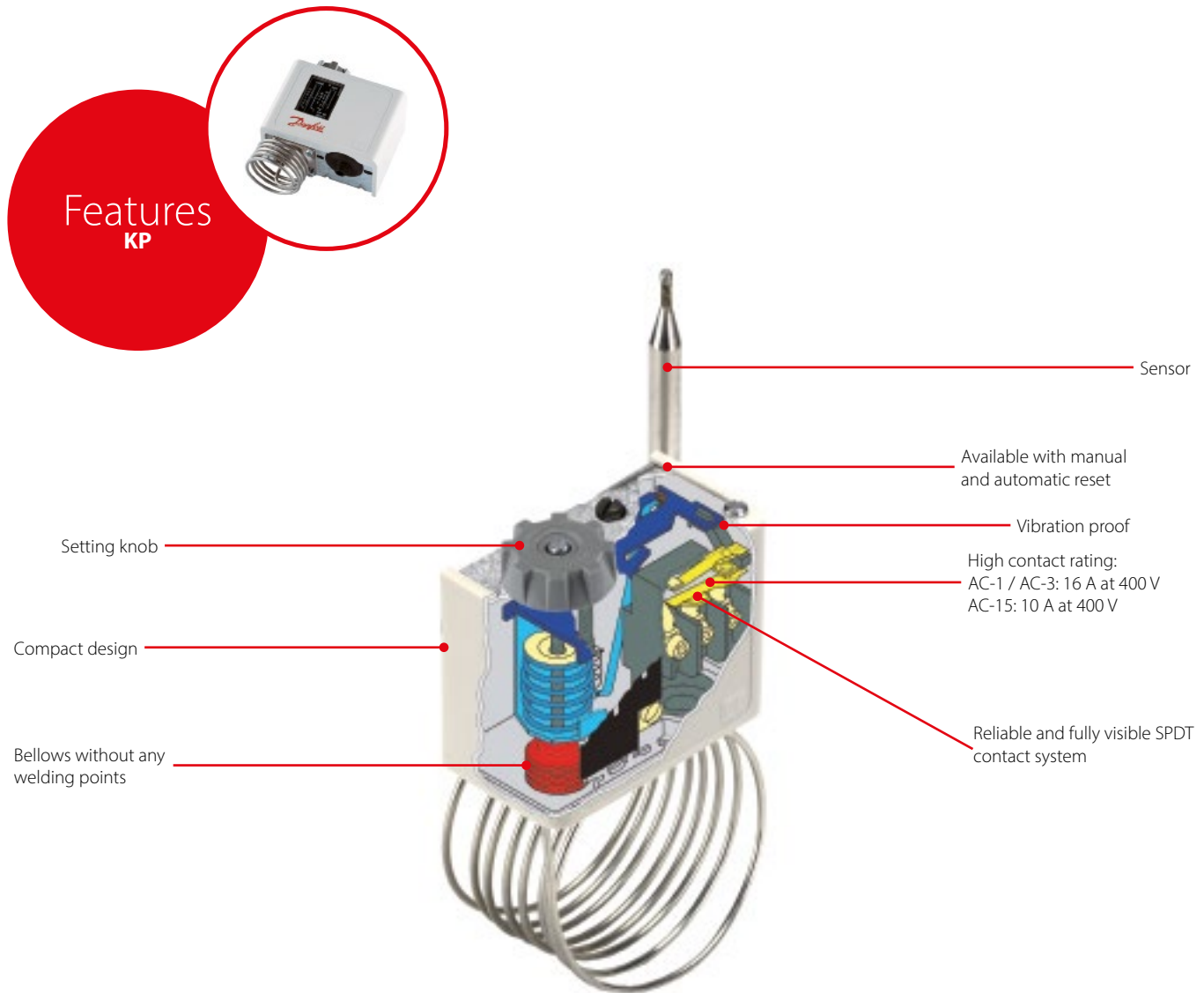


KP, Thermostat

KP thermostats are single-pole, double-throw (SPDT) temperature-operated electric switches. KP thermostats 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.

KP thermostats are used primarily for regulation, but also for safety monitoring systems, and are available with vapour charge or with adsorption charge. With vapour charge the differential is very small. KP thermostats with adsorption charge are widely used to give frost protection.



Facts

Application:

- Frost protection
- Defrost control
- Case and Room control

- Easy to handle compact design with large and visible scale plates
- Vibration and shock resistant
- High reliability both electrically and mechanically – a KP control 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
- Wide range of approvals - Danfoss offers a wide range of approvals suited for specific applications and geographical markets
- Available with capillary sensor, air sensor or cylindrical pocket sensor
- Different sensing elements - As experts in charging technologies Danfoss offers temperature switches that operate in a wide temperature range
- Available with vapour charge or with adsorption charge
- IP30 can be increased to IP44 or IP55 using top plate or IP55 enclosure available as accessories

