

New perspectives with Danfoss Saginomiya Controls



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



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.

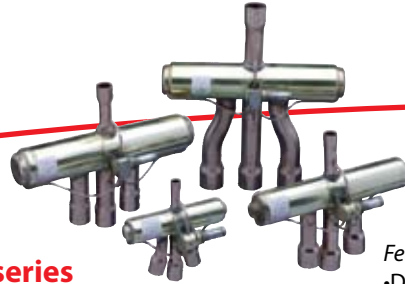
Application	Reset	Cut out (PSI)	Cut in (PSI)	Contact Style	Connection		Cable Length (inches)	Danfoss Code No.
					1/4"	1/4"		
					Solder	Female Flare		
					0.12" insertion	w/ depressor pin		
High pressure switch	Auto	260±10	190±17	SPST-NC	X		59±2	061F7505
	Auto	260±10	190±17	SPST-NC		X	59±2	061F7506
	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 CO₂ 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			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			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

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.

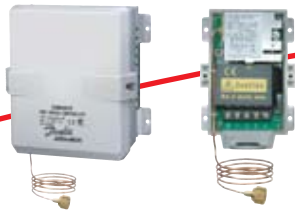
Coil with Quick Connect spade terminals or
Coil with lead wires available.

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

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)	Electrical 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	131				0.2 to 2A			R410A	0.36		
061H3021	RGE-Z1N6-7DS	232 to 566	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	-4 to 122	R22, R404A, R407C (R134a)	1.40		
061H3050	RGE-Z3T4-7DS	232 to 566	87	0.2 to 7A			1.53					
061H3027	RGE-Z3R6-7DS		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			681		Three phase 380 to 415V AC 50/60Hz	0.2 to 5A	5 to 122	R22, R404A, R407C (R134a)
061H3028	RGE-X3R6-7DS	232 to 566	116	Default setting: Min. speed								

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