

Capacity Table

SAGInoMIYA

ELECTRONIC EXPANSION VALVES SERIES



SAGINOMIYA PRODUCT CATALOG

- Electronic Expansion Valves
- Motor Operated Valves
- Changeover Valves
- Controllers

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Correction Elements That Influence the Capacity

Pressure Drop in the High-Pressure Side Liquid Pipe

Pressure drop on the high-pressure side results in a reduction in refrigerating capacity. The pressure drop occurring between the condenser and the expansion valve can lead to the generation of flush gas, which reduces the capacity of the expansion valve. Therefore, it is usually necessary to consider subcooling of approx. 1 to 3°C.

Correction Factor for Pressure Drop in the Low-Pressure Side Pipe

Pressure drops in the distributor and the evaporator can cause temperature imbalances and reduced capacity. The correction factors shown here are for changes in pressure drop within the distributor and evaporator.

R134a

Evaporating Temp. (°C)	Pressure Drop (MPa)										
	0	0.025	0.05	0.075	0.1	0.125	0.15	0.175	0.2	0.225	0.25
-60	1.000	0.987	0.973	0.960	0.946	0.932	0.917	0.903	0.888	0.873	0.858
-50	1.000	0.987	0.973	0.959	0.945	0.931	0.916	0.901	0.886	0.871	0.856
-40	1.000	0.986	0.972	0.958	0.944	0.929	0.914	0.899	0.884	0.868	0.852
-30	1.000	0.986	0.971	0.956	0.941	0.926	0.911	0.895	0.879	0.863	0.846
-20	1.000	0.985	0.969	0.954	0.938	0.922	0.905	0.888	0.871	0.854	0.836
-10	1.000	0.983	0.967	0.950	0.932	0.914	0.896	0.878	0.859	0.840	0.820
-5	1.000	0.982	0.965	0.946	0.928	0.909	0.890	0.870	0.850	0.829	0.808
0	1.000	0.981	0.962	0.942	0.922	0.902	0.881	0.860	0.838	0.815	0.792
5	1.000	0.979	0.958	0.937	0.915	0.892	0.869	0.845	0.821	0.796	0.770
10	1.000	0.977	0.953	0.929	0.904	0.879	0.852	0.825	0.797	0.768	0.738

R404A

Evaporating Temp. (°C)	Pressure Drop (MPa)										
	0	0.025	0.05	0.075	0.1	0.125	0.15	0.175	0.2	0.225	0.25
-60	1.000	0.993	0.985	0.978	0.970	0.962	0.955	0.947	0.939	0.931	0.923
-50	1.000	0.992	0.985	0.977	0.969	0.962	0.954	0.946	0.938	0.930	0.922
-40	1.000	0.992	0.984	0.976	0.968	0.960	0.952	0.944	0.936	0.928	0.919
-30	1.000	0.992	0.984	0.975	0.967	0.959	0.950	0.942	0.933	0.924	0.915
-20	1.000	0.991	0.983	0.974	0.965	0.956	0.947	0.937	0.928	0.919	0.909
-10	1.000	0.990	0.981	0.971	0.961	0.951	0.941	0.931	0.921	0.910	0.900
-5	1.000	0.990	0.980	0.969	0.959	0.948	0.937	0.926	0.915	0.904	0.893
0	1.000	0.989	0.978	0.967	0.955	0.944	0.932	0.920	0.908	0.896	0.884
5	1.000	0.988	0.976	0.963	0.951	0.938	0.925	0.912	0.899	0.885	0.872
10	1.000	0.986	0.973	0.959	0.945	0.930	0.916	0.901	0.886	0.870	0.855

R407C

Evaporating Temp. (°C)	Pressure Drop (MPa)										
	0	0.025	0.05	0.075	0.1	0.125	0.15	0.175	0.2	0.225	0.25
-60	1.000	0.992	0.985	0.977	0.969	0.961	0.953	0.945	0.937	0.929	0.921
-50	1.000	0.992	0.984	0.977	0.969	0.961	0.952	0.944	0.936	0.928	0.919
-40	1.000	0.992	0.984	0.976	0.968	0.960	0.951	0.943	0.935	0.926	0.917
-30	1.000	0.992	0.983	0.975	0.967	0.958	0.950	0.941	0.932	0.923	0.914
-20	1.000	0.991	0.983	0.974	0.965	0.956	0.947	0.938	0.929	0.919	0.910
-10	1.000	0.991	0.981	0.972	0.962	0.952	0.943	0.933	0.923	0.913	0.902
-5	1.000	0.990	0.980	0.970	0.960	0.950	0.940	0.929	0.919	0.908	0.897
0	1.000	0.990	0.979	0.968	0.958	0.947	0.936	0.925	0.913	0.902	0.890
5	1.000	0.989	0.977	0.966	0.954	0.942	0.931	0.918	0.906	0.894	0.881
10	1.000	0.988	0.975	0.963	0.950	0.937	0.924	0.910	0.897	0.883	0.869

R410A

Evaporating Temp. (°C)	Pressure Drop (MPa)										
	0	0.025	0.05	0.075	0.1	0.125	0.15	0.175	0.2	0.225	0.25
-60	1.000	0.994	0.989	0.983	0.977	0.972	0.966	0.960	0.954	0.949	0.943
-50	1.000	0.994	0.989	0.983	0.977	0.971	0.965	0.959	0.953	0.948	0.942
-40	1.000	0.994	0.988	0.982	0.976	0.970	0.964	0.958	0.952	0.946	0.940
-30	1.000	0.994	0.988	0.981	0.975	0.969	0.963	0.956	0.950	0.943	0.937
-20	1.000	0.993	0.987	0.980	0.973	0.967	0.960	0.953	0.946	0.939	0.932
-10	1.000	0.993	0.986	0.978	0.971	0.963	0.956	0.948	0.941	0.933	0.925
-5	1.000	0.992	0.985	0.977	0.969	0.961	0.953	0.945	0.937	0.929	0.920
0	1.000	0.992	0.983	0.975	0.966	0.958	0.949	0.940	0.932	0.923	0.914
5	1.000	0.991	0.982	0.972	0.963	0.954	0.944	0.934	0.925	0.915	0.905
10	1.000	0.990	0.979	0.969	0.958	0.948	0.937	0.926	0.915	0.904	0.892

R448A

Evaporating Temp. (°C)	Pressure Drop (MPa)										
	0	0.025	0.05	0.075	0.1	0.125	0.15	0.175	0.2	0.225	0.25
-60	1.000	0.993	0.986	0.978	0.971	0.964	0.956	0.949	0.941	0.934	0.926
-50	1.000	0.993	0.985	0.978	0.971	0.963	0.956	0.948	0.941	0.933	0.925
-40	1.000	0.993	0.985	0.978	0.970	0.962	0.955	0.947	0.939	0.931	0.923
-30	1.000	0.992	0.985	0.977	0.969	0.961	0.953	0.945	0.937	0.928	0.920
-20	1.000	0.992	0.984	0.975	0.967	0.959	0.950	0.942	0.933	0.924	0.916
-10	1.000	0.991	0.982	0.973	0.964	0.955	0.946	0.937	0.927	0.918	0.908
-5	1.000	0.991	0.981	0.972	0.962	0.953	0.943	0.933	0.923	0.913	0.903
0	1.000	0.990	0.980	0.970	0.960	0.950	0.939	0.929	0.918	0.908	0.897
5	1.000	0.989	0.979	0.968	0.957	0.946	0.934	0.923	0.911	0.900	0.888
10	1.000	0.988	0.976	0.965	0.952	0.940	0.928	0.915	0.902	0.889	0.876

R449A

Evaporating Temp. (°C)	Pressure Drop (MPa)										
	0	0.025	0.05	0.075	0.1	0.125	0.15	0.175	0.2	0.225	0.25
-60	1.000	0.993	0.986	0.978	0.971	0.963	0.956	0.948	0.941	0.933	0.925
-50	1.000	0.993	0.985	0.978	0.970	0.963	0.955	0.948	0.940	0.932	0.924
-40	1.000	0.992	0.985	0.977	0.970	0.962	0.954	0.946	0.938	0.930	0.922
-30	1.000	0.992	0.984	0.976	0.969	0.960	0.952	0.944	0.936	0.928	0.919
-20	1.000	0.992	0.984	0.975	0.967	0.958	0.950	0.941	0.932	0.923	0.915
-10	1.000	0.991	0.982	0.973	0.964	0.955	0.945	0.936	0.927	0.917	0.907
-5	1.000	0.991	0.981	0.972	0.962	0.952	0.942	0.933	0.922	0.912	0.902
0	1.000	0.990	0.980	0.970	0.960	0.949	0.939	0.928	0.917	0.906	0.895
5	1.000	0.989	0.978	0.967	0.956	0.945	0.934	0.922	0.910	0.899	0.887
10	1.000	0.988	0.976	0.964	0.952	0.939	0.927	0.914	0.901	0.888	0.875

R407H

Evaporating Temp. (°C)	Pressure Drop (MPa)										
	0	0.025	0.05	0.075	0.1	0.125	0.15	0.175	0.2	0.225	0.25
-60	1.000	0.993	0.985	0.978	0.970	0.963	0.955	0.947	0.939	0.932	0.924
-50	1.000	0.993	0.985	0.977	0.970	0.962	0.954	0.946	0.939	0.931	0.923
-40	1.000	0.992	0.985	0.977	0.969	0.961	0.953	0.945	0.937	0.929	0.921
-30	1.000	0.992	0.984	0.976	0.968	0.960	0.952	0.943	0.935	0.926	0.918
-20	1.000	0.992	0.983	0.975	0.966	0.958	0.949	0.940	0.931	0.922	0.913
-10	1.000	0.991	0.982	0.973	0.964	0.954	0.945	0.935	0.926	0.916	0.906
-5	1.000	0.991	0.981	0.971	0.962	0.952	0.942	0.932	0.922	0.912	0.901
0	1.000	0.990	0.980	0.970	0.959	0.949	0.938	0.928	0.917	0.906	0.895
5	1.000	0.989	0.978	0.967	0.956	0.945	0.933	0.922	0.910	0.898	0.886
10	1.000	0.988	0.976	0.964	0.952	0.939	0.927	0.914	0.901	0.888	0.874

R463A-J

Evaporating Temp. (°C)	Pressure Drop (MPa)										
	0	0.025	0.05	0.075	0.1	0.125	0.15	0.175	0.2	0.225	0.25
-60	1.000	0.995	0.990	0.984	0.979	0.974	0.969	0.963	0.958	0.953	0.947
-50	1.000	0.995	0.990	0.984	0.979	0.974	0.968	0.963	0.957	0.952	0.946
-40	1.000	0.995	0.989	0.984	0.978	0.973	0.967	0.962	0.956	0.951	0.945
-30	1.000	0.994	0.989	0.983	0.978	0.972	0.966	0.960	0.955	0.949	0.943
-20	1.000	0.994	0.988	0.982	0.976	0.970	0.964	0.958	0.952	0.946	0.940
-10	1.000	0.994	0.987	0.981	0.975	0.968	0.962	0.955	0.948	0.942	0.935
-5	1.000	0.993	0.987	0.980	0.973	0.966	0.960	0.953	0.946	0.939	0.932
0	1.000	0.993	0.986	0.979	0.972	0.964	0.957	0.950	0.942	0.935	0.927
5	1.000	0.992	0.985	0.977	0.970	0.962	0.954	0.946	0.938	0.930	0.922
10	1.000	0.992	0.984	0.975	0.967	0.958	0.950	0.941	0.932	0.923	0.915

Correction Factor for Subcooling

The correction factors given here represent capacity changes caused by the degree of subcooling of high-pressure solution refrigerants on the low-stage side of two-stage compression devices, and heat exchanger-equipped equipment.

For devices with significant subcooling, the expansion valve capacity is calculated by multiplying the figure in the capacity table by the correction factor below.

R134a

Condensing Temp. (°C)	Subcooling ΔT							
	0	10	20	30	40	50	60	70
0	1.00	1.10	1.20	1.30	—	—	—	—
10	1.00	1.11	1.22	1.33	1.45	—	—	—
20	1.00	1.12	1.25	1.37	1.50	1.62	—	—
30	1.00	1.14	1.28	1.42	1.56	1.70	1.85	—
38	1.00	1.15	1.31	1.47	1.63	1.79	1.95	2.11
40	1.00	1.16	1.32	1.48	1.65	1.81	1.98	2.14
50	1.00	1.19	1.38	1.57	1.76	1.96	2.15	2.35
60	1.00	1.23	1.46	1.70	1.93	2.17	2.41	2.65

R404A

Condensing Temp. (°C)	Subcooling ΔT							
	0	10	20	30	40	50	60	70
0	1.00	1.13	1.26	1.39	—	—	—	—
10	1.00	1.15	1.29	1.44	1.59	—	—	—
20	1.00	1.17	1.34	1.51	1.69	1.86	—	—
30	1.00	1.20	1.41	1.62	1.82	2.03	2.24	—
38	1.00	1.24	1.49	1.73	1.98	2.23	2.48	2.73
40	1.00	1.26	1.51	1.77	2.03	2.29	2.55	2.82
50	1.00	1.35	1.70	2.04	2.39	2.74	3.09	3.45
60	1.00	1.56	2.11	2.65	3.19	3.74	4.28	4.84

R407C

Condensing Temp. (°C)	Subcooling ΔT							
	0	10	20	30	40	50	60	70
0	1.00	1.10	1.21	1.31	—	—	—	—
10	1.00	1.11	1.23	1.34	1.46	—	—	—
20	1.00	1.13	1.26	1.38	1.51	1.65	—	—
30	1.00	1.15	1.29	1.44	1.59	1.73	1.88	—
38	1.00	1.16	1.33	1.49	1.66	1.83	2.00	2.17
40	1.00	1.17	1.34	1.51	1.68	1.86	2.03	2.21
50	1.00	1.21	1.41	1.62	1.82	2.03	2.24	2.45
60	1.00	1.26	1.53	1.79	2.05	2.31	2.57	2.83

R410A

Condensing Temp. (°C)	Subcooling ΔT							
	0	10	20	30	40	50	60	70
0	1.00	1.11	1.21	1.32	—	—	—	—
10	1.00	1.12	1.24	1.36	1.48	—	—	—
20	1.00	1.14	1.27	1.41	1.54	1.68	—	—
30	1.00	1.16	1.32	1.47	1.63	1.79	1.94	—
38	1.00	1.18	1.36	1.54	1.72	1.90	2.08	2.27
40	1.00	1.19	1.38	1.57	1.75	1.94	2.13	2.32
50	1.00	1.25	1.48	1.72	1.95	2.18	2.42	2.65
60	1.00	1.36	1.70	2.02	2.34	2.66	2.98	3.29

R448A

Condensing Temp. (°C)	Subcooling ΔT							
	0	10	20	30	40	50	60	70
0	1.00	1.09	1.18	1.27	—	—	—	—
10	1.00	1.10	1.20	1.30	1.40	—	—	—
20	1.00	1.12	1.23	1.34	1.46	1.57	—	—
30	1.00	1.13	1.27	1.40	1.52	1.65	1.78	—
38	1.00	1.15	1.30	1.45	1.60	1.74	1.88	2.03
40	1.00	1.16	1.32	1.47	1.62	1.77	1.91	2.06
50	1.00	1.20	1.39	1.57	1.76	1.94	2.12	2.29
60	1.00	1.26	1.51	1.75	1.99	2.22	2.45	2.67

R449A

Condensing Temp. (°C)	Subcooling ΔT							
	0	10	20	30	40	50	60	70
0	1.00	1.09	1.18	1.28	—	—	—	—
10	1.00	1.10	1.21	1.31	1.41	—	—	—
20	1.00	1.12	1.23	1.35	1.46	1.57	—	—
30	1.00	1.14	1.27	1.40	1.53	1.66	1.79	—
38	1.00	1.16	1.31	1.46	1.60	1.75	1.89	2.04
40	1.00	1.16	1.32	1.47	1.63	1.78	1.93	2.07
50	1.00	1.20	1.39	1.58	1.77	1.95	2.13	2.31
60	1.00	1.27	1.52	1.77	2.01	2.25	2.48	2.71

R407H

Condensing Temp. (°C)	Subcooling ΔT							
	0	10	20	30	40	50	60	70
0	1.00	1.08	1.16	1.25	—	—	—	—
10	1.00	1.09	1.18	1.27	1.36	—	—	—
20	1.00	1.10	1.20	1.30	1.40	1.50	—	—
30	1.00	1.12	1.23	1.34	1.45	1.56	1.67	—
38	1.00	1.13	1.26	1.38	1.51	1.63	1.75	1.87
40	1.00	1.13	1.27	1.39	1.52	1.65	1.77	1.89
50	1.00	1.16	1.32	1.47	1.62	1.77	1.91	2.06
60	1.00	1.20	1.40	1.58	1.77	1.95	2.12	2.30

R463A-J

Condensing Temp. (°C)	Subcooling ΔT							
	0	10	20	30	40	50	60	70
0	1.00	1.09	1.18	1.27	—	—	—	—
10	1.00	1.10	1.20	1.30	1.40	—	—	—
20	1.00	1.12	1.23	1.34	1.45	1.56	—	—
30	1.00	1.13	1.26	1.39	1.52	1.64	1.77	—
38	1.00	1.15	1.30	1.45	1.59	1.73	1.87	2.01
40	1.00	1.16	1.32	1.47	1.62	1.76	1.91	2.05
50	1.00	1.20	1.40	1.58	1.76	1.94	2.12	2.29
60	1.00	1.29	1.55	1.79	2.03	2.27	2.50	2.72

Selection Example for PKV and GKV

Select the most suitable electronic expansion valve for the operating conditions shown on page 7.

- (1) Calculate the max. required refrigerating capacity of the equipment

(Usually the capacity right after starting operation)

Use the correction factor table for R404A to find the correction factor (1.55) from the evaporating temp. (-30°C), condensing temp. (40°C) (A), and subcooling (30°C) (B). Then, divide the required refrigerating capacity (37.0 kW) by the correction factor to get the max. required refrigerating capacity (23.9kW).
- (2) Calculate the min. required refrigeration capacity of the equipment

(Usually the capacity right after operation ends)

Find the correction factor (1.66) from the evaporating temp. (-50°C), condensing temp. (40°C) (C), and subcooling (40°C) (D). Then, divide the required refrigerating capacity (17.5kW) by the correction factor to get the min. required refrigerating capacity (10.5kW).
- (3) Select an electronic expansion valve

At 480 pulses, GKV-34BS and GKV-60BS have larger refrigerating capacity than the equipment requires. Comparing the valve operating range between max. and min. loads, GKV-60BS has 80 pulses (E), while GKV-34BS has 185 pulses (F). Therefore, select the GKV-34BS, which has a wider valve operating range (higher resolution).

Correction Factor for R404A

B

D

Superheat : 5°C

ET (°C)	CT (°C)	Subcooling (°C)							
		0	10	20	30	40	50	60	
-70	50	0.61	0.85	1.08	1.30	1.52	1.74	1.95	
	45	0.69	0.91	1.12	1.33	1.54	1.74	1.94	
	40	0.75	0.96	1.16	1.35	1.54	1.73	1.92	
	35	0.80	0.99	1.18	1.36	1.54	1.72	1.90	
	30	0.84	1.02	1.19	1.36	1.53	1.70	1.86	
-60	50	0.68	0.92	1.15	1.37	1.59	1.81	2.03	
	45	0.76	0.98	1.19	1.40	1.61	1.81	2.01	
	40	0.82	1.02	1.22	1.41	1.61	1.80	1.99	
	35	0.86	1.05	1.24	1.42	1.60	1.78	1.96	
	30	0.90	1.07	1.24	1.41	1.58	1.75	1.91	
-50	50	0.75	0.99	1.22	1.44	1.66	1.88	2.09	
	45	0.82	1.04	1.25	1.46	1.67	1.87	2.07	
	40	0.87	1.08	1.28	1.47	1.66	1.85	2.04	
	35	0.92	1.10	1.29	1.47	1.65	1.83	2.00	
	30	0.95	1.12	1.29	1.46	1.63	1.79	1.96	
-40	50	0.81	1.05	1.28	1.50	1.72	1.93	2.15	
	45	0.87	1.09	1.31	1.51	1.72	1.92	2.12	
	40	0.92	1.13	1.32	1.52	1.71	1.90	2.08	
	35	0.96	1.15	1.33	1.51	1.69	1.86	2.04	
	30	0.98	1.16	1.33	1.49	1.66	1.82	1.98	
-30	50	0.86	1.10	1.33	1.55	1.76	1.98	2.19	
	45	0.92	1.14	1.35	1.55	1.76	1.96	2.15	
	40	0.96	1.16	1.36	1.55	1.74	1.92	2.11	
	35	0.99	1.18	1.36	1.53	1.71	1.88	2.05	
	30	1.01	1.18	1.35	1.51	1.67	1.83	—	
-25	50	0.88	1.12	1.35	1.57	1.78	1.99	2.20	
	45	0.94	1.16	1.36	1.57	1.77	1.97	2.16	
	40	0.98	1.18	1.37	1.56	1.75	1.93	2.11	
	35	1.01	1.19	1.36	1.54	1.71	1.88	—	
	30	1.02	1.18	1.35	1.51	1.67	1.82	—	
-20	50	0.90	1.14	1.36	1.58	1.79	2.00	2.21	
	45	0.96	1.17	1.38	1.58	1.78	1.97	2.16	
	40	0.99	1.19	1.38	1.56	1.75	1.93	—	
	35	1.01	1.19	1.37	1.54	1.71	1.87	—	
	30	1.02	1.18	1.34	1.50	1.66	—	—	
-15	50	0.92	1.15	1.37	1.59	1.80	2.01	2.21	
	45	0.97	1.18	1.38	1.58	1.78	1.97	—	
	40	1.00	1.19	1.38	1.56	1.74	1.92	—	
	35	1.01	1.19	1.36	1.53	1.69	—	—	
	30	1.02	1.17	1.33	1.48	1.64	—	—	
-10	50	0.93	1.16	1.38	1.59	1.80	2.00	—	
	45	0.97	1.18	1.38	1.58	1.77	1.96	—	
	40	1.00	1.19	1.37	1.55	1.73	—	—	
	35	1.01	1.18	1.35	1.51	1.67	—	—	
	30	1.00	1.16	1.31	1.46	—	—	—	
-5	50	0.94	1.16	1.38	1.58	1.79	1.99	—	
	45	0.98	1.18	1.37	1.57	1.75	—	—	
	40	0.99	1.18	1.36	1.53	1.70	—	—	
	35	1.00	1.16	1.32	1.48	—	—	—	
	30	0.98	1.13	1.28	1.42	—	—	—	
0	50	0.94	1.16	1.37	1.57	1.77	—	—	
	45	0.97	1.17	1.36	1.54	1.73	—	—	
	40	0.98	1.16	1.33	1.50	—	—	—	
	35	0.98	1.14	1.29	1.44	—	—	—	
	30	0.95	1.09	1.23	—	—	—	—	

Operating Conditions

Equipment : Rapid Freezer (using a two-stage compression refrigeration unit)

Target Freezing Temperature : -40°C

Refrigerant : R404A

Operating Conditions	Right after Starting Operation	Right after Operation Ends
Condensing Temp. (CT)	40°C	40°C
Subcooling (SC)	30°C	40°C
Evaporating Temp. (ET)	-30°C	-50°C
Required Refrigerating Capacity	37.0kW (at max. load)	17.5kW

* If pressure drops in the distributor or evaporator need to be considered, obtain the correction factor from the tables on pages 1 to 3 and then divide the max. and min. required refrigerating capacities calculated previously by the correction factor.

