KPU - Pressure Switches

KPU pressure switches are designed to be contractor friendly and used in refrigeration and air-conditioning systems to protect the systems from excessively low suction or too high discharge pressure. They can also be applied to start and stop compressors and the fans of air-cooled condensers. KPU pressure switches, in single and dual versions, cover a comprehensive range of applications and are designed for use with fluorinated and non-aggressive refrigerants. Most KPU pressure controls can be used with R-410A systems.



Facts

Applications:

- Commercial air conditioning
- Commercial refrigeration
- Supermarket Refrigeration
- Food processing and storage
- Product Types
 - Low Pressure
- High Pressure
- Dual Pressure
- Maximum working/test pressure
- LP controls: 245/290 psig
- HP controls: 505/505 psig
- KPU 6 and 16 on HP side: 675/675 psig
- Refrigerants: R-22, R-134a, R-404A, R-407A, R-407C, R-407F, R-422B, R-422D, R-438A, R-448A, R-449A, R-450A, R-452A, R-507A, R-513A, R-410A (only KPU 1, 2, 6, 16)
- Ambient temperature: -40 to +150 °F (175 °F for max. 2 hours)
- Enclosure: NEMA 1
- Cable entry: 7% inch cable entry for 1/2 inch male pipe thread connection (conduit boss) or similar screwed cable entry
- Pressure connection: ¼ inch M flare or 36 inch capillary tube with ¼ inch flare nut
- KPU 6W, 6B, and 16B feature "dual bellows" on high pressure side to prevent leaks in the case of a bellows rupture

Technical data and ordering



KPU Pressure Switches

Danfoss			Contact	Range	Differential	Max. working	Competitor part no.1	Danfoss Code No.		
Туре	Pressure	Reset	system	(in. Hg/psig)	(psig)	pressure (psig)		¼ in. M flare	36 in. capillary tubes with ¼ in. flare nuts	
KPU 1	Low	Automatic	SPDT	<mark>6</mark> to 108	10.2 to 58	250	O10-1483	060-5231	060-5233	
KPU 2	Low	Automatic	SPST (NO)	<mark>6</mark> to 73	6 to 30	250	O10-1402	060-5237	060-5235	
KPU 2	Low	Automatic	SPDT	<mark>6</mark> to 73	6 to 30	250		060-5239	060-5240	
KPU1B	Low	Manual	SPDT	28 to 100	10.2	250	P70AB12 P70AB2	060-5232	060-5234	
KPU 5	Fan cycling	Automatic	SPST (NO)	100 to 465	26.1 to 87	510	O10-2054 P70AA118	060-5241	060-5242	
KPU 6W ²	High	Automatic	SPDT	100 to 600	58 to 145	675	O16-108	060-5243	060-5245	
KPU 6B ²	High	Manual	SPDT	100 to 600	60	675		060-5244	060-5246	

Danfoss Type	Low pressure side		High pressure side		Rest			Max working		Danfoss Code No.	
	Range (in. Hg/psig)	Differential (psig)	Range (psig)	Differential (psig)	Low pressure side	High pressure side	Contact system (LP/HP)	liow/high side) (low/high side) (psig)	Competitor part no.'	¼ in. M flare	36 in. capillary tubes with ¼ flare nuts
KPU 15	<mark>6</mark> to 108	10 to 60	100 to 465	60	Automatic	Automatic	SPST (NO/NC)	250/510	012-1549	060-5247	060-5248
KPU 15B	<mark>6</mark> to 108	10 to 60	100 to 465		Automatic	Manual	SPST (NO/NC)	250/510	P170LB1 P70LB1 P70MA1	060-5249	060-5250
KPU 16B	<mark>6</mark> to 108	10 to 60	100 to 600		Convertible ³	Convertible ³	SPDT/ SPST (NO)	250/675	012-4834	060-5253	060-5254

¹Competitor part no. equipped with capillary tube for all but P170LB1 which has flare connections.

² KPU 6 and the high pressure side of KPU 16 are designed with fail-safe double bellows.

³Convertible reset controls can be adjusted for either automatic or manual reset.

All controls are supplied with universal mounting bracket and mounting screws.

Ambient tempature: -40 °F to +122 °F (175 °F for maximum 2 hours).

KPU 1, 2, 6, 16 suitable for all HFC refrigerants, including R-410A.

See page 56 for capillary tube (code no. 060-017166) to connect to controls with 1/4 in. male flare connections (pictured below).

	120/240 VAC			
Alternating Current				
Motor Full Load Amps (FLA)	24			
Locked Rotor Amps (LRA)	144			
Direct Current	240 V DC: 12W pilot duty			