

DPF/DPFS

DPF/DPFS Series electronic expansion valve



DPF series



DPFS series

Product Description

DPF/DPFS electronic expansion valve is suitable for refrigeration systems such as air conditioners, commercial refrigerators, small refrigeration storage and heat pumps. It can accurately control the refrigerant flow in the system, so that the system can always

run in the best state, achieve rapid cooling, and achieve the goal of precise control and energy saving.

Features

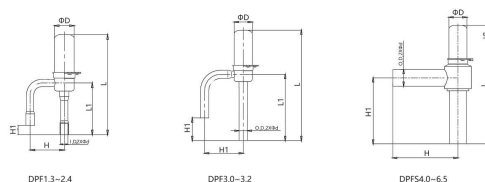
- Small size, light weight, stable and reliable performance;
- Fast response and action;
- New structure design of expansion valve, low noise and low failure rate;

- DPFS series products apply design of balanced port, and the reverse valve opening pressure is high;
- Suitable for systems with little oil or no oil.

Technical Parameters

Applicable refrigerant	R22, R134a, R404A, R407C, R410A
Nominal capacity	2.5~126KW
Medium temperature	-30~+70°C
Environment temperature	-30~+60°C
Environment humidity	under 95%RH
Full open pulse	500PS
Valve opening pulse	32±20
Rated voltage	12V DC (±10%), rectangular wave
Excitation mode	1-2 phase excitation, single pole drive
Excitation speed	30~50pps
Finishing excitation mode keeps	0.1~1.0s
Time cost for whole course	6s (83pps)
Drive current	260mA
Coil resistance	48±3.7Ω/phase
Coil insulation grade	Class E
Protect grade	IP65

Structure



DPF1.3-2.4

DPF3.0-3.2

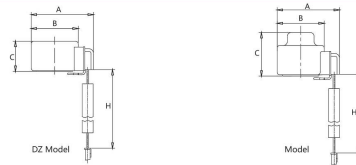
DPFS4.0-6.5

Overall dimension

Model	φD	L	L1	H	H1	φd
DPF1.3-2.4	17.3	87	36.8	30	8	6.5
DPF3.0-3.2	17.3	105	41.5	37	21.5	7.94
DPFS4.0-6.5	17.3	114	/	63	64	16

Note: dimension of connecting pipe can be customized according to requirements

Coil



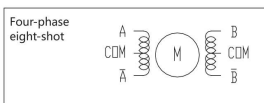
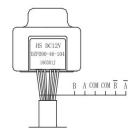
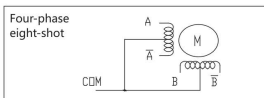
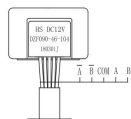
DZ Model

Model

Overall dimension

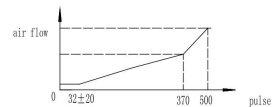
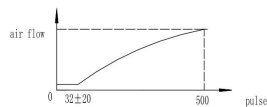
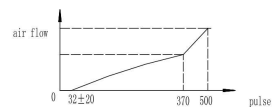
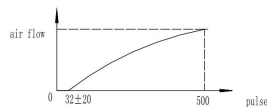
Series	Coil model	A	B	C	H	Connector model
DZ	DZ090-46-0101	51	38.5	25	900	XHP-5 XHP-6 XAP-5 XAP-6
	DZ120-46-0101	51	38.5	25	1200	
	DZ200-46-0101	51	38.5	25	2000	
	DZ300-46-0101	51	38.5	25	3000	
DZF	DZF090-46-0101	51	38.5	35.5	900	XHP-5 XAP-5 XAP-6
	DZF120-46-0101	51	38.5	35.5	1200	
	DZF200-46-0101	51	38.5	35.5	2000	
	DZF300-46-0101	51	38.5	35.5	3000	

Note: the lead wire length and connector can be customized according to customer's requirements.

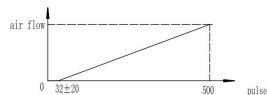


Excitation method								
相号	1	2	3	4	5	6	7	8
A	///	///						///
B			///	///				
A-bar					///	///		
B-bar							///	///

Timing: 1→2→3→4→5→6→7→8 Valve close
8→7→6→5→4→3→2→1 Valve open



DPF1.0-DPF3.2



DPFS4.5-DPFS6.5

Note: the flow curve can be customized according to requirement.

