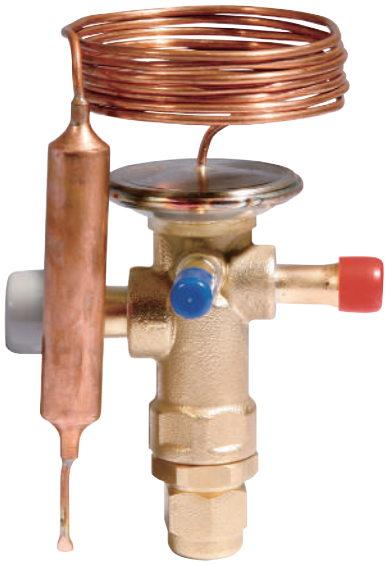
RFGD SERIES | *Thermostatic Expansion Valve*



RFGD series thermostatic expansion valves are used to regulate refrigerant flow into the evaporator while controlling the refrigerant's superheat at the outlet of the evaporator. They can be used for various refrigerants under all working conditions. Typical applications are refrigeration systems like commercial refrigerators and freezers, icemakers, dehumidifiers as well as air conditioners like water chillers and bus A/C at various evaporation temperatures.

FEATURES

- COMPACT DESIGN WITH BUILD-IN ORIFICE
- ALL COPPER CONNECTIONS
- OPTIONAL MOP FUNCTION TO ASSURE RELIABLE COMPRESSOR OPERATION
- APPLICABLE IN A WIDE EVAPORATION TEMPERATURE RANGE
- RELIABLE AND CONSISTENT PERFORMANCE OF SUPERHEAT CONTROL
- BALANCED PORT DESIGN TO ADDRESS THE INFLUENCE OFPRESSURE CHANGES IN THE SYSTEM
- THERMAL BULB UTILIZES CROSS CHARGE TECHNOLOGY, PROVIDING CONSISTENT SUPERHEAT CONTROL OVER WIDE EVAPORATOR TEMPERATURE RANGE
- 9 SIZES AVAILABLE RANGING FROM 2 TO 24 TON (DEPENDING ON THETYPE OF REFRIGERANT)

GENERAL SPECIFICATION

- Applicable for all common HCFC and HFC refrigerants such as: R-22, R-134a, R-404A, R-407C, R-410A, R-507
- Ambient temperature; min,/max.: -31°F to +131°F
- Medium temperature; min./max.: -40°F to +158°F
- Maximum operating pressure PS: 696 psig
- Installation position: Preferably with power element on top
- Certifications: UL/CSA and PED declaration

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RFGD SERIES | *Thermostatic Expansion Valve*

TECHNICAL PARAMETERS

- RFGD valves available in straight through configuration with adjustable superheat
- Connection types:

  Solder: Inlet: 3/8 ODF, 1/2" ODF, 5.8" ODF, 7/8" ODF

  Outlet: 5/8"ODF, 7/8"ODF, 1-1/8"ODF, 1-3/8"ODF

  Ext. Equalizer: 1/4" ODF
- Capillary tube length: 60"
- Temperature range:
  - A/C: -13°F to 50°F; with 60°F MOP
  - Medium & Low Temp. Refrigeration: -40°F to +50°F; without MOP

MODEL DESIGNATION

RFGD 01 E 1.0 XXX 1/2" ODF x 7/8" ODF x 1/4" ODF x 60"

TXV Model:

Refrigerant:
01 = R-22
02 = R-407C
03 = R-404A/R-507
04 = R-134a
05 = R-410A

External Equalizer:
E = External
Omit E = Internal

Capacity Rating (tons)

Digits for other information:

Connection: Inlet x Outlet x Equalizer x Capillary Length

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RFGD SERIES | *Thermostatic Expansion Valve*

