

螺杆并联机组

BSCR Rack系列



低温 150 450 HP

中温 180 540 HP



BEIJER REF

BSCR Rack
BSCR Series



稳定可靠 Stable and Reliable

- 高品质的世界名牌压缩机。
• High quality and world famous compressors.
- 99%分油效率的新型油分离系统, 机组开机无须添加润滑油。
• 99% efficiency oil separating system, eliminating the need of adding oil during system start up.
- 独特的高压控制系统 (可选配置) 保证了即使在冬天极低环境温度下, 系统保持12Bar冷凝压力并能高效率运行。
• Unique constant head pressure Control system, maintaining condensing pressure at 12 Bar and enhancing system efficiency during winter at low ambient temperature condition (optional).
- 每台机组出厂均标配电脑控制器, 自动调节压缩机运行时间, 延长压缩机使用寿命。
• Microprocessor controller allows automatic regulation of compressor operating time, prolonged compressor life span.
- 配套使用BOHN"浮动盘管"专利的WRC系列风冷冷凝器, 其高效和长寿命设计使系统运行更稳定。
• If equipped with BOHN air cooler condenser which uses patented Floating Coil technology, it is highly efficient, long operating life which ensures a stable system operation.
- 每台机组出厂均标配包括缺相、反相序过电压、欠电压、油压、高压、低压、电子式低液位、电子式电机过载在内的全套安全保护模块。
• Rack completes with phase loss, phase reversal, over/under voltage monitor, oil pressure failure switch, high pressure and low pressure switch and electronic motor over load protector.
- 独特的汽液分离设计, 最大限度避免液击。
• Unique liquid refrigerant separation design, eliminating liquid refrigerant flow back to compressor.(optional for MT rack).
- 预留有远端报警出线点, 方便客户监控。
• Alarm output connection for remote alarm monitoring.



高效节能

High efficiency and saving energy

- 可不等大小配比压缩机, 提供更多的调节级数, 冷量输出可以更加平滑地动态匹配实际负荷。
• Uneven parallel compressor rack provides more and smooth energy regulating steps, output smooth and dynamic matching capacity.
- 电脑控制器在日常部分负荷情况下调整机组最佳运行曲线, 为终端用户节省大量电能。
• With micro processor controller control adjust optimum operation curve under routine capacity condition, save energy for customer.
- 精确的管路设计, 把管路温度损失减到最小, 提高了效率。
• Accurate refrigerant piping design, reduce temperature loss as much as possible and improve the efficiency.
- 采用高效油分离器, 润滑油只有很少一部分进入系统, 提高了换热器的效率。
• Use high efficiency oil separating system, drastically reduce lubrication oil migrating to system and improve heat exchange efficiency of evaporator and condenser.
- 在提高冷柜/冷库温度品质的同时, 也降低了蒸发器的湿负荷, 降低了除霜的次数和时间, 提高了系统的效率。
• Improve showcase/cold storage humidity quality, decrease evaporator wet capacity, reduce defrost time and raise system efficiency.
- 高效可靠的自动温控热水回收装置, 使节能更明显。
• With high efficiency automatic heat reclaim system, enhance energy saving.
- 机组可选用BOHN热气化霜方案, Priority II, 降低了除霜耗电, 使系统更节能。
• Select BOHN gas defrost solution Priority II, reduce energy consumption.

市场范围 Market Segments



• 餐饮 Food Service

• 超市 Super Market

• 冷冻冷藏 Cold Storage

命名规则 Nomenclature

螺杆并联机组
BSCR RACK

B₍₁₎ **SCR**₍₂₎ **4**₍₃₎ **300**₍₄₎ **-X**₍₅₎ **-L**₍₆₎ **Y**₍₇₎

(1) 品牌	(1) Beijer Ref
(2) SCR:螺杆并联压缩机组	(2) SCR:Screw Rack System
(3) 4:压缩机数量	(3) 4:Compressor No.
(4) 300:总匹数	(4) 300:Total HP
(5) X:单级压缩	(5) X:Single Stage
B:低压级	B:Booster
T:双级压缩	T:Two Stage
(6) L:中低温(蒸发温度:-45~-25℃)	(5) L:Low temp(Evaporating temp.range:-45~-25)
M:中温(蒸发温度:-15~0℃)	M:Med temp(Evaporating temp.range:-15~0℃)
(7) 润滑油种类	(7) Types of oil
空白:矿物油	Blank:Mineral Oil(R22)
Y:聚酯油	Y:Polyester Oil(R404A,R507A)

