

Refrigeration Unit

Bitzer Semi-hermetic Reciprocating Compressor Racks



Compressor racks are the best solution for industrial and commercial applications which requires high refrigeration capacity. These systems consist of multiple compressors assembled in a robust frame, condenser and compressor rack is separated from each other as two independent units. The rack can be equipped with a wide range of options, from 2 up to 8 semi-hermetic compressors, in order to meet diverse cooling needs. All components of the refrigeration unit provide a comprehensive protection to ensure optimal safety during its parallel operation.

ICEAGE offers compressor rack solutions in various capacities, with a choice of reciprocating, screw or scroll compressors from top manufacturers, catering to different operational needs.

Advantages:

- > Compact in structure, with centralized installation, small footprint, and easy for centralized control.
- > Minimizes the impact of equipment malfunctions on operation, thereby enhance its operational reliability.
- > It enables multi-stage energy adjustment in response to real-time load variations, thus significantly lowering the operational expenses of the equipment.



Equipped with Bitzer semi-hermetic reciprocating compressor, it combines high efficiency, a wide range of cooling capacity, flexibility in refrigerant selection, smooth running, solid design and high reliability.



Main components include crankcase heater, vibration eliminator, oil separator, oil filter, receiver, drier filter, sight glass, accumulator, pressure controller, pressure gauge, oil protector with oil pump, electrical control cabinet,



PLC based control platform, equipped with Schneider electric (or equivalent brand electric), with multi-protections including phase protection, phase lack, over current, too constant starting of compressor, discharge temperature, etc.

Refrigeration Unit

Bitzer Semi-hermetic Reciprocating Compressor Racks

2 x Bitzer reciprocating semi-hermetic compressor rack | Application -5°C / +5°C | R404A / R507A

Model	Compressor			Cooling capacity at evaporating temperature kW			Suction mm	Gas outlet mm	Liquid outlet mm	Liquid inlet mm	Dimensions mm		
	Model	Qty	Total HP	-5°C	-10°C	-15°C					L	W	H
BRCU-2-20M	4VES-10Y	2	20	40.8	32.1	25.0	42	35	22	28	1950	1120	1700
BRCU-2-30M	4PES-15Y	2	30	56.2	44.2	34.3	54	35	22	28	2100	1120	1700
BRCU-2-40M	4NES-20Y	2	40	67.2	53.4	41.6	54	35	28	28	2100	1120	1700
BRCU-2-50M	4HE-25Y	2	50	88.6	71.0	56.0	67	42	28	35	2200	1120	1700
BRCU-2-60M	4GE-30Y	2	60	101.8	81.6	64.6	67	42	28	35	2200	1120	1700
BRCU-2-70M	4FE-35Y	2	70	121.6	98.2	78.4	76	54	35	42	2400	1120	1700
BRCU-2-80M	6GE-40Y	2	80	148.0	118.8	94.4	76	54	35	42	2400	1120	1700
BRCU-2-100M	6FE-50Y	2	100	180.2	145.2	115.4	76	54	35	42	2400	1120	1700

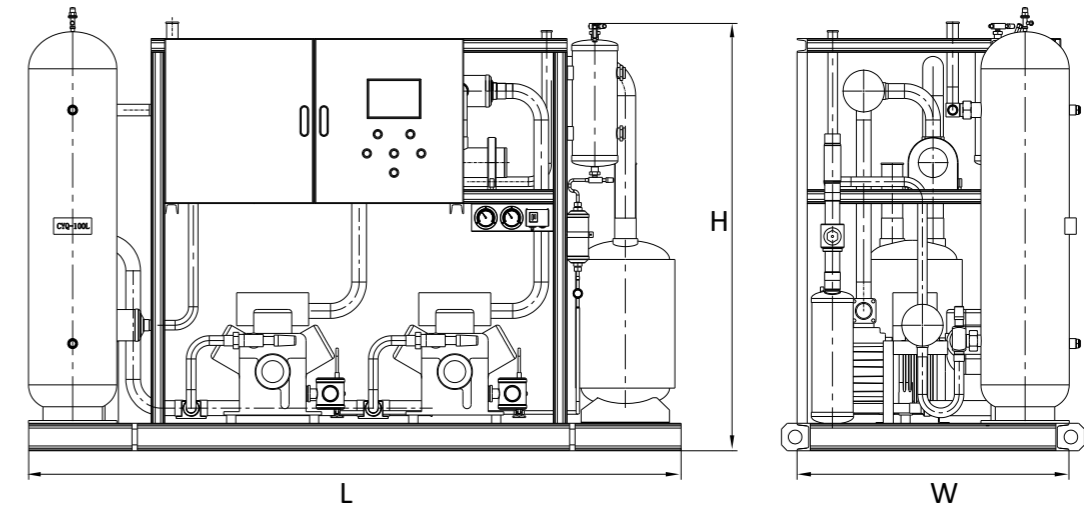
(1) Condensation temperature +45°C.

