

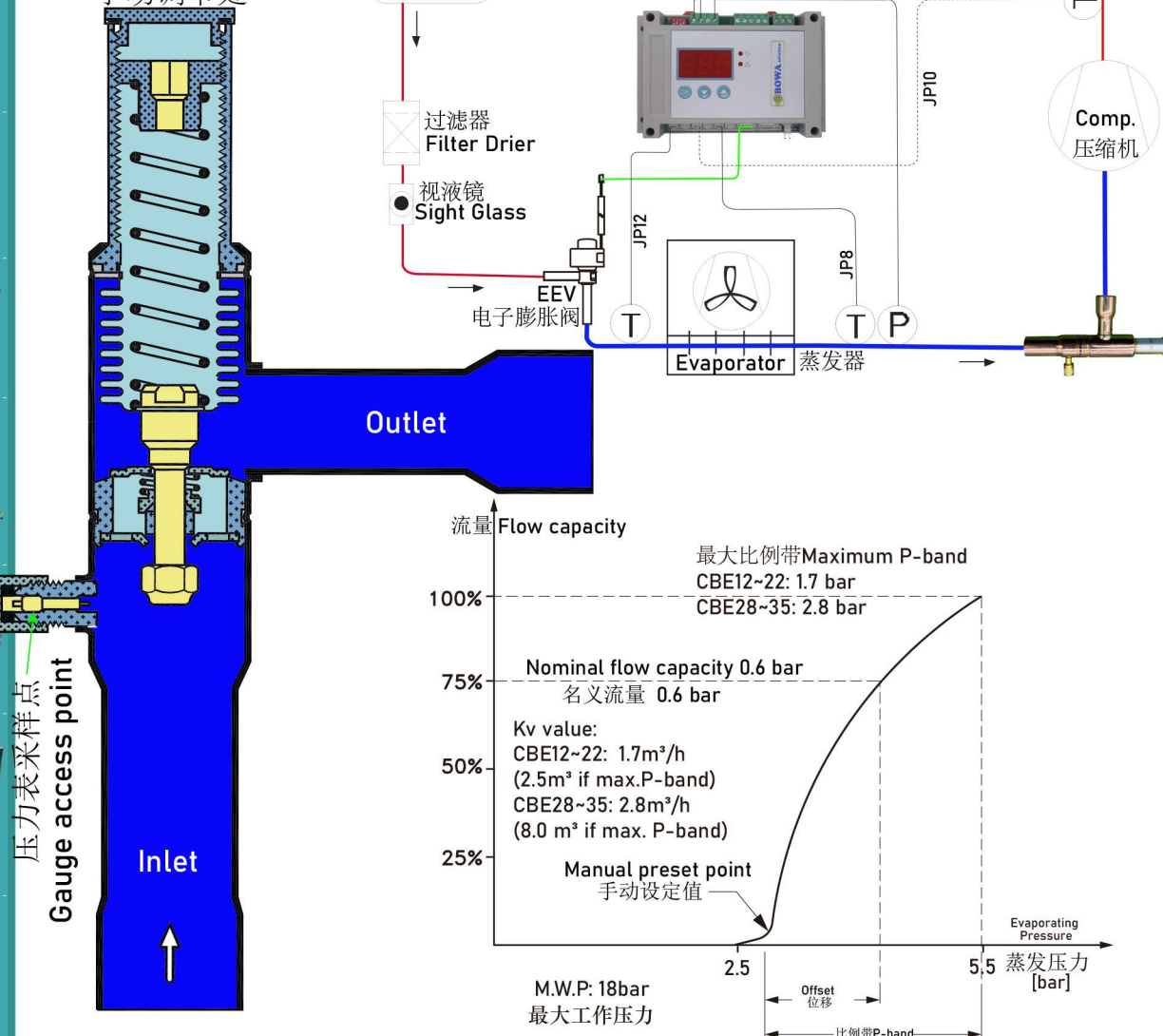
- CBE regulator is mounted in the suction line after the evaporator and is used to:
1. Maintain a constant evaporating pressure and thereby a constant surface temp. on the evaporator. The regulation is modulating. By throttling in the suction line, the amount of refrigerant gas is matched to the evaporator load.
 2. Protect against an evaporating pressure that is too low (e.g. as protection against freezing in a water chiller). The regulator closes when the pressure in the evaporator falls below the set value.
 3. Differentiate between the evaporating pressures in two or more evaporators in systems with one compressor.