Conditions

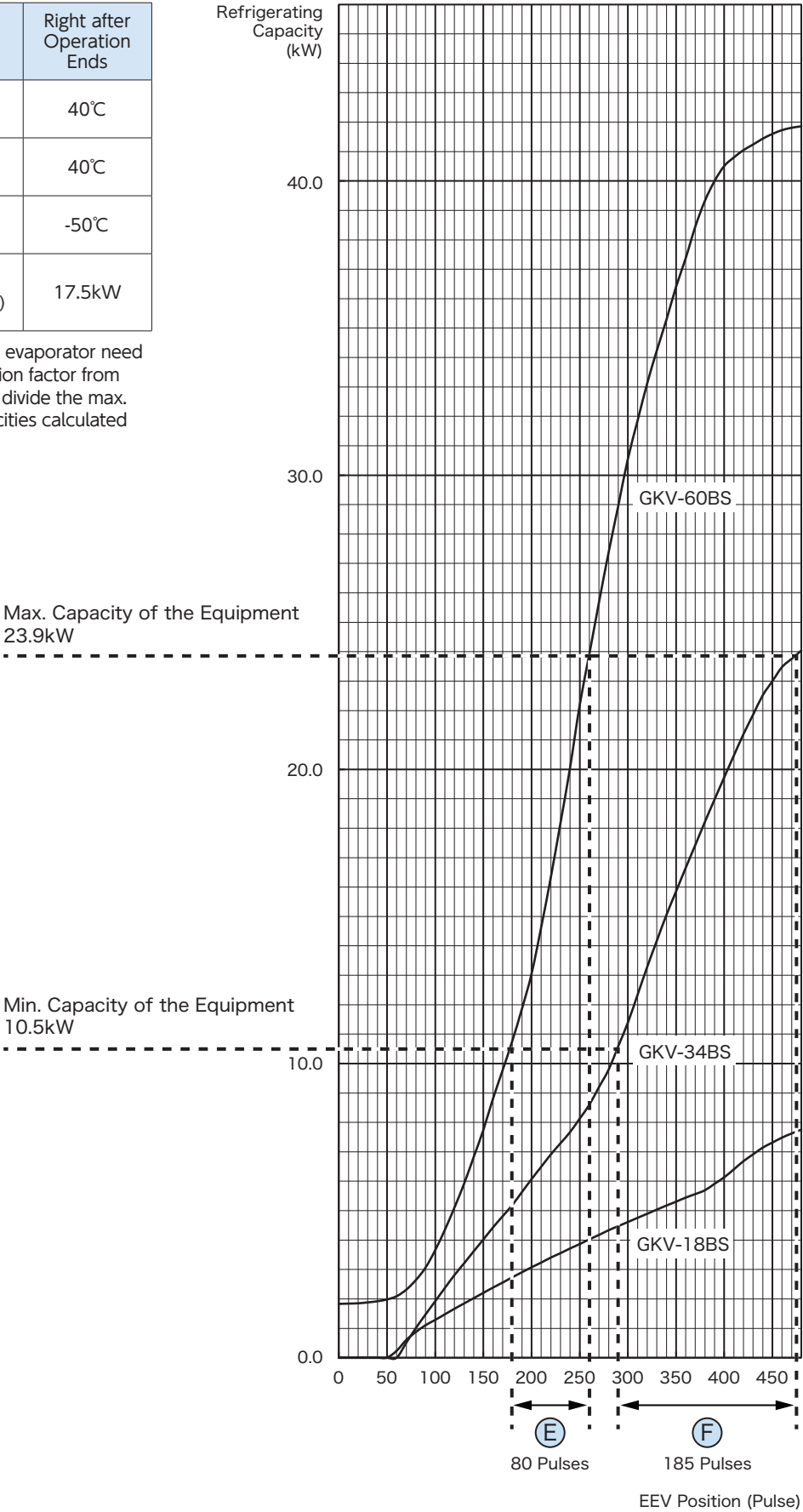
Refrigerant : R404A

Evaporating Temp. (ET) : -10°C

Condensing Temp. (CT) : 40°C

Subcooling : 0°C

Superheat : 5°C

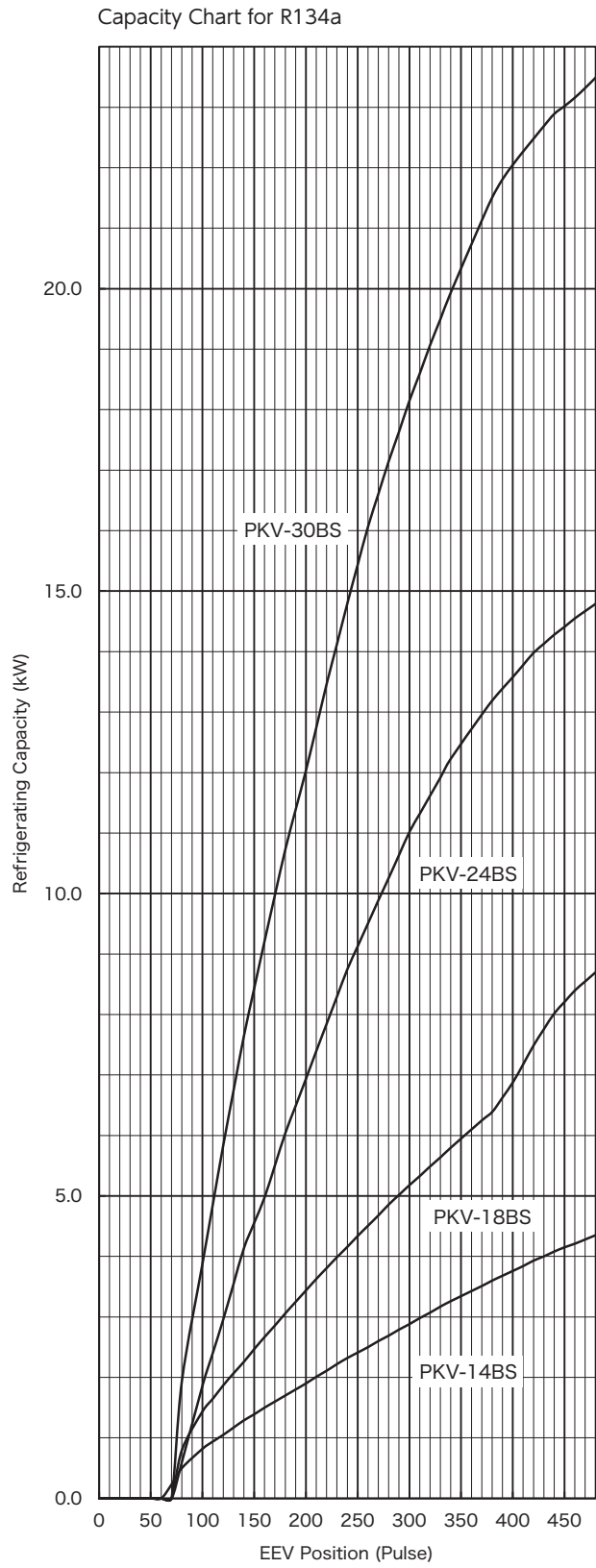


Capacity Chart for PKV

R134a < Type PKV >

Refrigerant : R134a
Evaporating Temp. (ET) : -10℃
Condensing Temp. (CT) : 40℃
Subcooling : 0℃
Superheat : 5℃

MOPD :
PKV-14BS 3.5 MPa
PKV-18BS 3.5 MPa
PKV-24BS 3.5 MPa
PKV-30BS 2.5 MPa



Correction Factor for R134a

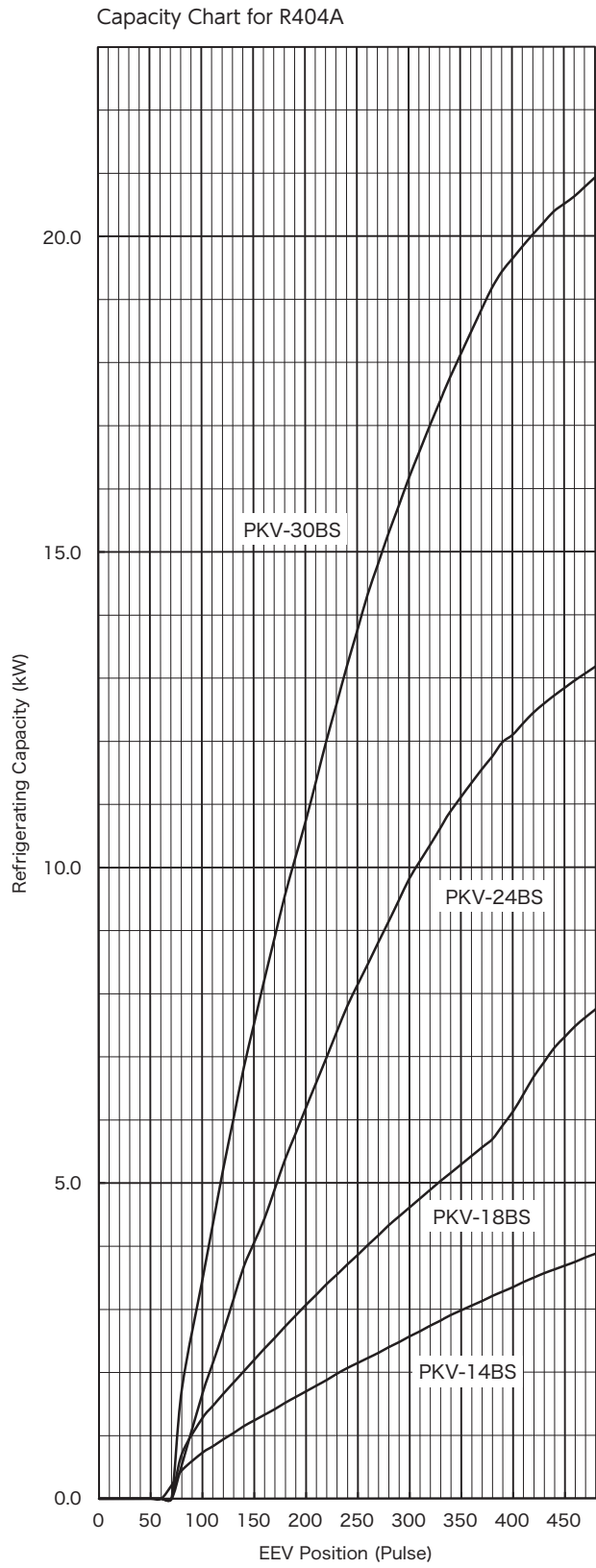
Superheat : 5℃

ET (℃)	CT (℃)	Subcooling (℃)						
		0	10	20	30	40	50	60
-50	50	0.88	1.03	1.19	1.34	1.49	1.64	1.79
	45	0.90	1.04	1.18	1.32	1.46	1.60	1.74
	40	0.90	1.04	1.17	1.30	1.43	1.56	1.70
	35	0.91	1.03	1.15	1.28	1.40	1.52	1.64
	30	0.90	1.01	1.13	1.24	1.36	1.47	1.58
	25	0.93	1.08	1.23	1.38	1.53	1.68	1.83
-40	50	0.93	1.08	1.22	1.37	1.51	1.65	1.79
	45	0.94	1.08	1.21	1.34	1.47	1.60	1.73
	40	0.94	1.08	1.21	1.34	1.47	1.60	1.73
	35	0.94	1.06	1.19	1.31	1.43	1.55	1.67
	30	0.93	1.04	1.16	1.27	1.38	1.49	1.61
	25	0.97	1.12	1.27	1.42	1.57	1.72	1.87
-30	50	0.97	1.12	1.26	1.40	1.54	1.68	1.81
	45	0.98	1.12	1.26	1.40	1.54	1.68	1.81
	40	0.98	1.11	1.24	1.37	1.50	1.62	1.75
	35	0.97	1.09	1.21	1.33	1.45	1.57	1.69
	30	0.95	1.06	1.17	1.28	1.39	1.50	—
	25	0.99	1.14	1.29	1.44	1.59	1.73	1.88
-25	50	0.99	1.13	1.27	1.41	1.55	1.69	1.82
	45	0.99	1.13	1.27	1.41	1.55	1.69	1.82
	40	0.99	1.12	1.25	1.38	1.50	1.63	1.76
	35	0.98	1.10	1.21	1.33	1.45	1.57	—
	30	0.95	1.07	1.17	1.28	1.39	1.50	—
	25	1.00	1.15	1.30	1.45	1.60	1.74	1.89
-20	50	1.00	1.14	1.28	1.42	1.56	1.69	1.83
	45	1.00	1.14	1.28	1.42	1.56	1.69	1.83
	40	1.00	1.12	1.25	1.38	1.51	1.63	—
	35	0.98	1.10	1.22	1.33	1.45	1.57	—
	30	0.96	1.06	1.17	1.28	1.39	—	—
	25	1.01	1.16	1.31	1.46	1.60	1.75	1.89
-15	50	1.01	1.15	1.29	1.42	1.56	1.69	—
	45	1.01	1.15	1.29	1.42	1.56	1.69	—
	40	1.00	1.13	1.25	1.38	1.50	1.63	—
	35	0.98	1.10	1.21	1.33	1.44	—	—
	30	0.95	1.06	1.16	1.27	1.37	—	—
	25	1.02	1.17	1.32	1.46	1.60	1.75	—
-10	50	1.02	1.15	1.29	1.42	1.55	1.69	—
	45	1.02	1.15	1.29	1.42	1.55	1.69	—
	40	1.00	1.12	1.25	1.37	1.49	—	—
	35	0.97	1.09	1.20	1.31	1.43	—	—
	30	0.94	1.04	1.15	1.25	—	—	—
	25	1.03	1.17	1.32	1.46	1.60	1.74	—
-5	50	1.02	1.15	1.28	1.41	1.54	—	—
	45	1.02	1.15	1.28	1.41	1.54	—	—
	40	0.99	1.12	1.24	1.36	1.48	—	—
	35	0.96	1.07	1.18	1.29	—	—	—
	30	0.92	1.02	1.12	1.22	—	—	—
	25	1.02	1.17	1.31	1.45	1.59	—	—
0	50	1.01	1.14	1.27	1.40	1.52	—	—
	45	0.98	1.10	1.22	1.33	—	—	—
	40	0.98	1.10	1.22	1.33	—	—	—
	35	0.94	1.05	1.16	1.26	—	—	—
	30	0.89	0.99	1.08	—	—	—	—
	25	1.02	1.16	1.29	1.43	1.56	—	—
5	50	1.00	1.12	1.25	1.37	—	—	—
	45	1.00	1.12	1.25	1.37	—	—	—
	40	0.96	1.07	1.19	1.30	—	—	—
	35	0.91	1.02	1.12	—	—	—	—
	30	0.85	0.94	1.03	—	—	—	—
	25	1.02	1.16	1.29	1.43	1.56	—	—
10	50	1.00	1.14	1.27	1.40	—	—	—
	45	0.97	1.09	1.21	1.33	—	—	—
	40	0.93	1.04	1.15	—	—	—	—
	35	0.87	0.97	1.06	—	—	—	—
	30	0.80	0.88	—	—	—	—	—
	25	1.00	1.14	1.27	1.40	—	—	—

R404A < Type PKV >

Refrigerant : R404A
Evaporating Temp. (ET) : -10℃
Condensing Temp. (CT) : 40℃
Subcooling : 0℃
Superheat : 5℃

MOPD :
PKV-14BS 3.5 MPa
PKV-18BS 3.5 MPa
PKV-24BS 3.5 MPa
PKV-30BS 2.5 MPa



Correction Factor for R404A

Superheat : 5℃

ET (℃)	CT (℃)	Subcooling (℃)						
		0	10	20	30	40	50	60
-50	50	0.75	0.99	1.22	1.44	1.66	1.88	2.09
	45	0.82	1.04	1.25	1.46	1.67	1.87	2.07
	40	0.87	1.08	1.28	1.47	1.66	1.85	2.04
	35	0.92	1.10	1.29	1.47	1.65	1.83	2.00
	30	0.95	1.12	1.29	1.46	1.63	1.79	1.96
	25	0.81	1.05	1.28	1.50	1.72	1.93	2.15
-40	50	0.81	1.05	1.28	1.50	1.72	1.93	2.15
	45	0.87	1.09	1.31	1.51	1.72	1.92	2.12
	40	0.92	1.13	1.32	1.52	1.71	1.90	2.08
	35	0.96	1.15	1.33	1.51	1.69	1.86	2.04
	30	0.98	1.16	1.33	1.49	1.66	1.82	1.98
	25	0.86	1.10	1.33	1.55	1.76	1.98	2.19
-30	50	0.92	1.14	1.35	1.55	1.76	1.96	2.15
	45	0.96	1.16	1.36	1.55	1.74	1.92	2.11
	40	0.96	1.16	1.36	1.55	1.74	1.92	2.11
	35	0.99	1.18	1.36	1.53	1.71	1.88	2.05
	30	1.01	1.18	1.35	1.51	1.67	1.83	—
	25	0.88	1.12	1.35	1.57	1.78	1.99	2.20
-25	50	0.94	1.16	1.36	1.57	1.77	1.97	2.16
	45	0.94	1.16	1.36	1.57	1.77	1.97	2.16
	40	0.98	1.18	1.37	1.56	1.75	1.93	2.11
	35	1.01	1.19	1.36	1.54	1.71	1.88	—
	30	1.02	1.18	1.35	1.51	1.67	1.82	—
	25	0.90	1.14	1.36	1.58	1.79	2.00	2.21
-20	50	0.96	1.17	1.38	1.58	1.78	1.97	2.16
	45	0.99	1.19	1.38	1.56	1.75	1.93	—
	40	0.99	1.19	1.38	1.56	1.75	1.93	—
	35	1.01	1.19	1.37	1.54	1.71	1.87	—
	30	1.02	1.18	1.34	1.50	1.66	—	—
	25	0.92	1.15	1.37	1.59	1.80	2.01	2.21
-15	50	0.97	1.18	1.38	1.58	1.78	1.97	—
	45	0.97	1.18	1.38	1.58	1.78	1.97	—
	40	1.00	1.19	1.38	1.56	1.74	1.92	—
	35	1.01	1.19	1.36	1.53	1.69	—	—
	30	1.02	1.17	1.33	1.48	1.64	—	—
	25	0.93	1.16	1.38	1.59	1.80	2.00	—
-10	50	0.97	1.18	1.38	1.58	1.77	1.96	—
	45	1.00	1.19	1.37	1.55	1.73	—	—
	40	1.00	1.19	1.37	1.55	1.73	—	—
	35	1.01	1.18	1.35	1.51	1.67	—	—
	30	1.00	1.16	1.31	1.46	—	—	—
	25	0.94	1.16	1.38	1.58	1.79	1.99	—
-5	50	0.98	1.18	1.37	1.57	1.75	—	—
	45	0.98	1.18	1.37	1.57	1.75	—	—
	40	0.99	1.18	1.36	1.53	1.70	—	—
	35	1.00	1.16	1.32	1.48	—	—	—
	30	0.98	1.13	1.28	1.42	—	—	—
	25	0.94	1.16	1.37	1.57	1.77	—	—
0	50	0.97	1.17	1.36	1.54	1.73	—	—
	45	0.98	1.16	1.33	1.50	—	—	—
	40	0.98	1.16	1.33	1.50	—	—	—
	35	0.98	1.14	1.29	1.44	—	—	—
	30	0.95	1.09	1.23	—	—	—	—
	25	0.93	1.15	1.35	1.55	1.74	—	—
5	50	0.96	1.15	1.33	1.51	—	—	—
	45	0.96	1.15	1.33	1.51	—	—	—
	40	0.96	1.13	1.30	1.46	—	—	—
	35	0.94	1.10	1.24	—	—	—	—
	30	0.91	1.04	1.17	—	—	—	—
	25	0.92	1.13	1.33	1.52	—	—	—
10	50	0.94	1.12	1.30	1.47	—	—	—
	45	0.93	1.09	1.25	—	—	—	—
	40	0.93	1.09	1.25	—	—	—	—
	35	0.90	1.04	1.18	—	—	—	—
	30	0.85	0.97	—	—	—	—	—
	25	0.92	1.13	1.33	1.52	—	—	—

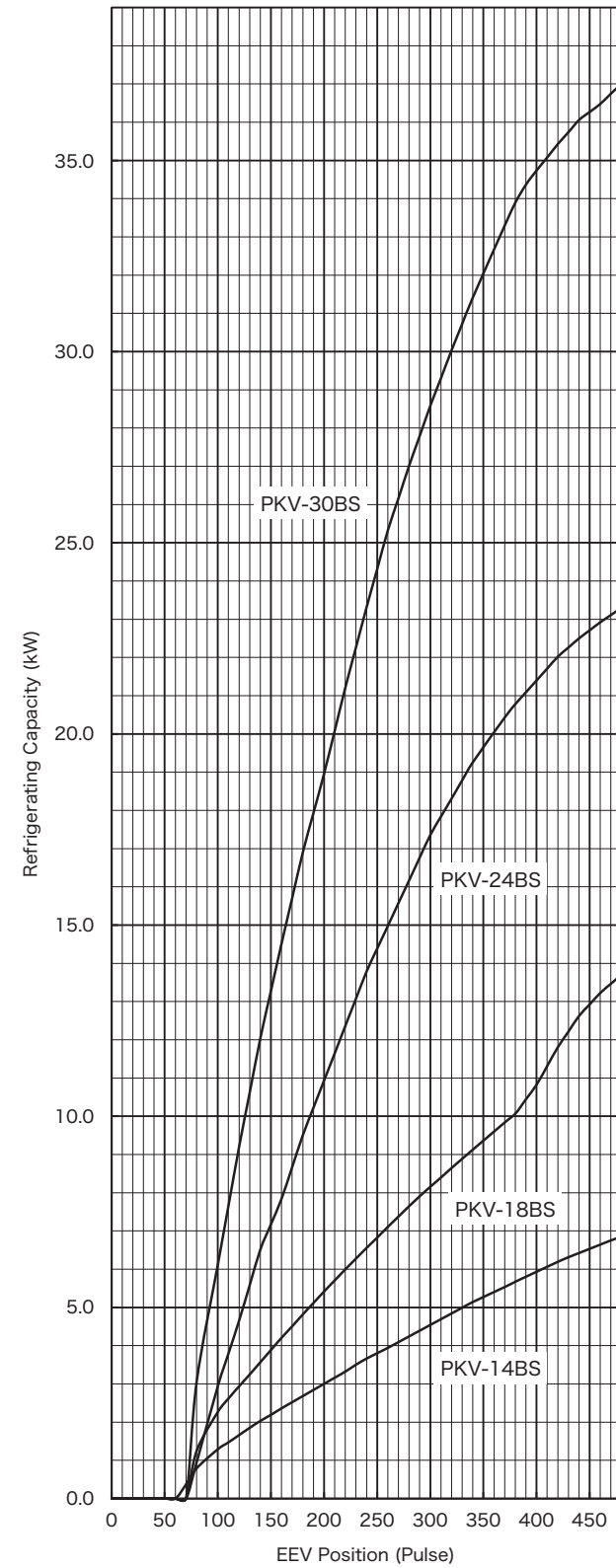
Capacity Chart for PKV

R410A < Type PKV >

Refrigerant : R410A
Evaporating Temp. (ET) : -25°C
Condensing Temp. (CT) : 40°C
Subcooling : 0°C
Superheat : 5°C

MOPD :
PKV-14BS 3.5 MPa
PKV-18BS 3.5 MPa
PKV-24BS 3.5 MPa
PKV-30BS 2.5 MPa

Capacity Chart for R410A



* PKV-30BS cannot be used under the conditions listed on the right because it is outside the differential pressure specification.

• ET -50 to -40°C / CT 45°C or more
• ET -30 to -15°C / CT 50°C or more

Correction Factor for R410A

Superheat : 5°C

ET (°C)	CT (°C)	Subcooling (°C)						
		0	10	20	30	40	50	60
-50	50	0.91	1.10	1.27	1.44	1.61	1.78	1.94
	45	0.94	1.12	1.28	1.44	1.60	1.75	1.90
	40	0.97	1.13	1.28	1.43	1.57	1.72	1.86
	35	0.98	1.13	1.27	1.41	1.54	1.68	1.81
	30	0.99	1.12	1.25	1.38	1.50	1.63	1.75
-40	50	0.93	1.12	1.30	1.47	1.64	1.80	1.96
	45	0.97	1.14	1.30	1.46	1.61	1.77	1.92
	40	0.99	1.15	1.30	1.44	1.59	1.73	1.87
	35	1.00	1.14	1.28	1.42	1.55	1.68	1.81
	30	1.00	1.13	1.26	1.39	1.51	1.63	1.75
-30	50	0.95	1.14	1.31	1.48	1.65	1.81	1.97
	45	0.98	1.15	1.31	1.47	1.62	1.77	1.92
	40	1.00	1.15	1.30	1.45	1.59	1.73	1.87
	35	1.00	1.15	1.28	1.41	1.55	1.68	1.80
	30	1.00	1.13	1.25	1.38	1.50	1.62	—
-25	50	0.96	1.14	1.32	1.48	1.65	1.81	1.96
	45	0.99	1.15	1.31	1.47	1.62	1.77	1.91
	40	1.00	1.15	1.30	1.44	1.58	1.72	1.86
	35	1.00	1.14	1.27	1.41	1.54	1.66	—
	30	0.99	1.12	1.24	1.36	1.48	1.60	—
-20	50	0.96	1.14	1.32	1.48	1.64	1.80	1.96
	45	0.99	1.15	1.31	1.46	1.61	1.76	1.90
	40	1.00	1.15	1.29	1.43	1.57	1.70	—
	35	1.00	1.13	1.26	1.39	1.52	1.65	—
	30	0.98	1.11	1.23	1.35	1.46	—	—
-15	50	0.96	1.14	1.31	1.47	1.63	1.79	1.94
	45	0.98	1.14	1.30	1.45	1.60	1.74	—
	40	0.99	1.14	1.28	1.42	1.55	1.68	—
	35	0.98	1.12	1.25	1.37	1.50	—	—
	30	0.97	1.09	1.20	1.32	1.43	—	—
-10	50	0.96	1.13	1.30	1.46	1.62	1.77	—
	45	0.97	1.13	1.28	1.43	1.58	1.72	—
	40	0.98	1.12	1.26	1.39	1.53	—	—
	35	0.97	1.10	1.22	1.34	1.47	—	—
	30	0.94	1.06	1.17	1.29	—	—	—
-5	50	0.95	1.12	1.28	1.44	1.60	1.75	—
	45	0.96	1.12	1.26	1.41	1.55	—	—
	40	0.96	1.10	1.23	1.36	1.49	—	—
	35	0.94	1.07	1.19	1.31	—	—	—
	30	0.91	1.03	1.14	1.24	—	—	—
0	50	0.93	1.10	1.26	1.42	1.57	—	—
	45	0.94	1.09	1.24	1.38	1.51	—	—
	40	0.93	1.07	1.20	1.33	—	—	—
	35	0.91	1.03	1.15	1.26	—	—	—
	30	0.88	0.98	1.09	—	—	—	—
5	50	0.91	1.08	1.23	1.38	1.53	—	—
	45	0.92	1.06	1.20	1.34	—	—	—
	40	0.90	1.03	1.16	1.28	—	—	—
	35	0.87	0.99	1.10	—	—	—	—
	30	0.82	0.92	1.02	—	—	—	—
10	50	0.89	1.05	1.20	1.34	—	—	—
	45	0.88	1.02	1.16	1.29	—	—	—
	40	0.86	0.98	1.10	—	—	—	—
	35	0.82	0.93	1.03	—	—	—	—
	30	0.76	0.85	—	—	—	—	—