Model selection													
Product series	Full open steps	Diameter [mm]	Kv ¹⁾	Nominal capacity [kW]							Max. working pressure [MPa]	Max. working pressure differential [MPa]	Reverse valve opening pressure differential [MPa]
				R22	R134a	R407C	R404A/R507	R410A					
DPF1.3	500	1.30	0.06	4.36	3.40	4.46	3.08	5.12	4.2	4.2	≥2.1		
DPF1.65	500	1.65	0.08	8.01	6.26	8.22	5.65	9.42	4.2	4.2	≥2.1		
DPF1.8	500	1.80	0.10	9.11	7.10	9.32	6.44	10.70	4.2	4.2	≥2.1		
DPF2.0	500	2.00	0.16	11.25	8.77	11.51	7.95	13.21	4.2	4.2	≥2.1		
DPF2.2	500	2.20	0.20	13.61	10.61	13.92	9.61	15.98	4.2	4.2	≥2.1		
DPF2.4	500	2.40	0.23	16.20	12.63	16.57	11.44	19.02	4.2	4.2	≥2.1		
DPF3.0	500	3.00	0.39	20.20	15.78	20.76	14.24	23.77	4.2	4.2	≥1.47		
DPF3.2	500	3.20	0.43	27.85	21.76	28.62	19.63	32.78	4.2	4.2	≥1.47		
DPFS4.0	500	6.50	0.50	40.37	31.54	41.49	29.45	47.52	4.2	4.2	≥3.5		
DPFS4.5	500	6.50	0.70	50.48	39.44	51.88	35.58	59.42	4.2	4.2	≥3.5		
DPFS5.5	500	6.50	0.80	67.30	52.58	69.16	47.44	79.21	4.2	4.2	≥3.5		
DPFS6.5	500	6.50	1.10	100.96	78.88	103.75	71.16	118.83	4.2	4.2	≥3.5		

Nominal condition:

- Rated capacity is based on: R407C condensing temperature: +38°C; evaporating temperature: +5°C; super cooling degree: 0 K; super heat degree: 0 K;
- Kv value: the pressure difference based on the two sides between water with density 17/m³ and the valve is equal to the positive flow capacity at 100Kpa.

