ENGINEERING TOMORROW

Data sheet

Electric expansion valves
Type ETS 6

The range of Electric expansion valves are based on many years of experience.
ETS 6 secure reliability and provide a precise solutions for expansion and flow control in a wide range of refrigeration and air conditioning systems.

Compact and lightweight. The current range is available with a wide capacity range, and can be used with all common fluorinated refrigerants. Bi-flow operation is also possible for heat pump systems.

The valve operation is by means of a uni-polar motor, which can be controlled by a number of controllers from Danfoss or third party vendors.

With an EKD 316 and EIM 336 (current drivers) and an AKS sensor, an accuracy better than ± 0.5 K can be obtained.
Please contact Danfoss for more details.

Features

- Optimized energy efficiency of the system.
- Precision flow control with high resolution.
- Compact and lightweight.
- Energy saving design.
- Proven know-how and high reliability.
- Wide range for all common refrigerants.
- Bi-flow for heat pump applications.

© Danfoss | DCS (sw) | 2016.12

Approvals

Complies with:
EC PED 97/23/EC a3P3, RoHS, REACH
UL (Danfoss UL file no. is MH 7648.) and CQC

RoHS

Technical data

Valve data

Flow characteristic	Bi-flow.
Maximum working pressure	47 bar / 681 psig.
Compatible refrigerants	R134a, R404A, R407C, R410A, R22 and other refrigerant.
Refrigerant oil	All mineral oils and ester oils (to lubricate ETS 6 valve).
Ambient temperature	-30 – 70°C / -22 – 158 °F
Fluid Temperature	-30 – 70°C / -22 – 158 °F
Durability	Tested for 60 Million total pulses supplies to the valve during partially open valve, which is comparable to 150,000 cycles if the valve is operated between 100 to 300 pulses open. Tested for 30,000 full stroke cycles including 20 pulse overdrive at each closing.
Ambient humidity	95 % RH or less.
Capacity control range	10 % – 100 %

Electrical data

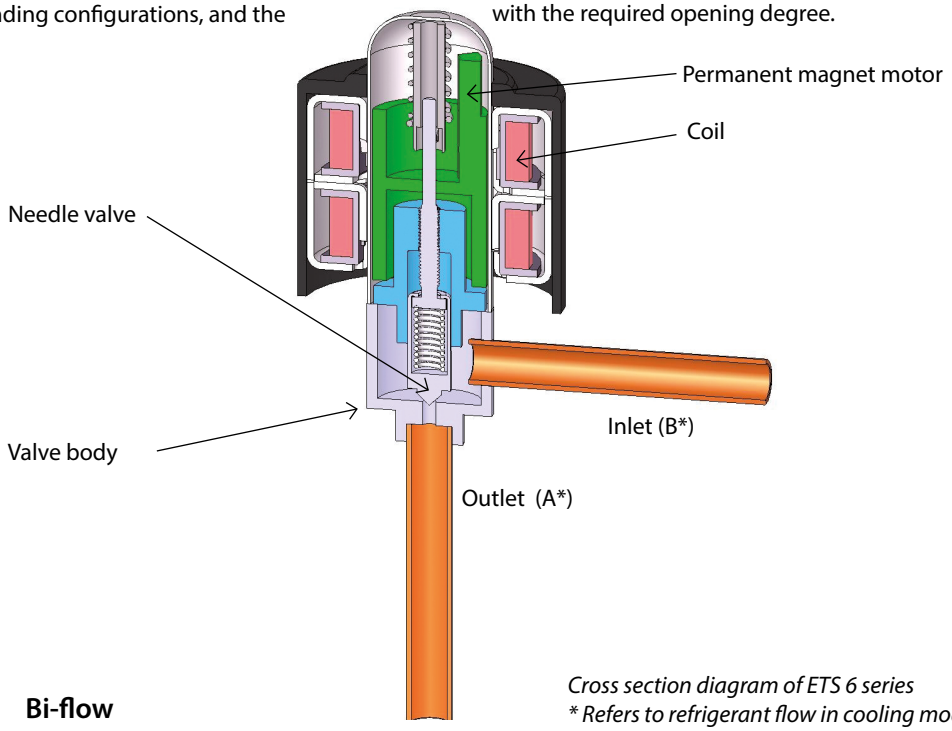
Modulation	Permanent magnet type direct operating stepper motor.
Excitation method	1-2 phase.
Electrical connection	JST XHP-6, JST XHP-5 and AMP connection.
Excitation speed	min. 30 pps (pulses per second) to max. 90 pps, recommended 31 pps.
Operating range	0 to 480 pulses, no holding power required (NOTE: do not apply more than 520 pulses).
Full motion transit time	e.g. 16 sec @ 30 pps, 6 sec @ 80 pps
Installation position Liquid line solenoid valve	With coil on the upper side and the valve/coil assembly within ±15˚of the vertical axis If using a liquid line solenoid valve, it must be installed in such a way that it does not create liquid hammering this ETS 6 valve.
Max. coil winding temperature	115 °C / 239 ° F
Compatible Danfoss controller	EKD 316, EKD 316C, EXD 316, EIM 336 (for OEM only).

Design/function

The ETS 6 Electric expansion valves open and close to regulate refrigerant flow by means of a screw, whose rotating motion is transformed into linear motion. This occurs by the rotation of a magnet-needle valve assembly which moves when electrical signals are applied to the surrounding coil.

Within the coil structure, there are different winding configurations, and the polarities are changed by the electrical signals applied. By application of the appropriate combination of signals, in the form of pulses, the coil forces the rotor of the valve to move in a stepwise fashion.

Application of multiple pulses will make the valve mechanism to move through a series of steps in the chosen direction, in order to set the valve with the required opening degree.



Bi-flow

Cross section diagram of ETS 6 series
** Refers to refrigerant flow in cooling mode*

Valve ordering

Nominal Capacity kW

SI units

Type	Orifice	Nominal Capacity [kW]					Connection (solder)	Valve tube confi-guration	MWP	MOPD	Max. Reverse Pressure[1]	K_v	Code No.
	[mm]	R22	R134a	R404A	R407C	R410A	A / B [mm]		[bar]	[bar]	[bar]	[m³/h]	
Single pack													
ETS 6 - 08	0.8	1.5	1.2	1.1	1.6	1.8	6.35	90°	47	35	20	0.011	**034G5095**
ETS 6 - 10	1	2.6	2	1.8	2.7	3.1	7.94	90°	47	35	35	0.030	**034G5005**
ETS 6 - 14	1.4	5.8	4.5	4.1	5.9	6.8	7.94	90°	47	35	20	0.052	**034G5015**
ETS 6 - 18 [2]	1.8	10.3	8.1	7.3	10.6	12.1	6.35	90°	47	35	28	0.082	**034G5026**
ETS 6 - 25	2.5	19.6	15.3	13.8	20.1	23	7.94	90°	47	35	22	0.164	**034G5035**
ETS 6 - 32	3.2	28.8	22.5	20.3	29.6	33.9	7.94	90°	47	28	12*	0.242	**034G5055**
ETS 6 - 40	4	39.1	30.6	27.6	40.2	46	7.94	90°	47	21	7	0.329	**034G5065**
I-pack (100 units per box)													
ETS 6 - 08	0.8	1.5	1.2	1.1	1.6	1.8	6.35	90°	47	35	20	0.011	**034G5090**
ETS 6 - 10	1	2.6	2	1.8	2.7	3.1	7.94	90°	47	35	35	0.030	**034G5000**
ETS 6 - 14	1.4	5.8	4.5	4.1	5.9	6.8	7.94	90°	47	35	20	0.052	**034G5010**
ETS 6 - 18 [2]	1.8	10.3	8.1	7.3	10.6	12.1	6.35	90°	47	35	28	0.082	**034G5024**
ETS 6 - 25	2.5	19.6	15.3	13.8	20.1	23	7.94	90°	47	35	22	0.164	**034G5030**
ETS 6 - 32	3.2	28.8	22.5	20.3	29.6	33.9	7.94	90°	47	28	12*	0.242	**034G5050**
ETS 6 - 40	4	39.1	30.6	27.6	40.2	46	7.94	90°	47	21	7	0.329	**034G5060**

Nominal Capacity based on:
t_c = 38 °C, te = 5 °C, SC = 0 °C, SH = 0 °C
* Please contact Danfoss if higher maximum reverse pressure valve is required.
[1] Max. Reverse Pressure = Pressure as which the valve can still close tightly in reverse direction (from A to B see fig. 1).
[2] For other connection size, please contact Danfoss.