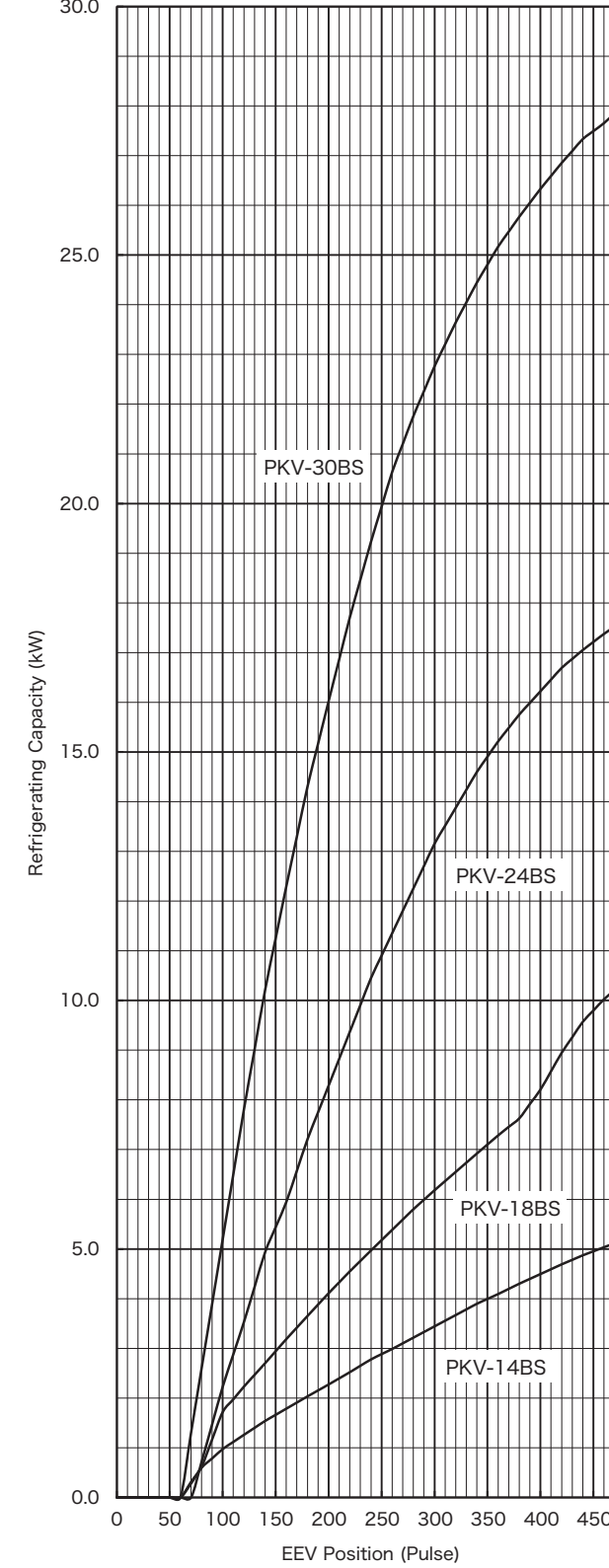
Capacity Chart for PKV

R448A < Type PKV >

Refrigerant : R448A
Evaporating Temp. (ET) : -10°C
Condensing Temp. (CT) : 40°C
Subcooling : 0°C
Superheat : 5°C

MOPD :
PKV-14BS 3.5 MPa
PKV-18BS 3.5 MPa
PKV-24BS 3.5 MPa
PKV-30BS 2.5 MPa

Capacity Chart for R448A



Correction Factor for R448A

Superheat : 5°C

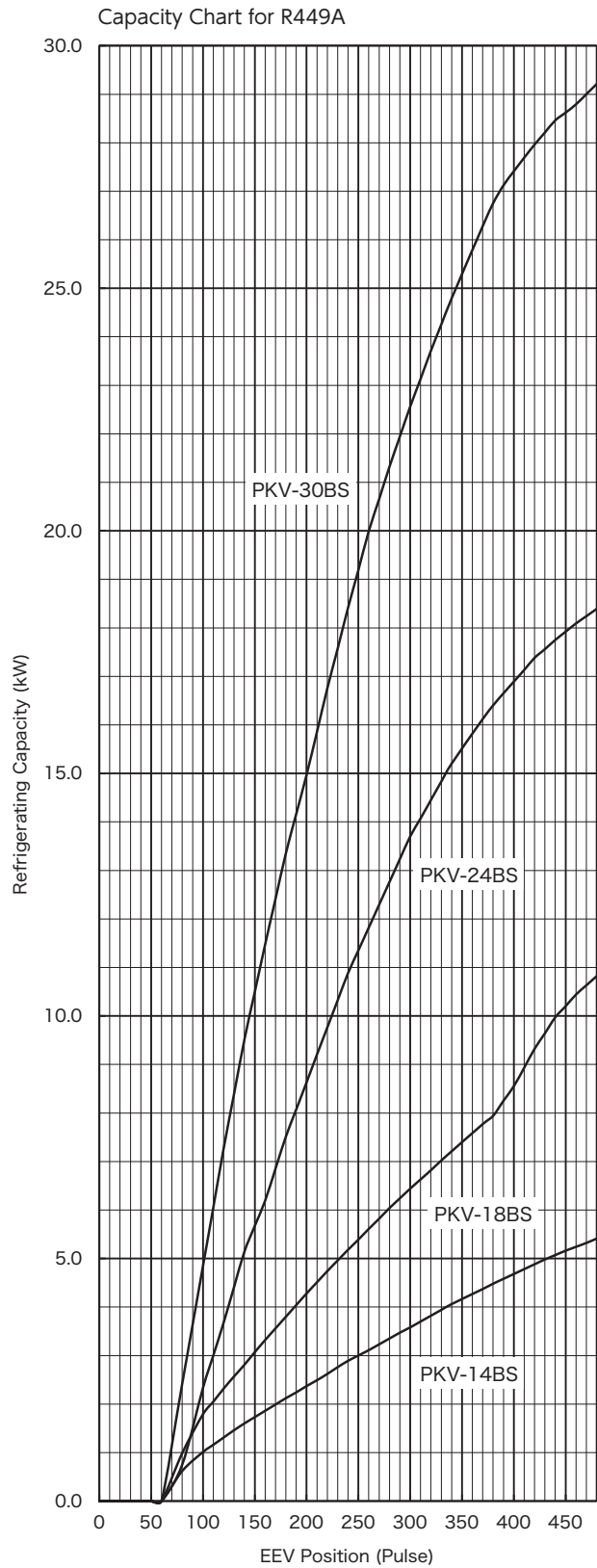
ET (°C)	CT (°C)	Subcooling (°C)						
		0	10	20	30	40	50	60
-50	50	0.82	1.00	1.17	1.34	1.51	1.67	1.84
	45	0.86	1.02	1.18	1.34	1.50	1.65	1.81
	40	0.89	1.04	1.19	1.34	1.48	1.63	1.77
	35	0.90	1.05	1.19	1.32	1.46	1.60	1.73
	30	0.91	1.05	1.18	1.30	1.43	1.56	1.68
-40	50	0.90	1.08	1.25	1.42	1.59	1.75	1.92
	45	0.93	1.10	1.26	1.42	1.57	1.73	1.88
	40	0.95	1.11	1.26	1.40	1.55	1.69	1.84
	35	0.97	1.11	1.25	1.38	1.52	1.66	1.79
	30	0.97	1.10	1.23	1.36	1.49	1.61	1.74
-30	50	0.94	1.11	1.29	1.45	1.62	1.78	1.94
	45	0.96	1.13	1.29	1.44	1.60	1.75	1.90
	40	0.98	1.13	1.28	1.43	1.57	1.71	1.86
	35	0.99	1.13	1.27	1.40	1.54	1.67	1.80
	30	0.99	1.12	1.24	1.37	1.49	1.62	—
-25	50	0.95	1.13	1.30	1.47	1.63	1.79	1.95
	45	0.98	1.14	1.30	1.45	1.61	1.76	1.91
	40	0.99	1.14	1.29	1.43	1.58	1.72	1.86
	35	1.00	1.13	1.27	1.41	1.54	1.67	—
	30	0.99	1.12	1.25	1.37	1.49	1.61	—
-20	50	0.96	1.14	1.31	1.47	1.64	1.81	1.96
	45	0.99	1.15	1.31	1.46	1.61	1.76	1.91
	40	1.00	1.15	1.29	1.44	1.58	1.72	—
	35	1.00	1.14	1.27	1.40	1.53	1.66	—
	30	0.99	1.12	1.24	1.36	1.48	—	—
-15	50	0.97	1.15	1.31	1.48	1.64	1.80	1.96
	45	0.99	1.15	1.31	1.46	1.61	1.76	—
	40	1.00	1.15	1.29	1.43	1.57	1.71	—
	35	1.00	1.13	1.27	1.40	1.53	—	—
	30	0.99	1.11	1.23	1.35	1.47	—	—
-10	50	0.98	1.15	1.32	1.48	1.64	1.80	—
	45	1.00	1.15	1.31	1.46	1.60	1.75	—
	40	1.00	1.14	1.29	1.42	1.56	—	—
	35	0.99	1.13	1.26	1.38	1.51	—	—
	30	0.98	1.10	1.22	1.33	—	—	—
-5	50	0.98	1.15	1.31	1.47	1.63	1.79	—
	45	0.99	1.15	1.30	1.45	1.59	—	—
	40	0.99	1.13	1.27	1.41	1.54	—	—
	35	0.98	1.11	1.24	1.36	—	—	—
	30	0.96	1.08	1.19	1.30	—	—	—
0	50	0.98	1.14	1.31	1.46	1.62	—	—
	45	0.99	1.14	1.29	1.43	1.57	—	—
	40	0.98	1.12	1.25	1.39	—	—	—
	35	0.96	1.09	1.21	1.33	—	—	—
	30	0.93	1.05	1.16	—	—	—	—
5	50	0.97	1.13	1.29	1.44	1.59	—	—
	45	0.97	1.12	1.26	1.40	—	—	—
	40	0.96	1.10	1.23	1.35	—	—	—
	35	0.94	1.06	1.17	—	—	—	—
	30	0.90	1.01	1.11	—	—	—	—
10	50	0.96	1.12	1.27	1.42	—	—	—
	45	0.95	1.10	1.23	1.37	—	—	—
	40	0.93	1.06	1.19	—	—	—	—
	35	0.90	1.02	1.13	—	—	—	—
	30	0.85	0.95	—	—	—	—	—

Capacity Chart for PKV

R449A < Type PKV >

Refrigerant : R449A
Evaporating Temp. (ET) : -10℃
Condensing Temp. (CT) : 40℃
Subcooling : 0℃
Superheat : 5℃

MOPD :
PKV-14BS 3.5 MPa
PKV-18BS 3.5 MPa
PKV-24BS 3.5 MPa
PKV-30BS 2.5 MPa



Correction Factor for R449A

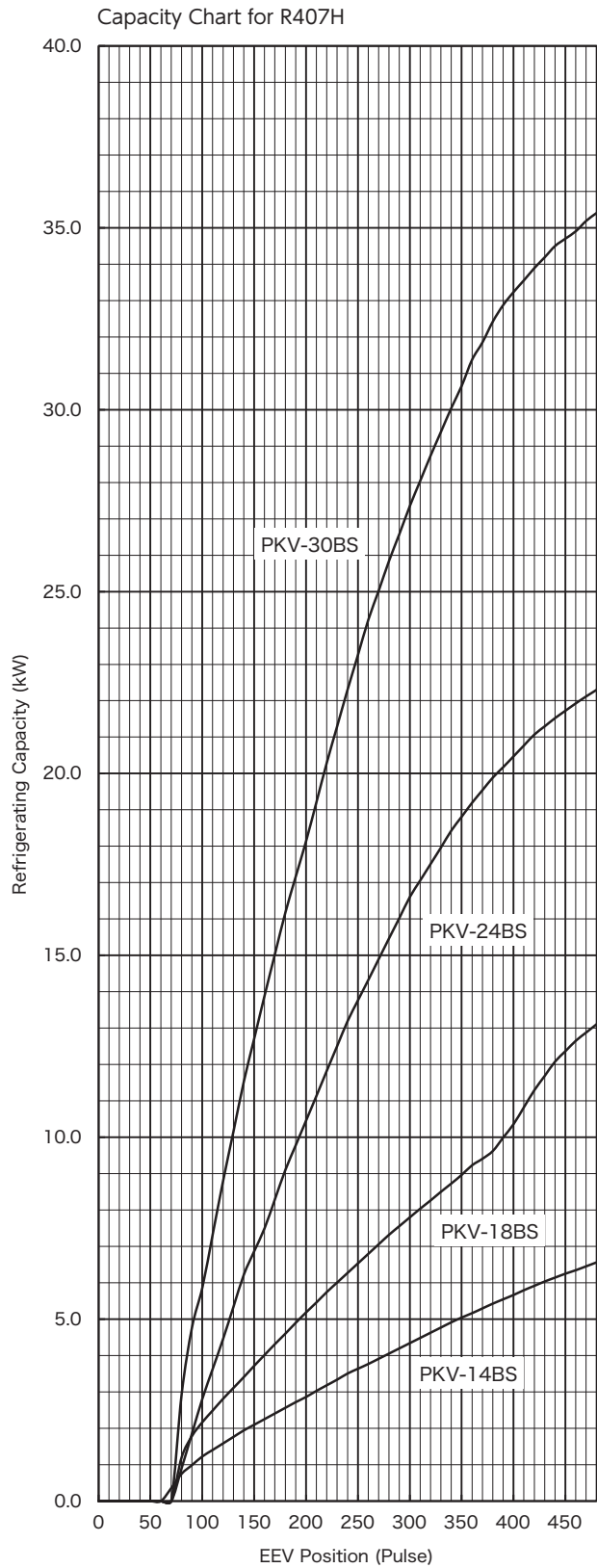
Superheat : 5℃

ET (℃)	CT (℃)	Subcooling (℃)						
		0	10	20	30	40	50	60
-50	50	0.85	1.03	1.21	1.38	1.55	1.71	1.88
	45	0.89	1.06	1.22	1.38	1.54	1.69	1.85
	40	0.91	1.07	1.22	1.37	1.52	1.67	1.81
	35	0.93	1.08	1.22	1.36	1.50	1.63	1.77
	30	0.94	1.07	1.21	1.34	1.47	1.59	1.72
	25	0.90	1.08	1.25	1.42	1.59	1.76	1.92
-40	50	0.90	1.08	1.25	1.42	1.58	1.73	1.89
	45	0.93	1.10	1.26	1.42	1.58	1.73	1.89
	40	0.95	1.11	1.26	1.41	1.56	1.70	1.85
	35	0.97	1.11	1.25	1.39	1.53	1.66	1.80
	30	0.97	1.10	1.23	1.36	1.49	1.62	1.74
	25	0.93	1.11	1.29	1.46	1.62	1.79	1.95
-30	50	0.93	1.11	1.29	1.45	1.60	1.76	1.91
	45	0.96	1.13	1.29	1.45	1.60	1.76	1.91
	40	0.98	1.13	1.28	1.43	1.58	1.72	1.86
	35	0.99	1.13	1.27	1.41	1.54	1.68	1.81
	30	0.99	1.12	1.25	1.37	1.50	1.62	—
	25	0.95	1.13	1.30	1.47	1.64	1.80	1.96
-25	50	0.95	1.13	1.30	1.46	1.61	1.77	1.92
	45	0.97	1.14	1.30	1.46	1.61	1.77	1.92
	40	0.99	1.14	1.29	1.44	1.58	1.73	1.87
	35	1.00	1.14	1.27	1.41	1.54	1.68	—
	30	0.99	1.12	1.25	1.37	1.50	1.62	—
	25	0.96	1.14	1.31	1.48	1.64	1.81	1.97
-20	50	0.96	1.14	1.31	1.48	1.64	1.81	1.97
	45	0.98	1.15	1.31	1.46	1.62	1.77	1.92
	40	1.00	1.15	1.30	1.44	1.58	1.72	—
	35	1.00	1.14	1.27	1.41	1.54	1.67	—
	30	0.99	1.12	1.24	1.37	1.49	—	—
	25	0.97	1.15	1.32	1.48	1.65	1.81	1.97
-15	50	0.99	1.15	1.31	1.46	1.62	1.77	—
	45	0.99	1.15	1.31	1.46	1.62	1.77	—
	40	1.00	1.15	1.29	1.44	1.58	1.72	—
	35	1.00	1.14	1.27	1.40	1.53	—	—
	30	0.99	1.11	1.23	1.36	1.48	—	—
	25	0.98	1.15	1.32	1.48	1.64	1.80	—
-10	50	0.98	1.15	1.31	1.46	1.61	1.76	—
	45	0.99	1.15	1.31	1.46	1.61	1.76	—
	40	1.00	1.15	1.29	1.43	1.57	—	—
	35	0.99	1.13	1.26	1.39	1.51	—	—
	30	0.98	1.10	1.22	1.34	—	—	—
	25	0.98	1.15	1.32	1.48	1.64	1.79	—
-5	50	0.98	1.15	1.32	1.48	1.64	1.79	—
	45	0.99	1.15	1.30	1.45	1.60	—	—
	40	0.99	1.14	1.28	1.41	1.55	—	—
	35	0.98	1.11	1.24	1.37	—	—	—
	30	0.96	1.08	1.19	1.31	—	—	—
	25	0.98	1.15	1.31	1.47	1.62	—	—
0	50	0.98	1.15	1.31	1.47	1.62	—	—
	45	0.99	1.14	1.29	1.43	1.58	—	—
	40	0.98	1.12	1.26	1.39	—	—	—
	35	0.96	1.09	1.21	1.34	—	—	—
	30	0.94	1.05	1.16	—	—	—	—
	25	0.97	1.13	1.29	1.45	1.60	—	—
5	50	0.97	1.12	1.27	1.41	—	—	—
	45	0.97	1.12	1.27	1.41	—	—	—
	40	0.96	1.10	1.23	1.36	—	—	—
	35	0.94	1.06	1.18	—	—	—	—
	30	0.90	1.01	1.11	—	—	—	—
	25	0.96	1.12	1.27	1.42	—	—	—
10	50	0.96	1.12	1.27	1.42	—	—	—
	45	0.95	1.10	1.24	1.37	—	—	—
	40	0.94	1.06	1.19	—	—	—	—
	35	0.90	1.02	1.13	—	—	—	—
	30	0.85	0.96	—	—	—	—	—
	25	0.96	1.12	1.27	1.42	—	—	—

R407H < Type PKV >

Refrigerant : R407H
Evaporating Temp. (ET) : -15℃
Condensing Temp. (CT) : 40℃
Subcooling : 0℃
Superheat : 5℃

MOPD :
PKV-14BS 3.5 MPa
PKV-18BS 3.5 MPa
PKV-24BS 3.5 MPa
PKV-30BS 2.5 MPa



Correction Factor for R407H

Superheat : 5℃

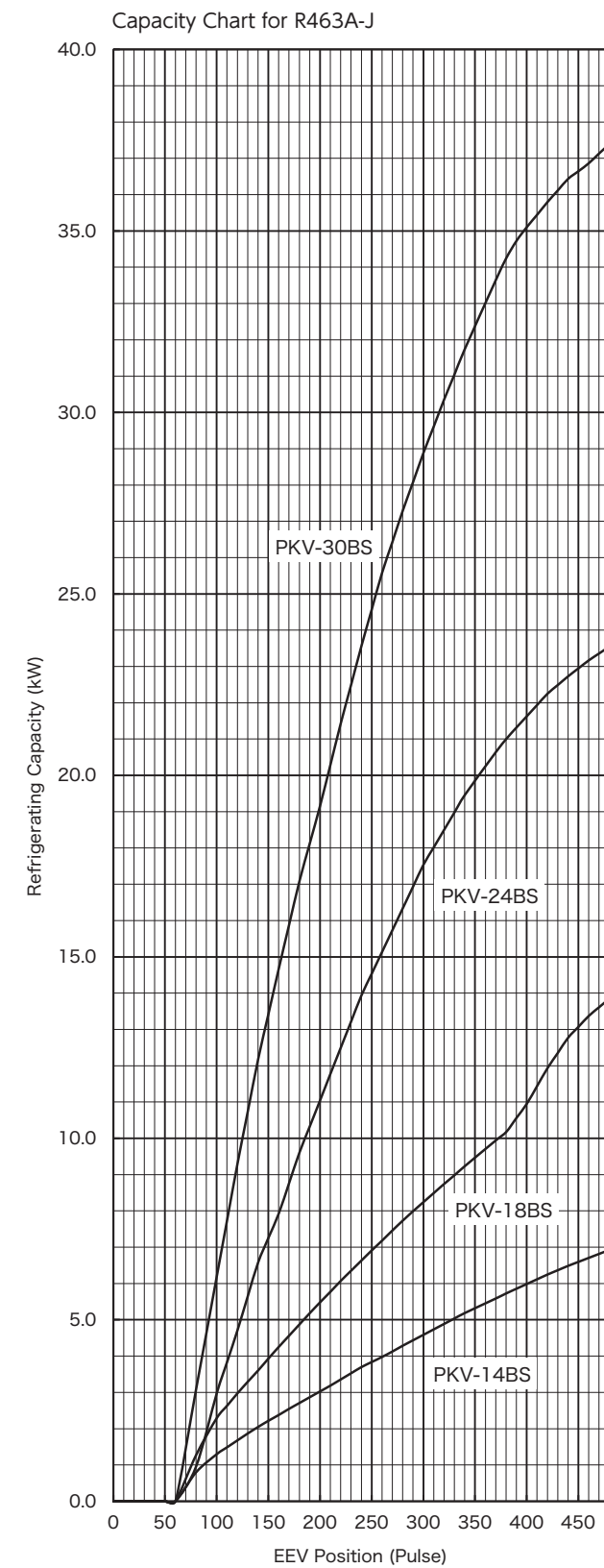
ET (℃)	CT (℃)	Subcooling (℃)						
		0	10	20	30	40	50	60
-50	50	0.91	1.06	1.21	1.36	1.51	1.65	1.79
	45	0.93	1.07	1.21	1.35	1.49	1.62	1.76
	40	0.94	1.07	1.20	1.33	1.46	1.59	1.71
	35	0.95	1.07	1.19	1.31	1.43	1.55	1.67
	30	0.94	1.06	1.17	1.28	1.39	1.50	1.61
	25	0.94	1.10	1.25	1.39	1.54	1.68	1.82
-40	50	0.94	1.10	1.24	1.38	1.52	1.65	1.78
	45	0.96	1.10	1.24	1.38	1.52	1.65	1.78
	40	0.97	1.10	1.23	1.36	1.49	1.61	1.74
	35	0.97	1.09	1.21	1.33	1.45	1.57	1.69
	30	0.96	1.08	1.19	1.30	1.41	1.52	1.63
	25	0.97	1.12	1.27	1.42	1.56	1.71	1.85
-30	50	0.97	1.12	1.27	1.40	1.54	1.67	1.80
	45	0.98	1.13	1.27	1.40	1.54	1.67	1.80
	40	0.99	1.12	1.25	1.38	1.50	1.63	1.75
	35	0.99	1.11	1.23	1.35	1.46	1.58	1.69
	30	0.98	1.09	1.20	1.31	1.42	1.52	—
	25	0.98	1.13	1.28	1.43	1.57	1.71	1.85
-25	50	0.98	1.13	1.27	1.41	1.54	1.67	1.80
	45	0.99	1.13	1.27	1.41	1.54	1.67	1.80
	40	1.00	1.13	1.25	1.38	1.50	1.63	1.75
	35	0.99	1.11	1.23	1.35	1.46	1.58	—
	30	0.98	1.09	1.20	1.30	1.41	1.52	—
	25	0.99	1.14	1.29	1.43	1.58	1.72	1.85
-20	50	0.99	1.14	1.29	1.41	1.54	1.67	1.80
	45	1.00	1.14	1.28	1.41	1.54	1.67	1.80
	40	1.00	1.13	1.26	1.38	1.50	1.62	—
	35	0.99	1.11	1.23	1.34	1.46	1.57	—
	30	0.98	1.08	1.19	1.30	1.40	—	—
	25	1.00	1.15	1.29	1.43	1.58	1.71	1.85
-15	50	1.00	1.14	1.28	1.41	1.54	1.67	—
	45	1.00	1.14	1.28	1.41	1.54	1.67	—
	40	1.00	1.13	1.25	1.37	1.50	1.62	—
	35	0.99	1.11	1.22	1.33	1.44	—	—
	30	0.97	1.08	1.18	1.28	1.39	—	—
	25	1.00	1.15	1.29	1.43	1.57	1.71	—
-10	50	1.00	1.14	1.27	1.40	1.53	1.66	—
	45	1.00	1.14	1.27	1.40	1.53	1.66	—
	40	1.00	1.12	1.24	1.36	1.48	—	—
	35	0.98	1.09	1.21	1.32	1.43	—	—
	30	0.96	1.06	1.16	1.26	—	—	—
	25	1.00	1.14	1.29	1.42	1.56	1.70	—
-5	50	1.00	1.13	1.26	1.39	1.52	—	—
	45	1.00	1.13	1.26	1.39	1.52	—	—
	40	0.99	1.11	1.23	1.35	1.46	—	—
	35	0.97	1.08	1.19	1.30	—	—	—
	30	0.94	1.04	1.14	1.24	—	—	—
	25	0.99	1.13	1.27	1.41	1.54	—	—
0	50	0.99	1.12	1.25	1.37	1.49	—	—
	45	0.97	1.09	1.21	1.32	—	—	—
	40	0.95	1.06	1.16	1.27	—	—	—
	35	0.91	1.01	1.10	—	—	—	—
	30	0.88	0.97	1.06	—	—	—	—
	25	0.96	1.10	1.23	1.36	—	—	—
5	50	0.96	1.10	1.23	1.35	—	—	—
	45	0.95	1.07	1.19	1.31	—	—	—
	40	0.92	1.03	1.14	—	—	—	—
	35	0.88	0.98	1.08	—	—	—	—
	30	0.83	0.92	—	—	—	—	—
	25	0.96	1.10	1.23	1.36	—	—	—

Capacity Chart for PKV

R463A-J < Type PKV >

Refrigerant : R463A-J
Evaporating Temp. (ET) : -20°C
Condensing Temp. (CT) : 30°C
Subcooling : 0°C
Superheat : 5°C

MOPD :
PKV-14BS 3.5 MPa
PKV-18BS 3.5 MPa
PKV-24BS 3.5 MPa
PKV-30BS 2.5 MPa



* PKV-30BS cannot be used under the conditions listed on the right because it is outside the differential pressure specification.

