40.5	21.92	27.22	30.34	36.31	41.98	49.06	52.13	54.44
	45.0	20.76	26.00	29.09	35.07	40.78	47.95	51.07	53.42
	50.0	19.54	24.70	27.77	33.74	39.48	46.74	49.91	52.31
	54.4	—	23.61	26.66	32.61	38.37	45.70	48.91	51.35
	60.0	—	—	25.31	31.23	37.01	44.41	47.67	50.15
5CD081ZA02 (转速Speed 60r/s)	35.0	14.83	18.99	21.48	26.38	31.13	37.20	39.87	41.89
	40.5	15.69	19.84	22.31	27.11	31.72	37.57	40.12	42.05
	45.0	16.43	20.56	23.00	27.71	32.21	37.86	40.32	42.17
	50.0	17.29	21.40	23.80	28.41	32.77	38.20	40.55	42.32
	54.4	—	22.16	24.53	29.03	33.26	38.50	40.75	42.44
	60.0	—	—	25.48	29.84	33.90	38.88	41.01	42.60
5CD081ZA02 (转速Speed 90r/s)	35.0	29.53	36.29	40.24	47.75	54.82	63.59	67.37	70.21
	40.5	27.63	34.31	38.23	45.76	52.91	61.84	65.70	68.61
	45.0	26.16	32.77	36.67	44.20	51.39	60.43	64.37	67.33
	50.0	24.63	31.13	35.01	42.53	49.76	58.91	62.91	65.93
	54.4	—	29.76	33.60	41.10	48.36	57.60	61.65	64.72
	60.0	—	—	31.90	39.37	46.64	55.97	60.09	63.21
65.0	—	—	—	—	—	—	—	—	

型号 Model	冷凝温度 Codensing Temp.(°C)	蒸发温度 Evaporating Temp(°C)							
		-25.0	-15.0	-10	0	5	7.2	10	15
5CD120ZA02 (转速Speed 90r/s)	30.0	36.80	46.69	53.29	69.80	79.71	84.41	90.72	102.82
	35.0	36.43	45.99	52.35	68.23	77.75	82.28	88.33	99.95
	40.5	36.46	45.60	51.71	66.97	76.14	80.49	86.32	97.53
	45.0	36.88	45.52	51.36	66.02	74.86	79.07	84.70	95.55
	50.0	37.71	45.77	51.30	65.38	73.92	78.00	83.47	94.02
54.4	38.77	46.23	51.49	65.05	73.37	77.35	82.70	93.04	

测试条件Rating Condition: 自然空冷Natural Cooling, 过热度 Superheat 11.1K, 过冷度 Sub-cooling 8.3K

R410A非补气机型使用标准·使用极限 Application Standard & Limit(R410A Standard Model)

为正确使用立式涡旋压缩机, 对其使用标准、使用极限作如下规定:

使用标准值:适用于常用条件下(日本JIS B8616与JIS B8616相关标准、过载、低温条件下的商品运转条件)的运转。

使用极限值:适用于过渡条件下的短时间运转。

The following requirement apply to Vertical type Hermetic Scroll Compressors:Applicable to ordinary conditions in Japan JIS B8616 or equivalent condition,such as standard rating conditions, maximum operating conditions, low temp erature conditions,etc. Applicable to transitional brief periods.

序号 No.	项目 Item	使用标准值 Standard	使用极限值 Limit	备注 Note
1	制冷剂 Refrigerant	R410A		
2	蒸发温度范围 Evaporating Temp.	-22~+25°C[0.27~1.55MPa(G)](4.5~7HP)	-25~+25°C[0.23~1.55MPa(G)](8~15HP)	压力指吸气压力 Compressor Suction Pressure
3	冷凝温度范围 Condensing Temp.	+20~+67°C 1.34~4.30MPa(G)	+67°C 4.30MPa(G)	压力指排气压力 Compressor Discharge Pressure
4	压缩比 Compression Ratio	1.5~8	8	
5	电动机绕组温度 Winding Temp.	115°C以下 115°C Max.	125°C	
6	压缩机外壳底部温度 Shell Bottom Temp.	上限: 90°C以下 Upper Limit:90°C Max. 下限: 蒸发压力相对应饱和温度+12°C以上 Lower Limit:Evaporating Temp.+12°C Min.		运转时 When compressor is running
		下限: 环境温度+11K以上 Lower Limit:Ambient Temp.+11K Min. *如不能保证, 具体应用时请与我司确认。 Please confirm with our company for specific application if lower than limit.		停机时 When compressor shuts off
7	排气温度 Discharge Gas Temp.	115°C以下115°C Max.	C-SB:130°C以下130°C Max. C-SC:135°C以下135°C Max.	距压缩机出口10cm以内位置的排气管温度 Within 100mm(4in) of the discharge fitting.
8	吸气温度 Suction Gas Temp.	吸气过热度在5K以上 Superheat:5K Min.	应无由于液体吸入而引起的冲刷音(不增加电流及振动) No excessive noise.	压缩机入口30cm以内位置的吸气管温度。还应同时满足5,6,7,13项 It should meet the requirement of item 5,6,7 and 13 within 30cm of the suction fitting.
9	运转时供电电压 Running Voltage	额定电压±10% Within ±10% of the rated voltage.		运转时压缩机接线柱电压 Voltage at compressor terminals.
10	启动时供电电压 Starting Voltage	三相机: 额定电压85%以上 Three Phase Models:85% of the rated voltage min. 单相机: 额定电压90%以上 Single Phase Models:90% of the rated voltage min.		指在启动电流升高, 电压下降时的压缩机接线柱电压 Dropped voltage at compressor terminals.
11	启停周期 On/Off Period	运转时间: 至少应使油回到指定油位所需的时间 ON Period:Until the oil level returns to the center of the lower bearing. 停止时间: 至少应使高低压达到平衡所需的时间 OFF Period:Until balance of high and low pressure is obtained.		一个循环周期为10分钟以上, 停机3分钟, 以此为基准, 启停周期不得超过20万个周期 For at least 7 minutes-ON/3 minutes-OFF is recommendable.200,000 cycle Max.
12	制冷剂注入量 Refrigerant Charge	油/制冷剂重量比推荐为0.35以上 Oil/Refrigerant(wt.)≥0.35		油比重: 0.94 Specific gravity Oil:0.94
13	压缩机内最低油面 Minimum Oil Level	C-SB: 保持在压缩机内下轴承的中部 Center of the lower bearing. C-SC: 规定封入量的70%以上 No less than 70% of the initial oil charge.	C-SB: 不低于压缩机下轴承的下端面 Bottom of the lower bearing.	
14	异常升压/降压 Abnormal Pressure Rise/Drop	压力上升: 4.30MPa(G)以下 Pressure Rise:4.30MPa(G) Max. 压力下降: 0.15MPa(G)以上 Pressure Drop:0.15MPa(G) Min.		高压开关设定值 By high pressure switch 低压开关设定值 By low pressure switch
15	水份 System Moisture Level	200ppm以下 200ppm Max.		
16	不凝性气体 System Uncondensable Gas Level	1%(容积比)以下 1 Vol.% Max. 残留氧气要求在0.1%(容积比)以下 Residual Oxygen 0.1 Vol.% Max.		抽真空24小时以后绝对压力应在1.01kPa以下 24 hrs. after vacuuming:1.01kPa Max.
17	倾斜角度 Tilt	5°以内 5°Max.		

■ 在超出本标准书的范围内进行商品设计时, 另行商定。 Operation beyond the above limits must be approved by our company.

(G): 表压 Gauge Pressure

R134a机型使用标准・使用极限 Application Standard & Limit(R134a Standard Model)

为正确使用立式涡旋压缩机，对其使用标准、使用极限作如下规定：

使用标准值:适用于常用条件下(日本JIS B8616与JIS B8616相关标准、过载、低温条件下的商品运转条件)的运转。

使用极限值:适用于过渡条件下的短时间运转。

The following requirement apply to Vertical type Hermetic Scroll Compressors:Applicable to ordinary conditions in Japan JIS B8616 or equivalent condition,such as standard rating conditions, maximum operating conditions, low temp erature conditions,etc. Applicable to transitional brief periods.

序号 No.	项目 Item	使用标准值 Standard	使用极限值 Limit	备注 Note
1	制冷剂 Refrigerant	R134a		
2	蒸发温度范围 Evaporating Temp.	-15~+40℃ 0.06~0.92MPa(G)		压力指吸气压力 Compressor Suction Pressure
3	冷凝温度范围 Condensing Temp.	+30~+85℃ 0.67~2.83MPa(G)	+85℃ 2.83MPa(G)	压力指排气压力 Compressor Discharge Pressure
4	压缩比 Compression Ratio	1.5~12	12	
5	电动机绕组温度 Winding Temp.	115℃以下 115℃ Max.	125℃	
6	压缩机外壳底部温度 Shell Bottom Temp.	上限: 90℃以下 Upper Limit:90℃ Max. 下限: 蒸发压力相对应饱和温度高12℃以上 Lower Limit:Evaporating Temp.+12℃ Min.		运转时 When compressor is running
		下限: 环境温度+11K以上 Lower Limit:Ambient Temp.+11K Min.		停机时 When compressor shuts off
7	排气温度 Discharge Gas Temp.	115℃以下115℃ Max.	6CB:130℃以下130℃ Max.	距压缩机出口10cm以内位置的排气管温度 Within 100mm(4in) of the discharge fitting.
			6CC:135℃以下135℃ Max.	
8	吸气温度 Suction Gas Temp.	吸气过热度在5K以上 Superheat:5K Min.	应无由于液体吸入而引起的冲刷音(不增加电流及振动) No excessive noise.	压缩机入口30cm以内位置的吸气管温度。还应同时满足5,6,7,13项 It should meet the requirement of item 5,6,7 and 13 within 30cm of the suction fitting.
9	运转时供电电压 Running Voltage	额定电压±10% Within ±10% of the rated voltage.		运转时压缩机接线柱电压 Voltage at compressor terminals.
10	启动时供电电压 Starting Voltage	三相机: 额定电压85%以上 Three Phase Models:85% of the rated voltage min. 单相机: 额定电压90%以上 Single Phase Models:90% of the rated voltage min.		指在启动电流升高, 电压下降时的压缩机接线柱电压 Dropped voltage at compressor terminals.
11	启停周期 On/Off Period	运转时间: 至少应使油回到指定油位所需的时间 ON Period:Until the oil level returns to the center of the lower bearing.		一个循环周期为10分钟以上, 停机3分钟, 以此为基准, 启停周期不得超过20万个周期 For at least 7 minutes-ON/3 minutes-OFF is recommendable.200,000 cycle Max.
		停止时间: 至少应使高低压达到平衡所需的时间 OFF Period:Until balance of high and low pressure is obtained.		
12	制冷剂注入量 Refrigerant Charge	油/制冷剂重量比推荐为0.35以上 Oil/Refrigerant(wt.)≥0.35		油比重: 0.94 Specific gravity Oil:0.94
13	压缩机内最低油面 Minimum Oil Level	6CB:保持在压缩机内下轴承的中部以上 Center of the lower bearing.	6CB:不低于压缩机下轴承的下端面 Bottom of the lower bearing.	
		6CC: 规定封入量的70%以上 No less than 70% of the initial oil charge.		
14	异常升压/降压 Abnormal Pressure Rise/Drop	压力上升: 3.00MPa(G)以下 Pressure Rise:3.00MPa(G) Max. 压力下降: 0.05MPa(G)以上 Pressure Drop:0.05MPa(G) Min.		高压开关设定值 By high pressure switch 低压开关设定值 By low pressure switch
15	水份 System Moisture Level	200ppm以下 200ppm Max.		
16	不凝性气体 System Uncondensable Gas Level	1%(容积比)以下 1 Vol.% Max. 残留氧气要求在0.1%(容积比)以下 Residual Oxygen 0.1 Vol.% Max.		抽真空24小时以后绝对压力应在1.01kPa以下 24 hrs. after vacuuming:1.01kPa Max.
17	倾斜角度 Tilt	5°以内 5°Max.		

R407C非补气机型使用标准・使用极限 Application Standard & Limit(R407C Standard Model)

为正确使用立式涡旋压缩机，对其使用标准、使用极限作如下规定：

使用标准值:适用于常用条件下(日本JIS B8616与JIS B8616相关标准、过载、低温条件下的商品运转条件)的运转。

使用极限值:适用于过渡条件下的短时间运转。

The following requirement apply to Vertical type Hermetic Scroll Compressors:Applicable to ordinary conditions in Japan JIS B8616 or equivalent condition,such as standard rating conditions, maximum operating conditions, low temp erature conditions,etc. Applicable to transitional brief periods.

序号 No.	项目 Item	使用标准值 Standard	使用极限值 Limit	备注 Note
1	制冷剂 Refrigerant	R407C		
2	蒸发温度范围 Evaporating Temp.	-25~+25℃ 0.10~1.00MPa(G)		压力指吸气压力 Compressor Suction Pressure
3	冷凝温度范围 Condensing Temp.	+20~+70℃ 0.86~3.20MPa(G)	+70℃ 3.20MPa(G)	压力指排气压力 Compressor Discharge Pressure
4	压缩比 Compression Ratio	1.5~9	9	
5	电动机绕组温度 Winding Temp.	115℃以下 115℃ Max.	125℃	
6	压缩机外壳底部温度 Shell Bottom Temp.	上限: 90℃以下 Upper Limit:90℃ Max. 下限: 蒸发压力相对应饱和温度高12℃以上 Lower Limit:Evaporating Temp.+12℃ Min.		运转时 When compressor is running
		下限: 环境温度+11K以上 Lower Limit:Ambient Temp.+11K Min. *如不能保证, 具体应用时请与我司确认。 Please confirm with our company for specific application if lower than limit.		停机时 When compressor shuts off
7	排气温度 Discharge Gas Temp.	115℃以下115℃ Max.	C-SB:130℃以下130℃ Max.	距压缩机出口10cm以内位置的排气管温度 Within 100mm(4in) of the discharge fitting.
			C-SC/4CC:135℃以下135℃ Max.	
8	吸气温度 Suction Gas Temp.	吸气过热度在5K以上 Superheat:5K Min.	应无由于液体吸入而引起的冲刷音(不增加电流及振动) No excessive noise.	压缩机入口30cm以内位置的吸气管温度。还应同时满足5,6,7,13项 It should meet the requirement of item 5,6,7 and 13 within 30cm of the suction fitting.
9	运转时供电电压 Running Voltage	额定电压±10% Within ±10% of the rated voltage.		运转时压缩机接线柱电压 Voltage at compressor terminals.
10	启动时供电电压 Starting Voltage	三相机: 额定电压85%以上 Three Phase Models:85% of the rated voltage min. 单相机: 额定电压90%以上 Single Phase Models:90% of the rated voltage min.		指在启动电流升高, 电压下降时的压缩机接线柱电压 Dropped voltage at compressor terminals.
11	启停周期 On/Off Period	运转时间: 至少应使油回到指定油位所需的时间 ON Period:Until the oil level returns to the center of the lower bearing.		一个循环周期为10分钟以上, 停机3分钟, 以此为基准, 启停周期不得超过20万个周期 For at least 7 minutes-ON/3 minutes-OFF is recommendable.200,000 cycle Max.
		停止时间: 至少应使高低压达到平衡所需的时间 OFF Period:Until balance of high and low pressure is obtained.		
12	制冷剂注入量 Refrigerant Charge	油/制冷剂重量比推荐为0.35以上 Oil/Refrigerant(wt.)≥0.35		油比重: 0.94 Specific gravity Oil:0.94
13	压缩机内最低油面 Minimum Oil Level	C-SB: 保持在压缩机内下轴承的中部以上 Center of the lower bearing.	C-SB: 不低于压缩机下轴承的下端面 Bottom of the lower bearing.	
		C-SC: 规定封入量的70%以上 No less than 70% of the initial oil charge.		
14	异常升压/降压 Abnormal Pressure Rise/Drop	压力上升: 3.30MPa(G)以下 Pressure Rise:3.30MPa(G) Max. 压力下降: 0.05MPa(G)以上 Pressure Drop:0.05MPa(G) Min.		高压开关设定值 By high pressure switch 低压开关设定值 By low pressure switch
15	水份 System Moisture Level	200ppm以下 200ppm Max.		
16	不凝性气体 System Uncondensable Gas Level	1%(容积比)以下 1 Vol.% Max. 残留氧气要求在0.1%(容积比)以下 Residual Oxygen 0.1 Vol.% Max.		抽真空24小时以后绝对压力应在1.01kPa以下 24 hrs. after vacuuming:1.01kPa Max.
17	倾斜角度 Tilt	5°以内 5°Max.		

R22非补气机型使用标准·使用极限 Application Standard & Limit(R22 Standard Model)

为正确使用立式涡旋压缩机，对其使用标准、使用极限作如下规定：

使用标准值:适用于常用条件下(日本JIS B8616与JIS B8616相关标准、过载、低温条件下的商品运转条件)的运转。

使用极限值:适用于过渡条件下的短时间运转。

The following requirement apply to Vertical type Hermetic Scroll Compressors:Applicable to ordinary conditions in Japan JIS B8616 or equivalent condition,such as standard rating conditions, maximum operating conditions, low temp erature conditions,etc. Applicable to transitional brief periods.