TECHNICAL DATA - RFGD Model List

Ref.	Model Number	Nominal Capacity (tons)	Connections, ODF Solder (inch)			Capillary Tube Length (inch)	MOP (Thermostatic Charge)
			Inlet	Outlet	Equalizer		
R-407C	RFGD02E-3.1-33	3.1	3/8	5/8	1/4	60	None
	RFGD02E-4.2-34	4.2	1/2	7/8			
	RFGD02E-6.3-35	6.3					
	RFGD02E-8.1-36	8.1	5/8				
	RFGD02E-9.4-37	9.4					
	RFGD02E-11.7-38	11.7					
	RFGD02E-12.0-542	12					
	RFGD02E-12.0-543	12		1-1/8			
	RFGD02E-15.0-545	15					
	RFGD02E-15.0-547	15	7/8				
	RFGD02E-18.0-549	18					
	RFGD02E-18.0-551	18					
	RFGD02E-12.0-637	12	5/8	1-3/8			95 psig (60°F)
	RFGD02E-12.0-638	12		7/8			
	RFGD02E-15.0-640	15		1-1/8			
	RFGD02E-15.0-642	15	7/8				
	RFGD02E-18.0-644	18					
	RFGD02E-18.0-646	18		1-3/8			
R-404A R-507	RFGD03E-2.0-39	2	3/8	5/8			None
	RFGD03E-2.8-40	2.8	1/2	7/8			
	RFGD03E-4.2-41	4.2					
	RFGD03E-5.4-42	5.4	5/8				
	RFGD03E-6.4-43	6.4					
	RFGD03E-7.8-44	7.8					
	RFGD03E-9.0-532	9					
	RFGD03E-9.0-533	9		1-1/8			
	RFGD03E-11.0-535	11					
	RFGD03E-11.0-537	11	7/8				
	RFGD03E-13.0-539	13					
	RFGD03E-13.0-541	13		1-3/8			
	RFGD03E-9.0-627	9	5/8	7/8			122 psig (60°F)
	RFGD03E-9.0-628	9		1-1/8			
	RFGD03E-11.0-630	11					
	RFGD03E-11.0-632	11	7/8				
	RFGD03E-13.0-634	13					
	RFGD03E-13.0-636	13		1-3/8			

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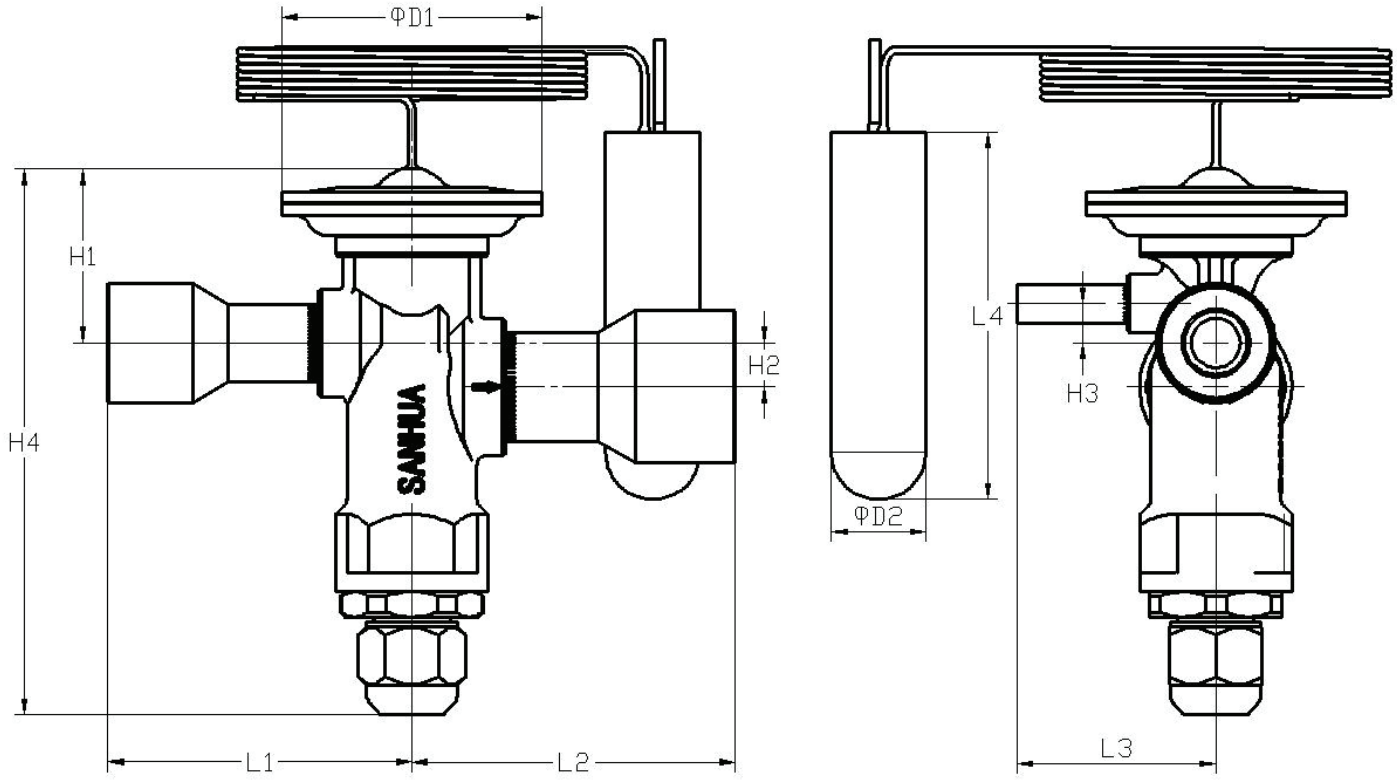
RFGD SERIES | *Thermostatic Expansion Valve*

