

## Correction Elements that Influence the Capacity

### Pressure Drop in High-Pressure Side Liquid Pipe

Pressure drop on high-pressure side deteriorates refrigerating capacity. Pressure drop generated between the condenser and the expansion valve leads to the generation of flash gas, and deteriorates the capacity of the expansion valve. In general, therefore, it is necessary to consider supercooling at about 1 to 3°C.

### Pressure Drop Correction Factor of Pipes on Low-Pressure Side

Pressure drop in the distributor and the evaporator cause the imbalance in temperature and deterioration of capacity, and increases the static superheat at the internal equalizer type expansion valve. The correction factors shown here are for cases in which Pressure drop changes occur in 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

## Correction Factor for Supercooling

Correction factors shown here indicate changes in capacity depending on the degree of supercooling caused by low-stage side high-pressure solution refrigerant in the two-stage compression-type refrigerating device, and heat exchange attachment device, etc. For devices with a significant degree of supercooling, the figure shown in the capacity table multiplied by the correction factor shown in the table below is the capacity of the expansion valve.

R134a

Condensing Temp (°C)	Sub-cooling 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)	Sub-cooling 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)	Sub-cooling 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)	Sub-cooling 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)	Sub-cooling 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)	Sub-cooling 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



Catalog No.		evaporating temp. (°C)	Capacity (U.S.R.T.) {kW}					
Type	Model		Condensing temp. (°C)					
			30	35	38	40	45	50
CTX-	34006BU 34006DU	-5	0.59 {2.06}	0.58 {2.04}	0.57 {2.01}	0.56 {1.97}	0.53 {1.88}	0.50 {1.75}
		-10	0.53 {1.88}	0.52 {1.84}	0.51 {1.81}	0.50 {1.77}	0.47 {1.67}	0.44 {1.53}
		-20	0.44 {1.56}	0.44 {1.53}	0.43 {1.50}	0.41 {1.45}	0.39 {1.36}	0.34 {1.21}
		-30	0.36 {1.25}	0.34 {1.20}	0.33 {1.16}	0.32 {1.12}	0.30 {1.04}	-
	34013BU 34013DU	-40	0.27 {0.94}	0.26 {0.90}	0.25 {0.87}	0.24 {0.83}	0.22 {0.76}	-
		-5	1.25 {4.40}	1.25 {4.38}	1.23 {4.33}	1.21 {4.26}	1.15 {4.05}	1.06 {3.74}
		-10	1.19 {4.18}	1.17 {4.12}	1.15 {4.05}	1.13 {3.97}	1.06 {3.74}	0.97 {3.42}
		-20	1.03 {3.61}	1.00 {3.51}	0.97 {3.42}	0.95 {3.34}	0.88 {3.11}	0.80 {2.80}
	34023BU 34023DU	-30	0.88 {3.10}	0.85 {2.99}	0.82 {2.90}	0.80 {2.82}	0.74 {2.59}	-
		-40	0.74 {2.59}	0.70 {2.45}	0.67 {2.37}	0.65 {2.30}	0.59 {2.08}	-
		-5	2.32 {8.16}	2.30 {8.08}	2.27 {7.97}	2.24 {7.86}	2.12 {7.46}	1.96 {6.90}
		-10	2.06 {7.23}	2.02 {7.10}	1.99 {6.98}	1.95 {6.85}	1.84 {6.46}	1.69 {5.95}
	34035BU 34035DU	-20	1.78 {6.25}	1.73 {6.07}	1.68 {5.92}	1.64 {5.78}	1.53 {5.38}	1.39 {4.88}
		-30	1.46 {5.13}	1.40 {4.92}	1.36 {4.78}	1.32 {4.65}	1.21 {4.27}	-
		-40	1.14 {4.00}	1.08 {3.81}	1.05 {3.68}	1.01 {3.56}	0.92 {3.25}	-
		-5	3.33 {11.7}	3.30 {11.6}	3.27 {11.5}	3.19 {11.2}	3.04 {10.7}	2.57 {9.03}
	34045BU 34045DU	-10	3.07 {10.8}	3.01 {10.6}	2.96 {10.4}	2.90 {10.2}	2.75 {9.67}	2.52 {8.87}
		-20	2.60 {9.14}	2.53 {8.88}	2.46 {8.65}	2.41 {8.46}	2.24 {7.87}	2.03 {7.14}
		-30	2.19 {7.69}	2.11 {7.41}	2.04 {7.19}	1.99 {6.99}	1.83 {6.44}	-
		-40	1.71 {6.01}	1.63 {5.73}	1.57 {5.53}	1.52 {5.36}	1.39 {4.88}	-
	57060DU	-5	4.27 {15.0}	4.24 {14.9}	4.21 {14.8}	4.12 {14.5}	3.92 {13.8}	3.61 {12.7}
