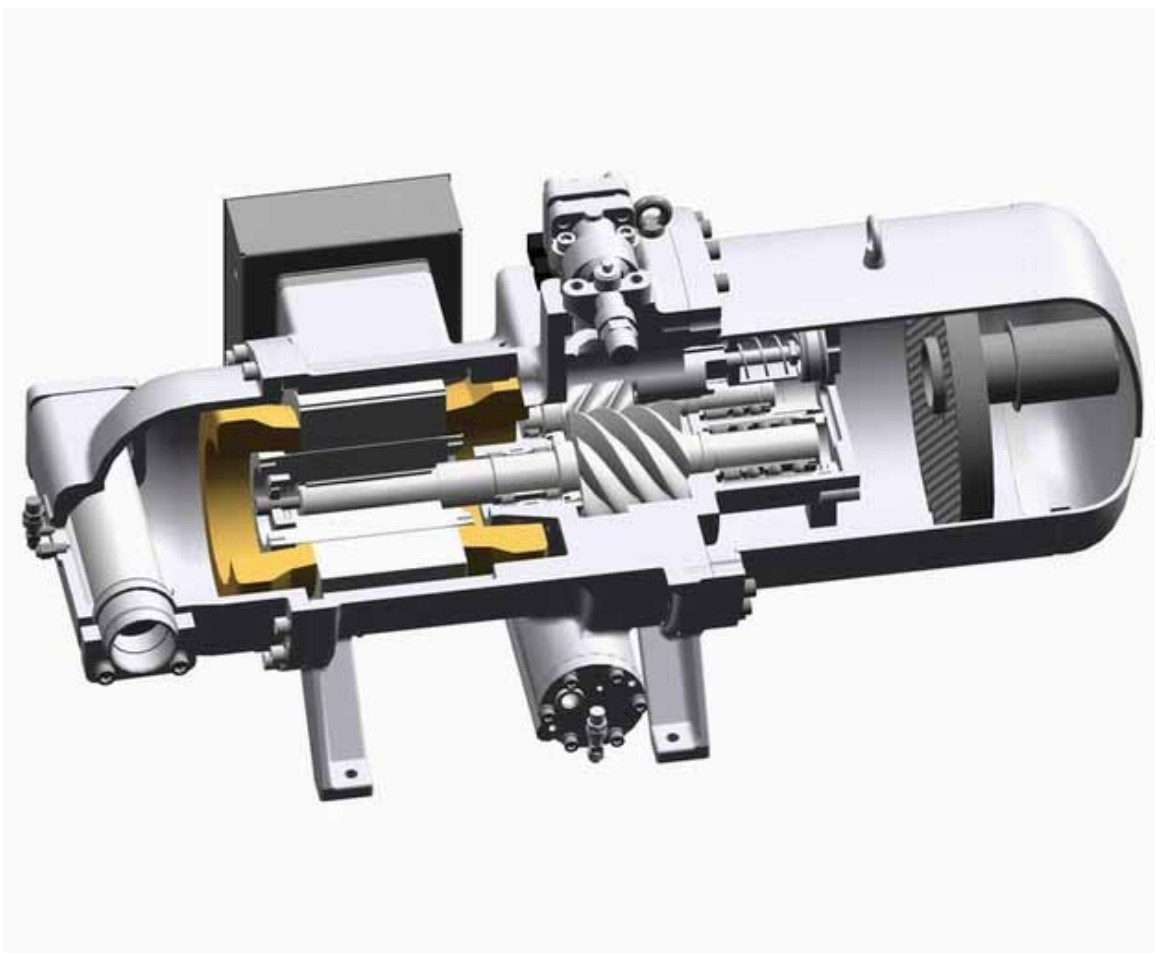


PERFORMANCE DATA

SCREW REFRIGERANT COMPRESSOR

R series



INDEX

PERFORMANCE DATA

R22	
R-11.....	1
R-12.....	2
R-13.....	3
R-14.....	4
R-16.....	5
R-17.....	6
R-18.....	7
R-19.....	8
R-21.....	9
R-23.....	10
R-11H	11
R-12H	12
R-13H	13
R-14H	14
R-16H	15
R-17H	16
R-18H	17
R-19H	18
R-21H	19
R-23H	20
R134a	
R-11A.....	21
R-12A.....	22
R-13A.....	23
R-14A.....	24
R-16A.....	25
R-17A.....	26
R-18A.....	27
R-19A.....	28
R-21A.....	29
R-23A.....	30
R407C	
R-11H	31
R-12H	32
R-13H	33
R-14H	34
R-16H	35
R-17H	36
R-18H	37
R-19H	38
R-21H	39
R-23H	40

Performance data - R series

R22

Model		R-11							
t _c (°C)	t _o (°C)	50Hz			60Hz				
		Q _o	P _e	380V	Q _o	P _e	220V	380V	440V
		(kW)	(kW)	(A)	(kW)	(kW)	(A)	(A)	(A)
35	10	197.0	30.9	53	236.4	37.1	109	63	55
	5	165.8	29.6	51	199.1	35.6	105	61	52
	0	138.7	28.8	49	166.4	34.6	102	59	51
	-5	114.6	28.3	48	137.6	34.0	100	58	50
	-10	93.1	27.8	48	111.8	33.4	99	57	49
40	10	184.7	34.7	59	221.8	41.7	123	71	61
	5	154.7	33.3	57	185.7	40.0	118	68	59
	4	149.2	33.1	57	179.0	39.8	117	68	59
	3	143.7	32.9	56	172.5	39.5	117	67	58
	2	138.4	32.8	56	166.1	39.4	116	67	58
	1	133.1	32.6	56	159.7	39.2	115	67	58
	0	128.0	32.5	56	153.6	39.0	115	67	58
	-5	104.0	31.8	54	124.8	38.2	113	65	56
	-10	82.3	31.1	53	98.9	37.4	110	64	55
45	10	170.1	38.5	66	204.2	46.2	136	79	68
	5	141.8	37.2	64	170.1	44.7	132	76	66
	0	115.9	36.3	62	139.0	43.6	129	74	64
	-5	92.2	35.5	61	110.7	42.6	126	73	63
	-10	70.7	34.6	59	84.9	41.6	123	71	61
50	10	155.4	42.6	72	186.5	51.1	149	86	75
	5	128.7	41.4	70	154.5	49.7	145	84	72
	0	103.8	40.6	69	124.6	48.7	142	82	71
	-5	80.7	39.7	67	96.8	47.7	139	80	69
55	10	142.3	47.4	80	170.7	56.9	166	96	83
	5	117.1	46.5	79	140.5	55.8	163	94	81
	0	93.0	45.8	77	111.7	55.0	160	93	80
	-5	70.4	44.9	76	84.5	53.9	157	91	79

Legend

t_c Condensing Temperature (°C)

Q_o Cooling capacity (kW)

t_o Evaporating Temperature (°C)

P_e Power consumption (kW)

 External cooling device is required.

- ! Cooling capacity is calculated based on superheat 5°C, subcooling 5°C.
Performance data for individual input data check CURTIS software.

Performance data - R series

R22

Model		R-12							
t _c (°C)	t _o (°C)	50Hz			60Hz				
		Q _o	P _e	380V	Q _o	P _e	220V	380V	440V
		(kW)	(kW)	(A)	(kW)	(kW)	(A)	(A)	(A)
35	10	234.7	37.0	63	281.7	44.4	131	76	66
	5	202.4	35.5	61	242.9	42.6	126	73	63
	0	171.6	34.5	59	205.9	41.4	122	71	61
	-5	142.5	33.7	58	171.0	40.5	119	69	60
	-10	115.8	33.0	56	138.9	39.6	117	68	58
40	10	221.7	41.4	71	266.1	49.7	147	85	73
	5	189.2	40.0	68	227.0	48.0	142	82	71
	4	182.8	39.8	68	219.4	47.8	141	82	70
	3	176.5	39.6	68	211.9	47.5	140	81	70
	2	170.2	39.4	67	204.3	47.3	139	81	70
	1	164.2	39.2	67	197.0	47.1	139	80	69
	0	158.1	39.1	67	189.7	46.9	138	80	69
	-5	129.1	38.2	65	154.9	45.9	135	78	68
45	10	205.1	45.8	78	246.2	55.0	162	94	81
	5	173.0	44.7	76	207.7	53.7	158	92	79
	0	142.6	43.7	75	171.1	52.5	155	90	77
	-5	114.4	42.8	73	137.4	51.4	151	88	76
	-10	88.8	41.7	71	106.6	50.1	148	85	74
50	10	187.2	50.5	85	224.6	60.6	177	102	88
	5	156.2	49.7	84	187.5	59.6	174	101	87
	0	126.9	48.8	82	152.2	58.6	171	99	85
	-5	99.7	47.7	81	119.7	57.2	167	97	83
55	10	170.5	55.9	94	204.7	67.1	196	113	98
	5	140.6	55.4	94	168.8	66.5	194	112	97
	0	112.5	54.5	92	135.0	65.4	191	110	95
	-5	86.5	53.2	90	103.8	63.8	186	108	93

Legend

t_c Condensing Temperature (°C)

Q_o Cooling capacity (kW)

t_o Evaporating Temperature (°C)

P_e Power consumption (kW)

External cooling device is required.

- ! Cooling capacity is calculated based on superheat 5°C, subcooling 5°C.
Performance data for individual input data check CURTIS software.

Performance data - R series

R22

Model		R-13							
t _c (°C)	t _o (°C)	50Hz			60Hz				
		Q _o	P _e	380V	Q _o	P _e	220V	380V	440V
		(kW)	(kW)	(A)	(kW)	(kW)	(A)	(A)	(A)
35	10	288.5	45.4	78	346.2	54.5	161	93	80
	5	246.4	43.9	75	295.8	52.7	155	90	78
	0	209.3	42.8	73	251.2	51.4	151	88	76
	-5	175.1	41.9	72	210.1	50.3	148	86	74
	-10	142.9	41.1	70	171.4	49.3	145	84	73
40	10	273.4	50.3	86	328.2	60.4	178	103	89
	5	231.8	48.9	83	278.2	58.7	173	100	87
	4	224.1	48.6	83	269.0	58.3	172	100	86
	3	216.7	48.4	83	260.0	58.1	171	99	86
	2	209.4	48.2	82	251.3	57.8	171	99	85
	1	202.2	47.9	82	242.7	57.5	170	98	85
	0	195.1	47.7	81	234.2	57.2	169	98	84
	-5	161.4	46.6	80	193.7	55.9	165	95	82
	-10	129.8	45.5	78	155.8	54.6	161	93	81
45	10	253.9	55.3	94	304.7	66.3	196	113	98
	5	212.7	54.0	92	255.3	64.8	191	111	96
	0	176.4	52.8	90	211.7	63.4	187	108	93
	-5	143.4	51.5	88	172.2	61.8	182	105	91
	-10	112.8	49.9	85	135.3	59.9	177	102	88
50	10	232.2	60.9	103	278.7	73.1	213	123	107
	5	190.8	59.8	101	229.0	71.7	209	121	105
	0	154.9	58.5	99	185.9	70.2	205	118	102
	-5	122.6	56.9	96	147.2	68.3	199	115	100
55	10	210.1	67.9	115	252.1	81.4	237	137	119
	5	168.1	67.1	113	201.7	80.5	235	136	117
	0	132.1	66.0	111	158.5	79.2	231	134	115
	-5	100.4	64.2	108	120.5	77.0	225	130	112

Legend

t_c Condensing Temperature (°C)

Q_o Cooling capacity (kW)

t_o Evaporating Temperature (°C)

P_e Power consumption (kW)

External cooling device is required.