序号 No.	项目 Item	使用标准值 Standard	使用极限值 Limit	备注 Note
1	制冷剂 Refrigerant	R22		
2	蒸发温度范围 Evaporating Temp.	-25~+25℃ 0.10~0.94MPa(G)		压力指吸气压力 Compressor Suction Pressure
3	冷凝温度范围 Condensing Temp.	+20~+70℃ 1.09~2.90MPa(G)	+70℃ 2.90MPa(G)	压力指排气压力 Compressor Discharge Pressure
4	压缩比 Compression Ratio	1.5~8	8	
5	电动机绕组温度 Winding Temp.	115℃以下 115℃ Max.	125℃	
6	压缩机外壳底部温度 Shell Bottom Temp.	上限: 90℃以下 Upper Limit:90℃ Max. 下限: 蒸发压力相对应饱和温度高12℃以上 Lower Limit:Evaporating Temp.+12℃ Min.		运转时 When compressor is running
		下限: 环境温度+11K以上 Lower Limit:Ambient Temp.+11K Min. *如不能保证, 具体应用时请与我司确认。 Please confirm with our company for specific application if lower than limit.		停机时 When compressor shuts off
7	排气温度 Discharge Gas Temp.	115℃以下115℃ Max.	C-SB:130℃以下130℃ Max.	距压缩机出口10cm以内位置的排气管温度 Within 100mm(4in) of the discharge fitting.
			C-SC/2CC:135℃以下135℃ Max.	
8	吸气温度 Suction Gas Temp.	吸气过热度在5K以上 Superheat:5K Min.	应无由于液体吸入而引起的冲刷音(不增加电流及振动) No excessive noise.	压缩机入口30cm以内位置的吸气管温度。还应同时满足5,6,7,13项 It should meet the requirement of item 5,6,7 and 13 within 30cm of the suction fitting.
9	运转时供电电压 Running Voltage	额定电压±10% Within ±10% of the rated voltage.		运转时压缩机接线柱电压 Voltage at compressor terminals.
10	启动时供电电压 Starting Voltage	三相机: 额定电压85%以上 Three Phase Models:85% of the rated voltage min. 单相机: 额定电压90%以上 Single Phase Models:90% of the rated voltage min.		指在启动电流升高, 电压下降时的压缩机接线柱电压 Dropped voltage at compressor terminals.
11	启停周期 On/Off Period	运转时间: 至少应使油回到指定油位所需的时间 ON Period:Until the oil level returns to the center of the lower bearing.		一个循环周期为10分钟以上, 停机3分钟, 以此为基准, 启停周期不得超过20万个周期 For at least 7 minutes-ON/3 minutes-OFF is recommendable.200,000 cycle Max.
		停止时间: 至少应使高低压达到平衡所需的时间 OFF Period:Until balance of high and low pressure is obtained.		
12	制冷剂注入量 Refrigerant Charge	油/制冷剂重量比推荐为0.35以上 Oil/Refrigerant(wt.)≥0.35		油比重: 0.92 Specific gravity Oil:0.92
13	压缩机内最低油面 Minimum Oil Level	C-SB:保持在压缩机内下轴承的中部以上 Center of the lower bearing.	C-SB:不低于压缩机下轴承的下端面 Bottom of the lower bearing.	
		C-SC/2CC:规定封入量的70%以上 No less than 70% of the initial oil charge.		
14	异常升压/降压 Abnormal Pressure Rise/Drop	压力上升: 3.00MPa(G)以下 Pressure Rise:3.00MPa(G) Max. 压力下降: 0.03MPa(G)以上 Pressure Drop:0.03MPa(G) Min.		高压开关设定值 By high pressure switch 低压开关设定值 By low pressure switch
15	水份 System Moisture Level	200ppm以下 200ppm Max.		
16	不凝性气体 System Uncondensable Gas Level	1%(容积比)以下 1 Vol.% Max. 残留氧气要求在0.1%(容积比)以下 Residual Oxygen 0.1 Vol.% Max.		抽真空24小时以后绝对压力应在1.01kPa以下 24 hrs. after vacuuming:1.01kPa Max.
17	倾斜角度 Tilt	5°以内 5°Max.		

R454C/R455A非补气机型使用标准·使用极限 Application Standard & Limit(R454C/R455A Standard Model)

为正确使用立式涡旋压缩机，对其使用标准、使用极限作如下规定：

使用标准值:适用于常用条件下(日本JIS B8616与JIS B8616相关标准、过载、低温条件下的商品运转条件)的运转。

使用极限值:适用于过渡条件下的短时间运转。

The following requirement apply to Vertical type Hermetic Scroll Compressors:Applicable to ordinary conditions in Japan JIS B8616 or equivalent condition,such as standard rating conditions, maximum operating conditions, low temp erature conditions,etc. Applicable to transitional brief periods.

序号 No.	项目 Item	使用标准值 Standard	使用极限值 Limit	备注 Note
1	制冷剂 Refrigerant	R454C/R455A		
2	蒸发温度范围 Evaporating Temp.	R454C	-30~+25℃ 0.04~0.88MPa(G)	压力指吸气压力 Compressor Suction Pressure
		R455A	-30~+25℃ 0.05~0.94MPa(G)	
3	冷凝温度范围 Condensing Temp.	R454C	+20~+75℃ 0.75~3.22MPa(G)	压力指排气压力 Compressor Discharge Pressure
		R455A	+20~+72℃ 0.80~3.22MPa(G)	
4	压缩比 Compression Ratio	1.5~11	11	
5	电动机绕组温度 Winding Temp.	115℃以下 115℃ Max.	125℃	
6	压缩机外壳底部温度 Shell Bottom Temp.	上限: 90℃以下 Upper Limit:90℃ Max. 下限: 蒸发压力相对应饱和温度高12℃以上 Lower Limit:Evaporating Temp.+12℃ Min.		运转时 When compressor is running
		下限: 环境温度+11K以上 Lower Limit:Ambient Temp.+11K Min. *如不能保证, 具体应用时请与我司确认。 Please confirm with our company for specific application if lower than limit.		停机时 When compressor shuts off
7	排气温度 Discharge Gas Temp.	115℃以下115℃ Max.	GCB:130℃以下 130℃ Max.	距压缩机出口10cm以内位置的排气管温度 Within 100mm(4in) of the discharge fitting.
			GCC:135℃以下 135℃ Max.	
8	吸气温度 Suction Gas Temp.	吸气过热度在5K以上 Superheat:5K Min.	应无由于液体吸入而引起的冲刷音(不增加电流及振动) No excessive noise.	压缩机入口30cm以内位置的吸气管温度。还应同时满足5,6,7,13项 It should meet the requirement of item 5,6,7 and 13 within 30cm of the suction fitting.
9	运转时供电电压 Running Voltage	额定电压±10% Within ±10% of the rated voltage.		运转时压缩机接线柱电压 Voltage at compressor terminals.
10	启动时供电电压 Starting Voltage	三相机: 额定电压85%以上 Three Phase Models:85% of the rated voltage min. 单相机: 额定电压90%以上 Single Phase Models:90% of the rated voltage min.		指在启动电流升高, 电压下降时的压缩机接线柱电压 Dropped voltage at compressor terminals.
11	启停周期 On/Off Period	运转时间: 至少应使油回到指定油位所需的时间 ON Period:Until the oil level returns to the center of the lower bearing.		一个循环周期为10分钟以上, 停机3分钟, 以此为基准, 启停周期不得超过20万个周期 For at least 7 minutes-ON/3 minutes-OFF is recommendable.200,000 cycle Max.
		停止时间: 至少应使高低压达到平衡所需的时间 OFF Period:Until balance of high and low pressure is obtained.		
12	制冷剂注入量 Refrigerant Charge	油/制冷剂重量比推荐为0.35以上 Oil/Refrigerant(wt.)≥0.35		油比重: 0.94 Specific gravity Oil:0.94
13	压缩机内最低油面 Minimum Oil Level	GCB: 保持在压缩机内下轴承的中部以上 Center of the lower bearing.	GCB: 不低于压缩机下轴承的下端面 Bottom of the lower bearing.	
		GCC: 规定封入量的70%以上 No less than 70% of the initial oil charge.		
14	异常升压/降压 Abnormal Pressure Rise/Drop	压力上升: 3.30MPa(G)以下 Pressure Rise:3.30MPa(G) Max. 压力下降: 0.03MPa(G)以上 Pressure Drop:0.03MPa(G) Min.		高压开关设定值 By high pressure switch 低压开关设定值 By low pressure switch
15	水份 System Moisture Level	200ppm以下 200ppm Max.		
16	不凝性气体 System Uncondensable Gas Level	1%(容积比)以下 1 Vol.% Max. 残留氧气要求在0.1%(容积比)以下 Residual Oxygen 0.1 Vol.% Max.		抽真空24小时以后绝对压力应在1.01kPa以下 24 hrs. after vacuuming:1.01kPa Max.
17	倾斜角度 Tilt	5°以内 5°Max.		

R290非补气机型使用标准·使用极限 Application Standard & Limit(R290 Standard Model)

为正确使用立式涡旋压缩机, 对其使用标准、使用极限作如下规定:

使用标准值:适用于常用条件下(日本JIS B8616与JIS B8616相关标准、过载、低温条件下的商品运转条件)的运转。

使用极限值:适用于过渡条件下的短时间运转。

The following requirement apply to Vertical type Hermetic Scroll Compressors:Applicable to ordinary conditions in Japan JIS B8616 or equivalent condition,such as standard rating conditions, maximum operating conditions, low temp erature conditions,etc. Applicable to transitional brief periods.

序号 No.	项目 Item	使用标准值 Standard	使用极限值 Limit	备注 Note
1	制冷剂 Refrigerant	R290		
2	蒸发温度范围 Evaporating Temp.	-30~+40℃[0.07~1.27MPa(G)]		压力指吸气压力 Compressor Suction Pressure
3	冷凝温度范围 Condensing Temp.	15~83℃ 0.63~3.21MPa(G)	+83℃ 3.21MPa(G)	压力指排气压力 Compressor Discharge Pressure
4	压缩比 Compression Ratio	1.5~9	9	
5	电动机绕组温度 Winding Temp.	115℃以下 115℃ Max.	125℃	
6	压缩机外壳底部温度 Shell Bottom Temp.	上限: 90℃以下 Upper Limit:90℃ Max. 下限: 蒸发压力相对应饱和温度高12℃以上 Lower Limit:Evaporating Temp.+12℃ Min.		运转时 When compressor is running
		下限: 环境温度+11K以上 Lower Limit:Ambient Temp.+11K Min. *如不能保证, 具体应用时请与我司确认。 Please confirm with our company for specific application if lower than limit.		停机时 When compressor shuts off
7	排气温度 Discharge Gas Temp.	115℃以下115℃ Max.	125℃以下 125℃ Max.	距压缩机出口10cm以内位置的排气管温度 Within 100mm(4in) of the discharge fitting.
8	吸气温度 Suction Gas Temp.	吸气过热度在5K以上 Superheat:5K Min.	应无由于液体吸入而引起的冲刷音(不增加电流及振动) No excessive noise.	压缩机入口30cm以内位置的吸气管温度。还应同时满足5,6,7,13项 It should meet the requirement of item 5,6,7 and 13 within 30cm of the suction fitting.
9	运转时供电电压 Running Voltage	额定电压±10% Within ±10% of the rated voltage.		运转时压缩机接线柱电压 Voltage at compressor terminals.
10	启动时供电电压 Starting Voltage	三相机: 额定电压85%以上 Three Phase Models:85% of the rated voltage min. 单相机: 额定电压90%以上 Single Phase Models:90% of the rated voltage min.		指在启动电流升高, 电压下降时的压缩机接线柱电压 Dropped voltage at compressor terminals.
11	启停周期 On/Off Period	运转时间: 至少应使油回到指定油位所需的时间 ON Period:Until the oil level returns to the center of the lower bearing.		一个循环周期为10分钟以上, 停机3分钟, 以此为基准, 启停周期不得超过20万个周期
		停止时间: 至少应使高低压达到平衡所需的时间 OFF Period:Until balance of high and low pressure is obtained.		For at least 7 minutes-ON/3 minutes-OFF is recommendable.200,000 cycle Max.
12	制冷剂注入量 Refrigerant Charge	油/制冷剂重量比推荐为0.35以上 Oil/Refrigerant(wt.)≥0.35		油比重: 0.94 Specific gravity Oil:0.94
13	压缩机内最低油面 Minimum Oil Level	3-6HP:保持在压缩机内下轴承的中部以上 Center of the lower bearing.	3-6HP:不低于压缩机下轴承的下端面 Bottom of the lower bearing.	
		7-15HP:规定封入量的70%以上 No less than 70% of the initial oil charge.		
14	异常升压/降压 Abnormal Pressure Rise/Drop	压力上升: 3.3MPa(G)以下 Pressure Rise: 3.3MPa(G)Max. 压力下降: 0.05MPa(G)以上 Pressure Drop: 0.05MPa(G)Min.		高压开关设定值 By high pressure switch 低压开关设定值 By low pressure switch
15	水份 System Moisture Level	200ppm以下 200ppm Max.		
16	不凝性气体 System Uncondensable Gas Level	1%(容积比)以下 1 Vol.% Max. 残留氧气要求在0.1%(容积比)以下 Residual Oxygen 0.1 Vol.% Max.		抽真空24小时以后绝对压力应在1.01kPa以下 24 hrs. after vacuuming:1.01kPa Max.
17	倾斜角度 Tilt	5°以内 5°Max.		

R515B非补气机型使用标准·使用极限 Application Standard & Limit(R515B Standard Model)

为正确使用立式涡旋压缩机, 对其使用标准、使用极限作如下规定:

使用标准值:适用于常用条件下(日本JIS B8616与JIS B8616相关标准、过载、低温条件下的商品运转条件)的运转。

使用极限值:适用于过渡条件下的短时间运转。

The following requirement apply to Vertical type Hermetic Scroll Compressors:Applicable to ordinary conditions in Japan JIS B8616 or equivalent condition,such as standard rating conditions, maximum operating conditions, low temp erature conditions,etc. Applicable to transitional brief periods.

序号 No.	项目 Item	使用标准值 Standard	使用极限值 Limit	备注 Note
1	制冷剂 Refrigerant	R515B		
2	蒸发温度范围 Evaporating Temp.	-5~+50℃[0.08~0.89MPa(G)]		压力指吸气压力 Compressor Suction Pressure
3	冷凝温度范围 Condensing Temp.	+30~+100℃ 0.47~2.91MPa(G)	+100℃ 2.91MPa(G)	压力指排气压力 Compressor Discharge Pressure
4	压缩比 Compression Ratio	1.58~8.4	8.4	
5	电动机绕组温度 Winding Temp.	115℃以下 115℃ Max.	125℃以下 125℃ Max.	
6	压缩机外壳底部温度 Shell Bottom Temp.	上限: 90℃以下 Upper Limit:90℃ Max. 下限: 蒸发压力相对应饱和温度高12℃以上 Lower Limit:Evaporating Temp.+12℃ Min.		运转时 When compressor is running
		下限: 环境温度+11K以上 Lower Limit:Ambient Temp.+11K Min. *如不能保证, 具体应用时请与我司确认。 Please confirm with our company for specific application if lower than limit.		停机时 When compressor shuts off
7	排气温度 Discharge Gas Temp.	115℃以下115℃ Max.	135℃以下 135℃ Max.	距压缩机出口10cm以内位置的排气管温度 Within 100mm(4in) of the discharge fitting.
8	吸气温度 Suction Gas Temp.	吸气过热度在5K以上 Superheat:5K Min.	应无由于液体吸入而引起的冲刷音(不增加电流及振动) No excessive noise.	压缩机入口30cm以内位置的吸气管温度。还应同时满足5,6,7,13项 It should meet the requirement of item 5,6,7 and 13 within 30cm of the suction fitting.
9	运转时供电电压 Running Voltage	额定电压±10% Within ±10% of the rated voltage.		运转时压缩机接线柱电压 Voltage at compressor terminals.
10	启动时供电电压 Starting Voltage	三相机: 额定电压85%以上 Three Phase Models:85% of the rated voltage min. 单相机: 额定电压90%以上 Single Phase Models:90% of the rated voltage min.		指在启动电流升高, 电压下降时的压缩机接线柱电压 Dropped voltage at compressor terminals.
11	启停周期 On/Off Period	运转时间: 至少应使油回到指定油位所需的时间 ON Period:Until the oil level returns to the center of the lower bearing.		一个循环周期为10分钟以上, 停机3分钟, 以此为基准, 启停周期不得超过20万个周期
		停止时间: 至少应使高低压达到平衡所需的时间 OFF Period:Until balance of high and low pressure is obtained.		For at least 7 minutes-ON/3 minutes-OFF is recommendable.200,000 cycle Max.
12	制冷剂注入量 Refrigerant Charge	油/制冷剂重量比推荐为0.35以上 Oil/Refrigerant(wt.)≥0.35		油比重: 0.94 Specific gravity Oil:0.94
13	压缩机内最低油面 Minimum Oil Level	10-15HP:规定封入量的70%以上 No less than 70% of the initial oil charge.		
14	异常升压/降压 Abnormal Pressure Rise/Drop	压力上升: 3.00MPa(G)以下 Pressure Rise: 3.00MPa(G)Max. 压力下降: 0.06MPa(G)以上 Pressure Drop: 0.06MPa(G)Min.		高压开关设定值 By high pressure switch 低压开关设定值 By low pressure switch
15	水份 System Moisture Level	200ppm以下 200ppm Max.		
16	不凝性气体 System Uncondensable Gas Level	1%(容积比)以下 1 Vol.% Max. 残留氧气要求在0.1%(容积比)以下 Residual Oxygen 0.1 Vol.% Max.		抽真空24小时以后绝对压力应在1.01kPa以下 24 hrs. after vacuuming:1.01kPa Max.
17	倾斜角度 Tilt	5°以内 5°Max.		



R32/R454B非补气机型使用标准·使用极限

Application Standard & Limit(R32/R454B Standard Model)

为正确使用立式涡旋压缩机，对其使用标准、使用极限作如下规定：

使用标准值:适用于常用条件下(日本JIS B8616与JIS B8616相关标准、过载、低温条件下的商品运转条件)的运转。

使用极限值:适用于过渡条件下的短时间运转。

The following requirement apply to Vertical type Hermetic Scroll Compressors:Applicable to ordinary conditions in Japan JIS B8616 or equivalent condition,such as standard rating conditions, maximum operating conditions, low temp erature conditions,etc. Applicable to transitional brief periods.

