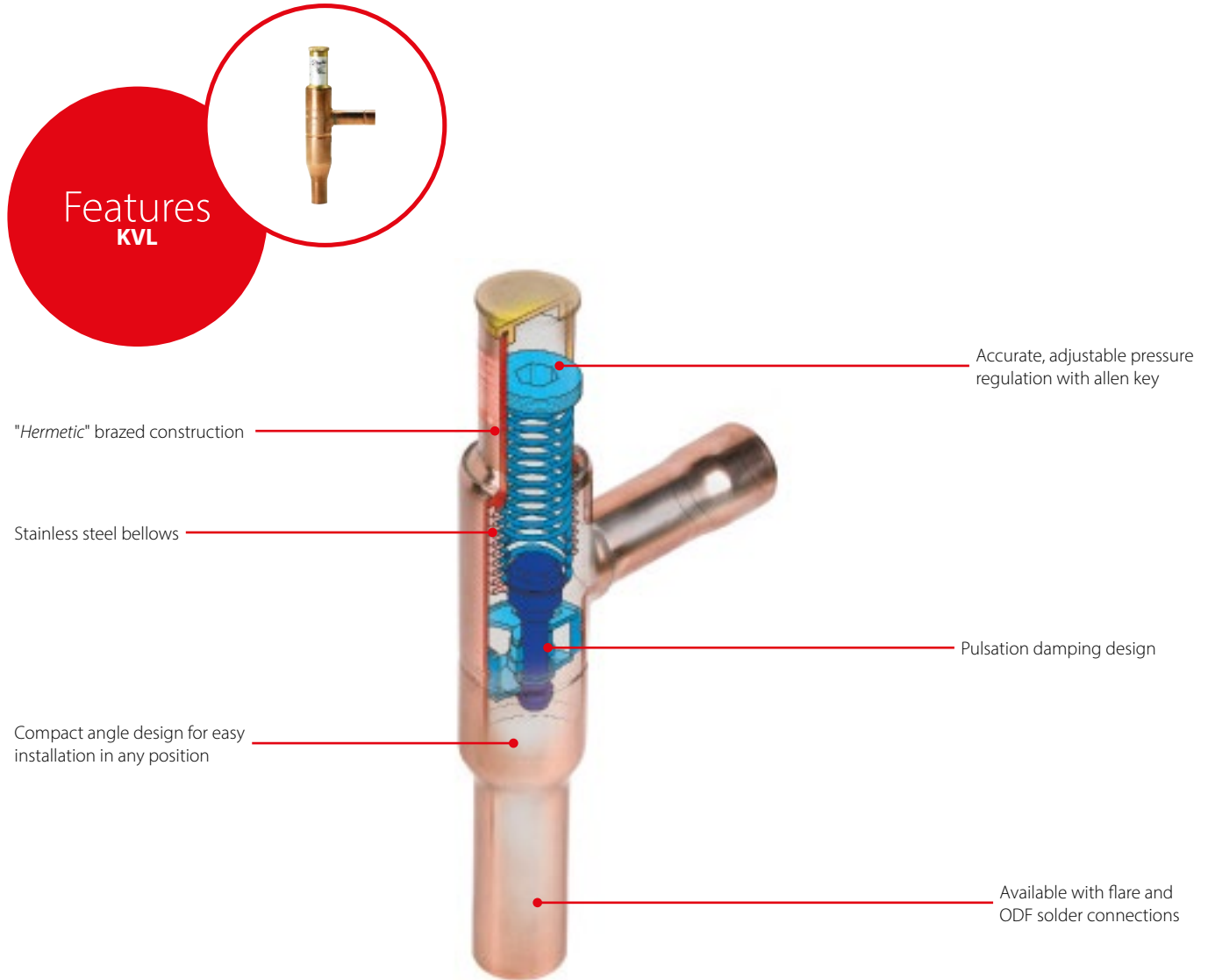


KVL, Crankcase pressure regulator

KVL crankcase pressure regulators valves are installed in the suction line ahead of the compressor.

KVL protects the compressor motor against overload during start-up after long standstill periods or after defrost periods (high pressure in evaporator).



Facts

Application:

- Traditional refrigeration
- Air conditioning units
- Transport refrigeration

- Unaffected by ambient pressure variations
- Bellows welded to the body for long lifetime
- Accurate, adjustable pressure regulation
- Easy adjustment before start up
- Protects the compressor against electrical motor overloading
- Wide capacity and operating range
- Regulation range: 0.2 – 6 bar / 3 – 87 psig
- KVL 12 – 22: applicable to R22, R1270, R134a, R290, R404A, R407A, R407C, R407F, R448A, R449A, R450A, R452A, R507A, R513A, R600, R600a
- KVL 12 – 22: may be used in the following EX range: Category 3 (Zone 2)
- KVL 28 – 35: applicable to R22, R134a, R404A, R407A, R407C, R407F, R448A, R449A, R450A, R452A, R507A, R513A
- Maximum working pressure: PS / MWP = 18 bar / 261 psig