CBE蒸发压力调节阀(背压阀)安装在蒸发器后的吸气管路上, 被用于:

1. 维持恒定的蒸发压力, 使蒸发器的表面温度保持恒定. 调节阀的控制是可调节的. 通过调节阀在吸气管路上的节流作用. 是制冷剂的流量同蒸发器的负荷相匹配.
2. 防止蒸发压力过低(如防止冷水机组中蒸发器冻裂).
当蒸发器的压力低于设定值时, 调节阀关闭

3. 蒸发压力调节阀也可用于一台压缩机配置蒸发压力不同的两个或两个以上蒸发器的制冷系统。

Manual setting screw
手动调节处



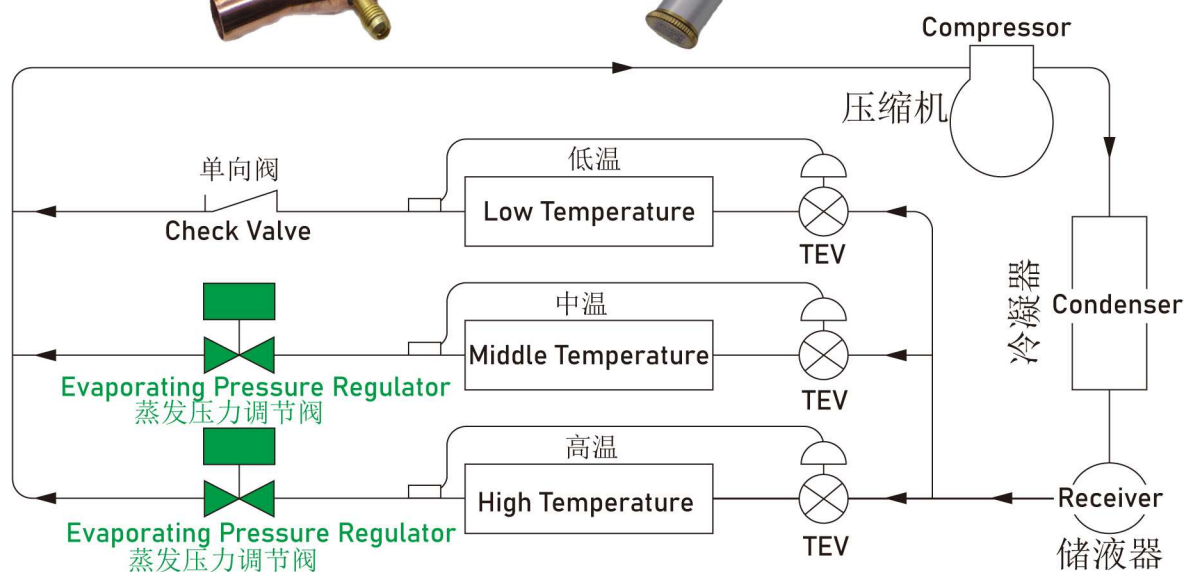


- * CBE蒸发器压力调节阀/背压阀在进口侧压力(蒸发压力)升高超出设定值时阀口打开。
- * 只用于调节进口压力. 出口压力的变化不会影响此阀的开度配置平衡波纹管
- * 波纹管的有效面积与相对应阀座的有效面积消除对设置的影响

* The CBE evaporator pressure regulator /background pressure valve opens on a rise in pressure on the inlet side, i.e. when the pressure in the evaporator exceeds the set value.