描述

Description

- 节约能源, 按需提供冷量, 比配备单个独立式机组节能20%以上。
- On-demand cooling capacity saves 20% or more energy compared with single independent unit .
- 结构紧凑, 多个机头集中安装, 节约机房占地空间。
- Compact and structure compressor configuration.
- 全自动化, 采用进口品牌的机组专用控制器。
- Full automated special rack controller with world-renowned brands.

制冷量与输入功率 (R22)

Capacity and Input Power (R22)

中温

MT

型号 Model	蒸发温度SET -15°C		蒸发温度SET -10°C		蒸发温度SET -5°C		蒸发温度SET 0°C		蒸发温度SET 5°C		通风量 (Air Flow) m ³ /h
	制冷量 Capacity	功率 Input Power	制冷量 Capacity	功率 Input Power	制冷量 Capacity	功率 Input Power	制冷量 Capacity	功率 Input Power	制冷量 Capacity	功率 Input Power	
BSCR2180-XM	215.00	116.40	265.40	118.60	323.20	121.20	390.20	124.20	464.00	127.80	16500
BSCR3240-XM	290.70	161.40	359.70	161.40	439.20	162.00	532.80	163.20	636.00	165.60	22500
BSCR3270-XM	322.50	174.60	398.10	177.90	484.80	181.80	585.30	186.30	696.00	191.70	24800
BSCR4320-XM	387.60	215.20	479.60	215.20	585.60	216.00	710.40	217.60	848.00	220.80	29900
BSCR4360-XM	430.00	232.80	530.80	237.20	646.40	242.40	780.40	248.40	928.00	255.60	33000
BSCR5400-XM	484.50	269.00	599.50	269.00	732.00	270.00	888.00	272.00	1060.00	276.00	37400
BSCR7490-XM	607.60	351.40	752.50	350.70	919.10	350.70	1114.40	350.00	1332.10	350.00	44900

其他技术参数 (R22)

Other Technical Data (R22)

中温

MT

型号 Model	匹数 HP	压缩机Compressor		最大工作电流 Max. Operating Current A	机组对外管路尺寸Dimension (mm)			标准支管路数量No. of Branch Line Ball Valve		
		型号 Model	数量 Qty		排气	吸气	供液	排气	吸气	供液
					Discharge Pipe mm	Suction Pipe mm	Liquid Pipe mm	Discharge Pipe	Suction Pipe	Liquid Pipe
BSCR2180-XM	180	HSK7471-90	2	217	DN65	DN80	42	1	2	2
BSCR3240-XM	240	HSK7461-80	3	266	DN80	DN100	42	1	2	2
BSCR3270-XM	270	HSK7471-90	3	325	DN80	DN100	42	1	2	2
BSCR4320-XM	320	HSK7461-80	4	354	DN80	DN100	42	1	3	3
BSCR4360-XM	360	HSK7471-90	4	433	DN80	DN100	42	1	3	3
BSCR5400-XM	400	HSK7461-80	5	442	DN100	DN100	42	1	4	4
BSCR7490-XM	490	HSK7451-70	7	565	DN100	DN100	42	1	4	4

机组供电380V/3P/50Hz。

Power supply: 380V/3P/50Hz.

名义制冷量及输入功率基于环境温度+38°C, 冷凝温度+45°C, 制冷剂R22。

Nominal cooling capacity and input power are based on ambient temperature +38°C, condensing temperature +45°C and refrigerant R22.

如果机组需要运行于不同的蒸发温度或过高/过低的冷凝温度, 请联系我们当地代表处。

If the same rack system should be applied in different evaporating temperatures or condensing temperature is out the normal range, please contact our local representative office.

所有的制冷量参数为均净有效值, 在考虑了管路损失后仅需对系统加最多10%的余量。

All capacities are net effective value. If pipe lose is considered in the system, only add 10% capacity.

