

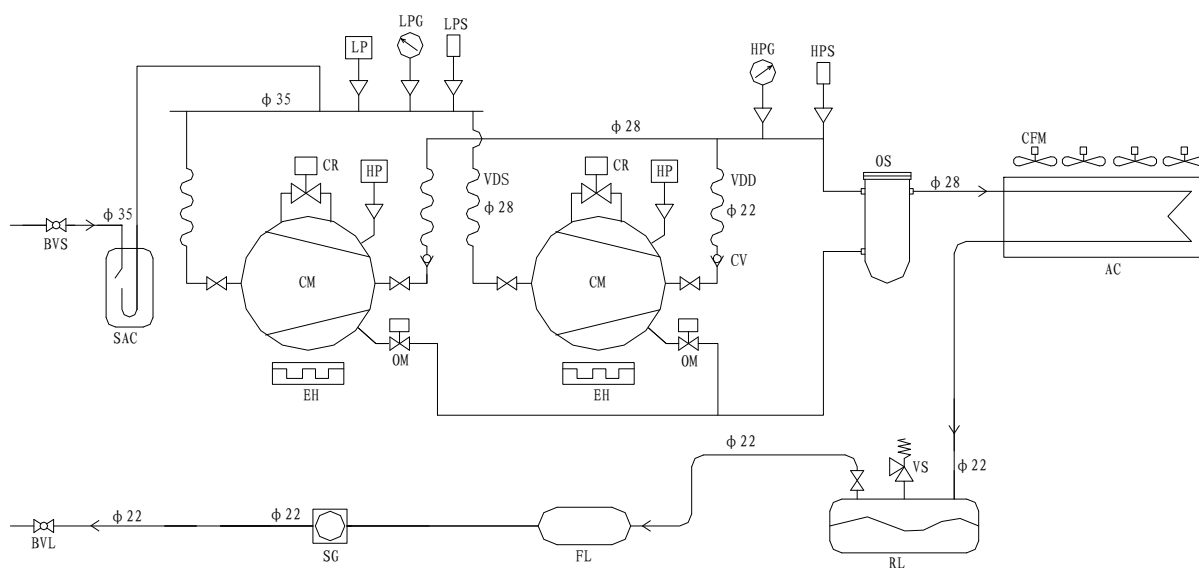
Design scheme of condensing unit

2026.07.01

1. Design condition 设计条件

Unit model : BGS2-06MYB-T			
Compressor model 压缩机	2×4CES-6Y	Refrigerant 制冷剂	R404A
Power supply 电源	400V/3PH/50Hz	Refrigeration capacity@50Hz 制冷量	2×17.1=34.2KW
Design evaporating temperature 设计蒸发温度	-5℃	Input power@50Hz 输入功率	2×8.55=17.1KW
Design condensation temperature 设计冷凝温度	50℃	Condensation load@50Hz 冷凝负荷	51.3 KW
Design ambient temperature 设计环境温度	35℃	Compressor rated current@50Hz 压缩机额定电流	2×14.5=29A
Design max. ambient temperature 设计最高环境温度	45℃	Compressor maximum current 压缩机最大电流	2×17.7A
Suction gas superheat 吸气过热度	10K	Capacity regulator 能量调节	25%-50%-75%-100%

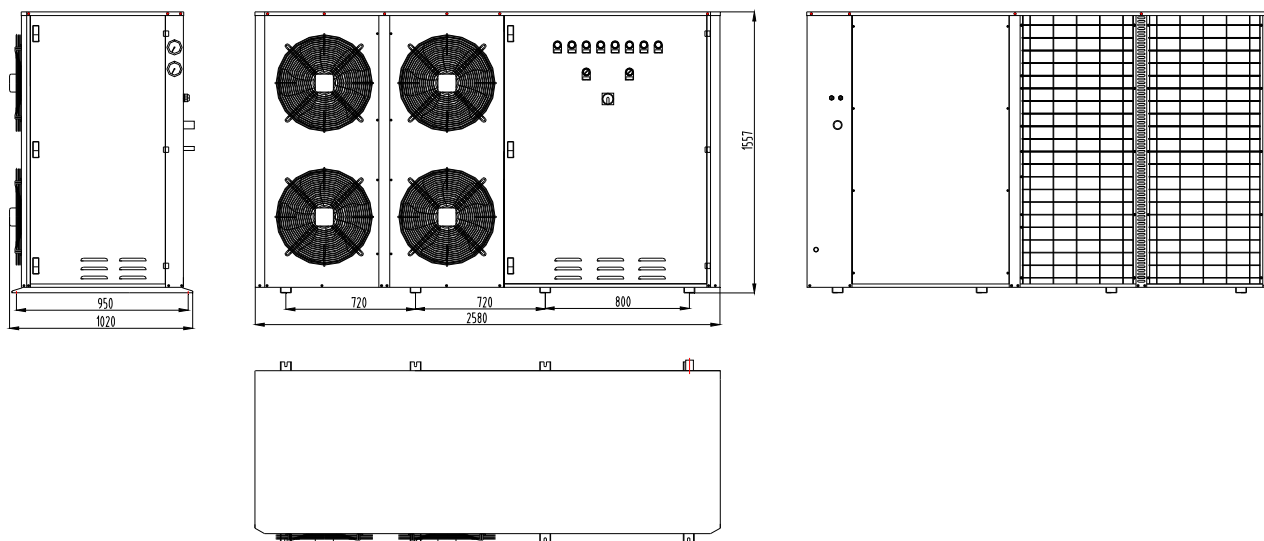
2 . Flowchart of the refrigeration system 制冷系统流程图



