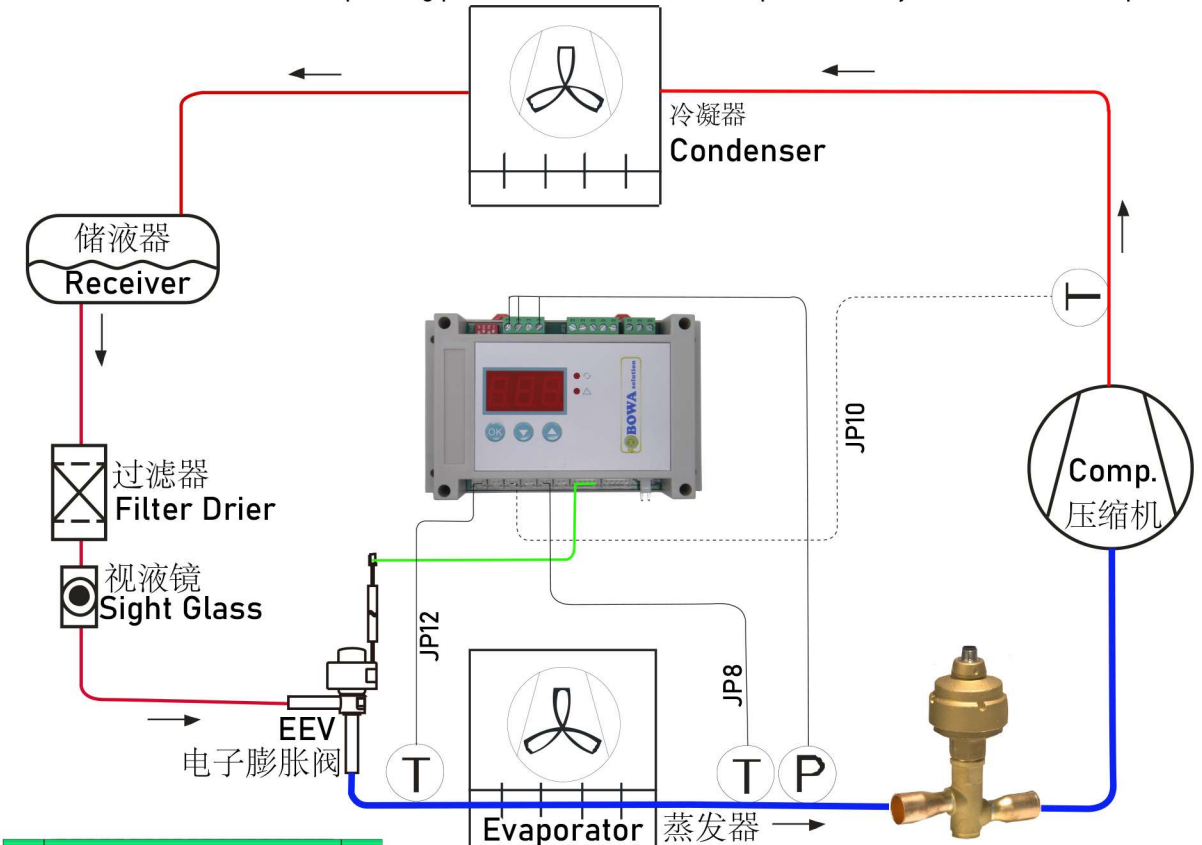


蒸发压力调节阀(背压阀)安装在蒸发器后的吸气管路上, 被用于:

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

The evaporating pressure regulator is mounted in the suction line after the evaporator and is used to:

1. Maintain a constant evaporating pressure & thereby a constant surface temperature on the evaporator. The valve is modulating. By throttling in the suction line, the amount of 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.



