

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
UEV-1004BX	6.9 {24}	8.4 {30}	9.7 {34}	14 {48}	4.8 {17}	5.8 {21}	6.8 {24}	9.6 {34}
UEV-1205BX	12 {42}	15 {52}	17 {60}	24 {85}	8.4 {29}	10 {36}	12 {42}	17 {59}
UEV-1506BX	18 {64}	22 {78}	26 {91}	36 {128}	13 {45}	16 {55}	18 {63}	25 {89}
UEV-1003GX	6.9 {24}	8.4 {30}	10 {34}	14 {48}	4.8 {17}	5.8 {21}	6.8 {24}	9.6 {34}
UEV-1204GX	12 {42}	15 {52}	17 {60}	24 {85}	8.4 {29}	10 {36}	12 {42}	17 {59}
UEV-1506GX	18 {64}	22 {78}	26 {91}	36 {128}	13 {45}	16 {55}	18 {63}	25 {89}
UEV-2010GX	31 {109}	38 {133}	44 {154}	62 {218}	21 {76}	26 {93}	30 {107}	43 {151}
UEV-1004DX	6.9 {24}	8.4 {30}	9.7 {34}	14 {48}	4.8 {17}	5.8 {21}	6.8 {24}	9.6 {34}
UEV-1205DX	12 {42}	15 {52}	17 {60}	24 {85}	8.4 {29}	10 {36}	12 {42}	17 {59}
UEV-1506DX	18 {64}	22 {78}	26 {91}	36 {128}	13 {45}	16 {55}	18 {63}	25 {89}
UEV-2007DX	31 {109}	38 {133}	44 {154}	62 {218}	21 {76}	26 {93}	30 {107}	43 {151}
UEV-2010DX	31 {109}	38 {133}	44 {154}	62 {218}	21 {76}	26 {93}	30 {107}	43 {151}
UEV-2011DX	31 {109}	38 {133}	44 {154}	62 {218}	21 {76}	26 {93}	30 {107}	43 {151}

*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	5	0	-10	-20	-30	-40
UEV-1004BX	0.01	0.78	{2.7}	0.71	{2.5}	0.57	{2.0}	0.45	{1.6}	0.34	{1.2}	0.25	{0.90}
	0.015	1.0	{3.4}	0.86	{3.0}	0.69	{2.4}	0.54	{1.9}	0.41	{1.5}	0.30	{1.1}
	0.02	1.1	{3.9}	0.99	{3.5}	0.79	{2.8}	0.62	{2.2}	0.47	{1.7}	0.34	{1.2}
	0.04	1.5	{5.4}	1.4	{4.8}	1.1	{3.8}	0.84	{3.0}	0.62	{2.2}	0.42	{1.5}
UEV-1205BX	0.01	1.4	{4.8}	1.2	{4.3}	0.99	{3.5}	0.78	{2.8}	0.60	{2.1}	0.45	{1.6}
	0.015	1.7	{5.9}	1.5	{5.3}	1.2	{4.3}	0.95	{3.3}	0.72	{2.5}	0.53	{1.9}
	0.02	1.9	{6.8}	1.7	{6.1}	1.4	{4.9}	1.1	{3.8}	0.82	{2.9}	0.60	{2.1}
	0.04	2.7	{9.4}	2.4	{8.5}	1.9	{6.7}	1.5	{5.2}	1.1	{3.8}	0.73	{2.6}
UEV-1506BX	0.01	2.1	{7.3}	1.9	{6.6}	1.5	{5.3}	1.2	{4.2}	0.91	{3.2}	0.67	{2.4}
	0.015	2.5	{8.9}	2.3	{8.0}	1.8	{6.4}	1.4	{5.1}	1.1	{3.9}	0.80	{2.8}