Nominal Capacity [TR]

US units

Type	Orifice	Nominal Capacity [TR]					Connection (solder)	Valve tube confi-guration	MWP	MOPD	Max. Reverse Pressure[1]	C_v	Code No.
	[in.]	R22	R134a	R404A	R407C	R410A	A / B [in.]		[psi]	[psi]	[psi]	[gpm]	
Single pack													
ETS 6 - 08	0 1/32	0.426	0.341	0.312	0.454	0.511	1/4	90°	681	507	290	0.013	**034G5095**
ETS 6 - 10	0 3/64	0.739	0.568	0.512	0.767	0.881	5/16	90°	681	507	507	0.035	**034G5005**
ETS 6 - 14	0 1/16	1.649	1.279	1.165	1.677	1.933	5/16	90°	681	507	290	0.060	**034G5015**
ETS 6 - 18 [2]	0 5/64	2.928	2.303	2.075	3.014	3.440	1/4	90°	681	507	406	0.099	**034G5026**
ETS 6 - 25	0 3/32	5.573	4.350	3.923	5.715	6.539	5/16	90°	681	507	319	0.190	**034G5035**
ETS 6 - 32	0 1/8	8.189	6.397	5.772	8.416	9.639	5/16	90°	681	406	174	0.280	**034G5055**
ETS 6 - 40	0 5/32	11.117	8.700	7.847	11.430	13.079	5/16	90°	681	304	101	0.380	**034G5065**
I-pack (100 units per box)													
ETS 6 - 08	0 1/32	0.426	0.341	0.312	0.454	0.511	1/4	90°	681	507	290	0.013	**034G5090**
ETS 6 - 10	0 3/64	0.739	0.568	0.512	0.767	0.881	5/16	90°	681	507	507	0.035	**034G5000**
ETS 6 - 14	0 1/16	1.649	1.279	1.165	1.677	1.933	5/16	90°	681	507	290	0.060	**034G5010**
ETS 6 - 18 [2]	0 5/64	2.928	2.303	2.075	3.014	3.440	1/4	90°	681	507	406	0.099	**034G5024**
ETS 6 - 25	0 3/32	5.573	4.350	3.923	5.715	6.539	5/16	90°	681	507	319	0.190	**034G5030**
ETS 6 - 32	0 1/8	8.189	6.397	5.772	8.416	9.639	5/16	90°	681	406	174	0.280	**034G5050**
ETS 6 - 40	0 5/32	11.117	8.700	7.847	11.430	13.079	5/16	90°	681	304	101	0.380	**034G5060**

Nominal Capacity based on:
t_c = 100 °F, te = 41 °F, SC = 32 °F, SH = 32 °F
* Please contact Danfoss if higher maximum reverse pressure valve is required.
[1] Max. Reverse Pressure = Pressure as which the valve can still close tightly in reverse direction (from A to B see fig. 1).
[2] For other connection size, please contact Danfoss.

Product identification

Valve

Danfoss code no.
Manufactoring no.

Coil

Manufacturing no.

7061

Electric Expansion Valve
ETS 6
034G5xxx
Coil 12VDC / 3W
Made in Japan

Product designation
Type
Danfoss code no.
Technical data
Contry of origin

Coil ordering

Single pack

Model No.	Voltage (current)	Enclosure	Insulation class	Cable length [m]	Cable length [in.]	Connector	Units per box	Single pack Code No.
ETS 6 Coil	12 V DC (0.26A/phase)	IP 66	Class "E" (UL Class 105 (A))	0.7	27.5	JST XHP-6	1	**034G5105**
				0.7	27.5	JST XHP-5	1	**034G5115**
				1.5	59.0	JST XHP 5	1	**034G5145**
				3.0	118.0	JST XHP 5	1	**034G5135**
				0.6	23.6	AMP UPC- 6	1	**034G5175**

I-pack

ETS 6 Coil	12 V DC (0.26A/phase)	IP 66	Class "E" (UL Class 105 (A))	0.7	27.5	JST XHP-6	100	**034G5100**
				0.7	27.5	JST XHP-5	100	**034G5110**
				1.5	59.0	JST XHP 5	100	**034G5140**
				3.0	118.0	JST XHP 5	40	**034G5130**
				3.0	118.0	JST XHP 6	40	**034G5150**
				0.6	23.6	AMP UPC- 6	100	**034G5170**

For the Danfoss controller select a ETS 6 coil with JST XHP-5 connector.

Accessories

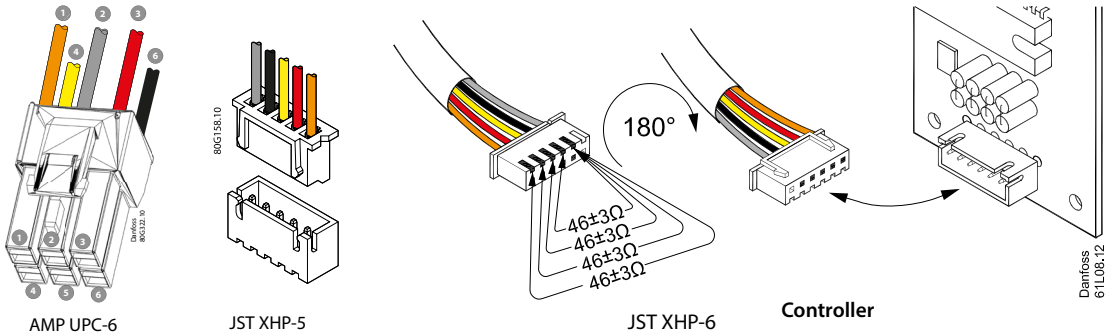
Type	Description	Code no.
ETS 6 manual coil	Manual coil for service	**034G5199**

Type	Description	Code no.
AST-G service driver	Driver for service of the valve	**034G0013**

Stepper motor switch sequence

	Coil I		Coil II		Common	
	Orange	Yellow	Red	Black	Gray	
↓ OPENING ↓	on	off	off	off	0	↑ CLOSING ↑
	on	off	on	off	0	
	off	off	on	off	0	
	off	on	on	off	0	
	off	on	off	off	0	
	off	on	off	on	0	
	off	off	off	on	0	
	on	off	off	on	0	

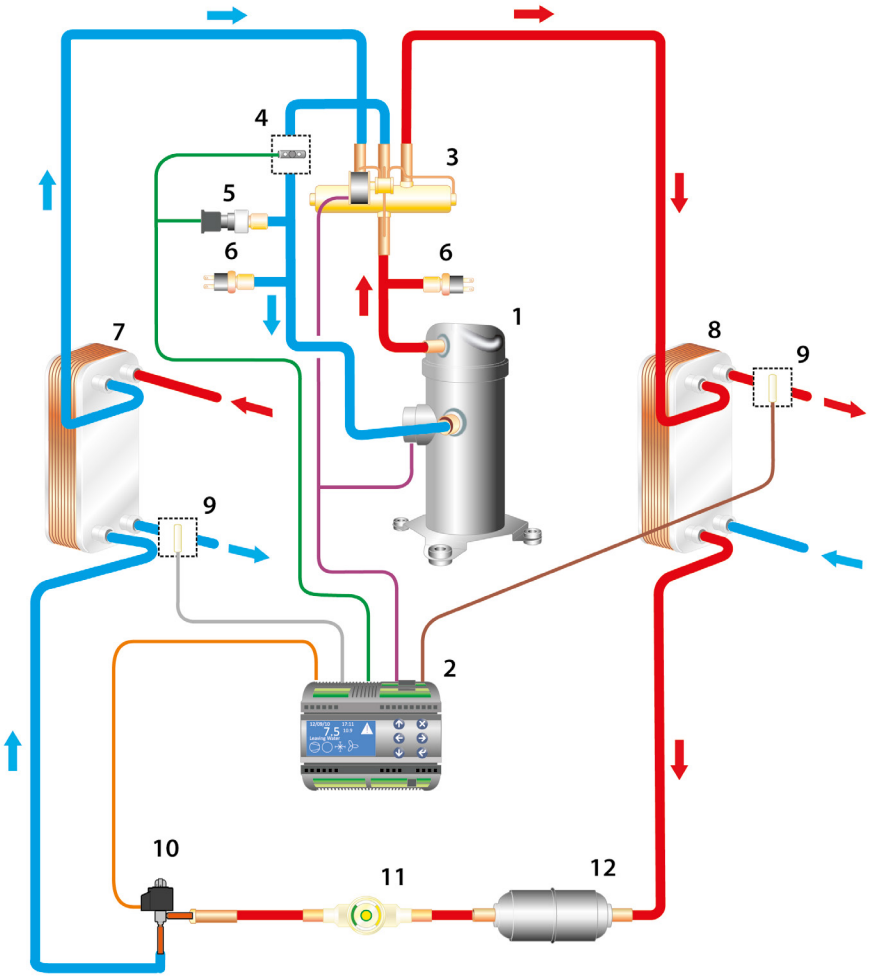
Electrical wiring



AMP UPC-6 | JST XHP-5 | JST XHP-6 | **Controller**

The illustration shows the JST XHP-6 connetor. The coil with JST XHP-5 is identical except that it does not have an unused pin.