制冷量与输入功率 (R22)

Capacity and Input Power (R22)

低温

LT

型号 Model	蒸发温度SET -45°C		蒸发温度SET -40°C		蒸发温度SET -35°C		蒸发温度SET 30°C		蒸发温度SET -25°C		通风量 (Air Flow) m3/h
	制冷量 Capacity	功率 Input Power	制冷量 Capacity	功率 Input Power	制冷量 Capacity	功率 Input Power	制冷量 Capacity	功率 Input Power	制冷量 Capacity	功率 Input Power	
BSCR2150-XL	72.20	97.60	94.80	101.60	120.80	105.40	150.60	109.00	184.40	112.80	9800
BSCR3210-XL	99.00	136.80	130.50	142.50	167.10	147.90	208.80	153.00	256.50	158.10	14000
BSCR3225-XL	108.30	146.40	142.20	152.40	181.20	158.10	225.90	163.50	276.60	169.20	14700
BSCR4280-XL	132.00	182.40	174.00	190.00	222.80	197.20	278.40	204.00	342.00	210.80	18700
BSCR4300-XL	144.40	195.20	189.60	203.20	241.60	210.80	301.20	218.00	368.80	225.60	19600
BSCR5350-XL	165.00	228.00	217.50	237.50	278.50	246.50	348.00	255.00	427.50	263.50	23400
BSCR5375-XL	180.50	244.00	237.00	254.00	302.00	263.50	376.50	272.50	461.00	282.00	24500
BSCR6420-XL	198.00	273.60	261.00	285.00	334.20	295.80	417.60	306.00	513.00	316.20	28000

其他技术参数 (R22)

Other Technical Data (R22)

中温

MT

型号 Model	匹数 HP	压缩机Compressor		最大工作电流 Max. Operating Current A	机组对外管路尺寸Dimension (mm)			标准支管路数量No. of Branch Line Ball Valve		
		型号 Model	数量 Qty		排气 Discharge Pipe mm	吸气 Suction Pipe mm	供液 Liquid Pipe mm	排气 Discharge Pipe	吸气 Suction Pipe	供液 Liquid Pipe
BSCR2150-XL	150	HSN7471-75	2	181	DN50	DN80	28	1	2	2
BSCR3210-XL	210	HSN7461-70	3	254	DN65	DN100	35	1	2	2
BSCR3225-XL	225	HSN7471-75	3	271	DN65	DN100	35	1	2	2
BSCR4280-XL	280	HSN7461-70	4	338	DN65	DN100	35	1	3	3
BSCR4300-XL	300	HSN7471-75	4	361	DN65	DN100	35	1	3	3
BSCR5350-XL	350	HSN7461-70	5	423	DN80	DN100	35	1	4	4
BSCR5375-XL	375	HSN7471-75	5	451	DN80	DN100	35	1	4	4
BSCR6420-XL	420	HSN7461-70	6	507	DN80	DN100	35	1	4	4

机组供电380V/3P/50Hz。

Power supply: 380V/3P/50Hz.

名义制冷量及输入功率基于环境温度+38°C, 冷凝温度+45°C, 制冷剂R22。

Nominal cooling capacity and input power are based on ambient temperature +38°C, condensing temperature +45°C and refrigerant R22.

如果机组需要运行于不同的蒸发温度或过高/过低的冷凝温度, 请联系我们当地代表处。

If the same rack system should be applied in different evaporating temperatures or condensing temperature is out the normal range, please contact our local representative office.

所有的制冷量参数均为净有效值, 在考虑了管路损失后仅需对系统加最多10%的余量。

All capacities are net effective valve. If pipe lose is considered in the system, only add 10% capacity.