• ET -50 to -20°C / CT 45°C or more
• ET -15 to 0°C / CT 50°C

Correction Factor for R463A-J

Superheat : 5°C

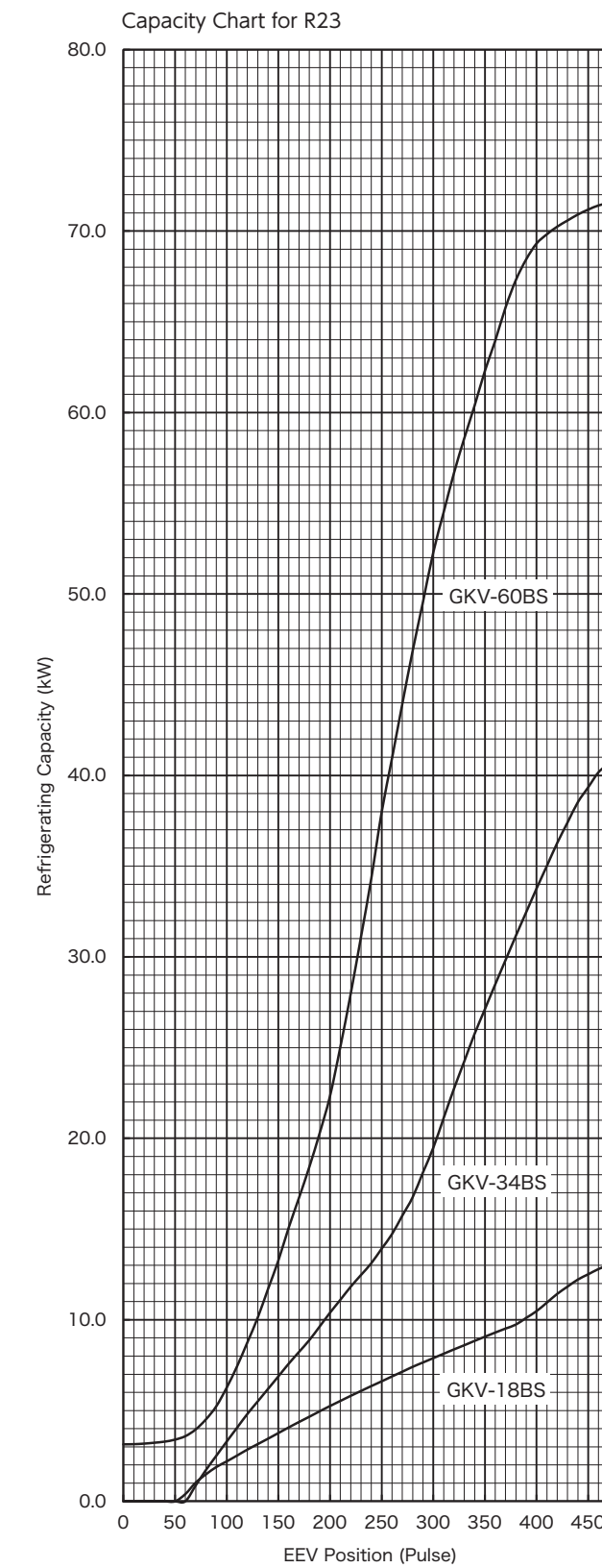
ET (°C)	CT (°C)	Subcooling (°C)						
		0	10	20	30	40	50	60
-50	50	0.85	1.04	1.21	1.38	1.55	1.72	1.88
	45	0.90	1.07	1.23	1.39	1.55	1.70	1.85
	40	0.93	1.09	1.24	1.39	1.54	1.68	1.82
	35	0.95	1.10	1.24	1.38	1.52	1.65	1.79
	30	0.96	1.10	1.23	1.36	1.49	1.62	1.75
	25	0.89	1.07	1.25	1.42	1.58	1.75	1.91
-40	45	0.93	1.10	1.26	1.42	1.58	1.73	1.88
	40	0.96	1.11	1.27	1.42	1.56	1.71	1.85
	35	0.98	1.12	1.26	1.40	1.54	1.67	1.81
	30	0.99	1.12	1.25	1.38	1.51	1.64	1.76
	25	0.92	1.10	1.27	1.44	1.61	1.77	1.93
	20	0.95	1.12	1.28	1.44	1.60	1.75	1.90
-30	40	0.98	1.13	1.28	1.43	1.58	1.72	1.86
	35	0.99	1.14	1.28	1.41	1.55	1.68	1.81
	30	1.00	1.13	1.26	1.39	1.51	1.64	—
	25	0.93	1.11	1.28	1.45	1.62	1.78	1.94
	20	0.96	1.13	1.29	1.45	1.60	1.75	1.90
	15	0.99	1.14	1.29	1.44	1.58	1.72	1.86
-25	35	1.00	1.14	1.28	1.42	1.55	1.68	—
	30	1.00	1.13	1.26	1.39	1.51	1.63	—
	25	0.94	1.12	1.29	1.46	1.62	1.78	1.94
	20	0.97	1.14	1.30	1.45	1.60	1.75	1.90
	15	0.99	1.14	1.29	1.43	1.57	1.71	—
	10	1.00	1.14	1.28	1.41	1.54	1.67	—
-20	30	1.00	1.13	1.26	1.38	1.50	—	—
	25	0.94	1.12	1.29	1.46	1.62	1.78	1.93
	20	0.97	1.14	1.30	1.45	1.60	1.75	—
	15	0.99	1.14	1.29	1.43	1.57	1.71	—
	10	1.00	1.14	1.27	1.40	1.53	—	—
	5	0.99	1.12	1.24	1.37	1.49	—	—
-15	50	0.94	1.12	1.29	1.46	1.61	1.77	—
	45	0.97	1.14	1.29	1.44	1.59	1.74	—
	40	0.99	1.14	1.28	1.42	1.56	—	—
	35	0.99	1.13	1.26	1.39	1.51	—	—
	30	0.98	1.11	1.23	1.35	—	—	—
	25	0.95	1.12	1.29	1.45	1.60	1.76	—
-10	45	0.97	1.13	1.28	1.43	1.57	—	—
	40	0.98	1.12	1.26	1.40	1.54	—	—
	35	0.98	1.11	1.24	1.37	—	—	—
	30	0.97	1.09	1.20	1.32	—	—	—
	25	0.94	1.11	1.27	1.43	1.59	—	—
	20	0.96	1.11	1.26	1.41	1.55	—	—
-5	40	0.97	1.11	1.24	1.38	—	—	—
	35	0.96	1.09	1.21	1.34	—	—	—
	30	0.94	1.06	1.17	—	—	—	—
	25	0.93	1.10	1.26	1.41	1.56	—	—
	20	0.94	1.10	1.24	1.38	—	—	—
	15	0.95	1.08	1.22	1.34	—	—	—
0	35	0.93	1.06	1.18	—	—	—	—
	30	0.91	1.02	1.13	—	—	—	—
	25	0.91	1.08	1.23	1.38	—	—	—
	20	0.92	1.07	1.21	1.35	—	—	—
	15	0.92	1.05	1.18	—	—	—	—
	10	0.90	1.02	1.13	—	—	—	—
5	30	0.87	0.97	—	—	—	—	—

Capacity Chart for GKV

R23 < Type GKV >

Refrigerant : R23
Evaporating Temp. (ET) : -65°C
Condensing Temp. (CT) : 0°C
Subcooling : 0°C
Superheat : 5°C

MOPD :
GKV-18BS 3.5 MPa
GKV-34BS 1.77 MPa
GKV-60BS 1.77 MPa



* GKV-34BS, 60BS cannot be used under the conditions listed on the right because it is outside the differential pressure specification.

• ET -70 to -40°C / CT over 0°C

Correction Factor for R23

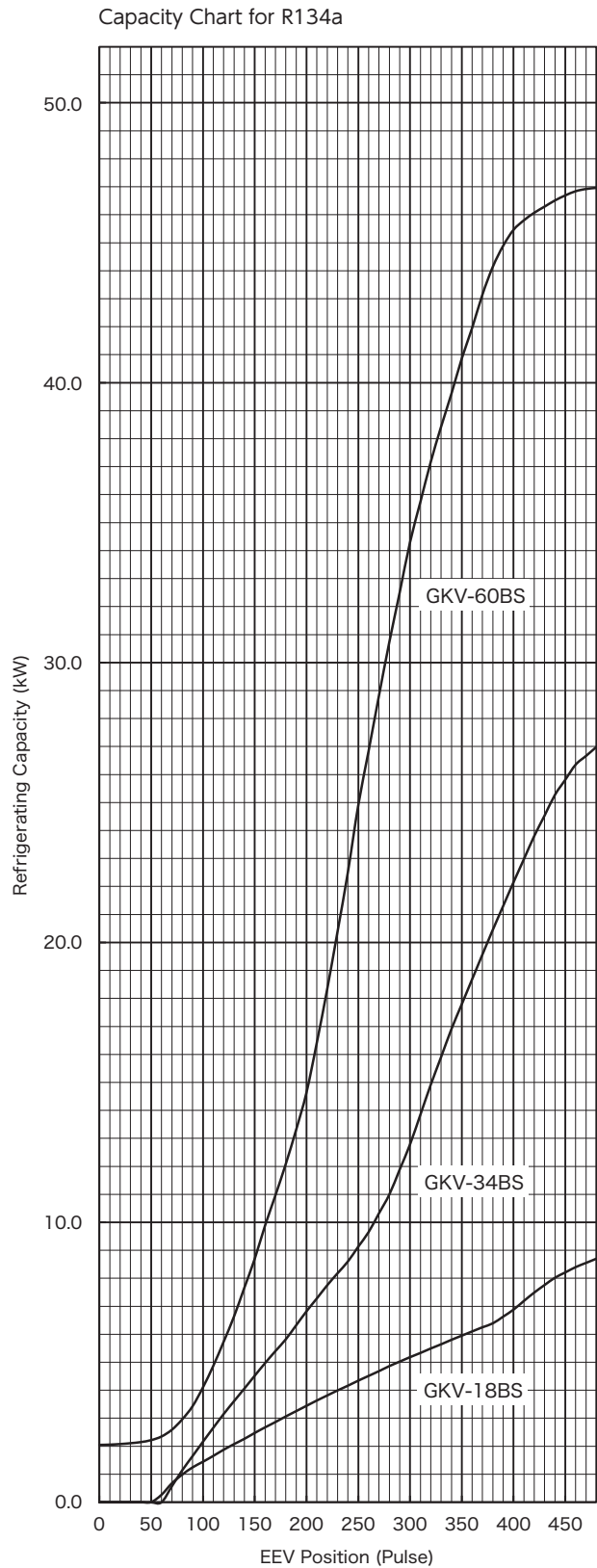
Superheat : 5°C

ET (°C)	CT (°C)	Subcooling (°C)						
		0	10	20	30	40	50	60
-70	0	1.00	1.16	1.31	1.46	1.60	1.74	1.88
	-10	0.99	1.12	1.25	1.37	1.49	1.61	—
	-20	0.95	1.05	1.16	1.26	1.36	—	—
	-30	0.87	0.95	1.04	1.12	—	—	—
	-40	0.76	0.82	0.89	—	—	—	—
	0	1.00	1.16	1.31	1.45	1.59	1.73	1.87
-65	-10	0.99	1.11	1.24	1.36	1.48	1.60	—
	-20	0.93	1.04	1.14	1.24	1.34	—	—
	-30	0.85	0.93	1.01	1.09	—	—	—
	-40	0.72	0.79	0.85	—	—	—	—
	0	1.00	1.15	1.30	1.44	1.58	1.72	—
	-10	0.98	1.10	1.22	1.34	1.46	—	—
-60	-20	0.92	1.02	1.12	1.21	—	—	—
	-30	0.82	0.90	0.97	—	—	—	—
	-40	0.67	0.73	—	—	—	—	—
	0	0.99	1.14	1.28	1.43	1.57	1.70	—
	-10	0.96	1.08	1.20	1.32	1.43	—	—
	-20	0.89	0.99	1.08	1.18	—	—	—
-55	-30	0.77	0.85	0.92	—	—	—	—
	-40	0.61	0.66	—	—	—	—	—
	0	0.97	1.12	1.26	1.40	1.54	—	—
	-10	0.94	1.06	1.17	1.29	—	—	—
	-20	0.85	0.95	1.04	—	—	—	—
	-30	0.72	0.79	—	—	—	—	—
-50	-40	0.52	—	—	—	—	—	—
	0	0.96	1.10	1.24	1.37	1.51	—	—
	-10	0.91	1.02	1.13	1.24	—	—	—
	-20	0.81	0.90	0.98	—	—	—	—
	-30	0.65	0.71	—	—	—	—	—
	-40	0.38	—	—	—	—	—	—
-45	0	0.93	1.07	1.20	1.34	—	—	—
	-10	0.87	0.98	1.08	—	—	—	—
	-20	0.75	0.83	—	—	—	—	—
	-30	0.55	—	—	—	—	—	—
	0	0.90	1.03	1.16	1.29	—	—	—
	-10	0.82	0.92	1.02	—	—	—	—
-40	-20	0.67	0.74	—	—	—	—	—
	-30	0.40	—	—	—	—	—	—
	0	0.86	0.98	1.11	—	—	—	—
	-10	0.76	0.85	—	—	—	—	—
	-20	0.57	—	—	—	—	—	—
	0	0.80	0.92	1.04	—	—	—	—
-35	-10	0.67	0.76	—	—	—	—	—
	-20	0.41	—	—	—	—	—	—
	0	0.74	0.85	—	—	—	—	—
	-10	0.57	—	—	—	—	—	—

R134a < Type GKV >

Refrigerant : R134a
Evaporating Temp. (ET) : -10℃
Condensing Temp. (CT) : 40℃
Subcooling : 0℃
Superheat : 5℃

MOPD :
GKV-18BS 3.5 MPa
GKV-34BS 1.77 MPa
GKV-60BS 1.77 MPa



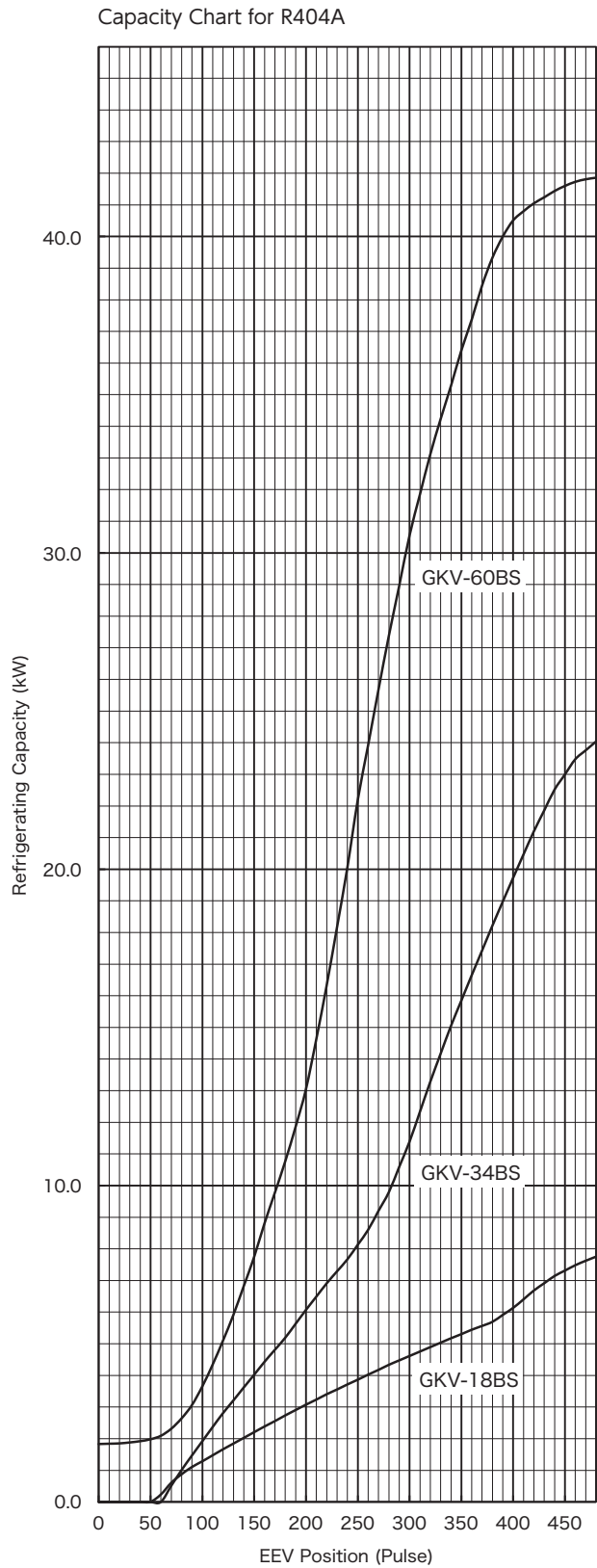
Correction Factor for R134a Superheat : 5℃

ET (℃)	CT (℃)	Subcooling (℃)						
		0	10	20	30	40	50	60
-70	50	0.77	0.93	1.08	1.23	1.38	1.53	1.68
	45	0.80	0.94	1.08	1.22	1.36	1.50	1.64
	40	0.81	0.95	1.08	1.21	1.34	1.47	1.60
	35	0.82	0.95	1.07	1.19	1.31	1.44	1.56
	30	0.82	0.94	1.05	1.17	1.28	1.39	1.51
-60	50	0.83	0.98	1.13	1.28	1.44	1.59	1.73
	45	0.85	0.99	1.13	1.28	1.42	1.56	1.70
	40	0.86	0.99	1.13	1.26	1.39	1.52	1.65
	35	0.86	0.99	1.11	1.24	1.36	1.48	1.60
	30	0.86	0.98	1.09	1.21	1.32	1.43	1.55
-50	50	0.88	1.03	1.19	1.34	1.49	1.64	1.79
	45	0.90	1.04	1.18	1.32	1.46	1.60	1.74
	40	0.90	1.04	1.17	1.30	1.43	1.56	1.70
	35	0.91	1.03	1.15	1.28	1.40	1.52	1.64
	30	0.90	1.01	1.13	1.24	1.36	1.47	1.58
-40	50	0.93	1.08	1.23	1.38	1.53	1.68	1.83
	45	0.94	1.08	1.22	1.37	1.51	1.65	1.79
	40	0.94	1.08	1.21	1.34	1.47	1.60	1.73
	35	0.94	1.06	1.19	1.31	1.43	1.55	1.67
	30	0.93	1.04	1.16	1.27	1.38	1.49	1.61
-30	50	0.97	1.12	1.27	1.42	1.57	1.72	1.87
	45	0.98	1.12	1.26	1.40	1.54	1.68	1.81
	40	0.98	1.11	1.24	1.37	1.50	1.62	1.75
	35	0.97	1.09	1.21	1.33	1.45	1.57	1.69
	30	0.95	1.06	1.17	1.28	1.39	1.50	—
-25	50	0.99	1.14	1.29	1.44	1.59	1.73	1.88
	45	0.99	1.13	1.27	1.41	1.55	1.69	1.82
	40	0.99	1.12	1.25	1.38	1.50	1.63	1.76
	35	0.98	1.10	1.21	1.33	1.45	1.57	—
	30	0.95	1.07	1.17	1.28	1.39	1.50	—
-20	50	1.00	1.15	1.30	1.45	1.60	1.74	1.89
	45	1.00	1.14	1.28	1.42	1.56	1.69	1.83
	40	1.00	1.12	1.25	1.38	1.51	1.63	—
	35	0.98	1.10	1.22	1.33	1.45	1.57	—
	30	0.96	1.06	1.17	1.28	1.39	—	—
-15	50	1.01	1.16	1.31	1.46	1.60	1.75	1.89
	45	1.01	1.15	1.29	1.42	1.56	1.69	—
	40	1.00	1.13	1.25	1.38	1.50	1.63	—
	35	0.98	1.10	1.21	1.33	1.44	—	—
	30	0.95	1.06	1.16	1.27	1.37	—	—
-10	50	1.02	1.17	1.32	1.46	1.60	1.75	—
	45	1.02	1.15	1.29	1.42	1.55	1.69	—
	40	1.00	1.12	1.25	1.37	1.49	—	—
	35	0.97	1.09	1.20	1.31	1.43	—	—
	30	0.94	1.04	1.15	1.25	—	—	—
-5	50	1.03	1.17	1.32	1.46	1.60	1.74	—
	45	1.02	1.15	1.28	1.41	1.54	—	—
	40	0.99	1.12	1.24	1.36	1.48	—	—
	35	0.96	1.07	1.18	1.29	—	—	—
	30	0.92	1.02	1.12	1.22	—	—	—
0	50	1.02	1.17	1.31	1.45	1.59	—	—
	45	1.01	1.14	1.27	1.40	1.52	—	—
	40	0.98	1.10	1.22	1.33	—	—	—
	35	0.94	1.05	1.16	1.26	—	—	—
	30	0.89	0.99	1.08	—	—	—	—
5	50	1.02	1.16	1.29	1.43	1.56	—	—
	45	1.00	1.12	1.25	1.37	—	—	—
	40	0.96	1.07	1.19	1.30	—	—	—
	35	0.91	1.02	1.12	—	—	—	—
	30	0.85	0.94	1.03	—	—	—	—
10	50	1.00	1.14	1.27	1.40	—	—	—
	45	0.97	1.09	1.21	1.33	—	—	—
	40	0.93	1.04	1.15	—	—	—	—
	35	0.87	0.97	1.06	—	—	—	—
	30	0.80	0.88	—	—	—	—	—

R404A < Type GKV >

Refrigerant : R404A
Evaporating Temp. (ET) : -10℃
Condensing Temp. (CT) : 40℃
Subcooling : 0℃
Superheat : 5℃

MOPD :
GKV-18BS 3.5 MPa
GKV-34BS 1.77 MPa
GKV-60BS 1.77 MPa



* GKV-34BS, 60BS cannot be used under the conditions listed on the right because it is outside the differential pressure specification.

- ET -70 to -60℃ / CT 40℃ or more
- ET -50 to -25℃ / CT 45℃ or more
- ET -20 to -5℃ / CT 50℃

Correction Factor for R404A Superheat : 5℃

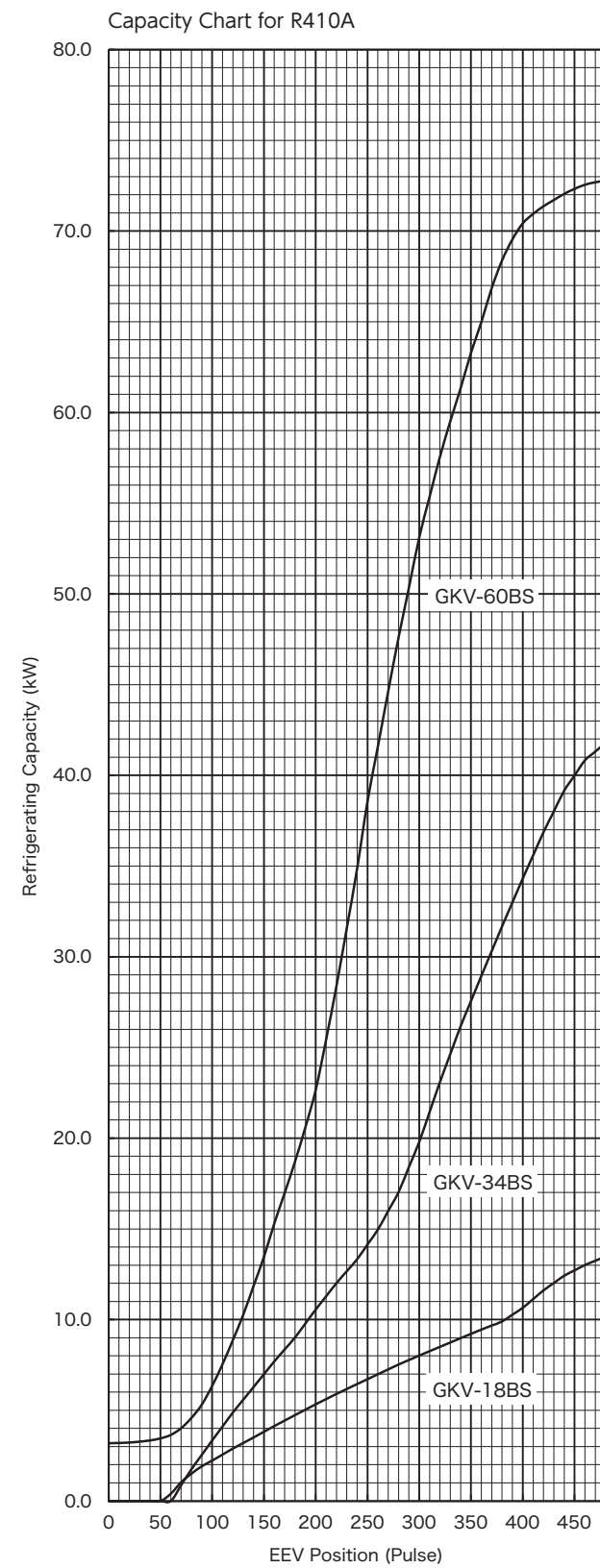
ET (℃)	CT (℃)	Subcooling (℃)						
		0	10	20	30	40	50	60
-70	50	0.61	0.85	1.08	1.30	1.52	1.74	1.95
	45	0.69	0.91	1.12	1.33	1.54	1.74	1.94
	40	0.75	0.96	1.16	1.35	1.54	1.73	1.92
	35	0.80	0.99	1.18	1.36	1.54	1.72	1.90
	30	0.84	1.02	1.19	1.36	1.53	1.70	1.86
-60	50	0.68	0.92	1.15	1.37	1.59	1.81	2.03
	45	0.76	0.98	1.19	1.40	1.61	1.81	2.01
	40	0.82	1.02	1.22	1.41	1.61	1.80	1.99
	35	0.86	1.05	1.24	1.42	1.60	1.78	1.96
	30	0.90	1.07	1.24	1.41	1.58	1.75	1.91
-50	50	0.75	0.99	1.22	1.44	1.66	1.88	2.09
	45	0.82	1.04	1.25	1.46	1.67	1.87	2.07
	40	0.87	1.08	1.28	1.47	1.66	1.85	2.04
	35	0.92	1.10	1.29	1.47	1.65	1.83	2.00
	30	0.95	1.12	1.29	1.46	1.63	1.79	1.96
-40	50	0.81	1.05	1.28	1.50	1.72	1.93	2.15
	45	0.87	1.09	1.31	1.51	1.72	1.92	2.12
	40	0.92	1.13	1.32	1.52	1.71	1.90	2.08
	35	0.96	1.15	1.33	1.51	1.69	1.86	2.04
	30	0.98	1.16	1.33	1.49	1.66	1.82	1.98
-30	50	0.86	1.10	1.33	1.55	1.76	1.98	2.19
	45	0.92	1.14	1.35	1.55	1.76	1.96	2.15
	40	0.96	1.16	1.36	1.55	1.74	1.92	2.11
	35	0.99	1.18	1.36	1.53	1.71	1.88	2.05
	30	1.01	1.18	1.35	1.51	1.67	1.83	—
-25	50	0.88	1.12	1.35	1.57	1.78	1.99	2.20
	45	0.94	1.16	1.36	1.57	1.77	1.97	2.16
	40	0.98	1.18	1.37	1.56	1.75	1.93	2.11
	35	1.01	1.19	1.36	1.54	1.71	1.88	—
	30	1.02	1.18	1.35	1.51	1.67	1.82	—
-20	50	0.90	1.14	1.36	1.58	1.79	2.00	2.21
	45	0.96	1.17	1.38	1.58	1.78	1.97	2.16
	40	0.99	1.19	1.38	1.56	1.75	1.93	—
	35	1.01	1.19	1.37	1.54	1.71	1.87	—
	30	1.02	1.18	1.34	1.50	1.66	—	—
-15	50	0.92	1.15	1.37	1.59	1.80	2.01	2.21
	45	0.97	1.18	1.38	1.58	1.78	1.97	—
	40	1.00	1.19	1.38	1.56	1.74	1.92	—
	35	1.01	1.19	1.36	1.53	1.69	—	—
	30	1.02	1.17	1.33	1.48	1.64	—	—
-10	50	0.93	1.16	1.38	1.59	1.80	2.00	—
	45	0.97	1.18	1.38	1.58	1.77	1.96	—
	40	1.00	1.19	1.37	1.55	1.73	—	—
	35	1.01	1.18	1.35	1.51	1.67	—	—
	30	1.00	1.16	1.31	1.46	—	—	—
-5	50	0.94	1.16	1.38	1.58	1.79	1.99	—
	45	0.98	1.18	1.37	1.57	1.75	—	—
	40	0.99	1.18	1.36	1.53	1.70	—	—
	35	1.00	1.16	1.32	1.48	—	—	—
	30	0.98	1.13	1.28	1.42	—	—	—
0	50	0.94	1.16	1.37	1.57	1.77	—	—
	45	0.97	1.17	1.36	1.54	1.73	—	—
	40	0.98	1.16	1.33	1.50	—	—	—
	35	0.98	1.14	1.29	1.44	—	—	—
	30	0.95	1.09	1.23	—	—	—	—
5	50	0.93	1.15	1.35	1.55	1.74	—	—
	45	0.96	1.15	1.33	1.51	—	—	—
	40	0.96	1.13	1.30	1.46	—	—	—
	35	0.94	1.10	1.24	—	—	—	—
	30	0.91	1.04	1.17	—	—	—	—
10	50	0.92	1.13	1.33	1.52	—	—	—
	45	0.94	1.12	1.30	1.47	—	—	—
	40	0.93	1.09	1.25	—	—	—	—
	35	0.90	1.04	1.18	—	—	—	—
	30	0.85	0.97	—	—	—	—	—