* It regulates inlet pressure only. Pressure variations on the outlet side of the regulator do not affect the degree of opening as the valve is equipped with equalization bellows

* The bellows have an effective area corresponding to that of the valve seat neutralising any affect to the setting

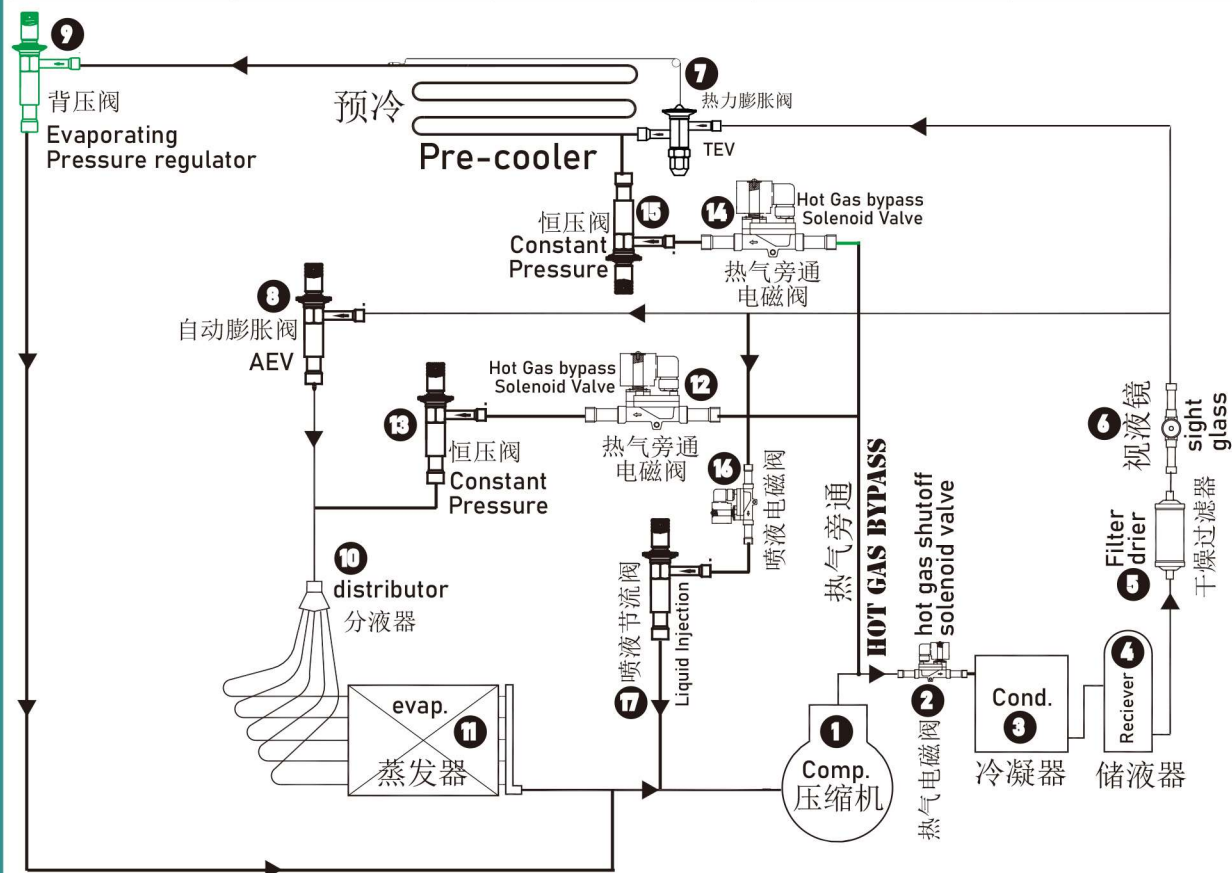


冷凝温度 Condensing Temp.: 55°C; 蒸发温度 Evaporating temp.: 10°C/6.81bar(a)

冷媒 Refrigerant	进出阀压降 Pressure drop across valve	工况体积流量 Working Volume flow	工况质量流量 Working Mass Flow	冷量 Cooling Capacity
	Bar	m ³ /hour	kgs/hour	kw
R22	0.1	4.66	134.21	4.84
	0.2	6.59	189.80	6.85
	0.3	8.07	232.45	8.39
	0.4	9.31	268.41	9.69
	0.5	10.41	300.10	10.83
	0.6	11.41	328.74	11.87

冷凝温度 Condensing Temp.: 30°C; 蒸发温度 Evaporating temp.: 2°C/5.31bar(a)

