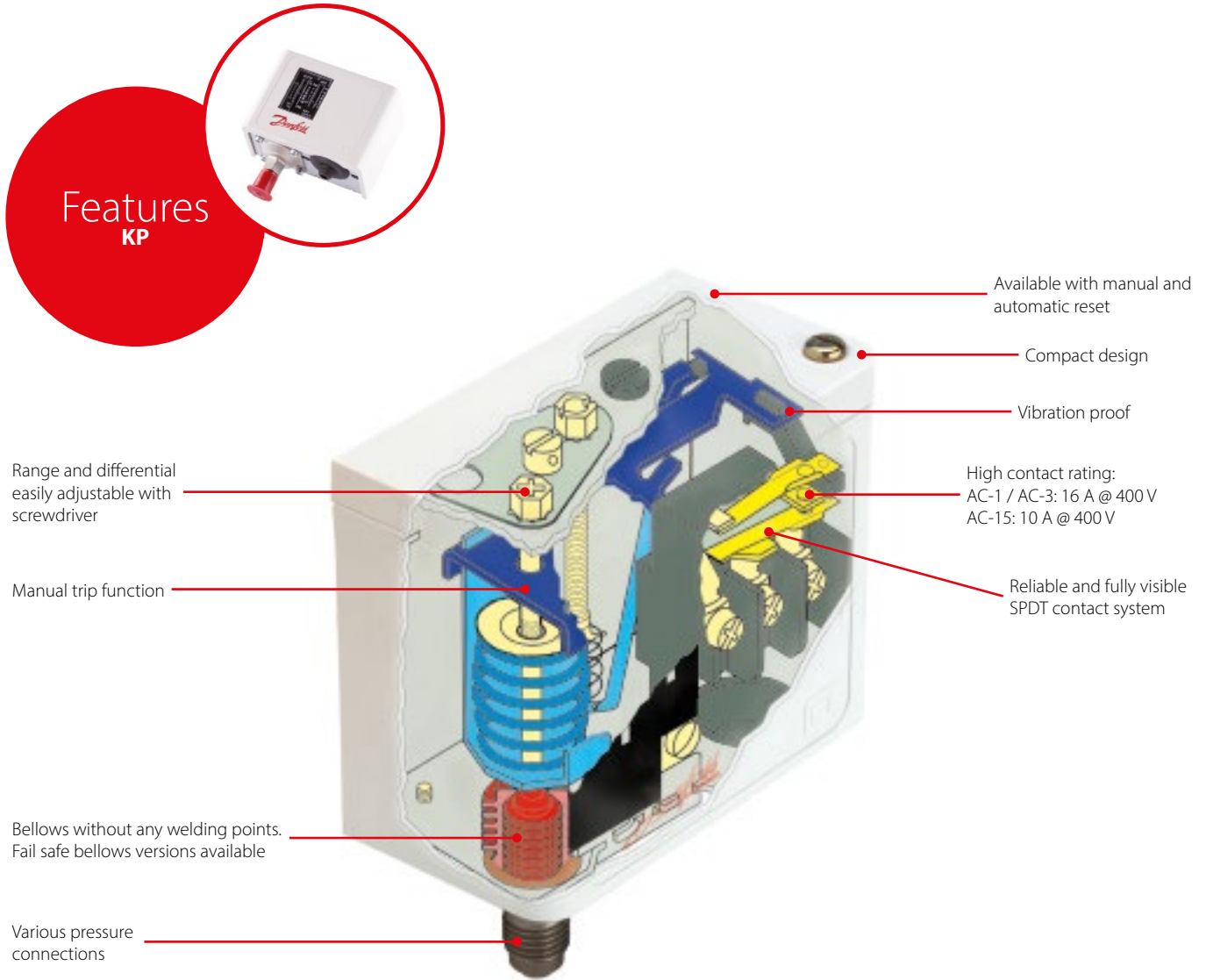


KP, Pressure switch

KP pressure switches are designed to protect refrigeration systems from excessively high discharge pressures, excessively low suction pressures, to start / stop compressors or to operate fans of aircooled condensers.

The enhanced contact system for 16 A makes it possible to operate electrical motors up to 2 kW directly, without the use of contactors. KP pressure switches are available in IP30 and IP44 enclosures.



Facts

Application: Food Retail, Heavy Commercial Refrigeration, Light Commercial Refrigeration, Commercial Air Conditioning, Food Processing and Storage.