Capacity Chart for GKV

R410A < Type GKV >

Refrigerant : R410A
 Evaporating Temp. (ET) : -20°C
 Condensing Temp. (CT) : 30°C
 Subcooling : 0°C
 Superheat : 5°C

MOPD :
 GKV-18BS 3.5 MPa
 GKV-34BS 1.77 MPa
 GKV-60BS 1.77 MPa



* GKV-34BS, 60BS cannot be used under the conditions listed on the right because it is outside the differential pressure specification.

• ET -70 ~ -30°C / CT 35°C or more
 • ET -25 ~ -15°C / CT 40°C or more
 • ET -10 ~ 0°C / CT 45°C or more
 • ET 5 ~ 10°C / CT 50°C or more

Correction Factor for R410A

Superheat : 5°C

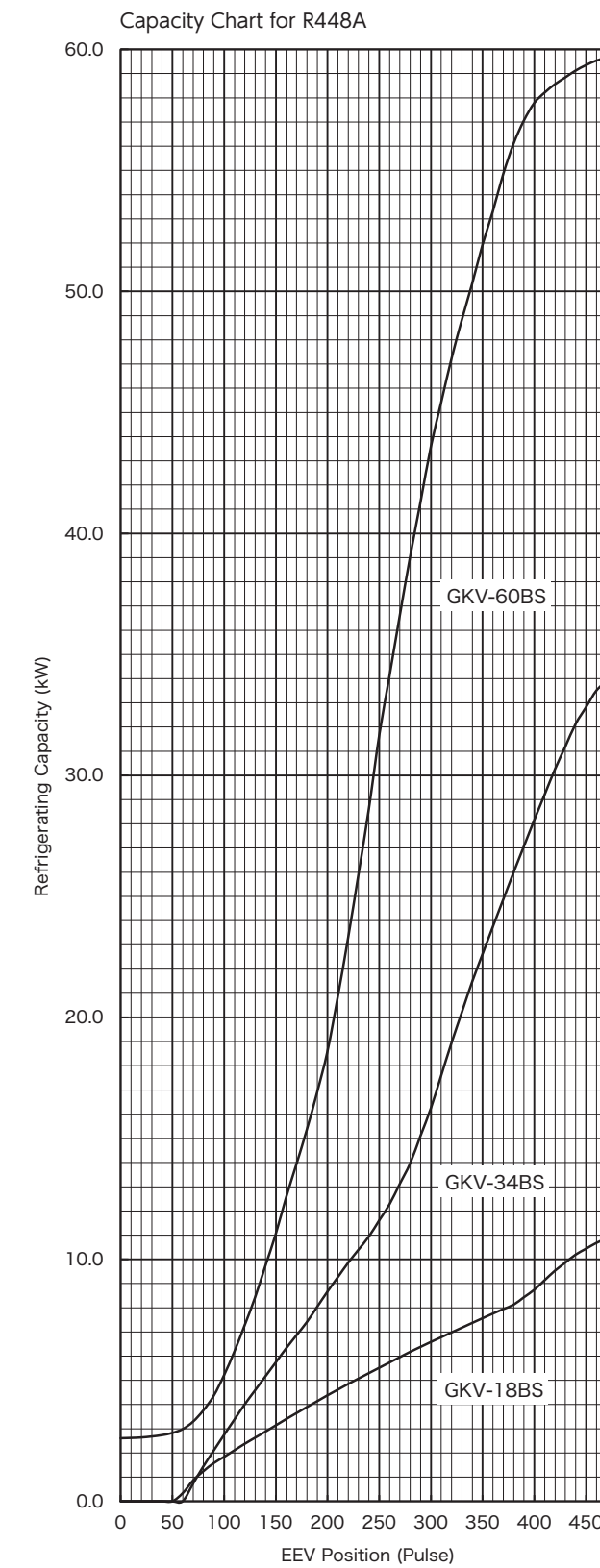
ET (°C)	CT (°C)	Subcooling (°C)						
		0	10	20	30	40	50	60
-70	50	0.86	1.05	1.23	1.40	1.58	1.74	1.91
	45	0.90	1.08	1.24	1.41	1.57	1.72	1.88
	40	0.93	1.09	1.25	1.40	1.55	1.69	1.84
	35	0.95	1.10	1.24	1.38	1.52	1.66	1.80
	30	0.96	1.10	1.23	1.36	1.49	1.62	1.75
-60	50	0.90	1.09	1.27	1.44	1.62	1.78	1.95
	45	0.94	1.11	1.28	1.44	1.60	1.76	1.91
	40	0.96	1.13	1.28	1.43	1.58	1.73	1.87
	35	0.98	1.13	1.27	1.41	1.55	1.69	1.83
	30	0.99	1.13	1.26	1.39	1.52	1.65	1.77
-50	50	0.92	1.11	1.29	1.47	1.64	1.81	1.97
	45	0.96	1.13	1.30	1.46	1.62	1.78	1.93
	40	0.99	1.15	1.30	1.45	1.60	1.74	1.89
	35	1.00	1.15	1.29	1.43	1.57	1.70	1.84
	30	1.00	1.14	1.27	1.40	1.53	1.66	1.78
-40	50	0.95	1.14	1.32	1.49	1.66	1.83	1.99
	45	0.98	1.16	1.32	1.48	1.64	1.80	1.95
	40	1.01	1.16	1.32	1.47	1.61	1.76	1.90
	35	1.02	1.16	1.30	1.44	1.58	1.71	1.85
	30	1.02	1.15	1.28	1.41	1.54	1.66	1.78
-30	50	0.97	1.16	1.34	1.51	1.68	1.84	2.00
	45	1.00	1.17	1.33	1.49	1.65	1.80	1.95
	40	1.02	1.17	1.32	1.47	1.61	1.76	1.90
	35	1.02	1.16	1.30	1.44	1.57	1.70	1.83
	30	1.02	1.15	1.27	1.40	1.52	1.64	—
-25	50	0.98	1.16	1.34	1.51	1.68	1.84	2.00
	45	1.00	1.17	1.33	1.49	1.65	1.80	1.95
	40	1.02	1.17	1.32	1.47	1.61	1.75	1.89
	35	1.02	1.16	1.30	1.43	1.56	1.69	—
	30	1.01	1.14	1.26	1.39	1.51	1.63	—
-20	50	0.98	1.16	1.34	1.51	1.67	1.83	1.99
	45	1.00	1.17	1.33	1.49	1.64	1.79	1.93
	40	1.01	1.17	1.31	1.46	1.60	1.73	—
	35	1.01	1.15	1.29	1.42	1.55	1.67	—
	30	1.00	1.13	1.25	1.37	1.49	—	—
-15	50	0.98	1.16	1.33	1.50	1.66	1.82	1.98
	45	1.00	1.16	1.32	1.47	1.62	1.77	—
	40	1.01	1.16	1.30	1.44	1.58	1.71	—
	35	1.00	1.14	1.27	1.40	1.52	—	—
	30	0.98	1.11	1.23	1.34	1.46	—	—
-10	50	0.97	1.15	1.32	1.49	1.64	1.80	—
	45	0.99	1.15	1.31	1.46	1.60	1.75	—
	40	0.99	1.14	1.28	1.42	1.55	—	—
	35	0.98	1.11	1.24	1.37	1.49	—	—
	30	0.96	1.08	1.19	1.31	—	—	—
-5	50	0.96	1.14	1.31	1.47	1.62	1.78	—
	45	0.98	1.13	1.29	1.43	1.58	—	—
	40	0.97	1.12	1.25	1.39	1.52	—	—
	35	0.96	1.09	1.21	1.33	—	—	—
	30	0.93	1.04	1.15	1.26	—	—	—
0	50	0.95	1.12	1.28	1.44	1.59	—	—
	45	0.96	1.11	1.26	1.40	1.54	—	—
	40	0.95	1.09	1.22	1.35	—	—	—
	35	0.93	1.05	1.17	1.28	—	—	—
	30	0.89	1.00	1.10	—	—	—	—
5	50	0.93	1.10	1.25	1.41	1.55	—	—
	45	0.93	1.08	1.22	1.36	—	—	—
	40	0.92	1.05	1.17	1.30	—	—	—
	35	0.89	1.00	1.11	—	—	—	—
	30	0.84	0.94	1.04	—	—	—	—
10	50	0.90	1.06	1.22	1.36	—	—	—
	45	0.90	1.04	1.18	1.31	—	—	—
	40	0.87	1.00	1.12	—	—	—	—
	35	0.83	0.94	1.05	—	—	—	—
	30	0.77	0.87	—	—	—	—	—

Capacity Chart for GKV

R448A < Type GKV >

Refrigerant : R448A
 Evaporating Temp. (ET) : -10°C
 Condensing Temp. (CT) : 40°C
 Subcooling : 0°C
 Superheat : 5°C

MOPD :
 GKV-18BS 3.5 MPa
 GKV-34BS 1.77 MPa
 GKV-60BS 1.77 MPa



* GKV-34BS, 60BS cannot be used under the conditions listed on the right because it is outside the differential pressure specification.

• ET -70 to -50°C / CT 40°C or more
 • ET -40 to -15°C / CT 45°C or more
 • ET -10 to 0°C / CT 50°C

Correction Factor for R448A

Superheat : 5°C

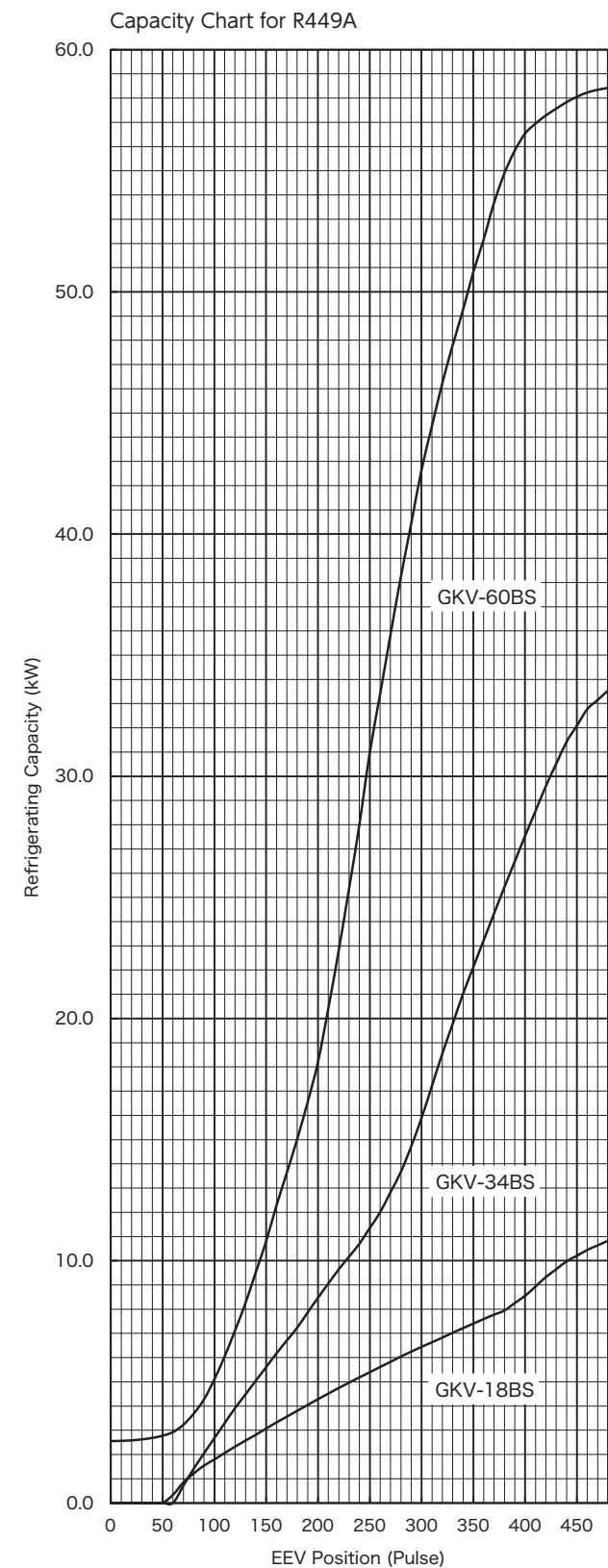
ET (°C)	CT (°C)	Subcooling (°C)						
		0	10	20	30	40	50	60
-70	50	0.72	0.90	1.07	1.24	1.40	1.57	1.73
	45	0.76	0.93	1.09	1.25	1.40	1.56	1.71
	40	0.80	0.95	1.10	1.25	1.39	1.54	1.68
	35	0.82	0.96	1.10	1.24	1.38	1.52	1.65
	30	0.84	0.97	1.10	1.23	1.36	1.49	1.61
-60	50	0.77	0.95	1.12	1.29	1.46	1.62	1.79
	45	0.81	0.98	1.14	1.30	1.45	1.61	1.76
	40	0.84	1.00	1.15	1.29	1.44	1.59	1.73
	35	0.87	1.01	1.15	1.29	1.42	1.56	1.69
	30	0.88	1.01	1.14	1.27	1.40	1.53	1.65
-50	50	0.82	1.00	1.17	1.34	1.51	1.67	1.84
	45	0.86	1.02	1.18	1.34	1.50	1.65	1.81
	40	0.89	1.04	1.19	1.34	1.48	1.63	1.77
	35	0.90	1.05	1.19	1.32	1.46	1.60	1.73
	30	0.91	1.05	1.18	1.30	1.43	1.56	1.68
-40	50	0.90	1.08	1.25	1.42	1.59	1.75	1.92
	45	0.93	1.10	1.26	1.42	1.57	1.73	1.88
	40	0.95	1.11	1.26	1.40	1.55	1.69	1.84
	35	0.97	1.11	1.25	1.38	1.52	1.66	1.79
	30	0.97	1.10	1.23	1.36	1.49	1.61	1.74
-30	50	0.94	1.11	1.29	1.45	1.62	1.78	1.94
	45	0.96	1.13	1.29	1.44	1.60	1.75	1.90
	40	0.98	1.13	1.28	1.43	1.57	1.71	1.86
	35	0.99	1.13	1.27	1.40	1.54	1.67	1.80
	30	0.99	1.12	1.24	1.37	1.49	1.62	—
-25	50	0.95	1.13	1.30	1.47	1.63	1.79	1.95
	45	0.98	1.14	1.30	1.45	1.61	1.76	1.91
	40	0.99	1.14	1.29	1.43	1.58	1.72	1.86
	35	1.00	1.13	1.27	1.41	1.54	1.67	—
	30	0.99	1.12	1.25	1.37	1.49	1.61	—
-20	50	0.96	1.14	1.31	1.47	1.64	1.80	1.96
	45	0.99	1.15	1.31	1.46	1.61	1.76	1.91
	40	1.00	1.15	1.29	1.44	1.58	1.72	—
	35	1.00	1.14	1.27	1.40	1.53	1.66	—
	30	0.99	1.12	1.24	1.36	1.48	—	—
-15	50	0.97	1.15	1.31	1.48	1.64	1.80	1.96
	45	0.99	1.15	1.31	1.46	1.61	1.76	—
	40	1.00	1.15	1.29	1.43	1.57	1.71	—
	35	1.00	1.13	1.27	1.40	1.53	—	—
	30	0.99	1.11	1.23	1.35	1.47	—	—
-10	50	0.98	1.15	1.32	1.48	1.64	1.80	—
	45	1.00	1.15	1.31	1.46	1.60	1.75	—
	40	1.00	1.14	1.29	1.42	1.56	—	—
	35	0.99	1.13	1.26	1.38	1.51	—	—
	30	0.98	1.10	1.22	1.33	—	—	—
-5	50	0.98	1.15	1.31	1.47	1.63	1.79	—
	45	0.99	1.15	1.30	1.45	1.59	—	—
	40	0.99	1.13	1.27	1.41	1.54	—	—
	35	0.98	1.11	1.24	1.36	—	—	—
	30	0.96	1.08	1.19	1.30	—	—	—
0	50	0.98	1.14	1.31	1.46	1.62	—	—
	45	0.99	1.14	1.29	1.43	1.57	—	—
	40	0.98	1.12	1.25	1.39	—	—	—
	35	0.96	1.09	1.21	1.33	—	—	—
	30	0.93	1.05	1.16	—	—	—	—
5	50	0.97	1.13	1.29	1.44	1.59	—	—
	45	0.97	1.12	1.26	1.40	—	—	—
	40	0.96	1.10	1.23	1.35	—	—	—
	35	0.94	1.06	1.17	—	—	—	—
	30	0.90	1.01	1.11	—	—	—	—
10	50	0.96	1.12	1.27	1.42	—	—	—
	45	0.95	1.10	1.23	1.37	—	—	—
	40	0.93	1.06	1.19	—	—	—	—
	35	0.90	1.02	1.13	—	—	—	—
	30	0.85	0.95	—	—	—	—	—

Capacity Chart for GKV

R449A < Type GKV >

Refrigerant : R449A
Evaporating Temp. (ET) : -10℃
Condensing Temp. (CT) : 40℃
Subcooling : 0℃
Superheat : 5℃

MOPD :
GKV-18BS 3.5 MPa
GKV-34BS 1.77 MPa
GKV-60BS 1.77 MPa



* GKV-34BS, 60BS cannot be used under the conditions listed on the right because it is outside the differential pressure specification.

•ET -60 to -50℃ / CT 40℃ or more
•ET -40 to -15℃ / CT 45℃ or more
•ET -10 to 0℃ / CT 50℃

Correction Factor for R449A

Superheat : 5℃

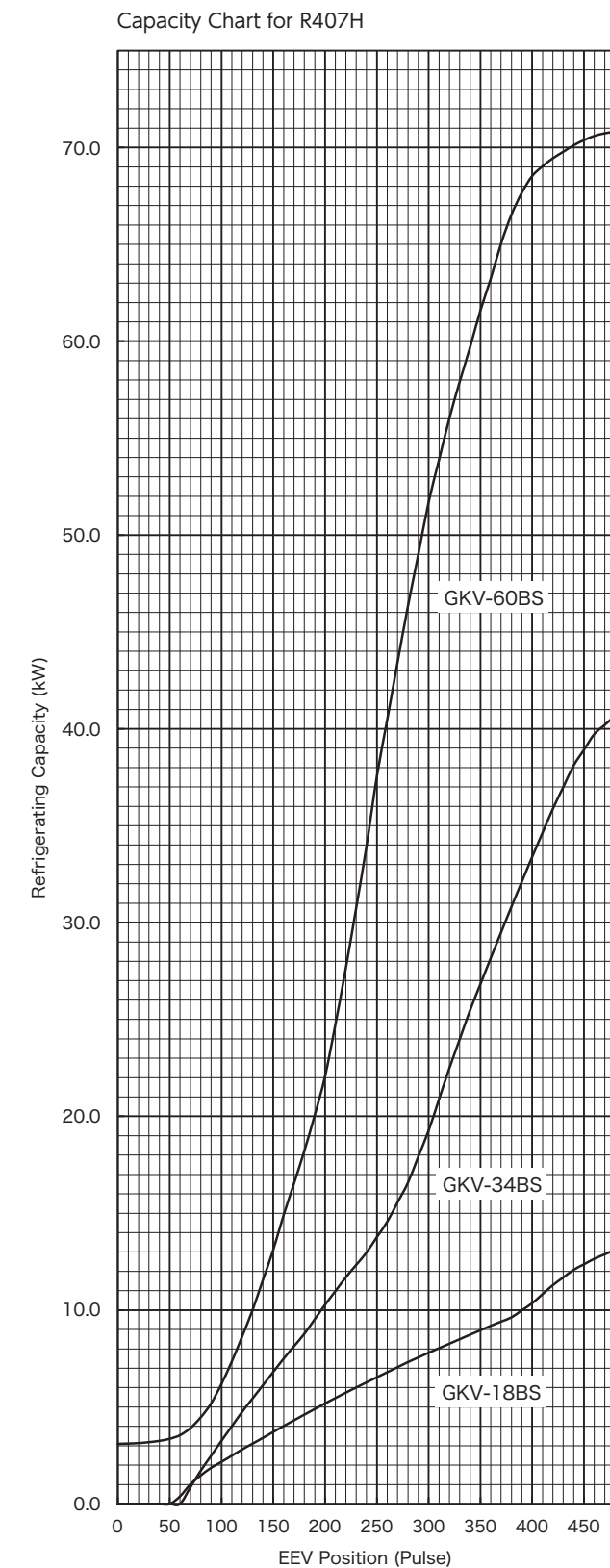
ET (℃)	CT (℃)	Subcooling (℃)						
		0	10	20	30	40	50	60
-70	50	0.75	0.93	1.10	1.27	1.44	1.61	1.78
	45	0.79	0.96	1.12	1.28	1.44	1.60	1.75
	40	0.83	0.98	1.13	1.28	1.43	1.58	1.72
	35	0.85	0.99	1.14	1.28	1.41	1.55	1.69
	30	0.87	1.00	1.13	1.26	1.39	1.52	1.65
-60	50	0.80	0.98	1.16	1.33	1.50	1.67	1.83
	45	0.84	1.01	1.17	1.33	1.49	1.65	1.80
	40	0.87	1.03	1.18	1.33	1.48	1.63	1.77
	35	0.89	1.04	1.18	1.32	1.46	1.60	1.73
	30	0.91	1.04	1.17	1.30	1.43	1.56	1.69
-50	50	0.85	1.03	1.21	1.38	1.55	1.71	1.88
	45	0.89	1.06	1.22	1.38	1.54	1.69	1.85
	40	0.91	1.07	1.22	1.37	1.52	1.67	1.81
	35	0.93	1.08	1.22	1.36	1.50	1.63	1.77
	30	0.94	1.07	1.21	1.34	1.47	1.59	1.72
-40	50	0.90	1.08	1.25	1.42	1.59	1.76	1.92
	45	0.93	1.10	1.26	1.42	1.58	1.73	1.89
	40	0.95	1.11	1.26	1.41	1.56	1.70	1.85
	35	0.97	1.11	1.25	1.39	1.53	1.66	1.80
	30	0.97	1.10	1.23	1.36	1.49	1.62	1.74
-30	50	0.93	1.11	1.29	1.46	1.62	1.79	1.95
	45	0.96	1.13	1.29	1.45	1.60	1.76	1.91
	40	0.98	1.13	1.28	1.43	1.58	1.72	1.86
	35	0.99	1.13	1.27	1.41	1.54	1.68	1.81
	30	0.99	1.12	1.25	1.37	1.50	1.62	—
-25	50	0.95	1.13	1.30	1.47	1.64	1.80	1.96
	45	0.97	1.14	1.30	1.46	1.61	1.77	1.92
	40	0.99	1.14	1.29	1.44	1.58	1.73	1.87
	35	1.00	1.14	1.27	1.41	1.54	1.68	—
	30	0.99	1.12	1.25	1.37	1.50	1.62	—
-20	50	0.96	1.14	1.31	1.48	1.64	1.81	1.97
	45	0.98	1.15	1.31	1.46	1.62	1.77	1.92
	40	1.00	1.15	1.30	1.44	1.58	1.72	—
	35	1.00	1.14	1.27	1.41	1.54	1.67	—
	30	0.99	1.12	1.24	1.37	1.49	—	—
-15	50	0.97	1.15	1.32	1.48	1.65	1.81	1.97
	45	0.99	1.15	1.31	1.46	1.62	1.77	—
	40	1.00	1.15	1.29	1.44	1.58	1.72	—
	35	1.00	1.14	1.27	1.40	1.53	—	—
	30	0.99	1.11	1.23	1.36	1.48	—	—
-10	50	0.98	1.15	1.32	1.48	1.64	1.80	—
	45	0.99	1.15	1.31	1.46	1.61	1.76	—
	40	1.00	1.15	1.29	1.43	1.57	—	—
	35	0.99	1.13	1.26	1.39	1.51	—	—
	30	0.98	1.10	1.22	1.34	—	—	—
-5	50	0.98	1.15	1.32	1.48	1.64	1.79	—
	45	0.99	1.15	1.30	1.45	1.60	—	—
	40	0.99	1.14	1.28	1.41	1.55	—	—
	35	0.98	1.11	1.24	1.37	—	—	—
	30	0.96	1.08	1.19	1.31	—	—	—
0	50	0.98	1.15	1.31	1.47	1.62	—	—
	45	0.99	1.14	1.29	1.43	1.58	—	—
	40	0.98	1.12	1.26	1.39	—	—	—
	35	0.96	1.09	1.21	1.34	—	—	—
	30	0.94	1.05	1.16	—	—	—	—
5	50	0.97	1.13	1.29	1.45	1.60	—	—
	45	0.97	1.12	1.27	1.41	—	—	—
	40	0.96	1.10	1.23	1.36	—	—	—
	35	0.94	1.06	1.18	—	—	—	—
	30	0.90	1.01	1.11	—	—	—	—
10	50	0.96	1.12	1.27	1.42	—	—	—
	45	0.95	1.10	1.24	1.37	—	—	—
	40	0.94	1.06	1.19	—	—	—	—
	35	0.90	1.02	1.13	—	—	—	—
	30	0.85	0.96	—	—	—	—	—

Capacity Chart for GKV

R407H < Type GKV >

Refrigerant : R407H
Evaporating Temp. (ET) : -15℃
Condensing Temp. (CT) : 40℃
Subcooling : 0℃
Superheat : 5℃

MOPD :
GKV-18BS 3.5 MPa
GKV-34BS 1.77 MPa
GKV-60BS 1.77 MPa



* GKV-34BS, 60BS cannot be used under the conditions listed on the right because it is outside the differential pressure specification.