冷媒 Refrigerant	进出阀压降 Pressure drop across valve	工况体积流量 Working Volume flow	工况质量流量 Working Mass Flow	冷量 Cooling Capacity
	Bar	m³/hour	kgs/hour	kw
R22	0.1	5.60	111.59	4.98
	0.2	7.92	157.81	7.04
	0.3	9.70	193.28	8.63
	0.4	11.20	223.18	9.96
	0.5	12.52	249.53	11.14
	0.6	13.72	273.34	12.20

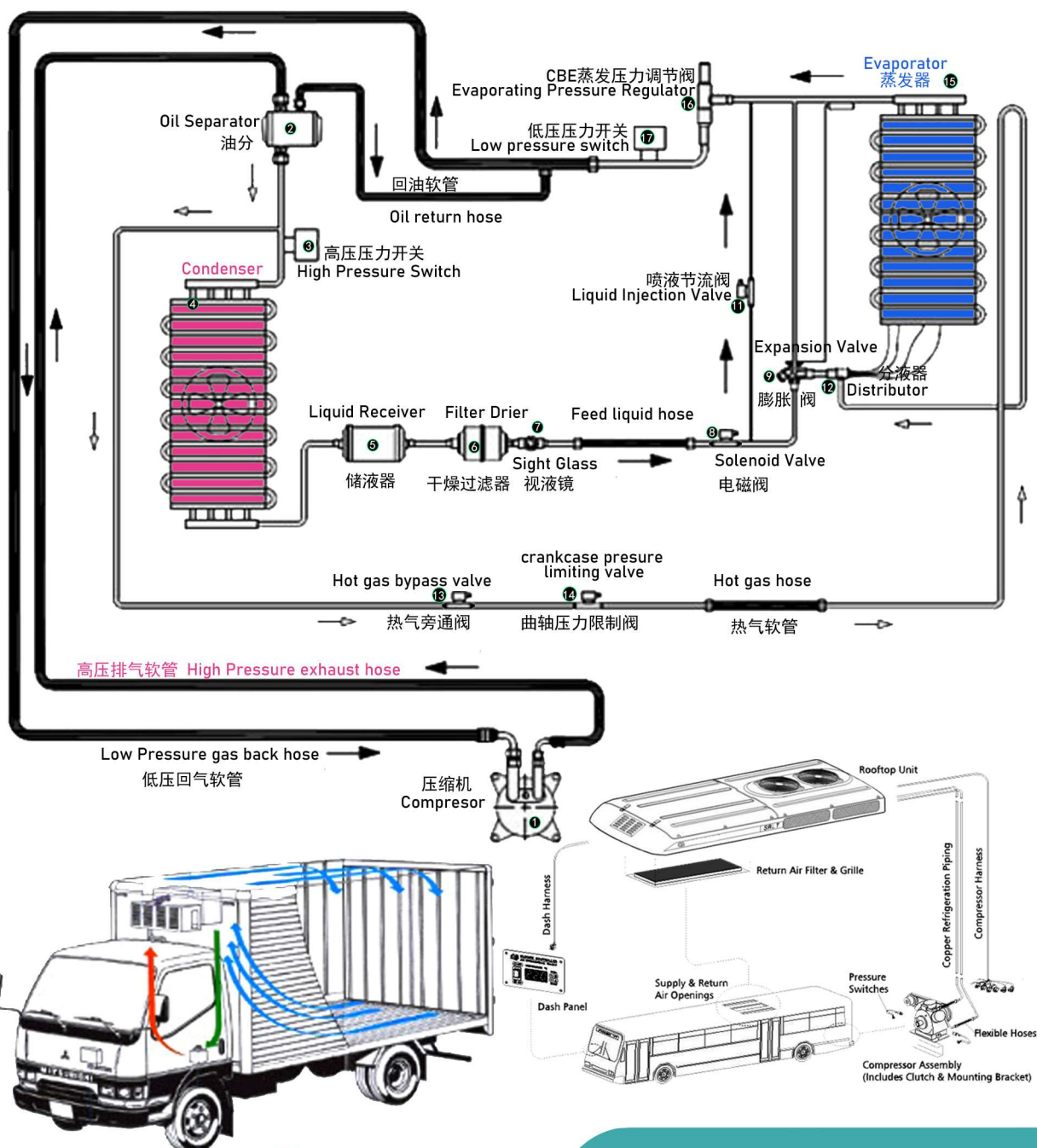


冷凝温度 Condensing Temp.: 30°C; 蒸发温度 Evaporating temp.: -10°C/3.55bar(a)