序号 No.	项目 Item	使用标准值 Standard	使用极限值 Limit	备注 Note
1	制冷剂 Refrigerant	R32/R454B		
2	蒸发温度范围 Evaporating Temp.	R32 -25~+27℃[0.24~1.68MPa(G)](3-15HP) R454B -25~+27℃[0.20~1.50MPa(G)](3-15HP)		压力指吸气压力 Compressor Suction Pressure
3	冷凝温度范围 Condensing Temp.	R32 +10~+65℃ 1.00~4.28MPa(G)(3-15HP) R454B +10~+65℃ 0.89~3.85MPa(G)(3-7HP) R454B +10~+68℃ 0.89~4.12MPa(G)(8-15HP)		压力指排气压力 Compressor Discharge Pressure
4	压缩比 Compression Ratio	1.5~8	8	
5	电动机绕组温度 Winding Temp.	115℃以下 115℃ Max.	125℃	
6	压缩机外壳底部温度 Shell Bottom Temp.	上限: 90℃以下 Upper Limit:90℃ Max. 下限: 蒸发压力相对饱和温度高12℃以上 Lower Limit:Evaporating Temp.+12℃ Min.		运转时 When compressor is running
		下限: 环境温度+11K以上 Lower Limit:Ambient Temp.+11K Min. *如不能保证, 具体应用时请与我司确认。 Please confirm with our company for specific application if lower than limit.		停机时 When compressor shuts off
7	排气温度 Discharge Gas Temp.	115℃以下115℃ Max.	C-SB:130℃以下130℃ Max.	距压缩机出口10cm以内位置的排气管温度 Within 100mm(4in) of the discharge fitting.
			C-SC:135℃以下135℃ Max.	
8	吸气温度 Suction Gas Temp.	吸气过热度在5K以上 Superheat:5K Min.	应无由于液体吸入而引起的冲刷音(不增加电流及振动) No excessive noise.	压缩机入口30cm以内位置的吸气管温度。还应同时满足5,6,7,13项 It should meet the requirement of item 5,6,7 and 13 within 30cm of the suction fitting.
9	运转时供电电压 Running Voltage	额定电压±10% Within ±10% of the rated voltage.		运转时压缩机接线柱电压 Voltage at compressor terminals.
10	启动时供电电压 Starting Voltage	三相机: 额定电压85%以上 Three Phase Models:85% of the rated voltage min. 单相机: 额定电压90%以上 Single Phase Models:90% of the rated voltage min.		指在启动电流升高, 电压下降时的压缩机接线柱电压 Dropped voltage at compressor terminals.
11	启停周期 On/Off Period	运转时间: 至少应使油回到指定油位所需的时间 ON Period:Until the oil level returns to the center of the lower bearing.		一个循环周期为10分钟以上, 停机3分钟, 以此为基准, 启停周期不得超过20万个周期 For at least 7 minutes-ON/3 minutes-OFF is recommendable.200,000 cycle Max.
		停止时间: 至少应使高低压达到平衡所需的时间 OFF Period:Until balance of high and low pressure is obtained.		
12	制冷剂注入量 Refrigerant Charge	油/制冷剂重量比推荐为0.35以上 Oil/Refrigerant(wt.)≥0.35		油比重: 0.94 Specific gravity Oil:0.94
13	压缩机内最低油面 Minimum Oil Level	*CB/*CE:保持在压缩机内下轴承的中部以上 Center of the lower bearing.	*CB/*CE:不低于压缩机下轴承的下端面 Bottom of the lower bearing.	
		*CC:规定封入量的70%以上 No less than 70% of the initial oil charge.		
14	异常升压/降压 Abnormal Pressure Rise/Drop	压力上升: 4.5MPa(G)以下 Pressure Rise: 4.5MPa(G)Max. 压力下降: 0.2MPa(G)以上 Pressure Drop: 0.2MPa(G)Max.		高压开关设定值 By high pressure switch 低压开关设定值 By low pressure switch
15	水份 System Moisture Level	200ppm以下 200ppm Max.		
16	不凝性气体 System Uncondensable Gas Level	1%(容积比)以下 1 Vol.% Max. 残留氧气要求在0.1%(容积比)以下 Residual Oxygen 0.1 Vol.% Max.		抽真空24小时以后绝对压力应在1.01kPa以下 24 hrs. after vacuuming:1.01kPa Max.
17	倾斜角度 Tilt	5°以内 5°Max.		

■ 在超出本标准书的范围内进行商品设计时, 另行商定。 Operation beyond the above limits must be approved by our company.

(G): 表压 Gauge Pressure



R410A补气机型使用标准·使用极限

Application Standard & Limit(R410A Vapor Injection Model)

为正确使用立式涡旋压缩机，对其使用标准、使用极限作如下规定：

使用标准值:适用于常用条件下(日本JIS B8616与JIS B8616相关标准、过载、低温条件下的商品运转条件)的运转。

使用极限值:适用于过渡条件下的短时间运转。

The following requirement apply to Vertical type Hermetic Scroll Compressors:Applicable to ordinary conditions in Japan JIS B8616 or equivalent condition,such as standard rating conditions, maximum operating conditions, low temp erature conditions,etc. Applicable to transitional brief periods.

序号 No.	项目 Item	使用标准值 Standard	使用极限值 Limit	备注 Note
1	制冷剂 Refrigerant	R410A		
2	蒸发温度范围 Evaporating Temp.	C-SB/C-SC/5CD: -35~+15℃/0.12~1.15MPa(G) 5CF: -35~+25℃/0.12~1.54MPa(G)		压力指吸气压力 Compressor Suction Pressure
3	冷凝温度范围 Condensing Temp.	+20~+65℃ 1.34~4.15MPa(G)	+65℃ 4.15MPa(G)	压力指排气压力 Compressor Discharge Pressure
4	压缩比 Compression Ratio	C-SB/C-SC/5CD: 1.5~14 5CF: 2.3~14	14	
5	电动机绕组温度 Winding Temp.	115℃以下 115℃ Max.	C-SB/C-SC/5CD: 125℃ 5CF: 130℃	
6	压缩机外壳底部温度 Shell Bottom Temp.	上限: 90℃以下 Upper Limit:90℃ Max. 下限: 蒸发压力相对饱和温度高12℃以上 Lower Limit:Evaporating Temp.+12℃ Min.		运转时 When compressor is running
		下限: 环境温度+11K以上 Lower Limit:Ambient Temp.+11K Min. *如不能保证, 具体应用时请与我司确认。 Please confirm with our company for specific application if lower than limit.		停机时 When compressor shuts off
7	排气温度 Discharge Gas Temp.	115℃以下115℃ Max.	C-SB:130℃以下130℃ Max.	距压缩机出口10cm以内位置的排气管温度 Within 100mm(4in) of the discharge fitting.
			C-SC/2CC:135℃以下135℃ Max.	
8	吸气温度 Suction Gas Temp.	吸气过热度在5K以上 Superheat:5K Min.	应无由于液体吸入而引起的冲刷音(不增加电流及振动) No excessive noise.	压缩机入口30cm以内位置的吸气管温度。还应同时满足5,6,7,13项 It should meet the requirement of item 5,6,7 and 13 within 30cm of the suction fitting.
9	运转时供电电压 Running Voltage	额定电压±10% Within ±10% of the rated voltage.		运转时压缩机接线柱电压 Voltage at compressor terminals.
10	启动时供电电压 Starting Voltage	三相机: 额定电压85%以上 Three Phase Models:85% of the rated voltage min. 单相机: 额定电压90%以上 Single Phase Models:90% of the rated voltage min.		指在启动电流升高, 电压下降时的压缩机接线柱电压 Dropped voltage at compressor terminals.
11	启停周期 On/Off Period	运转时间: 至少应使油回到指定油位所需的时间 ON Period:Until the oil level returns to the center of the lower bearing.		一个循环周期为10分钟以上, 停机3分钟, 以此为基准, 启停周期不得超过20万个周期 For at least 7 minutes-ON/3 minutes-OFF is recommendable.200,000 cycle Max.
		停止时间: 至少应使高低压达到平衡所需的时间 OFF Period:Until balance of high and low pressure is obtained.		
12	制冷剂注入量 Refrigerant Charge	油/制冷剂重量比推荐为0.35以上 Oil/Refrigerant(wt.)≥0.35		油比重: 0.94 Specific gravity Oil:0.94
13	压缩机内最低油面 Minimum Oil Level	C-SB:保持在压缩机内下轴承的中部以上 Center of the lower bearing.	C-SB:不低于压缩机下轴承的下端面 Bottom of the lower bearing.	
		C-SC: 规定封入量的 70% 以上 No less than 70% of the initial oil charge. 5CF: 剩余2.2L以上No less than 2.2L.		
14	异常升压/降压 Abnormal Pressure Rise/Drop	压力上升: 5CF: 4.35,其它系列: 4.15MPa(G)以下 Pressure Rise: 5CF: 4.35, else Series: 4.15MPa(G)Max.		高压开关设定值 By high pressure switch 低压开关设定值 By low pressure switch
15	水份 System Moisture Level	200ppm以下 200ppm Max.		
16	不凝性气体 System Uncondensable Gas Level	1%(容积比)以下 1 Vol.% Max. 残留氧气要求在0.1%(容积比)以下 Residual Oxygen 0.1 Vol.% Max.		抽真空24小时以后绝对压力应在1.01kPa以下 24 hrs. after vacuuming:1.01kPa Max.
17	倾斜角度 Tilt	5°以内 5°Max.		

■ 在超出本标准书的范围内进行商品设计时, 另行商定。 Operation beyond the above limits must be approved by our company.

(G): 表压 Gauge Pressure

R407C补气机型使用标准·使用极限

Application Standard & Limit(R407C Vapor Injection Model)

为正确使用立式涡旋压缩机，对其使用标准、使用极限作如下规定：

使用标准值:适用于常用条件下(日本JIS B8616与JIS B8616相关标准、过载、低温条件下的商品运转条件)的运转。

使用极限值:适用于过渡条件下的短时间运转。

The following requirement apply to Vertical type Hermetic Scroll Compressors:Applicable to ordinary conditions in Japan JIS B8616 or equivalent condition,such as standard rating conditions, maximum operating conditions, low temp erature conditions,etc. Applicable to transitional brief periods.

序号 No.	项目 Item	使用标准值 Standard	使用极限值 Limit	备注 Note
1	制冷剂 Refrigerant	R407C		
2	蒸发温度范围 Evaporating Temp.	-30~+15°C 0.05~0.73MPa(G)		压力指吸气压力 Compressor Suction Pressure
3	冷凝温度范围 Condensing Temp.	20~+68°C 0.86~3.03MPa(G)	+68°C 3.03MPa(G)	压力指排气压力 Compressor Discharge Pressure
4	压缩比 Compression Ratio	2~19	19	
5	电动机绕组温度 Winding Temp.	115°C以下 115°C Max.	125°C	
6	压缩机外壳底部温度 Shell Bottom Temp.	上限: 90°C以下 Upper Limit:90°C Max. 下限: 蒸发压力相对应饱和温度高12°C以上 Lower Limit:Evaporating Temp.+12°C Min.		运转时 When compressor is running
		下限: 环境温度+11K以上 Lower Limit:Ambient Temp.+11K Min. *如不能保证, 具体应用时请与我司确认。 Please confirm with our company for specific application if lower than limit.		停机时 When compressor shuts off
7	排气温度 Discharge Gas Temp.	115°C以下115°C Max.	C-SB:130°C以下 130°CMax.	距压缩机出口10cm以内位置的排气管温度 Within 100mm(4in) of the discharge fitting.
			C-SC:135°C以下 135°CMax.	
8	吸气温度 Suction Gas Temp.	吸气过热度在5K以上 Superheat:5K Min.	应无由于液体吸入而引起的冲刷音(不增加电流及振动) No excessive noise.	压缩机入口30cm以内位置的吸气管温度。还应同时满足5,6,7,13项 It should meet the requirement of item 5,6,7 and 13 within 30cm of the suction fitting.
9	运转时供电电压 Running Voltage	额定电压±10% Within ±10% of the rated voltage.		运转时压缩机接线柱电压 Voltage at compressor terminals.
10	启动时供电电压 Starting Voltage	三相机: 额定电压85%以上 Three Phase Models:85% of the rated voltage min.		指在启动电流升高, 电压下降时的压缩机接线柱电压 Dropped voltage at compressor terminals.
		单相机: 额定电压90%以上 Single Phase Models:90% of the rated voltage min.		
11	启停周期 On/Off Period	运转时间: 至少应使油回到指定油位所需的时间 ON Period:Until the oil level returns to the center of the lower bearing.		一个循环周期为10分钟以上, 停机3分钟, 以此为基准, 启停周期不得超过20万个周期 For at least 7 minutes-ON/3 minutes-OFF is recommendable.200,000 cycle Max.
		停止时间: 至少应使高低压达到平衡所需的时间 OFF Period:Until balance of high and low pressure is obtained.		
12	制冷剂注入量 Refrigerant Charge	油/制冷剂重量比推荐为0.35以上 Oil/Refrigerant(wt.)≥0.35		油比重: 0.94 Specific gravity Oil:0.94
13	压缩机内最低油面 Minimum Oil Level	C-SB: 保持在压缩机内下轴承的中部以上 Center of the lower bearing.	C-SB: 不低于压缩机下轴承的下端面 Bottom of the lower bearing.	
		C-SC: 规定封入量的 70% 以上 No less than 70% of the initial oil charge.		
14	异常升压/降压 Abnormal Pressure Rise/Drop	压力上升: 3.20MPa(G)以下 Pressure Rise: 3.20MPa(G)Max. 压力下降: 0.03MPa(G)以上 Pressure Drop: 0.03MPa(G)Min.		高压开关设定值 By high pressure switch 低压开关设定值 By low pressure switch
15	水份 System Moisture Level	200ppm以下 200ppm Max.		
16	不凝性气体 System Uncondensable Gas Level	1%(容积比)以下 1 Vol.% Max. 残留氧气要求在0.1%(容积比)以下 Residual Oxygen 0.1 Vol.% Max.		抽真空24小时以后绝对压力应在1.01kPa以下 24 hrs. after vacuuming:1.01kPa Max.
17	倾斜角度 Tilt	5°以内 5°Max.		

R22补气机型使用标准·使用极限

Application Standard & Limit(R22 Vapor Injection Model)

为正确使用立式涡旋压缩机，对其使用标准、使用极限作如下规定：

使用标准值:适用于常用条件下(日本JIS B8616与JIS B8616相关标准、过载、低温条件下的商品运转条件)的运转。

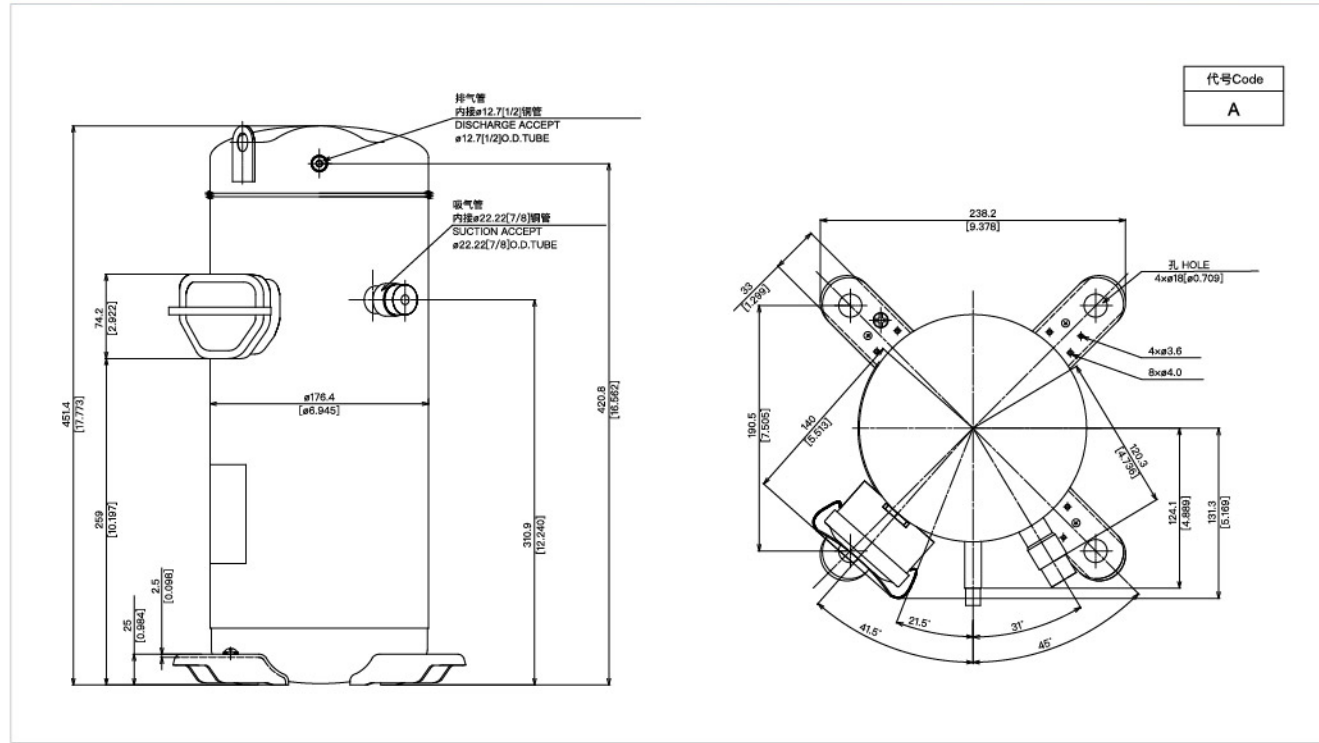
使用极限值:适用于过渡条件下的短时间运转。

The following requirement apply to Vertical type Hermetic Scroll Compressors:Applicable to ordinary conditions in Japan JIS B8616 or equivalent condition,such as standard rating conditions, maximum operating conditions, low temp erature conditions,etc. Applicable to transitional brief periods.

序号 No.	项目 Item	使用标准值 Standard	使用极限值 Limit	备注 Note
1	制冷剂 Refrigerant	R22		
2	蒸发温度范围 Evaporating Temp.	-30~+15°C 0.06~0.69MPa(G)		压力指吸气压力 Compressor Suction Pressure
3	冷凝温度范围 Condensing Temp.	+20~+68°C 1.09~2.78MPa(G)	+68°C 2.78MPa(G)	压力指排气压力 Compressor Discharge Pressure
4	压缩比 Compression Ratio	1.5~17	17	
5	电动机绕组温度 Winding Temp.	115°C以下 115°C Max.	125°C	
6	压缩机外壳底部温度 Shell Bottom Temp.	上限: 90°C以下 Upper Limit:90°C Max. 下限: 蒸发压力相对应饱和温度高12°C以上 Lower Limit:Evaporating Temp.+12°C Min.		运转时 When compressor is running
		下限: 环境温度+11K以上 Lower Limit:Ambient Temp.+11K Min. *如不能保证, 具体应用时请与我司确认。 Please confirm with our company for specific application if lower than limit.		停机时 When compressor shuts off
7	排气温度 Discharge Gas Temp.	115°C以下115°C Max.	C-SB:130°C以下 130°CMax.	距压缩机出口10cm以内位置的排气管温度 Within 100mm(4in) of the discharge fitting.
			C-SC:135°C以下 135°CMax.	
8	吸气温度 Suction Gas Temp.	吸气过热度在5K以上 Superheat:5K Min.	应无由于液体吸入而引起的冲刷音(不增加电流及振动) No excessive noise.	压缩机入口30cm以内位置的吸气管温度。还应同时满足5,6,7,13项 It should meet the requirement of item 5,6,7 and 13 within 30cm of the suction fitting.
9	运转时供电电压 Running Voltage	额定电压±10% Within ±10% of the rated voltage.		运转时压缩机接线柱电压 Voltage at compressor terminals.
10	启动时供电电压 Starting Voltage	三相机: 额定电压85%以上 Three Phase Models:85% of the rated voltage min.		指在启动电流升高, 电压下降时的压缩机接线柱电压 Dropped voltage at compressor terminals.
		单相机: 额定电压90%以上 Single Phase Models:90% of the rated voltage min.		
11	启停周期 On/Off Period	运转时间: 至少应使油回到指定油位所需的时间 ON Period:Until the oil level returns to the center of the lower bearing.		一个循环周期为10分钟以上, 停机3分钟, 以此为基准, 启停周期不得超过20万个周期 For at least 7 minutes-ON/3 minutes-OFF is recommendable.200,000 cycle Max.
		停止时间: 至少应使高低压达到平衡所需的时间 OFF Period:Until balance of high and low pressure is obtained.		
12	制冷剂注入量 Refrigerant Charge	油/制冷剂重量比推荐为0.35以上 Oil/Refrigerant(wt.)≥0.35		油比重: 0.92 Specific gravity Oil:0.92
13	压缩机内最低油面 Minimum Oil Level	C-SB: 保持在压缩机内下轴承的中部以上 Center of the lower bearing.	C-SB: 不低于压缩机下轴承的下端面 Bottom of the lower bearing.	
		C-SC: 规定封入量的 70% 以上 No less than 70% of the initial oil charge.		
14	异常升压/降压 Abnormal Pressure Rise/Drop	压力上升: 3.00MPa(G)以下 Pressure Rise:3.00MPa(G) Max 压力下降: 0.03MPa(G)以上 Pressure Drop:0.03MPa(G) Min..		高压开关设定值 By high pressure switch 低压开关设定值 By low pressure switch
15	水份 System Moisture Level	200ppm以下 200ppm Max.		
16	不凝性气体 System Uncondensable Gas Level	1%(容积比)以下 1 Vol.% Max. 残留氧气要求在0.1%(容积比)以下 Residual Oxygen 0.1 Vol.% Max.		抽真空24小时以后绝对压力应在1.01kPa以下 24 hrs. after vacuuming:1.01kPa Max.
17	倾斜角度 Tilt	5°以内 5°Max.		