制冷量与输入功率 (R404A) Capacity and Input Power (R404A)

中温
MT

型号 Model	蒸发温度SET -15°C		蒸发温度SET -10°C		蒸发温度SET -5°C		蒸发温度SET 0°C		蒸发温度SET 5°C		通风量 (Air Flow) m3/h
	制冷量 Capacity	功率 Input Power	制冷量 Capacity	功率 Input Power	制冷量 Capacity	功率 Input Power	制冷量 Capacity	功率 Input Power	制冷量 Capacity	功率 Input Power	
BSCR2180-XMY	210.80	135.20	262.20	138.00	322.20	141.00	408.00	144.00	482.00	147.20	16500
BSCR3240-XMY	289.50	187.50	359.10	189.60	441.00	191.40	559.20	193.20	660.00	194.70	22500
BSCR3270-XMY	316.20	202.80	393.30	207.00	483.30	211.50	612.00	216.00	723.00	220.80	24800
BSCR4320-XMY	386.00	250.00	478.80	252.80	588.00	255.20	745.60	257.60	880.00	259.60	29900
BSCR4360-XMY	421.60	270.40	524.40	276.00	644.40	282.00	816.00	288.00	964.00	294.40	33000
BSCR5400-XMY	482.50	312.50	598.50	316.00	735.00	319.00	932.00	322.00	1100.00	324.50	37400
BSCR7490-XMY	585.90	404.60	729.40	404.60	898.80	403.20	1142.40	401.10	1353.10	396.90	44900

其他技术参数 (R404A) Other Technical Data (R404A)

中温
MT

型号 Model	匹数 HP	压缩机Compressor		最大工作电流 Max. Operating Current A	机组对外管路尺寸Dimension (mm)			标准支管路数量No. of Branch Line Ball Valve		
		型号 Model	数量 Qty		排气 Discharge Pipe mm	吸气 Suction Pipe mm	供液 Liquid Pipe mm	排气 Discharge Pipe	吸气 Suction Pipe	供液 Liquid Pipe
BSCR2180-XMY	180	HSK7471-90	2	245	DN65	DN80	54	1	2	2
BSCR3240-XMY	240	HSK7461-80	3	309	DN80	DN100	54	1	2	2
BSCR3270-XMY	270	HSK7471-90	3	367	DN80	DN100	54	1	2	2
BSCR4320-XMY	320	HSK7461-80	4	412	DN80	DN100	54	1	3	3
BSCR4360-XMY	360	HSK7471-90	4	490	DN80	DN100	54	1	3	3
BSCR5400-XMY	400	HSK7461-80	5	515	DN100	DN100	54	1	4	4
BSCR7490-XMY	490	HSK7451-70	7	646	DN100	DN100	54	1	4	4

机组供电380V/3P/50Hz。名义制冷量及输入功率基于环境温度+38°C，冷凝温度+45°C，制冷剂R404A。

Power supply: 380V/3P/50Hz. Nominal cooling capacity and input power are based on ambient temperature +38°C, condensing temperature +45°C and refrigerant R404A.

如果机组需要运行于不同的蒸发温度或过高/过低的冷凝温度，请联系我们当地代表处。

If the same rack system should be applied in different evaporating temperatures or condensing temperature is out the normal range, please contact our local representative office.

所有的制冷量参数为均净有效值，在考虑了管路损失后仅需对系统加最多10%的余量。

All capacities are net effective valve. If pipe lose is considered in the system, only add 10% capacity.

制冷量与输入功率 (R404A)

Capacity and Input Power (R404A)

低温

LT

型号 Model	蒸发温度SET -45°C		蒸发温度SET -40°C		蒸发温度SET -35°C		蒸发温度SET -30°C		蒸发温度SET -25°C		通风量 (Air Flow) m3/h
	制冷量 Capacity	功率 Input Power	制冷量 Capacity	功率 Input Power	制冷量 Capacity	功率 Input Power	制冷量 Capacity	功率 Input Power	制冷量 Capacity	功率 Input Power	
BSCR2150-XLY	81.00	113.60	103.00	118.20	128.20	123.00	157.00	128.40	190.00	134.00	9800
BSCR3210-XLY	113.40	160.20	145.20	166.80	182.10	172.80	224.40	178.50	272.70	184.20	14000
BSCR3225-XLY	121.50	170.40	154.50	177.30	192.30	184.50	235.50	192.60	285.00	201.00	14700
BSCR4280-XLY	151.20	213.60	193.60	222.40	242.80	230.40	299.20	238.00	363.60	245.60	18700
BSCR4300-XLY	162.00	227.20	206.00	236.40	256.40	246.00	314.00	256.80	380.00	268.00	19600
BSCR5350-XLY	189.00	267.00	242.00	278.00	303.50	288.00	374.00	297.50	454.50	307.00	23400
BSCR5375-XLY	202.50	284.00	257.50	295.50	320.50	307.50	392.50	321.00	475.00	335.00	24500
BSCR6420-XLY	226.80	320.40	290.40	333.60	364.20	345.60	448.80	357.00	545.40	368.40	28000