	0.02	2.9	{10}	2.6	{9.2}	2.1	{7.4}	1.6	{5.8}	1.2	{4.4}	0.90	{3.2}
	0.04	4.1	{14}	3.6	{13}	2.9	{10}	2.2	{7.8}	1.6	{5.8}	1.1	{3.9}
UEV-1003GX	0.01	0.78	{2.7}	0.71	{2.5}	0.57	{2.0}	0.45	{1.6}	0.34	{1.2}	0.25	{0.90}
	0.015	0.95	{3.4}	0.86	{3.0}	0.69	{2.4}	0.54	{1.9}	0.41	{1.5}	0.30	{1.1}
	0.02	1.1	{3.9}	1.0	{3.5}	0.79	{2.8}	0.62	{2.2}	0.47	{1.7}	0.34	{1.2}
	0.04	1.5	{5.4}	1.4	{4.8}	1.1	{3.8}	0.84	{3.0}	0.62	{2.2}	0.42	{1.5}
UEV-1204GX	0.01	1.4	{4.8}	1.2	{4.3}	0.99	{3.5}	0.78	{2.8}	0.60	{2.1}	0.45	{1.6}
	0.015	1.7	{5.9}	1.5	{5.3}	1.2	{4.3}	0.95	{3.3}	0.72	{2.5}	0.53	{1.9}
	0.02	1.9	{6.8}	1.7	{6.1}	1.4	{4.9}	1.1	{3.8}	0.82	{2.9}	0.60	{2.1}
	0.04	2.7	{9.4}	2.4	{8.5}	1.9	{6.7}	1.5	{5.2}	1.1	{3.8}	0.73	{2.6}
UEV-1506GX	0.01	2.1	{7.3}	1.9	{6.6}	1.5	{5.3}	1.2	{4.2}	0.91	{3.2}	0.67	{2.4}
	0.015	2.5	{8.9}	2.3	{8.0}	1.8	{6.4}	1.4	{5.1}	1.1	{3.9}	0.80	{2.8}
	0.02	2.9	{10}	2.6	{9.2}	2.1	{7.4}	1.6	{5.8}	1.2	{4.4}	0.90	{3.2}
	0.04	4.1	{14}	3.6	{13}	2.9	{10}	2.2	{7.8}	1.6	{5.8}	1.1	{3.9}
UEV-2010GX	0.01	3.5	{12}	3.2	{11}	2.6	{9.0}	2.0	{7.1}	1.5	{5.4}	1.1	{4.0}
	0.015	4.3	{15}	3.9	{14}	3.1	{11}	2.4	{8.6}	1.9	{6.5}	1.4	{4.8}
	0.02	4.9	{17}	4.5	{16}	3.6	{13}	2.8	{9.8}	2.1	{7.4}	1.5	{5.4}
	0.04	6.9	{24}	6.2	{22}	4.9	{17}	3.8	{13}	2.8	{9.8}	1.9	{6.6}
UEV-1004DX	0.01	0.78	{2.7}	0.71	{2.5}	0.6	{2.0}	0.45	{1.6}	0.34	{1.2}	0.25	{0.90}
	0.015	0.95	{3.4}	0.86	{3.0}	0.7	{2.4}	0.54	{1.9}	0.41	{1.5}	0.30	{1.1}
	0.02	1.1	{3.9}	0.99	{3.5}	0.8	{2.8}	0.62	{2.2}	0.47	{1.7}	0.34	{1.2}
	0.04	1.5	{5.4}	1.4	{4.8}	1.1	{3.8}	0.84	{3.0}	0.62	{2.2}	0.42	{1.5}
UEV-1205DX	0.01	1.4	{4.8}	1.2	{4.3}	0.99	{3.5}	0.78	{2.8}	0.60	{2.1}	0.45	{1.6}
	0.015	1.7	{5.9}	1.5	{5.3}	1.2	{4.3}	0.95	{3.3}	0.72	{2.5}	0.53	{1.9}
	0.02	1.9	{6.8}	1.7	{6.1}	1.4	{4.9}	1.1	{3.8}	0.82	{2.9}	0.60	{2.1}
	0.04	2.7	{9.4}	2.4	{8.5}	1.9	{6.7}	1.5	{5.2}	1.1	{3.8}	0.73	{2.6}