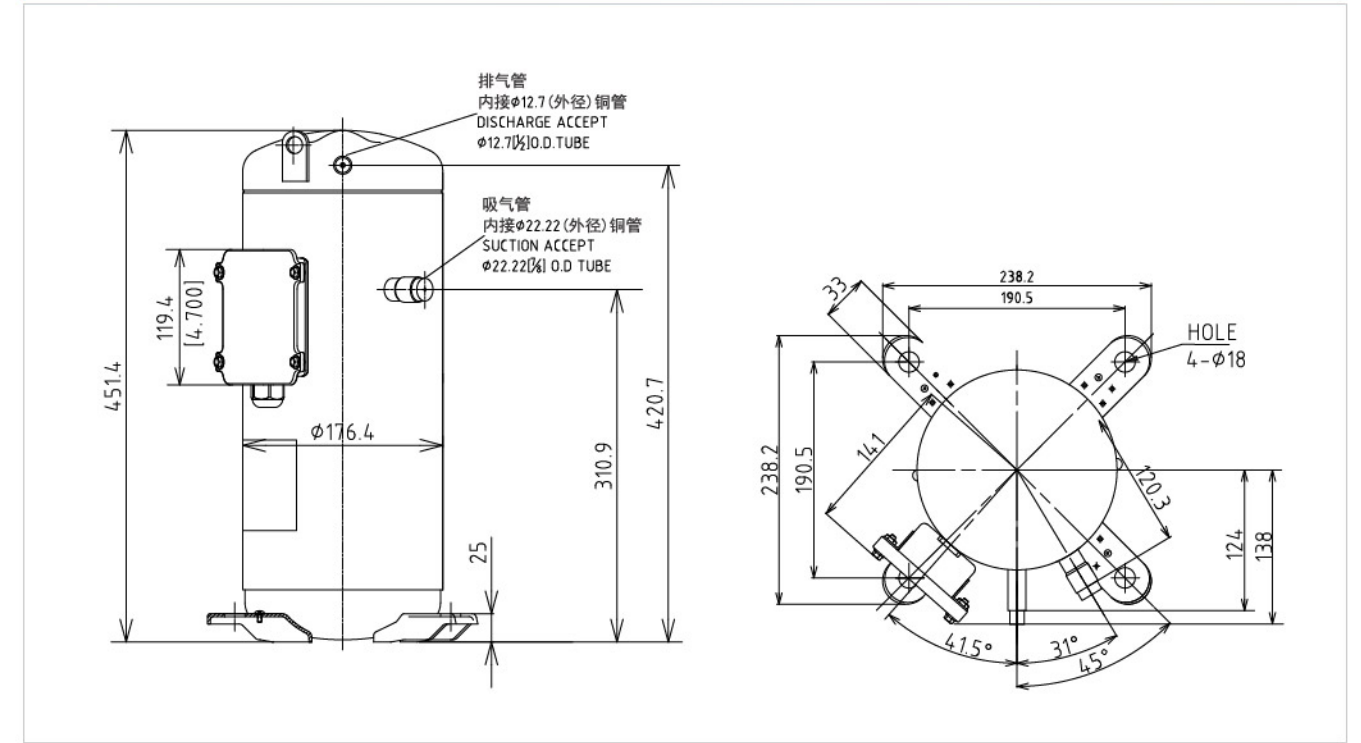
外观图
Outline Graph

B系列非补气机型
B Series Standard Model

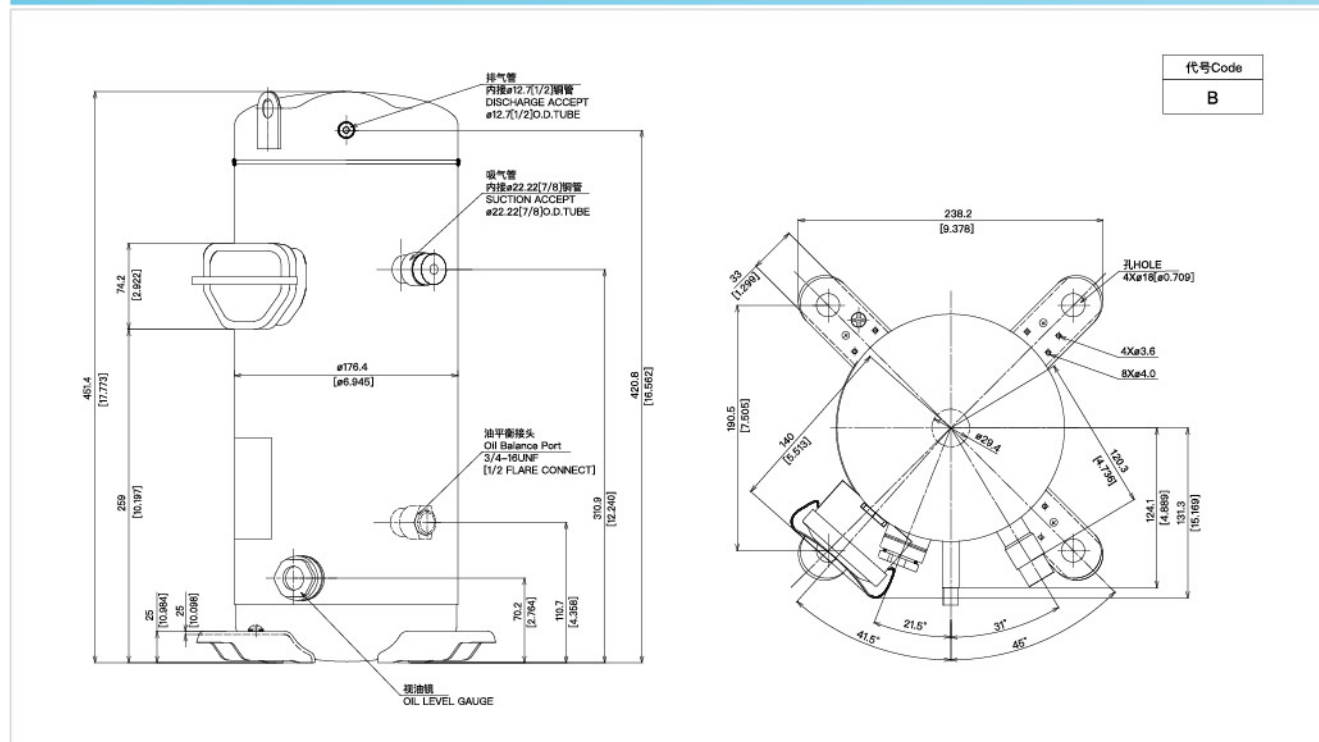


外观图
Outline Graph

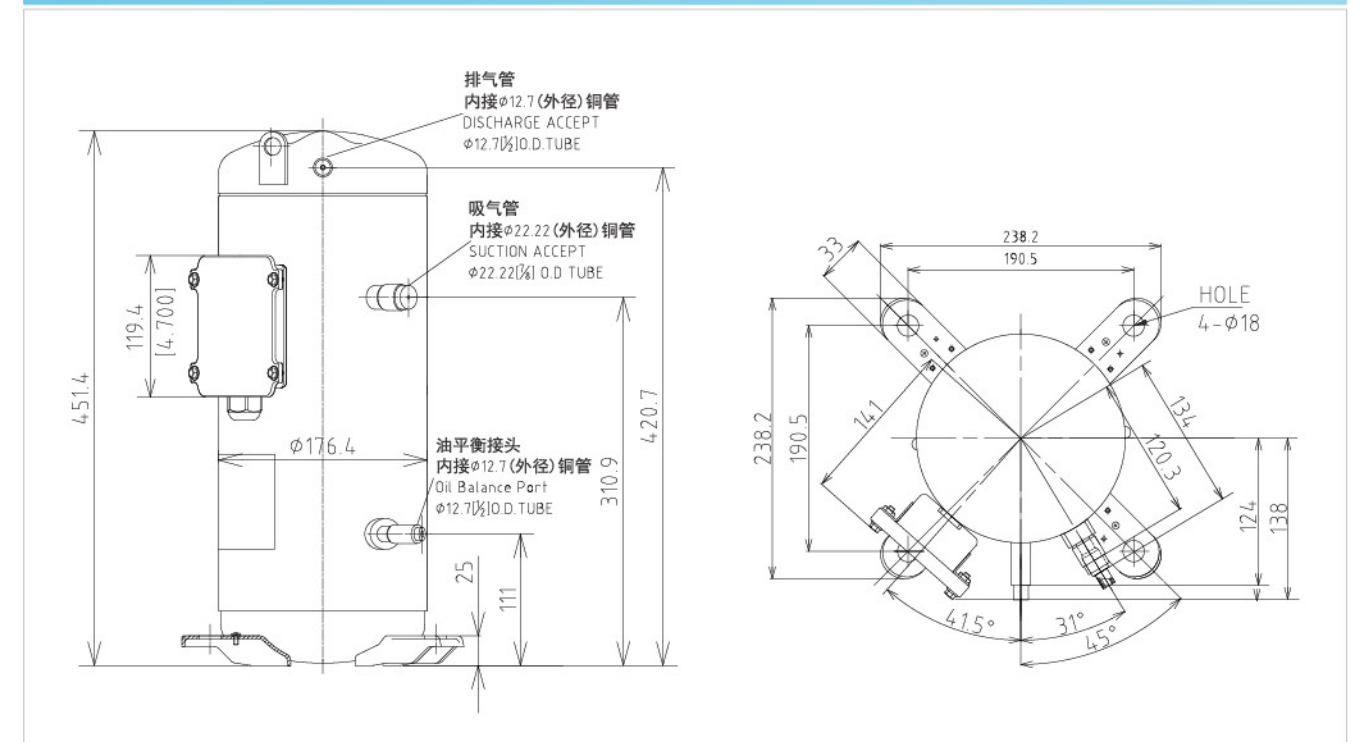
B系列非补气机型 (R290)
B Series Standard Model



B系列非补气机型 (R454C/R455A)
B Series Standard Model

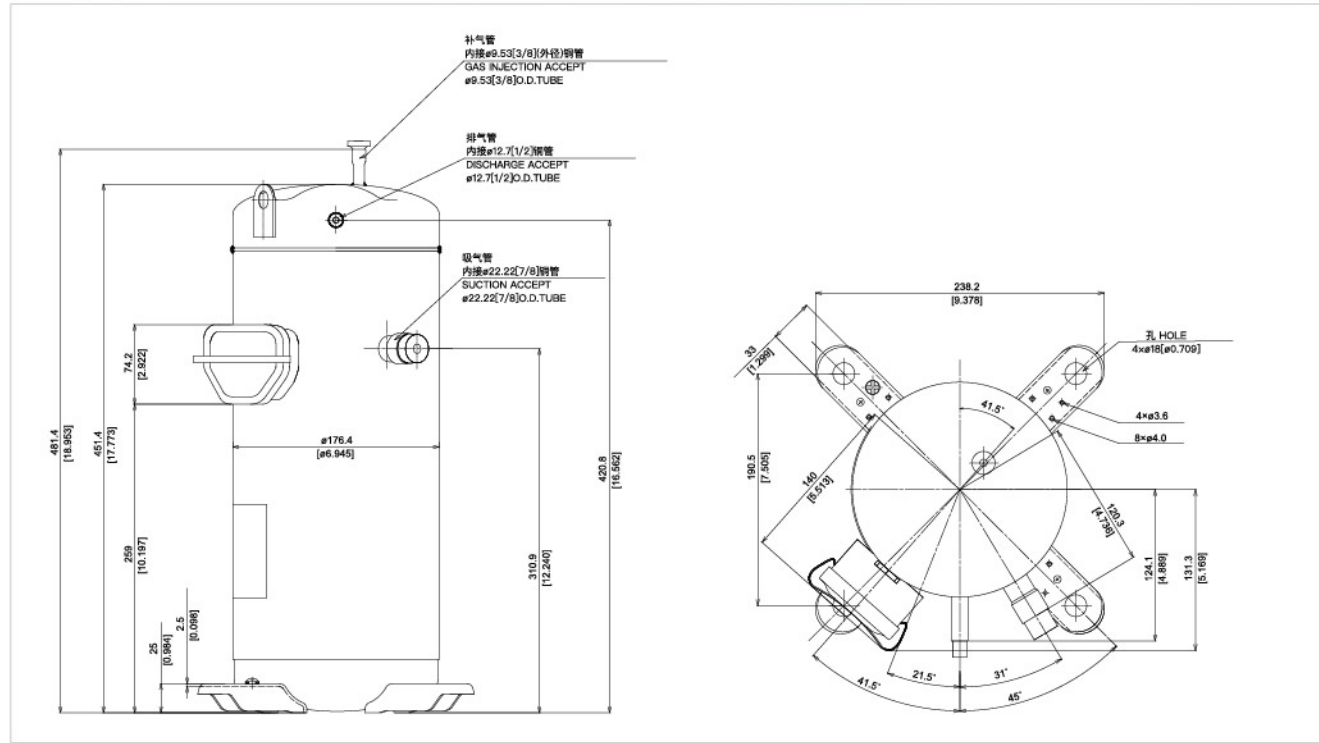


B系列非补气并联机型 (R290)
B Series Tandem Model



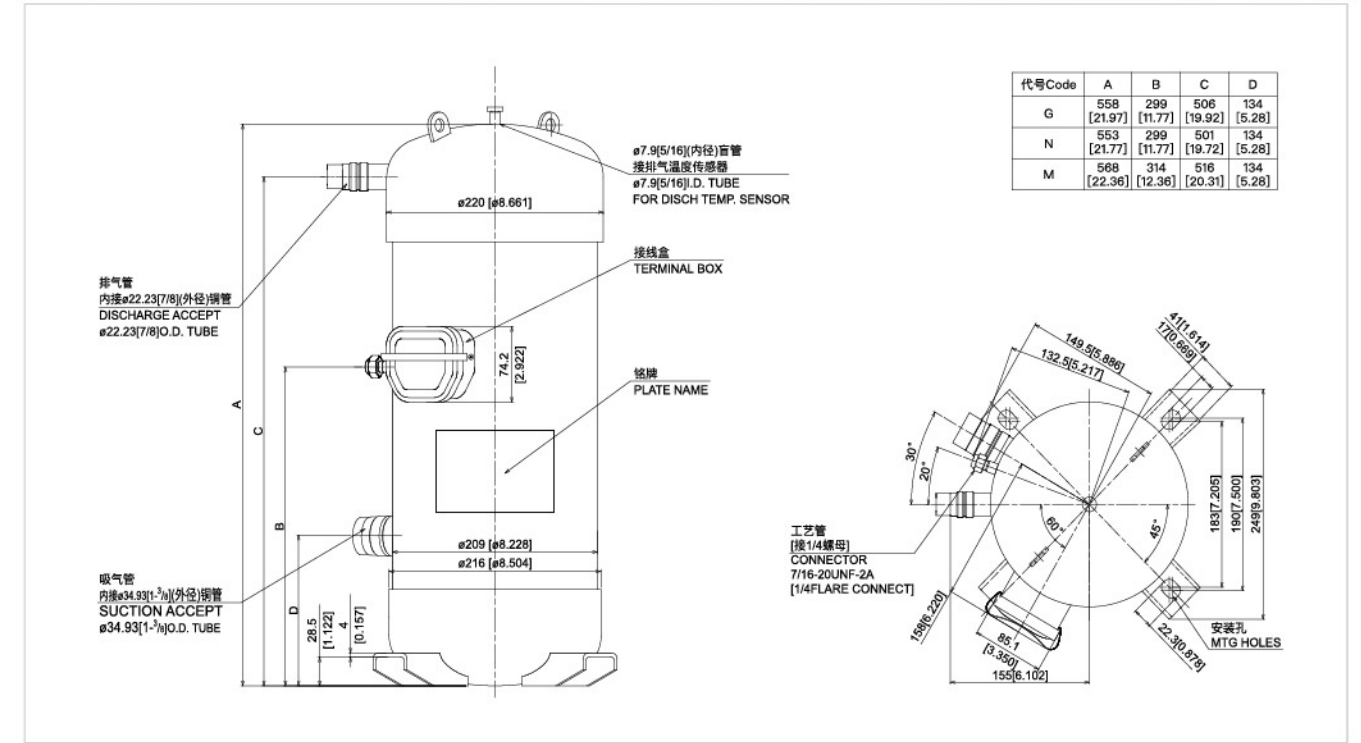
外观图
Outline Graph

B系列补气机型
B Series Vapor Injection Model