Rated capacity (kW)															
	Condensing temperature °C	DFF1.3						DFF1.65							
		Evaporating temperature(°C)						Evaporating temperature(°C)							
		10	5	0	-5	-10	-20	-30	10	5	0	-5	-10	-20	-30
R410A	30	4.38	4.73	5.02	5.24	5.41	5.63	5.71	8.06	8.72	9.25	9.65	9.96	10.36	10.51
	35	4.72	5.00	5.22	5.41	5.54	5.70	5.73	8.68	9.21	9.63	9.95	10.20	10.49	10.56
	38	4.87	5.12	5.31	5.46	5.58	5.70	5.73	8.95	9.42	9.78	10.06	10.26	10.50	10.54
	40	4.93	5.17	5.36	5.49	5.59	5.70	5.70	9.10	9.53	9.86	10.11	10.29	10.49	10.50
	45	5.07	5.26	5.39	5.49	5.58	5.63	5.61	9.33	9.68	9.93	10.13	10.26	10.38	10.32
50	5.10	5.24	5.36	5.42	5.48	5.49	5.42	9.39	9.65	9.85	9.99	10.07	10.11	10.00	
R407C	30	3.79	4.06	4.28	4.43	4.55	4.66	4.66	6.96	7.47	7.86	8.15	8.36	8.57	8.60
	35	4.12	4.65	4.50	4.61	4.70	4.77	4.75	7.58	7.99	8.28	8.50	8.64	8.76	8.74
	38	4.28	4.46	4.60	4.70	4.77	4.80	4.77	7.88	8.22	8.47	8.65	8.76	8.85	8.78
	40	4.38	4.55	4.66	4.75	4.80	4.83	4.77	8.06	8.36	8.58	8.74	8.83	8.89	8.79
	45	4.56	4.68	4.77	4.83	4.85	4.85	4.77	8.39	8.63	8.79	8.89	8.95	8.92	8.76
50	4.68	4.77	4.82	4.85	4.87	4.82	4.70	8.46	8.78	8.88	8.93	8.95	8.86	8.65	
R22	30	3.63	3.92	4.14	4.31	4.44	4.61	4.68	6.68	7.21	7.63	7.95	8.18	8.49	8.61
	35	3.97	4.21	4.39	4.53	4.63	4.75	4.78	7.32	7.75	8.08	8.33	8.53	8.75	8.81
	38	4.14	4.36	4.51	4.63	4.72	4.82	4.83	7.64	8.01	8.31	8.53	8.70	8.88	8.90
	40	4.26	4.44	4.58	4.70	4.77	4.85	4.87	7.82	8.17	8.43	8.64	8.78	8.93	8.95
	45	4.46	4.61	4.73	4.82	4.87	4.92	4.90	8.22	8.50	8.71	8.86	8.97	9.06	9.03
50	4.63	4.75	4.83	4.90	4.93	4.95	4.90	8.53	8.74	8.90	9.01	9.08	9.11	9.04	
R134a	30	2.89	3.08	3.23	3.33	3.40	3.45	3.41	5.31	5.67	5.93	6.11	6.24	6.33	6.29
	35	3.14	3.30	3.40	3.46	3.52	3.53	3.46	5.79	6.07	6.26	6.39	6.46	6.49	6.39
	38	3.28	3.40	3.48	3.53	3.57	3.57	3.50	6.04	6.26	6.42	6.51	6.57	6.56	6.43
	40	3.35	3.46	3.53	3.58	3.60	3.58	3.50	6.18	6.38	6.51	6.58	6.63	6.63	6.45
	45	3.52	3.58	3.63	3.65	3.65	3.60	3.50	6.46	6.60	6.68	6.72	6.72	6.63	6.43
50	3.62	3.67	3.68	3.68	3.67	3.58	3.46	6.65	6.74	6.78	6.78	6.75	6.60	6.38	
R404A	30	2.70	2.89	3.04	3.13	3.19	3.24	3.21	4.97	5.33	5.58	5.76	5.89	5.97	5.90
	35	2.89	3.03	3.13	3.19	3.23	3.23	3.18	5.32	5.57	5.76	5.88	5.95	5.96	5.83
	38	2.96	3.08	3.14	3.19	3.21	3.19	3.11	5.43	5.65	5.79	5.88	5.92	5.89	5.74
	40	2.97	3.08	3.14	3.18	3.19	3.16	3.06	5.47	5.67	5.78	5.85	5.88	5.82	5.64
	45	3.01	3.08	3.11	3.13	3.11	3.04	2.92	5.53	5.65	5.72	5.74	5.72	5.61	5.39
50	2.96	2.99	3.01	2.99	2.97	2.87	2.72	5.45	5.51	5.53	5.51	5.46	5.29	5.01	