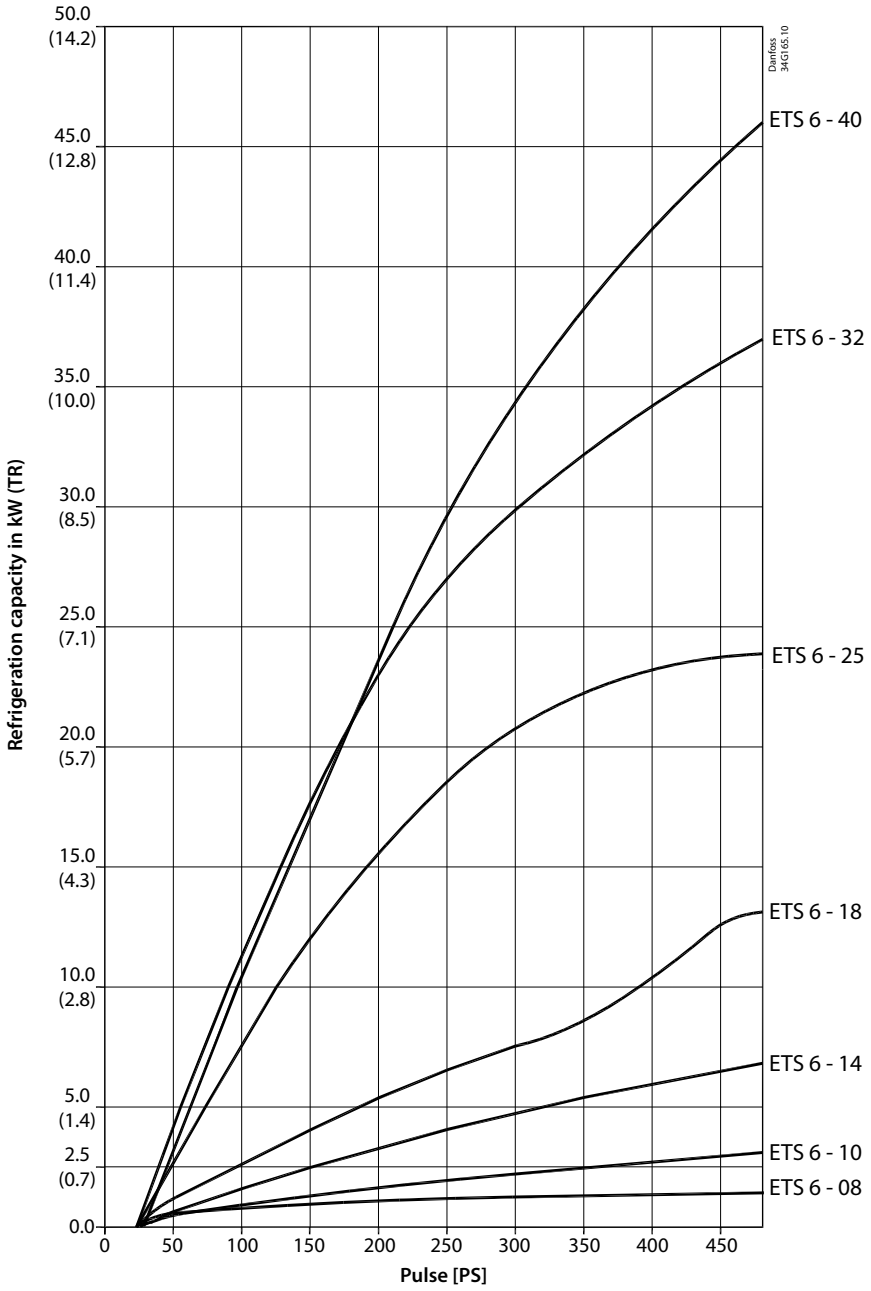
Application example



Heat pump components in typical system.

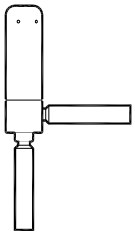
1. Compressor.
2. Controller.
3. Four-way valve.
4. Temperature sensor.
5. Pressure transmitter.
6. Cartridge pressure control.
7. Evaporator.
8. Condenser.
9. Temperature sensor.
10. Electric expansion valve.
11. Sight glass.
12. Liquid line filter drier.

Flow characteristics



Conditions R410 A

T_e: 5 °C / 41 °F)
T_c: 38 °C / 100.4 °F)
Subcooling: 0 °C / 32 °F)
Superheat: 0 °C / 32 °F)
Flow B to A



B inlet

A outlet

Valve Selection

For optimum performance, it is important to correct the evaporator capacity. In order to select the correct size of ETS 6 you will need the following information:

Refrigerant: HCFC / HFC
Evaporator capacity Q_e in kW or TR
Evaporating temperature t_e in °C / °F
Condenser temperature t_c in °C / °F
Subcooling Δt_{sub} in K / °F

Example
When selecting the valve it may be necessary to apply a correction factor to the actual evaporator capacity. This correction factor is required when system conditions are different than table conditions. Selection also depends on having an acceptable pressure drop across the valve. In the selection table, the pressure drop in the liquid line is assumed to be zero. The following example illustrates correct selection of the valve.

Refrigerant: R407C
Evaporator capacity: Q_e = 10 kW / 2.84 TR
Condensing temperature: t_c = 40 °C / 104 °F
Evaporating temperature: t_e = +10 °C / 50 °F
Subcooling Δt_{sub} = 10 K / 18 °F

Coolselector®2

Note!
Coolselector®2 *is a Danfoss calculation and selection software designed to make selection processes for all refrigeration projects easier and less time consuming. For details refer* ***http://coolselector.danfoss.com***

Valve Selection
(continued)

Step 1
Determine the correction factor for subcooling Δt_{sub}. From the correction factor table (see below) a subcooling of 10 K, R407C corresponds to a factor of 1.14.

Correction factors for subcooling Δt_{sub}.

ΔTsc	0K	4K	10K	15K	20K	25K	30K	35K	40K	45K	50K
	0°F	7.2°F	18°F	27°F	36°F	45°F	54°F	63°F	72°F	81°F	90°F
R22	1.00	1.04	1.10	1.16	1.20	1.25	1.30	1.35	1.41	1.45	1.50
R410A	1.00	1.06	1.14	1.21	1.28	1.34	1.40	1.47	1.53	1.58	1.65
R407C	1.00	1.06	1.14	1.20	1.28	1.34	1.40	1.47	1.53	1.60	1.66
R134a	1.00	1.06	1.14	1.19	1.26	1.32	1.38	1.45	1.50	1.56	1.63
R404A	1.00	1.07	1.18	1.29	1.38	1.47	1.56	1.65	1.75	1.82	1.91

Step 2
Corrected evaporator capacity is

Q_e (Corrected) = 10 kW /1.14 = 8.8 kW / 2.5 TR

Step 3
Select the appropriate capacity table, R407C, and choose the column for condensing temperature of t_c = 40°C / 104 °F and evaporating temperature of t_e = 10°C / 50°F which will provide an equivalent or greater capacity of 8.8 kW / 2.5 TR. ETS 6 - 18 provides 10.35 kW / 2.94 TR, which is the proper selection for this example.

Step 4
Choose ETS 6 -18:
- Single pack code no. 034G5026
- I-pack code no. 034G5024

Rated Capacity (kW)

	Condensing temperature (°C)	ETS 6 -18 Evaporation temperature (°C)						
		10	5	0	-5	-10	-20	-30
R410A	30	10.35	11.21	11.88	12.41	12.81	13.31	13.52
	35	11.15	11.84	12.38	12.79	13.10	13.47	13.58
	38	11.51	12.11	12.58	12.94	13.20	13.50	13.55
	40	11.70	12.25	12.67	13.00	13.23	13.48	13.50
	45	12.00	12.44	12.77	13.02	13.19	13.33	13.27
	50	12.07	12.41	12.66	12.84	12.95	13.00	12.86
R407C	30	8.95	9.61	10.11	10.48	10.74	11.02	11.06
	35	9.75	10.26	10.65	10.92	11.11	11.27	11.22
	38	10.13	10.57	10.90	11.13	11.28	11.38	11.28
	40	10.35	10.75	11.04	11.24	11.36	11.42	11.30
	45	10.79	11.09	11.30	11.43	11.50	11.47	11.27
	50	11.06	11.28	11.42	11.49	11.50	11.39	11.13
R22	30	8.59	9.27	9.80	10.22	10.53	10.92	11.07
	35	9.41	9.96	10.38	10.71	10.96	11.24	11.33

Correction factors for subcooling Δt_{sub}

The evaporator capacities used must be corrected if subcooling deviates from 0 K. The corrected capacity can be obtained by dividing the required evaporator capacity by the correction factor below. Selections can then be made from the tables above.