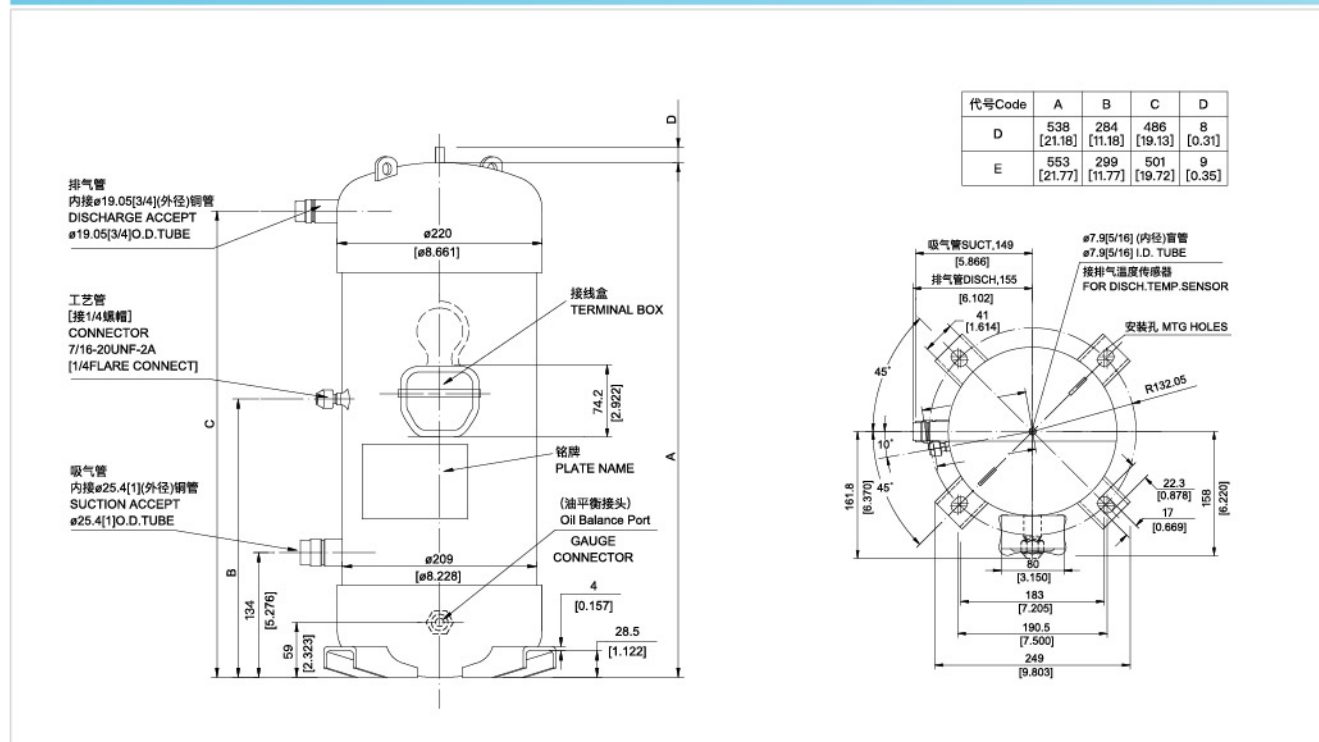


外观图
Outline Graph

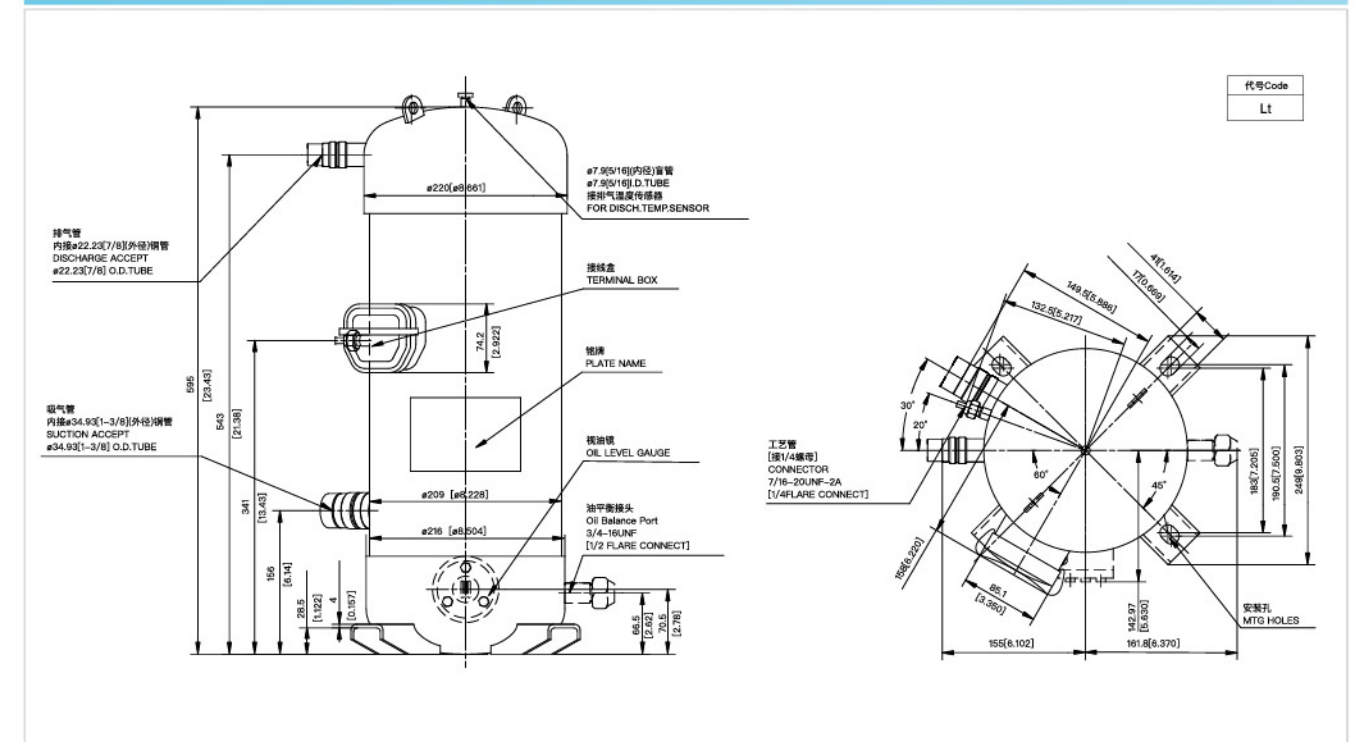
C系列非补气机型
C Series Standard Model



C系列非补气机型
C Series Standard Model

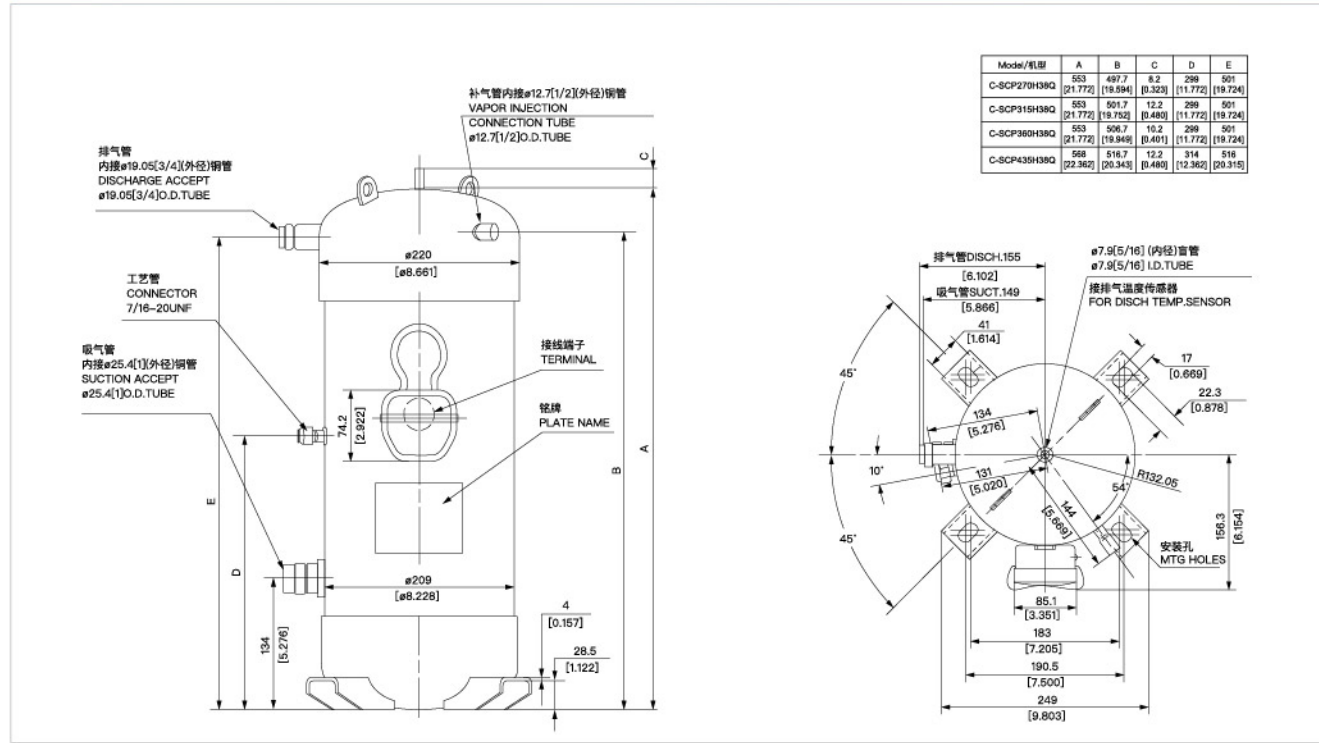


C系列非补气并联机型
C Series Tandem Model



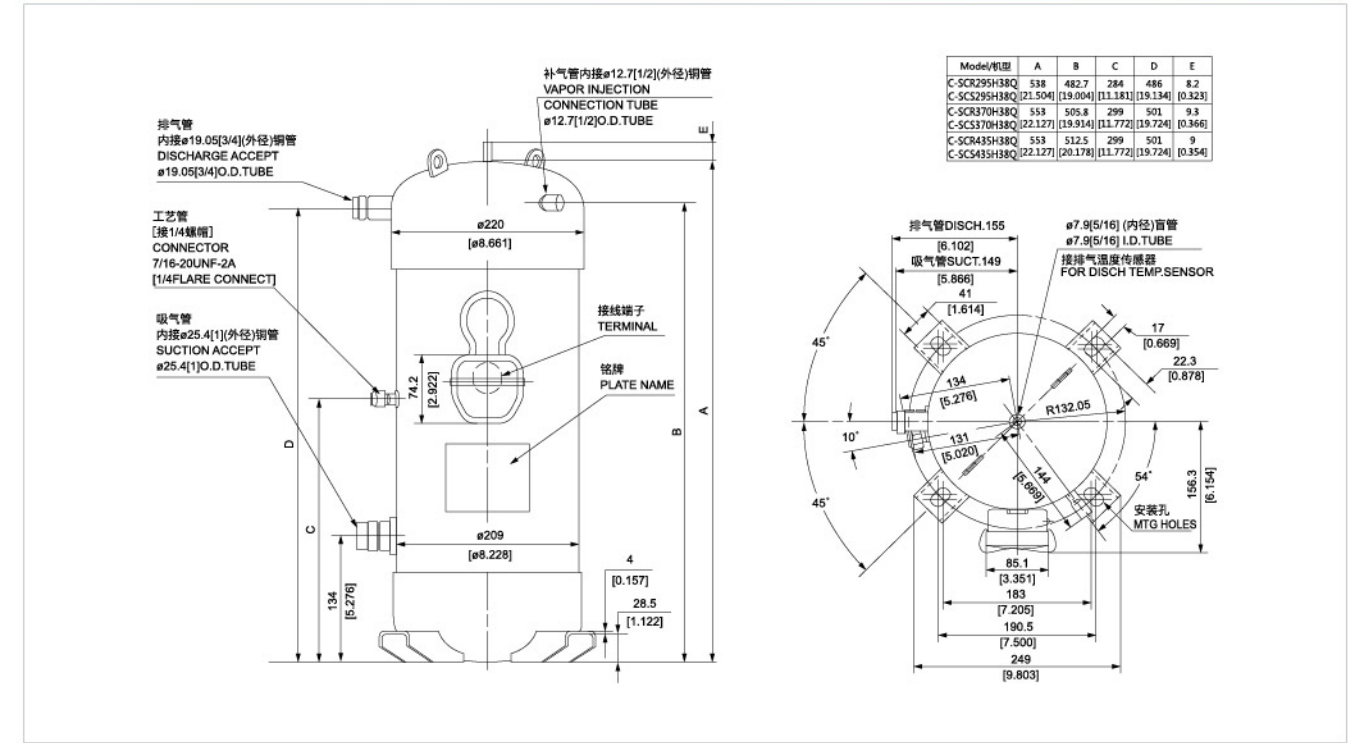
外观图
Outline Graph

C系列补气机型 (R410A)
C Series Vapor Injection Model

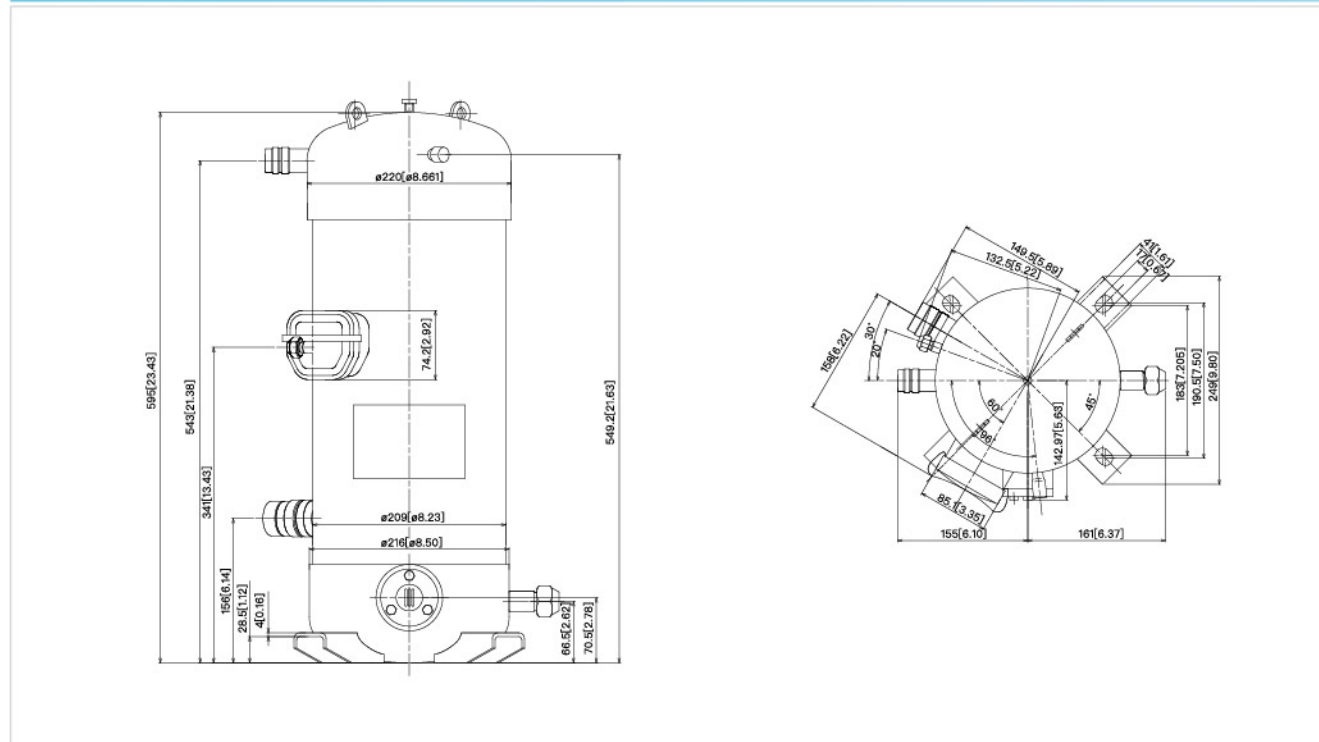


外观图
Outline Graph

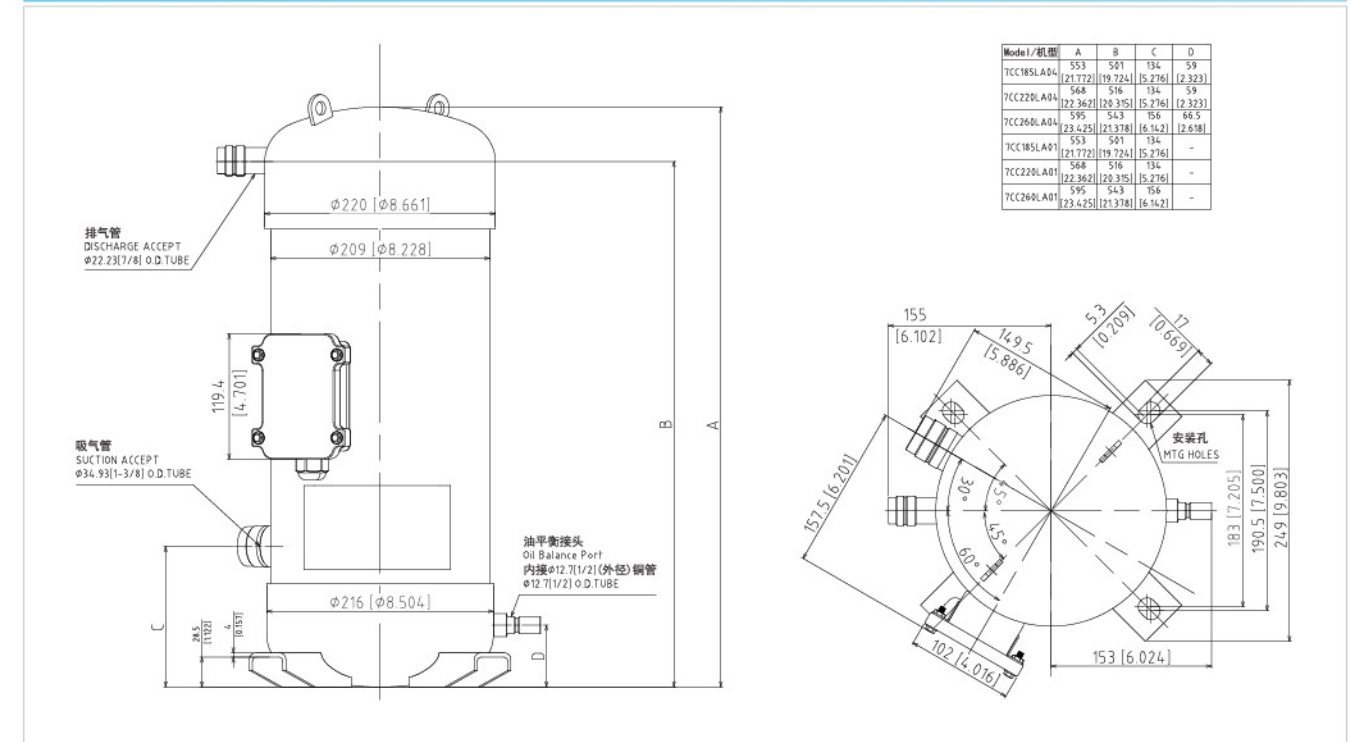
C系列补气机型 (R407C/R22)
C Series Vapor Injection Model