Technical data and ordering

KP thermostats

Ordering

Sensor type	Charge	Bulb type	Regulation range [°C]	Differential Δt		Reset	Max. bulb temp. [°C]	Capillary tube length [m]	Code no.
				Lowest temperature [°C]	Lowest temperature [°C]				
KP 61	Vapour ¹⁾	A	-30 – 15	5.5 – 23	1.5 – 7	Auto	120	2	060L110066
	Vapour ¹⁾	A	-30 – 15	5.5 – 23	1.5 – 7	Auto	120	5	060L110166
	Vapour ¹⁾	B	-30 – 13	4.5 – 23	1.2 – 7	Auto	120	2	060L110266
	Vapour ¹⁾	B	-30 – 15	5.5 – 23	1.5 – 7	Auto	120	2	060L110366 ³⁾
	Vapour ¹⁾	B	-30 – 15	5.5 – 23	1.5 – 7	Auto	120	2	060L112866 ³⁾ ⁴⁾
	Vapour ¹⁾	A	-30 – 15	Fixed 6	Fixed 2	Min.	120	5	060L110466
KP 62	Vapour ¹⁾	B	-30 – 15	Fixed 6	Fixed 2	Min.	120	2	060L110566
	Vapour ¹⁾	C 1	-30 – 15	6.0 – 23	1.5 – 7	Auto	120	–	060L110666
KP 63	Vapour ¹⁾	A	-50 – 10	10.0 – 70	2.7 – 8	Auto	120	2	060L110766
	Vapour ¹⁾	B	-50 – 10	10.0 – 70	2.7 – 8	Auto	120	2	060L110866
KP 68	Vapour ¹⁾	C 1	-5 – 35	4.5 – 25	1.8 – 7	Auto	120	–	060L111166
KP 69	Vapour ¹⁾	B	-5 – 35	4.5 – 25	1.8 – 7	Auto	120	2	060L111266
KP 62	Adsorbtion ²⁾	C 2	-30 – 15	5.0 – 20	2.0 – 8	Auto	80	–	060L111066 ³⁾ ⁴⁾
KP 71	Adsorbtion ²⁾	E 2	-5 – 20	3.0 – 10	2.2 – 9	Auto	80	2	060L111366
	Adsorbtion ²⁾	E 2	-5 – 20	Fixed 3	Fixed 3	Min.	80	2	060L111566
KP 73	Adsorbtion ²⁾	E 1	-25 – 15	12.0 – 70	8.0 – 25	Auto	80	2	060L111766
	Adsorbtion ²⁾	D 1	-25 – 15	4.0 – 10	3.5 – 9	Auto	80	2	060L111866 ³⁾
	Adsorbtion ²⁾	D 1	-25 – 15	Fixed 3.5	Fixed 3.5	Min.	80	2	060L113866
	Adsorbtion ²⁾	D 2	-20 – 15	4.0 – 15	2.0 – 13	Auto	55	3	060L114066
	Adsorbtion ²⁾	D 1	-25 – 15	3.5 – 20	3.25 – 18	Auto	80	2	060L114366
KP 75	Adsorbtion ²⁾	F	0 – 35	3.5 – 16	2.5 – 12	Auto	110	2	060L112066
	Adsorbtion ²⁾	E 2	0 – 35	3.5 – 16	2.5 – 12	Auto	110	2	060L113766
KP 77	Adsorbtion ²⁾	E 3	20 – 60	3.5 – 10	3.5 – 10	Auto	130	2	060L112166
	Adsorbtion ²⁾	E 3	20 – 60	3.5 – 10	3.5 – 10	Auto	130	3	060L112266
	Adsorbtion ²⁾	E 2	20 – 60	3.5 – 10	3.5 – 10	Auto	130	5	060L116866
KP 79	Adsorbtion ²⁾	E 3	50 – 100	5.0 – 15	5.0 – 15	Auto	150	2	060L112666
KP 81	Adsorbtion ²⁾	E 3	80 – 150	7.0 – 20	7.0 – 20	Auto	200	2	060L112566
	Adsorbtion ²⁾	E 3	80 – 150	Fixed 8	Fixed 8	Max.	200	2	060L115566
KP 98	Adsorbtion ²⁾	E 2	OIL: 60 – 120	OIL: Fixed 14	OIL: Fixed 14	Max.	150	1	060L113166
	Adsorbtion ²⁾	E 2	HT: 100 – 180	HT: Fixed 25	HT: Fixed 25	Max.	250	2	




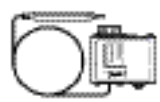


¹⁾ Sensor must always be placed colder than the thermostat housing and capillary tube. The thermostat will then regulate independent of ambient temperature.

²⁾ Sensor can be placed warmer or colder than thermostat housing and capillary tube, but variations from 20 °C ambient temperature will influence the scale accuracy.

³⁾ With manual switch, not isolating switch.

⁴⁾ Panel mounting model with top plate.

Thermostat sensor types

A	B	C	D	E	F
					
Straight capillary tube	ø9.5 × 70 mm remote air coil	C1: ø40 × 30 mm air coil C2: ø25 × 67 mm air coil (integral with thermostat)	D1: ø10 × 85 mm double contact remote sensor D2: ø16 × 170 mm double contact remote sensor Note! Cannot be used in sensor pocket	E1: ø6.4 × 95 mm remote sensor E2: ø9.5 × 115 mm remote sensor E3: ø9.5 × 85 mm remote sensor	ø25 × 125 mm remote duct coil