2 x Bitzer reciprocating semi-hermetic compressor rack | Application -30°C / -15°C | R404A / R507A

Model	Compressor			Cooling capacity at evaporating temperature kW				Suction mm	Gas outlet mm	Liquid outlet mm	Liquid inlet mm	Dimensions mm		
	Model	Qty	Total HP	-25°C	-30°C	-35°C	-40°C					L	W	H
BRCU-2-18L	4TES-9Y	2	18	17.7	13.0	9.2	6.3	54	35	22	28	2100	1120	1700
BRCU-2-28L	4NES-14Y	2	28	24.1	17.6	12.5	8.5	54	35	22	28	2100	1120	1700
BRCU-2-36L	4HE-18Y	2	36	34.2	25.6	18.6	13.0	54	35	22	28	2100	1120	1700
BRCU-2-46L	4GE-23Y	2	46	40.4	30.5	22.4	16.0	67	42	22	28	2200	1120	1700
BRCU-2-56L	4FE-28Y	2	56	48.2	36.5	26.8	18.9	67	42	28	35	2400	1120	1700
BRCU-2-68L	6GE-34Y	2	68	60.8	46.4	34.4	24.7	76	54	28	35	2400	1120	1700
BRCU-2-88L	6FE-44Y	2	88	72.4	54.8	40.2	28.3	76	54	28	35	2400	1120	1700

(1) Condensation temperature +45°C.

Dimensions



Refrigeration Unit

Bitzer Semi-hermetic Reciprocating Compressor Racks

3 x Bitzer reciprocating semi-hermetic compressor rack | Application -5°C / +5°C | R404A / R507A

Model	Compressor			Cooling capacity at evaporating temperature kW			Suction mm	Gas outlet mm	Liquid outlet mm	Liquid inlet mm	Dimensions mm		
	Model	Qty	Total HP	-5°C	-10°C	-15°C					L	W	H
BRCU-3-30M	4VES-10Y	3	30	61.2	48.2	37.5	54	35	22	28	2750	1120	1700
BRCU-3-45M	4PES-15Y	3	45	84.3	66.3	51.4	67	42	28	35	2750	1120	1700
BRCU-3-60M	4NES-20Y	3	60	100.8	80.1	62.4	67	42	28	35	2750	1120	1700
BRCU-3-75M	4HE-25Y	3	75	132.9	106.5	84.0	76	54	35	42	2850	1120	1850
BRCU-3-90M	4GE-30Y	3	90	152.7	122.4	96.9	76	54	35	42	2850	1120	1850
BRCU-3-105M	6FE-35Y	3	105	182.4	147.3	117.6	108	67	42	54	3150	1120	1850
BRCU-3-120M	6GE-40Y	3	120	222.0	178.2	141.6	108	67	42	54	3150	1120	1850
BRCU-3-150M	6FE-50Y	3	150	270.3	217.8	173.1	108	67	42	54	3200	1120	1850

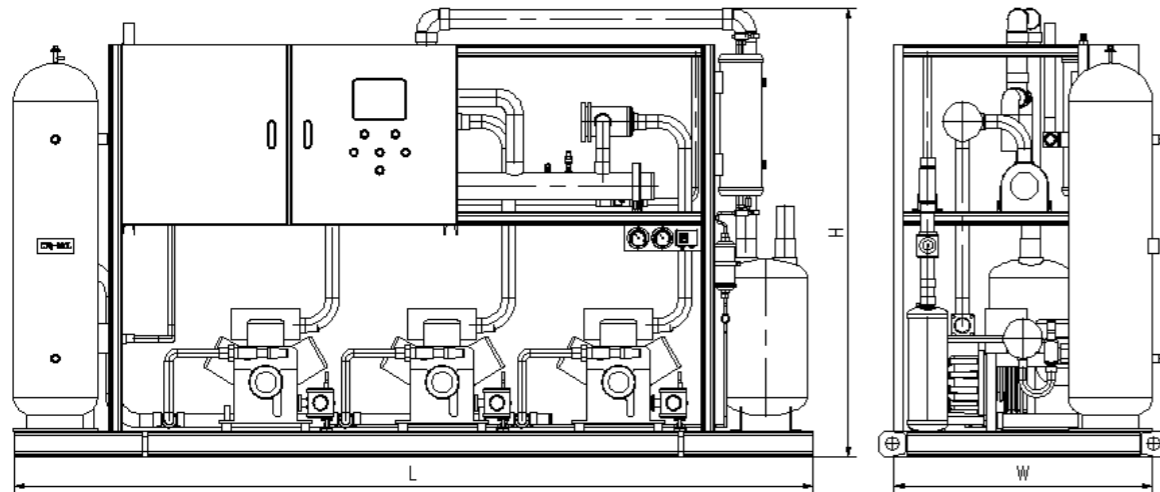
(1) Condensation temperature +45°C.