- ! Cooling capacity is calculated based on superheat 5°C, subcooling 5°C.
Performance data for individual input data check CURTIS software.

Performance data - R series

R22

Model		R-14							
t _c (°C)	t _o (°C)	50Hz			60Hz				
		Q _o	P _e	380V	Q _o	P _e	220V	380V	440V
		(kW)	(kW)	(A)	(kW)	(kW)	(A)	(A)	(A)
35	10	337.7	51.6	88	405.3	62.0	183	106	91
	5	286.3	49.7	85	343.6	59.6	176	102	88
	0	238.9	48.7	83	286.7	58.4	172	100	86
	-5	196.3	48.1	82	235.6	57.7	170	98	85
	-10	158.8	47.7	81	190.5	57.2	169	98	84
40	10	320.1	58.0	99	384.3	69.7	205	119	103
	5	270.0	56.2	96	324.1	67.5	199	115	100
	4	260.3	55.9	96	312.5	67.1	198	115	99
	3	250.9	55.7	95	301.1	66.9	197	114	99
	2	241.5	55.4	95	289.8	66.5	196	114	98
	1	232.2	55.2	94	278.7	66.3	195	113	98
	0	223.3	55.0	94	267.9	66.1	195	113	97
	-5	180.9	54.2	93	217.1	65.1	192	111	96
	-10	143.3	53.3	91	172.1	64.0	189	109	94
45	10	296.9	64.5	110	356.3	77.4	228	132	114
	5	248.6	62.9	107	298.3	75.5	223	129	111
	0	203.0	61.8	106	243.7	74.2	219	127	109
	-5	161.5	60.6	104	193.8	72.8	215	124	107
	-10	124.6	59.2	101	149.6	71.1	210	121	105
50	10	270.6	71.3	120	324.8	85.6	250	144	125
	5	224.4	70.1	118	269.4	84.2	245	142	123
	0	180.4	69.0	117	216.5	82.8	242	140	121
	-5	139.9	67.7	114	168.0	81.3	237	137	119
55	10	244.0	79.0	133	292.8	94.8	277	160	138
	5	199.6	78.4	132	239.6	94.1	274	159	137
	0	156.9	77.5	131	188.4	93.0	271	157	136
	-5	117.7	75.9	128	141.3	91.1	266	154	133

Legend

t_c Condensing Temperature (°C)

Q_o Cooling capacity (kW)

t_o Evaporating Temperature (°C)

P_e Power consumption (kW)

External cooling device is required.

- ! Cooling capacity is calculated based on superheat 5°C, subcooling 5°C.
Performance data for individual input data check CURTIS software.

Performance data - R series

R22

Model		R-16							
t _c (°C)	t _o (°C)	50Hz			60Hz				
		Q _o	P _e	380V	Q _o	P _e	220V	380V	440V
		(kW)	(kW)	(A)	(kW)	(kW)	(A)	(A)	(A)
35	10	502.6	77.2	132	603.3	92.6	-	158	137
	5	427.3	74.6	127	512.9	89.5	-	153	132
	0	359.3	72.6	124	431.2	87.1	-	149	128
	-5	298.6	71.1	121	358.4	85.3	-	146	126
	-10	244.9	70.2	120	294.0	84.2	-	144	124
40	10	472.2	86.1	147	566.7	103.3	-	176	152
	5	399.0	83.8	143	478.9	100.6	-	172	148
	4	385.1	83.4	142	462.3	100.1	-	171	148
	3	371.5	82.9	142	445.9	99.5	-	170	147
	2	358.0	82.5	141	429.7	99.0	-	169	146
	1	344.9	82.1	140	414.0	98.5	-	168	145
	0	332.1	81.7	139	398.5	98.0	-	167	145
	-5	271.8	79.8	136	326.2	95.8	-	163	141
45	10	435.0	95.2	163	522.0	114.2	-	195	168
	5	364.4	93.3	159	437.3	112.0	-	191	165
	0	299.0	91.1	156	358.9	109.3	-	187	161
	-5	240.0	88.9	152	288.1	106.7	-	182	157
	-10	187.8	87.1	149	225.3	104.5	-	178	154
50	10	395.7	105.1	177	475.0	126.1	-	213	184
	5	327.3	103.7	175	392.9	124.4	-	210	181
	0	263.8	101.6	172	316.6	121.9	-	206	178
	-5	206.1	99.1	167	247.4	118.9	-	201	173
55	10	358.2	116.9	197	429.9	140.3	-	237	205
	5	291.6	116.5	197	350.0	139.8	-	236	204
	0	229.3	114.7	194	275.2	137.6	-	232	201
	-5	172.8	111.9	189	207.5	134.3	-	227	196

Legend

t_c Condensing Temperature (°C)

Q_o Cooling capacity (kW)

t_o Evaporating Temperature (°C)

P_e Power consumption (kW)

External cooling device is required.

- ! Cooling capacity is calculated based on superheat 5°C, subcooling 5°C.
Performance data for individual input data check CURTIS software.

Performance data - R series

R22

Model		R-17							
t _c (°C)	t _o (°C)	50Hz			60Hz				
		Q _o	P _e	380V	Q _o	P _e	220V	380V	440V
		(kW)	(kW)	(A)	(kW)	(kW)	(A)	(A)	(A)
35	10	571.9	89.5	153	686.4	107.4	-	183	158
	5	489.6	87.1	149	587.6	104.5	-	178	154
	0	414.1	85.0	145	497.0	102.0	-	174	150
	-5	347.6	83.5	143	417.2	100.2	-	171	148
	-10	291.1	82.6	141	349.3	99.1	-	169	146
40	10	555.8	102.3	175	667.1	122.8	-	210	181
	5	473.8	99.7	170	568.6	119.6	-	204	176
	4	457.9	99.1	169	549.6	118.9	-	203	175
	3	442.4	98.6	168	530.9	118.3	-	202	174
	2	427.0	98.1	167	512.6	117.7	-	201	174
	1	412.0	97.6	167	494.5	117.1	-	200	173
	0	397.4	97.1	166	476.9	116.5	-	199	172
	-5	329.4	94.8	162	395.3	113.8	-	194	168
	-10	271.1	93.0	159	325.3	111.6	-	191	165
45	10	531.0	114.7	196	637.3	137.6	-	235	203
	5	450.4	112.3	192	540.6	134.8	-	230	199
	0	374.3	109.6	187	449.2	131.5	-	225	194
	-5	305.9	106.6	182	367.2	127.9	-	218	189
	-10	247.0	103.7	177	296.5	124.4	-	212	183
50	10	501.8	127.0	214	602.3	152.4	-	257	222
	5	423.2	125.3	212	507.9	150.4	-	254	219
	0	348.1	122.5	207	417.8	147.0	-	248	214
	-5	280.1	119.1	201	336.1	142.9	-	241	208
55	10	471.9	139.2	235	566.5	167.0	-	282	244
	5	395.6	138.6	234	474.8	166.3	-	281	242
	0	321.7	136.3	230	386.1	163.6	-	276	238
	-5	254.2	132.5	224	305.1	159.0	-	268	232

Legend

t_c Condensing Temperature (°C)

Q_o Cooling capacity (kW)

t_o Evaporating Temperature (°C)

P_e Power consumption (kW)

External cooling device is required.

- ! Cooling capacity is calculated based on superheat 5°C, subcooling 5°C.
Performance data for individual input data check CURTIS software.

Performance data - R series

R22

Model		R-18							
t _c (°C)	t _o (°C)	50Hz			60Hz				
		Q _o	P _e	380V	Q _o	P _e	220V	380V	440V
		(kW)	(kW)	(A)	(kW)	(kW)	(A)	(A)	(A)
35	10	597.8	93.5	160	717.4	112.2	-	192	165
	5	517.6	90.7	155	621.1	108.8	-	186	160
	0	438.3	88.9	152	525.9	106.7	-	182	157
	-5	364.2	87.1	149	437.0	104.5	-	178	154
	-10	298.0	84.8	145	357.6	101.8	-	174	150
40	10	584.3	106.1	181	701.2	127.3	-	217	188
	5	501.6	103.4	177	601.9	124.1	-	212	183
	4	485.1	103.0	176	582.2	123.6	-	211	182
	3	468.8	102.6	175	562.5	123.1	-	210	182
	2	452.5	102.2	174	543.0	122.6	-	209	181
	1	436.4	101.9	174	523.7	122.3	-	209	180
	0	420.5	101.5	173	504.7	121.8	-	208	180
	-5	345.2	99.4	170	414.2	119.3	-	204	176
	-10	278.0	96.4	165	333.6	115.7	-	197	171
45	10	559.7	118.7	203	671.6	142.4	-	243	210
	5	475.9	116.3	199	571.0	139.6	-	238	206
	0	394.1	114.3	195	472.9	137.2	-	234	202
	-5	318.6	111.9	191	382.3	134.3	-	229	198
	-10	251.8	108.1	185	302.2	129.7	-	221	191
50	10	527.8	131.6	225	633.3	157.9	-	267	230
	5	443.6	129.6	221	532.3	155.5	-	263	227
	0	362.0	127.5	218	434.5	153.0	-	258	223
	-5	287.3	124.7	213	344.7	149.6	-	253	218
55	10	492.2	145.1	248	590.7	174.1	-	294	254
	5	408.0	143.4	245	489.6	172.1	-	290	251
	0	327.1	141.3	241	392.6	169.6	-	286	247
	-5	253.5	137.9	235	304.2	165.5	-	279	241

Legend

t_c Condensing Temperature (°C)

Q_o Cooling capacity (kW)

t_o Evaporating Temperature (°C)

P_e Power consumption (kW)

 External cooling device is required.

- ! Cooling capacity is calculated based on superheat 5°C, subcooling 5°C.
Performance data for individual input data check CURTIS software.

Performance data - R series

R22

Model		R-19							
t _c (°C)	t _o (°C)	50Hz			60Hz				
		Q _o	P _e	380V	Q _o	P _e	220V	380V	440V
		(kW)	(kW)	(A)	(kW)	(kW)	(A)	(A)	(A)
35	10	764.0	116.0	198	916.9	139.2	-	238	205
	5	641.6	111.3	190	770.0	133.6	-	228	197
	0	533.3	107.8	184	640.2	129.4	-	221	191
	-5	438.1	104.8	179	525.8	125.8	-	215	185
	-10	354.8	102.2	174	425.8	122.6	-	209	181
40	10	725.8	127.6	218	871.1	153.2	-	261	226
	5	606.0	123.8	211	727.3	148.6	-	254	219
	4	583.5	123.1	210	700.4	147.7	-	252	218
	3	561.5	122.5	209	673.9	147.0	-	251	217
	2	539.9	121.9	208	648.1	146.3	-	250	216
	1	518.9	121.3	207	622.8	145.6	-	249	215
	0	498.3	120.7	206	598.1	144.9	-	247	214
	-5	402.4	118.0	201	483.0	141.6	-	242	209
	-10	318.2	115.4	197	381.9	138.5	-	236	204
45	10	671.7	140.3	240	806.1	168.4	-	287	248
	5	557.6	137.0	234	669.2	164.4	-	281	242
	0	453.0	134.2	229	543.8	161.1	-	275	237
	-5	358.9	131.6	225	430.7	158.0	-	270	233
	-10	275.8	128.8	220	331.1	154.6	-	264	228
50	10	608.1	155.3	262	729.9	186.3	-	315	272
	5	501.6	152.3	257	602.0	182.7	-	308	266
	0	402.1	149.4	252	482.6	179.3	-	303	261
	-5	311.5	146.5	247	373.9	175.9	-	297	256
55	10	540.7	174.6	295	648.9	209.5	-	354	305
	5	442.9	171.6	290	531.5	205.9	-	348	300
	0	349.7	168.6	285	419.8	202.3	-	341	295
	-5	263.6	165.1	279	316.4	198.1	-	334	289

Legend

t_c Condensing Temperature (°C)

Q_o Cooling capacity (kW)

t_o Evaporating Temperature (°C)

P_e Power consumption (kW)

 External cooling device is required.