Δt_{sub}	0K	4K	10K	15K	20K	25K	30K	35K	40K	45K	50K
	0°F	7.2°F	18°F	27°F	36°F	45°F	54°F	63°F	72°F	81°F	90°F
R22	1.00	1.04	1.10	1.16	1.20	1.25	1.30	1.35	1.41	1.45	1.50
R410A	1.00	1.06	1.14	1.21	1.28	1.34	1.40	1.47	1.53	1.58	1.65
R407C	1.00	1.06	1.14	1.20	1.28	1.34	1.40	1.47	1.53	1.60	1.66
R134a	1.00	1.06	1.14	1.19	1.26	1.32	1.38	1.45	1.50	1.56	1.63
R404A/R507	1.00	1.07	1.18	1.29	1.38	1.47	1.56	1.65	1.75	1.82	1.91

Capacity (kW)

SI units

	Condensing temperature (°C)	ETS 6 - 08						
		Evaporation temperature [°C]						
		10	5	0	-5	-10	-20	-30
R22	30	1.27	1.37	1.45	1.51	1.56	1.62	1.64
	35	1.39	1.47	1.54	1.59	1.62	1.66	1.68
	38	1.45	1.52	1.58	1.62	1.65	1.69	1.69
	40	1.49	1.55	1.61	1.64	1.67	1.70	1.70
	45	1.56	1.62	1.66	1.69	1.71	1.72	1.72
	50	1.62	1.66	1.69	1.72	1.73	1.73	1.72
R134a	30	1.01	1.08	1.13	1.16	1.19	1.20	1.20
	35	1.10	1.15	1.19	1.22	1.23	1.23	1.22
	38	1.15	1.19	1.22	1.24	1.25	1.25	1.22
	40	1.17	1.21	1.24	1.25	1.26	1.25	1.23
	45	1.23	1.26	1.27	1.28	1.28	1.26	1.22
	50	1.27	1.28	1.29	1.29	1.28	1.26	1.21
R404A	30	0.95	1.01	1.06	1.10	1.12	1.14	1.12
	35	1.01	1.06	1.10	1.12	1.13	1.13	1.11
	38	1.03	1.07	1.10	1.12	1.13	1.12	1.09
	40	1.04	1.08	1.10	1.11	1.12	1.11	1.07
	45	1.05	1.08	1.09	1.09	1.09	1.07	1.02
	50	1.04	1.05	1.05	1.05	1.04	1.01	0.96
R407C	30	1.32	1.42	1.50	1.55	1.59	1.63	1.64
	35	1.44	1.52	1.58	1.62	1.64	1.67	1.66
	38	1.50	1.56	1.61	1.65	1.67	1.68	1.67
	40	1.53	1.59	1.63	1.66	1.68	1.69	1.67
	45	1.60	1.64	1.67	1.69	1.70	1.70	1.67
	50	1.64	1.67	1.69	1.70	1.70	1.69	1.65
R410A	30	1.53	1.66	1.76	1.84	1.90	1.97	2.00
	35	1.65	1.75	1.83	1.89	1.94	1.99	2.01
	38	1.70	1.79	1.86	1.91	1.95	2.00	2.01
	40	1.73	1.81	1.88	1.92	1.96	2.00	2.00
	45	1.78	1.84	1.89	1.93	1.95	1.97	1.96
	50	1.79	1.84	1.87	1.90	1.92	1.92	1.90

Capacity (kW)

SI units

	Condensing temperature (°C)	ETS 6 -10						
		Evaporation temperature [°C]						
		10	5	0	-5	-10	-20	-30
R22	30	2.15	2.32	2.45	2.55	2.63	2.73	2.77
	35	2.35	2.49	2.60	2.68	2.74	2.81	2.83
	38	2.45	2.58	2.67	2.74	2.79	2.85	2.86
	40	2.52	2.63	2.71	2.78	2.82	2.87	2.88
	45	2.64	2.73	2.80	2.85	2.88	2.91	2.90
	50	2.74	2.81	2.86	2.90	2.92	2.93	2.90
R134a	30	1.71	1.82	1.91	1.97	2.01	2.04	2.02
	35	1.86	1.95	2.01	2.05	2.08	2.09	2.05
	38	1.94	2.01	2.06	2.09	2.11	2.11	2.07
	40	1.98	2.05	2.09	2.12	2.13	2.12	2.07
	45	2.08	2.12	2.15	2.16	2.16	2.13	2.07
	50	2.14	2.17	2.18	2.18	2.17	2.12	2.05
R404A	30	1.60	1.71	1.80	1.85	1.89	1.92	1.90
	35	1.71	1.79	1.85	1.89	1.91	1.91	1.88
	38	1.75	1.82	1.86	1.89	1.90	1.89	1.84
	40	1.76	1.82	1.86	1.88	1.89	1.87	1.81
	45	1.78	1.82	1.84	1.85	1.84	1.80	1.73
	50	1.75	1.77	1.78	1.77	1.76	1.70	1.61
R407C	30	2.24	2.40	2.53	2.62	2.69	2.76	2.76
	35	2.44	2.57	2.66	2.73	2.78	2.82	2.81
	38	2.53	2.64	2.72	2.78	2.82	2.84	2.82
	40	2.59	2.69	2.76	2.81	2.84	2.86	2.82
	45	2.70	2.77	2.82	2.86	2.87	2.87	2.82
	50	2.77	2.82	2.85	2.87	2.88	2.85	2.78
R410A	30	2.59	2.80	2.97	3.10	3.20	3.33	3.38
	35	2.79	2.96	3.09	3.20	3.28	3.37	3.39
	38	2.88	3.03	3.14	3.23	3.30	3.37	3.39
	40	2.92	3.06	3.17	3.25	3.31	3.37	3.37
	45	3.00	3.11	3.19	3.25	3.30	3.33	3.32
	50	3.02	3.10	3.17	3.21	3.24	3.25	3.21

Capacity (kW)

SI units

	Condensing temperature (°C)	ETS 6 - 14						
		Evaporation temperature [°C]						
		10	5	0	-5	-10	-20	-30
R22	30	4.81	5.19	5.49	5.72	5.89	6.11	6.20
	35	5.27	5.58	5.82	6.00	6.14	6.30	6.34
	38	5.50	5.77	5.98	6.14	6.26	6.39	6.41
	40	5.63	5.88	6.07	6.22	6.32	6.43	6.44
	45	5.92	6.12	6.27	6.38	6.46	6.52	6.50
	50	6.14	6.29	6.41	6.49	6.54	6.56	6.51
R134a	30	3.82	4.08	4.27	4.40	4.49	4.56	4.53
	35	4.17	4.37	4.51	4.60	4.65	4.67	4.60
	38	4.35	4.51	4.62	4.69	4.73	4.72	4.63
	40	4.45	4.59	4.69	4.74	4.77	4.74	4.64
	45	4.65	4.75	4.81	4.84	4.84	4.77	4.63
	50	4.79	4.85	4.88	4.88	4.86	4.75	4.59
R404A	30	3.58	3.84	4.02	4.15	4.24	4.30	4.25
	35	3.83	4.01	4.15	4.23	4.28	4.29	4.20
	38	3.91	4.07	4.17	4.23	4.26	4.24	4.13
	40	3.94	4.08	4.16	4.21	4.23	4.19	4.06
	45	3.98	4.07	4.12	4.13	4.12	4.04	3.88
	50	3.92	3.97	3.98	3.97	3.93	3.81	3.61
R407C	30	5.01	5.38	5.66	5.87	6.02	6.17	6.19
	35	5.46	5.75	5.96	6.12	6.22	6.31	6.29
	38	5.67	5.92	6.10	6.23	6.31	6.37	6.32
	40	5.80	6.02	6.18	6.29	6.36	6.40	6.33
	45	6.04	6.21	6.33	6.40	6.44	6.42	6.31
	50	6.19	6.32	6.39	6.43	6.44	6.38	6.23
R410A	30	5.80	6.28	6.66	6.95	7.17	7.46	7.57
	35	6.25	6.63	6.93	7.16	7.34	7.55	7.60
	38	6.44	6.78	7.04	7.24	7.39	7.56	7.59
	40	6.55	6.86	7.10	7.28	7.41	7.55	7.56
	45	6.72	6.97	7.15	7.29	7.39	7.47	7.43
	50	6.76	6.95	7.09	7.19	7.25	7.28	7.20

Capacity (kW)