		-10	3.92 {13.8}	3.87 {13.6}	3.81 {13.4}	3.73 {13.1}	3.53 {12.4}	3.24 {11.4}
		-20	3.33 {11.7}	3.21 {11.3}	3.16 {11.1}	3.07 {10.8}	2.87 {10.1}	2.61 {9.18}
		-30	2.81 {9.88}	2.71 {9.52}	2.62 {9.23}	2.55 {8.98}	2.35 {8.27}	-
	57080DU	-40	2.20 {7.72}	2.10 {7.37}	2.02 {7.10}	1.96 {6.89}	1.78 {6.27}	-
		-5	5.83 {20.5}	5.80 {20.4}	5.72 {20.1}	5.60 {19.7}	5.35 {18.8}	4.95 {17.4}
		-10	5.46 {19.2}	5.37 {18.9}	5.29 {18.6}	5.18 {18.2}	4.89 {17.2}	4.49 {15.8}
		-20	4.64 {16.3}	4.52 {15.9}	4.41 {15.5}	4.29 {15.1}	3.98 {14.0}	3.61 {12.7}
	71110DU	-30	3.92 {13.8}	3.78 {13.3}	3.67 {12.9}	3.55 {12.5}	3.27 {11.5}	-
		-40	3.27 {11.5}	3.13 {11.0}	3.04 {10.7}	2.93 {10.3}	2.68 {9.42}	-
		-5	7.76 {27.3}	7.71 {27.1}	7.62 {26.8}	7.48 {26.3}	7.11 {25.0}	6.60 {23.2}
		-10	7.31 {25.7}	7.22 {25.4}	7.08 {24.9}	6.97 {24.5}	6.57 {23.1}	6.00 {21.1}
	71140DU	-20	6.20 {21.8}	6.03 {21.2}	5.89 {20.7}	5.72 {20.1}	5.35 {18.8}	4.83 {17.0}
		-30	5.26 {18.5}	5.06 {17.8}	4.92 {17.3}	4.78 {16.8}	4.38 {15.4}	-
		-40	4.38 {15.4}	4.21 {14.8}	4.07 {14.3}	3.92 {13.8}	3.55 {12.5}	-
		-5	11.0 {38.7}	10.9 {38.4}	10.8 {38.0}	10.6 {37.3}	10.1 {35.5}	9.30 {32.7}
	71160DU	-10	10.1 {35.5}	9.81 {34.5}	9.67 {34.0}	9.47 {33.3}	8.93 {31.4}	8.28 {29.1}
		-20	8.93 {31.4}	8.67 {30.5}	8.45 {29.7}	8.22 {28.9}	7.68 {27.0}	6.97 {24.5}
		-30	7.45 {26.2}	7.14 {25.1}	6.94 {24.4}	6.74 {23.7}	6.20 {21.8}	-
		-40	6.26 {22.0}	5.94 {20.9}	5.74 {20.2}	5.55 {19.5}	5.06 {17.8}	-
	12220DU	-5	13.8 {48.5}	13.7 {48.2}	13.5 {47.6}	13.3 {46.8}	12.7 {44.5}	11.7 {41.1}
		-10	13.0 {45.6}	12.8 {45.0}	12.6 {44.2}	12.3 {43.4}	11.6 {40.9}	10.7 {37.5}
		-20	11.2 {39.3}	10.8 {38.1}	10.6 {37.2}	10.4 {36.4}	9.61 {33.8}	8.73 {30.7}
		-30	9.36 {32.9}	8.99 {31.6}	8.73 {30.7}	8.47 {29.8}	7.79 {27.4}	-
	12270DU	-40	7.96 {28.0}	7.59 {26.7}	7.31 {25.7}	7.05 {24.8}	6.43 {22.6}	-
		-5	15.7 {55.2}	15.6 {54.7}	15.4 {54.0}	15.1 {53.2}	14.4 {50.5}	13.3 {46.8}
		-10	14.7 {51.6}	14.4 {50.7}	14.2 {49.8}	13.9 {48.9}	13.1 {46.2}	12.1 {42.4}
		-20	12.7 {44.7}	12.4 {43.5}	12.1 {42.4}	11.8 {41.5}	11.0 {38.6}	9.93 {34.9}
	12330DU	-30	10.6 {37.4}	10.2 {36.0}	9.78 {34.4}	9.70 {34.1}	8.87 {31.2}	-
		-40	9.07 {31.9}	8.62 {30.3}	8.39 {29.5}	8.13 {28.6}	7.34 {25.8}	-
		-5	21.6 {76.0}	21.4 {75.4}	21.2 {74.5}	20.9 {73.4}	19.8 {69.6}	18.3 {64.4}
		-10	20.2 {71.1}	19.9 {70.0}	19.6 {68.8}	19.2 {67.5}	18.1 {63.7}	16.6 {58.5}
	12420DU	-20	17.3 {60.7}	16.8 {59.0}	16.4 {57.5}	16.0 {56.2}	14.9 {52.3}	13.5 {47.3}
		-30	14.7 {51.7}	14.1 {49.7}	13.7 {48.2}	13.3 {46.9}	12.3 {43.1}	-
		-40	12.4 {43.7}	11.9 {41.7}	11.4 {40.2}	11.1 {38.9}	10.1 {35.4}	-
		-5	26.7 {93.7}	26.5 {93.1}	26.1 {91.9}	25.7 {90.5}	24.4 {85.9}	22.6 {79.4}
	12500DU	-10	24.9 {87.4}	24.5 {86.0}	24.1 {84.6}	23.6 {83.1}	22.3 {78.3}	20.4 {71.8}
		-20	21.3 {75.0}	20.7 {72.9}	20.2 {71.0}	19.8 {69.5}	18.4 {64.6}	16.6 {58.5}
		-30	18.1 {63.6}	17.4 {61.2}	16.9 {59.3}	16.4 {57.7}	15.1 {53.1}	-
		-40	15.2 {53.6}	14.5 {51.1}	14.0 {49.3}	13.6 {47.8}	12.4 {43.5}	-
	12330DU	-5	32.4 {114}	31.9 {112}	31.9 {112}	31.0 {109}	29.6 {104}	27.4 {96.4}
		-10	30.4 {107}	30.2 {106}	29.6 {104}	29.0 {102}	27.3 {95.9}	25.0 {88.0}
		-20	26.0 {91.5}	25.3 {88.9}	24.6 {86.6}	24.1 {84.7}	22.4 {78.8}	20.3 {71.3}
		-30	22.1 {77.6}	21.2 {74.7}	20.6 {72.4}	20.0 {70.4}	18.5 {64.9}	-
	12420DU	-40	18.6 {65.4}	17.8 {62.4}	17.1 {60.1}	16.6 {58.3}	15.1 {53.1}	-
		-5	42.7 {150}	42.1 {148}	41.8 {147}	41.0 {144}	39.0 {137}	36.1 {127}
		-10	40.4 {142}	39.8 {140}	39.0 {137}	38.1 {134}	36.1 {127}	33.0 {116}
		-20	34.7 {122}	33.6 {118}	33.0 {116}	32.1 {113}	30.2 {106}	27.2 {95.6}