- ! Cooling capacity is calculated based on superheat 5°C, subcooling 5°C.
Performance data for individual input data check CURTIS software.

Performance data - R series

R22

Model		R-21							
t _c (°C)	t _o (°C)	50Hz			60Hz				
		Q _o	P _e	380V	Q _o	P _e	220V	380V	440V
		(kW)	(kW)	(A)	(kW)	(kW)	(A)	(A)	(A)
35	10	916.7	140.2	239	1100.3	168.3	-	287	248
	5	769.3	135.5	231	923.4	162.6	-	278	240
	0	645.7	131.6	225	774.9	158.0	-	270	233
	-5	539.6	128.5	219	647.6	154.2	-	263	227
	-10	446.6	125.9	215	536.1	151.1	-	258	223
40	10	873.4	157.0	268	1048.2	188.3	-	322	278
	5	735.8	152.3	260	883.1	182.7	-	312	269
	4	710.8	151.4	258	853.1	181.6	-	310	268
	3	686.2	150.6	257	823.6	180.7	-	308	266
	2	662.4	149.7	256	795.1	179.7	-	307	265
	1	639.2	148.9	254	767.2	178.7	-	305	264
	0	616.6	148.1	253	740.1	177.8	-	303	262
	-5	511.4	144.5	247	613.8	173.5	-	296	256
	-10	417.5	141.2	241	501.1	169.5	-	289	250
45	10	823.4	173.7	296	988.3	208.4	-	356	307
	5	694.5	169.5	289	833.6	203.4	-	347	300
	0	579.0	165.5	282	695.0	198.6	-	339	293
	-5	474.8	161.4	275	569.8	193.6	-	331	285
	-10	380.5	157.4	269	456.7	188.8	-	322	278
50	10	773.9	191.9	324	928.8	230.3	-	389	336
	5	651.3	188.5	318	781.7	226.2	-	382	330
	0	538.5	184.7	312	646.3	221.6	-	374	323
	-5	434.7	180.3	304	521.7	216.3	-	365	315
55	10	730.7	213.1	360	877.0	255.7	-	432	373
	5	611.6	210.9	356	734.1	253.1	-	427	369
	0	499.6	207.6	350	599.6	249.1	-	421	363
	-5	395.3	203.1	343	474.5	243.7	-	411	355

Legend

t_c Condensing Temperature (°C)

Q_o Cooling capacity (kW)

t_o Evaporating Temperature (°C)

P_e Power consumption (kW)

External cooling device is required.

- ! Cooling capacity is calculated based on superheat 5°C, subcooling 5°C.
Performance data for individual input data check CURTIS software.

Performance data - R series

R22

Model		R-23							
t _c (°C)	t _o (°C)	50Hz			60Hz				
		Q _o	P _e	380V	Q _o	P _e	220V	380V	440V
		(kW)	(kW)	(A)	(kW)	(kW)	(A)	(A)	(A)
35	10	1183.6	169.3	289	1420.6	203.2	-	347	300
	5	982.8	164.3	281	1179.6	197.2	-	337	291
	0	822.5	159.3	272	987.2	191.2	-	326	282
	-5	686.5	155.0	265	823.9	186.0	-	318	274
	-10	564.9	151.4	258	678.0	181.7	-	310	268
40	10	1121.8	189.5	323	1346.4	227.4	-	388	335
	5	922.6	184.5	315	1107.3	221.4	-	378	326
	4	887.9	183.5	313	1065.7	220.2	-	376	325
	3	854.6	182.5	311	1025.7	219.0	-	374	323
	2	822.5	181.5	310	987.2	217.8	-	372	321
	1	791.5	180.4	308	950.0	216.4	-	369	319
	0	761.6	179.4	306	914.1	215.2	-	367	317
	-5	623.9	174.7	298	748.8	209.7	-	358	309
	-10	501.1	171.1	292	601.4	205.4	-	351	303
45	10	1041.5	209.7	358	1250.0	251.7	-	430	371
	5	848.7	205.1	350	1018.6	246.1	-	420	363
	0	690.9	200.2	342	829.2	240.2	-	410	354
	-5	555.0	195.7	334	666.1	234.8	-	401	346
	-10	433.6	192.4	328	520.4	230.9	-	394	340
50	10	955.2	231.5	391	1146.4	277.8	-	469	405
	5	771.5	227.7	384	926.0	273.2	-	461	398
	0	619.1	223.2	377	743.1	267.9	-	452	391
	-5	486.9	219.2	370	584.4	263.1	-	444	384
55	10	873.5	256.6	433	1048.4	307.9	-	520	449
	5	699.8	254.2	429	839.9	305.0	-	515	445
	0	553.7	251.0	424	664.6	301.2	-	508	439
	-5	425.7	248.1	419	510.9	297.7	-	503	434

Legend

t_c Condensing Temperature (°C)

Q_o Cooling capacity (kW)

t_o Evaporating Temperature (°C)

P_e Power consumption (kW)

External cooling device is required.

- ! Cooling capacity is calculated based on superheat 5°C, subcooling 5°C.
Performance data for individual input data check CURTIS software.

Performance data - R series

R22

Model		R-11H							
t _c (°C)	t _o (°C)	50Hz			60Hz				
		Q _o	P _e	380V	Q _o	P _e	220V	380V	440V
		(kW)	(kW)	(A)	(kW)	(kW)	(A)	(A)	(A)
40	10	166.2	34.3	59	199.5	41.2	121	70	61
	5	141.9	33.4	57	170.2	40.1	118	68	59
	0	121.0	32.5	56	145.2	39.0	115	67	58
	-5	102.7	31.5	54	123.2	37.8	112	65	56
	-10	86.6	30.5	52	103.9	36.6	108	63	54
	-15	72.2	29.4	50	86.6	35.3	104	60	52
45	10	158.9	37.8	65	190.7	45.4	134	77	67
	5	135.6	36.8	63	162.7	44.2	130	75	65
	0	115.2	35.9	61	138.3	43.1	127	74	64
	-5	97.2	34.9	60	116.7	41.9	124	72	62
	-10	81.2	33.9	58	97.5	40.7	120	70	60
	-15	66.9	32.8	56	80.3	39.4	116	67	58
50	10	150.7	41.3	70	180.8	49.6	145	84	72
	5	128.3	40.2	68	154.0	48.3	141	81	70
	0	108.6	39.2	66	130.3	47.1	137	79	69
	-5	91.0	38.2	65	109.2	45.9	134	77	67
	-10	75.2	37.2	63	90.3	44.7	130	75	65
	-15	61.2	36.2	61	73.4	43.5	127	73	63
55	10	142.6	44.8	76	171.1	53.8	157	91	78
	5	121.1	43.7	74	145.3	52.5	153	89	76
	0	101.9	42.6	72	122.2	51.1	149	86	75
	-5	84.6	41.6	70	101.5	49.9	146	84	73
	-10	69.1	40.6	69	82.9	48.7	142	82	71
	-15	55.3	39.7	67	66.4	47.7	139	80	69
60	10	135.6	48.6	82	162.7	58.3	170	98	85
	5	114.6	47.4	80	137.5	56.9	166	96	83
	0	95.8	46.3	78	115.0	55.6	162	94	81
	-5	78.7	45.2	76	94.5	54.3	158	92	79
	-10	63.4	44.2	75	76.1	53.1	155	90	77

Legend

t_c Condensing Temperature (°C)

Q_o Cooling capacity (kW)

t_o Evaporating Temperature (°C)

P_e Power consumption (kW)

External cooling device is required.

! Cooling capacity is calculated based on superheat 5°C, subcooling 5°C.

Performance data for individual input data check CURTIS software.

Performance data - R series

R22

Model		R-12H							
t _c (°C)	t _o (°C)	50Hz			60Hz				
		Q _o	P _e	380V	Q _o	P _e	220V	380V	440V
		(kW)	(kW)	(A)	(kW)	(kW)	(A)	(A)	(A)
40	10	203.6	41.3	71	244.4	49.6	146	85	73
	5	174.0	39.9	68	208.8	47.9	141	82	71
	0	149.2	38.8	66	179.0	46.6	137	80	69
	-5	127.3	37.8	65	152.7	45.4	134	77	67
	-10	107.5	36.6	63	129.0	44.0	130	75	65
	-15	89.3	35.1	60	107.2	42.2	124	72	62
45	10	193.8	45.4	78	232.5	54.5	161	93	80
	5	165.1	44.0	75	198.1	52.8	156	90	78
	0	140.7	42.8	73	168.9	51.4	151	88	76
	-5	119.1	41.7	71	143.0	50.1	148	85	74
	-10	99.6	40.4	69	119.5	48.5	143	83	72
	-15	81.7	38.8	66	98.1	46.6	137	80	69
50	10	182.4	49.4	83	218.8	59.3	173	100	86
	5	155.0	47.9	81	186.0	57.5	168	97	84
	0	131.5	46.8	79	157.8	56.2	164	95	82
	-5	110.5	45.6	77	132.6	54.7	160	92	80
	-10	91.4	44.3	75	109.7	53.2	155	90	78
	-15	73.9	42.6	72	88.7	51.1	149	86	75
55	10	171.1	53.3	90	205.3	64.0	186	108	93
	5	145.1	51.9	88	174.1	62.3	182	105	91
	0	122.4	50.7	86	146.9	60.8	177	103	89
	-5	102.2	49.6	84	122.6	59.5	174	100	87
	-10	83.6	48.3	82	100.3	58.0	169	98	85
	-15	66.6	46.5	79	79.9	55.8	163	94	81
60	10	161.0	57.5	97	193.2	69.0	201	116	101
	5	136.3	56.1	95	163.6	67.3	196	114	98
	0	114.5	55.0	93	137.4	66.0	192	111	96
	-5	94.9	53.9	91	113.9	64.7	189	109	94
	-10	76.8	52.5	89	92.1	63.0	184	106	92

Legend

t_c Condensing Temperature (°C)

Q_o Cooling capacity (kW)

t_o Evaporating Temperature (°C)

P_e Power consumption (kW)

External cooling device is required.

! Cooling capacity is calculated based on superheat 5°C, subcooling 5°C.

Performance data for individual input data check CURTIS software.

