New perspectives with

Danfoss Saginomiya Controls







- Cartridge controls
- 4-way reversing valves
- Condenser fan speed controllers

REFRIGERATIONAND
AIR CONDITIONING



Cartridge Controls, ACB series



Precision and many years of experience ensure a very low field reject rate.

The ACB series cartridge controls are small, disc type pressure controls designed and manufactured to ensure quality and reliable performance in applications including room air conditioners, packaged air conditioners, display cases, and ice machines. They are compact and light-weight for easy mounting directly on the refrigeration system where pressure regulation is required. Used by major OEMs worldwide, the ACB series have more than 100 million pieces installed.

Technical data and Ordering Information

These are standard high and low pressure cut-out models. Water proof type IP65.

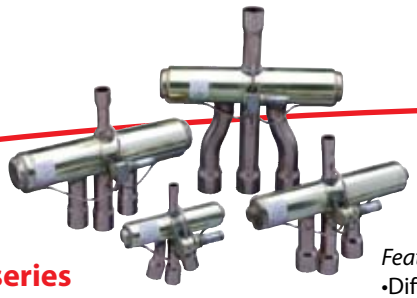
Application	Reset	Cut out (PSI)	Cut in (PSI)	Contact Style	Connection		Cable Length (inches)	**Danfoss Code No.**
					1/4"	1/4"		
					Solder	Female Flare		
					0.12" insertion	w/ depressor pin		
High pressure switch	Auto	260±10	190±17	SPST-NC	X		59±2	**061F7505**
	Auto	260±10	190±17	SPST-NC		X	59±2	**061F7506**
	Auto	335±10	275±17	SPST-NC		X	59±2	**061F8494**
	Manual	380±15	290±30	SPST-NC	X		59±2	**061F9714**
	Manual	380±15	290±30	SPST-NC		X	59±2	**061F9713**
	Auto	380±14	290±21	SPST-NC	X		59±2	**061F7508**
	Auto	380±14	290±21	SPST-NC		X	59±2	**061F7509**
	Auto	405±14	305±21	SPST-NC	X		59±2	**061F7513**
	Auto	405±14	305±21	SPST-NC		X	59±2	**061F7514**
	Auto	450±14	350±22	SPST-NC		X	59±2	**061F8492**
	Manual	610±17	480±29	SPST-NC		X	59±2	**061F9575**
	Auto	610±17	480±30	SPST-NC	X		59±2	**061F7516**
	Auto	610±17	480±30	SPST-NC		X	59±2	**061F7517**
Low pressure switch	Auto	7±6	22±5	SPST-NO	X		59±2	**061F7519**
	Auto	7±6	22±5	SPST-NO		X	59±2	**061F7520**
	Auto	10±7	25±6	SPST-NO	X		59±2	**061F7522**
	Auto	10±7	25±6	SPST-NO		X	59±2	**061F7523**
	Auto	25±7	40±6	SPST-NO	X		59±2	**061F7525**
	Auto	25±7	40±6	SPST-NO		X	59±2	**061F7526**
Fan Cycle Control	Auto	125±17	160±12	SPST-NO		X	59±2	**061F8490**
	Auto	190±22	230±14	SPST-NO		X	59±2	**061F8333**

Features:

- Water proof IP65, open type IP40
- Contact load up to 8A (250V.AC), 6A for manual reset model
- Automatic or manual reset
- High and low pressure cut-in and cut-out and fan speed control
- Normally closed (NC) or normally open (NO)
- SPST or SPDT contact system
- Corrosion resistant housing
- UL, c-UL approvals (CE, TUV, VDE, and CSA models are available upon request)
- Wide range of port fittings for soldering or direct mounting. (Sweat, Flare, NPT and other fittings are available.)
- Spade terminals or cables connection

Specifications:

- Used with CFC, HCFC, HFC (Model for CO_2 is available)
- Pressure range from –1.5 in Hg to 650 psi
- Media temp: -65˚ to 275˚F
- Ambient temp: -22˚ to 212˚F



4 Way Reversing Valves, VHV and STF series

VHV and STF pilot operated, 4-way reversing valves have been in production for over 30 years with 60 million pieces installed worldwide. These robust valves are engineered to provide power savings and they are ideal for heat pump applications on unitary, split system and window type air conditioners. Saginomiya 4-way valves are available in a wide selection of connecting sizes and styles for air conditioning units of varying sizes.

Technical data and Ordering

STF ; UL and c-UL Recognized

Danfoss Code No.	Saginomiya Part No.	Capacity from Minimum to Nominal		Connection (inch) ODF *(Standard in bold)*		Box Qty.
		R22 Applicable (Value for reference)	R410A Applicable (Value for reference)	Discharge (D) *Candy Cane	E.S.C	
		TR	TR			
061L1200	**STF-01U1G3**	0.45 - 1.35	0.46 - 1.59	**5/16** *	**3/8**	50
061L1210	**STF-02U1G3**	0.80 - 2.57	0.88 - 3.03	5/16, **3/8**, 1/2 *	**1/2,** 5/8	40
061L1211	**STF-02U2G3**	0.51 - 2.57	0.57 - 3.03			40
061L1212	**STF-02U4G3**	0.80 - 2.57	0.88 - 3.03	5/16, **3/8**, 1/2	1/2, **5/8**	40
061L1213	**STF-02U9G3**	0.80 - 2.57	0.88 - 3.03		**1/2,** 5/8	40
061L1214	**STF-02U8G3**	0.80 - 2.57	0.88 - 3.03	5/16, **3/8**, 1/2 *	1/2, **5/8**	40
061L1220	**STF-03U6G3**	1.3 - 3.1	1.5 - 3.7	3/8, **1/2**	5/8, **3/4**	36
061L1230	**STF-04U1G3**	2.0 - 5.7	2.4 - 6.7	**1/2,** 5/8, 3/4	**3/4,** 7/8	20
061L1231	**STF-04U9G3**	2.0 - 5.7	2.4 - 6.7		3/4, **7/8**	20
061L1232	**STF-04U20G3**	2.0 - 6.5	2.4 -7.7			20
061L1240	**STF-07U19G3**	5.1 - 9.7	6.0 - 11.4	**1/2,** 5/8, 3/4, 7/8	**7/8**, 1-1/8	12
061L1243	**STF-07U12G3**	5.1 - 9.7	6.0 - 11.4	1/2, 5/8, **3/4**, 7/8	**7/8**, 1-1/8	12