•ET -70 to -60℃ / CT 40℃ or more
•ET -50 to -15℃ / CT 45℃ or more
•ET -10 to 0℃ / CT 50℃

Correction Factor for R407H

Superheat : 5℃

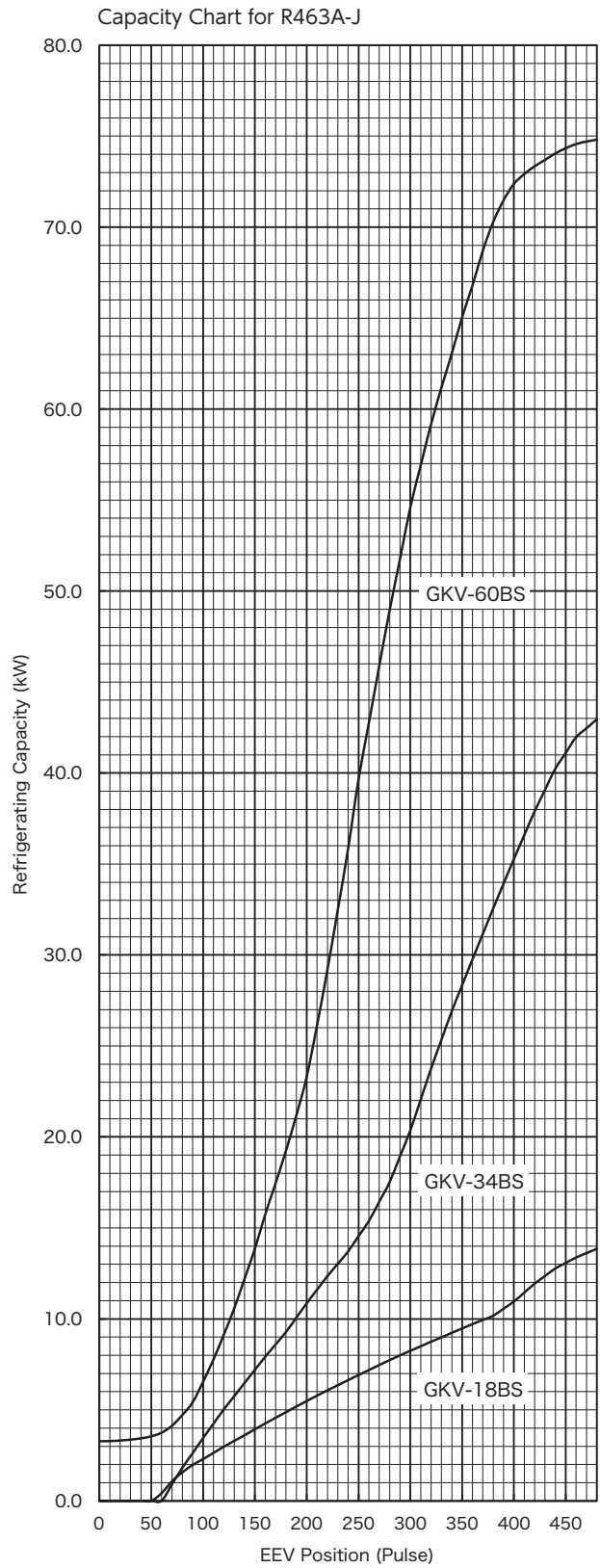
ET (°C)	CT (°C)	Subcooling (°C)						
		0	10	20	30	40	50	60
-70	50	0.83	0.98	1.13	1.28	1.42	1.57	1.71
	45	0.85	1.00	1.14	1.27	1.41	1.54	1.68
	40	0.87	1.00	1.13	1.26	1.39	1.52	1.64
	35	0.88	1.00	1.13	1.25	1.36	1.48	1.60
	30	0.88	1.00	1.11	1.22	1.34	1.45	1.56
-60	50	0.87	1.02	1.17	1.32	1.47	1.61	1.75
	45	0.89	1.04	1.18	1.31	1.45	1.58	1.72
	40	0.91	1.04	1.17	1.30	1.43	1.55	1.68
	35	0.91	1.04	1.16	1.28	1.40	1.52	1.64
	30	0.91	1.03	1.14	1.26	1.37	1.48	1.59
-50	50	0.91	1.06	1.21	1.36	1.51	1.65	1.79
	45	0.93	1.07	1.21	1.35	1.49	1.62	1.76
	40	0.94	1.07	1.20	1.33	1.46	1.59	1.71
	35	0.95	1.07	1.19	1.31	1.43	1.55	1.67
	30	0.94	1.06	1.17	1.28	1.39	1.50	1.61
-40	50	0.94	1.10	1.25	1.39	1.54	1.68	1.82
	45	0.96	1.10	1.24	1.38	1.52	1.65	1.78
	40	0.97	1.10	1.23	1.36	1.49	1.61	1.74
	35	0.97	1.09	1.21	1.33	1.45	1.57	1.69
	30	0.96	1.08	1.19	1.30	1.41	1.52	1.63
-30	50	0.97	1.12	1.27	1.42	1.56	1.71	1.85
	45	0.98	1.13	1.27	1.40	1.54	1.67	1.80
	40	0.99	1.12	1.25	1.38	1.50	1.63	1.75
	35	0.99	1.11	1.23	1.35	1.46	1.58	1.69
	30	0.98	1.09	1.20	1.31	1.42	1.52	—
-25	50	0.98	1.13	1.28	1.43	1.57	1.71	1.85
	45	0.99	1.13	1.27	1.41	1.54	1.67	1.80
	40	1.00	1.13	1.25	1.38	1.50	1.63	1.75
	35	0.99	1.11	1.23	1.35	1.46	1.58	—
	30	0.98	1.09	1.20	1.30	1.41	1.52	—
-20	50	0.99	1.14	1.29	1.43	1.58	1.72	1.85
	45	1.00	1.14	1.28	1.41	1.54	1.67	1.80
	40	1.00	1.13	1.26	1.38	1.50	1.62	—
	35	0.99	1.11	1.23	1.34	1.46	1.57	—
	30	0.98	1.08	1.19	1.30	1.40	—	—
-15	50	1.00	1.15	1.29	1.43	1.58	1.71	1.85
	45	1.00	1.14	1.28	1.41	1.54	1.67	—
	40	1.00	1.13	1.25	1.37	1.50	1.62	—
	35	0.99	1.11	1.22	1.33	1.44	—	—
	30	0.97	1.08	1.18	1.28	1.39	—	—
-10	50	1.00	1.15	1.29	1.43	1.57	1.71	—
	45	1.00	1.14	1.27	1.40	1.53	1.66	—
	40	1.00	1.12	1.24	1.36	1.48	—	—
	35	0.98	1.09	1.21	1.32	1.43	—	—
	30	0.96	1.06	1.16	1.26	—	—	—
-5	50	1.00	1.14	1.29	1.42	1.56	1.70	—
	45	1.00	1.13	1.26	1.39	1.52	—	—
	40	0.99	1.11	1.23	1.35	1.46	—	—
	35	0.97	1.08	1.19	1.30	—	—	—
	30	0.94	1.04	1.14	1.24	—	—	—
0	50	0.99	1.13	1.27	1.41	1.54	—	—
	45	0.99	1.12	1.25	1.37	1.49	—	—
	40	0.97	1.09	1.21	1.32	—	—	—
	35	0.95	1.06	1.16	1.27	—	—	—
	30	0.91	1.01	1.10	—	—	—	—
5	50	0.98	1.12	1.26	1.39	1.52	—	—
	45	0.97	1.10	1.22	1.35	—	—	—
	40	0.95	1.07	1.18	1.29	—	—	—
	35	0.92	1.02	1.13	—	—	—	—
	30	0.88	0.97	1.06	—	—	—	—
10	50	0.96	1.10	1.23	1.36	—	—	—
	45	0.95	1.07	1.19	1.31	—	—	—
	40	0.92	1.03	1.14	—	—	—	—
	35	0.88	0.98	1.08	—	—	—	—
	30	0.83	0.92	—	—	—	—	—

Capacity Chart for GKV

R463A-J < Type GKV >

Refrigerant : R463A-J
Evaporating Temp. (ET) : -20℃
Condensing Temp. (CT) : 30℃
Subcooling : 0℃
Superheat : 5℃

MOPD :
GKV-18BS 3.5 MPa
GKV-34BS 1.77 MPa
GKV-60BS 1.77 MPa



* GKV-34BS, 60BS cannot be used under the conditions listed on the right because it is outside the differential pressure specification.

- ET -60 to -25℃ / CT 30℃ or more
- ET -20 to -10℃ / CT 35℃ or more
- ET -5 to 5℃ / CT 40℃ or more
- ET 10℃ / CT 45℃ or more

Correction Factor for R463A-J

Superheat : 5℃

ET (℃)	CT (℃)	Subcooling (℃)						
		0	10	20	30	40	50	60
-70	50	0.78	0.96	1.14	1.31	1.47	1.64	1.80
	45	0.82	0.99	1.16	1.32	1.48	1.63	1.79
	40	0.86	1.02	1.17	1.32	1.47	1.62	1.76
	35	0.89	1.04	1.18	1.32	1.46	1.60	1.73
	30	0.91	1.04	1.18	1.31	1.44	1.57	1.70
-60	50	0.82	1.01	1.18	1.35	1.52	1.69	1.85
	45	0.87	1.04	1.20	1.36	1.52	1.68	1.83
	40	0.90	1.06	1.21	1.36	1.51	1.66	1.81
	35	0.93	1.07	1.22	1.36	1.50	1.64	1.77
	30	0.94	1.08	1.21	1.35	1.48	1.61	1.73
-50	50	0.86	1.05	1.22	1.40	1.56	1.73	1.89
	45	0.90	1.08	1.24	1.40	1.56	1.72	1.87
	40	0.94	1.10	1.25	1.40	1.55	1.69	1.84
	35	0.96	1.11	1.25	1.39	1.53	1.67	1.80
	30	0.97	1.11	1.24	1.37	1.50	1.63	1.76
-40	50	0.90	1.08	1.26	1.43	1.60	1.76	1.93
	45	0.94	1.11	1.27	1.43	1.59	1.75	1.90
	40	0.97	1.12	1.28	1.43	1.57	1.72	1.86
	35	0.99	1.13	1.27	1.41	1.55	1.69	1.82
	30	1.00	1.13	1.26	1.39	1.52	1.65	1.78
-30	50	0.93	1.11	1.29	1.46	1.62	1.79	1.95
	45	0.96	1.13	1.30	1.45	1.61	1.76	1.91
	40	0.99	1.14	1.30	1.44	1.59	1.73	1.88
	35	1.00	1.15	1.29	1.43	1.56	1.70	1.83
	30	1.01	1.14	1.27	1.40	1.53	1.65	—
-25	50	0.94	1.12	1.30	1.47	1.63	1.79	1.95
	45	0.97	1.14	1.30	1.46	1.62	1.77	1.92
	40	1.00	1.15	1.30	1.45	1.59	1.73	1.88
	35	1.01	1.15	1.29	1.43	1.56	1.69	—
	30	1.01	1.14	1.27	1.40	1.52	1.65	—
-20	50	0.95	1.13	1.30	1.47	1.63	1.80	1.95
	45	0.98	1.15	1.31	1.46	1.62	1.77	1.92
	40	1.00	1.15	1.30	1.45	1.59	1.73	—
	35	1.01	1.15	1.29	1.42	1.56	1.69	—
	30	1.01	1.14	1.27	1.39	1.51	—	—
-15	50	0.95	1.13	1.30	1.47	1.63	1.79	1.95
	45	0.98	1.15	1.31	1.46	1.61	1.76	—
	40	1.00	1.15	1.30	1.44	1.58	1.72	—
	35	1.01	1.15	1.28	1.41	1.54	—	—
	30	1.00	1.13	1.25	1.38	1.50	—	—
-10	50	0.95	1.13	1.30	1.47	1.63	1.79	—
	45	0.98	1.14	1.30	1.45	1.60	1.75	—
	40	1.00	1.14	1.29	1.43	1.57	—	—
	35	1.00	1.14	1.27	1.40	1.53	—	—
	30	0.99	1.12	1.24	1.36	—	—	—
-5	50	0.95	1.13	1.30	1.46	1.62	1.77	—
	45	0.98	1.14	1.29	1.44	1.59	—	—
	40	0.99	1.13	1.28	1.41	1.55	—	—
	35	0.99	1.12	1.25	1.38	—	—	—
	30	0.97	1.10	1.21	1.33	—	—	—
0	50	0.95	1.12	1.28	1.44	1.60	—	—
	45	0.97	1.12	1.28	1.42	1.57	—	—
	40	0.97	1.12	1.25	1.39	—	—	—
	35	0.97	1.10	1.22	1.35	—	—	—
	30	0.95	1.07	1.18	—	—	—	—
5	50	0.94	1.11	1.27	1.42	1.57	—	—
	45	0.95	1.11	1.25	1.40	—	—	—
	40	0.95	1.09	1.23	1.36	—	—	—
	35	0.94	1.07	1.19	—	—	—	—
	30	0.92	1.03	1.14	—	—	—	—
10	50	0.92	1.09	1.24	1.39	—	—	—
	45	0.93	1.08	1.22	1.36	—	—	—
	40	0.93	1.06	1.19	—	—	—	—
	35	0.91	1.03	1.14	—	—	—	—
	30	0.87	0.98	—	—	—	—	—

Capacity Table for VKV

R32 < Type VKV >

Subcooling : 0℃ / Superheat : 0℃

Catalog No.	Evaporating Temp. (℃)	Capacity (U.S.R.T.) (kW)					
		R32					
		Condensing Temp. (℃)					
		30	35	38	40	45	50
VKV-14DS VKV-14DS167	10	2.1 {7.4}	2.3 {8.1}	2.4 {8.4}	2.5 {8.6}	2.6 {9.0}	2.6 {9.3}
	5	2.3 {8.1}	2.5 {8.6}	2.5 {8.9}	2.6 {9.1}	2.7 {9.4}	2.7 {9.6}
	0	2.4 {8.6}	2.6 {9.1}	2.6 {9.3}	2.7 {9.4}	2.8 {9.7}	2.8 {9.8}
	-5	2.6 {9.0}	2.7 {9.4}	2.7 {9.6}	2.8 {9.7}	2.8 {9.9}	2.9 {10.0}
	-10	2.7 {9.4}	2.8 {9.7}	2.8 {9.9}	2.8 {10.0}	2.9 {10.1}	2.9 {10.2}
	-20	2.8 {9.8}	2.9 {10.1}	2.9 {10.2}	2.9 {10.3}	3.0 {10.4}	3.0 {10.4}
	-30	2.9 {10.1}	2.9 {10.3}	3.0 {10.4}	3.0 {10.5}	3.0 {10.5}	3.0 {10.5}
	-40	2.9 {10.2}	3.0 {10.4}	3.0 {10.5}	3.0 {10.5}	3.0 {10.5}	3.0 {10.4}
	-50	2.9 {10.2}	2.9 {10.3}	3.0 {10.4}	3.0 {10.4}	3.0 {10.4}	2.9 {10.3}
VKV-18DS VKV-18DS168	10	4.2 {14.8}	4.6 {16.2}	4.8 {16.8}	4.9 {17.2}	5.1 {18.0}	5.3 {18.5}
	5	4.6 {16.1}	4.9 {17.3}	5.1 {17.8}	5.2 {18.1}	5.3 {18.8}	5.4 {19.1}
	0	4.9 {17.2}	5.2 {18.1}	5.3 {18.6}	5.4 {18.9}	5.5 {19.4}	5.6 {19.7}
	-5	5.1 {18.0}	5.4 {18.9}	5.5 {19.3}	5.5 {19.5}	5.7 {19.9}	5.7 {20.1}
	-10	5.3 {18.7}	5.5 {19.4}	5.6 {19.8}	5.7 {20.0}	5.8 {20.3}	5.8 {20.4}
	-20	5.6 {19.7}	5.7 {20.2}	5.8 {20.5}	5.9 {20.6}	5.9 {20.8}	5.9 {20.8}
	-30	5.7 {20.2}	5.9 {20.6}	5.9 {20.8}	5.9 {20.9}	6.0 {21.0}	6.0 {20.9}
	-40	5.8 {20.4}	5.9 {20.8}	5.9 {20.9}	6.0 {21.0}	6.0 {21.0}	5.9 {20.8}
	-50	5.8 {20.4}	5.9 {20.7}	5.9 {20.8}	5.9 {20.8}	5.9 {20.8}	5.9 {20.6}
VKV-25DS VKV-25DS169	10	7.6 {26.7}	8.3 {29.1}	8.6 {30.3}	8.8 {31.0}	9.2 {32.4}	9.5 {33.3}
	5	8.3 {29.0}	8.8 {31.1}	9.1 {32.1}	9.3 {32.7}	9.6 {33.8}	9.8 {34.5}
	0	8.8 {30.9}	9.3 {32.7}	9.5 {33.5}	9.7 {34.0}	9.9 {34.9}	10.1 {35.4}
	-5	9.2 {32.5}	9.7 {33.9}	9.9 {34.7}	10 {35.1}	10.2 {35.8}	10.3 {36.2}
	-10	9.6 {33.7}	9.9 {35.0}	10.1 {35.6}	10.2 {35.9}	10.4 {36.5}	10.4 {36.7}
	-20	10.1 {35.4}	10.3 {36.4}	10.5 {36.8}	10.5 {37.1}	10.6 {37.4}	10.6 {37.4}
	-30	10.3 {36.4}	10.6 {37.2}	10.7 {37.5}	10.7 {37.6}	10.8 {37.8}	10.7 {37.7}
	-40	10.5 {36.8}	10.6 {37.4}	10.7 {37.6}	10.7 {37.7}	10.7 {37.8}	10.7 {37.5}
	-50	10.5 {36.8}	10.6 {37.3}	10.6 {37.4}	10.7 {37.5}	10.6 {37.4}	10.5 {37.1}
VKV-30DS VKV-30DS170	10	10.1 {35.6}	11.0 {38.8}	11.5 {40.4}	11.8 {41.4}	12.3 {43.2}	12.6 {44.4}
	5	11.0 {38.7}	11.8 {41.4}	12.2 {42.8}	12.4 {43.5}	12.8 {45.1}	13.1 {46.0}
	0	11.7 {41.3}	12.4 {43.6}	12.7 {44.7}	12.9 {45.3}	13.2 {46.5}	13.4 {47.2}
	-5	12.3 {43.3}	12.9 {45.3}	13.1 {46.2}	13.3 {46.8}	13.6 {47.8}	13.7 {48.2}
	-10	12.8 {44.9}	13.3 {46.6}	13.5 {47.4}	13.6 {47.9}	13.8 {48.7}	13.9 {49.0}
	-20	13.4 {47.2}	13.8 {48.5}	14.0 {49.1}	14.1 {49.4}	14.2 {49.9}	14.2 {49.9}
	-30	13.8 {48.5}	14.1 {49.5}	14.2 {50.0}	14.3 {50.2}	14.3 {50.4}	14.3 {50.2}
	-40	13.9 {49.1}	14.2 {49.9}	14.3 {50.2}	14.3 {50.3}	14.3 {50.4}	14.2 {50.0}
	-50	13.9 {49.0}	14.1 {49.7}	14.2 {49.9}	14.2 {50.0}	14.2 {49.9}	14.1 {49.4}
VKV-32DS VKV-32DS171	10	11.8 {41.5}	12.9 {45.3}	13.4 {47.2}	13.7 {48.3}	14.3 {50.4}	14.7 {51.8}
	5	12.8 {45.2}	13.7 {48.4}	14.2 {49.9}	14.4 {50.8}	14.9 {52.6}	15.2 {53.6}
	0	13.7 {48.1}	14.4 {50.8}	14.8 {52.1}	15.0 {52.9}	15.4 {54.3}	15.7 {55.1}
	-5	14.4 {50.5}	15.0 {52.8}	15.3 {53.9}	15.5 {54.6}	15.8 {55.7}	16.0 {56.2}
	-10	14.9 {52.4}	15.5 {54.4}	15.7 {55.4}	15.9 {55.9}	16.2 {56.8}	16.2 {57.1}
	-20	15.7 {55.1}	16.1 {56.6}	16.3 {57.3}	16.4 {57.7}	16.6 {58.2}	16.6 {58.2}
	-30	16.1 {56.6}	16.4 {57.8}	16.6 {58.3}	16.6 {58.6}	16.7 {58.8}	16.7 {58.6}
	-40	16.3 {57.2}	16.5 {58.2}	16.6 {58.6}	16.7 {58.7}	16.7 {58.8}	16.6 {58.4}
	-50	16.3 {57.2}	16.5 {58.0}	16.6 {58.2}	16.6 {58.3}	16.6 {58.2}	16.4 {57.6}
VKV-40DS	10	19.0 {66.7}	20.7 {72.8}	21.6 {75.8}	22.1 {77.6}	23.0 {81.0}	23.7 {83.3}
	5	20.6 {72.6}	22.1 {77.7}	22.8 {80.2}	23.2 {81.6}	24.0 {84.5}	24.5 {86.2}
	0	22.0 {77.3}	23.2 {81.7}	23.8 {83.8}	24.2 {85.0}	24.8 {87.3}	25.2 {88.5}
	-5	23.1 {81.2}	24.1 {84.9}	24.6 {86.7}	24.9 {87.7}	25.5 {89.5}	25.7 {90.4}
	-10	23.9 {84.2}	24.9 {87.4}	25.3 {89.0}	25.5 {89.8}	26.0 {91.3}	26.1 {91.8}
	-20	25.2 {88.5}	25.9 {91.0}	26.2 {92.1}	26.4 {92.7}	26.6 {93.6}	26.6 {93.6}
	-30	25.9 {91.0}	26.4 {92.9}	26.6 {93.7}	26.8 {94.1}	26.9 {94.6}	26.8 {94.2}
	-40	26.2 {92.0}	26.6 {93.5}	26.8 {94.1}	26.8 {94.4}	26.9 {94.5}	26.7 {93.8}
	-50	26.1 {91.9}	26.5 {93.1}	26.6 {93.6}	26.6 {93.7}	26.6 {93.6}	26.3 {92.6}

