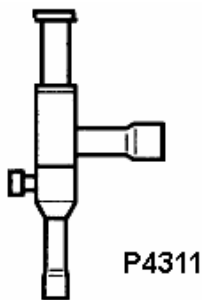


EVAPORATOR PRESSURE REGULATORS

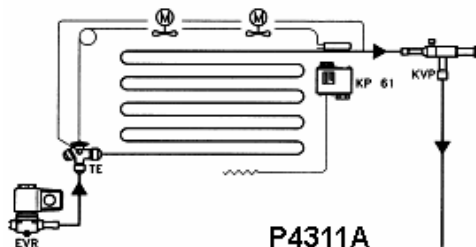
DANFOSS EVAPORATOR PRESSURE REGULATORS



P4311

INTRODUCTION

KVP evaporator pressure regulators are mounted in the suction line of refrigeration and air conditioning systems. They are used to maintain a constant pressure corresponding to a constant temperature on the evaporator. They also protect against too low an evaporating pressure by throttling down when pressure falls below the set value. They are also used to differentiate the evaporating pressures in two or more evaporators in systems with one compressor.



P4311A

APPROVALS

UL listed, file SA7200.
CSA approved.

ORDERING

TYPE	RATED CAPACITY*(Tons)				FLARE CONNECTION†		SOLDER CONNECTION	
	R22	R134a	R404A/R507	R407C	in	Part No	Part No	in ODF
KVP 12	1.3	0.9	1.2	1.2	1/2	034L0021	034L0023	1/2
KVP 15	1.3	0.9	1.2	1.2	5/8	034L0022	034L0029	5/8
KVP 22	1.3	0.9	1.2	1.2	-	-	034L0025	7/8
KVP 28	2.8	1.9	2.4	2.6	-	-	034L0026	1-1/8
KVP 35	2.8	1.9	2.4	2.6	-	-	034L0032	1-3/8

*Rated capacity is based on:

Evaporating temperature $t_e = 40^\circ \text{F}$

Condensing temperature $t_c = 100^\circ \text{F}$

Pressure drop across regulator $\Delta p = 2 \text{ psi}$

Offset (design evaporating pressure minus minimum allowable evaporator pressure) = 9 psi.

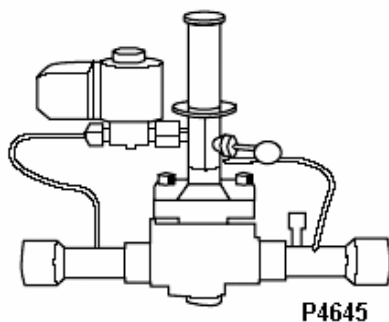
†KVP supplied without flare nuts. Separate flare nuts can be supplied:

1/2 in., part no. **011L1103** 5/8 in., part no. **011L1167**

NOTE: The connection dimensions chosen must not be too small, as gas velocities in excess of 130 ft/s at the inlet of the regulator can result in flow noise.

EVAPORATOR PRESSURE REGULATORS

DANFOSS TYPE PKV/PKVS



Introduction

Range 5 1/4 – 13 1/2 TR (R 22) PKV is a servo-operated, evaporator pressure regulator that operates with minimum pressure drop in the suction line. When designing refrigeration systems, it is important to minimize the pressure drop in the suction line, because increased pressure drop reduces compressor capacity, resulting in longer running times and higher energy costs. PKV has been specifically developed for low temperature systems where pressure drop has the greatest effect. PKVS is fitted with an EVR 3 solenoid valve for use in systems with hot gas defrost and where positive shut-off is required.

- 1) Rated capacity is based on:
 - Evaporating temperature $t_e = 40^\circ \text{F}$
 - Condensing temperature $t_c = 100^\circ \text{F}$
 - Pressure drop across valve $\Delta p = 2 \text{ psi}$
- 2) With 115 V coil

Note: Type PKVS is supplied with an EVR 3 NC solenoid valve (032F1155) fitted in the vent line.