Performance data - R series

R22

Model		R-13H							
t _c (°C)	t _o (°C)	50Hz			60Hz				
		Q _o	P _e	380V	Q _o	P _e	220V	380V	440V
		(kW)	(kW)	(A)	(kW)	(kW)	(A)	(A)	(A)
40	10	247.0	49.3	84	296.4	59.2	174	101	87
	5	213.6	47.8	82	256.3	57.4	169	98	85
	0	183.5	46.5	79	220.2	55.8	165	95	82
	-5	156.2	45.2	77	187.4	54.3	160	93	80
	-10	131.3	43.8	75	157.5	52.6	155	90	78
	-15	108.9	42.4	72	130.6	50.9	150	87	75
45	10	232.8	54.4	93	279.4	65.3	192	111	96
	5	201.3	52.8	90	241.5	63.4	187	108	93
	0	172.2	51.4	88	206.6	61.7	182	105	91
	-5	145.4	49.9	85	174.4	59.9	177	102	88
	-10	120.8	48.5	83	144.9	58.2	172	99	86
	-15	98.5	46.9	80	118.2	56.3	166	96	83
50	10	217.5	59.2	100	261.0	71.0	207	120	104
	5	187.8	57.6	97	225.4	69.1	201	117	101
	0	159.8	56.2	95	191.7	67.4	197	114	98
	-5	133.4	54.7	92	160.1	65.6	191	111	96
	-10	109.3	53.2	90	131.1	63.8	186	108	93
	-15	87.4	51.6	87	104.9	61.9	181	105	90
55	10	203.0	63.8	108	243.6	76.5	223	129	112
	5	174.7	62.4	105	209.6	74.9	218	126	109
	0	147.4	61.1	103	176.9	73.3	214	124	107
	-5	121.7	59.6	101	146.1	71.5	208	121	104
	-10	98.0	58.2	98	117.6	69.8	204	118	102
	-15	76.4	56.8	96	91.7	68.1	199	115	99
60	10	190.7	68.6	116	228.8	82.3	240	139	120
	5	163.3	67.4	114	196.0	80.8	236	136	118
	0	136.5	66.2	112	163.8	79.4	232	134	116
	-5	111.1	64.9	110	133.4	77.8	227	131	113
	-10	87.6	63.7	107	105.1	76.4	223	129	111

Legend

t_c Condensing Temperature (°C)

Q_o Cooling capacity (kW)

t_o Evaporating Temperature (°C)

P_e Power consumption (kW)

External cooling device is required.

! Cooling capacity is calculated based on superheat 5°C, subcooling 5°C.

Performance data for individual input data check CURTIS software.

Performance data - R series

R22

Model		R-14H							
t _c (°C)	t _o (°C)	50Hz			60Hz				
		Q _o	P _e	380V	Q _o	P _e	220V	380V	440V
		(kW)	(kW)	(A)	(kW)	(kW)	(A)	(A)	(A)
40	10	303.9	61.4	105	364.6	73.7	217	126	109
	5	258.8	59.3	101	310.6	71.2	210	122	105
	0	219.7	57.6	98	263.6	69.2	204	118	102
	-5	186.7	55.9	96	224.0	67.1	198	115	99
	-10	159.5	54.2	93	191.4	65.1	192	111	96
	-15	137.5	52.4	90	165.0	62.9	186	107	93
45	10	291.7	67.4	115	350.1	80.9	239	138	119
	5	248.0	65.3	112	297.6	78.4	231	134	116
	0	210.2	63.4	108	252.3	76.1	224	130	112
	-5	178.5	61.8	106	214.2	74.2	219	127	109
	-10	152.6	60.1	103	183.1	72.2	213	123	106
	-15	131.7	58.1	99	158.1	69.8	206	119	103
50	10	277.6	73.3	124	333.1	88.0	257	149	128
	5	234.9	71.1	120	281.9	85.4	249	144	124
	0	198.4	69.4	117	238.1	83.3	243	141	121
	-5	168.0	67.7	114	201.6	81.3	237	137	119
	-10	143.3	66.1	112	172.0	79.4	231	134	116
	-15	123.7	64.1	108	148.4	77.0	224	130	112
55	10	262.9	79.4	134	315.5	95.3	278	161	139
	5	220.9	77.3	131	265.1	92.8	271	157	135
	0	185.3	75.6	128	222.4	90.7	265	153	132
	-5	156.1	74.1	125	187.3	89.0	259	150	130
	-10	132.7	72.6	123	159.3	87.2	254	147	127
	-15	114.2	70.6	119	137.1	84.8	247	143	124
60	10	249.1	85.9	145	298.9	103.1	301	174	150
	5	207.2	83.9	142	248.7	100.7	294	170	147
	0	172.3	82.4	139	206.7	98.9	288	167	144
	-5	144.0	81.2	137	172.7	97.5	284	165	142
	-10	121.5	79.9	135	145.8	95.9	280	162	140

Legend

t_c Condensing Temperature (°C)

Q_o Cooling capacity (kW)

t_o Evaporating Temperature (°C)

P_e Power consumption (kW)

External cooling device is required.

! Cooling capacity is calculated based on superheat 5°C, subcooling 5°C.

Performance data for individual input data check CURTIS software.

Performance data - R series

R22

Model		R-16H							
t _c (°C)	t _o (°C)	50Hz			60Hz				
		Q _o	P _e	380V	Q _o	P _e	220V	380V	440V
		(kW)	(kW)	(A)	(kW)	(kW)	(A)	(A)	(A)
40	10	422.1	84.6	144	506.5	101.5	-	173	150
	5	361.7	82.3	140	434.1	98.8	-	169	146
	0	309.6	80.1	137	371.5	96.1	-	164	142
	-5	263.1	78.0	133	315.7	93.6	-	160	138
	-10	220.6	75.8	129	264.8	91.0	-	155	134
	-15	181.5	73.5	125	217.8	88.2	-	151	130
45	10	404.9	93.9	160	485.9	112.7	-	192	166
	5	346.0	91.1	156	415.2	109.3	-	187	161
	0	294.7	88.4	151	353.6	106.1	-	181	156
	-5	248.6	85.9	147	298.4	103.1	-	176	152
	-10	206.7	83.5	143	248.1	100.2	-	171	148
	-15	168.2	81.0	138	201.8	97.2	-	166	143
50	10	384.7	102.8	174	461.6	123.4	-	208	180
	5	327.5	99.6	168	393.0	119.5	-	202	174
	0	277.5	96.7	163	333.0	116.0	-	196	169
	-5	232.6	94.0	159	279.1	112.8	-	190	164
	-10	191.5	91.5	154	229.8	109.8	-	185	160
	-15	153.9	89.1	150	184.7	106.9	-	180	156
55	10	364.4	111.3	188	437.3	133.6	-	225	195
	5	309.1	108.1	182	370.9	129.7	-	219	189
	0	260.4	105.2	178	312.5	126.2	-	213	184
	-5	216.5	102.6	173	259.8	123.1	-	208	180
	-10	176.4	100.2	169	211.7	120.2	-	203	175
	-15	140.0	98.2	166	168.0	117.8	-	199	172
60	10	346.4	120.0	203	415.7	144.0	-	243	210
	5	292.6	116.9	197	351.1	140.3	-	237	205
	0	245.0	114.2	193	294.0	137.0	-	231	200
	-5	202.1	111.9	189	242.5	134.3	-	227	196
	-10	162.9	109.9	186	195.5	131.9	-	223	192

Legend

t_c Condensing Temperature (°C)

Q_o Cooling capacity (kW)

t_o Evaporating Temperature (°C)

P_e Power consumption (kW)

External cooling device is required.

! Cooling capacity is calculated based on superheat 5°C, subcooling 5°C.

Performance data for individual input data check CURTIS software.

Performance data - R series

R22

Model		R-17H							
t _c (°C)	t _o (°C)	50Hz			60Hz				
		Q _o	P _e	380V	Q _o	P _e	220V	380V	440V
		(kW)	(kW)	(A)	(kW)	(kW)	(A)	(A)	(A)
40	10	538.4	103.4	177	646.1	124.1	-	212	183
	5	466.2	100.5	172	559.4	120.6	-	206	178
	0	398.2	97.8	167	477.8	117.4	-	200	173
	-5	336.7	95.2	163	404.0	114.2	-	195	168
	-10	282.7	92.5	158	339.3	111.0	-	189	164
	-15	236.4	89.6	153	283.7	107.5	-	184	159
45	10	511.3	114.3	195	613.6	137.2	-	234	202
	5	439.5	111.1	190	527.4	133.3	-	228	197
	0	372.1	108.2	185	446.6	129.8	-	222	191
	-5	311.3	105.3	180	373.5	126.4	-	216	186
	-10	258.0	102.3	175	309.6	122.8	-	210	181
	-15	212.5	99.0	169	255.0	118.8	-	203	175
50	10	478.3	124.9	211	574.0	149.9	-	253	219
	5	408.7	121.6	205	490.4	145.9	-	246	213
	0	343.2	118.5	200	411.8	142.2	-	240	207
	-5	284.1	115.4	195	340.9	138.5	-	234	202
	-10	232.4	112.1	189	278.8	134.5	-	227	196
	-15	188.6	108.6	183	226.3	130.3	-	220	190
55	10	443.8	135.5	229	532.6	162.6	-	274	237
	5	377.4	132.3	223	452.9	158.8	-	268	231
	0	314.5	129.1	218	377.4	154.9	-	262	226
	-5	257.7	125.8	212	309.2	151.0	-	255	220
	-10	208.1	122.3	206	249.7	146.8	-	248	214
	-15	166.1	118.4	200	199.4	142.1	-	240	207
60	10	411.7	146.7	248	494.0	176.0	-	297	257
	5	348.6	143.6	242	418.3	172.3	-	291	251
	0	288.6	140.3	237	346.3	168.4	-	284	245
	-5	234.2	136.9	231	281.1	164.3	-	277	240
	-10	186.7	133.0	225	224.1	159.6	-	269	233

Legend

t_c Condensing Temperature (°C)

Q_o Cooling capacity (kW)

t_o Evaporating Temperature (°C)

P_e Power consumption (kW)

External cooling device is required.

! Cooling capacity is calculated based on superheat 5°C, subcooling 5°C.

Performance data for individual input data check CURTIS software.

Performance data - R series

R22

Model		R-18H							
t _c (°C)	t _o (°C)	50Hz			60Hz				
		Q _o	P _e	380V	Q _o	P _e	220V	380V	440V
		(kW)	(kW)	(A)	(kW)	(kW)	(A)	(A)	(A)
40	10	565.4	107.1	185	678.4	128.5	-	222	192
	5	489.5	104.8	181	587.3	125.8	-	217	188
	0	418.2	102.0	176	501.8	122.4	-	211	183
	-5	353.6	99.0	171	424.3	118.8	-	205	177
	-10	296.8	96.0	166	356.2	115.2	-	199	172
	-15	248.1	93.3	161	297.8	112.0	-	193	167
45	10	536.8	118.4	204	644.2	142.1	-	245	212
	5	461.4	115.8	200	553.7	139.0	-	240	207
	0	390.7	112.6	194	468.8	135.1	-	233	201
	-5	326.8	109.3	189	392.2	131.2	-	226	196
	-10	270.9	106.0	183	325.1	127.2	-	220	190
	-15	223.1	103.1	178	267.7	123.7	-	214	184
50	10	502.2	129.3	221	602.7	155.2	-	265	229
	5	429.1	126.5	216	514.9	151.8	-	259	224
	0	360.4	123.2	210	432.5	147.8	-	252	218
	-5	298.3	119.6	204	357.9	143.5	-	245	212
	-10	244.0	116.1	198	292.8	139.3	-	238	205
	-15	198.0	113.2	193	237.6	135.8	-	232	200
55	10	466.1	140.2	239	559.3	168.2	-	287	248
	5	396.2	137.5	235	475.5	165.0	-	282	243
	0	330.2	134.0	229	396.3	160.8	-	275	237
	-5	270.6	130.3	222	324.7	156.4	-	267	231
	-10	218.6	126.7	216	262.3	152.0	-	260	224
	-15	174.5	123.9	212	209.4	148.7	-	254	219
60	10	432.3	151.9	259	518.7	182.3	-	311	269
	5	366.0	149.2	255	439.2	179.0	-	306	264
	0	303.0	145.7	249	363.6	174.8	-	298	258
	-5	246.0	141.8	242	295.2	170.2	-	290	251
	-10	196.1	138.2	236	235.3	165.8	-	283	245

Legend

t_c Condensing Temperature (°C)

Q_o Cooling capacity (kW)

t_o Evaporating Temperature (°C)

P_e Power consumption (kW)

External cooling device is required.