UEV-1506DX	0.01	2.1	{7.3}	1.9	{6.6}	1.5	{5.3}	1.2	{4.2}	0.91	{3.2}	0.67	{2.4}
	0.015	2.5	{8.9}	2.3	{8.0}	1.8	{6.4}	1.4	{5.1}	1.1	{3.9}	0.80	{2.8}
	0.02	2.9	{10}	2.6	{9.2}	2.1	{7.4}	1.6	{5.8}	1.2	{4.4}	0.90	{3.2}
	0.04	4.1	{14}	3.6	{13}	2.9	{10}	2.2	{7.8}	1.6	{5.8}	1.1	{3.9}
UEV-2007DX	0.01	3.5	{12}	3.2	{11}	2.6	{9.0}	2.0	{7.1}	1.5	{5.4}	1.1	{4.0}
	0.015	4.3	{15}	3.9	{14}	3.1	{11}	2.4	{8.6}	1.9	{6.5}	1.4	{4.8}
	0.02	4.9	{17}	4.5	{16}	3.6	{13}	2.8	{9.8}	2.1	{7.4}	1.5	{5.4}
	0.04	6.9	{24}	6.2	{22}	4.9	{17}	3.8	{13}	2.8	{9.8}	1.9	{6.6}
UEV-2010DX	0.01	3.5	{12}	3.2	{11}	2.6	{9.0}	2.0	{7.1}	1.5	{5.4}	1.1	{4.0}
	0.015	4.3	{15}	3.9	{14}	3.1	{11}	2.4	{8.6}	1.9	{6.5}	1.4	{4.8}
	0.02	4.9	{17}	4.5	{16}	3.6	{13}	2.8	{9.8}	2.1	{7.4}	1.5	{5.4}
	0.04	6.9	{24}	6.2	{22}	4.9	{17}	3.8	{13}	2.8	{9.8}	1.9	{6.6}
UEV-2011DX	0.01	3.5	{12}	3.2	{11}	2.6	{9.0}	2.0	{7.1}	1.5	{5.4}	1.1	{4.0}
	0.015	4.3	{15}	3.9	{14}	3.1	{11}	2.4	{8.6}	1.9	{6.5}	1.4	{4.8}
	0.02	4.9	{17}	4.5	{16}	3.6	{13}	2.8	{9.8}	2.1	{7.4}	1.5	{5.4}
	0.04	6.9	{24}	6.2	{22}	4.9	{17}	3.8	{13}	2.8	{9.8}	1.9	{6.6}

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})								
		R404A								
		Evaporating Temp. (°C)								
		5	0	-10	-20	-30	-40			
UEV-1004BX	0.01	0.82 {2.9}	0.75 {2.6}	0.61 {2.2}	0.49 {1.7}	0.39 {1.4}	0.30 {1.0}			
	0.015	1.0 {3.5}	0.91 {3.2}	0.75 {2.6}	0.60 {2.1}	0.47 {1.7}	0.36 {1.3}			
	0.02	1.2 {4.1}	1.1 {3.7}	0.86 {3.0}	0.69 {2.4}	0.54 {1.9}	0.41 {1.4}			
	0.04	1.6 {5.7}	1.5 {5.2}	1.2 {4.2}	0.96 {3.4}	0.75 {2.6}	0.56 {2.0}			
UEV-1205BX	0.01	1.4 {5.0}	1.3 {4.6}	1.1 {3.8}	0.86 {3.0}	0.68 {2.4}	0.52 {1.8}			
	0.015	1.8 {6.2}	1.6 {5.6}	1.3 {4.6}	1.1 {3.7}	0.83 {2.9}	0.63 {2.2}			
	0.02	2.0 {7.1}	1.8 {6.5}	1.5 {5.3}	1.2 {4.3}	0.95 {3.3}	0.72 {2.5}			
	0.04	2.8 {10}	2.6 {9.1}	2.1 {7.4}	1.7 {5.9}	1.3 {4.6}	0.97 {3.4}			