3 x Bitzer reciprocating semi-hermetic compressor rack | Application -30°C / -15°C | R404A / R507A

Model	Compressor			Cooling capacity at evaporating temperature kW				Suction mm	Gas outlet mm	Liquid outlet mm	Liquid inlet mm	Dimensions mm		
	Model	Qty	Total HP	-25°C	-30°C	-35°C	-40°C					L	W	H
BRCU-3-27L	4TES-9Y	3	27	26.6	19.5	13.9	9.4	54	42	22	28	2750	1120	1700
BRCU-3-42L	4NES-14Y	3	42	36.1	26.5	18.8	12.7	54	42	22	28	2750	1120	1700
BRCU-3-54L	4HE-18Y	3	54	51.4	38.4	27.9	19.4	67	42	28	35	2750	1120	1700
BRCU-3-69L	4GE-23Y	3	69	60.6	45.7	33.6	23.9	76	42	28	35	2850	1120	1700
BRCU-3-84L	4FE-28Y	3	84	72.3	54.8	40.2	28.3	76	54	28	35	3150	1120	1850
BRCU-3-102L	6GE-34Y	3	102	91.2	69.6	51.6	37.0	108	54	35	42	3150	1120	1850
BRCU-3-132L	6FE-44Y	3	132	108.6	82.2	60.3	42.5	108	67	35	42	3150	1120	1850

(1) Condensation temperature +45°C.

Dimensions



Refrigeration Unit

Bitzer Semi-hermetic Reciprocating Compressor Racks

4 x Bitzer reciprocating semi-hermetic compressor rack | Application -5°C / +5°C | R404A / R507A

Model	Compressor			Cooling capacity at evaporating temperature kW			Suction mm	Gas outlet mm	Liquid outlet mm	Liquid inlet mm	Dimensions mm		
	Model	Qty	Total HP	-5°C	-10°C	-15°C					L	W	H
BRCU-4-40M	4VES-10Y	4	40	81.6	64.3	50.0	54	42	28	35	3300	1120	1700
BRCU-4-60M	4PES-15Y	4	60	112.4	88.4	68.6	67	54	28	35	3300	1120	1700
BRCU-4-80M	4NES-20Y	4	80	134.4	106.8	83.2	76	54	35	42	3300	1120	1700
BRCU-4-100M	4HE-25Y	4	100	177.2	142.0	112.0	76	54	35	42	3500	1120	1850
BRCU-4-120M	4GE-30Y	4	120	203.6	163.2	129.2	108	67	42	54	3800	1120	1850
BRCU-4-140M	6HE-35Y	4	140	243.2	196.4	156.8	108	67	42	54	3800	1120	1850
BRCU-4-160M	6GE-40Y	4	160	296.0	237.6	188.8	108	67	42	54	3800	1120	1850
BRCU-4-200M	6FE-50Y	4	200	360.4	290.4	230.8	133	79	42	54	3800	1120	1850

(1) Condensation temperature +45°C.

4 x Bitzer reciprocating semi-hermetic compressor rack | Application -30°C / -15°C | R404A / R507A

Model	Compressor			Cooling capacity at evaporating temperature kW				Suction mm	Gas outlet mm	Liquid outlet mm	Liquid inlet mm	Dimensions mm		
	Model	Qty	Total HP	-25°C	-30°C	-35°C	-40°C					L	W	H
BRCU-4-36L	4TES-9Y	4	36	35.4	26.0	18.5	12.6	54	42	22	28	3300	1120	1700
BRCU-4-56L	4NES-14Y	4	56	48.1	35.3	25.0	17.0	54	42	22	28	3300	1120	1700
BRCU-4-72L	4HE-18Y	4	72	68.5	51.2	37.2	25.9	67	54	28	35	3500	1120	1700
BRCU-4-92L	4GE-23Y	4	92	80.8	61.0	44.8	31.9	76	54	28	35	3500	1120	1700
BRCU-4-112L	4FE-28Y	4	112	95.4	73.0	53.6	37.7	108	54	35	42	3800	1120	1850
BRCU-4-136L	6GE-34Y	4	136	121.6	92.8	68.8	49.4	108	67	35	42	3800	1120	1850
BRCU-4-176L	6FE-44Y	4	176	144.8	109.6	80.4	56.6	108	67	35	42	3800	1120	1850

(1) Condensation temperature +45°C.

Dimensions