! Cooling capacity is calculated based on superheat 5°C, subcooling 5°C.

Performance data for individual input data check CURTIS software.

Performance data - R series

R22

Model		R-19H							
t _c (°C)	t _o (°C)	50Hz			60Hz				
		Q _o	P _e	380V	Q _o	P _e	220V	380V	440V
		(kW)	(kW)	(A)	(kW)	(kW)	(A)	(A)	(A)
40	10	656.1	127.6	218	787.4	153.2	-	261	226
	5	555.8	122.8	210	667.0	147.4	-	252	217
	0	471.0	119.1	203	565.2	142.9	-	244	211
	-5	397.8	115.8	198	477.3	139.0	-	237	205
	-10	333.6	112.3	192	400.4	134.8	-	230	199
	-15	277.1	108.2	185	332.6	129.8	-	222	191
45	10	623.7	139.5	238	748.4	167.4	-	286	247
	5	529.7	134.9	230	635.7	161.9	-	276	239
	0	448.3	131.3	224	537.9	157.6	-	269	232
	-5	376.7	128.1	219	452.1	153.8	-	262	227
	-10	313.4	124.7	213	376.1	149.7	-	256	221
	-15	257.0	120.7	206	308.4	144.9	-	247	214
50	10	588.0	151.6	259	705.6	181.9	-	310	268
	5	499.8	147.0	251	599.8	176.5	-	301	260
	0	421.9	143.5	245	506.3	172.3	-	294	254
	-5	352.3	140.4	240	422.8	168.5	-	288	248
	-10	289.9	137.1	234	347.9	164.6	-	281	243
	-15	234.2	133.2	227	281.1	159.9	-	273	236
55	10	552.9	164.4	281	663.5	197.2	-	333	288
	5	469.9	159.8	273	563.9	191.7	-	324	280
	0	395.0	156.3	267	474.0	187.5	-	317	273
	-5	327.0	153.2	261	392.4	183.8	-	310	268
	-10	265.7	149.8	256	318.8	179.8	-	304	262
	-15	210.7	145.9	249	252.9	175.1	-	296	255
60	10	522.1	178.8	305	626.5	214.5	-	362	313
	5	442.8	173.9	297	531.4	208.6	-	352	304
	0	369.9	170.2	291	443.9	204.2	-	345	298
	-5	303.1	166.8	285	363.7	200.1	-	338	292
	-10	242.6	163.3	279	291.1	195.9	-	331	286

Legend

t_c Condensing Temperature (°C)

Q_o Cooling capacity (kW)

t_o Evaporating Temperature (°C)

P_e Power consumption (kW)

External cooling device is required.

! Cooling capacity is calculated based on superheat 5°C, subcooling 5°C.

Performance data for individual input data check CURTIS software.

Performance data - R series

R22

Model		R-21H							
t _c (°C)	t _o (°C)	50Hz			60Hz				
		Q _o	P _e	380V	Q _o	P _e	220V	380V	440V
		(kW)	(kW)	(A)	(kW)	(kW)	(A)	(A)	(A)
40	10	802.4	151.6	259	962.9	181.9	-	310	268
	5	685.6	148.0	253	822.7	177.7	-	303	262
	0	584.5	144.1	246	701.4	173.0	-	295	255
	-5	495.3	140.0	239	594.4	168.0	-	287	248
	-10	415.6	135.7	232	498.7	162.9	-	278	240
	-15	344.0	131.3	224	412.9	157.6	-	269	232
45	10	763.5	167.0	285	916.1	200.4	-	342	295
	5	651.9	163.0	278	782.3	195.6	-	334	288
	0	553.6	158.6	271	664.4	190.3	-	325	281
	-5	465.9	154.2	263	559.1	185.0	-	316	273
	-10	386.9	149.4	255	464.3	179.3	-	306	264
	-15	315.8	144.8	247	379.0	173.8	-	297	256
50	10	718.9	182.3	308	862.7	218.7	-	369	319
	5	613.3	177.9	300	736.0	213.5	-	360	311
	0	518.7	173.3	293	622.4	207.9	-	351	303
	-5	433.1	168.5	284	519.7	202.2	-	341	295
	-10	355.6	163.6	276	426.7	196.3	-	331	286
	-15	285.7	158.9	268	342.8	190.6	-	322	278
55	10	674.6	198.4	335	809.5	238.1	-	402	347
	5	574.9	193.7	327	689.9	232.4	-	392	339
	0	483.8	188.9	319	580.6	226.7	-	383	330
	-5	400.5	183.8	310	480.7	220.5	-	372	322
	-10	324.7	178.8	302	389.6	214.5	-	362	313
	-15	256.2	174.3	294	307.4	209.1	-	353	305
60	10	635.1	216.3	365	762.1	259.6	-	438	378
	5	540.2	211.5	357	648.3	253.8	-	428	370
	0	452.3	206.4	348	542.8	247.7	-	418	361
	-5	371.1	201.2	340	445.3	241.4	-	408	352
	-10	296.6	196.2	331	355.9	235.4	-	397	343

Legend

t_c Condensing Temperature (°C)

Q_o Cooling capacity (kW)

t_o Evaporating Temperature (°C)

P_e Power consumption (kW)

External cooling device is required.

! Cooling capacity is calculated based on superheat 5°C, subcooling 5°C.

Performance data for individual input data check CURTIS software.

Performance data - R series

R22

Model		R-23H							
t _c (°C)	t _o (°C)	50Hz			60Hz				
		Q _o	P _e	380V	Q _o	P _e	220V	380V	440V
		(kW)	(kW)	(A)	(kW)	(kW)	(A)	(A)	(A)
40	10	1021.0	193.8	331	1225.1	232.5	-	397	343
	5	864.7	189.8	324	1037.7	227.7	-	389	336
	0	731.5	184.0	314	877.8	220.8	-	377	325
	-5	620.5	177.4	303	744.6	212.8	-	363	314
	-10	530.1	170.8	292	636.2	205.0	-	350	302
	-15	457.6	164.7	281	549.1	197.7	-	337	291
45	10	975.5	214.7	367	1170.7	257.7	-	440	380
	5	828.9	209.7	358	994.7	251.7	-	430	371
	0	701.0	203.2	347	841.2	243.8	-	416	360
	-5	593.0	196.3	335	711.6	235.6	-	402	347
	-10	503.6	189.5	323	604.3	227.4	-	388	335
	-15	431.0	183.3	313	517.2	219.9	-	375	324
50	10	921.9	234.4	396	1106.3	281.2	-	475	410
	5	785.0	228.9	386	942.1	274.6	-	464	400
	0	663.5	222.1	375	796.2	266.6	-	450	389
	-5	559.0	215.0	363	670.8	258.0	-	436	376
	-10	471.6	208.2	352	565.9	249.9	-	422	364
	-15	400.0	202.2	341	480.0	242.6	-	410	354
55	10	865.6	253.3	428	1038.8	304.0	-	513	443
	5	738.3	247.6	418	886.0	297.1	-	502	433
	0	623.0	240.8	406	747.6	288.9	-	488	421
	-5	522.5	233.8	395	627.0	280.5	-	474	409
	-10	437.4	227.4	384	524.8	272.8	-	461	398
	-15	367.1	221.9	375	440.5	266.3	-	450	388
60	10	811.8	272.1	459	974.1	326.6	-	551	476
	5	693.0	266.4	450	831.6	319.7	-	540	466
	0	583.4	259.7	438	700.1	311.7	-	526	454
	-5	486.4	253.0	427	583.7	303.6	-	513	443
	-10	403.6	247.1	417	484.3	296.5	-	501	432

Legend

t_c Condensing Temperature (°C)

Q_o Cooling capacity (kW)

t_o Evaporating Temperature (°C)

P_e Power consumption (kW)

External cooling device is required.

! Cooling capacity is calculated based on superheat 5°C, subcooling 5°C.

Performance data for individual input data check CURTIS software.

Performance data - R series

R134a

Model		R-11A							
t _c (°C)	t _o (°C)	50Hz			60Hz				
		Q _o (kW)	P _e (kW)	380V (A)	Q _o (kW)	P _e (kW)	220V (A)	380V (A)	440V (A)
35	10	123.4	20.0	34	148.0	24.0	71	41	35
	5	105.2	19.4	33	126.2	23.2	69	40	34
	0	86.9	18.9	32	104.2	22.6	67	39	33
	-5	70.0	18.4	31	84.0	22.0	65	38	32
	-10	55.2	17.8	30	66.2	21.3	63	36	31
	-15	42.8	17.3	29	51.3	20.7	61	35	31
40	10	119.9	22.4	38	143.8	26.8	79	46	40
	5	101.7	21.7	37	122.0	26.0	77	44	38
	0	83.5	21.0	36	100.2	25.1	74	43	37
	-5	66.7	20.4	35	80.1	24.4	72	42	36
	-10	52.1	19.7	34	62.5	23.6	70	40	35
	-15	39.9	19.1	33	47.9	22.9	67	39	34
45	10	113.8	24.7	42	136.6	29.6	87	50	44
	5	96.0	23.9	41	115.2	28.6	84	49	42
	0	78.3	23.1	39	94.0	27.7	82	47	41
	-5	62.1	22.4	38	74.5	26.8	79	46	40
	-10	48.0	21.6	37	57.6	25.9	76	44	38
	-15	36.3	20.9	36	43.5	25.0	74	43	37
50	10	106.3	27.0	46	127.6	32.5	96	55	48
	5	89.2	26.1	45	107.1	31.4	93	54	46
	0	72.3	25.2	43	86.7	30.3	89	52	45
	-5	56.6	24.5	42	68.0	29.3	87	50	43
	-10	43.3	23.6	40	51.9	28.3	83	48	42
	-15	32.2	22.8	39	38.6	27.3	81	47	40
55	10	97.9	29.5	50	117.4	35.4	105	61	52
	5	81.6	28.5	49	97.9	34.3	101	58	50
	0	65.6	27.6	47	78.7	33.2	98	57	49
	-5	50.9	26.7	46	61.1	32.1	95	55	47
	-10	38.2	25.8	44	45.9	31.0	91	53	46
	-15	27.9	25.0	43	33.4	29.9	88	51	44
60	10	89.2	32.3	55	107.1	38.8	114	66	57
	5	73.9	31.4	54	88.7	37.7	111	64	56
	0	58.8	30.4	52	70.6	36.5	108	62	54
	-5	45.0	29.5	50	54.0	35.4	105	61	52
	-10	33.2	28.5	49	39.8	34.3	101	58	50
65	10	80.8	35.9	61	97.0	43.1	127	74	64
	5	66.5	35.0	60	79.8	42.0	124	72	62
	0	52.3	34.0	58	62.8	40.8	120	70	60
	-5	39.5	33.1	57	47.4	39.8	117	68	59

Legend

t_c Condensing Temperature (°C)

Q_o Cooling capacity (kW)

t_o Evaporating Temperature (°C)

P_e Power consumption (kW)

External cooling device is required.

! Cooling capacity is calculated based on superheat 5^oC, subcooling 5^oC.

Performance data for individual input data check CURTIS software.