冷媒 Refrigerant	进出阀压降 Pressure drop across valve	工况体积流量 Working Volume flow	工况质量流量 Working Mass Flow	冷量 Cooling Capacity
	Bar	m³/hour	kgs/hour	kw
R22	0.1	6.39	97.86	4.25
	0.2	9.03	138.39	6.01
	0.3	11.06	169.49	7.36
	0.4	12.77	195.71	8.50
	0.5	14.28	218.81	9.50
	0.6	15.64	239.69	10.41

冷凝温度 Condensing Temp.: 30°C; 蒸发温度 Evaporating temp.: -20°C/2.45bar(a)

冷媒 Refrigerant	进出阀压降 Pressure drop across valve	工况体积流量 Working Volume flow	工况质量流量 Working Mass Flow	冷量 Cooling Capacity
	Bar	m ³ /hour	kgs/hour	kw
R22	0.1	11.33	55.19	2.34
	0.2	16.02	78.05	3.30
	0.3	19.62	95.59	4.05
	0.4	22.65	110.38	4.67
	0.5	25.32	123.40	5.22
	0.6	27.74	135.18	5.72

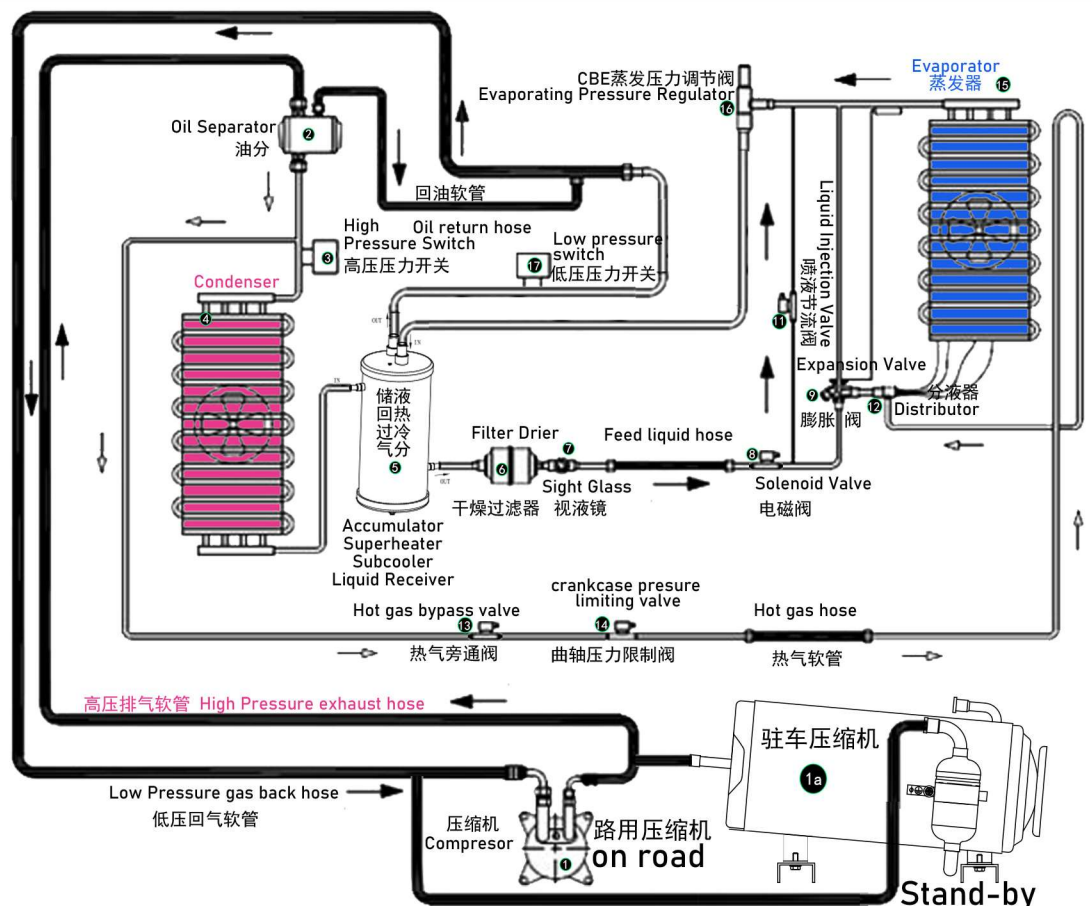


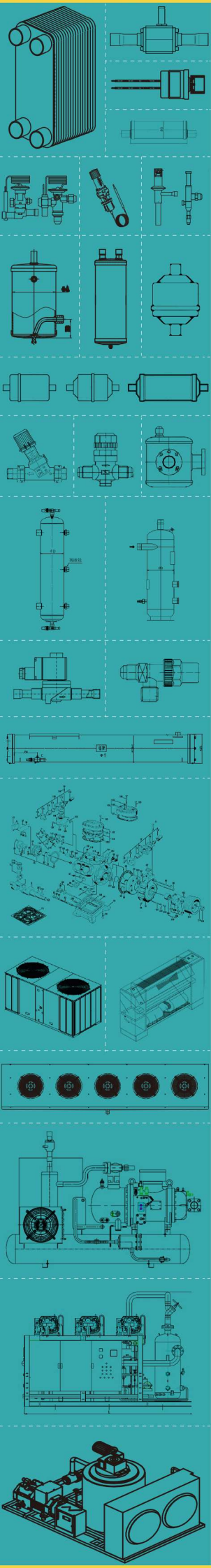
冷凝温度 Condensing Temp.: 54°C; 蒸发温度 Evaporating temp.: 18°C/5.37bar(a)

冷媒 Refrigerant	进出阀压降 Pressure drop across valve	工况体积流量 Working Volume flow	工况质量流量 Working Mass Flow	冷量 Cooling Capacity
	Bar	m³/hour	kgs/hour	kw