	12500DU	-30	29.6 {104}	28.4 {100}	27.6 {97.1}	26.9 {94.5}	24.7 {87.0}	-
		-40	25.2 {88.6}	24.0 {84.4}	23.2 {81.4}	22.4 {78.8}	20.4 {71.8}	-
		-5	50.9 {179}	50.3 {177}	49.8 {175}	48.9 {172}	46.4 {163}	42.9 {151}
		-10	48.1 {169}	47.2 {166}	46.4 {163}	45.5 {160}	42.7 {150}	39.5 {139}
	12500DU	-20	41.5 {146}	40.1 {141}	39.5 {139}	38.7 {136}	35.8 {126}	32.7 {115}
		-30	35.3 {124}	34.1 {120}	33.0 {116}	31.9 {112}	29.6 {104}	-
	12500DU	-40	30.2 {106}	28.7 {101}	27.7 {97.3}	26.9 {94.4}	24.4 {85.8}	-

Catalog No.		evaporating temp. (°C)	Capacity (U.S.R.T.) {kW}					
Type	Model		Condensing temp. (°C)					
			30	35	38	40	45	50
CTX-	34006BP 34006DP	0	0.90 {3.15}	0.93 {3.27}	0.94 {3.32}	0.95 {3.34}	0.96 {3.37}	0.96 {3.36}
		-5	0.87 {3.07}	0.89 {3.13}	0.90 {3.17}	0.90 {3.18}	0.91 {3.19}	0.89 {3.14}
		-10	0.80 {2.81}	0.71 {2.49}	0.83 {2.91}	0.83 {2.91}	0.83 {2.91}	0.81 {2.86}
		-20	0.68 {2.40}	0.69 {2.43}	0.69 {2.44}	0.69 {2.43}	0.69 {2.41}	0.67 {2.37}
		-30	0.56 {1.96}	0.55 {1.95}	0.56 {1.96}	0.55 {1.95}	0.55 {1.94}	-
	34013BP 34013DP	0	1.71 {6.03}	1.76 {6.19}	1.78 {6.27}	1.79 {6.28}	1.79 {6.30}	1.78 {6.25}
		-5	1.65 {5.80}	1.44 {5.05}	1.69 {5.93}	1.69 {5.93}	1.68 {5.92}	1.66 {5.85}
		-10	1.44 {5.08}	1.46 {5.13}	1.46 {5.15}	1.46 {5.14}	1.45 {5.10}	1.42 {4.99}
		-20	1.28 {4.50}	1.28 {4.51}	1.28 {4.51}	1.28 {4.49}	1.26 {4.43}	-
		-30	1.11 {3.90}	1.10 {3.88}	1.10 {3.88}	1.10 {3.86}	1.08 {3.79}	-
	34023BP 34023DP	0	3.24 {11.4}	3.38 {11.9}	3.44 {12.1}	3.44 {12.1}	3.47 {12.2}	3.47 {12.2}
		-5	3.10 {10.9}	3.21 {11.3}	3.24 {11.4}	3.24 {11.4}	3.27 {11.5}	3.21 {11.3}
		-10	2.79 {9.80}	2.84 {9.99}	2.87 {10.1}	2.87 {10.1}	2.87 {10.1}	2.80 {9.86}
		-20	2.47 {8.69}	2.49 {8.75}	2.50 {8.78}	2.49 {8.75}	2.47 {8.68}	2.42 {8.51}
		-30	2.09 {7.34}	2.09 {7.34}	2.09 {7.34}	2.08 {7.31}	2.05 {7.21}	-
	34035BP 34035DP	0	5.01 {17.6}	5.15 {18.1}	5.26 {18.5}	5.26 {18.5}	5.35 {18.8}	5.32 {18.7}
		-5	4.58 {16.1}	4.66 {16.4}	4.75 {16.7}	4.75 {16.7}	4.78 {16.8}	4.72 {16.6}
		-10	4.24 {14.9}	4.32 {15.2}	4.35 {15.3}	4.32 {15.2}	4.35 {15.3}	4.29 {15.1}
		-20	3.67 {12.9}	3.70 {13.0}	3.70 {13.0}	3.70 {13.0}	3.64 {12.8}	3.58 {12.6}
		-30	3.19 {11.2}	3.21 {11.3}	3.19 {11.2}	3.19 {11.2}	3.13 {11.0}	-
	34045BP 34045DP	0	6.40 {22.5}	6.65 {23.4}	6.77 {23.8}	6.80 {23.9}	6.85 {24.1}	6.83 {24.0}
		-5	5.89 {20.7}	6.03 {21.2}	6.11 {21.5}	6.11 {21.5}	6.14 {21.6}	6.09 {21.4}
		-10	5.46 {19.2}	5.55 {19.5}	5.57 {19.6}	5.57 {19.6}	5.55 {19.5}	5.52 {19.4}
		-20	4.69 {16.5}	4.72 {16.6}	4.75 {16.7}	4.72 {16.6}	4.69 {16.5}	4.61 {16.2}
		-30	4.07 {14.3}	4.10 {14.4}	4.10 {14.4}	4.10 {14.4}	4.04 {14.2}	-
	57060DP	0	8.87 {31.2}	9.21 {32.4}	9.38 {33.0}	9.41 {33.1}	9.53 {33.5}	9.47 {33.3}
		-5	8.28 {29.1}	8.53 {30.0}	8.62 {30.3}	8.62 {30.3}	8.67 {30.5}	8.59 {30.2}
		-10	7.82 {27.5}	7.99 {28.1}	8.05 {28.3}	8.02 {28.2}	8.05 {28.3}	7.93 {27.9}
		-20	6.80 {23.9}	6.85 {24.1}	6.88 {24.2}	6.83 {24.0}	6.80 {23.9}	6.65 {23.4}
		-30	5.92 {20.8}	5.92 {20.8}	5.92 {20.8}	5.89 {20.7}	5.83 {20.5}	-
	57080DP	0	11.9 {41.9}	12.4 {43.5}	12.6 {44.2}	12.6 {44.4}	12.8 {44.9}	12.7 {44.6}
		-5	11.0 {38.7}	11.3 {39.7}	11.4 {40.2}	11.5 {40.3}	11.5 {40.4}	11.4 {40.0}
		-10	10.5 {36.8}	10.7 {37.5}	10.8 {37.8}	10.8 {37.8}	10.7 {37.7}	10.6 {37.2}
		-20	9.04 {31.8}	9.16 {32.2}	9.16 {32.2}	9.16 {32.2}	9.04 {31.8}	8.87 {31.2}
		-30	7.93 {27.9}	7.96 {28.0}	7.93 {27.9}	7.91 {27.8}	7.79 {27.4}	-
	71110DP	0	16.5 {58.1}	17.2 {60.3}	17.4 {61.3}	17.6 {61.7}	17.7 {62.1}	17.6 {61.8}
		-5	15.5 {54.5}	15.9 {55.9}	16.1 {56.6}	16.2 {56.8}	16.2 {56.9}	16.0 {56.4}
		-10	14.4 {50.5}	14.7 {51.5}	14.8 {51.9}	14.8 {52.0}	14.7 {51.8}	14.6 {51.2}