Performance data - R series

R134a

Model		R-12A							
t _c (°C)	t _o (°C)	50Hz			60Hz				
		Q _o (kW)	P _e (kW)	380V (A)	Q _o (kW)	P _e (kW)	220V (A)	380V (A)	440V (A)
35	10	148.2	25.0	43	177.9	30.1	89	51	44
	5	128.4	24.1	41	154.1	28.9	85	49	43
	0	107.8	23.4	40	129.4	28.0	83	48	41
	-5	88.0	22.7	39	105.6	27.2	80	46	40
	-10	69.9	21.9	37	83.9	26.2	77	45	39
	-15	54.1	21.0	36	64.9	25.1	74	43	37
40	10	144.0	27.5	47	172.8	33.1	97	56	49
	5	124.5	26.6	45	149.4	32.0	94	55	47
	0	104.1	26.0	44	125.0	31.3	92	53	46
	-5	84.7	25.3	43	101.6	30.4	90	52	45
	-10	66.9	24.6	42	80.3	29.5	87	50	43
	-15	51.5	23.7	40	61.8	28.4	84	48	42
45	10	137.3	30.0	51	164.8	36.0	106	62	53
	5	118.3	29.3	50	142.0	35.2	104	60	52
	0	98.6	28.6	49	118.3	34.4	101	59	51
	-5	79.7	27.9	48	95.6	33.5	99	57	49
	-10	62.5	27.2	47	75.0	32.7	96	56	48
	-15	47.6	26.2	45	57.1	31.5	93	54	46
50	10	129.2	32.8	56	155.1	39.4	116	67	58
	5	110.7	32.0	55	132.9	38.4	113	66	57
	0	91.6	31.4	54	109.9	37.7	111	64	56
	-5	73.5	30.7	52	88.2	36.9	109	63	54
	-10	57.1	30.0	51	68.5	36.0	106	62	53
	-15	42.9	29.0	50	51.4	34.9	103	59	51
55	10	120.4	35.9	61	144.5	43.1	127	74	64
	5	102.4	35.2	60	122.9	42.3	125	72	62
	0	84.1	34.5	59	100.9	41.4	122	71	61
	-5	66.7	33.8	58	80.1	40.6	120	69	60
	-10	51.1	33.1	57	61.3	39.8	117	68	59
	-15	37.7	32.1	55	45.3	38.6	114	66	57
60	10	111.6	39.8	68	134.0	47.8	141	82	70
	5	94.1	39.0	67	112.9	46.8	138	80	69
	0	76.4	38.3	65	91.7	46.0	136	79	68
	-5	59.7	37.6	64	71.7	45.1	133	77	67
	-10	45.0	36.8	63	54.0	44.2	130	75	65
65	10	103.3	45.0	77	124.0	54.0	159	92	80
	5	86.0	44.0	75	103.3	52.8	156	90	78
	0	68.9	43.2	74	82.7	51.9	153	89	76
	-5	53.0	42.5	73	63.7	51.0	150	87	75

Legend

t_c Condensing Temperature (°C)

Q_o Cooling capacity (kW)

t_o Evaporating Temperature (°C)

P_e Power consumption (kW)

External cooling device is required.

! Cooling capacity is calculated based on superheat 5^oC, subcooling 5^oC.

Performance data for individual input data check CURTIS software.

Performance data - R series

R134a

Model		R-13A							
t _c (°C)	t _o (°C)	50Hz			60Hz				
		Q _o (kW)	P _e (kW)	380V (A)	Q _o (kW)	P _e (kW)	220V (A)	380V (A)	440V (A)
35	10	179.8	29.8	51	215.8	35.8	106	61	53
	5	154.7	28.5	49	185.7	34.3	101	58	50
	0	129.5	27.5	47	155.4	33.1	97	56	49
	-5	105.5	26.6	45	126.6	32.0	94	55	47
	-10	83.6	25.6	44	100.3	30.8	91	53	45
	-15	64.4	24.5	42	77.2	29.3	87	50	43
40	10	173.2	32.8	56	207.9	39.4	116	67	58
	5	149.0	31.6	54	178.7	38.0	112	65	56
	0	124.3	30.6	52	149.1	36.8	108	63	54
	-5	100.8	29.6	51	121.0	35.6	105	61	52
	-10	79.4	28.6	49	95.2	34.4	101	59	51
	-15	60.7	27.4	47	72.8	32.9	97	56	49
45	10	163.6	35.8	61	196.3	43.0	127	73	63
	5	140.3	34.7	59	168.4	41.7	123	71	61
	0	116.7	33.7	58	140.0	40.5	119	69	60
	-5	94.0	32.7	56	112.8	39.3	116	67	58
	-10	73.4	31.6	54	88.1	38.0	112	65	56
	-15	55.3	30.3	52	66.4	36.4	107	62	54
50	10	152.1	38.9	66	182.6	46.7	138	80	69
	5	130.0	37.9	65	156.1	45.5	134	78	67
	0	107.3	36.9	63	128.8	44.3	131	76	65
	-5	85.7	35.8	61	102.9	43.0	127	73	63
	-10	66.0	34.7	59	79.2	41.7	123	71	61
	-15	48.8	33.3	57	58.6	40.0	118	68	59
55	10	140.0	42.5	73	168.0	51.0	150	87	75
	5	118.8	41.4	71	142.6	49.7	147	85	73
	0	97.2	40.4	69	116.7	48.5	143	83	72
	-5	76.6	39.3	67	91.9	47.2	139	81	70
	-10	58.0	38.0	65	69.6	45.6	135	78	67
	-15	41.8	36.5	62	50.2	43.8	129	75	65
60	10	127.8	46.7	80	153.3	56.0	165	96	83
	5	107.5	45.7	78	129.0	54.9	162	94	81
	0	86.9	44.6	76	104.2	53.5	158	91	79
	-5	67.3	43.4	74	80.8	52.1	154	89	77
	-10	49.8	42.0	72	59.7	50.4	149	86	74
65	10	116.5	52.4	89	139.8	62.9	185	107	93
	5	96.7	51.2	87	116.1	61.4	181	105	91
	0	76.9	50.1	86	92.3	60.1	177	103	89
	-5	58.4	48.8	83	70.1	58.6	173	100	86

Legend

t_c Condensing Temperature (°C)

Q_o Cooling capacity (kW)

t_o Evaporating Temperature (°C)

P_e Power consumption (kW)

External cooling device is required.

! Cooling capacity is calculated based on superheat 5°C, subcooling 5°C.

Performance data for individual input data check CURTIS software.

Performance data - R series

R134a

Model		R-14A							
t _c (°C)	t _o (°C)	50Hz			60Hz				
		Q _o (kW)	P _e (kW)	380V (A)	Q _o (kW)	P _e (kW)	220V (A)	380V (A)	440V (A)
35	10	224.4	37.0	63	269.3	44.4	131	76	65
	5	192.0	35.5	61	230.4	42.6	125	73	63
	0	159.5	34.2	58	191.4	41.0	121	70	60
	-5	128.9	32.8	56	154.7	39.3	116	67	58
	-10	101.6	31.4	54	121.9	37.6	111	64	55
	-15	77.9	30.0	51	93.5	36.0	106	61	53
40	10	217.2	40.7	69	260.7	48.8	144	83	72
	5	185.3	39.3	67	222.4	47.1	139	80	69
	0	153.4	37.9	65	184.1	45.4	134	78	67
	-5	123.6	36.5	62	148.3	43.8	129	75	65
	-10	96.7	35.0	60	116.1	42.0	124	72	62
	-15	73.7	33.6	57	88.4	40.3	119	69	59
45	10	206.3	44.4	76	247.6	53.2	157	91	78
	5	175.2	43.0	73	210.3	51.5	152	88	76
	0	144.4	41.6	71	173.2	49.9	147	85	74
	-5	115.5	40.1	68	138.5	48.1	142	82	71
	-10	89.6	38.6	66	107.6	46.3	136	79	68
	-15	67.6	37.2	63	81.1	44.6	131	76	66
50	10	193.1	48.3	82	231.8	57.9	171	99	85
	5	163.0	46.9	80	195.6	56.2	166	96	83
	0	133.3	45.4	77	159.9	54.4	160	93	80
	-5	105.6	43.8	75	126.7	52.5	155	90	77
	-10	81.0	42.2	72	97.2	50.6	149	86	75
	-15	60.2	40.7	69	72.2	48.8	144	83	72
55	10	178.7	52.5	90	214.5	63.1	186	108	93
	5	149.6	51.1	87	179.5	61.4	181	105	90
	0	121.0	49.6	85	145.2	59.5	175	102	88
	-5	94.7	47.9	82	113.6	57.4	169	98	85
	-10	71.5	46.2	79	85.8	55.4	163	95	82
	-15	52.1	44.5	76	62.5	53.3	157	91	79
60	10	164.4	57.9	99	197.3	69.5	205	119	103
	5	136.1	56.4	96	163.4	67.7	200	116	100
	0	108.7	54.6	93	130.4	65.6	193	112	97
	-5	83.7	52.7	90	100.4	63.3	187	108	93
	-10	61.8	50.7	87	74.2	60.9	180	104	90
	-15	41.8	48.8	84	51.1	58.8	173	100	87
65	10	150.9	65.0	111	181.0	78.0	230	133	115
	5	123.2	63.2	108	147.8	75.9	224	130	112
	0	96.7	61.2	105	116.1	73.5	217	125	108
	-5	73.0	59.0	101	87.5	70.8	209	121	104

Legend

t_c Condensing Temperature (°C)

Q_o Cooling capacity (kW)

t_o Evaporating Temperature (°C)

P_e Power consumption (kW)

External cooling device is required.

! Cooling capacity is calculated based on superheat 5°C, subcooling 5°C.

Performance data for individual input data check CURTIS software.

Performance data - R series

R134a

Model		R-16A							
t _c (°C)	t _o (°C)	50Hz			60Hz				
		Q _o (kW)	P _e (kW)	380V (A)	Q _o (kW)	P _e (kW)	220V (A)	380V (A)	440V (A)
35	10	318.4	52.6	90	382.0	63.1	-	108	93
	5	277.3	50.1	86	332.7	60.1	-	103	89
	0	233.2	48.3	82	279.8	58.0	-	99	85
	-5	190.4	46.6	80	228.5	55.9	-	95	82
	-10	151.7	44.9	77	182.1	53.9	-	92	79
	-15	118.3	43.1	74	142.0	51.7	-	88	76
40	10	311.9	57.7	99	374.3	69.2	-	118	102
	5	269.0	55.5	95	322.8	66.6	-	114	98
	0	224.2	53.6	92	269.1	64.3	-	110	95
	-5	181.6	51.8	88	217.9	62.2	-	106	92
	-10	143.4	50.0	85	172.1	60.0	-	102	88
	-15	110.7	48.0	82	132.9	57.6	-	98	85
45	10	298.8	62.9	107	358.6	75.5	-	129	111
	5	255.4	60.8	104	306.5	73.0	-	125	108
	0	211.2	58.9	101	253.4	70.7	-	121	104
	-5	169.4	57.0	97	203.3	68.4	-	117	101
	-10	132.5	55.0	94	158.9	66.0	-	113	97
	-15	101.2	52.9	90	121.5	63.5	-	108	94
50	10	281.4	68.4	117	337.7	82.1	-	140	121
	5	238.5	66.3	113	286.3	79.6	-	136	117
	0	195.4	64.4	110	234.5	77.3	-	132	114
	-5	155.2	62.4	107	186.3	74.9	-	128	110
	-10	120.1	60.2	103	144.1	72.2	-	123	107
	-15	90.6	57.7	99	108.8	69.2	-	118	102
55	10	261.7	74.5	127	314.1	89.4	-	153	132
	5	220.0	72.5	124	264.0	87.0	-	149	128
	0	178.5	70.5	120	214.2	84.6	-	144	125
	-5	140.3	68.3	117	168.3	82.0	-	140	121
	-10	107.1	65.8	112	128.5	79.0	-	135	116
	-15	79.7	62.9	107	95.7	75.5	-	129	111
60	10	241.5	82.1	140	289.8	98.5	-	168	145
	5	201.2	80.0	137	241.4	96.0	-	164	142
	0	161.5	77.8	133	193.8	93.4	-	159	138
	-5	125.6	75.3	129	150.7	90.4	-	154	133
	-10	94.6	72.4	124	113.5	86.9	-	148	128
65	10	222.2	91.9	157	266.6	110.3	-	188	163
	5	183.2	89.7	153	219.9	107.6	-	184	159
	0	145.5	87.2	149	174.6	104.6	-	179	154
	-5	111.7	84.4	144	134.0	101.3	-	173	149

Legend

t_c Condensing Temperature (°C)

Q_o Cooling capacity (kW)

t_o Evaporating Temperature (°C)

P_e Power consumption (kW)

External cooling device is required.