SI units

	Condensing temperature (°C)	ETS 6 -18						
		Evaporation temperature [°C]						
		10	5	0	-5	-10	-20	-30
R22	30	8.59	9.27	9.80	10.22	10.53	10.92	11.07
	35	9.41	9.96	10.38	10.71	10.96	11.24	11.33
	38	9.82	10.30	10.68	10.96	11.17	11.40	11.44
	40	10.06	10.50	10.85	11.11	11.29	11.49	11.50
	45	10.57	10.93	11.20	11.40	11.53	11.65	11.60
	50	10.96	11.24	11.45	11.59	11.68	11.72	11.62
R134a	30	6.83	7.29	7.63	7.87	8.02	8.14	8.08
	35	7.45	7.80	8.05	8.21	8.31	8.34	8.21
	38	7.76	8.05	8.25	8.38	8.44	8.42	8.26
	40	7.94	8.20	8.37	8.47	8.52	8.46	8.28
	45	8.31	8.49	8.59	8.64	8.64	8.52	8.27
	50	8.56	8.67	8.72	8.72	8.68	8.49	8.19
R404A	30	6.40	6.85	7.18	7.41	7.56	7.67	7.60
	35	6.83	7.17	7.41	7.56	7.65	7.66	7.51
	38	6.99	7.26	7.45	7.56	7.61	7.57	7.38
	40	7.04	7.28	7.43	7.52	7.55	7.47	7.25
	45	7.11	7.27	7.35	7.38	7.36	7.21	6.92
	50	7.00	7.08	7.11	7.09	7.03	6.80	6.45
R407C	30	8.95	9.61	10.11	10.48	10.74	11.02	11.06
	35	9.75	10.26	10.65	10.92	11.11	11.27	11.22
	38	10.13	10.57	10.90	11.13	11.28	11.38	11.28
	40	10.35	10.75	11.04	11.24	11.36	11.42	11.30
	45	10.79	11.09	11.30	11.43	11.50	11.47	11.27
	50	11.06	11.28	11.42	11.49	11.50	11.39	11.13
R410A	30	10.35	11.21	11.88	12.41	12.81	13.31	13.52
	35	11.15	11.84	12.38	12.79	13.10	13.47	13.58
	38	11.51	12.11	12.58	12.94	13.20	13.50	13.55
	40	11.70	12.25	12.67	13.00	13.23	13.48	13.50
	45	12.00	12.44	12.77	13.02	13.19	13.33	13.27
	50	12.07	12.41	12.66	12.84	12.95	13.00	12.86

Capacity (kW)

SI units

	Condensing temperature (°C)	ETS 6 - 25						
		Evaporation temperature [°C]						
		10	5	0	-5	-10	-20	-30
R22	30	16.36	17.67	18.69	19.47	20.06	20.81	21.11
	35	17.93	18.98	19.79	20.42	20.88	21.43	21.59
	38	18.71	19.63	20.35	20.89	21.29	21.73	21.81
	40	19.17	20.02	20.67	21.17	21.52	21.89	21.92
	45	20.15	20.83	21.35	21.72	21.98	22.20	22.11
	50	20.88	21.42	21.81	22.09	22.26	22.34	22.14
R134a	30	13.01	13.90	14.55	14.99	15.29	15.52	15.40
	35	14.21	14.87	15.35	15.66	15.84	15.90	15.65
	38	14.79	15.35	15.73	15.97	16.09	16.05	15.74
	40	15.13	15.62	15.95	16.14	16.23	16.13	15.78
	45	15.83	16.17	16.38	16.47	16.47	16.23	15.77
	50	16.31	16.52	16.62	16.62	16.54	16.18	15.61
R404A	30	12.20	13.06	13.69	14.13	14.42	14.63	14.48
	35	13.03	13.66	14.11	14.41	14.57	14.59	14.30
	38	13.32	13.84	14.20	14.41	14.51	14.43	14.06
	40	13.42	13.87	14.17	14.33	14.39	14.24	13.82
	45	13.55	13.85	14.01	14.07	14.04	13.74	13.19
	50	13.33	13.50	13.55	13.51	13.39	12.95	12.30
R407C	30	17.05	18.32	19.28	19.98	20.48	21.01	21.07
	35	18.58	19.56	20.29	20.82	21.18	21.49	21.39
	38	19.31	20.15	20.77	21.21	21.49	21.69	21.50
	40	19.73	20.49	21.04	21.42	21.66	21.78	21.54
	45	20.57	21.14	21.54	21.79	21.91	21.86	21.48
	50	21.08	21.50	21.76	21.90	21.93	21.71	21.21
R410A	30	19.73	21.37	22.65	23.64	24.41	25.37	25.76
	35	21.26	22.56	23.59	24.38	24.97	25.68	25.88
	38	21.93	23.08	23.97	24.65	25.16	25.72	25.82
	40	22.29	23.34	24.15	24.77	25.22	25.70	25.73
	45	22.88	23.71	24.35	24.81	25.13	25.41	25.28
	50	23.00	23.65	24.13	24.47	24.68	24.77	24.50

Capacity (kW)

SI units

	Condensing temperature (°C)	ETS 6 - 32						
		Evaporation temperature [°C]						
		10	5	0	-5	-10	-20	-30
R22	30	24.0	26.0	27.5	28.6	29.5	30.6	31.0
	35	26.3	27.9	29.1	30.0	30.7	31.5	31.7
	38	27.5	28.8	29.9	30.7	31.3	31.9	32.0
	40	28.2	29.4	30.4	31.1	31.6	32.2	32.2
	45	29.6	30.6	31.4	31.9	32.3	32.6	32.5
	50	30.7	31.5	32.0	32.5	32.7	32.8	32.5
R134a	30	19.1	20.4	21.4	22.0	22.5	22.8	22.6
	35	20.9	21.9	22.5	23.0	23.3	23.4	23.0
	38	21.7	22.5	23.1	23.5	23.6	23.6	23.1
	40	22.2	22.9	23.4	23.7	23.8	23.7	23.2
	45	23.3	23.8	24.1	24.2	24.2	23.8	23.2
	50	24.0	24.3	24.4	24.4	24.3	23.8	22.9
R404A	30	17.9	19.2	20.1	20.8	21.2	21.5	21.3
	35	19.1	20.1	20.7	21.2	21.4	21.4	21.0
	38	19.6	20.3	20.9	21.2	21.3	21.2	20.7
	40	19.7	20.4	20.8	21.1	21.1	20.9	20.3
	45	19.9	20.3	20.6	20.7	20.6	20.2	19.4
	50	19.6	19.8	19.9	19.8	19.7	19.0	18.1
R407C	30	25.0	26.9	28.3	29.3	30.0	30.8	30.9
	35	27.3	28.7	29.8	30.5	31.1	31.5	31.4
	38	28.3	29.6	30.5	31.1	31.5	31.8	31.5
	40	28.9	30.1	30.9	31.4	31.8	31.9	31.6
	45	30.2	31.0	31.6	32.0	32.1	32.1	31.5
	50	30.9	31.5	31.9	32.1	32.2	31.8	31.1
R410A	30	29.0	31.4	33.3	34.7	35.9	37.3	37.8
	35	31.2	33.1	34.7	35.8	36.7	37.7	38.0
	38	32.2	33.9	35.2	36.2	37.0	37.8	37.9
	40	32.8	34.3	35.5	36.4	37.1	37.8	37.8
	45	33.6	34.8	35.8	36.5	36.9	37.3	37.1
	50	33.8	34.7	35.5	35.9	36.3	36.4	36.0

Capacity (kW)

SI units

	Condensing temperature (°C)	ETS 6 - 40						
		Evaporation temperature [°C]						
		10	5	0	-10	-20	-30	-40
R22	30	32.6	35.2	37.3	40.0	41.5	42.1	42.0
	35	35.7	37.8	39.5	41.6	42.7	43.0	42.8
	38	37.3	39.1	40.6	42.4	43.3	43.5	43.1
	40	38.2	39.9	41.2	42.9	43.7	43.7	43.2
	45	40.2	41.5	42.6	43.8	44.3	44.1	43.4
	50	41.6	42.7	43.5	44.4	44.5	44.1	43.3
R134a	30	25.9	27.7	29.0	30.5	30.9	30.7	-
	35	28.3	29.7	30.6	31.6	31.7	31.2	-
	38	29.5	30.6	31.4	32.1	32.0	31.4	-
	40	30.2	31.1	31.8	32.4	32.2	31.5	-
	45	31.6	32.2	32.7	32.8	32.4	31.4	-
	50	32.5	32.9	33.1	33.0	32.3	31.1	-
R404A	30	24.3	26.0	27.3	28.7	29.2	28.9	28.1
	35	26.0	27.2	28.1	29.1	29.1	28.5	27.5
	38	26.6	27.6	28.3	28.9	28.8	28.0	26.9
	40	26.8	27.7	28.2	28.7	28.4	27.6	26.3
	45	27.0	27.6	27.9	28.0	27.4	26.3	24.9
	50	26.6	26.9	27.0	26.7	25.8	24.5	22.9
R410A	30	39.3	42.6	45.2	48.7	50.6	51.4	51.3
	35	42.4	45.0	47.0	49.8	51.2	51.6	51.2
	38	43.7	46.0	47.8	50.2	51.3	51.5	51.0
	40	44.5	46.5	48.2	50.3	51.2	51.3	50.7
	45	45.6	47.3	48.5	50.1	50.7	50.4	49.6
	50	45.9	47.2	48.1	49.2	49.4	48.9	47.8