		-20	13.0 {45.7}	13.1 {46.1}	13.1 {46.2}	13.1 {46.1}	13.0 {45.6}	12.7 {44.8}
		-30	11.2 {39.3}	11.2 {39.3}	11.2 {39.3}	11.1 {39.1}	11.0 {38.6}	-
71140DP	0	20.7 {72.7}	21.5 {75.5}	21.8 {76.7}	21.9 {77.1}	22.1 {77.8}	22.0 {77.4}	
	-5	19.4 {68.2}	19.8 {69.6}	20.0 {70.4}	20.1 {70.7}	20.2 {70.9}	20.1 {70.5}	
	-10	18.4 {64.7}	18.8 {66.1}	18.9 {66.5}	18.9 {66.5}	18.9 {66.4}	18.7 {65.6}	
	-20	16.2 {57.1}	16.4 {57.6}	16.4 {57.8}	16.4 {57.6}	16.2 {57.1}	15.9 {56.0}	
	-30	14.0 {49.2}	14.1 {49.4}	14.1 {49.4}	14.0 {49.1}	13.8 {48.5}	-	
71160DP	0	23.9 {84.0}	24.8 {87.2}	25.2 {88.5}	25.3 {89.0}	25.5 {89.8}	25.5 {89.5}	
	-5	22.2 {78.1}	22.8 {80.3}	23.1 {81.2}	23.2 {81.4}	23.2 {81.6}	23.0 {80.8}	
	-10	20.9 {73.6}	21.4 {75.1}	21.5 {75.7}	21.5 {75.7}	21.5 {75.5}	21.2 {74.5}	
	-20	18.5 {64.9}	18.8 {66.1}	18.8 {66.2}	18.8 {66.1}	18.6 {65.4}	18.3 {64.2}	
	-30	16.0 {56.3}	16.2 {56.8}	16.1 {56.5}	16.0 {56.2}	15.8 {55.5}	-	
12220DP	0	32.7 {115}	34.1 {120}	34.7 {122}	34.7 {122}	35.0 {123}	35.0 {123}	
	-5	30.7 {108}	31.6 {111}	31.9 {112}	31.9 {112}	32.1 {113}	31.6 {111}	
	-10	29.0 {102}	29.6 {104}	29.9 {105}	29.9 {105}	29.6 {104}	29.3 {103}	
	-20	25.3 {88.8}	25.5 {89.6}	25.5 {89.8}	25.5 {89.7}	25.3 {88.8}	24.7 {87.0}	
	-30	22.1 {77.7}	22.2 {78.1}	22.2 {78.0}	22.1 {77.7}	21.8 {76.6}	-	
12270DP	0	39.8 {140}	41.2 {145}	42.1 {148}	42.4 {149}	42.7 {150}	42.7 {150}	
	-5	37.5 {132}	38.1 {134}	38.7 {136}	38.7 {136}	38.7 {136}	38.4 {135}	
	-10	35.3 {124}	35.6 {125}	36.1 {127}	35.8 {126}	35.8 {126}	35.8 {126}	
	-20	30.7 {108}	31.3 {110}	31.3 {110}	31.3 {110}	31.0 {109}	30.2 {106}	
	-30	26.9 {94.5}	27.0 {94.9}	27.0 {94.8}	26.9 {94.4}	26.5 {93.1}	-	
12330DP	0	48.9 {172}	50.6 {178}	51.8 {182}	51.8 {182}	52.3 {184}	52.0 {183}	
	-5	45.8 {161}	46.6 {164}	47.5 {167}	47.5 {167}	47.8 {168}	47.2 {166}	
	-10	43.2 {152}	44.1 {155}	44.7 {157}	44.4 {156}	44.4 {156}	43.8 {154}	
	-20	37.8 {133}	38.4 {135}	38.4 {135}	38.1 {134}	37.8 {133}	37.3 {131}	
	-30	33.0 {116}	33.3 {117}	33.0 {116}	33.0 {116}	32.4 {114}	-	
12420DP	0	63.1 {222}	65.7 {231}	66.6 {234}	66.8 {235}	67.4 {237}	67.1 {236}	
	-5	59.7 {210}	61.4 {216}	62.0 {218}	62.0 {218}	62.3 {219}	61.7 {217}	
	-10	56.9 {200}	57.7 {203}	58.6 {206}	58.6 {206}	58.0 {204}	57.7 {203}	
	-20	50.6 {178}	50.9 {179}	51.2 {180}	50.9 {179}	50.6 {178}	49.8 {175}	
	-30	44.1 {155}	44.1 {155}	44.1 {155}	43.8 {154}	43.2 {152}	-	
12500DP	0	75.7 {266}	78.8 {277}	80.2 {282}	80.5 {283}	81.1 {285}	80.8 {284}	
	-5	72.0 {253}	73.7 {259}	74.5 {262}	74.8 {263}	75.1 {264}	74.2 {261}	
	-10	68.5 {241}	70.0 {246}	70.5 {248}	70.5 {248}	70.5 {248}	69.4 {244}	
	-20	60.9 {214}	60.9 {214}	61.4 {216}	60.9 {214}	60.6 {213}	59.4 {209}	
	-30	52.9 {186}	53.2 {187}	53.2 {187}	52.9 {186}	52.3 {184}	-	
		-40	46.9 {165}	46.6 {164}	46.6 {164}	46.4 {163}	45.5 {160}	-

Catalog No.		evaporating temp. (°C)	Capacity (U.S.R.T.) {kW}					
Type	Model		Condensing temp. (°C)					
			30	35	38	40	45	50
CTX-	34006BC1	0	0.83 {2.91}	0.86 {3.02}	0.86 {3.02}	0.86 {3.04}	0.86 {3.02}	0.85 {2.99}
		-5	0.80 {2.83}	0.82 {2.87}	0.82 {2.87}	0.82 {2.87}	0.81 {2.83}	0.80 {2.80}
		-10	0.71 {2.49}	0.72 {2.53}	0.72 {2.53}	0.72 {2.52}	0.71 {2.48}	0.70 {2.45}
		-20	0.56 {1.96}	0.55 {1.94}	0.55 {1.93}	0.54 {1.92}	0.53 {1.87}	0.52 {1.82}
		-30	0.45 {1.58}	0.44 {1.56}	0.44 {1.56}	0.44 {1.54}	0.43 {1.50}	-
	34006DC1	-40	0.37 {1.31}	0.36 {1.28}	0.36 {1.27}	0.36 {1.26}	0.34 {1.21}	-
		0	1.70 {5.98}	1.78 {6.25}	1.78 {6.26}	1.79 {6.29}	1.78 {6.25}	1.75 {6.17}
		-5	1.60 {5.62}	1.64 {5.75}	1.63 {5.75}	1.63 {5.74}	1.61 {5.66}	1.58 {5.56}