Rated capacity (kW)															
	Condensing temperature °C	DFF1.6						DFF2.0							
		Evaporating temperature(°C)						Evaporating temperature(°C)							
		10	5	0	-5	-10	-20	-30	10	5	0	-5	-10	-20	-30
R410A	30	9.15	9.88	10.49	10.95	11.31	11.77	11.93	11.30	12.20	12.95	13.52	13.96	14.52	14.73
	35	9.66	10.45	10.91	11.31	11.58	11.91	11.97	12.18	12.90	13.47	13.96	14.29	14.71	14.78
	38	10.18	10.70	11.10	11.41	11.66	11.91	11.97	12.56	13.21	13.70	14.09	14.40	14.71	14.78
	40	10.30	10.80	11.20	11.47	11.68	11.91	11.91	12.72	13.34	13.83	14.16	14.42	14.71	14.71
	45	10.59	10.99	11.26	11.47	11.66	11.77	11.72	13.08	13.57	13.91	14.16	14.40	14.52	14.47
50	10.66	10.95	11.20	11.33	11.45	11.47	11.33	13.16	13.52	13.83	13.98	14.14	14.16	13.98	
R407C	30	7.92	8.48	8.94	9.26	9.51	9.74	9.74	9.78	10.47	11.04	11.43	11.74	12.02	12.02
	35	8.61	9.72	9.40	9.63	9.82	9.97	9.93	10.63	12.00	11.61	11.89	12.13	12.31	12.25
	38	8.94	9.32	9.61	9.82	9.97	10.03	9.97	11.04	11.51	11.87	12.13	12.31	12.38	12.31
	40	9.15	9.51	9.74	9.93	10.03	10.09	9.97	11.30	11.74	12.02	12.25	12.38	12.46	12.31
	45	9.53	9.78	9.97	10.09	10.14	10.14	9.97	11.76	12.07	12.31	12.46	12.51	12.51	12.31
50	9.78	9.97	10.07	10.14	10.18	10.07	9.82	12.07	12.31	12.44	12.51	12.56	12.44	12.13	
R22	30	7.59	8.19	8.65	9.01	9.28	9.63	9.78	9.36	10.11	10.68	11.12	11.45	11.89	12.07
	35	8.30	8.80	9.17	9.47	9.68	9.93	9.99	10.24	10.86	11.33	11.69	11.94	12.25	12.33
	38	8.65	9.11	9.42	9.68	9.86	10.07	10.09	10.68	11.25	11.64	11.94	12.18	12.44	12.46
	40	8.90	9.28	9.57	9.82	9.97	10.14	10.18	10.99	11.45	11.82	12.13	12.31	12.51	12.56
	45	9.32	9.63	9.88	10.07	10.18	10.28	10.24	11.51	11.89	12.20	12.44	12.56	12.69	12.64
50	9.68	9.93	10.09	10.24	10.30	10.34	10.24	11.94	12.25	12.46	12.64	12.72	12.77	12.64	
R134a	30	6.04	6.44	6.75	6.96	7.10	7.21	7.13	7.46	7.95	8.33	8.59	8.77	8.90	8.80
	35	6.56	6.90	7.10	7.23	7.36	7.38	7.23	8.10	8.51	8.77	8.93	9.08	9.11	8.93
	38	6.85	7.10	7.27	7.38	7.46	7.46	7.31	8.46	8.77	8.98	9.11	9.21	9.21	9.03
	40	7.00	7.23	7.38	7.48	7.52	7.48	7.31	8.64	8.93	9.11	9.24	9.29	9.24	9.03
	45	7.36	7.48	7.59	7.63	7.63	7.52	7.31	9.08	9.24	9.36	9.42	9.42	9.29	9.03
50	7.56	7.67	7.69	7.69	7.67	7.48	7.23	9.34	9.47	9.49	9.49	9.47	9.24	8.93	
R404A	30	5.64	6.04	6.35	6.54	6.67	6.77	6.71	6.97	7.46	7.84	8.08	8.23	8.36	8.28
	35	6.04	6.33	6.54	6.67	6.75	6.75	6.65	7.46	7.82	8.08	8.23	8.33	8.33	8.20
	38	6.19	6.44	6.56	6.67	6.71	6.67	6.50	7.64	7.95	8.10	8.23	8.28	8.23	8.02
	40	6.21	6.44	6.56	6.65	6.67	6.60	6.39	7.66	7.95	8.10	8.20	8.23	8.15	7.89
	45	6.29	6.44	6.50	6.54	6.50	6.35	6.10	7.77	7.95	8.02	8.08	8.02	7.94	7.53
50	6.19	6.25	6.29	6.25	6.21	6.00	5.88	7.64	7.71	7.77	7.71	7.66	7.40	7.02	

Rated capacity (kW)