其他技术参数 (R404A)

Other Technical Data (R404A)

低温

LT

型号 Model	匹数 HP	压缩机Compressor		最大工作电流 Max. Operating Current	机组对外管路尺寸Dimension (mm)			标准支管路数量No. of Branch Line Ball Valve		
		型号 Model	数量 Qty		排气 Discharge Pipe	吸气 Suction Pipe	供液 Liquid Pipe	排气 Discharge Pipe	吸气 Suction Pipe	供液 Liquid Pipe
BSCR2150-XLY	150	HSN7471-75	2	212	DN50	DN80	42	1	2	2
BSCR3210-XLY	210	HSN7461-70	3	293	DN65	DN100	42	1	2	2
BSCR3225-XLY	225	HSN7471-75	3	318	DN65	DN100	42	1	2	2
BSCR4280-XLY	280	HSN7461-70	4	391	DN65	DN100	42	1	3	3
BSCR4300-XLY	300	HSN7471-75	4	424	DN65	DN100	42	1	3	3
BSCR5350-XLY	350	HSN7461-70	5	489	DN80	DN100	42	1	4	4
BSCR5375-XLY	375	HSN7471-75	5	531	DN80	DN100	42	1	4	4
BSCR6420-XLY	420	HSN7461-70	6	586	DN80	DN100	42	1	4	4

机组供电380V/3P/50Hz。

Power supply: 380V/3P/50Hz.

名义制冷量及输入功率基于环境温度+38°C, 冷凝温度+45°C, 制冷剂R404A。

Nominal cooling capacity and input power are based on ambient temperature +38°C, condensing temperature +45°C and refrigerant R404A.

如果机组需要运行于不同的蒸发温度或过高/过低的冷凝温度, 请联系我们当地代表处。

If the same rack system should be applied in different evaporating temperatures or condensing temperature is out the normal range, please contact our local representative office.

所有的制冷量参数为均净有效值, 在考虑了管路损失后仅需对系统加最多10%的余量。

All capacities are net effective value. If pipe lose is considered in the system, only add 10% capacity.

尺寸参数

Dimension

型号 Model	外形尺寸 Dimension (mm)			
	长(L)	宽(W)	高(H)	重量 Weight(kg)
BSCR2180-XM	3520	1750	2100	1700
BSCR3240-XM	4280	1750	2100	2300
BSCR3270-XM	4280	1750	2100	2450
BSCR4320-XM	5040	1750	2100	2900
BSCR4360-XM	5040	1750	2100	3000
BSCR5400-XM	6000	2200	2100	3550
BSCR7490-XM	7520	2200	2100	5000
BSCR2150-XL	3520	1750	2100	1900
BSCR3210-XL	4280	1750	2100	2600
BSCR3225-XL	4280	1750	2100	2650
BSCR4280-XL	5040	1750	2100	3150
BSCR4300-XL	5040	1750	2100	3250
BSCR5350-XL	6000	2200	2100	3750
BSCR5375-XL	6000	2200	2100	3850
BSCR6420-XL	6760	2200	2100	4950
BSCR2180-XMY	3550	1750	2100	1700
BSCR3240-XMY	4300	1750	2100	2300
BSCR3270-XMY	4300	1750	2100	2450
BSCR4320-XMY	5050	1750	2100	2900
BSCR4360-XMY	5050	1750	2100	3000
BSCR5400-XMY	6000	2200	2100	3550
BSCR7490-XMY	7600	2200	2100	5000
BSCR2150-XLY	3550	1750	2100	1900
BSCR3210-XLY	4300	1750	2100	2600
BSCR3225-XLY	4300	1750	2100	2650
BSCR4280-XLY	5050	1750	2100	3150
BSCR4300-XLY	5050	1750	2100	3250
BSCR5350-XLY	6000	2200	2100	3750
BSCR5375-XLY	6000	2200	2100	3850
BSCR6420-XLY	6800	2200	2100	5000