VHV; UL and c-UL Recognized

Danfoss Code No.	Saginomiya Part No.	Capacity from Minimum to Nominal		Connection (inch) ODF *(Standard in bold)*		Box Qty.
		R22 Applicable (Value for reference)	R410A Applicable (Value for reference)	Discharge (D)	E.S.C.	
		TR	TR			
061L1260	**VHV-15U11G3**	9.5 - 10.8	11.1 -12.7	**7/8**	**1-1/8**	8
061L1261	**VHV-20U11G3**	9.5 - 13.8	11.1 - 16.3	**7/8,** 1-1/8	**1-1/8,** 1-3/8	8
061L1262	**VHV-25U1G3**	12.8 - 20.8	14.8 - 24.6	**1**	**1-1/4**	1
061L1263	**VHV-30U1G3**	15.9 - 29.3	18.4 - 34.7	**1-1/4**	**1-1/2**	1
061L1264	**VHV-40U1G3**	28.4 - 41.0	32.7 - 48.4	**1-1/2**	**1-3/4**	1
061L1265	**VHV-50U1G3**	35.6 -51.0	41.2 - 60.3	**1-1/2**	**2-1/8**	1

Features:

- Different connection pipe size and configuration are available.
- Reliable changeover operation by 4-way pilot valve
- Unique design ensures reduced pressure drop
- Full capacity range up to 50TR
- Minimize leakage
- Splash proof resin encapsulated solenoid coil

- Max. working pressure: 4.15MPa (600 psi)
- Ambient temperature : -20 to +55˚C (-4 to +135˚F)

- Available for: R22, R134a, R407C, R410A, R404A

Coil Voltage : 24V.AC, 115V.AC, 230V A.C. 50/60 Hz and others are available.

Coil with Quick Connect spade terminals or Coil with lead wires available.

Nominal capacity is based on Pressure Drop = 2.1 psi, condensing temperature = 100°F, evaporating temperature = 41°F and superheat = 9°F

For non-standard connection size and configuration, please contact Danfoss Inc.
Not all connection size combinations are available.



Condenser Fan Speed Control, RGE Series

Designed and optimized for precisely controlling the speed of a condenser fan of packaged air-conditioning units, condensing units, and other units that operate year round, RGE series control keep condensing pressure constant in winter and intermediate seasons for stable operation.

Features:

- Available in single phase and three phase versions
- All in one senses pressure and controls fan speed
- Reliable structure of the pressure-sensing element with bellows
- Low noise output
- Operational when fan speed is slowing down
- Operation selectable for Minimum Speed Operation or Cut-off Operation
- An external forced operation switch can be connected
- c-CSA-us approval, CE certified.

Technical data and Ordering

Danfoss Code No.	Saginomiya Part No.	F.V.S. Setting Adjusting Range (psi)	E.P.B. (psi) Fixed	Max. Working Pressure (psi)	Eletrical Rating		Function	Ambient Temp. (°F)	Refrigerants	Wt. (kg)
					Voltage	Ampere				
061H3045	**RGE-Z1L4-7DS**	116 to 406	87	681	Single phase 200 to 240V AC 50/60Hz	0.2 to 2A	At approx. 45% (50Hz) at approx 35% (60Hz). Cut Off or Minimum Speed function is selectable with changeover switch. Default setting: Cut Off	-4 to 131	R22, R404A, R407C (R134a)	0.36
061H3005	**RGE-Z1N4-7DS**		58			0.2 to 4A				0.50
061H3008	**RGE-ZIP4-7DS**					0.2 to 6A				0.54
061H3009	**RGE-ZIQ4-7DS**					0.2 to 8A				0.58
061H3048	**RGE-Z1L6-7DS**	232 to 566	131			0.2 to 2A			R410A	0.36
061H3021	**RGE-Z1N6-7DS**		116			0.2 to 4A				0.50
061H3022	**RGE-Z1P6-7DS**					0.2 to 6A				0.54
061H3023	**RGE-Z1Q6-7DS**					0.2 to 8A				0.58
061H3003	**RGE-Z3R4-7DS**	116 to 406	58	681	Three phase 200 to 240V AC 50/60Hz	0.2 to 5A	At approx. 35%, Cut Off or Minimum Speed function is selectable with changeover switch. Default setting: Min. speed	-4 to 122	R22, R404A, R407C (R134a)	1.40
061H3050	**RGE-Z3T4-7DS**		87			0.2 to 7A				1.53
061H3027	**RGE-Z3R6-7DS**	232 to 566	116			0.2 to 5A			R410A	1.40
061H3051	**RGE-Z3T6-7DS**					0.2 to 7A				1.53
061H3006	**RGE-X3R4-7DS**	116 to 406	58		Three phase 380 to 415V AC 50/60Hz	0.2 to 5A		5 to 122	R22, R404A, R407C (R134a)	1.40
061H3028	**RGE-X3R6-7DS**	232 to 566	116						R410A	

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