	Condensing temperature [°C]	DPF2.2							DPF2.4						
		Evaporating temperature [°C]							Evaporating temperature [°C]						
		10	5	0	-5	-10	-20	-30	10	5	0	-5	-10	-20	-30
R410A	30	13.67	14.77	15.67	16.36	16.89	17.57	17.82	16.27	17.57	18.65	19.47	20.10	20.92	21.21
	35	14.73	15.61	16.30	16.89	17.29	17.79	17.89	17.53	18.56	19.39	20.10	20.56	21.18	21.29
	38	15.20	15.98	16.58	17.04	17.42	17.79	17.89	18.09	19.02	19.73	20.28	20.73	21.18	21.29
	40	15.39	16.14	16.73	17.14	17.45	17.79	17.79	18.32	19.21	19.91	20.40	20.77	21.18	21.18
	45	15.83	16.42	16.83	17.14	17.42	17.57	17.51	18.84	19.54	20.02	20.40	20.73	20.92	20.84
	50	15.92	16.36	16.73	16.92	17.11	17.14	16.92	18.95	19.47	19.91	20.14	20.36	20.40	20.14
R407C	30	11.83	12.67	13.36	13.83	14.20	14.55	14.55	14.08	15.08	15.90	16.46	16.90	17.31	17.31
	35	12.86	14.52	14.05	14.39	14.67	14.89	14.83	15.31	17.27	16.72	17.13	17.46	17.72	17.65
	38	13.36	13.92	14.36	14.67	14.89	14.98	14.89	15.90	16.57	17.09	17.46	17.72	17.83	17.72
	40	13.67	14.20	14.55	14.83	14.98	15.08	14.89	16.27	16.90	17.31	17.65	17.83	17.94	17.72
	45	14.23	14.61	14.89	15.08	15.14	15.14	14.89	16.94	17.39	17.72	17.94	18.02	18.02	17.72
	50	14.61	14.89	15.05	15.14	15.20	15.05	14.67	17.39	17.72	17.91	18.02	18.09	17.91	17.46
R22	30	11.33	12.24	12.92	13.45	13.86	14.39	14.61	13.49	14.56	15.38	16.01	16.49	17.13	17.39
	35	12.39	13.14	13.70	14.14	14.45	14.83	14.92	14.75	15.64	16.31	16.83	17.20	17.65	17.76
	38	12.92	13.61	14.08	14.45	14.73	15.05	15.08	15.38	16.20	16.75	17.20	17.53	17.91	17.94
	40	13.30	13.86	14.30	14.67	14.89	15.14	15.20	15.83	16.49	17.01	17.46	17.72	18.02	18.09
	45	13.92	14.39	14.77	15.05	15.20	15.36	15.30	16.57	17.13	17.57	17.91	18.09	18.28	18.20
	50	14.45	14.83	15.08	15.30	15.39	15.45	15.30	17.20	17.65	17.94	18.20	18.32	18.39	18.20
R134a	30	9.02	9.61	10.08	10.40	10.61	10.77	10.64	10.74	11.44	12.00	12.37	12.63	12.82	12.67
	35	9.80	10.30	10.61	10.80	10.99	11.02	10.80	11.67	12.26	12.63	12.85	13.08	13.11	12.85
	38	10.24	10.61	10.86	11.02	11.14	11.14	10.93	12.19	12.65	12.93	13.11	13.26	13.26	13.00
	40	10.46	10.80	11.02	11.18	11.24	11.18	10.93	12.45	12.85	13.11	13.30	13.37	13.30	13.00
	45	10.99	11.18	11.33	11.39	11.39	11.24	10.93	13.08	13.30	13.49	13.56	13.56	13.37	13.00
	50	11.30	11.46	11.49	11.49	11.46	11.18	10.80	13.45	13.63	13.67	13.67	13.63	13.30	12.85
R404A	30	8.43	9.02	9.49	9.77	9.96	10.11	10.02	10.45	11.04	11.29	11.63	11.85	12.04	11.93
	35	9.02	9.46	9.77	9.96	10.08	10.08	9.93	10.74	11.26	11.63	11.85	12.00	12.00	11.81
	38	9.24	9.61	9.80	9.96	10.02	9.96	9.71	11.00	11.44	11.67	11.85	11.93	11.85	11.55
	40	9.27	9.61	9.80	9.93	9.96	9.86	9.55	11.03	11.44	11.67	11.81	11.85	11.74	11.37
	45	9.40	9.61	9.71	9.77	9.71	9.49	9.12	11.18	11.44	11.55	11.63	11.55	11.29	10.85
	50	9.24	9.33	9.40	9.33	9.27	8.96	8.49	11.00	11.11	11.11	11.03	10.66	10.10	

Rated capacity (kW)

