

Scroll Parallel Racks



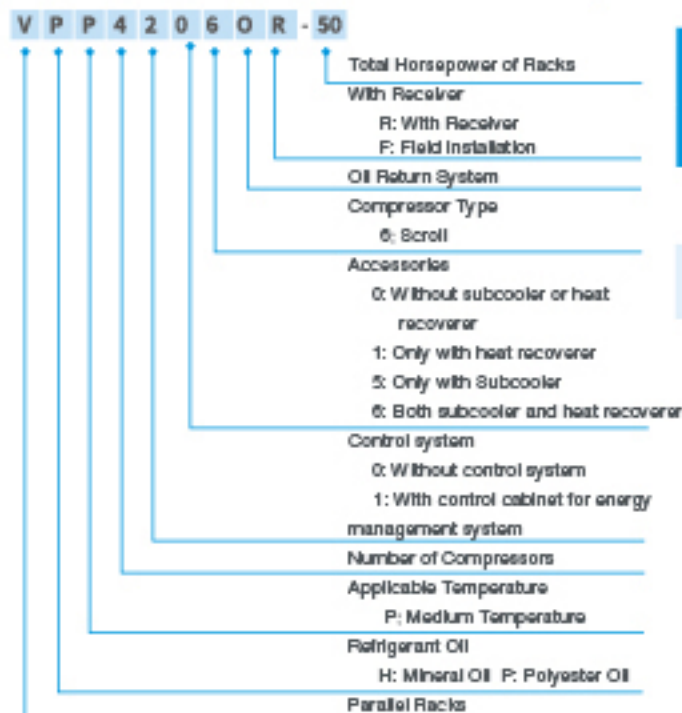
Customer Value

- Extensive application range, water cooled application and air cooled application
- Wide range of adjustable cooling capacity, reliable operation even under low frequency load
- Silent racks, 8-10dBA lower than traditional Reciprocating racks
- Full automatic control and remote control
- Compressor timing rotation control and long service life
- Compact design and small footprint

Product Features

- Non-proportional parallel design, racks adjusting range: 15%~100%, compressor number up to 8 units
- Check valve and shock absorber equipped at each exhaust by-pass to avoid blow-by; low vibration for ensuring the reliability of system
- Electronic oil level regulator is adopted to ensure reliability of oil return
- Controllers allow compressor cyclical operation to ensure service life of the racks
- Integrated frame design, with compact structure

Naming Rule of Scroll Parallel Racks



Scroll Parallel Racks Application

Working Conditions	Scroll Parallel Racks
	Medium Temperature
Refrigerant	R404A
Evaporating Temperature (°C)	-20~+10

> 45HP Large Scroll Parallel Racks Configuration (R404A)

No.	Type	Standard Options	Non-standard Options
1	Subcooler	x	√
2	Control system	With dxcell* controller electric box	With controller electric box (Danfoss, Carel, etc.) (Dtxcell*, Danfoss, Carel, etc.)
3	Racks external pipes	Liquid drain, gas return, supply liquid and discharge	By-passes for supply liquid and gas return
4	Oil return system	High-pressure return oil system + electronic oil level equalizer	x
5	Reservoir	Vertical reservoir	Horizontal reservoir (Field installation only)
6	Condensing pressure control	x	1, Condensing pressure control switch 2, A9 System pressure control valve (cold region) optional, A8 valve needs field installation

⊕ > 45HP Large MT Parallel Scroll Compressor Racks Performance Table

Racks Model No.	Compressor Model x Quantity	Evaporating Temperature							
		to: -15°C		to: -10°C		to: -5°C		to: 0°C	
		Cooling Capacity Q (kW)	Power Consumption P (kW)	Cooling Capacity Q (kW)	Power Consumption P (kW)	Cooling Capacity Q (kW)	Power Consumption P (kW)	Cooling Capacity Q (kW)	Power Consumption P (kW)
VPP3208OR-30	ZB78*3	43.8	24.5	53.3	24.7	64.2	24.9	76.2	25.1
VPP3208OR-35	ZB78*2+ZB114	49.9	29.0	61.2	29.1	74.0	29.2	88.2	29.4
VPP3208OR-40	ZB78+ZB114*2	56.0	33.5	69.2	33.5	83.8	33.6	100.2	33.8
VPP4208OR-45	ZB78*3+ZB114	64.5	37.1	79.0	37.3	95.4	37.5	113.6	37.8
VPP4208OR-50	ZB78*2+ZB114*2	70.6	41.6	86.9	41.7	105.2	41.9	125.6	42.1
VPP4208OR-55	ZB78+ZB114*3	76.7	46.1	94.9	46.2	115.0	46.2	137.6	46.5
VPP4208OR-60	ZB114*4	82.8	50.6	102.9	50.6	124.8	50.6	149.6	50.8
VPP5208OR-65	ZB78*2+ZB114*3	91.3	54.3	112.6	54.4	136.4	54.5	163.0	54.8
VPP5208OR-70	ZB78+ZB114*4	97.4	58.8	120.6	58.8	146.2	58.9	175.0	59.2
VPP5208OR-75	ZB114*5	103.5	63.3	128.5	63.3	156.0	63.3	187.0	63.5
VPP6208OR-80	ZB114*6	124.2	75.9	154.2	75.9	187.2	75.9	224.4	76.2

Notes:

- 1) Cooling capacity and input power listed are based on condensing temperature at 45°C, without liquid subcooling.
- 2) The power wire for the compressor racks is three-phase 380V/50Hz, the power for the control operation is one-phase 220V/50Hz.
- 3) If the compressor racks are to operate with different evaporating temperature or with too high/too low ambient temperature, please contact us.
- 4) If you need water cooled rack, please contact our technical staffs.

> 45HP Large MT Parallel Scroll Compressor Racks Technical Parameters

Racks Model No.	Dimension of Racks' External Pipes				External Dimensions			Max. Working Current	Weight	Machine Room Ventilation Rate
	Discharge DL	Suction SL	Liquid Pipe Inlet	Liquid Pipe Outlet	L	W	H	A	Kg	m ³ /h
VPP3208CR-30	35	54	35	35	2950	900	1950	98.84	970	3500
VPP3208CR-35	35	67	35	35	2950	900	1950	110.16	990	4000
VPP3208CR-40	35	67	35	35	2950	900	1950	123.48	990	4500
VPP4208CR-45	35	67	35	35	3400	900	1950	136.8	1000	5000
VPP4208CR-50	35	67	35	35	3400	900	1950	155.76	1120	5500
VPP4208CR-55	42	76	42	42	3400	900	1950	169.08	1130	6000
VPP4208CR-60	42	76	42	42	3400	900	1950	182.4	1140	6500
VPP5208CR-65	42	76	42	42	3900	900	1950	201.36	1270	7000
VPP5208CR-70	42	89	42	42	3900	900	1950	214.68	1290	7500
VPP5208CR-75	42	89	42	42	3900	900	1950	228	1290	8000
VPP6208CR-80	42	89	42	42	4400	900	1950	273.6	1350	8500

- 1) The dimensions of the racks' external pipes are for standard racks and can be customized.
- 2) Ball valves and headers on the pipeline can be customized.
- 3) If more than one Parallel racks are used in the machine room, it is necessary to calculate the total ventilation rate.
- 4) If you need water cooled rack, please contact our technical staffs.