R134a	0.1	4.89	127.74	4.41
	0.2	6.92	180.66	6.24
	0.3	8.47	221.26	7.64
	0.4	9.79	255.49	8.82
	0.5	10.94	285.64	9.86
	0.6	11.98	312.91	10.80

冷凝温度 Condensing Temp.: 30°C; 蒸发温度 Evaporating temp.: -10°C/2.01bar(a)

冷媒 Refrigerant	进出阀压降 Pressure drop across valve	工况体积流量 Working Volume flow	工况质量流量 Working Mass Flow	冷量 Cooling Capacity
	Bar	m³/hour	kgs/hour	kw
R134a	0.1	7.89	79.22	3.16
	0.2	11.16	112.03	4.46
	0.3	13.66	137.21	5.47
	0.4	15.78	158.44	6.31
	0.5	17.64	177.14	7.06
	0.6	19.33	194.05	7.73





冷凝温度 Condensing Temp.: 30°C; 蒸发温度 Evaporating temp.: 0°C/6.0bar(a)

冷媒 Refrigerant	进出阀压降 Pressure drop across valve	工况体积流量 Working Volume flow	工况质量流量 Working Mass Flow	冷量 Cooling Capacity
	Bar	m³/hour	kgs/hour	kw
R404a	0.1	4.53	137.96	4.48
	0.2	6.41	195.10	6.33
	0.3	7.85	238.95	7.76
	0.4	9.06	275.91	8.96
	0.5	10.13	308.48	10.01
	0.6	11.10	337.92	10.97

冷凝温度 Condensing Temp.: 30°C; 蒸发温度 Evaporating temp.: -10°C/4.31bar(a)