	Condensing temperature [°C]	DPF3.0							DPF3.2						
		Evaporating temperature [°C]							Evaporating temperature [°C]						
		10	5	0	-5	-10	-20	-30	10	5	0	-5	-10	-20	-30
R410A	30	20.33	22.02	23.35	24.33	25.18	26.16	26.51	28.04	30.36	32.20	33.55	34.72	36.07	36.55
	35	21.88	23.21	24.33	25.11	25.74	26.44	26.65	30.17	32.01	33.55	34.62	35.49	36.46	36.75
	38	22.58	23.77	24.69	25.39	25.95	26.51	26.58	31.14	32.78	34.04	35.01	35.78	36.55	36.65
	40	23.00	24.06	24.90	25.53	26.02	26.51	26.51	31.72	33.17	34.33	35.20	35.88	36.55	36.55
	45	23.56	24.40	25.11	25.60	25.88	26.16	26.02	32.49	33.65	34.62	35.30	35.88	36.07	35.88
	50	23.70	24.33	24.90	25.18	25.45	25.53	25.24	32.68	33.55	34.33	34.72	35.10	35.20	34.81
R407C	30	17.54	18.86	19.85	20.55	21.04	21.60	21.67	24.18	26.01	27.37	28.33	29.01	29.78	29.88
	35	19.15	20.12	20.90	21.39	21.81	22.09	22.02	26.40	27.75	28.82	29.49	30.07	30.46	30.36
	38	19.85	20.76	21.39	21.81	22.09	22.30	22.09	27.37	28.62	29.49	30.07	30.46	30.75	30.46
	40	20.27	21.11	21.67	22.02	22.30	22.37	22.16	27.95	29.11	29.88	30.36	30.75	30.85	30.56
	45	21.18	21.74	22.16	22.44	22.51	22.51	22.09	29.20	29.98	30.56	31.04	31.04	31.04	30.46
	50	21.67	22.09	22.37	22.51	22.58	22.30	21.81	29.88	30.46	30.85	31.04	31.14	30.75	30.07
R22	30	16.83	18.23	19.28	20.06	20.69	21.46	21.74	23.21	25.14	26.59	27.66	28.53	29.59	29.98
	35	18.44	19.57	20.41	21.04	21.53	22.09	22.23	25.43	26.98	28.14	29.01	29.69	30.46	30.65
	38	19.28	20.20	20.97	21.53	21.95	22.37	22.44	26.59	27.85	28.91	29.69	30.27	30.85	30.94
	40	19.78	20.62	21.32	21.81	22.16	22.58	22.58	27.27	28.43	29.40	30.07	30.56	31.14	31.14
	45	20.76	21.46	22.02	22.37	22.65	22.86	22.79	28.62	29.59	30.36	30.85	31.23	31.52	31.43
	50	21.53	22.09	22.44	22.79	22.93	23.00	22.79	29.69	30.46	30.94	31.43	31.62	31.72	31.43
R134a	30	13.39	14.31	15.04	15.53	15.78	15.99	15.85	18.47	19.73	20.69	21.27	21.76	22.05	21.85
	35	14.66	15.36	15.78	16.13	16.34	16.41	16.13	20.21	21.18	21.76	22.24	22.53	22.63	22.24
	38	15.21	15.78	16.20	16.48	16.55	16.55	16.20	20.98	21.76	22.34	22.72	22.82	22.82	22.34
	40	15.57	16.06	16.41	16.62	16.69	16.65	16.27	21.41	22.14	22.63	22.92	23.01	22.82	22.43
	45	16.34	16.69	16.90	16.97	16.97	16.69	16.27	22.53	23.01	23.30	23.40	23.40	23.01	22.43
	50	16.83	17.04	17.11	17.11	17.04	16.69	16.06	23.21	23.50	23.59	23.59	23.50	23.21	22.14
R404A	30	12.55	13.47	14.10	14.58	14.87	15.08	14.94	17.31	18.57	19.44	20.11	20.50	20.79	20.60
	35	13.39	14.10	14.52	14.87	15.00	15.00	14.73	18.47	19.44	20.02	20.50	20.69	20.69	20.31
	38	13.74	14.24	14.66	14.87	14.94	14.87	14.52	18.95	19.63	20.21	20.50	20.60	20.50	20.02
	40	13.82	14.31	14.58	14.79	14.79	14.66	14.24	19.05	19.73	20.11	20.40	20.40	20.21	19.63
	45	13.95	14.16	14.45	14.52	14.45	14.16	13.60	19.24	19.53	19.92	20.02	19.92	19.53	18.76
	50	13.74	13.89	13.95	13.89	13.82	13.32	12.69	18.95	19.15	19.24	19.15	19.05	18.37	17.50