		-10	1.43 {5.02}	1.45 {5.1}	1.44 {5.08}	1.44 {5.08}	1.42 {4.99}	1.39 {4.89}
		-20	1.18 {4.15}	1.19 {4.19}	1.18 {4.16}	1.18 {4.14}	1.14 {4.02}	1.12 {3.92}
	34013BC1	-30	1.03 {3.62}	1.03 {3.61}	1.02 {3.57}	1.01 {3.54}	0.98 {3.43}	-
		-40	0.89 {3.12}	0.88 {3.08}	0.87 {3.05}	0.86 {3.03}	0.83 {2.91}	-
		0	2.94 {10.3}	3.06 {10.7}	3.05 {10.7}	3.08 {10.8}	3.05 {10.7}	3.01 {10.6}
		-5	2.78 {9.79}	2.83 {9.95}	2.83 {9.95}	2.83 {9.96}	2.80 {9.86}	2.74 {9.64}
		-10	2.39 {8.40}	2.43 {8.53}	2.42 {8.50}	2.41 {8.48}	2.37 {8.33}	2.33 {8.19}
	34023BC1	-20	2.08 {7.30}	2.10 {7.37}	2.08 {7.30}	2.07 {7.27}	2.01 {7.07}	1.96 {6.88}
		-30	1.68 {5.90}	1.67 {5.88}	1.65 {5.82}	1.64 {5.78}	1.59 {5.59}	-
		-40	1.34 {4.71}	1.33 {4.68}	1.32 {4.63}	1.31 {4.59}	1.26 {4.43}	-
		0	4.47 {15.7}	4.62 {16.3}	4.67 {16.4}	4.66 {16.4}	4.67 {16.4}	4.59 {16.1}
		-5	4.41 {15.5}	4.46 {15.7}	4.46 {15.7}	4.47 {15.7}	4.40 {15.5}	4.33 {15.2}
	34035BC1	-10	3.77 {13.3}	3.81 {13.4}	3.82 {13.4}	3.79 {13.3}	3.74 {13.1}	3.66 {12.9}
		-20	3.32 {11.7}	3.34 {11.7}	3.31 {11.6}	3.28 {11.6}	3.19 {11.2}	3.12 {11.0}
		-30	2.55 {8.97}	2.56 {9.01}	2.52 {8.87}	2.53 {8.88}	2.42 {8.52}	-
		-40	2.06 {7.25}	2.05 {7.2}	2.02 {7.11}	2.01 {7.05}	1.93 {6.80}	-
		0	5.75 {20.2}	6.01 {21.1}	6.00 {21.1}	6.03 {21.2}	5.98 {21.0}	5.87 {20.7}
	34045BC1	-5	5.68 {20.0}	5.77 {20.3}	5.74 {20.2}	5.72 {20.1}	5.66 {19.9}	5.56 {19.6}
		-10	4.80 {16.9}	4.91 {17.3}	4.91 {17.3}	4.90 {17.2}	4.79 {16.8}	4.69 {16.5}
		-20	4.22 {14.9}	4.25 {14.9}	4.24 {14.9}	4.20 {14.8}	4.10 {14.4}	3.99 {14.0}
		-30	3.26 {11.5}	3.28 {11.5}	3.26 {11.5}	3.23 {11.4}	3.13 {11.0}	-
		-40	2.66 {9.35}	2.64 {9.29}	2.60 {9.15}	2.58 {9.08}	2.50 {8.78}	-
	57060DC1	0	8.02 {28.2}	8.34 {29.3}	8.37 {29.4}	8.38 {29.5}	8.35 {29.4}	8.24 {29.0}
		-5	7.71 {27.1}	7.92 {27.8}	7.88 {27.7}	7.89 {27.7}	7.77 {27.3}	7.65 {26.9}
		-10	6.93 {24.4}	7.02 {24.7}	7.00 {24.6}	6.97 {24.5}	6.83 {24.0}	6.74 {23.7}
		-20	5.70 {20.0}	5.73 {20.2}	5.70 {20.0}	5.65 {19.9}	5.51 {19.4}	5.37 {18.9}
		-30	4.75 {16.7}	4.75 {16.7}	4.70 {16.5}	4.66 {16.4}	4.52 {15.9}	-
	57080DC1	-40	4.09 {14.4}	4.08 {14.3}	4.04 {14.2}	4.01 {14.1}	3.85 {13.5}	-
		0	10.7 {37.5}	11.1 {39.1}	11.1 {39.1}	11.2 {39.2}	11.1 {39.1}	10.9 {38.4}
		-5	10.3 {36.1}	10.5 {36.9}	10.5 {36.9}	10.5 {37.0}	10.3 {36.4}	10.2 {35.7}
		-10	9.08 {31.9}	8.86 {31.1}	8.84 {31.1}	8.82 {31.0}	8.67 {30.5}	8.84 {31.1}
		-20	7.65 {26.9}	7.69 {27.0}	7.65 {26.9}	7.61 {26.8}	7.39 {26.0}	7.21 {25.4}
	71110DC1	-30	6.37 {22.4}	6.36 {22.4}	6.29 {22.1}	6.23 {21.9}	6.04 {21.2}	-
		-40	5.48 {19.3}	5.42 {19.1}	5.37 {18.9}	5.32 {18.7}	5.12 {18.0}	-
		0	14.7 {51.6}	15.2 {53.5}	15.3 {53.7}	15.3 {53.9}	15.3 {53.7}	15.1 {53.0}
		-5	14.0 {49.3}	14.3 {50.3}	14.3 {50.2}	14.3 {50.3}	14.1 {49.6}	13.8 {48.6}
		-10	12.4 {43.7}	12.6 {44.4}	12.6 {44.2}	12.6 {44.2}	12.3 {43.4}	12.1 {42.5}
	71140DC1	-20	10.3 {36.3}	10.4 {36.4}	10.3 {36.1}	10.2 {35.9}	9.93 {34.9}	9.68 {34.0}
		-30	8.97 {31.5}	8.94 {31.4}	8.86 {31.1}	8.78 {30.9}	8.50 {29.9}	-
		-40	7.74 {27.2}	7.72 {27.1}	7.63 {26.8}	7.56 {26.6}	7.29 {25.6}	-
		0	18.7 {65.6}	19.5 {68.4}	19.5 {68.5}	19.5 {68.7}	19.5 {68.4}	19.2 {67.4}
		-5	17.8 {62.7}	18.2 {64.0}	18.2 {63.9}	18.2 {63.9}	17.9 {63.0}	17.6 {61.8}
	71160DC1	-10	15.6 {54.9}	15.9 {55.9}	15.8 {55.7}	15.8 {55.5}	15.5 {54.6}	15.2 {53.4}
		-20	13.4 {47.1}	13.5 {47.5}	13.4 {47.1}	13.3 {46.8}	13.0 {45.7}	12.6 {44.4}
		-30	11.3 {39.6}	11.3 {39.5}	11.1 {39.1}	11.0 {38.8}	10.7 {37.6}	-
		-40	9.86 {34.7}	9.78 {34.4}	9.66 {34.0}	9.64 {33.9}	9.22 {32.4}	-
		0	21.4 {75.3}	22.3 {78.5}	22.3 {78.5}	22.4 {78.8}	22.3 {78.5}	22.0 {77.4}
