Heat exchanger suction accmulator
Type PKR, CE

Applications

The function of Suction accumulator with heat exchanger is to put the pipes for high pressure high temperature refrigerant and low pressure low temperature refrigerant to one vessel to exchange high and low temperature, to cool or warming refrigerant. After the heat exchange, a better performance of the whole system and cooling effect achieved.

In air conditioning refrigeration, the refrigerant pipelines have high pressure and low pressure lines, the high pressure refrigerant with high temperature needs cooled, and the low pressure from evaporator needed to be separated to liquid and gas refrigerant, the liquid refrigerant need some time and temperature to be evaporated to gas and then enter to compressor. It avoids liquid slugging to protect compressor.

Features

- Corrosion resistant epoxy powder paint finish, can be used in all environment
- Sturdy steel shells for long life, solid copper connections
- If the evaporating temperature lower than –15℃ in a refrigeration equipment, recommend to install a PKR Suction line accumulator.
- Allowable operating temperature: –40℃ to +120℃
- Max. working pressure: 4.2Mpa, Optional for R410a and CO_2 Refrigerant
- CE listed

Installation–Notes

The right selection and installation of a Suction Accumulator in the line is to install as close as possible to the compressor, which can assure adequate oil and liquid refrigerant return to the compressor and prevent the compressor from damage. By returning the liquid refrigerant and oil back to compressor, the accumulator also helps maintain system efficiency and proper crankcase oil levels.

Suction Accumulators can also prevent liquid refrigerant floodback, one of the most common causes of compressor failure.

WARNING:

Directing the flame away from the shell according to normal precautions.Using chill blocks, wet rags, or other suitable heat protection for the accumulator.

– Be sure the incoming refrigerant line connected to the connection marked “inlet” or “in” .
– Always install the accumulator upright vertically.
– Change the accumulator when a compressor is replaced.
The old accumulator may contain contaminants from the problem that caused compressor failure. There may also be considerable oil remaining from first compressor if a gradual loss of refrigerant caused the failure. This amount coupled with the oil in the rep compressor may lead to an oil over–charge condition.

Specification 选型参数

Part No.	Low Temp. Side Conn.	Low Temp. Side Conn.	Dimension (mm)				Volume (L)	Diagram
			A	B	C	ΦD		
PKR-2404	1/2	3/8	254	52	52	102	1.5	Fig.5
PKR-2405	5/8	3/8	294	52	52	102	1.8	
PKR-2406	3/4	1/2	316	75	75	140	3.8	
PKR-2407	7/8	1/2	356	75	75	140	4.3	
PKR-2411	1-1/8	5/8	450	85	85	159	7.3	
PKR-2413	1-3/8	3/4	574	85	85	159	9.6	
PKR-2415	1-5/8	7/8	624	85	85	159	10.4	
PKR-2417	2-1/8	7/8	629	85	85	159	10.4	
PKQ-208N04	1-1/8	1/2	450	85	42.5	159	7.4	Fig.6
PKQ-208N05	1-1/8	5/8	450	85	42.5	159	7.4	
PKQ-209N05	1-3/8	5/8	574	85	42.5	159	9.8	
PKQ-209N06	1-3/8	3/4	574	85	42.5	159	9.8	
PKQ-210N06	1-5/8	3/4	624	85	42.5	159	9.8	
PKQ-210N07	1-5/8	7/8	624	85	42.5	159	9.8	
PKQ-1517N07	2-1/8	7/8	518	120	60	219	16	
PKQ-1517N09	2-1/8	1-1/8	518	120	60	219	16	
PKQ-221N09	2-1/8	1-1/8	576	120	60	273	28.5	

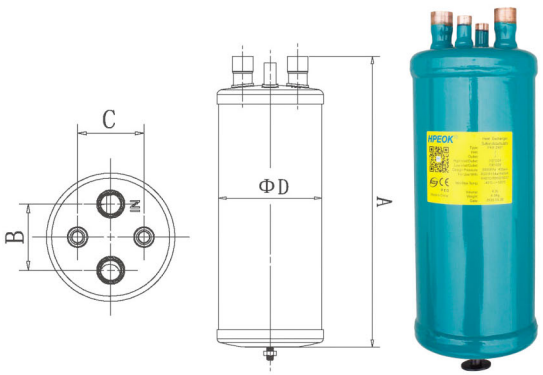

Fig.5

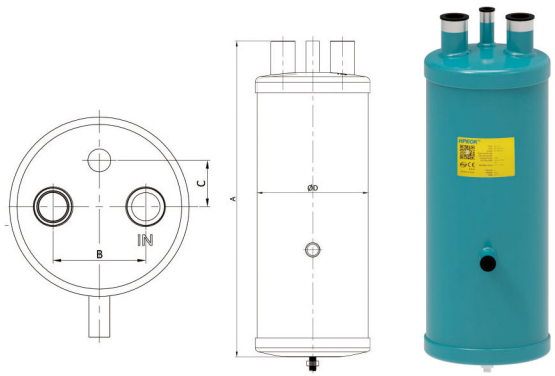

Fig.6

Specification

Part NO.	Refrigerating capacity on basis of below evaporate temperature (Kw)						Refrigerant capacity (kg)	
	R22		R134a		R404A		R22/R134a	R404A
	-18℃	5℃	-18℃	5℃	-18℃	5℃	5℃	
PKR-2404	3.2	7.0	2.17	4.3	2.8	4.6	1.73	1.60
PKR-2405	4.9	10.5	2.8	6.0	4.2	7.0	2.03	1.88
PKR-2406	6.3	14.1	3.2	8.1	5.3	9.2	4.02	3.72
PKR-2407	11.6	25.7	6.3	14.0	9.5	16.2	4.78	4.43
PKR-2411	18.9	41.5	10.9	25.3	15.5	26.7	8.60	8.00
PKR-2413	29.9	66.1	16.2	37.6	25.3	42.9	11.23	10.40
PKR-2415	41.0	79.2	24.1	50.8	32.6	53.0	12.36	11.45
PKR-2417	49.6	92.4	35.4	71.7	42.8	75.3	17	15

The Heat exchanger suction line accumulators are suitable with CFC, HFC & HCFC Refrigerants and associated oils.To cover the demand for components with an increased working pressure for R410a and as well for CO_2 applications, HPEOK provides customized Accumulator on request.