- Easy to handle compact design with large and visible scale plates
- Vibration and shock resistant
- Accurate and reliable compressor operation due to excellent electro-mechanical function
- High reliability both electrically and mechanically-a KP switch can be connected directly to a single-phase

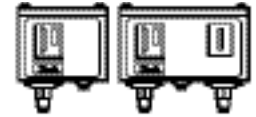
AC motor of up to approximately 2 kW or installed in the control circuit of DC motors and large AC motors

- Easy to install electrical connection which also facilitates rack mounting
- Bellows without any welding points, which makes them stress free and completely tight
- Wide range of approvals - Danfoss offers a wide range of approval suited for specific applications and geographical markets

- Available with flare, solder or capillary tube connections
- Pressure switches PED 97 / 23 / EC approved available
- Wide pressure ranges
The programme covers working ranges: -0.9 – 46.5 bar / -1.3 – 674 psi
- Versions with IP30 enclosure rating can be updated to IP44 or IP55 enclosure rating using top plate (IP44) or IP55 enclosure (IP55), available as accessories

Technical data and ordering

KP pressure switches for R22, R134a, R404A, R407A, R407C, R407F, R422B, R422D, R438A, R448A, R449A, R450A, R452A, R507A, R513A



Ordering

Type	Pressure	Low pressure (LP)		High pressure (HP)		Reset		Contact System	Connection type	Code no.
		Regulating range [bar]	Differential Δp [bar]	Regulating range [bar]	Differential Δp [bar]	Low pressure LP	High pressure HP			
KP 1	Low	-0.2 – 7.5	0.7 – 4.0	–	–	Auto	–	SPDT	¼ in / 6 mm flare	060-110166 ^{1) 4)}
	Low	-0.2 – 7.5	0.7 – 4.0	–	–	Auto	–	SPDT	¼ in ODF solder	060-111266 ⁴⁾
	Low	-0.2 – 7.5	0.7 – 4.0	–	–	Auto	–	SPDT	6 mm ODF solder	060-111066 ⁴⁾
	Low	-0.2 – 7.5	0.7 – 4.0	–	–	Auto	–	SPDT	¼ in / 6 mm flare	060-114166 ^{2) 4)}
	Low	-0.9 – 7.0	0.7	–	–	Man. (Min.)	–	SPDT	¼ in / 6 mm flare	060-110366 ¹⁾
	Low	-0.9 – 7.0	0.7	–	–	Man. (Min.)	–	SPDT	¼ in ODF solder	060-111166
	Low	-0.9 – 7.0	0.7	–	–	Man. (Min.)	–	SPDT	6 mm ODF solder	060-110966
KP 2	Low	-0.2 – 5.0	0.4 – 1.5	–	–	Auto	–	SPDT	¼ in / 6 mm flare	060-112066 ^{1) 4)}
	Low	-0.2 – 5.0	0.4 – 1.5	–	–	Auto	–	SPDT	6 mm ODF solder	060-112366 ⁴⁾
KP 5	High	–	–	8 – 32	1.8 – 6.0	–	Auto	SPDT	¼ in / 6 mm flare	060-117166 ^{1) 4)}
	High	–	–	8 – 32	1.8 – 6.0	–	Auto	SPDT	¼ in / ODF solder	060-117966 ⁴⁾
	High	–	–	8 – 32	1.8 – 6.0	–	Auto	SPDT	6 mm ODF solder	060-117766 ⁴⁾
	High	–	–	8 – 32	3	–	Man. (Max.)	SPDT	¼ in / 6 mm flare	060-117366 ¹⁾
	High	–	–	8 – 32	3	–	Man. (Max.)	SPDT	¼ in ODF solder	060-118066
KP 15	Dual	-0.2 – 7.5	0.7 – 4.0	8 – 32	4	Auto	Auto	SPDT+LP signal	¼ in / 6 mm flare	060-124166 ⁴⁾
	Dual	-0.2 – 7.5	0.7 – 4.0	8 – 32	4	Auto	Auto	SPDT+LP signal	¼ in ODF solder	060-125466 ⁴⁾
	Dual	-0.2 – 7.5	0.7 – 4.0	8 – 32	4	Auto	Man. (Max.)	SPDT+LP signal	¼ in / 6 mm flare	060-124366 ¹⁾
	Dual	-0.2 – 7.5	0.7 – 4.0	8 – 32	4	Auto	Man. (Max.)	SPDT+LP signal	¼ in / 6 mm flare	060-114866 ²⁾
	Dual	-0.9 – 7.0	0.7	8 – 32	4	Man. (Min.)	Man. (Max.)	SPDT+LP signal	¼ in / 6 mm flare	060-124566 ¹⁾
	Dual	-0.9 – 7.0	0.7	8 – 32	4	Conv. ³⁾	Conv. ³⁾	SPDT+LP signal	¼ in / 6 mm flare	060-126166
	Dual	-0.2 – 7.5	0.7 – 4.0	8 – 32	4	Auto	Auto	SPDT+LP and HP signal	¼ in / 6 mm flare	060-126566 ^{1) 4)}
	Dual	-0.2 – 7.5	0.7 – 4.0	8 – 32	4	Auto	Auto	SPDT+LP and HP signal	¼ in ODF solder	060-129966 ⁴⁾
	Dual	-0.2 – 7.5	0.7 – 4.0	8 – 32	4	Auto	Man. (Max.)	SPDT+LP and HP signal	¼ in / 6 mm flare	060-126466 ¹⁾
	Dual	-0.2 – 7.5	0.7 – 4.0	8 – 32	4	Auto	Man. (Max.)	SPDT+LP and HP signal	¼ in ODF solder	060-128466 ¹⁾
	Dual	-0.2 – 7.5	0.7 – 4.0	8 – 32	4	Conv. ³⁾	Conv. ³⁾	SPDT+LP and HP signal	¼ in / 6 mm flare	060-115466 ⁴⁾
	Dual	-0.2 – 7.5	0.7 – 4.0	8 – 32	4	Conv. ³⁾	Conv. ³⁾	SPDT+LP and HP signal	¼ in ODF solder	060-001066 ⁴⁾
Dual	-0.9 – 7.0	0.7	8 – 32	4	Conv. ³⁾	Conv. ³⁾	SPDT+LP and HP signal	¼ in / 6 mm flare	060-122066	