Capacity (TR)

US units

	Condensing temperature (°F)	ETS 6 - 08									
		Evaporation temperature [°F]									
		-40	-35	-25	-15	-5	15	25	35	45	55
R22	75	0.452	0.452	0.45	0.446	0.439	0.414	0.394	0.367	0.385	0.28
	85	0.464	0.465	0.465	0.463	0.458	0.439	0.423	0.402	0.437	0.336
	95	0.474	0.475	0.477	0.476	0.474	0.46	0.448	0.431	0.482	0.38
	115	0.481	0.484	0.488	0.491	0.492	0.487	0.481	0.471	0.547	0.44
	125	0.478	0.481	0.487	0.491	0.493	0.492	0.488	0.481	0.569	0.458
	135	0.472	0.475	0.482	0.487	0.491	0.493	0.491	0.487	0.584	0.469
R134a	75	0.325	0.327	0.329	0.33	0.329	0.317	0.305	0.287	0.262	0.225
	85	0.331	0.334	0.338	0.341	0.341	0.335	0.327	0.314	0.296	0.269
	95	0.336	0.339	0.344	0.348	0.351	0.349	0.344	0.336	0.323	0.303
	115	0.333	0.338	0.345	0.352	0.358	0.365	0.365	0.362	0.357	0.347
	125	0.326	0.331	0.34	0.348	0.355	0.365	0.367	0.367	0.365	0.359
	135	0.316	0.321	0.331	0.34	0.349	0.362	0.366	0.368	0.368	0.365
R404A	75	0.317	0.319	0.322	0.324	0.322	0.311	0.299	0.281	0.257	0.221
	85	0.312	0.315	0.32	0.323	0.324	0.319	0.311	0.299	0.281	0.255
	95	0.304	0.307	0.314	0.319	0.322	0.321	0.317	0.309	0.297	0.279
	115	0.27	0.275	0.284	0.292	0.298	0.307	0.308	0.307	0.302	0.294
	125	0.244	0.249	0.259	0.268	0.276	0.288	0.292	0.293	0.292	0.287
	135	0.211	0.217	0.228	0.238	0.248	0.263	0.268	0.272	0.273	0.272
R407C	75	0.459	0.461	0.464	0.464	0.463	0.449	0.435	0.416	0.389	0.351
	85	0.463	0.466	0.47	0.473	0.473	0.465	0.456	0.441	0.421	0.392
	95	0.465	0.468	0.474	0.478	0.481	0.478	0.472	0.461	0.446	0.424
	115	0.452	0.456	0.465	0.472	0.478	0.484	0.483	0.479	0.472	0.46
	125	0.436	0.442	0.451	0.46	0.467	0.477	0.479	0.477	0.473	0.465
	135	0.416	0.422	0.433	0.443	0.451	0.464	0.468	0.469	0.468	0.463
R410A	75	0.561	0.561	0.559	0.553	0.544	0.511	0.486	0.459	0.406	0.343
	85	0.566	0.567	0.567	0.564	0.558	0.534	0.514	0.493	0.452	0.404
	95	0.567	0.568	0.57	0.57	0.567	0.549	0.534	0.518	0.486	0.449
	115	0.544	0.548	0.553	0.556	0.558	0.552	0.544	0.536	0.516	0.494
	125	0.519	0.523	0.53	0.535	0.538	0.537	0.533	0.527	0.512	0.496
	135	0.484	0.489	0.497	0.504	0.509	0.512	0.51	0.508	0.497	0.485

Capacity (TR)

US units

	Condensing temperature (°F)	ETS 6 -10									
		Evaporation temperature [°F]									
		-40	-35	-25	-15	-5	15	25	35	45	55
R22	75	0.76	0.76	0.76	0.75	0.74	0.70	0.67	0.62	0.65	0.47
	85	0.78	0.79	0.79	0.78	0.77	0.74	0.72	0.68	0.74	0.57
	95	0.80	0.80	0.81	0.81	0.80	0.78	0.76	0.73	0.82	0.64
	115	0.81	0.82	0.82	0.83	0.83	0.82	0.81	0.80	0.92	0.74
	125	0.81	0.81	0.82	0.83	0.83	0.83	0.83	0.81	0.96	0.77
	135	0.80	0.80	0.81	0.82	0.83	0.83	0.83	0.82	0.99	0.79
R134a	75	0.55	0.55	0.56	0.56	0.56	0.54	0.52	0.49	0.44	0.38
	85	0.56	0.56	0.57	0.58	0.58	0.57	0.55	0.53	0.50	0.45
	95	0.57	0.57	0.58	0.59	0.59	0.59	0.58	0.57	0.55	0.51
	115	0.56	0.57	0.58	0.60	0.61	0.62	0.62	0.61	0.60	0.59
	125	0.55	0.56	0.57	0.59	0.60	0.62	0.62	0.62	0.62	0.61
	135	0.53	0.54	0.56	0.58	0.59	0.61	0.62	0.62	0.62	0.62
R404A	75	0.54	0.54	0.54	0.55	0.55	0.53	0.51	0.48	0.43	0.37
	85	0.53	0.53	0.54	0.55	0.55	0.54	0.53	0.50	0.48	0.43
	95	0.51	0.52	0.53	0.54	0.54	0.54	0.54	0.52	0.50	0.47
	115	0.46	0.46	0.48	0.49	0.50	0.52	0.52	0.52	0.51	0.50
	125	0.41	0.42	0.44	0.45	0.47	0.49	0.49	0.50	0.49	0.49
	135	0.36	0.37	0.39	0.40	0.42	0.44	0.45	0.46	0.46	0.46
R407C	75	0.78	0.78	0.78	0.78	0.78	0.76	0.74	0.70	0.66	0.59
	85	0.78	0.79	0.79	0.80	0.80	0.79	0.77	0.75	0.71	0.66
	95	0.79	0.79	0.80	0.81	0.81	0.81	0.80	0.78	0.75	0.72
	115	0.76	0.77	0.79	0.80	0.81	0.82	0.82	0.81	0.80	0.78
	125	0.74	0.75	0.76	0.78	0.79	0.81	0.81	0.81	0.80	0.79
	135	0.70	0.71	0.73	0.75	0.76	0.78	0.79	0.79	0.79	0.78
R410A	75	0.95	0.95	0.94	0.94	0.92	0.86	0.82	0.78	0.69	0.58
	85	0.96	0.96	0.96	0.95	0.94	0.90	0.87	0.83	0.76	0.68
	95	0.96	0.96	0.96	0.96	0.96	0.93	0.90	0.88	0.82	0.76
	115	0.92	0.93	0.93	0.94	0.94	0.93	0.92	0.91	0.87	0.84
	125	0.88	0.88	0.89	0.90	0.91	0.91	0.90	0.89	0.87	0.84
	135	0.82	0.83	0.84	0.85	0.86	0.87	0.86	0.86	0.84	0.82

Capacity (TR)