Rated capacity (kW)															
	Condensing temperature [°C]	DPF4.0						DPF4.5							
		Evaporating temperature [°C]						Evaporating temperature [°C]							
		10	5	0	-5	-10	-20	-30	10	5	0	-5	-10	-20	-30
R410A	30	40.64	44.01	46.67	48.63	50.33	52.28	52.98	50.83	55.03	58.37	60.81	62.93	65.38	66.25
	35	43.73	46.40	48.63	50.18	51.44	52.85	53.27	54.69	58.02	60.81	62.75	64.33	66.09	66.61
	38	45.14	47.52	49.34	50.75	51.86	52.98	53.13	56.45	59.42	61.70	63.46	64.86	66.25	66.43
	40	45.98	48.08	49.76	51.02	52.01	52.98	52.98	57.50	60.13	62.23	63.80	65.04	66.25	66.25
	45	47.09	48.78	50.18	51.17	51.72	52.28	52.01	58.89	61.00	62.75	63.99	64.67	65.38	65.04
50	47.37	48.63	49.76	50.33	50.88	51.02	50.46	59.24	60.81	62.23	62.93	63.62	63.80	63.10	
R407C	30	35.05	37.70	39.67	41.06	42.05	43.17	43.31	43.83	47.15	49.61	51.35	52.58	53.98	54.16
	35	38.27	40.22	41.78	42.75	43.59	44.15	44.01	47.85	50.30	52.24	53.45	54.51	55.21	55.03
	38	39.67	41.49	42.75	43.59	44.15	44.57	44.15	49.61	51.88	53.45	54.51	55.21	55.74	55.21
	40	40.51	42.20	43.31	44.01	44.57	44.72	44.30	50.66	52.77	54.16	55.03	55.74	55.92	55.39
	45	42.33	43.46	44.30	44.85	44.99	44.99	44.15	52.93	54.34	55.39	56.08	56.26	56.26	55.21
50	43.31	44.15	44.72	44.99	45.14	44.57	43.59	54.16	55.21	55.92	56.26	56.45	56.74	54.51	
R22	30	33.64	36.44	38.54	40.09	41.35	42.89	43.46	42.07	45.57	48.20	50.14	51.71	53.64	54.34
	35	36.86	39.11	40.79	42.05	43.04	44.15	44.43	46.10	48.90	51.01	52.58	53.82	55.21	55.56
	38	38.54	40.37	41.91	43.04	43.88	44.72	44.85	48.20	50.48	52.40	53.82	54.87	55.92	56.08
	40	39.53	41.21	42.62	43.59	44.30	45.14	45.14	49.43	51.53	53.29	54.51	55.39	56.45	56.45
	45	41.49	42.89	44.01	44.72	45.27	45.69	45.56	51.88	53.64	55.03	55.92	56.61	57.13	56.97
50	43.04	44.15	44.85	45.56	45.83	45.98	45.56	53.82	55.21	56.08	56.97	57.32	57.50	56.97	
R134a	30	26.77	28.60	29.99	30.83	31.54	31.96	31.67	33.48	35.76	37.50	38.55	39.44	39.97	39.61
	35	29.29	30.70	31.54	32.24	32.66	32.80	32.24	36.63	38.39	39.44	40.31	40.84	41.02	40.31
	38	30.41	31.54	32.38	32.93	33.08	33.08	32.58	38.03	39.44	40.49	41.18	41.36	41.36	40.49
	40	31.12	32.09	32.80	33.22	33.35	33.08	32.58	38.92	40.13	41.02	41.55	41.71	41.36	40.66
	45	32.66	33.35	33.77	33.92	33.92	33.35	32.51	40.84	41.71	42.23	42.42	42.42	41.71	40.66
50	33.64	34.06	34.19	34.19	34.06	33.35	32.09	42.07	42.60	42.76	42.76	42.60	41.71	40.13	
R404A	30	25.09	26.92	28.18	29.15	29.72	30.14	29.86	31.38	33.66	35.24	36.45	37.16	37.68	37.34
	35	26.77	28.10	29.02	29.72	29.99	29.99	29.44	33.48	35.24	36.29	37.16	37.50	37.50	36.81
	38	27.47	28.45	29.29	29.72	29.86	29.72	29.02	34.35	35.58	36.63	37.16	37.34	37.16	36.29
	40	27.61	28.60	29.15	29.57	29.57	29.29	28.45	34.53	35.76	36.45	36.98	36.98	36.63	35.58
	45	27.89	28.31	28.87	29.02	28.87	28.31	27.19	34.88	35.40	36.11	36.29	36.11	35.40	34.01
50	27.47	27.76	27.89	27.76	27.61	26.63	25.37	34.35	34.71	34.88	34.71	34.53	33.30	31.72	