! Cooling capacity is calculated based on superheat 5°C, subcooling 5°C.

Performance data for individual input data check CURTIS software.

Performance data - R series

R134a

Model		R-17A							
t _c (°C)	t _o (°C)	50Hz			60Hz				
		Q _o (kW)	P _e (kW)	380V (A)	Q _o (kW)	P _e (kW)	220V (A)	380V (A)	440V (A)
35	10	375.4	60.6	103	450.5	72.7	-	124	107
	5	326.5	58.3	100	391.8	70.0	-	119	103
	0	274.0	56.5	96	328.8	67.8	-	116	100
	-5	223.2	54.7	93	267.8	65.6	-	112	97
	-10	177.3	52.6	90	212.7	63.1	-	108	93
	-15	137.8	50.1	86	165.4	60.1	-	103	89
40	10	366.7	67.0	114	440.0	80.4	-	137	119
	5	316.2	64.7	110	379.5	77.6	-	133	114
	0	263.4	62.7	107	316.0	75.2	-	128	111
	-5	213.0	60.7	104	255.6	72.8	-	124	107
	-10	167.9	58.5	100	201.5	70.2	-	120	103
	-15	129.4	55.8	95	155.2	67.0	-	114	99
45	10	350.5	73.3	125	420.6	88.0	-	150	130
	5	299.9	70.9	121	359.9	85.1	-	145	125
	0	247.8	68.8	117	297.4	82.6	-	141	122
	-5	198.8	66.7	114	238.5	80.0	-	137	118
	-10	155.2	64.3	110	186.3	77.2	-	132	114
	-15	118.6	61.5	105	142.3	73.8	-	126	109
50	10	329.7	79.9	136	395.6	95.9	-	164	141
	5	279.7	77.4	132	335.7	92.9	-	159	137
	0	229.3	75.1	128	275.1	90.1	-	154	133
	-5	182.2	72.9	124	218.6	87.5	-	149	129
	-10	140.8	70.4	120	169.0	84.5	-	144	125
	-15	106.2	67.3	115	127.4	80.8	-	138	119
55	10	306.5	87.2	149	367.8	104.6	-	179	154
	5	257.9	84.6	144	309.5	101.5	-	173	150
	0	209.3	82.1	140	251.2	98.5	-	168	145
	-5	164.6	79.7	136	197.5	95.6	-	163	141
	-10	125.7	77.0	131	150.8	92.4	-	158	136
	-15	93.4	73.7	126	112.1	88.4	-	151	130
60	10	282.9	96.1	164	339.5	115.3	-	197	170
	5	235.8	93.1	159	282.9	111.7	-	191	165
	0	189.4	90.4	154	227.3	108.5	-	185	160
	-5	147.2	87.7	150	176.6	105.2	-	180	155
	-10	110.8	84.8	145	133.0	101.8	-	174	150
65	10	260.7	107.5	184	312.8	129.0	-	220	190
	5	215.0	104.1	178	258.0	124.9	-	213	184
	0	170.7	101.1	173	204.8	121.3	-	207	179
	-5	130.9	98.1	167	157.1	117.7	-	201	174

Legend

t_c Condensing Temperature (°C)

Q_o Cooling capacity (kW)

t_o Evaporating Temperature (°C)

P_e Power consumption (kW)

External cooling device is required.

! Cooling capacity is calculated based on superheat 5°C, subcooling 5°C.

Performance data for individual input data check CURTIS software.

Performance data - R series

R134a

Model		R-18A							
t _c (°C)	t _o (°C)	50Hz			60Hz				
		Q _o (kW)	P _e (kW)	380V (A)	Q _o (kW)	P _e (kW)	220V (A)	380V (A)	440V (A)
35	10	395.6	64.1	109	474.7	76.9	-	131	113
	5	344.0	60.8	104	412.8	73.0	-	125	108
	0	288.8	58.7	100	346.6	70.4	-	120	104
	-5	235.5	56.8	97	282.5	68.2	-	116	100
	-10	187.4	54.8	94	224.8	65.8	-	112	97
	-15	146.2	52.2	89	175.4	62.6	-	107	92
40	10	386.5	70.5	120	463.7	84.6	-	144	125
	5	333.2	67.5	115	399.8	81.0	-	138	119
	0	277.5	65.3	111	333.0	78.4	-	134	116
	-5	224.3	63.3	108	269.2	76.0	-	130	112
	-10	177.1	61.0	104	212.5	73.2	-	125	108
	-15	136.9	58.2	99	164.3	69.8	-	119	103
45	10	369.5	76.9	131	443.4	92.3	-	158	136
	5	316.0	74.0	126	379.2	88.8	-	152	131
	0	261.0	71.8	123	313.2	86.2	-	147	127
	-5	209.2	69.7	119	251.0	83.6	-	143	123
	-10	163.6	67.2	115	196.3	80.6	-	138	119
	-15	125.0	64.0	109	150.1	76.8	-	131	113
50	10	347.4	83.5	143	416.9	100.2	-	171	148
	5	294.8	80.8	138	353.7	97.0	-	166	143
	0	241.3	78.6	134	289.6	94.3	-	161	139
	-5	191.7	76.3	130	230.0	91.6	-	156	135
	-10	148.2	73.6	126	177.9	88.3	-	151	130
	-15	112.0	69.9	119	134.4	83.9	-	143	124
55	10	322.8	90.9	155	387.4	109.1	-	186	161
	5	271.6	88.3	151	325.9	106.0	-	181	156
	0	220.4	86.0	147	264.5	103.2	-	176	152
	-5	173.1	83.6	143	207.8	100.3	-	171	148
	-10	132.3	80.6	138	158.7	96.7	-	165	143
	-15	98.4	76.3	130	118.0	91.6	-	156	135
60	10	297.9	99.8	170	357.5	119.8	-	204	177
	5	248.4	97.2	166	298.1	116.6	-	199	172
	0	199.5	94.9	162	239.4	113.9	-	194	168
	-5	155.0	92.4	158	186.0	110.9	-	189	163
	-10	116.7	88.9	152	140.0	106.7	-	182	157
65	10	274.3	111.1	190	329.1	133.3	-	228	197
	5	226.5	108.6	185	271.8	130.3	-	222	192
	0	179.9	106.2	181	215.9	127.4	-	218	188
	-5	138.0	103.6	177	165.6	124.3	-	212	183

Legend

t_c Condensing Temperature (°C)

Q_o Cooling capacity (kW)

t_o Evaporating Temperature (°C)

P_e Power consumption (kW)

External cooling device is required.

! Cooling capacity is calculated based on superheat 5°C, subcooling 5°C.

Performance data for individual input data check CURTIS software.

Performance data - R series

R134a

Model		R-19A							
t _c (°C)	t _o (°C)	50Hz			60Hz				
		Q _o (kW)	P _e (kW)	380V (A)	Q _o (kW)	P _e (kW)	220V (A)	380V (A)	440V (A)
35	10	501.8	77.8	133	602.1	93.3	-	159	138
	5	425.4	74.2	127	510.5	89.0	-	152	131
	0	350.1	71.5	122	420.2	85.8	-	146	126
	-5	280.6	69.0	118	336.8	82.8	-	141	122
	-10	219.6	66.6	114	263.5	79.9	-	136	118
	-15	167.9	64.1	109	201.5	76.9	-	131	113
40	10	483.5	86.1	147	580.2	103.3	-	176	152
	5	409.3	82.5	141	491.2	99.0	-	169	146
	0	335.9	79.6	136	403.1	95.5	-	163	141
	-5	268.2	76.9	131	321.8	92.3	-	157	136
	-10	208.6	74.1	126	250.3	88.9	-	152	131
	-15	158.3	71.3	122	189.9	85.5	-	146	126
45	10	456.9	94.1	161	548.3	112.9	-	193	166
	5	385.7	90.7	155	462.8	108.8	-	186	160
	0	315.3	87.7	150	378.3	105.2	-	180	155
	-5	250.1	84.7	145	300.1	101.6	-	173	150
	-10	192.9	81.6	139	231.5	97.9	-	167	144
	-15	144.6	78.3	134	173.6	93.9	-	160	138
50	10	425.4	102.3	175	510.5	122.8	-	210	181
	5	357.8	99.0	169	429.3	118.8	-	203	175
	0	290.6	96.0	164	348.8	115.2	-	197	170
	-5	228.7	92.8	158	274.4	111.4	-	190	164
	-10	174.3	89.4	153	209.2	107.3	-	183	158
	-15	128.8	85.4	146	154.5	102.5	-	175	151
55	10	391.7	111.2	190	470.0	133.5	-	228	197
	5	327.7	108.2	185	393.2	129.8	-	222	191
	0	264.1	105.1	179	317.0	126.1	-	215	186
	-5	205.6	101.8	174	246.7	122.2	-	209	180
	-10	154.5	97.9	167	185.5	117.5	-	201	173
	-15	111.9	93.1	159	134.2	111.7	-	191	165
60	10	358.4	121.7	208	430.1	146.1	-	249	215
	5	297.8	118.9	203	357.3	142.7	-	244	210
	0	237.6	115.9	198	285.2	139.1	-	237	205
	-5	182.5	112.3	192	219.0	134.8	-	230	199
	-10	134.6	107.9	184	161.6	129.5	-	221	191
65	10	327.4	134.9	230	392.9	161.9	-	276	239
	5	269.6	132.5	226	323.5	159.0	-	271	234
	0	212.7	129.6	221	255.2	155.6	-	266	229
	-5	160.6	125.9	215	192.8	151.1	-	258	223

Legend

t_c Condensing Temperature (°C)

Q_o Cooling capacity (kW)

t_o Evaporating Temperature (°C)

P_e Power consumption (kW)

External cooling device is required.

! Cooling capacity is calculated based on superheat 5^oC, subcooling 5^oC.

Performance data for individual input data check CURTIS software.