C系列补气机型 (5CC171SA02)
C Series Vapor Injection Model

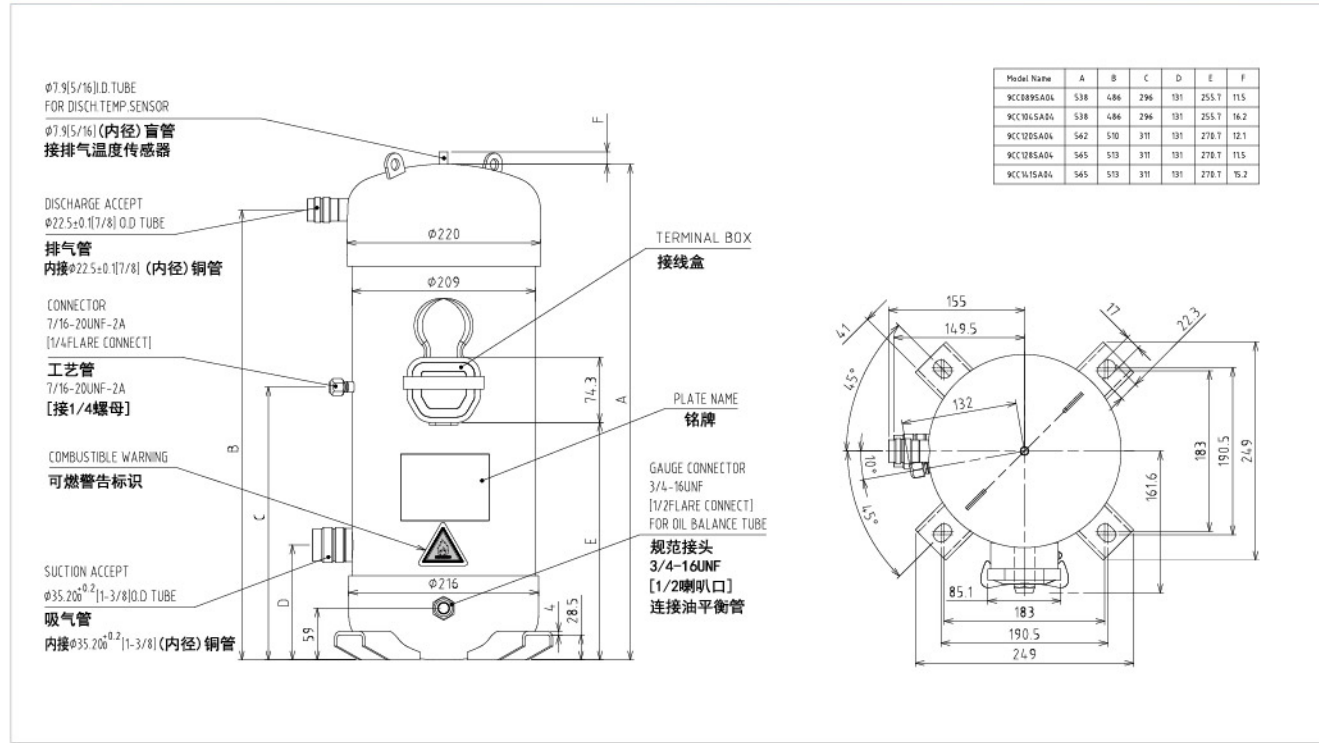


C系列非补气或并联机型 (R290)
C Series Standard or Tandem Model

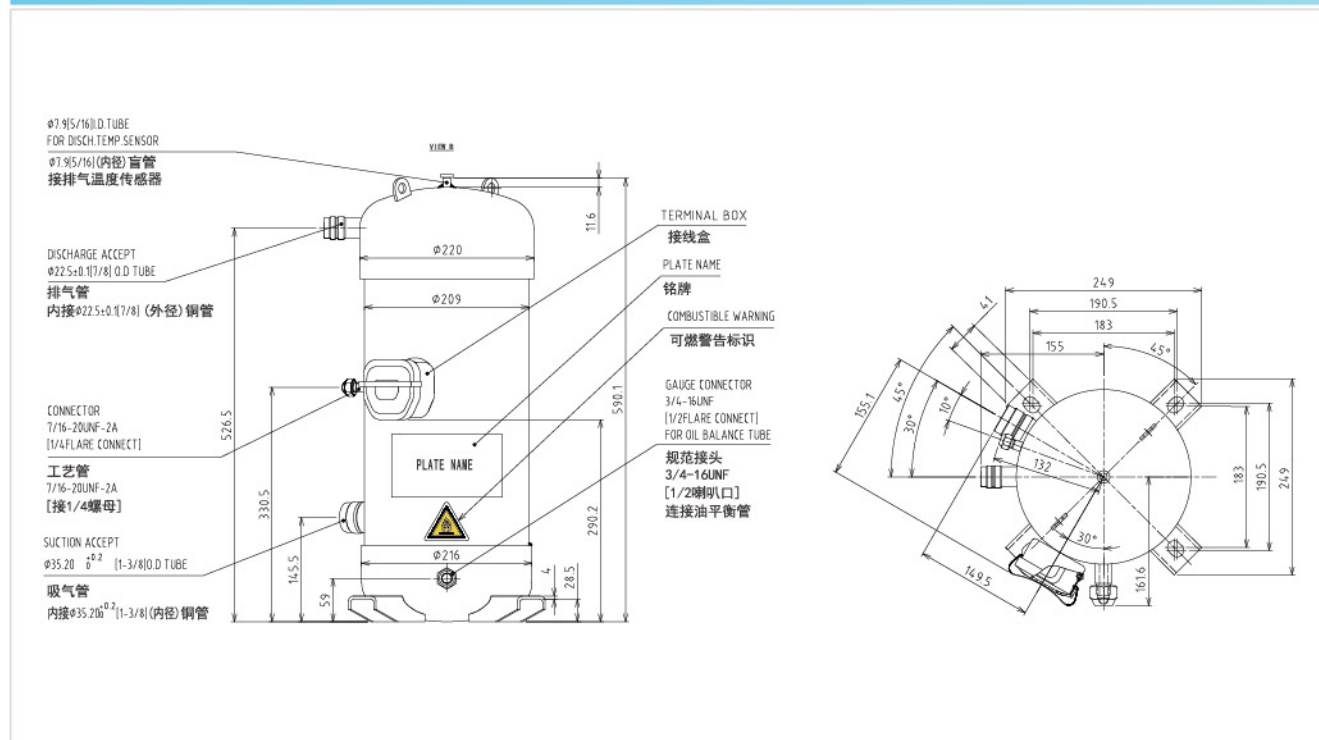


外观图
Outline Graph

C系列非补气并联机型 (R32/R454B 8-13HP)
C Series Tandem Model

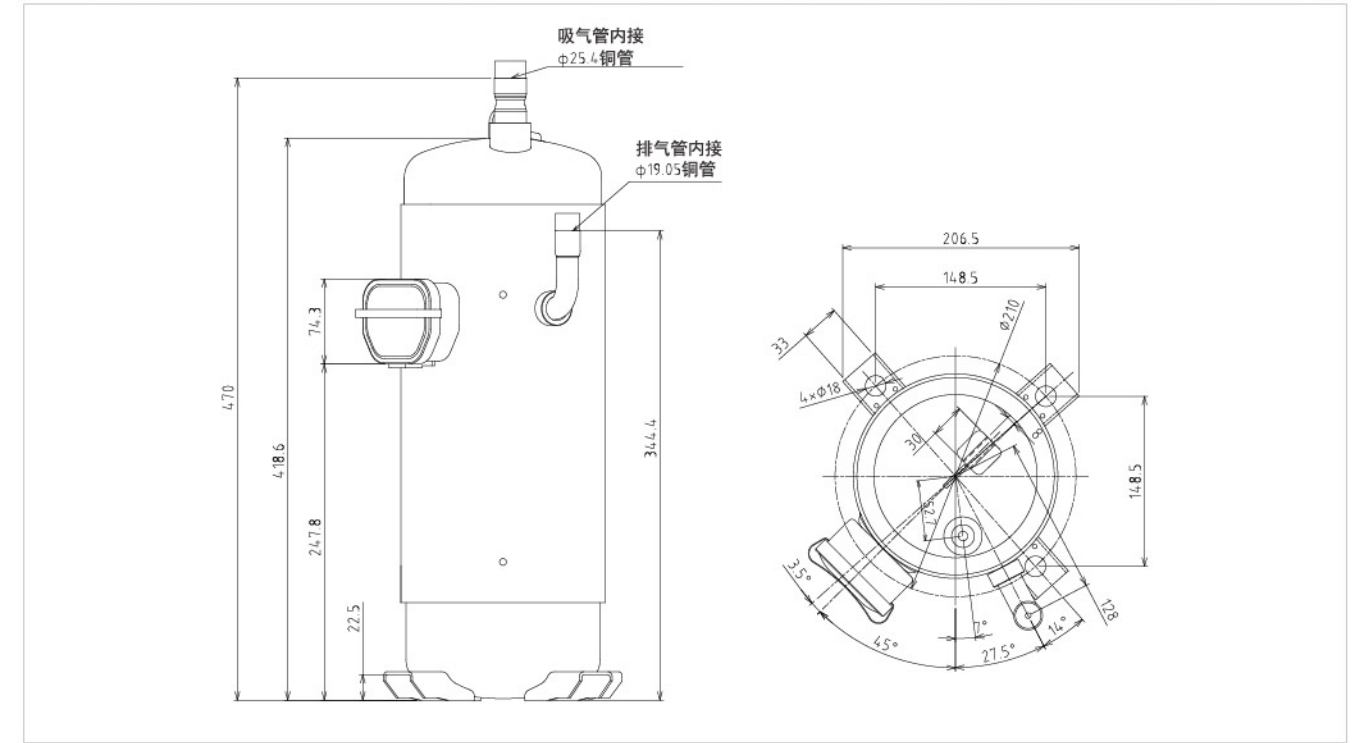


C系列非补气并联机型 (R32/R454B 15HP)
C Series Tandem Model

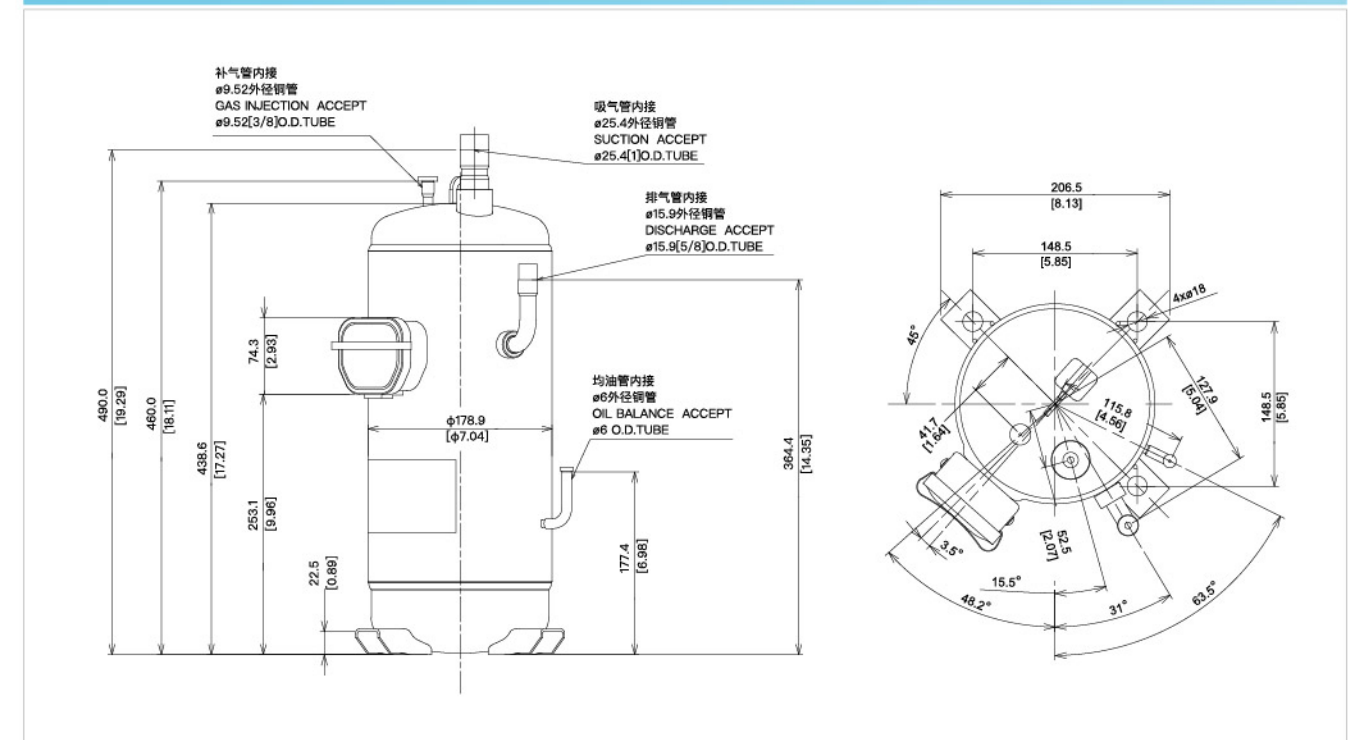


外观图
Outline Graph

D系列直流变频非补气机型 (R134a 6CD081ZA01)
D Series DC Standard Model

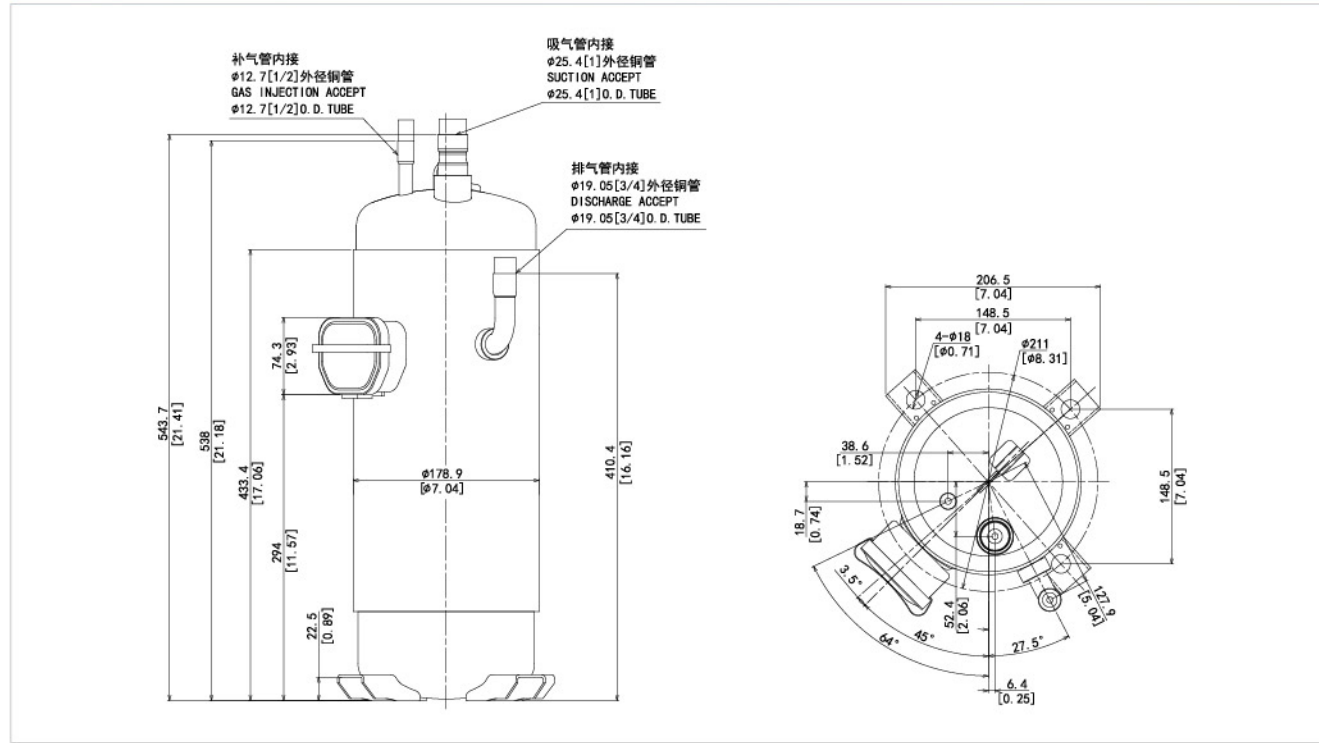


D系列直流变频补气机型 (R410A 12-16HP)
D Series DC Vapor Injection Model



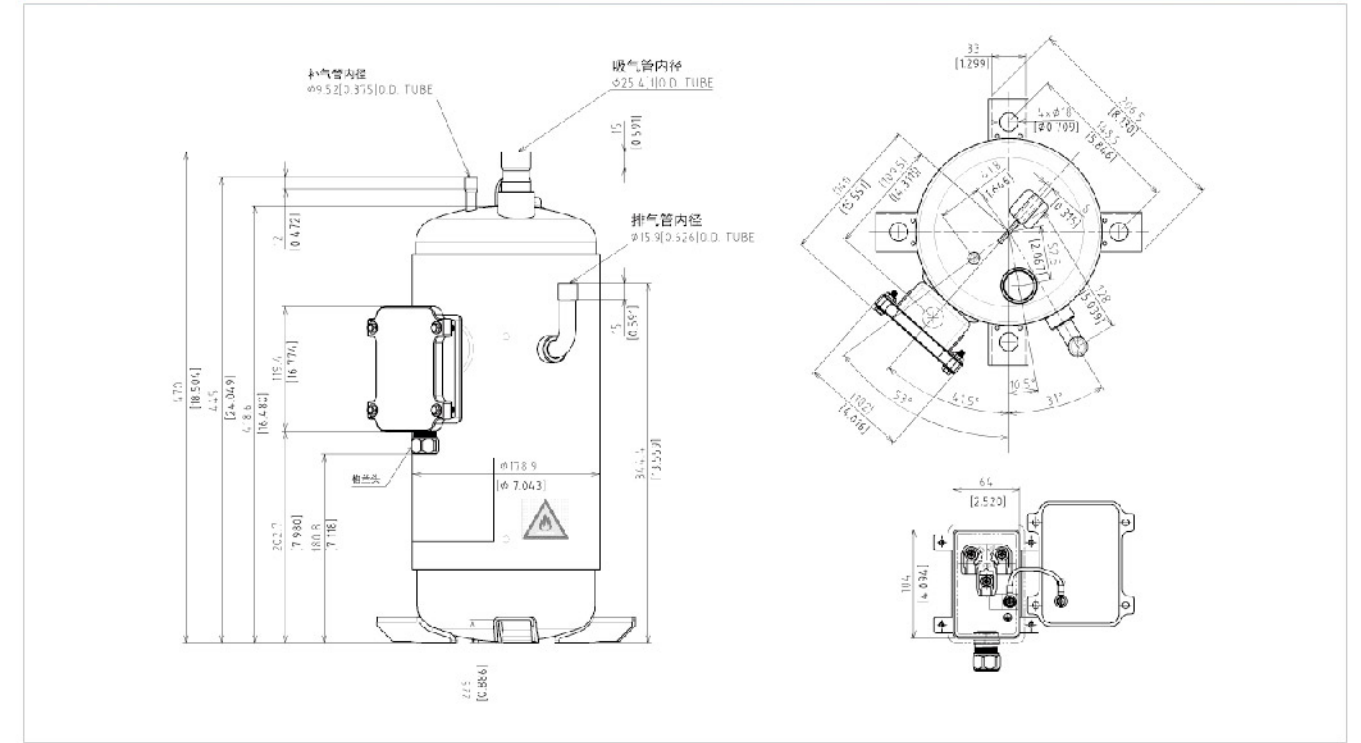
外观图
Outline Graph

D系列直流变频补气机型 (R410A 25HP)