EVR 3 is supplied without coil and must be ordered separately.

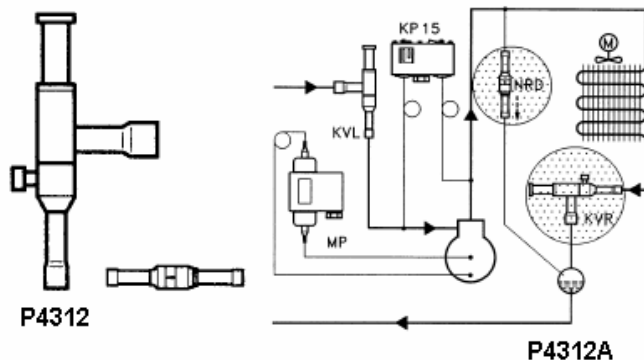
- Installs in either Horizontal or vertical position.
- For use with CFC, HCFC and HFC Refrigerants.
Regulating range: 0 to 86 PSIG.

ORDERING

TYPE	RATED CAPACITY ¹⁾ tons	CONNECTION SOLDER ODF in.			CONNECTION SOLDER ODF in.	Part No.
		R134a	R404A/ R507	R407C		
R22	R22					
PKV 12	5.2	3.8	4.4	4.8	1 1/8	034N1051
PKV 15	8.3	6.1	7.0	7.7	1 3/8	034N1052
PKV 20	13.5	10.1	11.4	12.6	1 5/8	034N1053
PKVS 12	5.2	3.8	4.4	4.8	1 1/8	034N1080²⁾
PKVS 15	8.3	6.1	7.0	7.7	1 3/8	034N1081²⁾
PKVS 20	13.5	10.1	11.4	12.6	1 5/8	034N1082²⁾

EVAPORATOR PRESSURE REGULATORS

DANFOSS CONDENSER PRESSURE REGULATORS



KVR condenser regulators can be mounted in either the gas or liquid side of the condenser in refrigeration and air conditioning systems. They are used to maintain a constant and sufficiently high condensing pressure with systems using air-cooled condensers. They can also be used with valve types NRD or KVD to assure that adequate pressure is maintained on the receiver.



ORDERING

TYPE	Rated Liquid Capacity ¹⁾ (Evaporator Capacity) tons				Rated Hot Gas ¹⁾ (Evaporator Capacity) tons				Flare Connection ²⁾		SOLDER CONNECTION	
	R22	R134a	R404A/R507	R407C	R22	R134a	R404A/R507	R407C	in.	Part No	in.	Part No
KVR 12	12.7	11.8	8.2	13.8	4.13	3.03	3.27	4.50	1/2	034L0091	1/2	034L0093
KVR 15	12.7	11.8	8.2	13.8	4.13	3.03	3.27	4.50	5/8	034L0091	5/8	034L0097
KVR 22	12.7	11.8	8.2	13.8	4.13	3.03	3.27	4.50	-	-	7/8	034L0094
KVR 28	32.6	30.2	20.9	35.5	10.93	8.04	8.66	11.91	-	-	1 1/8	034L0095
KVR 35	32.6	30.2	20.9	35.5	10.93	8.04	8.66	11.91	-	-	1 3/8	034L0100

1) Rated capacity is based on:

Evaporating temperature $t_e = 40^\circ \text{F}$

Condensing temperature $t_c = 100^\circ \text{F}$

Pressure drop across valve $\Delta p = 3 \text{ psi}$ for liquid capacity
 $\Delta p = 3 \text{ psi}$ for hot gas capacity

2) KVR are delivered without flare nuts.

Separate flare nuts can be supplied:

1/2 in., part no. **011L1103**

5/8 in., part no. **011L1167**

Note: The connection dimensions chosen must not be too small, as gas velocities in excess of 130 ft/s at the inlet of the regulator can result in flow noise.