Technical data and ordering



KVL - Crankcase pressure regulator

Ordering

Type	Rated capacity in [kW] / [TR] ¹⁾								Connection type	Connection size		Code no.
	R22		R134a		R404A / R507		R407C			[in]	[mm]	
	[kW]	[TR]	[kW]	[TR]	[kW]	[TR]	[kW]	[TR]				
KVL 12	7.1	1.2	5.3	0.8	6.3	1.0	6.4	1.1	Flare ²⁾	½	12	034L0041
	7.1	1.2	5.3	0.8	6.3	1.0	6.4	1.1	Solder, ODF ³⁾	½	–	034L0043
	7.1	1.2	5.3	0.8	6.3	1.0	6.4	1.1	Solder, ODF ³⁾	–	12	034L0048
KVL 15	7.1	1.2	5.3	0.8	6.3	1.0	6.5	1.1	Flare ²⁾	¾	16	034L0042
	7.1	1.2	5.3	0.8	6.3	1.0	6.5	1.1	Solder, ODF ³⁾	¾	16	034L0049
KVL 22	7.1	1.2	5.3	0.8	6.3	1.0	6.5	1.1	Solder, ODF ³⁾	¾	22	034L0045
KVL 28	17.8	4.1	13.2	2.6	15.9	3.4	16.4	3.8	Solder, ODF ³⁾	1 ½	–	034L0046
	17.8	4.1	13.2	2.6	15.9	3.4	16.4	3.8	Solder, ODF ³⁾	–	28	034L0051
KVL 35	17.8	4.1	13.2	2.6	15.9	3.4	16.4	3.8	Solder, ODF ³⁾	1 ¾	35	034L0052

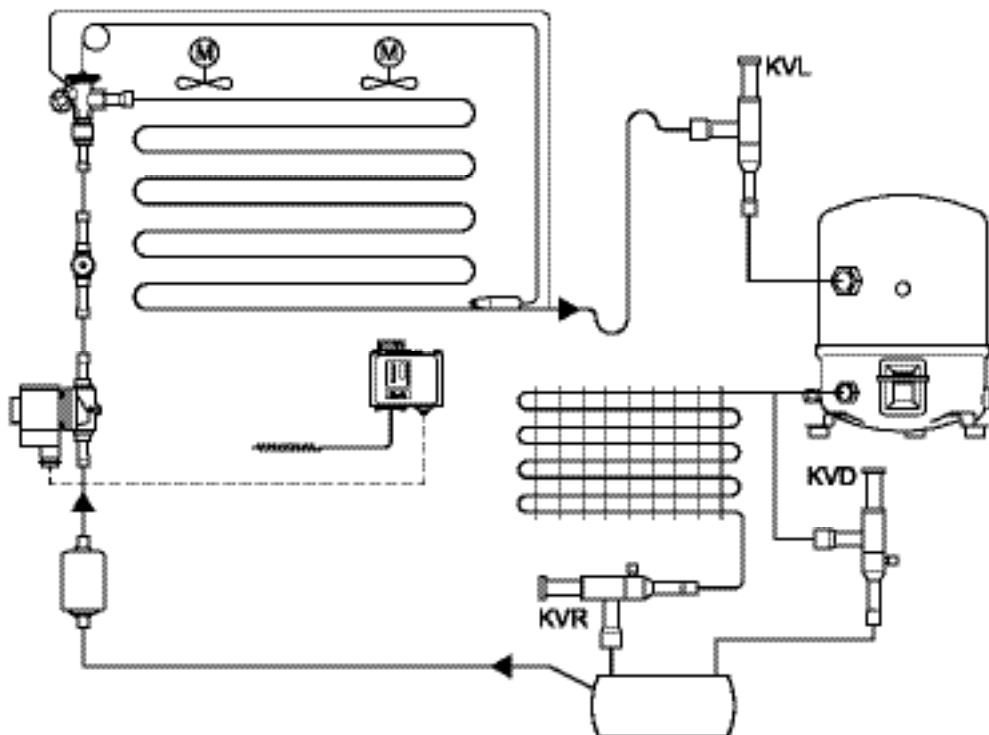
¹⁾ Rated capacity is the capacity of the regulator at
 – Evaporating temperature $t_e = -10\text{ °C} / 14\text{ °F}$
 – Condensing temperature $t_c = 25\text{ °C} / 100\text{ °F}$
 – Pressure drop in regulator $\Delta p = 0.2\text{ bar} / 2\text{ psi}$

²⁾ Supplied without flare nuts. Separate flare nuts can be supplied: ½ in / 12 mm - code no. 011L1103, ¾ in / 16 mm - code no. 011L1167.

³⁾ The connection dimensions chosen must not be too small, since gas velocities in excess of 40 m/s at the inlet of the regulator can give flow noise.

To select the product for other conditions or refrigerants, use Danfoss Coolselector*2.

Application example



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