	12220DC1	-5	20.4 {71.8}	20.9 {73.5}	20.8 {73.2}	20.8 {73.3}	20.6 {72.3}	20.2 {70.9}
		-10	18.0 {63.3}	18.3 {64.5}	18.3 {64.2}	18.3 {64.2}	17.9 {63.0}	17.5 {61.6}
		-20	15.4 {54.0}	15.4 {54.3}	15.3 {53.9}	15.3 {53.6}	14.8 {52.1}	14.5 {50.8}
		-30	12.9 {45.2}	12.9 {45.2}	12.7 {44.8}	12.6 {44.4}	12.2 {43.0}	-
		-40	11.3 {39.6}	11.2 {39.4}	11.1 {38.9}	11.0 {38.6}	10.6 {37.2}	-
	12270DC1	0	29.2 {102}	30.3 {107}	30.2 {106}	30.3 {106}	30.3 {106}	29.9 {105}
		-5	28.1 {98.8}	28.8 {101}	28.8 {101}	28.9 {101}	28.3 {99.5}	27.7 {97.3}
		-10	24.8 {87.2}	25.3 {88.8}	25.1 {88.4}	25.1 {88.3}	24.7 {86.8}	24.1 {84.9}
		-20	20.7 {72.7}	20.8 {73.2}	20.7 {72.7}	20.6 {72.3}	20.0 {70.3}	19.5 {68.5}
		-30	17.8 {62.4}	17.8 {62.5}	17.6 {61.8}	17.5 {61.4}	16.9 {59.3}	-
	12330DC1	-40	15.5 {54.4}	15.4 {54.1}	15.2 {53.5}	15.1 {53.0}	14.5 {51.1}	-
		0	35.6 {125}	36.7 {129}	37.0 {130}	37.0 {130}	37.1 {130}	36.5 {128}
		-5	34.2 {120}	34.8 {122}	34.7 {122}	34.7 {122}	34.2 {120}	33.7 {119}
		-10	30.0 {105}	30.5 {107}	30.8 {108}	30.5 {107}	29.9 {105}	29.3 {103}
		-20	25.2 {88.5}	25.3 {89.0}	25.1 {88.4}	25.0 {88.0}	24.4 {85.6}	23.7 {83.3}
	12420DC1	-30	21.6 {76.0}	21.6 {75.9}	21.4 {75.2}	21.2 {74.6}	20.5 {72.2}	-
		-40	18.8 {66.1}	18.7 {65.7}	18.5 {64.9}	18.3 {64.3}	17.6 {62.0}	-
		0	43.6 {153}	45.2 {159}	45.4 {159}	45.5 {160}	45.2 {159}	44.7 {157}
		-5	41.9 {147}	42.7 {150}	42.7 {150}	42.9 {151}	42.2 {148}	41.5 {146}
		-10	37.2 {131}	37.6 {132}	37.5 {132}	37.2 {131}	36.9 {130}	36.1 {127}
	12500DC1	-20	30.9 {109}	31.3 {110}	31.1 {109}	30.8 {108}	29.9 {105}	29.3 {103}
		-30	26.4 {93.0}	26.5 {93.3}	26.2 {92.0}	26.2 {92.0}	25.1 {88.3}	-
		-40	23.0 {81.0}	22.9 {80.6}	22.6 {79.6}	22.4 {78.9}	21.6 {76.0}	-
		0	55.4 {195}	57.4 {202}	57.6 {203}	57.7 {203}	57.5 {202}	56.8 {200}
		-5	53.7 {189}	55.0 {193}	55.0 {193}	54.8 {193}	54.3 {191}	53.3 {188}







Catalog No.		evaporating temp. (°C)	Capacity (U.S.R.T.) {kW}								
			1.32 (Equivalent to 30°C)			1.70 (Equivalent to 40°C)			2.22 (Equivalent to 50°C)		
Type	Model		Hot gas temp. (°C)								
			60	80	100	60	80	100	60	80	100
CTX-	34006BU 34006DU	0	0.11 {0.37}	0.11 {0.37}	0.10 {0.35}	0.13 {0.45}	0.12 {0.42}	0.12 {0.42}	0.15 {0.53}	0.14 {0.50}	0.14 {0.50}
		-10	0.11 {0.37}	0.10 {0.35}	0.10 {0.35}	0.12 {0.42}	0.12 {0.42}	0.11 {0.40}	0.17 {0.60}	0.14 {0.50}	0.13 {0.47}
		-20	0.10 {0.35}	0.10 {0.35}	0.10 {0.35}	0.12 {0.42}	0.11 {0.40}	0.11 {0.40}	0.17 {0.60}	0.13 {0.47}	0.13 {0.45}
		-30	0.10 {0.35}	0.10 {0.35}	0.09 {0.32}	0.11 {0.40}	0.11 {0.40}	0.11 {0.37}	0.13 {0.47}	0.13 {0.45}	0.13 {0.45}
	-40	0.10 {0.35}	0.09 {0.32}	0.09 {0.32}	0.11 {0.40}	0.11 {0.37}	0.11 {0.37}	0.13 {0.45}	0.13 {0.45}	0.12 {0.42}	
	0	0.22 {0.77}	0.21 {0.75}	0.20 {0.72}	0.25 {0.87}	0.25 {0.87}	0.23 {0.82}	0.30 {1.05}	0.29 {1.02}	0.28 {1.00}	
	-10	0.21 {0.75}	0.20 {0.72}	0.20 {0.72}	0.25 {0.87}	0.24 {0.85}	0.23 {0.82}	0.29 {1.02}	0.28 {1.00}	0.28 {0.97}	
	-20	0.20 {0.72}	0.20 {0.72}	0.20 {0.70}	0.23 {0.82}	0.23 {0.80}	0.23 {0.80}	0.28 {1.00}	0.27 {0.95}	0.26 {0.92}	
	-30	0.20 {0.72}	0.20 {0.70}	0.19 {0.67}	0.23 {0.80}	0.23 {0.80}	0.22 {0.77}	0.27 {0.95}	0.26 {0.92}	0.26 {0.90}	
	-40	0.20 {0.70}	0.19 {0.67}	0.18 {0.65}	0.23 {0.80}	0.21 {0.75}	0.21 {0.75}	0.26 {0.92}	0.26 {0.90}	0.25 {0.87}	
	0	0.38 {1.32}	0.36 {1.27}	0.36 {1.25}	0.43 {1.52}	0.42 {1.47}	0.40 {1.42}	0.51 {1.80}	0.49 {1.74}	0.48 {1.70}	
	-10	0.37 {1.30}	0.36 {1.25}	0.35 {1.22}	0.42 {1.47}	0.40 {1.42}	0.40 {1.40}	0.49 {1.73}	0.48 {1.70}	0.47 {1.65}	
	-20	0.36 {1.25}	0.35 {1.22}	0.33 {1.17}	0.40 {1.42}	0.39 {1.37}	0.38 {1.35}	0.48 {1.68}	0.46 {1.63}	0.46 {1.60}	