UEV-1506BX	0.01	2.2 {7.6}	2.0 {7.0}	1.6 {5.7}	1.3 {4.6}	1.0 {3.6}	0.79 {2.8}			
	0.015	2.7 {9.3}	2.4 {8.5}	2.0 {7.0}	1.6 {5.6}	1.3 {4.4}	0.95 {3.3}			
	0.02	3.1 {11}	2.8 {9.8}	2.3 {8.0}	1.8 {6.4}	1.4 {5.0}	1.1 {3.8}			
	0.04	4.3 {15}	3.9 {14}	3.2 {11}	2.5 {9.0}	2.0 {6.9}	1.5 {5.2}			
UEV-1003GX	0.01	0.82 {2.9}	0.75 {2.6}	0.61 {2.2}	0.49 {1.7}	0.39 {1.4}	0.30 {1.0}			
	0.015	1.0 {3.5}	0.91 {3.2}	0.75 {2.6}	0.60 {2.1}	0.47 {1.7}	0.36 {1.3}			
	0.02	1.2 {4.1}	1.1 {3.7}	0.86 {3.0}	0.69 {2.4}	0.54 {1.9}	0.41 {1.4}			
	0.04	1.6 {5.7}	1.5 {5.2}	1.2 {4.2}	0.96 {3.4}	0.75 {2.6}	0.56 {2.0}			
UEV-1204GX	0.01	1.4 {5.0}	1.3 {4.6}	1.1 {3.8}	0.86 {3.0}	0.68 {2.4}	0.52 {1.8}			
	0.015	1.8 {6.2}	1.6 {5.6}	1.3 {4.6}	1.1 {3.7}	0.83 {2.9}	0.63 {2.2}			
	0.02	2.0 {7.1}	1.8 {6.5}	1.5 {5.3}	1.2 {4.3}	0.95 {3.3}	0.72 {2.5}			
	0.04	2.8 {10}	2.6 {9.1}	2.1 {7.4}	1.7 {5.9}	1.3 {4.6}	0.97 {3.4}			
UEV-1506GX	0.01	2.2 {7.6}	2.0 {7.0}	1.6 {5.7}	1.3 {4.6}	1.0 {3.6}	0.79 {2.8}			
	0.015	2.7 {9.3}	2.4 {8.5}	2.0 {7.0}	1.6 {5.6}	1.3 {4.4}	0.95 {3.3}			
	0.02	3.1 {11}	2.8 {9.8}	2.3 {8.0}	1.8 {6.4}	1.4 {5.0}	1.1 {3.8}			
	0.04	4.3 {15}	3.9 {14}	3.2 {11}	2.5 {9.0}	2.0 {6.9}	1.5 {5.2}			
UEV-2010GX	0.01	3.7 {13}	3.4 {12}	2.8 {9.7}	2.2 {7.8}	1.7 {6.1}	1.3 {4.7}			
	0.015	4.5 {16}	4.1 {14}	3.4 {12}	2.7 {9.5}	2.1 {7.5}	1.6 {5.7}			
	0.02	5.2 {18}	4.7 {17}	3.9 {14}	3.1 {11}	2.4 {8.6}	1.8 {6.5}			
	0.04	7.3 {26}	6.6 {23}	5.4 {19}	4.3 {15}	3.4 {12}	2.5 {8.8}			
UEV-1004DX	0.01	0.82 {2.9}	0.75 {2.6}	0.61 {2.2}	0.49 {1.7}	0.39 {1.4}	0.30 {1.0}			
	0.015	1.0 {3.5}	0.91 {3.2}	0.75 {2.6}	0.60 {2.1}	0.47 {1.7}	0.36 {1.3}			
	0.02	1.2 {4.1}	1.1 {3.7}	0.86 {3.0}	0.69 {2.4}	0.54 {1.9}	0.41 {1.4}			
	0.04	1.6 {5.7}	1.5 {5.2}	1.2 {4.2}	0.96 {3.4}	0.75 {2.6}	0.56 {2.0}			
UEV-1205DX	0.01	1.4 {5.0}	1.3 {4.6}	1.1 {3.8}	0.86 {3.0}	0.68 {2.4}	0.52 {1.8}			
	0.015	1.8 {6.2}	1.6 {5.6}	1.3 {4.6}	1.1 {3.7}	0.83 {2.9}	0.63 {2.2}			