TECHNICAL DATA - RFGD Model List continued

Ref.	Model Number	Nominal Capacity (tons)	Connections, ODF Solder (inch)			Capillary Tube Length (inch)	MOP (Thermostatic Charge)
			Inlet	Outlet	Equalizer		
R-134a	RFGD04E-1.8-01	1.8	3/8	5/8	1/4	60	None
	RFGD04E-2.5-02	2.5	1/2	7/8			
	RFGD04E-3.6-03	3.6					
	RFGD04E-4.6-04	4.6	5/8				
	RFGD04E-5.5-49	5.5					
	RFGD04E-6.8-32	6.8					
	RFGD04E-8.0-501	8					
	RFGD04E-8.0-502	8		1-1/8			
	RFGD04E-10.0-504	10					
	RFGD04E-10.0-520	10	7/8				
	RFGD04E-12.0-522	12					
	RFGD04E-12.0-524	12					
	RFGD04E-8.0-601	8	5/8	1-3/8			56 psig (60ºF)
	RFGD04E-8.0-602	8		7/8			
	RFGD04E-10.0-604	10		1-1/8			
	RFGD04E-10.0-606	10	7/8				
	RFGD04E-12.0-608	12					
	RFGD04E-12.0-610	12		1-3/8			
R-410A	RFGD05E-3.5-22	3.5	3/8	5/8			None
	RFGD05E-4.5-23	4.5	1/2	7/8			
	RFGD05E-7.0-24	7					
	RFGD05E-8.6-25	8.6	5/8				
	RFGD05E-10.6-27	10.6					
	RFGD05E-12.8-26	12.8					
	RFGD05E-15.0-510	15					
	RFGD05E-15.0-511	15		1-1/8			
	RFGD05E-19.0-512	19					
	RFGD05E-19.0-517	19	7/8				
	RFGD05E-23.0-555	23					
	RFGD05E-23.0-557	23		1-3/8			
	RFGD05E-15.0-647	15	5/8	7/8			167 psig (60ºF)
	RFGD05E-15.0-648	15		1-1/8			
	RFGD05E-19.0-650	19					
	RFGD05E-19.0-652	19	7/8				
	RFGD05E-23.0-654	23					
	RFGD05E-23.0-656	23		1-3/8			

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DIMENSIONS



Model Range	Connection Sizes	Capillary	Dimensions									
			H1	H2	H3	H4	L1	L2	L3	L4	ΦD1	ΦD2
	(inch)	(in)	(in)	(in)	(in)	(in)	(in)	(in)	(in)	(in)	(in)	(in)
RFGD02E-3.1 to 11.7 RFGD03E-2.0 to 7.8 RFGD04E-1.8 to 6.8 RFGD05E-3.5 to 12.8	3/8x5/8	60	1.18	0.30	0.20	3.82	1.63	1.79	1.48	2.52	1.89	0.57
	1/2x7/8						1.63	2.34				
	5/8x7/8						1.79	2.34				
RFGD02E-12.0 to 18.0 RFGD03E-9.0 to 13.0 RFGD04E-8.0 to 12.0 RFGD05E-15.0 to 23.0	5/8x7/8	60	1.26	0.35	0.31	4.37	1.89	2.44	1.59	2.95	2.09	0.76
	5/8x1-1/8						1.89	2.60				
	7/8x1-1/8						2.44	2.60				
	7/8x1-3/8						2.44	2.60				