D Series DC Vapor Injection Model

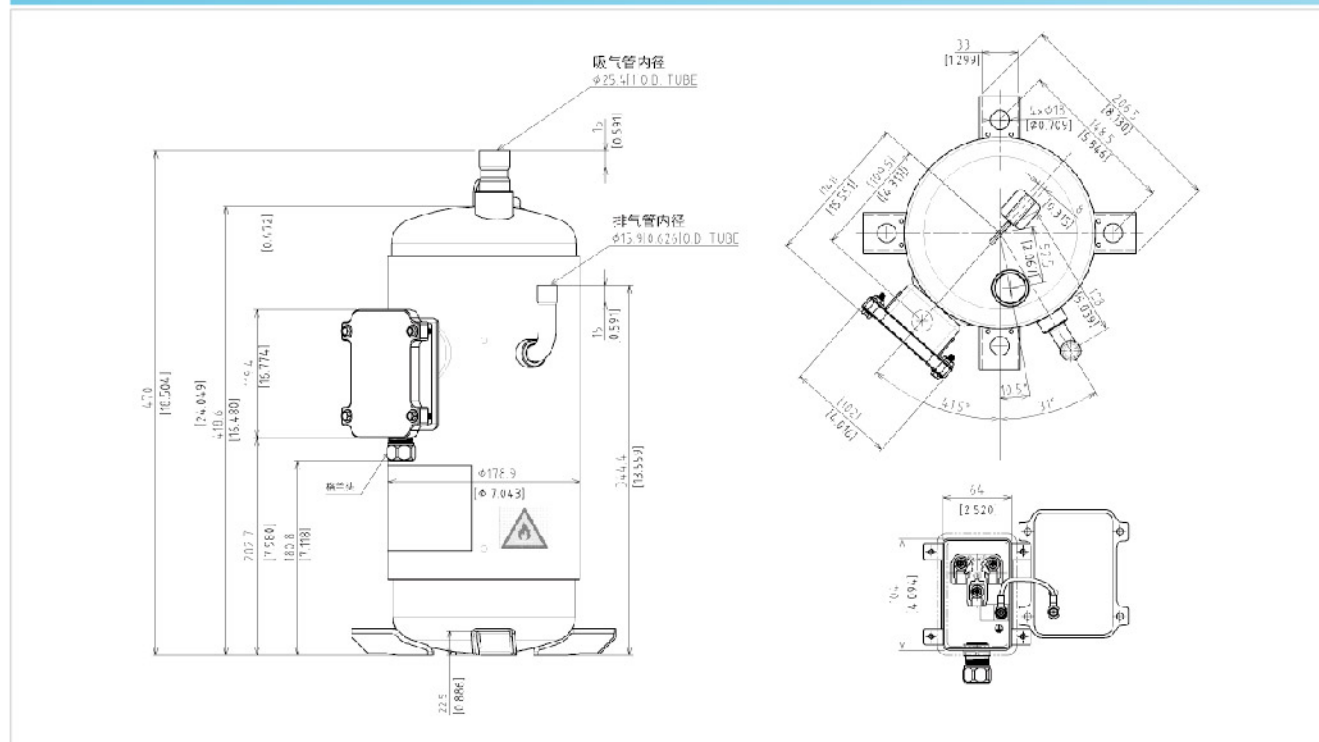


外观图
Outline Graph

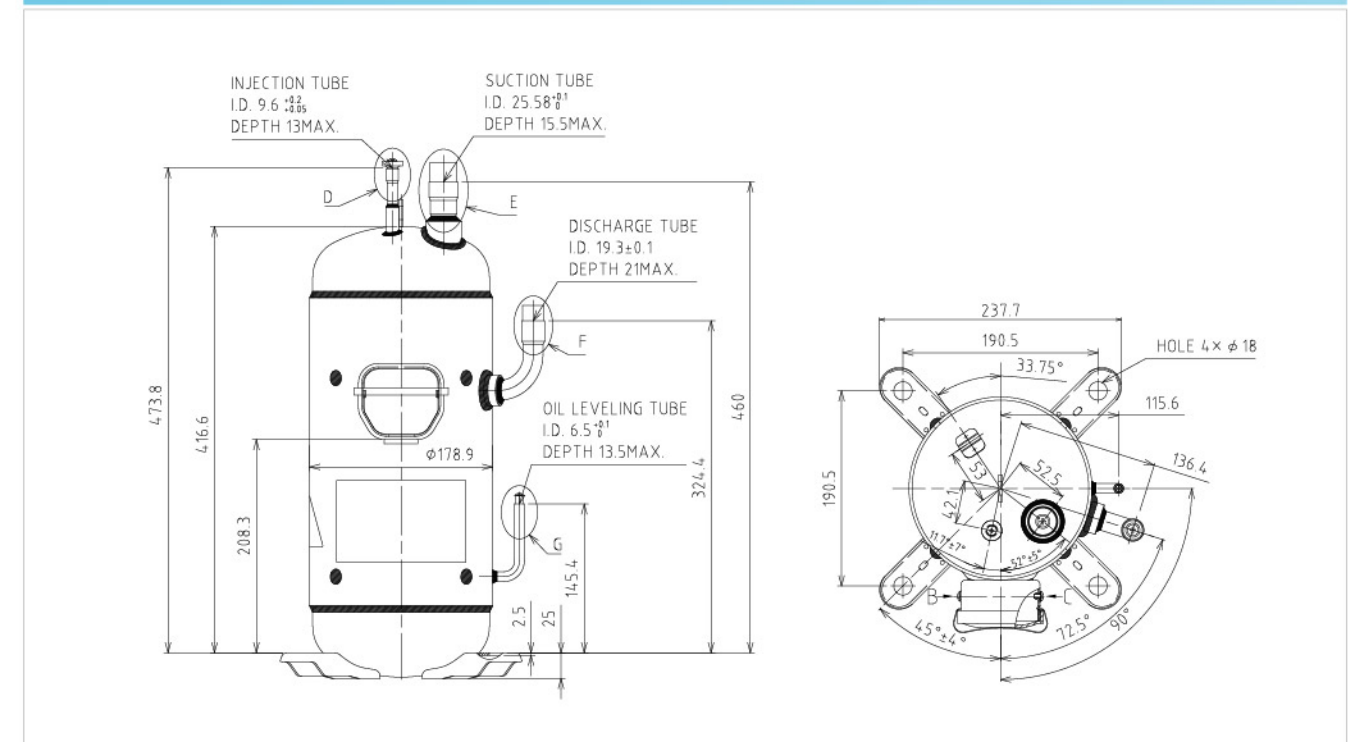
D系列直流变频补气机型 (R32 7CD081ZA12)
D Series DC Vapor Injection Model



D系列直流变频非补气机型 (R32 7CD081ZA11)
D Series DC Standard Model

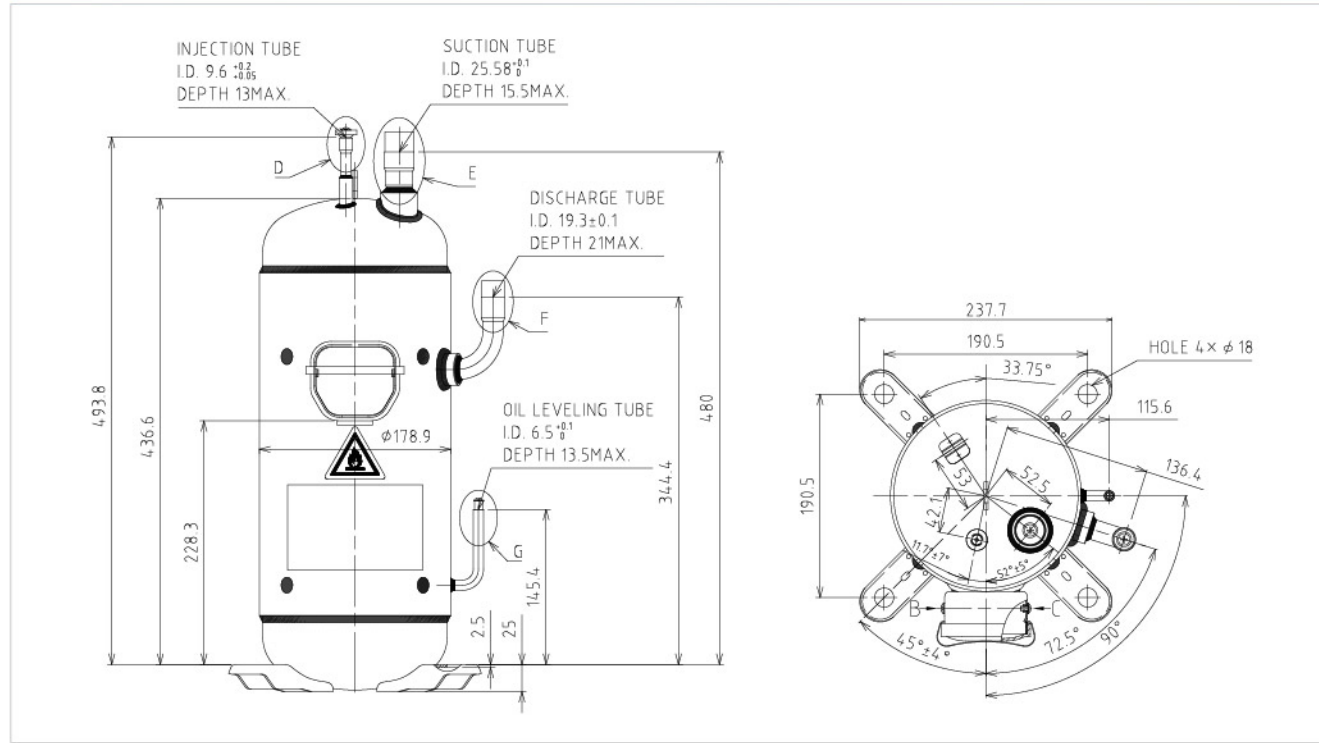


D系列直流变频补气机型 (R290 9CD067ZA02)
D Series DC Vapor Injection Model



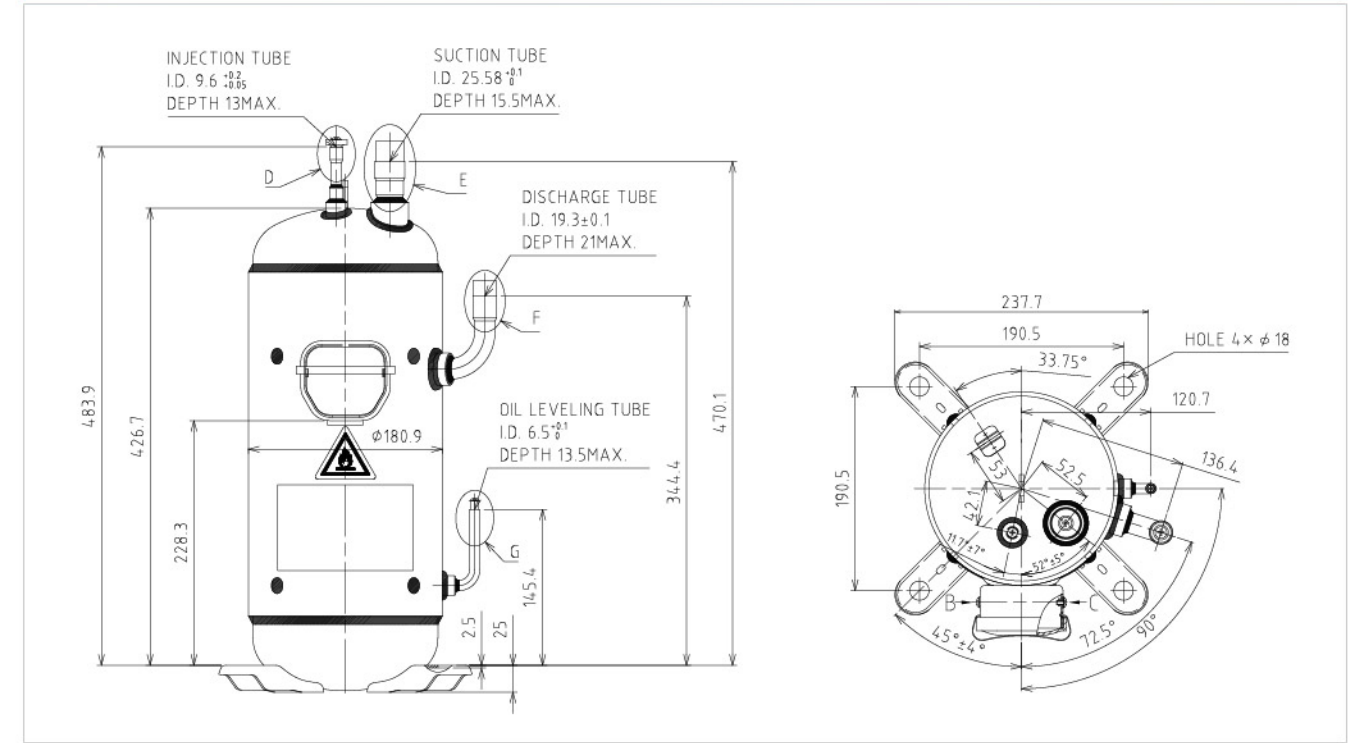
外观图
Outline Graph

D系列直流变频补气机型 (R290 9CD081ZA02)
D Series DC Vapor Injection Model

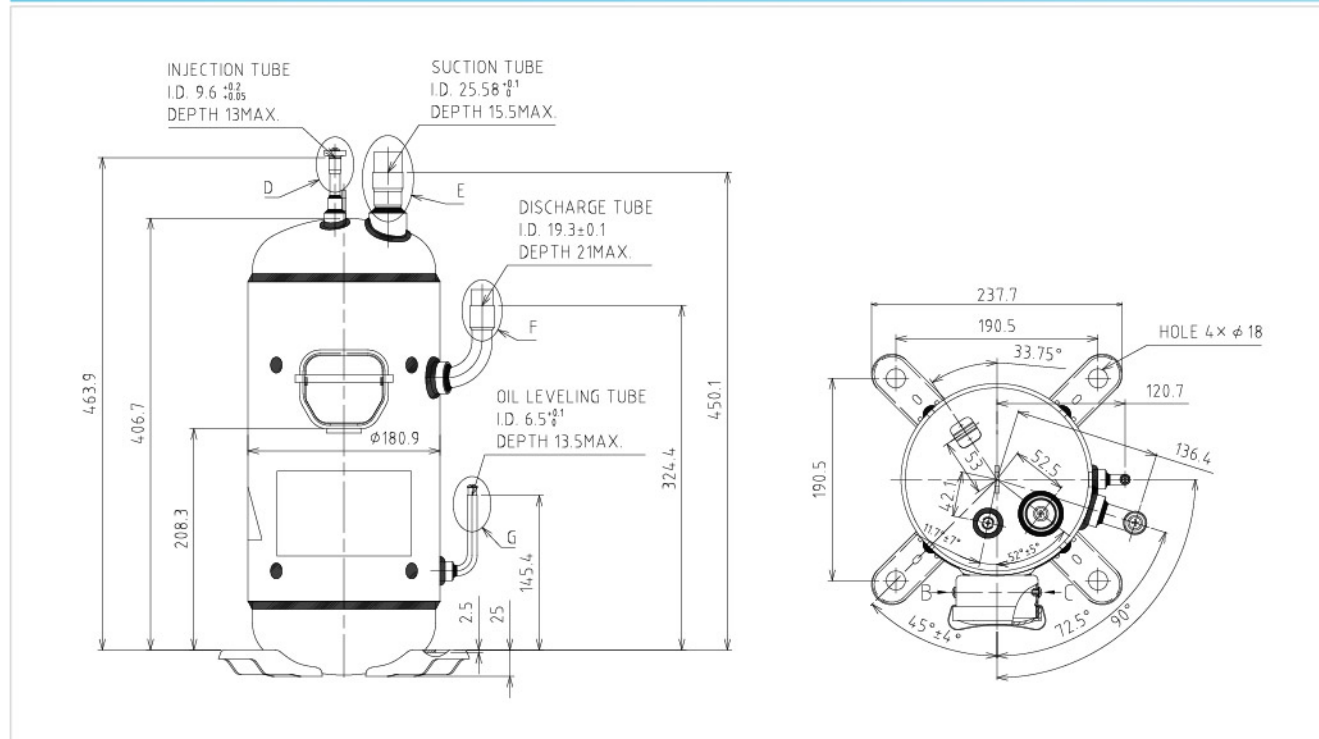


外观图
Outline Graph

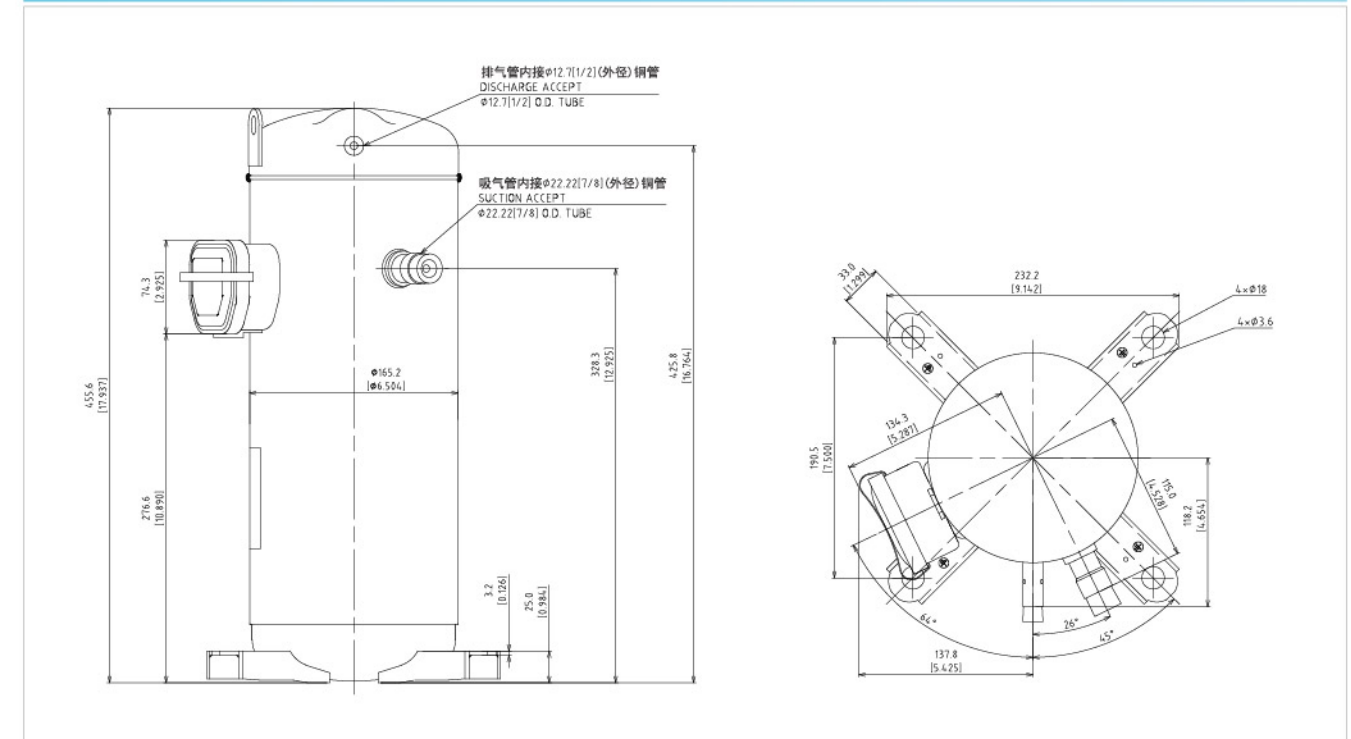
D系列直流变频补气机型 (R290 9CD081XA02)
D Series DC Vapor Injection Model