Capacity Table for VKV

R134a < Type VKV >

Subcooling : 0℃ / Superheat : 0℃

Catalog No.	Evaporating Temp. (℃)	Capacity (U.S.R.T.) (kW)					
		R134a					
		Condensing Temp. (℃)					
		30	35	38	40	45	50
VKV-14DS VKV-14DS167	10	1.0 {3.4}	1.1 {3.7}	1.1 {3.9}	1.1 {4.0}	1.2 {4.2}	1.2 {4.3}
	5	1.0 {3.6}	1.1 {3.9}	1.1 {4.0}	1.2 {4.1}	1.2 {4.2}	1.2 {4.3}
	0	1.1 {3.8}	1.1 {4.0}	1.2 {4.1}	1.2 {4.2}	1.2 {4.3}	1.2 {4.4}
	-5	1.1 {3.9}	1.2 {4.1}	1.2 {4.2}	1.2 {4.2}	1.2 {4.3}	1.2 {4.4}
	-10	1.1 {4.0}	1.2 {4.2}	1.2 {4.2}	1.2 {4.3}	1.2 {4.3}	1.2 {4.3}
	-20	1.2 {4.1}	1.2 {4.2}	1.2 {4.2}	1.2 {4.2}	1.2 {4.3}	1.2 {4.2}
	-30	1.1 {4.0}	1.2 {4.1}	1.2 {4.1}	1.2 {4.1}	1.2 {4.1}	1.2 {4.1}
	-40	1.1 {3.9}	1.1 {4.0}	1.1 {4.0}	1.1 {4.0}	1.1 {4.0}	1.1 {3.9}
	-50	1.1 {3.8}	1.1 {3.8}	1.1 {3.8}	1.1 {3.8}	1.1 {3.8}	1.1 {3.7}
VKV-18DS VKV-18DS168	10	1.9 {6.8}	2.1 {7.5}	2.2 {7.8}	2.3 {7.9}	2.4 {8.3}	2.4 {8.6}
	5	2.1 {7.3}	2.2 {7.8}	2.3 {8.1}	2.3 {8.2}	2.4 {8.5}	2.5 {8.7}
	0	2.2 {7.6}	2.3 {8.1}	2.3 {8.3}	2.4 {8.4}	2.4 {8.6}	2.5 {8.7}
	-5	2.2 {7.9}	2.3 {8.2}	2.4 {8.4}	2.4 {8.5}	2.5 {8.6}	2.5 {8.7}
	-10	2.3 {8.0}	2.4 {8.3}	2.4 {8.4}	2.4 {8.5}	2.5 {8.6}	2.5 {8.7}
	-20	2.3 {8.1}	2.4 {8.3}	2.4 {8.4}	2.4 {8.5}	2.4 {8.5}	2.4 {8.5}
	-30	2.3 {8.1}	2.3 {8.2}	2.3 {8.3}	2.4 {8.3}	2.4 {8.3}	2.3 {8.2}
	-40	2.2 {7.9}	2.3 {8.0}	2.3 {8.0}	2.3 {8.0}	2.3 {7.9}	2.2 {7.8}
	-50	2.2 {7.6}	2.2 {7.7}	2.2 {7.7}	2.2 {7.6}	2.1 {7.6}	2.1 {7.4}
VKV-25DS VKV-25DS169	10	3.5 {12.3}	3.8 {13.4}	4.0 {14.0}	4.1 {14.3}	4.3 {15.0}	4.4 {15.4}
	5	3.7 {13.1}	4.0 {14.0}	4.1 {14.5}	4.2 {14.8}	4.3 {15.3}	4.4 {15.6}
	0	3.9 {13.7}	4.1 {14.5}	4.2 {14.9}	4.3 {15.1}	4.4 {15.5}	4.5 {15.7}
	-5	4.0 {14.2}	4.2 {14.8}	4.3 {15.1}	4.3 {15.2}	4.4 {15.6}	4.5 {15.7}
	-10	4.1 {14.4}	4.3 {15.0}	4.3 {15.2}	4.4 {15.3}	4.4 {15.6}	4.4 {15.6}
	-20	4.2 {14.7}	4.3 {15.0}	4.3 {15.2}	4.3 {15.2}	4.4 {15.3}	4.3 {15.3}
	-30	4.1 {14.5}	4.2 {14.8}	4.2 {14.9}	4.2 {14.9}	4.2 {14.9}	4.2 {14.7}
	-40	4.0 {14.2}	4.1 {14.4}	4.1 {14.4}	4.1 {14.4}	4.1 {14.3}	4.0 {14.1}
	-50	3.9 {13.7}	3.9 {13.8}	3.9 {13.8}	3.9 {13.8}	3.9 {13.6}	3.8 {13.3}
VKV-30DS VKV-30DS170	10	4.7 {16.4}	5.1 {17.9}	5.3 {18.6}	5.4 {19.1}	5.7 {19.9}	5.8 {20.5}
	5	5.0 {17.5}	5.3 {18.7}	5.5 {19.3}	5.6 {19.7}	5.8 {20.4}	5.9 {20.8}
	0	5.2 {18.3}	5.5 {19.3}	5.6 {19.8}	5.7 {20.1}	5.9 {20.6}	6.0 {20.9}
	-5	5.4 {18.9}	5.6 {19.7}	5.7 {20.1}	5.8 {20.3}	5.9 {20.7}	6.0 {20.9}
	-10	5.5 {19.2}	5.7 {19.9}	5.8 {20.3}	5.8 {20.4}	5.9 {20.7}	5.9 {20.8}
	-20	5.6 {19.5}	5.7 {20.0}	5.7 {20.2}	5.8 {20.3}	5.8 {20.4}	5.8 {20.4}
	-30	5.5 {19.4}	5.6 {19.7}	5.6 {19.8}	5.6 {19.9}	5.6 {19.9}	5.6 {19.7}
	-40	5.4 {19.0}	5.4 {19.1}	5.5 {19.2}	5.5 {19.2}	5.4 {19.1}	5.3 {18.8}
	-50	5.2 {18.3}	5.2 {18.4}	5.2 {18.4}	5.2 {18.4}	5.2 {18.1}	5.0 {17.7}
VKV-32DS VKV-32DS171	10	5.4 {19.1}	5.9 {20.9}	6.2 {21.7}	6.3 {22.2}	6.6 {23.3}	6.8 {24.0}
	5	5.8 {20.4}	6.2 {21.9}	6.4 {22.5}	6.5 {22.9}	6.8 {23.8}	6.9 {24.3}
	0	6.1 {21.4}	6.4 {22.5}	6.6 {23.1}	6.7 {23.4}	6.8 {24.1}	6.9 {24.4}
	-5	6.3 {22.0}	6.5 {23.0}	6.7 {23.5}	6.7 {23.7}	6.9 {24.2}	6.9 {24.4}
	-10	6.4 {22.5}	6.6 {23.3}	6.7 {23.6}	6.8 {23.8}	6.9 {24.2}	6.9 {24.3}
	-20	6.5 {22.8}	6.6 {23.4}	6.7 {23.6}	6.7 {23.7}	6.8 {23.8}	6.8 {23.8}
	-30	6.4 {22.6}	6.5 {23.0}	6.6 {23.1}	6.6 {23.2}	6.6 {23.2}	6.5 {22.9}
	-40	6.3 {22.1}	6.4 {22.3}	6.4 {22.4}	6.4 {22.4}	6.3 {22.2}	6.2 {21.9}
	-50	6.1 {21.4}	6.1 {21.5}	6.1 {21.5}	6.1 {21.4}	6.0 {21.2}	5.9 {20.7}
VKV-40DS	10	8.7 {30.7}	9.5 {33.5}	9.9 {34.9}	10.2 {35.7}	10.6 {37.4}	10.9 {38.5}
	5	9.3 {32.8}	10.0 {35.1}	10.3 {36.2}	10.5 {36.9}	10.9 {38.2}	11.1 {39.0}
	0	9.8 {34.3}	10.3 {36.2}	10.6 {37.1}	10.7 {37.7}	11.0 {38.7}	11.2 {39.2}
	-5	10.1 {35.4}	10.5 {37.0}	10.7 {37.7}	10.8 {38.1}	11.1 {38.9}	11.2 {39.2}
	-10	10.3 {36.1}	10.6 {37.4}	10.8 {38.0}	10.9 {38.3}	11.1 {38.9}	11.1 {39.1}
	-20	10.4 {36.6}	10.7 {37.5}	10.8 {37.9}	10.8 {38.1}	10.9 {38.3}	10.9 {38.2}
	-30	10.3 {36.4}	10.5 {37.0}	10.6 {37.2}	10.6 {37.2}	10.6 {37.2}	10.5 {36.9}
	-40	10.1 {35.5}	10.2 {35.9}	10.2 {36.0}	10.2 {36.0}	10.2 {35.7}	10.0 {35.2}
	-50	9.8 {34.3}	9.8 {34.5}	9.8 {34.5}	9.8 {34.4}	9.7 {34.0}	9.5 {33.3}

Capacity Table for VKV

R404A < Type VKV >

Subcooling : 0℃ / Superheat : 0℃

Catalog No.	Evaporating Temp. (℃)	Capacity (U.S.R.T.) (kW)					
		R404A					
		Condensing Temp. (℃)					
		30	35	38	40	45	50
VKV-14DS VKV-14DS167	10	0.9 {3.2}	1.0 {3.4}	1.0 {3.5}	1.0 {3.5}	1.0 {3.6}	1.0 {3.5}
	5	1.0 {3.4}	1.0 {3.6}	1.0 {3.6}	1.0 {3.6}	1.0 {3.6}	1.0 {3.5}
	0	1.0 {3.6}	1.1 {3.7}	1.1 {3.7}	1.1 {3.7}	1.0 {3.7}	1.0 {3.6}
	-5	1.1 {3.7}	1.1 {3.8}	1.1 {3.8}	1.1 {3.8}	1.0 {3.7}	1.0 {3.5}
	-10	1.1 {3.8}	1.1 {3.8}	1.1 {3.8}	1.1 {3.8}	1.0 {3.7}	1.0 {3.5}
	-20	1.1 {3.8}	1.1 {3.8}	1.1 {3.8}	1.1 {3.7}	1.0 {3.6}	1.0 {3.4}
	-30	1.1 {3.8}	1.1 {3.8}	1.0 {3.7}	1.0 {3.6}	1.0 {3.5}	0.9 {3.2}
	-40	1.0 {3.7}	1.0 {3.6}	1.0 {3.5}	1.0 {3.5}	0.9 {3.3}	0.9 {3.0}
	-50	1.0 {3.5}	1.0 {3.4}	1.0 {3.3}	0.9 {3.3}	0.9 {3.1}	0.8 {2.8}
VKV-18DS VKV-18DS168	10	1.8 {6.4}	1.9 {6.8}	2.0 {7.0}	2.0 {7.0}	2.0 {7.1}	2.0 {7.0}
	5	1.9 {6.9}	2.0 {7.2}	2.1 {7.3}	2.1 {7.3}	2.1 {7.3}	2.0 {7.1}
	0	2.0 {7.2}	2.1 {7.4}	2.1 {7.4}	2.1 {7.4}	2.1 {7.4}	2.0 {7.1}
	-5	2.1 {7.4}	2.1 {7.6}	2.2 {7.6}	2.1 {7.5}	2.1 {7.4}	2.0 {7.1}
	-10	2.2 {7.6}	2.2 {7.6}	2.2 {7.6}	2.1 {7.6}	2.1 {7.4}	2.0 {7.0}
	-20	2.2 {7.7}	2.2 {7.7}	2.2 {7.6}	2.1 {7.5}	2.0 {7.2}	1.9 {6.8}
	-30	2.2 {7.6}	2.1 {7.5}	2.1 {7.4}	2.1 {7.3}	2.0 {6.9}	1.8 {6.5}
	-40	2.1 {7.4}	2.1 {7.2}	2.0 {7.1}	2.0 {6.9}	1.9 {6.5}	1.7 {6.0}
	-50	2.0 {7.1}	2.0 {6.9}	1.9 {6.7}	1.9 {6.5}	1.7 {6.1}	1.6 {5.6}
VKV-25DS VKV-25DS169	10	3.3 {11.5}	3.5 {12.3}	3.6 {12.6}	3.6 {12.7}	3.6 {12.8}	3.6 {12.6}
	5	3.5 {12.3}	3.7 {12.9}	3.7 {13.1}	3.7 {13.1}	3.7 {13.1}	3.6 {12.7}
	0	3.7 {12.9}	3.8 {13.3}	3.8 {13.4}	3.8 {13.4}	3.8 {13.2}	3.6 {12.8}
	-5	3.8 {13.3}	3.9 {13.6}	3.9 {13.6}	3.8 {13.5}	3.8 {13.3}	3.6 {12.8}
	-10	3.9 {13.6}	3.9 {13.8}	3.9 {13.7}	3.9 {13.6}	3.8 {13.3}	3.6 {12.6}
	-20	3.9 {13.8}	3.9 {13.8}	3.9 {13.6}	3.8 {13.5}	3.7 {13.0}	3.5 {12.2}
	-30	3.9 {13.7}	3.8 {13.5}	3.8 {13.3}	3.7 {13.1}	3.5 {12.5}	3.3 {11.6}
	-40	3.8 {13.3}	3.7 {13.0}	3.6 {12.7}	3.5 {12.5}	3.4 {11.8}	3.1 {10.9}
	-50	3.6 {12.7}	3.5 {12.4}	3.4 {12.0}	3.3 {11.8}	3.1 {11.0}	2.8 {10.0}
VKV-30DS VKV-30DS170	10	4.4 {15.4}	4.7 {16.4}	4.8 {16.8}	4.8 {16.9}	4.9 {17.1}	4.8 {16.8}
	5	4.7 {16.5}	4.9 {17.2}	5.0 {17.4}	5.0 {17.5}	5.0 {17.4}	4.8 {17.0}
	0	4.9 {17.2}	5.1 {17.8}	5.1 {17.9}	5.1 {17.8}	5.0 {17.6}	4.9 {17.1}
	-5	5.1 {17.8}	5.2 {18.1}	5.2 {18.1}	5.1 {18.0}	5.0 {17.7}	4.8 {17.0}
	-10	5.2 {18.2}	5.2 {18.3}	5.2 {18.3}	5.2 {18.1}	5.0 {17.7}	4.8 {16.9}
	-20	5.2 {18.4}	5.2 {18.4}	5.2 {18.2}	5.1 {17.9}	4.9 {17.3}	4.6 {16.3}
	-30	5.2 {18.2}	5.1 {18.0}	5.0 {17.7}	4.9 {17.4}	4.7 {16.6}	4.4 {15.5}
	-40	5.0 {17.7}	4.9 {17.4}	4.8 {17.0}	4.7 {16.6}	4.5 {15.7}	4.1 {14.5}
	-50	4.8 {17.0}	4.7 {16.5}	4.6 {16.1}	4.5 {15.7}	4.2 {14.7}	3.8 {13.3}
VKV-32DS VKV-32DS171	10	5.1 {17.9}	5.4 {19.1}	5.6 {19.6}	5.6 {19.7}	5.7 {19.9}	5.6 {19.6}
	5	5.5 {19.2}	5.7 {20.1}	5.8 {20.3}	5.8 {20.4}	5.8 {20.3}	5.6 {19.8}
	0	5.7 {20.1}	5.9 {20.7}	5.9 {20.9}	5.9 {20.8}	5.9 {20.6}	5.7 {19.9}
	-5	5.9 {20.8}	6.0 {21.2}	6.0 {21.2}	6.0 {21.1}	5.9 {20.7}	5.6 {19.8}
	-10	6.0 {21.2}	6.1 {21.4}	6.1 {21.3}	6.0 {21.1}	5.9 {20.6}	5.6 {19.7}
	-20	6.1 {21.5}	6.1 {21.4}	6.0 {21.2}	6.0 {20.9}	5.7 {20.2}	5.4 {19.0}
	-30	6.0 {21.3}	6.0 {21.0}	5.9 {20.7}	5.8 {20.3}	5.5 {19.4}	5.1 {18.1}
	-40	5.9 {20.7}	5.8 {20.3}	5.6 {19.8}	5.5 {19.4}	5.2 {18.3}	4.8 {16.9}
	-50	5.6 {19.8}	5.5 {19.3}	5.3 {18.7}	5.2 {18.3}	4.9 {17.1}	4.4 {15.6}
VKV-40DS	10	8.2 {28.8}	8.7 {30.8}	8.9 {31.4}	9.0 {31.7}	9.1 {32.0}	9.0 {31.5}
	5	8.8 {30.8}	9.2 {32.3}	9.3 {32.7}	9.3 {32.7}	9.3 {32.7}	9.1 {31.9}
	0	9.2 {32.3}	9.5 {33.3}	9.5 {33.5}	9.5 {33.4}	9.4 {33.1}	9.1 {32.0}
	-5	9.5 {33.4}	9.7 {34.0}	9.7 {34.0}	9.6 {33.8}	9.4 {33.2}	9.1 {31.9}
	-10	9.7 {34.0}	9.8 {34.4}	9.7 {34.3}	9.7 {34.0}	9.4 {33.1}	9.0 {31.6}
	-20	9.8 {34.5}	9.8 {34.5}	9.7 {34.1}	9.6 {33.6}	9.2 {32.4}	8.7 {30.6}
	-30	9.7 {34.2}	9.6 {33.8}	9.4 {33.2}	9.3 {32.6}	8.9 {31.2}	8.3 {29.0}
	-40	9.4 {33.2}	9.3 {32.6}	9.1 {31.8}	8.9 {31.2}	8.4 {29.5}	7.7 {27.2}
	-50	9.0 {31.8}	8.8 {31.0}	8.6 {30.1}	8.4 {29.4}	7.8 {27.5}	7.1 {25.0}

Capacity Table for VKV

R410A <Type VKV>

Subcooling : 0℃ / Superheat : 0℃

Catalog No.	Evaporating Temp. (℃)	Capacity (U.S.R.T.) (kW)					
		R410A					
		Condensing Temp. (℃)					
		30	35	38	40	45	50
VKV-14DS VKV-14DS167	10	1.5 {5.2}	1.6 {5.6}	1.6 {5.8}	1.7 {5.8}	1.7 {6.0}	1.7 {6.0}
	5	1.6 {5.6}	1.7 {5.9}	1.7 {6.1}	1.7 {6.1}	1.8 {6.2}	1.8 {6.2}
	0	1.7 {5.9}	1.8 {6.2}	1.8 {6.3}	1.8 {6.3}	1.8 {6.4}	1.8 {6.3}
	-5	1.8 {6.2}	1.8 {6.4}	1.8 {6.5}	1.8 {6.5}	1.9 {6.5}	1.8 {6.4}
	-10	1.8 {6.4}	1.9 {6.6}	1.9 {6.6}	1.9 {6.6}	1.9 {6.6}	1.8 {6.5}
	-20	1.9 {6.7}	1.9 {6.7}	1.9 {6.7}	1.9 {6.7}	1.9 {6.7}	1.8 {6.5}
	-30	1.9 {6.8}	1.9 {6.8}	1.9 {6.8}	1.9 {6.7}	1.9 {6.6}	1.8 {6.4}
	-40	1.9 {6.7}	1.9 {6.7}	1.9 {6.7}	1.9 {6.7}	1.9 {6.5}	1.8 {6.3}
	-50	1.9 {6.7}	1.9 {6.6}	1.9 {6.6}	1.9 {6.5}	1.8 {6.3}	1.7 {6.1}
VKV-18DS VKV-18DS168	10	2.9 {10.4}	3.2 {11.2}	3.3 {11.5}	3.3 {11.7}	3.4 {12.0}	3.4 {12.1}
	5	3.2 {11.2}	3.4 {11.8}	3.4 {12.1}	3.5 {12.2}	3.5 {12.4}	3.5 {12.4}
	0	3.4 {11.9}	3.5 {12.4}	3.6 {12.6}	3.6 {12.7}	3.6 {12.8}	3.6 {12.7}
	-5	3.5 {12.4}	3.6 {12.8}	3.7 {12.9}	3.7 {13.0}	3.7 {13.0}	3.7 {12.8}
	-10	3.6 {12.8}	3.7 {13.1}	3.8 {13.2}	3.8 {13.2}	3.7 {13.2}	3.7 {12.9}
	-20	3.8 {13.3}	3.8 {13.5}	3.8 {13.5}	3.8 {13.5}	3.8 {13.3}	3.7 {13.0}
	-30	3.8 {13.5}	3.9 {13.6}	3.9 {13.5}	3.8 {13.5}	3.8 {13.3}	3.7 {12.9}
	-40	3.8 {13.5}	3.8 {13.5}	3.8 {13.4}	3.8 {13.3}	3.7 {13.0}	3.6 {12.6}
	-50	3.8 {13.3}	3.8 {13.2}	3.7 {13.1}	3.7 {13.0}	3.6 {12.7}	3.5 {12.2}
VKV-25DS VKV-25DS169	10	5.3 {18.6}	5.7 {20.1}	5.9 {20.7}	6.0 {21.1}	6.1 {21.6}	6.2 {21.7}
	5	5.7 {20.2}	6.1 {21.3}	6.2 {21.8}	6.3 {22.0}	6.4 {22.4}	6.4 {22.3}
	0	6.1 {21.4}	6.3 {22.3}	6.4 {22.6}	6.5 {22.8}	6.5 {23.0}	6.5 {22.8}
	-5	6.3 {22.3}	6.5 {23.0}	6.6 {23.3}	6.7 {23.4}	6.7 {23.4}	6.6 {23.1}
	-10	6.6 {23.1}	6.7 {23.6}	6.8 {23.8}	6.8 {23.8}	6.7 {23.7}	6.6 {23.3}
	-20	6.8 {24.0}	6.9 {24.3}	6.9 {24.3}	6.9 {24.3}	6.8 {24.0}	6.7 {23.4}
	-30	6.9 {24.3}	6.9 {24.4}	6.9 {24.4}	6.9 {24.3}	6.8 {23.9}	6.6 {23.1}
	-40	6.9 {24.3}	6.9 {24.3}	6.9 {24.1}	6.8 {24.0}	6.7 {23.5}	6.4 {22.6}
	-50	6.8 {24.0}	6.8 {23.8}	6.7 {23.6}	6.7 {23.5}	6.5 {22.8}	6.2 {21.9}
VKV-30DS VKV-30DS170	10	7.1 {24.8}	7.6 {26.8}	7.9 {27.6}	8.0 {28.1}	8.2 {28.8}	8.2 {29.0}
	5	7.7 {26.9}	8.1 {28.4}	8.3 {29.1}	8.4 {29.4}	8.5 {29.9}	8.5 {29.8}
	0	8.1 {28.5}	8.4 {29.7}	8.6 {30.2}	8.6 {30.4}	8.7 {30.7}	8.6 {30.4}
	-5	8.5 {29.8}	8.7 {30.7}	8.8 {31.0}	8.9 {31.2}	8.9 {31.2}	8.8 {30.8}
	-10	8.7 {30.7}	8.9 {31.4}	9.0 {31.7}	9.0 {31.8}	9.0 {31.7}	8.8 {31.1}
	-20	9.1 {32.0}	9.2 {32.3}	9.2 {32.4}	9.2 {32.4}	9.1 {32.0}	8.9 {31.2}
	-30	9.2 {32.4}	9.3 {32.6}	9.2 {32.5}	9.2 {32.4}	9.1 {31.8}	8.8 {30.9}
	-40	9.2 {32.4}	9.2 {32.4}	9.2 {32.2}	9.1 {32.0}	8.9 {31.3}	8.6 {30.2}
	-50	9.1 {32.0}	9.0 {31.8}	9.0 {31.5}	8.9 {31.3}	8.7 {30.5}	8.3 {29.2}
VKV-32DS VKV-32DS171	10	8.2 {29.0}	8.9 {31.2}	9.2 {32.2}	9.3 {32.8}	9.6 {33.6}	9.6 {33.8}
	5	8.9 {31.4}	9.4 {33.1}	9.6 {33.9}	9.7 {34.3}	9.9 {34.8}	9.9 {34.7}
	0	9.5 {33.3}	9.9 {34.7}	10.0 {35.2}	10.1 {35.5}	10.2 {35.8}	10.1 {35.5}
	-5	9.9 {34.7}	10.2 {35.8}	10.3 {36.2}	10.3 {36.4}	10.4 {36.5}	10.2 {35.9}
	-10	10.2 {35.9}	10.4 {36.7}	10.5 {37.0}	10.5 {37.1}	10.5 {36.9}	10.3 {36.3}
	-20	10.6 {37.3}	10.7 {37.7}	10.7 {37.8}	10.7 {37.8}	10.6 {37.3}	10.3 {36.4}
	-30	10.8 {37.8}	10.8 {38.0}	10.8 {37.9}	10.7 {37.8}	10.6 {37.1}	10.2 {36.0}
	-40	10.7 {37.8}	10.7 {37.8}	10.7 {37.6}	10.6 {37.3}	10.4 {36.5}	10.0 {35.2}
	-50	10.6 {37.3}	10.5 {37.1}	10.5 {36.8}	10.4 {36.5}	10.1 {35.5}	9.7 {34.1}
VKV-40DS	10	13.2 {46.6}	14.3 {50.2}	14.7 {51.8}	15.0 {52.6}	15.4 {54.0}	15.4 {54.3}
	5	14.3 {50.5}	15.1 {53.3}	15.5 {54.5}	15.7 {55.1}	15.9 {56.0}	15.9 {55.8}
	0	15.2 {53.5}	15.8 {55.7}	16.1 {56.6}	16.2 {57.0}	16.3 {57.5}	16.2 {57.0}
	-5	15.9 {55.8}	16.4 {57.6}	16.6 {58.2}	16.6 {58.5}	16.7 {58.6}	16.4 {57.8}
	-10	16.4 {57.6}	16.8 {59.0}	16.9 {59.4}	16.9 {59.5}	16.9 {59.3}	16.6 {58.3}
	-20	17.0 {59.9}	17.2 {60.6}	17.3 {60.7}	17.3 {60.7}	17.1 {60.0}	16.6 {58.5}
	-30	17.3 {60.8}	17.4 {61.1}	17.3 {61.0}	17.3 {60.7}	17.0 {59.7}	16.5 {57.9}
	-40	17.3 {60.7}	17.3 {60.7}	17.2 {60.4}	17.1 {60.0}	16.7 {58.7}	16.1 {56.6}
	-50	17.0 {59.9}	16.9 {59.6}	16.8 {59.1}	16.7 {58.7}	16.2 {57.1}	15.6 {54.8}

