

Capacity Table

Liquid line Capacity

CT. 38°C / ET. 5°C / SC. 0K

Catalog No.	Capacity (U.S.R.T. {kw})							
	R134a				R404A			
	Pressure Drop (MPa)							
	0.01	0.015	0.02	0.04	0.01	0.015	0.02	0.04
JEV-1203EX	10 {36}	13 {44}	15 {51}	21 {73}	7.2 {25}	8.8 {31}	10 {36}	14 {50}
JEV-2006EX	22 {77}	27 {95}	31 {109}	44 {155}	15 {54}	19 {66}	22 {76}	31 {107}
JEV-2510EX	38 {132}	46 {161}	53 {186}	75 {264}	26 {92}	32 {112}	37 {129}	52 {183}
JEV-3212EX	57 {200}	69 {244}	80 {282}	113 {399}	39 {139}	48.3 {170}	56 {196}	79 {277}

*Based on condensing temp. 38°C, evaporating temp. -5°C, sub-cooling 0°C. In case the conditions is different, the value is multiplied by the correction factor in the table.

Evaporating temperature correction factor

Evaporating Temp. (°C)	Correction factor	
	R134a	R404A
5	1	1
0	0.98	0.98
-10	0.94	0.93
-20	0.90	0.88
-30	0.85	0.83
-40	0.81	0.78

Subcooling correction factor

Subcooling (K)	Correction factor	
	R134a	R404A
0	1	1
10	1.12	1.17
20	1.23	1.34
30	1.35	1.51
40	1.46	1.67
50	1.58	1.83

Suction line Capacity

CT. 38°C , Superheat at valve inlet 0K

Catalog No.	Pressure drop across the valve (MPa)	Capacity (U.S.R.T. {kw})					
		R134a					
		Evaporating Temp. (°C)					
		5	0	-10	-20	-30	-40
JEV-1203EX	0.01	1.19 {4.2}	1.02 {3.6}	0.85 {3.0}	0.68 {2.4}	0.51 {1.8}	0.34 {1.20}
	0.015	1.4 {5.0}	1.29 {4.5}	1.04 {3.6}	0.81 {2.9}	0.62 {2.2}	0.46 {1.6}
	0.02	1.6 {5.8}	1.48 {5.2}	1.19 {4.2}	0.93 {3.3}	0.71 {2.5}	0.51 {1.8}
	0.04	2.3 {8.1}	2.1 {7.3}	1.6 {5.8}	1.26 {4.4}	0.93 {3.3}	0.63 {2.2}
JEV-2006EX	0.01	2.5 {9.0}	2.2 {7.7}	1.82 {6.4}	1.46 {5.1}	1.09 {3.8}	0.73 {2.6}
	0.015	3.1 {10.7}	2.8 {9.7}	2.2 {7.8}	1.74 {6.1}	1.32 {4.7}	0.97 {3.4}
	0.02	3.5 {12.3}	3.2 {11.1}	2.5 {8.9}	2.0 {7.0}	1.50 {5.3}	1.09 {3.8}
	0.04	4.9 {17.2}	4.4 {15.5}	3.5 {12.3}	2.7 {9.5}	2.0 {7.0}	1.34 {4.7}
JEV-2510EX	0.01	4.3 {15.3}	3.7 {13.1}	3.1 {10.9}	2.5 {8.7}	1.86 {6.5}	1.24 {4.4}
	0.015	5.2 {18.3}	4.7 {16.5}	3.8 {13.3}	3.0 {10.4}	2.3 {7.9}	1.65 {5.8}
	0.02	6.0 {21}	5.4 {19.0}	4.3 {15.2}	3.4 {11.9}	2.6 {9.0}	1.85 {6.5}
	0.04	8.3 {29}	7.5 {26}	6.0 {21}	4.6 {16.1}	3.4 {11.9}	2.3 {8.0}
JEV-3212EX	0.01	6.57 {23.1}	5.63 {19.8}	4.69 {16.5}	3.75 {13.2}	2.81 {9.9}	1.88 {6.60}
	0.015	7.87 {27.7}	7.10 {25.0}	5.71 {20.1}	4.48 {15.7}	3.41 {12.0}	2.50 {8.8}
	0.02	9.0 {31.8}	8.2 {28.7}	6.55 {23.0}	5.12 {18.0}	3.88 {13.6}	2.81 {9.9}
	0.04	12.6 {44.3}	11.3 {39.9}	9.0 {31.7}	6.94 {24.4}	5.11 {18.0}	3.46 {12.2}