¹⁾ Available in Asia market with code 060-xxxx91

²⁾ Pressure switches with gold-plated contacts

³⁾ Conv.: optional automatic or manual reset

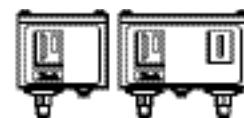
⁴⁾ Enclosure IP44

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Technical data and ordering

KP pressure switches PED 2014/68/EU approved; EN 12263

For R22, R134a, R404A, R407A, R407C, R407F, R410A*), R422B, R422D, R438A, R448A, R449A, R450A, R452A, R507A, R513A



Ordering

Type	Pressure	Low pressure (LP)		High pressure (HP)		Reset		Contact System	Connection type	Code no.
		Regulating range [bar]	Differential Δp [bar]	Regulating range [bar]	Differential Δp [bar]	Low pressure LP	High pressure HP			
KP 1	Low	-0.2 – 7.5	0.7 – 4.0	–	–	Auto	–	SPDT	¼ in / 6 mm flare	060-110166 ^{2) 3)}
	Low	-0.2 – 7.5	0.7 – 4.0	–	–	Auto	–	SPDT	6 mm ODF solder	060-111066 ³⁾
	Low	-0.9 – 7	0.7	–	–	Man. (Min.)	–	SPDT	¼ in / 6 mm flare	060-110366 ²⁾
	Low	-0.9 – 7	0.7	–	–	Man. (Min.)	–	SPDT	6 mm ODF solder	060-110966
KP 2	Low	-0.2 – 5	0.4 – 1.5	–	–	Auto	–	SPDT	¼ in / 6 mm flare	060-112066 ^{2) 3)}
	Low	-0.2 – 5	0.4 – 1.5	–	–	Auto	–	SPDT	6 mm ODF solder	060-112366 ³⁾
KP 6W ¹⁾	High	–	–	8 – 42	4 – 10	–	Auto	SPDT	¼ in / 6 mm flare	060-519066 ³⁾
KP 6B ¹⁾	High	–	–	8 – 42	4	–	Man. (Max.)	SPDT	¼ in / 6 mm flare	060-519166
KP 7W ¹⁾	High	–	–	8 – 32	4 – 10	–	Auto	SPDT	¼ in / 6 mm flare	060-119066 ³⁾
	High	–	–	8 – 32	4 – 10	–	Auto	SPDT	6 mm ODF solder	060-120366 ³⁾
KP 7B ¹⁾	High	–	–	8 – 32	4	–	Man. (Max.)	SPDT	¼ in / 6 mm flare	060-119166
KP 7S ¹⁾	High	–	–	8 – 32	4	–	Man. (Max.)	SPDT	¼ in / 6 mm flare	060-119266 ³⁾
KP 7BS ¹⁾	Dual	–	–	8 – 32	4	–	Man. (Max.)	SPST	¼ in / 6 mm flare	060-120066
KP 17W ¹⁾	Dual	0.2 – 7.5	0.7 – 4	8 – 32	4	Auto	Auto	SPDT+LP and HP signal	¼ in / 6 mm flare	060-127566 ³⁾
	Dual	0.2 – 7.5	0.7 – 4	8 – 32	4	Auto	Auto	SPDT+LP and HP signal	6 mm ODF solder	060-127666 ³⁾
KP 17W ¹⁾	Dual	0.2 – 7.5	0.7 – 4	8 – 32	4	Auto	Auto	SPDT+LP signal	¼ in / 6 mm flare	060-126766 ³⁾
KP 17B ¹⁾	Dual	0.2 – 7.5	0.7 – 4	8 – 32	4	Auto	Man. (Max.)	SPDT	¼ in / 6 mm flare	060-126866
	Dual	0.2 – 7.5	0.7 – 4	8 – 32	4	Auto	Man. (Max.)	SPDT	6 mm ODF solder	060-127466
KP 17WB ¹⁾	Dual	0.2 – 7.5	0.7 – 4	8 – 32	4	Auto	Conv. ⁵⁾	SPDT+LP and HP signal	¼ in / 6 mm flare	060-539766 ^{3) 4)}