	-30	0.35 {1.22}	0.33 {1.17}	0.33 {1.15}	0.39 {1.37}	0.38 {1.35}	0.37 {1.30}	0.46 {1.63}	0.45 {1.58}	0.44 {1.54}	
	-40	0.33 {1.17}	0.33 {1.15}	0.32 {1.12}	0.38 {1.35}	0.37 {1.30}	0.36 {1.25}	0.45 {1.58}	0.43 {1.52}	0.42 {1.47}	
	0	0.53 {1.87}	0.52 {1.82}	0.51 {1.78}	0.61 {2.14}	0.59 {2.07}	0.57 {2.02}	0.72 {2.52}	0.70 {2.47}	0.68 {2.39}	
	-10	0.52 {1.82}	0.51 {1.78}	0.49 {1.73}	0.59 {2.07}	0.57 {2.02}	0.56 {2.02}	0.72 {2.52}	0.69 {2.44}	0.68 {2.39}	
	-20	0.51 {1.78}	0.49 {1.73}	0.48 {1.68}	0.57 {2.02}	0.55 {1.95}	0.55 {1.92}	0.67 {2.37}	0.66 {2.32}	0.64 {2.24}	
	-30	0.49 {1.73}	0.48 {1.68}	0.46 {1.63}	0.55 {1.95}	0.54 {1.90}	0.53 {1.85}	0.65 {2.29}	0.63 {2.22}	0.62 {2.17}	
	-40	0.48 {1.68}	0.46 {1.63}	0.45 {1.58}	0.54 {1.90}	0.52 {1.82}	0.51 {1.78}	0.63 {2.22}	0.61 {2.14}	0.59 {2.07}	
	0	0.68 {2.40}	0.67 {2.34}	0.65 {2.27}	0.79 {2.78}	0.76 {2.68}	0.74 {2.59}	0.92 {3.24}	0.90 {3.17}	0.87 {3.07}	
	-10	0.67 {2.34}	0.65 {2.27}	0.63 {2.22}	0.76 {2.68}	0.74 {2.59}	0.72 {2.54}	0.90 {3.15}	0.87 {3.07}	1.13 {3.99}	
	-20	0.65 {2.27}	0.63 {2.20}	0.61 {2.14}	0.74 {2.59}	0.71 {2.49}	0.70 {2.47}	0.87 {3.05}	0.85 {2.97}	0.82 {2.90}	
	-30	0.63 {2.22}	0.61 {2.14}	0.59 {2.09}	0.71 {2.49}	0.69 {2.44}	0.67 {2.37}	0.84 {2.95}	0.81 {2.85}	0.80 {2.80}	
	-40	0.61 {2.14}	0.59 {2.07}	0.57 {2.02}	0.69 {2.44}	0.67 {2.34}	0.65 {2.27}	0.81 {2.85}	0.79 {2.78}	0.76 {2.68}	
	0	0.84 {2.95}	0.81 {2.85}	0.79 {2.78}	0.95 {3.34}	0.93 {3.27}	0.90 {3.17}	1.13 {3.97}	1.10 {3.87}	1.07 {3.75}	
	-10	0.82 {2.88}	0.80 {2.80}	0.77 {2.70}	0.93 {3.27}	0.90 {3.17}	0.88 {3.10}	1.09 {3.85}	1.07 {3.75}	1.04 {3.65}	
	-20	0.80 {2.80}	0.77 {2.70}	0.75 {2.63}	0.90 {3.17}	0.87 {3.07}	0.85 {3.00}	1.07 {3.75}	1.03 {3.61}	1.00 {3.51}	
	-30	0.77 {2.70}	0.75 {2.63}	0.72 {2.54}	0.87 {3.07}	0.85 {3.00}	0.82 {2.90}	1.05 {3.70}	1.00 {3.50}	0.97 {3.42}	
	-40	0.75 {2.63}	0.72 {2.54}	0.70 {2.47}	0.84 {2.97}	0.82 {2.88}	0.80 {2.80}	0.98 {3.46}	0.96 {3.37}	0.93 {3.27}	
	0	1.08 {3.80}	1.05 {3.68}	1.01 {3.56}	1.23 {4.31}	1.15 {4.05}	1.15 {4.03}	1.45 {5.11}	1.42 {5.00}	1.38 {4.85}	
	-10	1.05 {3.70}	1.02 {3.60}	0.99 {3.49}	1.20 {4.22}	1.17 {4.12}	1.14 {4.00}	1.41 {4.97}	1.38 {4.85}	1.34 {4.72}	
	-20	1.02 {3.60}	0.99 {3.49}	0.96 {3.39}	1.17 {4.10}	1.13 {3.97}	1.10 {3.87}	1.37 {4.82}	1.33 {4.66}	1.29 {4.54}	
	-30	0.99 {3.49}	0.96 {3.39}	0.94 {3.29}	1.13 {3.97}	1.09 {3.85}	1.07 {3.75}	1.32 {4.64}	1.29 {4.52}	1.25 {4.39}	
	-40	0.96 {3.39}	0.94 {3.29}	0.91 {3.20}	1.09 {3.85}	1.06 {3.73}	1.03 {3.61}	1.27 {4.47}	1.24 {4.35}	1.20 {4.22}	
	0	1.29 {4.52}	1.24 {4.37}	1.21 {4.25}	1.46 {5.15}	1.43 {5.02}	1.38 {4.85}	1.73 {6.09}	1.69 {5.94}	1.64 {5.77}	
	-10	1.25 {4.39}	1.21 {4.27}	1.18 {4.15}	1.43 {5.02}	1.38 {4.87}	1.35 {4.75}	1.68 {5.89}	1.64 {5.77}	1.59 {5.59}	
	-20	1.21 {4.27}	1.18 {4.15}	1.15 {4.05}	1.38 {4.85}	1.34 {4.72}	1.31 {4.59}	1.63 {5.72}	1.58 {5.57}	1.53 {5.39}	
	-30	1.18 {4.15}	1.14 {4.02}	1.11 {3.92}	1.34 {4.72}	1.30 {4.57}	1.26 {4.44}	1.57 {5.52}	1.53 {5.37}	1.48 {5.22}	
	-40	1.14 {4.02}	1.11 {3.90}	1.08 {3.80}	1.32 {4.64}	1.26 {4.42}	1.22 {4.30}	1.51 {5.32}	1.47 {5.17}	1.43 {5.02}	
	0	1.56 {5.49}	1.51 {5.32}	1.48 {5.20}	1.78 {6.27}	1.73 {6.10}	1.68 {5.92}	2.10 {7.38}	2.06 {7.24}	2.00 {7.02}	
	-10	1.52 {5.34}	1.48 {5.20}	1.44 {5.05}	1.73 {6.09}	1.69 {5.94}	1.64 {5.77}	2.04 {7.17}	2.00 {7.02}	1.94 {6.82}	
	-20	1.48 {5.20}	1.44 {5.05}	1.40 {4.92}	1.68 {5.92}	1.63 {5.74}	1.59 {5.59}	1.98 {6.97}	1.93 {6.77}	1.87 {6.59}	
	-30	1.44 {5.05}	1.39 {4.90}	1.36 {4.77}	1.63 {5.74}	1.58 {5.57}	1.54 {5.42}	1.92 {6.74}	1.86 {6.54}	1.81 {6.37}	