Catalog No.	Pressure drop (MPa)	Capacity (U.S.R.T. {kw})					
		R404A					
		Evaporating Temp. (°C)					
		5	0	-10	-20	-30	-40
JEV-1203EX	0.01	1.19 {4.2}	1.11 {3.9}	0.94 {3.3}	0.77 {2.7}	0.60 {2.1}	0.43 {1.5}
	0.015	1.5 {5.3}	1.37 {4.8}	1.12 {4.0}	0.90 {3.2}	0.71 {2.5}	0.54 {1.9}
	0.02	1.7 {6.1}	1.6 {5.6}	1.29 {4.5}	1.04 {3.6}	0.81 {2.9}	0.62 {2.2}
	0.04	2.4 {8.5}	2.2 {7.8}	1.8 {6.4}	1.44 {5.1}	1.12 {3.9}	0.83 {2.9}
JEV-2006EX	0.01	2.5 {9.0}	2.4 {8.3}	2.0 {7.0}	1.64 {5.8}	1.27 {4.5}	0.91 {3.2}
	0.015	3.2 {11.3}	2.9 {10.3}	2.4 {8.4}	1.9 {6.8}	1.51 {5.3}	1.15 {4.0}
	0.02	3.7 {13.0}	3.4 {11.8}	2.8 {9.7}	2.2 {7.8}	1.73 {6.1}	1.31 {4.6}
	0.04	5.2 {18}	4.7 {16.6}	3.9 {13.6}	3.1 {10.8}	2.4 {8.4}	1.78 {6.3}
JEV-2510EX	0.01	4.3 {15.3}	4.0 {14.2}	3.4 {12.0}	2.8 {9.8}	2.2 {7.6}	1.55 {5.5}
	0.015	5.5 {19.2}	5.0 {17.5}	4.1 {14.4}	3.3 {11.5}	2.6 {9.0}	1.96 {6.9}
	0.02	6.3 {22}	5.7 {20.2}	4.7 {16.5}	3.8 {13.3}	2.9 {10.4}	2.2 {7.9}
	0.04	8.8 {31}	8.0 {28}	6.6 {23}	5.2 {18.4}	4.1 {14.3}	3.0 {10.7}
JEV-3212EX	0.01	6.57 {23.1}	6.10 {21.5}	5.16 {18.2}	4.22 {14.9}	3.28 {11.6}	2.35 {8.3}
	0.015	8.3 {29.1}	7.53 {26.5}	6.18 {21.7}	4.96 {17.5}	3.89 {13.7}	2.97 {10.4}
	0.02	9.5 {33.5}	8.7 {30.5}	7.11 {25.0}	5.71 {20.1}	4.46 {15.7}	3.39 {11.9}
	0.04	13.4 {47.0}	12.2 {42.8}	9.9 {35.0}	7.93 {27.9}	6.15 {21.6}	4.59 {16.1}

Flow Rate

Hot Gas Defrost Line

CT. 38°C , hot Gas temperature at valve inlet 50°C

Catalog No.	Hot Gas Flow Rate (kg/h)							
	R134a				R404A			
	Pressure Drop (MPa)							
	0.05	0.10	0.15	0.30	0.05	0.10	0.15	0.30
JEV-1203EX	343	479	578	783	452	634	771	1065
JEV-2006EX	732	1022	1234	1670	964	1353	1645	2273
JEV-2510EX	1247	1740	2102	2844	1642	2304	2801	3870
JEV-3212EX	1888	2634	3182	4305	2485	3488	4240	5859