Model designation 型号说明

CBZ - 0.5

阀类型
Valve type

名义kV流量
Rated kV flow

Z - HP

制冷剂类型
Refrigerant type

工况
Working Conditions

H: R22

Z: R410a/R32

M: R134a/R513a

L: R290

N: R407c

S: R404a/R507

CH: 冷水机
Water Chiller

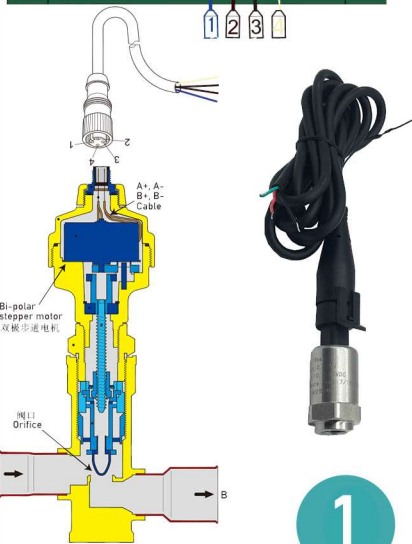
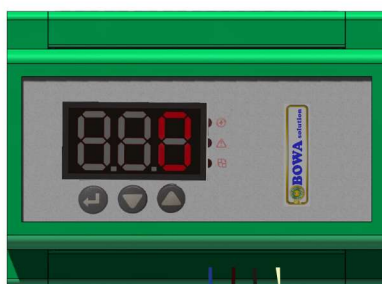
AC: 空调工况
Air conditioner

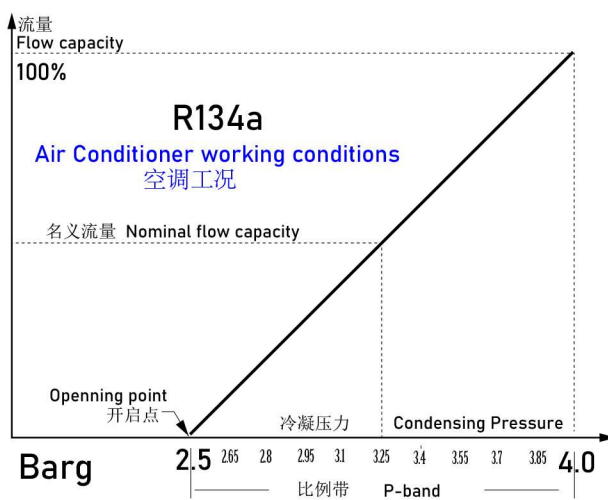
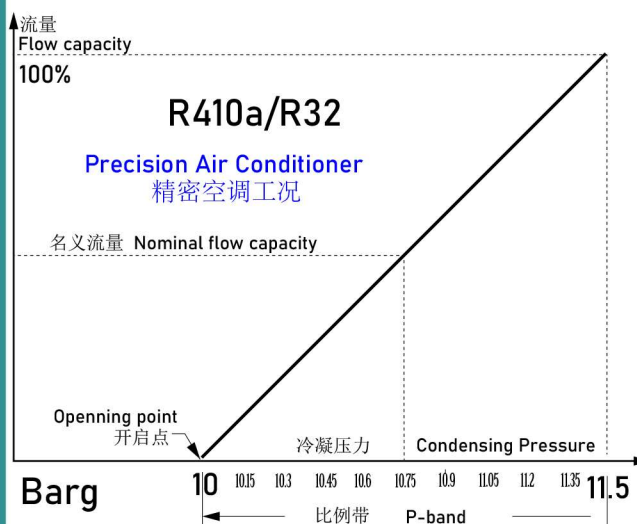
SD: 冷冻工况
Freezer

电动阀构成
1- 脉冲调制器
2- 压力变送器
3- 阀门执行器

Electric regulator includes:

- 1 - Pulse modulator
- 2 - Pressure Transmitter
- 3 - valve executor





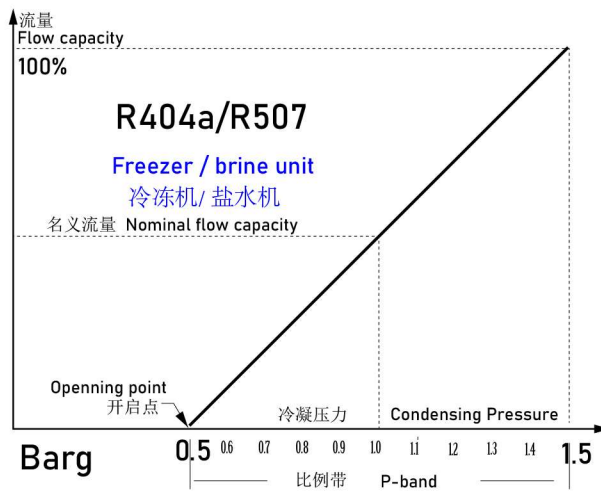
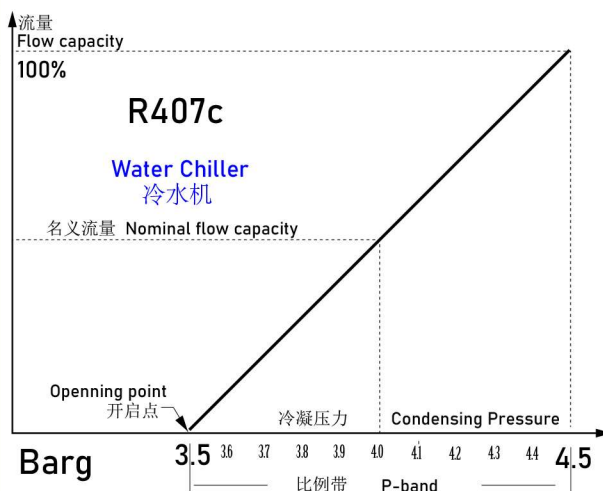
基于精密空调工况 Basing on precision air conditioner

冷凝温度 Condensing Temp.: 40°C; 蒸发温度 Evaporating temp.: 12.5°C;
进风干球温度: 23.94°C; 相对湿度 RH: 40% ~60%

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
R410A	0.1	5.76	257.24	18.03
	0.2	8.15	363.79	25.50
	0.3	9.98	445.55	31.23
	0.4	11.52	514.48	36.06
	0.5	12.88	575.20	40.32
	0.6	14.11	630.10	44.16

冷凝温度 Condensing Temp.: 54°C; 蒸发温度 Evaporating temp.: 8°C;

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
R134a	0.1	8.85	167.55	5.54
	0.2	12.51	236.95	7.84
	0.3	15.32	290.20	9.60
	0.4	17.69	335.10	11.08
	0.5	19.78	374.65	12.39
	0.6	21.67	410.41	13.57

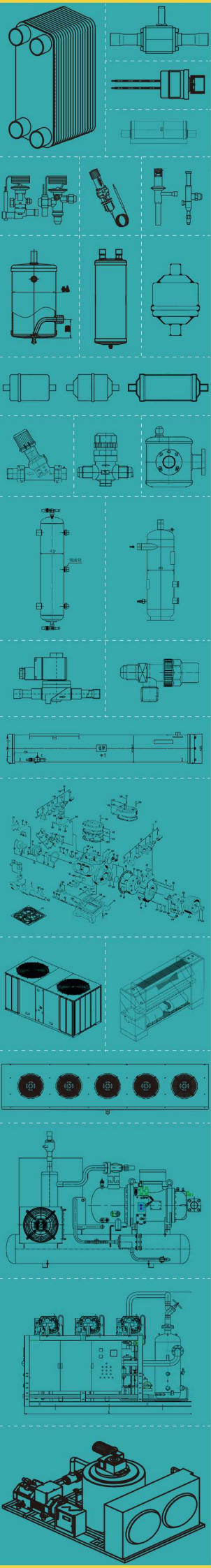


冷凝温度 Condensing Temp.: 30°C; 蒸发温度 Evaporating temp.: 2°C;

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
R407c	0.1	8.34	177.83	8.14
	0.2	11.79	251.49	11.51
	0.3	14.44	308.02	14.10
	0.4	16.67	355.67	16.28
	0.5	18.64	397.65	18.20
	0.6	20.42	435.60	19.94

冷凝温度 Condensing Temp.: 30°C; 蒸发温度 Evaporating temp.: -30°C;

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
R404a	0.1	11.92	124.38	3.49
	0.2	16.85	175.90	4.94
	0.3	20.64	215.43	6.05
	0.4	23.83	248.76	6.99
	0.5	26.65	278.13	7.81
	0.6	29.19	304.67	8.56



典型应用场景 Typical application examples