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REFRIGERANT CAPACITY TABLES

Refrigerant	Model Number	Nominal Capacity (tons)
R-407C	RFGD02E-3.1	3.10
	RFGD02E-4.2	4.20
	RFGD02E-6.3	6.30
	RFGD02E-8.1	8.10
	RFGD02E-9.4	9.40
	RFGD02E-11.7	11.7
	RFGD02E-12.0	12.0
	RFGD02E-15.0	15.0
	RFGD02E-18.0	18.0
R-404A R-507	RFGD03E-2.0	2.00
	RFGD03E-2.8	2.80
	RFGD03E-4.2	4.20
	RFGD03E-5.4	5.40
	RFGD03E-6.4	6.40
	RFGD03E-7.8	7.80
	RFGD03E-9.0	9.00
	RFGD03E-11.0	11.0
	RFGD03E-13.0	13.0
R134a	RFGD04E-1.8	1.80
	RFGD04E-2.5	2.50
	RFGD04E-3.6	3.60
	RFGD04E-4.6	4.60
	RFGD04E-5.5	5.50
	RFGD04E-6.8	6.80
	RFGD04E-8.0	8.00
	RFGD04E-10.0	10.0
	RFGD04E-12.0	12.0
R-410A	RFGD05E-3.5	3.50
	RFGD05E-4.5	4.50
	RFGD05E-7.0	7.00
	RFGD05E-8.6	8.60
	RFGD05E-10.6	10.6
	RFGD05E-12.8	12.8
	RFGD05E-15.0	15.0
	RFGD05E-19.0	19.0
	RFGD05E-23.0	23.0

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RFGD SERIES | *Thermostatic Expansion Valve*

NECESSARY INFORMATION FOR RFGD CUSTOMIZATION

PLEASE SPECIFY ALL MANDATORY INFORMATION IN THE CUSTOMIZATION TABLE BELOW. THE STANDARD RFGD FEATURES WILL BE USED IF FIELDS AREN'T FILLED IN.

RFGD CUSTOMIZATION TABLE					
Pos.	**MANDATORY INFORMATION**				
1	**REFRIGERANT**				
	R-22	R-407C	R-404/R-507A	R-134a	R-410A
	Other Refrigerants: _____				
2	**PRESSURE EQUALIZATION**				
	Internal		Ext. Pressure Equalization		
3	**CAPACITY**				
	Capacity:	_____	tons		
	Based on:				
	Evaporation temperature:	_____	°F		
	Condensing temperature:	_____	°F		
	Subcooling:	_____	F		
	Superheat:	_____	F		
	Pressure drop:	_____	psi (Standard: Without pressure drop)		
	Alternative information if capacity data isn't available:				
	Brand of used expansion valve:		_____		
	Complete model of used expansion valve:		_____		
4	**VALVE SHAPE**				
	Staight (Standard)				
5	**CONNECTIONS**				
	Metrical			Imperial	
	Inlet 10mm, Outlet 16mm			Inlet 3/8", Outlet 5/8"	
	Inlet 12mm, Outlet 22mm			Inlet 1/2", Outlet 7/8"	
	Inlet 16mm, Outlet 22mm			Inlet 5/8, Outlet 7/8"	
	Ext. pressure equal. 6mm if selected			Ext. pressure equal. 1/4" if selected	
	Other Connections:				
	Inlet:	_____		Ext. pressure equal.: _____	
	Oulet:	_____			
	ADDITIONAL INFORMATION				
6	**STATIC SUPERHEAT: FACTORY SETTING**				
	5...7F (standard)		Other Valve:	_____	F
7	**MOP**				
	Without (Standard)		MOP Point:	_____	°F or psig
8	**BLEED**				
	Without (Standard)		15% Bleed		30% Bleed
9	**DESIGNATED APPLICATION / OTHER REQUIREMENTS:** _____				

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