冷媒 Refrigerant	进出阀压降 Pressure drop across valve	工况体积流量 Working Volume flow	工况质量流量 Working Mass Flow	冷量 Cooling Capacity
	Bar	m³/hour	kgs/hour	kw
R404a	0.1	5.41	115.56	3.58
	0.2	7.65	163.43	5.07
	0.3	9.37	200.16	6.20
	0.4	10.82	231.13	7.16
	0.5	12.09	258.41	8.01
	0.6	13.25	283.07	8.77

冷凝温度 Condensing Temp.: 30°C; 蒸发温度 Evaporating temp.: -20°C/3.0bar(a)

冷媒 Refrigerant	进出阀压降 Pressure drop across valve	工况体积流量 Working Volume flow	工况质量流量 Working Mass Flow	冷量 Cooling Capacity
	Bar	m³/hour	kgs/hour	kw
R404a	0.1	6.37	98.10	2.91
	0.2	9.01	138.74	4.11
	0.3	11.03	169.92	5.04
	0.4	12.74	196.21	5.82
	0.5	14.25	219.37	6.50
	0.6	15.61	240.30	7.12

冷凝温度 Condensing Temp.: 30°C; 蒸发温度 Evaporating temp.: -30°C/2.02bar(a)

冷媒 Refrigerant	进出阀压降 Pressure drop across valve	工况体积流量 Working Volume flow	工况质量流量 Working Mass Flow	冷量 Cooling Capacity
	Bar	m³/hour	kgs/hour	kw
R404a	0.1	7.74	80.77	2.27
	0.2	10.94	114.22	3.21
	0.3	13.40	139.89	3.93
	0.4	15.48	161.53	4.54
	0.5	17.30	180.60	5.07
	0.6	18.95	197.84	5.56

冷凝温度 Condensing Temp.: 30°C; 蒸发温度 Evaporating temp.: 2°C/4.94bar(a)

冷媒 Refrigerant	进出阀压降 Pressure drop across valve	工况体积流量 Working Volume flow	工况质量流量 Working Mass Flow	冷量 Cooling Capacity
	Bar	m³/hour	kgs/hour	kw
R407c	0.1	5.41	115.48	5.29
	0.2	7.65	163.31	7.47
	0.3	9.37	200.01	9.15
	0.4	10.82	230.95	10.57
	0.5	12.10	258.21	11.82
	0.6	13.26	282.86	12.95

冷凝温度 Condensing Temp.: 30°C; 蒸发温度 Evaporating temp.: 2°C/3.2bar(a)

冷媒 Refrigerant	进出阀压降 Pressure drop across valve	工况体积流量 Working Volume flow	工况质量流量 Working Mass Flow	冷量 Cooling Capacity
	Bar	m³/hour	kgs/hour	kw
R407c	0.1	6.53	95.70	4.22
	0.2	9.24	135.34	5.97
	0.3	11.31	165.76	7.32
	0.4	13.06	191.40	8.45
	0.5	14.60	214.00	9.45
	0.6	16.00	234.42	10.35

冷凝温度 Condensing Temp.: 30°C; 蒸发温度 Evaporating temp.: 10°C/6.37bar(a)

冷媒 Refrigerant	进出阀压降 Pressure drop across valve	工况体积流量 Working Volume flow	工况质量流量 Working Mass Flow	冷量 Cooling Capacity
	Bar	m³/hour	kgs/hour	kw
R290	0.1	6.73	92.87	7.50
	0.2	9.52	131.34	10.61
	0.3	11.66	160.86	13.00
	0.4	13.46	185.75	15.01
	0.5	15.05	207.67	16.78
	0.6	16.48	227.49	18.38

冷凝温度 Condensing Temp.: 30°C; 蒸发温度 Evaporating temp.: -10°C/3.45bar(a)

冷媒 Refrigerant	进出阀压降 Pressure drop across valve	工况体积流量 Working Volume flow	工况质量流量 Working Mass Flow	冷量 Cooling Capacity
	Bar	m³/hour	kgs/hour	kw
R290	0.1	7.77	80.48	6.03
	0.2	10.98	113.81	8.53
	0.3	13.45	139.39	10.45
	0.4	15.53	160.96	12.07
	0.5	17.37	179.95	13.49
	0.6	19.02	197.13	14.78