Capacity Table for VKV

R448A <Type VKV>

Subcooling : 0℃ / Superheat : 0℃

Catalog No.	Evaporating Temp. (℃)	Capacity (U.S.R.T.) (kW)					
		R448A					
		Condensing Temp. (℃)					
		30	35	38	40	45	50
VKV-14DS VKV-14DS167	10	1.3 {4.6}	1.4 {5.0}	1.4 {5.0}	1.4 {5.1}	1.5 {5.2}	1.5 {5.2}
	5	1.4 {5.0}	1.5 {5.3}	1.5 {5.3}	1.5 {5.3}	1.5 {5.4}	1.5 {5.3}
	0	1.4 {5.1}	1.5 {5.3}	1.5 {5.3}	1.5 {5.3}	1.5 {5.3}	1.5 {5.3}
	-5	1.5 {5.4}	1.6 {5.5}	1.6 {5.5}	1.6 {5.5}	1.6 {5.5}	1.5 {5.4}
	-10	1.5 {5.3}	1.5 {5.4}	1.5 {5.4}	1.5 {5.4}	1.5 {5.4}	1.5 {5.3}
	-20	1.5 {5.4}	1.5 {5.4}	1.5 {5.4}	1.5 {5.4}	1.5 {5.3}	1.5 {5.2}
	-30	1.5 {5.3}	1.5 {5.4}	1.5 {5.3}	1.5 {5.3}	1.5 {5.2}	1.4 {5.0}
	-40	1.5 {5.2}	1.5 {5.2}	1.5 {5.2}	1.5 {5.1}	1.4 {5.0}	1.4 {4.8}
	-50	1.4 {5.0}	1.4 {5.0}	1.4 {4.9}	1.4 {4.8}	1.3 {4.7}	1.3 {4.5}
VKV-18DS VKV-18DS168	10	2.6 {9.3}	2.8 {9.9}	2.8 {10.0}	2.9 {10.1}	2.9 {10.4}	2.9 {10.4}
	5	2.9 {10.0}	3.0 {10.5}	3.0 {10.6}	3.0 {10.6}	3.1 {10.8}	3.0 {10.7}
	0	2.9 {10.1}	3.0 {10.5}	3.0 {10.6}	3.0 {10.6}	3.0 {10.7}	3.0 {10.6}
	-5	3.1 {10.7}	3.1 {11.0}	3.1 {11.0}	3.1 {11.0}	3.1 {11.0}	3.1 {10.8}
	-10	3.0 {10.6}	3.1 {10.8}	3.1 {10.8}	3.1 {10.8}	3.0 {10.7}	3.0 {10.5}
	-20	3.0 {10.7}	3.1 {10.9}	3.1 {10.8}	3.1 {10.8}	3.0 {10.6}	2.9 {10.3}
	-30	3.0 {10.6}	3.0 {10.7}	3.0 {10.6}	3.0 {10.6}	2.9 {10.3}	2.9 {10.0}
	-40	3.0 {10.4}	3.0 {10.4}	2.9 {10.3}	2.9 {10.2}	2.8 {9.9}	2.7 {9.6}
	-50	2.8 {10.0}	2.8 {9.9}	2.8 {9.8}	2.8 {9.7}	2.7 {9.3}	2.6 {9.0}
VKV-25DS VKV-25DS169	10	4.7 {16.7}	5.1 {17.9}	5.1 {18.0}	5.2 {18.2}	5.3 {18.6}	5.3 {18.6}
	5	5.1 {18.0}	5.4 {18.9}	5.4 {19.0}	5.4 {19.2}	5.5 {19.4}	5.5 {19.2}
	0	5.2 {18.2}	5.4 {19.0}	5.4 {19.0}	5.4 {19.1}	5.5 {19.2}	5.4 {19.0}
	-5	5.5 {19.3}	5.7 {19.9}	5.6 {19.8}	5.7 {19.9}	5.6 {19.8}	5.6 {19.5}
	-10	5.4 {19.0}	5.5 {19.5}	5.5 {19.4}	5.5 {19.4}	5.5 {19.3}	5.4 {19.0}
	-20	5.5 {19.3}	5.6 {19.5}	5.5 {19.4}	5.5 {19.4}	5.4 {19.1}	5.3 {18.6}
	-30	5.4 {19.2}	5.5 {19.3}	5.4 {19.1}	5.4 {19.0}	5.3 {18.6}	5.1 {18.1}
	-40	5.3 {18.8}	5.3 {18.8}	5.3 {18.5}	5.2 {18.4}	5.1 {17.9}	4.9 {17.3}
	-50	5.1 {18.0}	5.1 {17.9}	5.0 {17.6}	5.0 {17.5}	4.8 {16.8}	4.6 {16.2}
VKV-30DS VKV-30DS170	10	6.3 {22.2}	6.8 {23.8}	6.8 {24.0}	6.9 {24.3}	7.1 {24.8}	7.1 {24.8}
	5	6.8 {24.1}	7.2 {25.3}	7.2 {25.3}	7.3 {25.5}	7.3 {25.8}	7.3 {25.6}
	0	6.9 {24.3}	7.2 {25.3}	7.2 {25.3}	7.2 {25.5}	7.3 {25.6}	7.2 {25.3}
	-5	7.3 {25.8}	7.5 {26.5}	7.5 {26.4}	7.5 {26.5}	7.5 {26.4}	7.4 {26.0}
	-10	7.2 {25.3}	7.4 {26.0}	7.4 {25.9}	7.4 {25.9}	7.3 {25.7}	7.2 {25.3}
	-20	7.3 {25.7}	7.4 {26.0}	7.4 {25.9}	7.3 {25.8}	7.2 {25.4}	7.1 {24.8}
	-30	7.3 {25.5}	7.3 {25.7}	7.2 {25.4}	7.2 {25.3}	7.0 {24.8}	6.8 {24.1}
	-40	7.1 {25.0}	7.1 {25.0}	7.0 {24.7}	7.0 {24.6}	6.8 {23.9}	6.6 {23.1}
	-50	6.8 {24.0}	6.8 {23.8}	6.7 {23.5}	6.6 {23.3}	6.4 {22.4}	6.1 {21.5}
VKV-32DS VKV-32DS171	10	7.4 {25.9}	7.9 {27.8}	8.0 {28.0}	8.1 {28.4}	8.2 {29.0}	8.2 {29.0}
	5	8.0 {28.1}	8.4 {29.5}	8.4 {29.6}	8.5 {29.8}	8.6 {30.1}	8.5 {29.9}
	0	8.1 {28.3}	8.4 {29.5}	8.4 {29.5}	8.4 {29.7}	8.5 {29.9}	8.4 {29.6}
	-5	8.6 {30.1}	8.8 {30.9}	8.8 {30.9}	8.8 {30.9}	8.8 {30.8}	8.6 {30.4}
	-10	8.4 {29.6}	8.6 {30.3}	8.6 {30.2}	8.6 {30.2}	8.5 {30.0}	8.4 {29.5}
	-20	8.5 {30.0}	8.6 {30.4}	8.6 {30.2}	8.6 {30.1}	8.4 {29.7}	8.2 {29.0}
	-30	8.5 {29.8}	8.5 {30.0}	8.4 {29.7}	8.4 {29.5}	8.2 {28.9}	8.0 {28.1}
	-40	8.3 {29.2}	8.3 {29.2}	8.2 {28.8}	8.1 {28.7}	7.9 {27.8}	7.7 {26.9}
	-50	8.0 {28.0}	7.9 {27.8}	7.8 {27.4}	7.7 {27.1}	7.4 {26.2}	7.1 {25.1}
VKV-40DS	10	11.8 {41.7}	12.7 {44.7}	12.8 {45.0}	13.0 {45.6}	13.2 {46.6}	13.2 {46.6}
	5	12.8 {45.1}	13.5 {47.4}	13.5 {47.5}	13.6 {47.9}	13.8 {48.4}	13.7 {48.1}
	0	12.9 {45.5}	13.5 {47.4}	13.5 {47.5}	13.6 {47.7}	13.6 {48.0}	13.5 {47.5}
	-5	13.8 {48.4}	14.1 {49.7}	14.1 {49.6}	14.1 {49.7}	14.1 {49.5}	13.9 {48.8}
	-10	13.5 {47.5}	13.8 {48.7}	13.8 {48.5}	13.8 {48.6}	13.7 {48.2}	13.5 {47.4}
	-20	13.7 {48.2}	13.9 {48.8}	13.8 {48.5}	13.8 {48.4}	13.5 {47.7}	13.2 {46.6}
	-30	13.6 {47.9}	13.7 {48.2}	13.6 {47.7}	13.5 {47.5}	13.2 {46.4}	12.8 {45.1}
	-40	13.4 {47.0}	13.3 {46.9}	13.2 {46.4}	13.1 {46.0}	12.7 {44.7}	12.3 {43.3}
	-50	12.8 {45.0}	12.7 {44.7}	12.5 {44.0}	12.4 {43.6}	12.0 {42.0}	11.5 {40.4}

Capacity Table for VKV

R449A < Type VKV >

Subcooling : 0℃ / Superheat : 0℃

Catalog No.	Evaporating Temp. (℃)	Capacity (U.S.R.T.) (kW)					
		R449A					
		Condensing Temp. (℃)					
		30	35	38	40	45	50
VKV-14DS VKV-14DS167	10	1.3 {4.6}	1.4 {4.8}	1.4 {4.9}	1.4 {5.0}	1.4 {5.1}	1.4 {5.1}
	5	1.4 {4.8}	1.4 {5.0}	1.4 {5.1}	1.5 {5.1}	1.5 {5.2}	1.5 {5.2}
	0	1.4 {5.0}	1.5 {5.1}	1.5 {5.2}	1.5 {5.2}	1.5 {5.2}	1.5 {5.2}
	-5	1.5 {5.1}	1.5 {5.2}	1.5 {5.3}	1.5 {5.3}	1.5 {5.3}	1.5 {5.2}
	-10	1.5 {5.2}	1.5 {5.3}	1.5 {5.3}	1.5 {5.3}	1.5 {5.3}	1.5 {5.2}
	-20	1.5 {5.3}	1.5 {5.3}	1.5 {5.3}	1.5 {5.3}	1.5 {5.2}	1.4 {5.1}
	-30	1.5 {5.2}	1.5 {5.2}	1.5 {5.2}	1.5 {5.2}	1.4 {5.1}	1.4 {4.9}
	-40	1.5 {5.1}	1.5 {5.1}	1.4 {5.1}	1.4 {5.0}	1.4 {4.9}	1.3 {4.7}
	-50	1.4 {5.0}	1.4 {4.9}	1.4 {4.9}	1.4 {4.8}	1.3 {4.7}	1.3 {4.5}
VKV-18DS VKV-18DS168	10	2.6 {9.1}	2.7 {9.6}	2.8 {9.8}	2.8 {10.0}	2.9 {10.1}	2.9 {10.2}
	5	2.7 {9.6}	2.8 {10.0}	2.9 {10.2}	2.9 {10.2}	2.9 {10.3}	2.9 {10.3}
	0	2.8 {10.0}	2.9 {10.3}	3.0 {10.4}	3.0 {10.4}	3.0 {10.5}	2.9 {10.4}
	-5	2.9 {10.2}	3.0 {10.5}	3.0 {10.5}	3.0 {10.6}	3.0 {10.5}	3.0 {10.4}
	-10	3.0 {10.4}	3.0 {10.6}	3.0 {10.6}	3.0 {10.6}	3.0 {10.5}	2.9 {10.3}
	-20	3.0 {10.5}	3.0 {10.6}	3.0 {10.6}	3.0 {10.6}	3.0 {10.4}	2.9 {10.2}
	-30	3.0 {10.5}	3.0 {10.5}	3.0 {10.4}	2.9 {10.4}	2.9 {10.2}	2.8 {9.8}
	-40	2.9 {10.3}	2.9 {10.2}	2.9 {10.1}	2.9 {10.0}	2.8 {9.8}	2.7 {9.4}
	-50	2.8 {10.0}	2.8 {9.8}	2.8 {9.7}	2.7 {9.6}	2.7 {9.3}	2.5 {8.9}
VKV-25DS VKV-25DS169	10	4.7 {16.4}	4.9 {17.3}	5.0 {17.7}	5.1 {17.9}	5.2 {18.3}	5.2 {18.3}
	5	4.9 {17.3}	5.1 {18.0}	5.2 {18.3}	5.2 {18.4}	5.3 {18.6}	5.3 {18.6}
	0	5.1 {17.9}	5.3 {18.5}	5.3 {18.7}	5.3 {18.8}	5.4 {18.9}	5.3 {18.7}
	-5	5.2 {18.4}	5.4 {18.8}	5.4 {19.0}	5.4 {19.0}	5.4 {19.0}	5.3 {18.7}
	-10	5.3 {18.7}	5.4 {19.0}	5.4 {19.1}	5.4 {19.1}	5.4 {19.0}	5.3 {18.6}
	-20	5.4 {19.0}	5.4 {19.1}	5.4 {19.1}	5.4 {19.0}	5.3 {18.8}	5.2 {18.3}
	-30	5.4 {18.9}	5.4 {18.9}	5.3 {18.8}	5.3 {18.7}	5.2 {18.3}	5.0 {17.7}
	-40	5.3 {18.5}	5.2 {18.4}	5.2 {18.2}	5.1 {18.1}	5.0 {17.6}	4.8 {16.9}
	-50	5.1 {17.9}	5.0 {17.7}	5.0 {17.5}	4.9 {17.4}	4.8 {16.8}	4.6 {16.1}
VKV-30DS VKV-30DS170	10	6.2 {21.9}	6.6 {23.1}	6.7 {23.6}	6.8 {23.9}	6.9 {24.3}	6.9 {24.4}
	5	6.6 {23.1}	6.8 {24.0}	6.9 {24.4}	7.0 {24.6}	7.1 {24.8}	7.0 {24.7}
	0	6.8 {23.9}	7.0 {24.7}	7.1 {24.9}	7.1 {25.0}	7.1 {25.1}	7.1 {24.9}
	-5	7.0 {24.5}	7.1 {25.1}	7.2 {25.3}	7.2 {25.3}	7.2 {25.3}	7.1 {24.9}
	-10	7.1 {24.9}	7.2 {25.4}	7.2 {25.5}	7.2 {25.5}	7.2 {25.3}	7.1 {24.8}
	-20	7.2 {25.3}	7.2 {25.5}	7.2 {25.4}	7.2 {25.4}	7.1 {25.0}	6.9 {24.4}
	-30	7.1 {25.1}	7.1 {25.1}	7.1 {25.0}	7.1 {24.9}	6.9 {24.4}	6.7 {23.6}
	-40	7.0 {24.6}	7.0 {24.5}	6.9 {24.3}	6.9 {24.1}	6.7 {23.5}	6.4 {22.6}
	-50	6.8 {23.9}	6.7 {23.6}	6.6 {23.4}	6.6 {23.1}	6.4 {22.4}	6.1 {21.4}
VKV-32DS VKV-32DS171	10	7.3 {25.5}	7.7 {27.0}	7.8 {27.6}	7.9 {27.9}	8.1 {28.4}	8.1 {28.5}
	5	7.6 {26.9}	8.0 {28.0}	8.1 {28.5}	8.2 {28.7}	8.2 {29.0}	8.2 {28.9}
	0	7.9 {27.9}	8.2 {28.8}	8.3 {29.1}	8.3 {29.2}	8.3 {29.3}	8.3 {29.0}
	-5	8.1 {28.6}	8.3 {29.3}	8.4 {29.5}	8.4 {29.6}	8.4 {29.5}	8.3 {29.1}
	-10	8.3 {29.1}	8.4 {29.6}	8.4 {29.7}	8.4 {29.7}	8.4 {29.5}	8.2 {29.0}
	-20	8.4 {29.5}	8.4 {29.7}	8.4 {29.7}	8.4 {29.6}	8.3 {29.2}	8.1 {28.4}
	-30	8.3 {29.3}	8.3 {29.3}	8.3 {29.2}	8.3 {29.0}	8.1 {28.4}	7.8 {27.5}
	-40	8.2 {28.7}	8.1 {28.6}	8.1 {28.3}	8.0 {28.1}	7.8 {27.4}	7.5 {26.4}
	-50	7.9 {27.9}	7.8 {27.6}	7.8 {27.3}	7.7 {27.0}	7.4 {26.1}	7.1 {25.0}
VKV-40DS	10	11.7 {41.0}	12.3 {43.3}	12.6 {44.3}	12.7 {44.8}	13.0 {45.7}	13.0 {45.8}
	5	12.3 {43.2}	12.8 {45.0}	13.0 {45.8}	13.1 {46.1}	13.2 {46.6}	13.2 {46.4}
	0	12.8 {44.8}	13.1 {46.2}	13.3 {46.7}	13.4 {47.0}	13.4 {47.1}	13.3 {46.7}
	-5	13.1 {46.0}	13.4 {47.1}	13.5 {47.4}	13.5 {47.5}	13.5 {47.4}	13.3 {46.8}
	-10	13.3 {46.8}	13.5 {47.5}	13.6 {47.7}	13.6 {47.8}	13.5 {47.4}	13.2 {46.6}
	-20	13.5 {47.4}	13.6 {47.8}	13.6 {47.7}	13.5 {47.6}	13.3 {46.9}	13.0 {45.7}
	-30	13.4 {47.1}	13.4 {47.1}	13.3 {46.9}	13.3 {46.6}	13.0 {45.7}	12.6 {44.2}
	-40	13.1 {46.2}	13.1 {45.9}	12.9 {45.5}	12.9 {45.2}	12.5 {44.0}	12.0 {42.4}
	-50	12.7 {44.8}	12.6 {44.3}	12.5 {43.8}	12.3 {43.4}	11.9 {42.0}	11.4 {40.2}

Capacity Table for VKV

R407H < Type VKV >

Subcooling : 0℃ / Superheat : 0℃

Catalog No.	Evaporating Temp. (℃)	Capacity (U.S.R.T.) (kW)					
		R407H					
		Condensing Temp. (℃)					
		30	35	38	40	45	50
VKV-14DS VKV-14DS167	10	1.5 {5.4}	1.6 {5.7}	1.7 {5.9}	1.7 {6.0}	1.7 {6.1}	1.8 {6.2}
	5	1.6 {5.7}	1.7 {6.0}	1.7 {6.1}	1.8 {6.2}	1.8 {6.3}	1.8 {6.3}
	0	1.7 {5.9}	1.7 {6.1}	1.8 {6.2}	1.8 {6.3}	1.8 {6.4}	1.8 {6.4}
	-5	1.7 {6.1}	1.8 {6.3}	1.8 {6.3}	1.8 {6.4}	1.8 {6.4}	1.8 {6.4}
	-10	1.8 {6.2}	1.8 {6.3}	1.8 {6.4}	1.8 {6.4}	1.8 {6.5}	1.8 {6.4}
	-20	1.8 {6.3}	1.8 {6.4}	1.8 {6.4}	1.8 {6.5}	1.8 {6.4}	1.8 {6.4}
	-30	1.8 {6.3}	1.8 {6.4}	1.8 {6.4}	1.8 {6.4}	1.8 {6.3}	1.8 {6.2}
	-40	1.8 {6.2}	1.8 {6.2}	1.8 {6.2}	1.8 {6.2}	1.8 {6.2}	1.7 {6.0}
	-50	1.7 {6.1}	1.7 {6.1}	1.7 {6.1}	1.7 {6.0}	1.7 {6.0}	1.7 {5.8}
VKV-18DS VKV-18DS168	10	3.1 {10.8}	3.3 {11.5}	3.3 {11.8}	3.4 {12.0}	3.5 {12.3}	3.5 {12.5}
	5	3.2 {11.4}	3.4 {11.9}	3.5 {12.2}	3.5 {12.3}	3.6 {12.6}	3.6 {12.7}
	0	3.4 {11.8}	3.5 {12.3}	3.5 {12.5}	3.6 {12.6}	3.6 {12.8}	3.6 {12.8}
	-5	3.5 {12.1}	3.6 {12.5}	3.6 {12.7}	3.6 {12.8}	3.7 {12.9}	3.7 {12.9}
	-10	3.5 {12.4}	3.6 {12.7}	3.6 {12.8}	3.7 {12.9}	3.7 {12.9}	3.7 {12.9}
	-20	3.6 {12.6}	3.6 {12.8}	3.7 {12.9}	3.7 {12.9}	3.7 {12.9}	3.6 {12.7}
	-30	3.6 {12.6}	3.6 {12.7}	3.6 {12.8}	3.6 {12.8}	3.6 {12.7}	3.5 {12.5}
	-40	3.5 {12.4}	3.6 {12.5}	3.6 {12.5}	3.5 {12.5}	3.5 {12.3}	3.4 {12.1}
	-50	3.5 {12.1}	3.5 {12.2}	3.4 {12.1}	3.4 {12.1}	3.4 {11.9}	3.3 {11.6}
VKV-25DS VKV-25DS169	10	5.5 {19.4}	5.9 {20.6}	6.0 {21.2}	6.1 {21.5}	6.3 {22.1}	6.4 {22.5}
	5	5.8 {20.5}	6.1 {21.5}	6.2 {21.9}	6.3 {22.2}	6.4 {22.6}	6.5 {22.8}
	0	6.0 {21.3}	6.3 {22.1}	6.4 {22.4}	6.4 {22.6}	6.5 {23.0}	6.6 {23.0}
	-5	6.2 {21.8}	6.4 {22.5}	6.5 {22.8}	6.5 {23.0}	6.6 {23.2}	6.6 {23.2}
	-10	6.3 {22.3}	6.5 {22.8}	6.6 {23.0}	6.6 {23.2}	6.6 {23.3}	6.6 {23.2}
	-20	6.4 {22.7}	6.6 {23.0}	6.6 {23.2}	6.6 {23.2}	6.6 {23.2}	6.5 {22.9}
	-30	6.4 {22.7}	6.5 {22.9}	6.5 {23.0}	6.5 {23.0}	6.5 {22.8}	6.4 {22.5}
	-40	6.4 {22.4}	6.4 {22.5}	6.4 {22.5}	6.4 {22.4}	6.3 {22.2}	6.2 {21.8}
	-50	6.2 {21.8}	6.2 {21.9}	6.2 {21.8}	6.2 {21.8}	6.1 {21.4}	5.9 {20.9}
VKV-30DS VKV-30DS170	10	7.4 {25.9}	7.8 {27.5}	8.0 {28.3}	8.2 {28.7}	8.4 {29.5}	8.5 {29.9}
	5	7.8 {27.3}	8.1 {28.6}	8.3 {29.2}	8.4 {29.6}	8.6 {30.2}	8.7 {30.4}
	0	8.1 {28.3}	8.4 {29.4}	8.5 {29.9}	8.6 {30.2}	8.7 {30.6}	8.7 {30.7}
	-5	8.3 {29.1}	8.5 {30.0}	8.6 {30.4}	8.7 {30.6}	8.8 {30.9}	8.8 {30.9}
	-10	8.4 {29.7}	8.6 {30.4}	8.7 {30.7}	8.8 {30.9}	8.8 {31.0}	8.8 {30.9}
	-20	8.6 {30.2}	8.7 {30.7}	8.8 {30.9}	8.8 {31.0}	8.8 {30.9}	8.7 {30.6}
	-30	8.6 {30.2}	8.7 {30.5}	8.7 {30.6}	8.7 {30.6}	8.6 {30.4}	8.5 {29.9}
	-40	8.5 {29.8}	8.5 {30.0}	8.5 {30.0}	8.5 {29.9}	8.4 {29.6}	8.3 {29.0}
	-50	8.3 {29.1}	8.3 {29.2}	8.3 {29.1}	8.2 {29.0}	8.1 {28.6}	7.9 {27.9}
VKV-32DS VKV-32DS171	10	8.6 {30.2}	9.1 {32.1}	9.4 {33.0}	9.5 {33.5}	9.8 {34.4}	9.9 {34.9}
	5	9.1 {31.8}	9.5 {33.4}	9.7 {34.1}	9.8 {34.5}	10.0 {35.2}	10.1 {35.5}
	0	9.4 {33.1}	9.8 {34.3}	9.9 {34.9}	10.0 {35.2}	10.2 {35.7}	10.2 {35.9}
	-5	9.7 {34.0}	10.0 {35.0}	10.1 {35.5}	10.2 {35.7}	10.3 {36.1}	10.2 {36.0}
	-10	9.8 {34.6}	10.1 {35.5}	10.2 {35.8}	10.2 {36.0}	10.3 {36.2}	10.3 {36.1}
	-20	10.0 {35.3}	10.2 {35.8}	10.2 {36.0}	10.3 {36.1}	10.3 {36.1}	10.2 {35.7}
	-30	10.0 {35.3}	10.1 {35.6}	10.2 {35.7}	10.2 {35.7}	10.1 {35.5}	9.9 {34.9}
	-40	9.9 {34.8}	9.9 {35.0}	9.9 {35.0}	9.9 {34.9}	9.8 {34.5}	9.6 {33.9}
	-50	9.7 {34.0}	9.7 {34.0}	9.7 {34.0}	9.6 {33.8}	9.5 {33.3}	9.3 {32.5}
VKV-40DS	10	13.8 {48.5}	14.7 {51.6}	15.1 {53.0}	15.3 {53.8}	15.7 {55.3}	16.0 {56.1}
	5	14.5 {51.2}	15.3 {53.6}	15.6 {54.8}	15.8 {55.4}	16.1 {56.6}	16.2 {57.1}
	0	15.1 {53.1}	15.7 {55.2}	16.0 {56.1}	16.1 {56.6}	16.3 {57.4}	16.4 {57.6}
	-5	15.5 {54.6}	16.0 {56.3}	16.2 {57.0}	16.3 {57.4}	16.5 {58.0}	16.5 {57.9}
	-10	15.8 {55.7}	16.2 {57.0}	16.4 {57.6}	16.5 {57.9}	16.6 {58.2}	16.5 {57.9}
	-20	16.1 {56.7}	16.4 {57.6}	16.5 {57.9}	16.5 {58.1}	16.5 {58.0}	16.3 {57.4}
	-30	16.1 {56.7}	16.3 {57.3}	16.3 {57.4}	16.3 {57.4}	16.2 {57.0}	16.0 {56.1}
	-40	15.9 {55.9}	16.0 {56.2}	16.0 {56.2}	16.0 {56.1}	15.8 {55.5}	15.5 {54.4}
	-50	15.5 {54.6}	15.6 {54.7}	15.5 {54.6}	15.5 {54.4}	15.2 {53.6}	14.9 {52.3}