D系列直流变频补气机型 (R290 9CD067XA02)
D Series DC Vapor Injection Model

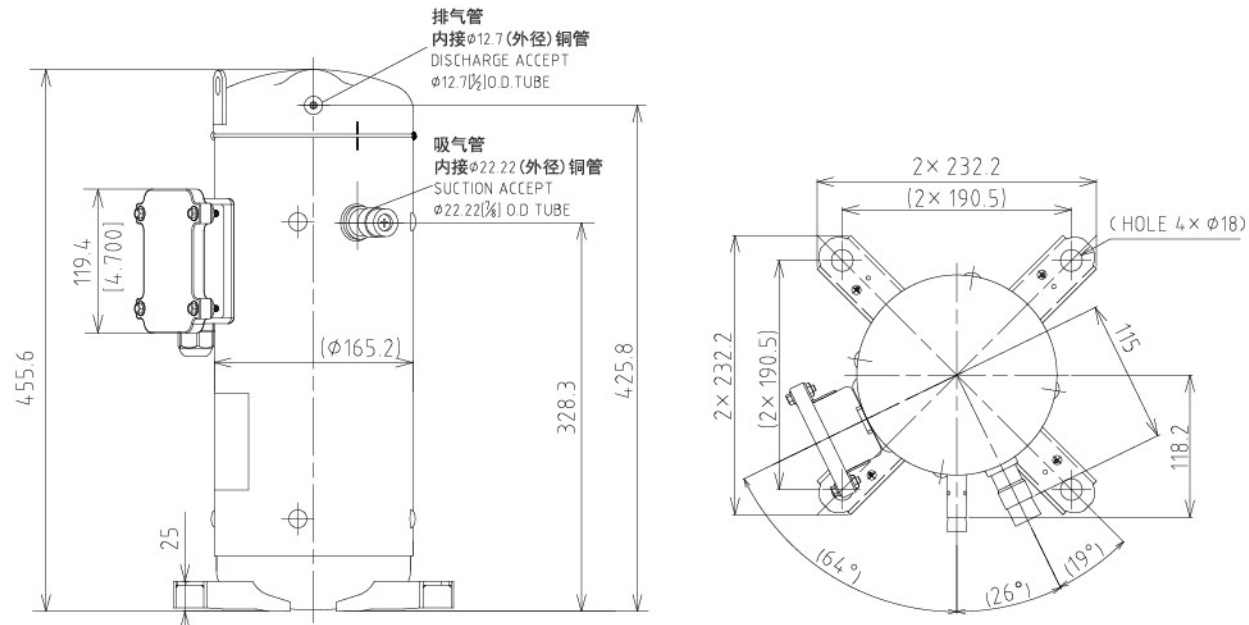


E系列非补气机型 (5CE058SA01)
E Series Standard Model



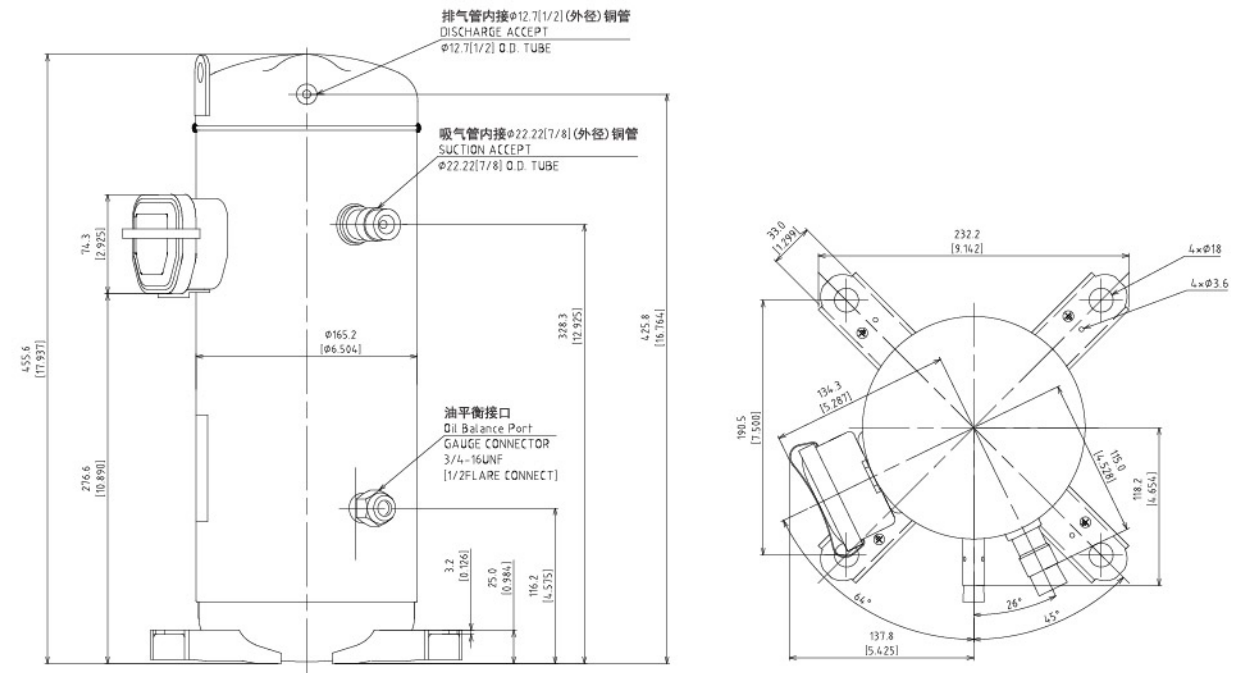
外观图
Outline Graph

E系列非补气机型 (R290)
E Series Standard Model

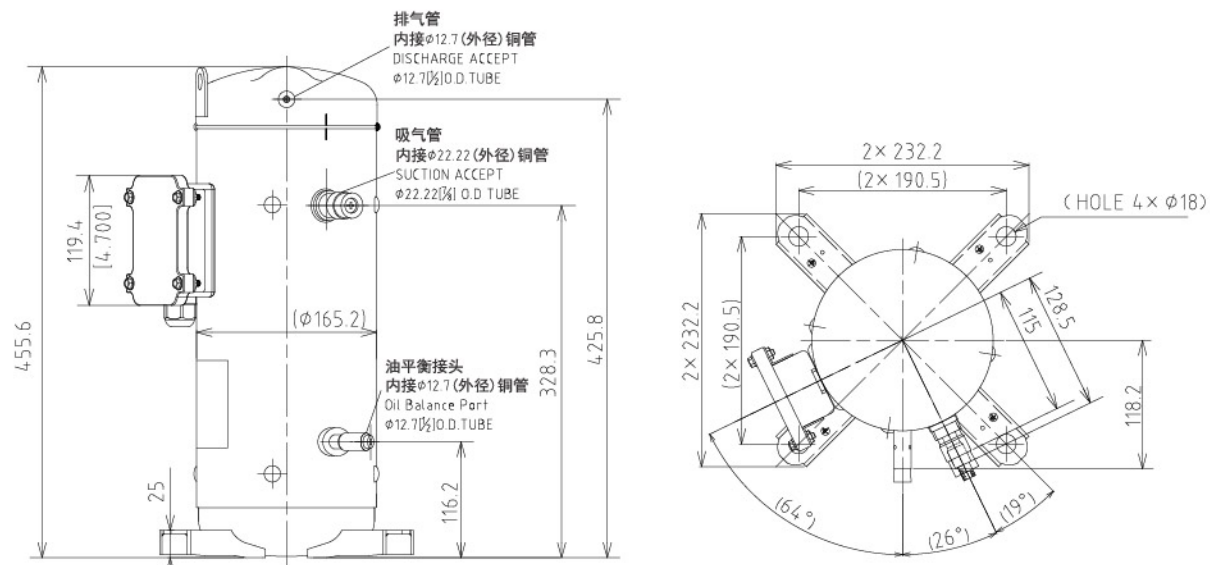


外观图
Outline Graph

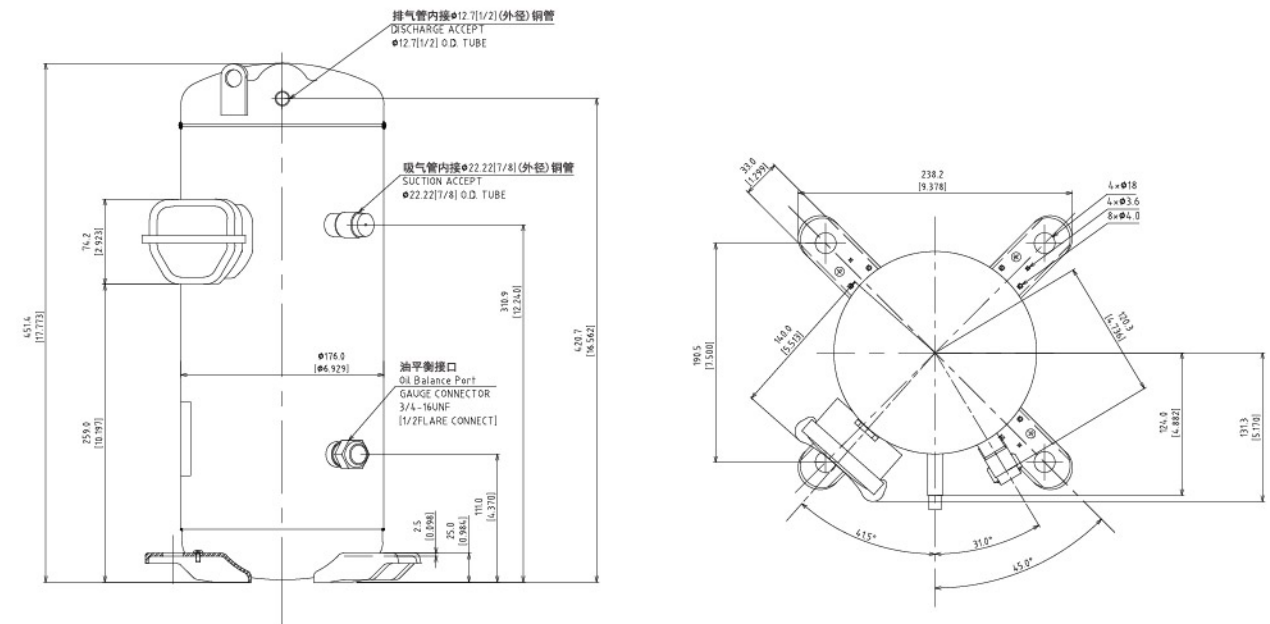
E系列非补气并联机型 (R32 3-6HP)
E Series Tandem Model



E系列非补气并联机型 (R290)
E Series Tandem Model

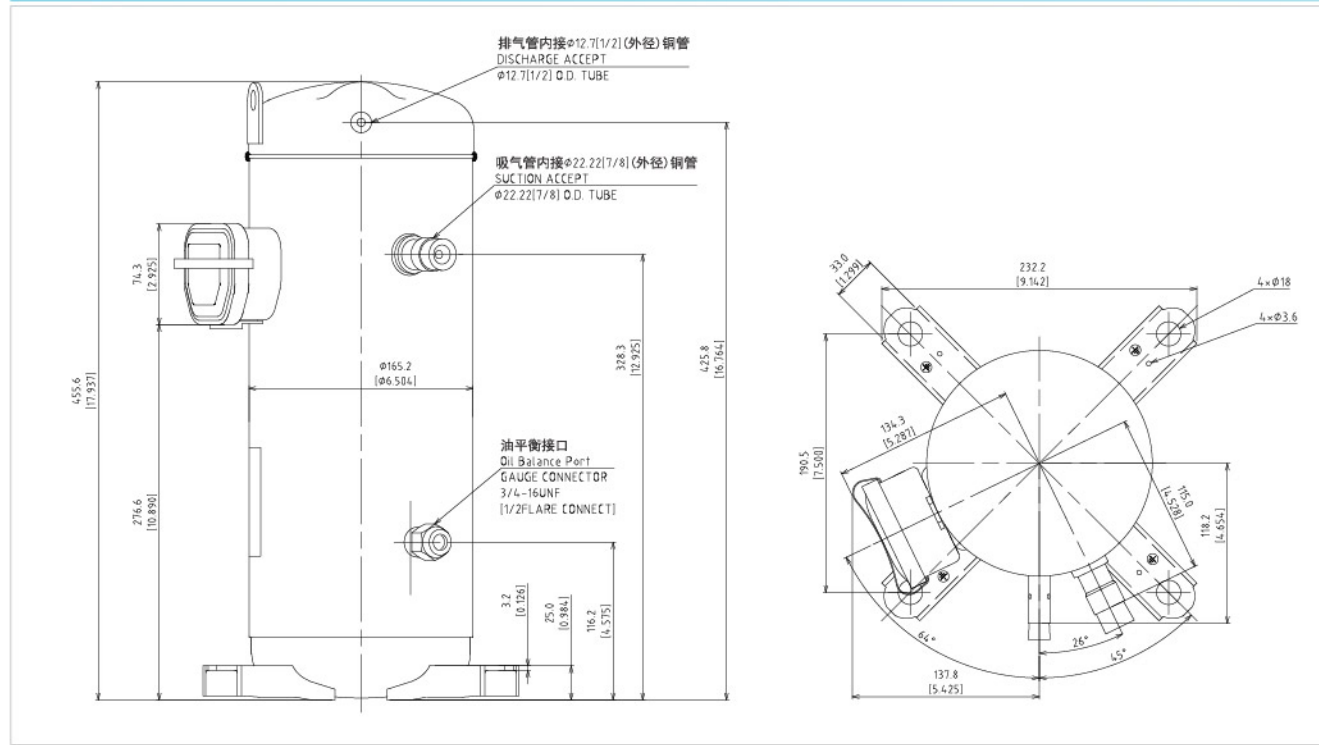


E系列非补气并联机型
E Series Tandem Model (R32/R454B 7HP)



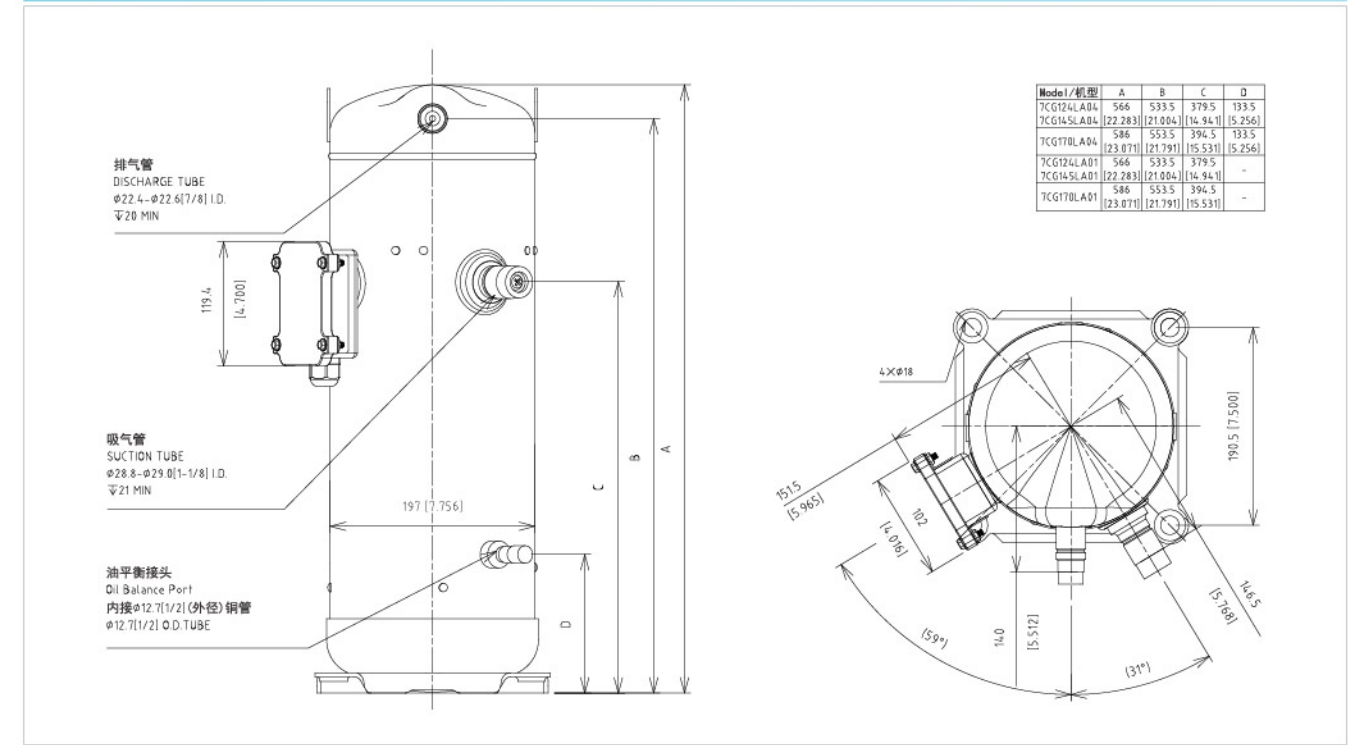
外观图
Outline Graph

E系列非补气并联机型 (R454B 3-6HP)
E Series Tandem Model



外观图
Outline Graph

G系列非补气并联机型 (R290)
G Series Tandem Model



F系列补气机型 (R410A)
F Series Vapor Injection Model