	-40	1.39 {4.90}	1.36 {4.77}	1.31 {4.62}	1.58 {5.54}	1.53 {5.37}	1.48 {5.22}	1.84 {6.47}	1.79 {6.29}	1.73 {6.09}	
	0	1.83 {6.44}	1.77 {6.24}	1.73 {6.07}	2.08 {7.31}	2.04 {7.17}	1.97 {6.94}	2.46 {8.66}	2.42 {8.52}	2.34 {8.24}	
	-10	1.78 {6.27}	1.73 {6.09}	1.68 {5.91}	2.04 {7.17}	1.98 {6.97}	1.93 {6.77}	2.40 {8.45}	2.34 {8.24}	2.28 {8.02}	
	-20	1.73 {6.09}	1.68 {5.92}	1.64 {5.77}	1.97 {6.94}	1.92 {6.74}	1.87 {6.57}	2.32 {8.17}	2.26 {7.95}	2.20 {7.74}	
	-30	1.68 {5.92}	1.63 {5.74}	1.59 {5.59}	1.92 {6.74}	1.86 {6.54}	1.81 {6.37}	2.24 {7.88}	2.18 {7.67}	2.12 {7.46}	
	-40	1.63 {5.74}	1.59 {5.59}	1.54 {5.42}	1.85 {6.52}	1.79 {6.29}	1.75 {6.14}	2.16 {7.60}	2.10 {7.38}	2.04 {7.17}	
	0	2.55 {8.95}	2.44 {8.59}	2.36 {8.31}	2.87 {10.1}	2.79 {9.80}	2.73 {9.59}	3.41 {12.0}	3.33 {11.7}	3.21 {11.3}	
	-10	2.46 {8.66}	2.40 {8.45}	2.32 {8.17}	2.79 {9.80}	2.73 {9.59}	2.64 {9.30}	3.31 {11.6}	3.21 {11.3}	3.11 {10.9}	
	-20	2.40 {8.45}	2.32 {8.17}	2.26 {7.95}	2.73 {9.59}	2.62 {9.23}	2.59 {9.09}	3.19 {11.2}	3.11 {10.9}	3.03 {10.7}	
	-30	2.32 {8.17}	2.26 {7.95}	2.20 {7.74}	2.62 {9.23}	2.57 {9.02}	2.48 {8.73}	3.11 {10.9}	3.01 {10.6}	2.93 {10.3}	
	-40	2.26 {7.95}	2.18 {7.67}	2.12 {7.46}	2.57 {9.02}	2.46 {8.66}	2.40 {8.45}	2.99 {10.5}	2.89 {10.2}	2.79 {9.80}	
	0	3.11 {10.9}	2.99 {10.5}	2.91 {10.2}	3.51 {12.4}	3.43 {12.1}	3.33 {11.7}	4.16 {14.6}	4.06 {14.3}	3.94 {13.9}	
	-10	3.01 {10.6}	2.93 {10.3}	2.85 {10.0}	3.43 {12.1}	3.33 {11.7}	3.23 {11.4}	4.04 {14.2}	3.94 {13.9}	3.84 {13.5}	
	-20	2.93 {10.3}	2.85 {10.0}	2.77 {9.73}	3.33 {11.7}	3.21 {11.3}	3.15 {11.1}	3.92 {13.8}	3.80 {13.4}	3.69 {13.0}	
	-30	2.85 {10.0}	2.75 {9.66}	2.68 {9.44}	3.21 {11.3}	3.13 {11.0}	3.05 {10.7}	3.78 {13.3}	3.65 {12.9}	3.57 {12.6}	
	-40	2.75 {9.66}	2.68 {9.44}	2.61 {9.16}	3.13 {11.0}	3.03 {10.7}	2.93 {10.3}	3.63 {12.8}	3.55 {12.5}	3.43 {12.1}	
	0	3.74 {13.1}	3.61 {12.7}	3.51 {12.4}	4.26 {15.0}	4.14 {14.6}	4.04 {14.2}	5.03 {17.7}	4.91 {17.3}	4.77 {16.8}	
	-10	3.63 {12.8}	3.51 {12.4}	3.43 {12.1}	4.14 {14.6}	4.04 {14.2}	3.92 {13.8}	4.87 {17.1}	4.77 {16.8}	4.62 {16.3}	
	-20	3.51 {12.4}	3.43 {12.1}	3.33 {11.7}	4.04 {14.2}	3.90 {13.7}	3.80 {13.4}	4.72 {16.6}	4.58 {16.1}	4.46 {15.7}	
	-30	3.43 {12.1}	3.33 {11.7}	3.23 {11.4}	3.90 {13.7}	3.78 {13.3}	3.69 {13.0}	4.56 {16.1}	4.44 {15.6}	4.32 {15.2}	
	-40	3.33 {11.7}	3.21 {11.3}	3.15 {11.1}	3.76 {13.2}	3.63 {12.8}	3.55 {12.5}	4.38 {15.4}	4.28 {15.1}	4.14 {14.6}	
	0	4.20 {14.8}	4.06 {14.3}	3.94 {13.9}	4.79 {16.8}	4.64 {16.3}	4.50 {15.8}	5.65 {19.9}	5.51 {19.4}	5.35 {18.8}	
	-10	4.08 {14.3}	3.98 {14.0}	3.86 {13.6}	4.64 {16.3}	4.52 {15.9}	4.38 {15.4}	5.49 {19.3}	5.35 {18.8}	5.19 {18.3}	
	-20	3.98 {14.0}	3.86 {13.6}	3.76 {13.2}	4.50 {15.8}	4.38 {15.4}	4.28 {15.1}	5.33 {18.7}	5.17 {18.2}	5.03 {17.7}	
	-30	3.86 {13.6}	3.74 {13.1}	3.63 {12.8}	4.38 {15.4}	4.26 {15.0}	4.14 {14.6}	5.15 {18.1}	5.01 {17.6}	4.87 {17.1}	
	-40	3.74 {13.1}	3.63 {12.8}	3.55 {12.5}	4.26 {15.0}	4.12 {14.5}	4.00 {14.1}	4.93 {17.3}	4.81 {16.9}	4.64 {16.3}	
	0	4.42 {15.6}	4.28 {15.1}	4.18 {14.7}	5.03 {17.7}	4.91 {17.3}	4.77 {16.8}	5.96 {21.0}	5.82 {20.5}	5.63 {19.8}	
	-10	4.30 {15.1}	4.18 {14.7}	4.06 {14.3}	4.91 {17.3}	4.77 {16.8}	4.62 {16.3}	5.78 {20.3}	5.63 {19.8}	5.47 {19.2}	
	-20	4.18 {14.7}	4.06 {14.3}	3.94 {13.9}	4.77 {16.8}	4.79 {16.8}	4.50 {15.8}	5.61 {19.7}	5.45 {19.2}	5.29 {18.6}	
	-30	4.06 {14.3}	3.94 {13.9}	3.86 {13.6}	4.62 {16.3}	4.48 {15.8}	4.36 {15.3}	5.39 {19.0}	5.27 {18.5}	5.13 {18.0}	
	-40	3.94 {13.9}	3.84 {13.5}	3.71 {13.1}	4.46 {15.7}	4.32 {15.2}	4.20 {14.8}	5.21 {18.3}	5.07 {17.8}	4.91 {17.3}	