US units

	Condensing temperature (°F)	ETS 6 -14									
		Evaporation temperature [°F]									
		-40	-35	-25	-15	-5	15	25	35	45	55
R22	75	1.71	1.71	1.70	1.69	1.66	1.57	1.49	1.39	1.46	1.06
	85	1.76	1.76	1.76	1.75	1.73	1.66	1.60	1.52	1.66	1.27
	95	1.79	1.80	1.80	1.80	1.79	1.74	1.70	1.63	1.82	1.44
	115	1.82	1.83	1.85	1.86	1.86	1.84	1.82	1.78	2.07	1.66
	125	1.81	1.82	1.84	1.86	1.87	1.86	1.85	1.82	2.15	1.73
	135	1.78	1.80	1.82	1.84	1.86	1.87	1.86	1.84	2.21	1.77
R134a	75	1.23	1.24	1.25	1.25	1.24	1.20	1.15	1.09	0.99	0.85
	85	1.25	1.26	1.28	1.29	1.29	1.27	1.24	1.19	1.12	1.02
	95	1.27	1.28	1.30	1.32	1.33	1.32	1.30	1.27	1.22	1.15
	115	1.26	1.28	1.31	1.33	1.35	1.38	1.38	1.37	1.35	1.31
	125	1.23	1.25	1.29	1.32	1.34	1.38	1.39	1.39	1.38	1.36
	135	1.19	1.21	1.25	1.29	1.32	1.37	1.38	1.39	1.39	1.38
R404A	75	1.20	1.21	1.22	1.22	1.22	1.18	1.13	1.06	0.97	0.83
	85	1.18	1.19	1.21	1.22	1.23	1.21	1.18	1.13	1.06	0.97
	95	1.15	1.16	1.19	1.21	1.22	1.22	1.20	1.17	1.12	1.05
	115	1.02	1.04	1.07	1.10	1.13	1.16	1.17	1.16	1.14	1.11
	125	0.92	0.94	0.98	1.02	1.05	1.09	1.10	1.11	1.10	1.09
	135	0.80	0.82	0.86	0.90	0.94	1.00	1.02	1.03	1.03	1.03
R407C	75	1.74	1.74	1.75	1.76	1.75	1.70	1.65	1.57	1.47	1.33
	85	1.75	1.76	1.78	1.79	1.79	1.76	1.72	1.67	1.59	1.48
	95	1.76	1.77	1.79	1.81	1.82	1.81	1.78	1.74	1.69	1.60
	115	1.71	1.73	1.76	1.79	1.81	1.83	1.83	1.81	1.79	1.74
	125	1.65	1.67	1.71	1.74	1.77	1.80	1.81	1.81	1.79	1.76
	135	1.57	1.60	1.64	1.68	1.71	1.76	1.77	1.78	1.77	1.75
R410A	75	2.12	2.12	2.11	2.09	2.06	1.93	1.84	1.74	1.54	1.30
	85	2.14	2.15	2.15	2.13	2.11	2.02	1.94	1.87	1.71	1.53
	95	2.14	2.15	2.16	2.16	2.14	2.08	2.02	1.96	1.84	1.70
	115	2.06	2.07	2.09	2.11	2.11	2.09	2.06	2.03	1.95	1.87
	125	1.96	1.98	2.00	2.02	2.04	2.03	2.01	2.00	1.94	1.88
	135	1.83	1.85	1.88	1.91	1.92	1.94	1.93	1.92	1.88	1.83

Capacity (TR)

US units

	Condensing temperature (°F)	ETS 6 -18									
		Evaporation temperature [°F]									
		-40	-35	-25	-15	-5	15	25	35	45	55
R22	75	3.05	3.05	3.04	3.01	2.97	2.80	2.66	2.48	2.60	1.89
	85	3.13	3.14	3.14	3.12	3.09	2.96	2.86	2.71	2.96	2.27
	95	3.20	3.21	3.22	3.22	3.20	3.11	3.03	2.92	3.26	2.57
	115	3.25	3.27	3.30	3.31	3.32	3.29	3.25	3.18	3.70	2.97
	125	3.23	3.25	3.29	3.31	3.33	3.33	3.30	3.25	3.84	3.09
	135	3.19	3.21	3.25	3.29	3.31	3.33	3.32	3.29	3.95	3.17
R134a	75	2.19	2.21	2.22	2.23	2.22	2.14	2.06	1.94	1.77	1.52
	85	2.24	2.26	2.28	2.30	2.30	2.26	2.21	2.12	2.00	1.82
	95	2.27	2.29	2.33	2.35	2.37	2.36	2.33	2.27	2.18	2.05
	115	2.25	2.28	2.33	2.38	2.42	2.46	2.46	2.45	2.41	2.34
	125	2.20	2.24	2.30	2.35	2.40	2.47	2.48	2.48	2.46	2.42
	135	2.13	2.17	2.24	2.30	2.35	2.44	2.47	2.49	2.49	2.47
R404A	75	2.14	2.16	2.18	2.19	2.18	2.10	2.02	1.90	1.73	1.49
	85	2.11	2.13	2.16	2.18	2.19	2.15	2.10	2.02	1.90	1.73
	95	2.05	2.08	2.12	2.15	2.17	2.17	2.14	2.09	2.00	1.88
	115	1.82	1.86	1.92	1.97	2.02	2.07	2.08	2.07	2.04	1.99
	125	1.65	1.68	1.75	1.81	1.87	1.95	1.97	1.98	1.97	1.94
	135	1.42	1.46	1.54	1.61	1.67	1.78	1.81	1.84	1.85	1.84
R407C	75	3.10	3.11	3.13	3.14	3.12	3.03	2.94	2.81	2.63	2.37
	85	3.13	3.15	3.18	3.20	3.20	3.14	3.08	2.98	2.84	2.65
	95	3.14	3.16	3.20	3.23	3.25	3.23	3.19	3.11	3.01	2.86
	115	3.05	3.08	3.14	3.19	3.23	3.27	3.27	3.24	3.19	3.11
	125	2.95	2.98	3.05	3.11	3.16	3.22	3.23	3.23	3.20	3.14
	135	2.81	2.85	2.92	2.99	3.05	3.14	3.16	3.17	3.16	3.13
R410A	75	3.79	3.79	3.78	3.74	3.68	3.46	3.28	3.10	2.74	2.32
	85	3.82	3.83	3.83	3.81	3.77	3.61	3.47	3.33	3.05	2.73
	95	3.83	3.84	3.85	3.85	3.83	3.71	3.61	3.50	3.28	3.04
	115	3.68	3.70	3.74	3.76	3.77	3.73	3.68	3.62	3.49	3.34
	125	3.50	3.53	3.58	3.61	3.63	3.63	3.60	3.56	3.46	3.35
	135	3.27	3.30	3.36	3.40	3.44	3.46	3.45	3.43	3.36	3.27

Capacity (TR)

US units

	Condensing temperature (°F)	ETS 6 - 25									
		Evaporation temperature [°F]									
		-40	-35	-25	-15	-5	15	25	35	45	55
R22	75	5.80	5.80	5.78	5.73	5.64	5.31	5.05	4.70	4.94	3.60
	85	5.96	5.96	5.96	5.94	5.88	5.63	5.43	5.16	5.62	4.31
	95	6.08	6.10	6.12	6.11	6.08	5.91	5.75	5.54	6.19	4.88
	115	6.18	6.21	6.26	6.30	6.31	6.25	6.17	6.05	7.02	5.64
	125	6.14	6.18	6.25	6.30	6.33	6.32	6.27	6.18	7.30	5.87
	135	6.05	6.10	6.18	6.25	6.30	6.33	6.31	6.25	7.50	6.02
R134a	75	4.17	4.19	4.23	4.24	4.22	4.07	3.92	3.69	3.37	2.89
	85	4.25	4.29	4.34	4.37	4.38	4.30	4.20	4.03	3.79	3.45
	95	4.31	4.35	4.42	4.47	4.50	4.48	4.42	4.31	4.14	3.89
	115	4.28	4.33	4.43	4.52	4.60	4.68	4.68	4.65	4.58	4.45
	125	4.19	4.25	4.36	4.47	4.56	4.69	4.72	4.72	4.68	4.61
	135	4.05	4.12	4.25	4.37	4.47	4.64	4.70	4.73	4.72	4.69
R404A	75	4.07	4.10	4.14	4.15	4.14	3.99	3.84	3.61	3.30	2.83
	85	4.01	4.05	4.11	4.15	4.16	4.09	3.99	3.83	3.61	3.28
	95	3.90	3.95	4.03	4.09	4.13	4.13	4.07	3.97	3.81	3.58
	115	3.47	3.53	3.64	3.75	3.83	3.94	3.95	3.94	3.88	3.78
	125	3.13	3.20	3.33	3.44	3.55	3.70	3.75	3.76	3.75	3.69
	135	2.71	2.78	2.93	3.06	3.18	3.38	3.45	3.49	3.51	3.50
R407C	75	5.89	5.91	5.95	5.96	5.94	5.76	5.59	5.33	4.99	4.50
	85	5.95	5.98	6.04	6.07	6.08	5.97	5.85	5.66	5.40	5.03
	95	5.96	6.01	6.08	6.14	6.17	6.13	6.05	5.92	5.72	5.44
	115	5.80	5.86	5.97	6.06	6.14	6.21	6.20	6.15	6.06	5.91
	125	5.60	5.67	5.79	5.91	6.00	6.12	6.14	6.13	6.07	5.97
	135	5.34	5.41	5.55	5.68	5.79	5.96	6.01	6.02	6.01	5.95
R410A	75	7.20	7.20	7.17	7.10	6.99	6.56	6.24	5.89	5.21	4.40
	85	7.27	7.28	7.28	7.24	7.17	6.85	6.59	6.33	5.80	5.19
	95	7.27	7.30	7.32	7.32	7.27	7.05	6.86	6.66	6.24	5.77
	115	6.99	7.03	7.10	7.14	7.16	7.09	6.99	6.88	6.63	6.34
	125	6.66	6.71	6.80	6.86	6.91	6.90	6.84	6.77	6.58	6.36
	135	6.21	6.27	6.38	6.47	6.53	6.57	6.55	6.52	6.38	6.22

Capacity (TR)