¹⁾ W = PSH (pressure switch), B = PZH (pressure switch with ext. reset), S = PZHH (pressure switch with int. reset)

²⁾ Available in Asia market with code 060-xxxx91

³⁾ Enclosure IP44

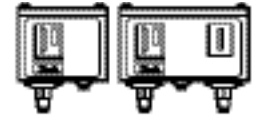
⁴⁾ Factory setting: LP side: range = 1 bar P_o , diff. = 1 bar; HP side: range = 18 bar P_o , diff. = 4 bar fixed

⁵⁾ Conv.: optional automatic or manual reset

^{*}) only for KP6W, KP6B

Technical data and ordering

KP pressure switches for R717, R22, R134a, R404A, R407A, R407C, R407F, R422B, R422D, R438A, R448A, R449A, R450A, R452A, R507A, R513A



Ordering

Type	Pressure	Low pressure (LP)		High pressure (HP)		Reset		Contact System	Connection type	Code no.
		Regulating range [bar]	Differential Δp [bar]	Regulating range [bar]	Differential Δp [bar]	Low pressure LP	High pressure HP			
KP 1A	Low	-0.2 – 7.5	0.7 – 4.0	–	–	Auto	–	SPDT	M10 × 0.75	060-116266 ²⁾
	Low	-0.2 – 7.5	0.7 – 4.0	–	–	Auto	–	SPDT	1 m cap. tube with M10 × 0.75	060-116066 ²⁾
	Low	-0.9 – 7.0	0.7	–	–	Man. (Min.)	–	SPDT	1 m cap. tube with M10 × 0.75	060-116166
KP 5A	High	–	–	8 – 32	1.8 – 6.0	–	Auto	SPDT	1 m cap. tube with M10 × 0.75	060-123066 ²⁾
	High	–	–	8 – 32	3	–	Man. (Max.)	SPDT	M10 × 0.75	060-115366 ³⁾
	High	–	–	8 – 32	3	–	Man. (Max.)	SPDT	1 m cap. tube with M10 × 0.75	060-123166
KP 15A	Dual	-0.2 – 7.5	0.7 – 4.0	8 – 32	4	Auto	Auto	SPDT+LP and HP signal	M10 × 0.75	060-129566
	Dual	-0.2 – 7.5	0.7 – 4.0	8 – 32	4	Auto	Auto	SPDT+LP and HP signal	1 m cap. tube with M10 × 0.75	060-129366 ²⁾
	Dual	-0.2 – 7.5	0.7 – 4.0	8 – 32	4	Auto	Man. (Max.)	SPDT+LP and HP signal	M10 × 0.75	060-129666
	Dual	-0.2 – 7.5	0.7 – 4.0	8 – 32	4	Auto	Man. (Max.)	SPDT+LP and HP signal	1 m cap. tube with M10 × 0.75	060-129466
	Dual	-0.9 – 7.0	0.7	8 – 32	4	Conv. ¹⁾	Conv. ¹⁾	SPDT+LP signal	1 m cap. tube with M10 × 0.75	060-128366
KP 7ABS	Dual	–	–	8 – 32	4	–	Man. (Max.)	SPST	1 m cap. tube with M10 × 0.75	060-120566

¹⁾ Conv.: optional automatic or manual reset

²⁾ Enclosure IP44

³⁾ Available in Asia market with code 060-xxxx91

KP pressure switches for R290, R444B, R600, R600a, R1234ze, R1290

Ordering



Type	Pressure	Low pressure (LP)		High pressure (HP)		Reset		Contact System	Function *)	Code no.
		Regulating range [bar]	Differential Δp [bar]	Regulating range [bar]	Differential Δp [bar]	Low pressure LP	High pressure HP			Connection ¼ in ODF solder
KP 1E	Low	-0.2 – 7.5	0.7 – 4.0	–	–	Auto	–	SPDT	PSL	060-530066
KP 1E	Low	-0.9 – 7.0	0.7	–	–	Man. (Min.)	–	SPDT	PZL	060-530266
KP 7EW	High	–	–	8 – 32	1.8 – 6.0	–	Auto	SPDT	PSH	060-530466
KP 7EB	High	–	–	8 – 32	4	–	Man. (Max.)	SPDT	PZH	060-530666

*) PSL, PZL, PSH, PZH according to EN12263: 1998

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