3 . Unit configuration table 机组配置:

Number 序号	Symbol 符号	Name 名称	Model 型号	Quantity 数量	Brand 品牌	Discription 描述
01	CM	Compressor 压缩机	4CES-6Y-40S	2	Bitzer	With 50% CR valve
02	EH	Oil heater 油加热		2	Bitzer	
03	OM	Oil controller 电子油位控制器	OM3-120 24VAC	2	ALCO	配接头
04	HPG	HP gauge 高压表	MR305	1	REFCO	
05	LPG	LP gauge 低压表	MR205	1	REFCO	
06	HP	HP switch 高压开关	KP5	2	Danfoss	
07	LP	LP switch 低压开关	KP1	1	Danfoss	
08	CV	Check valve 单向阀	YCVSH7H03	2	SANHUA	
09	VDD	Discharge vibration damper 排气减震管	Φ 22	2		
10	OS	Oil separator 油分	F-6609Q/2	1	O&F	
11	AC	Condenser 冷凝器	BSL130/60-1350	1		Rifled pipe and blue fins
12	CFM	Fan motor 冷凝风机	BY2EC500-102/050 (315W/2.05A)	4	DAYOUNG	220V/1PH/50Hz 网罩 35mm 高
13	RL	Liquid receiver (with valve) 储液器 (含 22 阀)	BSSC-30	1		30L
14	VS	Safety valve 安全阀	DN10FL-A3B3	1	HONGSEN	Release 3.1MPa 释放压力 3.1Mpa
15	FL	Filter 过滤器	DTGB-307S	1	SANHUA	
16	SG	Sight glass 视液镜	SYJ-22H11	1	SANHUA	
17	BVL	Ball valve 球阀	HBC-22	1	HONGSEN	
18	BVL	Ball valve 球阀	HBC-35	1	HONGSEN	
19	SAC	Accumulator 气液分离器	ZTQ-62011	1	ZTUO	
20	VDS	Suction vibration damper 吸气减震管	Φ 28	2		
21	FI1	Unit controller 机组控制器	XC450CX AC24V	1	DIXELL	
22	HPS	HP sensor 高压传感器	PP30-F	1	DIXELL	0-28Vdc, 4-20mA, 0-30bar
23	LPS	LP sensor 低压传感器	PP11-F	1	Dixell	0-28Vdc, 4-20mA, -0.5-11bar
24	TR	Transformer 变压器	NDK-50 AC220V/AC24V	1	CHINT	
25	QS	Emergency switch 急停开关	LW26GS-63/04M2	1	DELIX	
26	QF1	Main Breaker 断路器	IC65N4PD50A	1	Schneider	
27	QF2	Fans Breaker 断路器	IC65N2PD10A	1	Schneider	
28	QF3	Control circuit breaker 控制回路断路器	IC65N1PD6A	1	Schneider	
29	KM1/KM2	Compressor contactor 压缩机接触器	LC1D25M7C	2	Schneider	
30	KM3	Fans contactor 风机接触器	LC1D12M7C	1	Schneider	
31	FR1/FR2	Compressor thermal relay 压缩机热继电器	LRD21C	2	Schneider	
32	FR3	Fan motors thermal relay 风机热继电器	LRD16C	1	Schneider	
33	KA	Intermediate relay 中间继电器	RXM2LB2P7+ RXZE1M2C	1	Schneider	
34	SA	Rotary switch 旋钮开关	NP2-BD21	2	CHINT	
35	HL1	Indicator light 电源指示灯		1	CHINT	
36		Run light 运行指示		3	CHINT	
37		Module light 模块保护指示		2	CHINT	
38		Oil protect light 油位保护指示		2	CHINT	
39		Cabient 机箱		1		

4. Dimension of condensation unit 机组尺寸



- 1) 机箱门采用按压式快速旋转锁 (A7101-1011)。The door adopts a press-type quick-rotation lock.
- 2) **4 风口的中间加隔板。The condenser is equipped with a partition in the middle**
- 3) 详细尺寸以最终设计为准。The detailed dimensions are subject to the final design.