Rated capacity (kW)															
	Condensing temperature [°C]	DPF5.5						DPF6.5							
		Evaporating temperature [°C]						Evaporating temperature [°C]							
		10	5	0	-5	-10	-20	-30	10	5	0	-5	-10	-20	-30
R410A	30	67.76	73.37	77.81	81.07	83.90	87.16	88.32	101.65	110.06	116.73	121.62	125.86	130.76	132.50
	35	72.91	77.35	81.07	83.66	85.76	88.11	88.81	109.37	116.94	121.62	125.50	128.65	132.17	133.22
	38	75.25	79.21	82.26	84.60	86.46	88.32	88.57	112.88	118.83	123.40	126.91	129.71	132.50	132.86
	40	76.65	80.16	82.96	85.06	86.71	88.32	88.32	114.99	120.24	124.45	127.60	130.07	132.50	132.50
	45	78.51	81.32	83.66	85.30	86.22	87.16	86.71	117.78	121.98	125.50	127.97	129.34	130.76	130.07
50	79.87	81.07	82.96	83.90	84.82	85.06	84.12	118.47	121.62	124.45	125.86	127.24	127.60	126.19	
R407C	30	58.43	62.85	66.14	68.46	70.10	71.96	72.21	87.65	94.29	99.22	102.70	105.16	107.95	108.32
	35	63.80	67.06	69.64	71.26	72.67	73.61	73.37	95.70	100.60	104.70	106.90	109.01	110.42	110.06
	38	66.14	69.16	71.26	72.67	73.61	74.31	73.61	99.22	103.75	106.90	109.01	110.42	111.47	110.42
	40	67.54	70.35	72.21	73.37	74.31	74.55	73.85	103.32	105.53	108.32	110.06	111.47	111.83	110.78
	45	70.56	72.45	73.85	74.77	75.01	75.01	73.61	105.85	108.68	110.78	112.16	112.52	112.52	110.42
50	72.21	73.61	74.55	75.01	75.25	74.31	72.67	108.32	110.42	111.83	112.52	112.88	111.47	109.01	
R22	30	56.09	60.75	64.26	66.84	68.94	71.51	72.45	84.14	91.13	96.39	100.27	103.42	107.27	108.68
	35	61.45	65.20	68.00	70.10	71.75	73.61	74.07	92.19	97.80	102.01	105.16	107.63	110.42	111.11
	38	64.26	67.30	69.86	71.75	73.15	74.55	74.77	96.39	100.96	104.80	107.63	109.73	111.83	112.16
	40	65.90	68.70	71.05	72.67	73.61	73.85	75.25	98.36	103.06	106.58	109.01	110.78	112.88	112.88
	45	69.16	71.51	73.37	74.55	75.47	76.17	75.95	103.75	107.27	110.06	111.83	113.21	114.26	113.94
50	71.75	73.61	74.77	75.95	76.41	76.65	75.95	107.63	110.42	112.16	113.94	114.62	114.99	113.94	
R134a	30	44.63	47.68	50.00	51.40	52.58	53.28	52.80	66.96	71.52	75.00	77.11	78.88	79.93	79.21
	35	48.84	51.18	52.58	53.74	54.44	54.69	53.74	73.26	76.78	78.88	80.62	81.67	82.04	80.62
	38	50.70	52.58	53.99	54.90	55.15	55.15	53.99	76.05	78.88	80.58	82.36	82.72	82.72	80.98
	40	51.88	53.50	54.69	55.39	55.60	55.15	54.20	77.83	80.26	82.04	83.09	83.41	82.72	81.31
	45	54.44	55.60	56.31	56.55	56.55	55.60	54.20	81.67	83.41	84.46	84.83	84.83	83.41	81.31
50	56.09	56.79	57.01	57.01	56.79	55.60	53.50	84.14	85.19	85.52	85.52	85.19	83.41	80.26	
R404A	30	41.83	44.88	46.98	48.60	49.54	50.24	49.78	62.75	67.32	70.47	72.90	74.31	75.37	74.68
	35	44.63	46.98	48.38	49.54	50.00	50.00	49.08	66.96	70.47	72.57	74.31	75.00	75.00	73.63
	38	45.79	47.44	48.84	49.54	49.78	49.54	48.84	68.06	71.16	73.26	74.31	74.68	74.31	72.57
	40	46.04	47.68	48.60	49.30	49.30	48.84	47.44	69.07	71.52	72.90	73.95	73.95	73.26	71.16
	45	46.49	47.19	48.14	48.38	48.14	47.19	45.33	69.75	70.80	72.21	72.57	72.21	70.80	68.01
50	45.79	46.28	46.49	46.28	46.04	44.39	42.29	68.70	69.42	69.75	69.42	69.06	66.59	63.44	