US units

	Condensing temperature (°F)	ETS 6 - 32									
		Evaporation temperature [°F]									
		-40	-35	-25	-15	-5	15	25	35	45	55
R22	75	8.55	8.55	8.51	8.44	8.31	7.83	7.45	6.93	7.28	5.30
	85	8.78	8.79	8.79	8.75	8.66	8.30	8.01	7.60	8.28	6.35
	95	8.96	8.99	9.02	9.01	8.96	8.70	8.48	8.16	9.12	7.19
	115	9.11	9.15	9.23	9.28	9.30	9.21	9.09	8.91	10.30	8.31
	125	9.05	9.11	9.21	9.28	9.33	9.31	9.24	9.11	10.70	8.65
	135	8.92	8.99	9.11	9.21	9.28	9.33	9.29	9.21	11.00	8.87
R134a	75	6.14	6.18	6.23	6.24	6.22	6.00	5.77	5.44	4.96	4.25
	85	6.27	6.32	6.39	6.44	6.45	6.34	6.18	5.94	5.59	5.08
	95	6.35	6.41	6.51	6.59	6.64	6.61	6.52	6.35	6.10	5.73
	115	6.31	6.39	6.54	6.67	6.77	6.90	6.90	6.85	6.75	6.56
	125	6.17	6.26	6.43	6.58	6.72	6.91	6.95	6.95	6.90	6.79
	135	5.97	6.07	6.26	6.44	6.59	6.84	6.92	6.96	6.96	6.91
R404A	75	6.00	6.04	6.10	6.12	6.10	5.88	5.66	5.32	4.86	4.17
	85	5.91	5.96	6.05	6.11	6.13	6.03	5.88	5.65	5.32	4.83
	95	5.75	5.82	5.93	6.03	6.09	6.08	6.00	5.85	5.61	5.27
	115	5.11	5.20	5.37	5.52	5.64	5.81	5.83	5.80	5.72	5.57
	125	4.61	4.71	4.90	5.08	5.23	5.46	5.52	5.54	5.52	5.44
	135	3.99	4.10	4.31	4.51	4.68	4.98	5.08	5.15	5.17	5.15
R407C	75	8.68	8.72	8.77	8.78	8.75	8.49	8.23	7.86	7.36	6.64
	85	8.76	8.81	8.90	8.95	8.95	8.80	8.62	8.34	7.96	7.41
	95	8.79	8.86	8.97	9.05	9.09	9.04	8.92	8.72	8.43	8.02
	115	8.55	8.64	8.80	8.94	9.05	9.16	9.14	9.07	8.93	8.71
	125	8.25	8.35	8.54	8.70	8.84	9.02	9.05	9.03	8.95	8.80
	135	7.87	7.98	8.19	8.38	8.54	8.78	8.85	8.88	8.85	8.76
R410A	75	10.61	10.61	10.57	10.47	10.30	9.67	9.19	8.69	7.68	6.48
	85	10.71	10.73	10.73	10.67	10.56	10.09	9.72	9.33	8.54	7.65
	95	10.72	10.75	10.79	10.78	10.72	10.39	10.10	9.81	9.19	8.50
	115	10.29	10.36	10.46	10.53	10.55	10.44	10.30	10.14	9.77	9.35
	125	9.81	9.89	10.02	10.12	10.18	10.16	10.07	9.98	9.69	9.38
	135	9.16	9.24	9.40	9.53	9.62	9.69	9.65	9.60	9.40	9.17

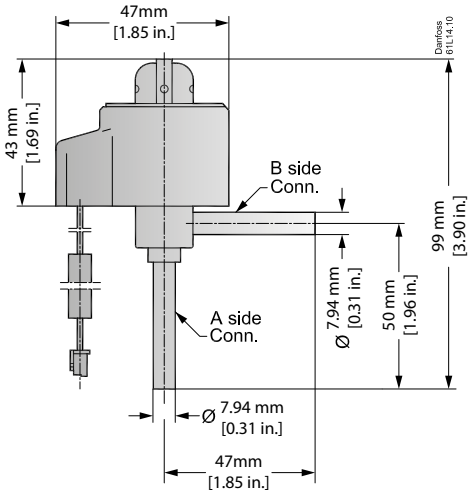
Capacity (TR)

US units

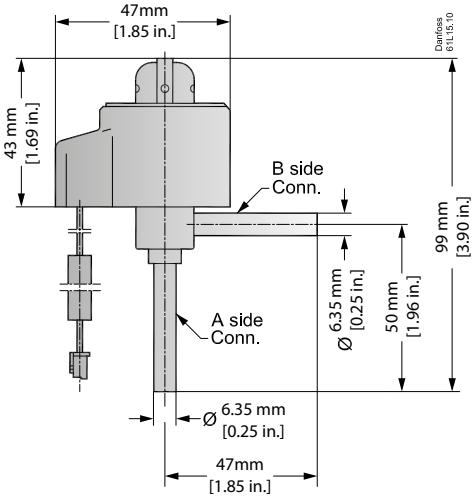
	Condensing temperature (°F)	ETS 6 - 40									
		Evaporation temperature [°F]									
		-40	-35	-25	-15	-5	15	25	35	45	55
R22	75	11.60	11.60	11.60	11.50	11.30	10.60	10.10	9.41	9.87	7.19
	85	11.90	11.90	11.90	11.90	11.80	11.30	10.90	10.30	11.20	8.63
	95	12.20	12.20	12.20	12.20	12.20	11.80	11.50	11.10	12.40	9.76
	115	12.40	12.40	12.50	12.60	12.60	12.50	12.30	12.10	14.00	11.30
	125	12.30	12.40	12.50	12.60	12.70	12.60	12.50	12.40	14.60	11.70
	135	12.10	12.20	12.40	12.50	12.60	12.70	12.60	12.50	15.00	12.00
R134a	75	8.34	8.39	8.45	8.47	8.44	8.14	7.84	7.38	6.73	5.77
	85	8.51	8.57	8.68	8.74	8.76	8.60	8.39	8.06	7.59	6.90
	95	8.62	8.70	8.84	8.94	9.01	8.97	8.84	8.62	8.28	7.78
	115	8.56	8.67	8.87	9.05	9.19	9.36	9.36	9.30	9.15	8.91
	125	8.37	8.50	8.73	8.94	9.12	9.37	9.43	9.43	9.37	9.21
	135	8.10	8.24	8.49	8.73	8.95	9.29	9.39	9.45	9.45	9.38
R404A	75	8.14	8.20	8.28	8.31	8.28	7.98	7.68	7.22	6.59	5.66
	85	8.02	8.09	8.22	8.30	8.32	8.18	7.98	7.67	7.21	6.56
	95	7.80	7.89	8.05	8.18	8.26	8.25	8.14	7.93	7.62	7.15
	115	6.93	7.06	7.29	7.49	7.66	7.88	7.91	7.87	7.76	7.55
	125	6.25	6.39	6.65	6.89	7.09	7.41	7.49	7.52	7.49	7.38
	135	5.41	5.56	5.85	6.12	6.36	6.75	6.89	6.98	7.02	6.99
R407C	75	11.80	11.80	11.90	11.90	11.90	11.50	11.20	10.70	9.99	9.01
	85	11.90	12.00	12.10	12.10	12.20	11.90	11.70	11.30	10.80	10.10
	95	11.90	12.00	12.20	12.30	12.30	12.30	12.10	11.80	11.40	10.90
	115	11.60	11.70	11.90	12.10	12.30	12.40	12.40	12.30	12.10	11.80
	125	11.20	11.30	11.60	11.80	12.00	12.20	12.30	12.30	12.10	11.90
	135	10.70	10.80	11.10	11.40	11.60	11.90	12.00	12.00	12.00	11.90
R410A	75	14.40	14.40	14.30	14.20	14.00	13.10	12.50	11.80	10.40	8.80
	85	14.50	14.60	14.60	14.50	14.30	13.70	13.20	12.70	11.60	10.40
	95	14.50	14.60	14.60	14.60	14.50	14.10	13.70	13.30	12.50	11.50
	115	14.00	14.10	14.20	14.30	14.30	14.20	14.00	13.80	13.30	12.70
	125	13.30	13.40	13.60	13.70	13.80	13.80	13.70	13.50	13.20	12.70
	135	12.40	12.50	12.80	12.90	13.10	13.10	13.10	13.00	12.80	12.40

Dimensions

ETS 6 - 10
ETS 6 - 14
ETS 6 - 25
ETS 6 - 32
ETS 6 - 40



ETS 6 - 08
ETS 6 - 18



Weight: 0.16 kg (0.35 lbs)
(complete)

Related Danfoss Products

AKS pressure transmitter and temperature sensor	EKD 316, EKD 316C superheat controller (MODBUS)	EIM 336 superheat controller (MODBUS) – OEM version	EXD 316 superheat controller (CANBUS)

Danfoss can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequential changes being necessary in specifications already agreed.
All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.