	0.02	2.0 {7.1}	1.8 {6.5}	1.5 {5.3}	1.2 {4.3}	0.95 {3.3}	0.72 {2.5}			
	0.04	2.8 {10}	2.6 {9.1}	2.1 {7.4}	1.7 {5.9}	1.3 {4.6}	0.97 {3.4}			
UEV-1506DX	0.01	2.2 {7.6}	2.0 {7.0}	1.6 {5.7}	1.3 {4.6}	1.0 {3.6}	0.79 {2.8}			
	0.015	2.7 {9.3}	2.4 {8.5}	2.0 {7.0}	1.6 {5.6}	1.3 {4.4}	0.95 {3.3}			
	0.02	3.1 {11}	2.8 {9.8}	2.3 {8.0}	1.8 {6.4}	1.4 {5.0}	1.1 {3.8}			
	0.04	4.3 {15}	3.9 {14}	3.2 {11}	2.5 {9.0}	2.0 {6.9}	1.5 {5.2}			
UEV-2007DX	0.01	3.7 {13}	3.4 {12}	2.8 {9.7}	2.2 {7.8}	1.7 {6.1}	1.3 {4.7}			
	0.015	4.5 {16}	4.1 {14}	3.4 {12}	2.7 {9.5}	2.1 {7.5}	1.6 {5.7}			
	0.02	5.2 {18}	4.7 {17}	3.9 {14}	3.1 {11}	2.4 {8.6}	1.8 {6.5}			
	0.04	7.3 {26}	6.6 {23}	5.4 {19}	4.3 {15}	3.4 {12}	2.5 {8.8}			
UEV-2010DX	0.01	3.7 {13}	3.4 {12}	2.8 {9.7}	2.2 {7.8}	1.7 {6.1}	1.3 {4.7}			
	0.015	4.5 {16}	4.1 {14}	3.4 {12}	2.7 {9.5}	2.1 {7.5}	1.6 {5.7}			
	0.02	5.2 {18}	4.7 {17}	3.9 {14}	3.1 {11}	2.4 {8.6}	1.8 {6.5}			
	0.04	7.3 {26}	6.6 {23}	5.4 {19}	4.3 {15}	3.4 {12}	2.5 {8.8}			
UEV-2011DX	0.01	3.7 {13}	3.4 {12}	2.8 {9.7}	2.2 {7.8}	1.7 {6.1}	1.3 {4.7}			
	0.015	4.5 {16}	4.1 {14}	3.4 {12}	2.7 {9.5}	2.1 {7.5}	1.6 {5.7}			
	0.02	5.2 {18}	4.7 {17}	3.9 {14}	3.1 {11}	2.4 {8.6}	1.8 {6.5}			
	0.04	7.3 {26}	6.6 {23}	5.4 {19}	4.3 {15}	3.4 {12}	2.5 {8.8}			

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
UEV-1004BX	29	40	48	65	38	53	64	89
UEV-1205BX	58	81	98	133	77	108	131	181
UEV-1506BX	92	128	154	209	120	169	206	284
UEV-1003GX	200	279	337	457	264	370	450	621
UEV-1204GX	332	463	559	757	437	613	745	1030
UEV-1506GX	515	718	868	1174	678	951	1156	1598
UEV-2010GX	29	40	48	65	38	53	64	89
UEV-1004DX	61	85	102	138	80	112	136	188
UEV-1205DX	95	133	160	217	125	175	213	295
UEV-1506DX	95	133	160	217	125	175	213	295
UEV-2007DX	229	319	386	522	301	423	514	710
UEV-2010DX	229	319	386	522	301	423	514	710
UEV-2011DX	400	559	675	913	527	740	899	1243