

KP/KPI  
illustrated is KPI 35  
with top cover



## Introduction

Danfoss KP/KPI pressure controls are used for regulating, monitoring and alarm systems in industry.

KP pressure controls are for gaseous media and air.

KPI pressure controls are suitable for plant in connection with liquid and gaseous media.

The pressure controls are fitted with a single-pole switch changeover (SPDT). The position of the switch depends on the setting of the pressure control and the pressure in the connector.

## Features

- Wide regulating range
- Can be used for pumps and compressors
- Small dimensions.  
Space-saving – easy to install in panels
- Shock and impact resistant
- Ultra-short bounce times.  
Limits wear to an absolute minimum and increases reliability
- Electrical connection from front of unit.  
Makes rack mounting easier and also saves space
- Suitable for both alternating current and direct current
- Cable entry for 6-14 mm diameter cables
- Screwed cable entry makes rewiring easy.  
Standard screwed cable entry  
Pa 13.5 and Pa 16

## Definitions

### *Range setting*

The pressure range within which the unit will give a signal (contact changeover).

### *Differential*

The difference between contact changeover on rising and falling pressure.

The differential is a condition for stable automatic plant operation.

### *Automatic reset*

Units with automatic reset restart automatically after stop.

Min. reset units will restart after the pressure **has risen** by a value greater than that of the fixed differential.

Max. reset units will restart after the pressure **has fallen** by a value greater than that of the fixed differential

### *Permissible operating pressure*

The highest permissible constant pressure or pressure variation the unit can be exposed to.

Ordering, IP 33/44 versions Pressure controls **type KP 35 and 36**

Setting range $p_e$ [bar]	Differential [bar]	Permissible operating pressure $p_B$ [bar]	Max. test pressure [bar]	Pressure connection	Contact Material	Code no.	Type
-0.2 → 7.5	0.7 → 4	17	22	G 1/4 A	Aa	<b>060-1133</b>	KP 35
					Au	<b>060-5047</b>	
2 → 14	0.7 → 4	17	22	G 1/4 A	Aa	<b>060-1108</b>	KP 36
					Au	<b>060-1137</b>	
4 → 12	0.5 → 1.6	17	22	G 1/4 A	Aa	<b>060-1221</b>	KP 36
					Au	<b>060-1144</b>	

Ordering, IP 33/44 versions Pressure controls **type KPI 35 - 38**

Setting range $p_e$ [bar]	Differential [bar]	Permissible operating pressure $p_B$ [bar]	Max. test pressure [bar]	Pressure connection	Contact Material	Code no.	Type
-0.2 → 8	0.4 → 1.5	18	18	G 1/4 A	Aa	<b>060-1217</b>	KPI 35
					Au	<b>060-3164</b>	
-0.2 → 8	0.5 → 2	18	18	G 1/4 A	Aa	<b>060-1219</b>	KPI 35
					Au	<b>060-3165</b>	
4 → 12	0.5 → 1.6	18	18	G 1/4 A	Aa	<b>060-1189</b>	KPI 36
					Au	<b>060-1138</b>	
2 → 12	0.5 → 1.6	18	18	G 1/4 A	Aa	<b>060-3169</b>	KPI 36
					Au	<b>060-3166</b>	
8 → 28	1.8 → 6	30	30	G 1/4 A	Aa	<b>060-5081</b>	KPI 38
					Au	<b>060-3167</b>	

**Technical data**

Description	KP	KPI	
Ambient temperature °C	-40 °C - +65 °C (for short periods up to +80 °C)		
Media temperature °C	-40 °C - +100 °C		
Media	Gaseous media and air	Air, oil, fresh water	
Parts in contact with medium	Bellows	Tinbronze W. no. 2.1020 to DIN 17662	Tinbronze W. no. 2.1020 to DIN 17662
	Pressure connector	Free-cutting steel W. no. 1.0719 to DIN 1651	Brass W. no. 2.0401 to DIN 17660
Contact system	Single-pole changeover switch (SPDT) <div style="text-align: right;"> </div>		
Contact load. Aa contact set	<b>Alternating current:</b> AC-1: 16 A. 400 V AC-3: 16 A. 400 V AC-15: 10 A. 400V	<b>Alternating current:</b> AC-1: 10 A. 440 V AC-3: 6 A. 440 V AC-15: 4 A. 440V	
Contact material AaCdO	<b>Direct current:</b> DC-13: 12 W. 220 V	<b>Direct current:</b> DC-13: 12 W. 220 V	
Contact load. Au contact set	See information page 6		
Enclosure. IP 33 grade	Unit must be mounted on a flat surface/a flat fitting and all unused holes covered.		
Enclosure. IP 44 grade	Mounted as IP 33 plus fitting of top cover. code no. <b>060-1097</b>		
Cable connection	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		
Approvals	EN 60 947-4.5 RINA. Registro Italiano Navale MRS. Maritime Reg. of Shipping. Russia UL approved versions are available	EN 60 947-4.5	