

Data sheet

# Pressure switch and Thermostat

## KP and KPI



The KP and KPI pressure switches and thermostats are used for control, monitoring and alarm systems in a wide variety of industry applications.

KP pressure switches are mainly used for gaseous fluid whereas KPI pressure switches are more for liquid and gaseous fluid.

The KP pressure range include special designed pressure switches and limiters for steam boilers and other heating applications.

For water pump control and protection (dry run) the dual pressure switch KP44 is suitable and secure improved life time of the water pump.

### Features

- Wide setting range,
- Shock and impact resistant,
- Snap action electrical contacts minimize chatter, bounce, and wear, and ensure long term electrical and mechanical reliability,
- Small dimensions. Space saving – easy to install in panels,
- Electrical connection from front of the unit makes rack mounting easier and also saves space,
- Suitable for alternating current and direct current,
- Single pressure switches and thermostats are fitted with a single pole double throw contact system (SPDT),
- Can be used for both liquids and gases (KPI),
- Manual trip function enables electrical connections verification without any tools or pressure changes in the application,
- Versions with automatic and manual reset available.

### Approvals

CE-marked in accordance with LVD 2014/35/EU: EN 60947-1, EN 60947-4-1, EN 60947-5-1  
Underwriters Laboratories Inc., UL

China Compulsory Certificate, CCC (excluding boiler versions)  
GOST (excluding KPI)

# SINGLE PRESSURE SWITCH

## Technical data

Description		KP 35, KP 36	KPI 35, KPI 36	KPI 38	KP 34, KP 35, KP 36, KP 37 boiler version
Ambient temperature [°C]		-40 – 65 °C (for max. 2 hours up to 80 °C)			
Media temperature [°C]		-40 – 100 °C			
Fluid		Gaseous media	Gaseous media and liquids	Steam, air, gaseous media & liquids	
Parts in contact with fluid	Bellows	Phosphor bronze or Stainless steel	Phosphor bronze		Stainless steel
	Pressure connector	Free-cutting steel (nickel plated) or Stainless steel	Brass	Free-cutting steel (nickel plated)	
Contact system		<p>Line ~ 16A 1 4 2 3 M</p> <p>SPDT</p> <p>DANFOSS A60-1031..10</p>			
		Single-pole double throw (SPDT)			
Contact load, Silver		<i>Alternating current:</i> AC-1: 16 A, 400 V AC-3: 16 A, 400 V AC-15: 10 A, 400 V  <i>Direct current:</i> DC-13: 12 W, 220 V	<i>Alternating current:</i> AC-1: 10 A, 440 V AC-3: 6 A, 440 V AC-15: 4 A, 440 V  <i>Direct current:</i> DC-13: 12 W, 220 V	<i>Alternating current:</i> AC-1: 16 A, 400 V AC-3: 16 A, 400 V AC-15: 10 A, 400 V  <i>Direct current:</i> DC-13: 12 W, 220 V	
Contact load, Gold plated contact set		See information page 15.			
Enclosure, IP30 grade		Unit must be mounted on a flat surface/ a flat fitting and all unused holes covered.			
Enclosure, IP44 grade		Mounted as IP30 plus fitting of top cover, code no. <b>060-109766</b> .			
Enclosure, IP55 grade		Unit mounted in a special IP55 enclosure, code no. <b>060-033066</b> or <b>060-062866</b> .			
Cable entry		Rubber cable gland entry for 6 – 14 mm diameter cables.			
Mounted on back plate/wall bracket		Vibration proof in the range 0 – 1000 Hz, 4 g (1 g = 9.81 m/s <sup>2</sup> ).			
Mounted on angle bracket		Not recommended in areas where vibrations occur.			