Performance data - R series

R134a

Model		R-21A							
t _c (°C)	t _o (°C)	50Hz			60Hz				
		Q _o (kW)	P _e (kW)	380V (A)	Q _o (kW)	P _e (kW)	220V (A)	380V (A)	440V (A)
35	10	563.6	87.5	149	676.4	105.0	-	179	155
	5	481.6	83.6	143	577.9	100.3	-	171	148
	0	398.2	80.7	138	477.8	96.8	-	165	143
	-5	319.6	77.9	133	383.5	93.5	-	160	138
	-10	249.8	74.8	128	299.8	89.7	-	153	132
	-15	190.3	71.2	121	228.4	85.4	-	146	126
40	10	546.0	96.4	165	655.2	115.7	-	197	171
	5	464.6	92.6	158	557.5	111.1	-	190	164
	0	382.3	89.6	153	458.8	107.5	-	184	159
	-5	305.4	86.7	148	366.5	104.0	-	178	153
	-10	237.1	83.5	143	284.6	100.2	-	171	148
	-15	179.3	79.7	136	215.1	95.6	-	163	141
45	10	518.1	105.3	180	621.7	126.4	-	216	186
	5	438.7	101.5	173	526.4	121.8	-	208	180
	0	359.0	98.4	168	430.8	118.1	-	202	174
	-5	284.8	95.3	163	341.7	114.4	-	195	169
	-10	219.4	92.0	157	263.3	110.4	-	188	163
	-15	164.1	88.0	150	197.0	105.6	-	180	156
50	10	483.7	114.6	196	580.5	137.5	-	235	203
	5	407.3	110.8	189	488.8	133.0	-	227	196
	0	331.1	107.5	184	397.3	129.0	-	220	190
	-5	260.4	104.3	178	312.5	125.2	-	214	185
	-10	198.4	100.8	172	238.0	121.0	-	206	178
	-15	146.4	96.5	165	175.7	115.8	-	198	171
55	10	446.3	124.9	213	535.6	149.9	-	256	221
	5	373.3	121.0	207	448.0	145.2	-	248	214
	0	300.8	117.5	201	361.0	141.0	-	241	208
	-5	234.1	114.1	195	281.0	136.9	-	234	202
	-10	176.0	110.3	188	211.2	132.4	-	226	195
	-15	127.5	105.6	180	153.0	126.7	-	216	187
60	10	408.6	137.3	234	490.3	164.8	-	281	243
	5	339.0	133.1	227	406.8	159.8	-	273	236
	0	270.4	129.4	221	324.5	155.3	-	265	229
	-5	207.7	125.8	215	249.3	151.0	-	258	223
	-10	153.5	121.7	208	184.2	146.1	-	249	215
65	10	372.9	153.7	262	447.5	184.4	-	315	272
	5	306.3	148.9	254	367.6	178.7	-	305	264
	0	241.5	144.9	247	289.8	173.9	-	297	256
	-5	182.6	140.9	241	219.1	169.1	-	289	249

Legend

t_c Condensing Temperature (°C)

Q_o Cooling capacity (kW)

t_o Evaporating Temperature (°C)

P_e Power consumption (kW)

External cooling device is required.

! Cooling capacity is calculated based on superheat 5°C, subcooling 5°C.

Performance data for individual input data check CURTIS software.

Performance data - R series

R134a

Model		R-23A							
t _c (°C)	t _o (°C)	50Hz			60Hz				
		Q _o (kW)	P _e (kW)	380V (A)	Q _o (kW)	P _e (kW)	220V (A)	380V (A)	440V (A)
35	10	771.2	113.7	194	925.5	136.5	-	233	201
	5	650.6	108.6	185	780.7	130.3	-	223	192
	0	536.2	104.7	179	643.5	125.7	-	215	185
	-5	432.5	101.0	172	519.0	121.2	-	207	179
	-10	341.5	97.0	166	409.8	116.4	-	199	172
	-15	264.0	92.1	157	316.8	110.5	-	189	163
40	10	741.3	125.6	214	889.5	150.7	-	257	222
	5	624.3	120.4	206	749.1	144.5	-	247	213
	0	513.5	116.4	199	616.2	139.7	-	239	206
	-5	412.9	112.6	192	495.5	135.1	-	231	199
	-10	324.8	108.3	185	389.7	130.0	-	222	192
	-15	249.7	103.1	176	299.7	123.7	-	211	182
45	10	698.7	137.2	234	838.4	164.6	-	281	243
	5	587.2	132.2	226	704.6	158.6	-	271	234
	0	481.4	128.1	219	577.7	153.7	-	262	227
	-5	385.6	124.0	212	462.7	148.9	-	254	219
	-10	301.4	119.6	204	361.7	143.6	-	245	212
	-15	230.1	113.9	194	276.2	136.7	-	233	202
50	10	649.0	149.2	255	778.8	179.0	-	306	264
	5	543.9	144.2	246	652.6	173.0	-	295	255
	0	444.1	140.0	239	532.9	168.0	-	287	248
	-5	353.6	135.9	232	424.3	163.0	-	278	240
	-10	274.4	131.2	224	329.3	157.4	-	269	232
	-15	207.5	124.7	213	249.0	149.7	-	256	221
55	10	597.0	162.3	277	716.4	194.8	-	333	287
	5	498.4	157.4	269	598.0	188.9	-	322	278
	0	404.8	153.1	261	485.7	183.7	-	314	271
	-5	319.9	148.8	254	383.9	178.6	-	305	263
	-10	246.0	143.6	245	295.2	172.3	-	294	254
	-15	183.7	136.3	233	220.4	163.5	-	279	241
60	10	546.7	178.2	304	656.0	213.8	-	365	315
	5	454.0	173.0	295	544.8	207.7	-	354	306
	0	366.3	168.6	288	439.5	202.4	-	345	298
	-5	287.0	163.9	280	344.4	196.7	-	336	290
	-10	218.2	157.8	269	261.8	189.4	-	323	279
65	10	500.9	198.5	339	601.1	238.2	-	407	351
	5	413.4	193.0	329	496.1	231.6	-	395	341
	0	330.9	188.2	321	397.0	225.8	-	385	333
	-5	256.6	182.9	312	307.9	219.4	-	375	324

Legend

t_c Condensing Temperature (°C)

Q_o Cooling capacity (kW)

t_o Evaporating Temperature (°C)

P_e Power consumption (kW)

External cooling device is required.

! Cooling capacity is calculated based on superheat 5^oC, subcooling 5^oC.

Performance data for individual input data check CURTIS software.

Performance data - R series

R407C

Model		R-11H							
t _c (°C)	t _o (°C)	50Hz			60Hz				
		Q _o (kW)	P _e (kW)	380V (A)	Q _o (kW)	P _e (kW)	220V (A)	380V (A)	440V (A)
35	10	186.5	31.4	54	223.8	37.7	111	64	56
	5	158.1	30.3	52	189.7	36.4	107	62	54
	0	132.0	29.3	50	158.4	35.2	104	60	52
	-5	108.5	28.4	49	130.1	34.1	101	58	50
	-10	87.7	27.7	47	105.2	33.3	98	57	49
	-15	69.7	27.1	46	83.6	32.6	96	56	48
40	10	178.4	34.8	59	214.0	41.8	123	71	62
	5	150.2	33.6	57	180.2	40.4	119	69	60
	0	124.4	32.5	56	149.3	39.0	115	67	58
	-5	101.3	31.5	54	121.5	37.8	112	65	56
	-10	80.8	30.6	52	97.0	36.8	108	63	54
	-15	63.3	29.8	51	76.0	35.8	106	61	53
45	10	166.8	38.1	65	200.2	45.7	135	78	67
	5	139.5	36.9	63	167.4	44.3	131	76	65
	0	114.5	35.7	61	137.4	42.9	126	73	63
	-5	92.1	34.5	59	110.5	41.4	122	71	61
	-10	72.5	33.4	57	87.0	40.1	118	68	59
	-15	55.7	32.5	56	66.9	39.0	115	67	58
50	10	153.6	41.5	71	184.3	49.8	147	85	73
	5	127.4	40.3	69	152.8	48.4	143	83	71
	0	103.4	39.1	67	124.1	46.9	138	80	69
	-5	82.0	37.8	65	98.4	45.4	134	77	67
	-10	63.4	36.5	62	76.1	43.8	129	75	65
	-15	47.6	35.3	60	57.1	42.4	125	72	63
55	10	139.8	45.3	77	167.8	54.4	160	93	80
	5	114.8	44.2	75	137.8	53.1	156	91	78
	0	92.0	43.0	73	110.4	51.6	152	88	76
	-5	71.9	41.5	71	86.2	49.8	147	85	73
	-10	54.3	40.0	68	65.1	48.0	142	82	71
60	10	126.5	50.0	85	151.9	60.0	177	102	88
	5	102.8	49.1	84	123.4	58.9	174	101	87
	0	81.2	47.8	82	97.5	57.4	169	98	85
	-5	62.1	46.3	79	74.5	55.6	164	95	82

Legend

t_c Condensing Temperature (°C)

Q_o Cooling capacity (kW)

t_o Evaporating Temperature (°C)

P_e Power consumption (kW)

External cooling device is required.

- ! Cooling capacity is calculated based on superheat 5°C, subcooling 5°C.
- Evaporating and condensing temperatures are based on dew point valves.
- Performance data for individual input data check CURTIS software.

Version: RP0907

Performance data - R series

R407C

Model		R-12H							
t _c (°C)	t _o (°C)	50Hz			60Hz				
		Q _o	P _e	380V	Q _o	P _e	220V	380V	440V
		(kW)	(kW)	(A)	(kW)	(kW)	(A)	(A)	(A)
35	10	215.6	34.8	59	258.7	41.8	123	71	62
	5	185.2	34.0	58	222.3	40.8	120	70	60
	0	156.1	33.2	57	187.3	39.9	118	68	59
	-5	128.6	32.4	55	154.3	38.9	115	66	57
	-10	103.3	31.5	54	124.0	37.8	112	65	56
	-15	80.5	30.4	52	96.6	36.5	108	62	54
40	10	213.6	39.2	67	256.3	47.1	139	80	69
	5	181.8	38.5	66	218.1	46.2	136	79	68
	0	151.6	37.8	65	182.0	45.4	134	77	67
	-5	123.7	37.0	63	148.4	44.4	131	76	66
	-10	98.3	36.0	62	117.9	43.2	127	74	64
	-15	75.7	34.9	60	90.8	41.9	124	72	62
45	10	205.9	43.7	75	247.1	52.5	155	90	77
	5	173.5	43.1	74	208.2	51.7	153	88	76
	0	143.3	42.4	72	172.0	50.9	150	87	75
	-5	115.5	41.6	71	138.7	49.9	147	85	74
	-10	90.6	40.5	69	108.7	48.6	143	83	72
	-15	68.7	39.4	67	82.4	47.3	139	81	70
50	10	193.5	48.4	83	232.2	58.1	171	99	86
	5	161.3	47.9	82	193.6	57.5	170	98	85
	0	131.7	47.2	81	158.0	56.6	167	97	84
	-5	104.8	46.2	79	125.7	55.4	164	95	82
	-10	80.8	45.1	77	97.0	54.1	160	92	80
	-15	60.0	43.7	75	72.0	52.5	155	90	77
55	10	177.3	53.5	91	212.8	64.2	189	110	95
	5	146.1	53.0	90	175.3	63.6	188	109	94
	0	117.6	52.2	89	141.1	62.6	185	107	92
	-5	92.0	51.1	87	110.4	61.3	181	105	90
	-10	69.5	49.5	85	83.4	59.4	175	101	88
	-15	50.0	47.5	83	60.0	57.5	170	98	85
60	10	158.4	59.3	101	190.1	71.1	210	121	105
	5	128.6	58.7	100	154.3	70.4	208	120	104
	0	101.8	57.6	98	122.1	69.1	204	118	102
	-5	77.9	56.1	96	93.5	67.3	198	115	99

Legend

t_c Condensing Temperature (°C)

Q_o Cooling capacity (kW)

t_o Evaporating Temperature (°C)

P_e Power consumption (kW)

External cooling device is required.

- ! Cooling capacity is calculated based on superheat 5°C, subcooling 5°C.
- Evaporating and condensing temperatures are based on dew point valves.
- Performance data for individual input data check CURTIS software.

Version: RP0907

Performance data - R series

R407C

Model		R-13H							
t _c (°C)	t _o (°C)	50Hz			60Hz				
		Q _o (kW)	P _e (kW)	380V (A)	Q _o (kW)	P _e (kW)	220V (A)	380V (A)	440V (A)
35	10	247.0	40.5	69	296.4	48.6	143	83	72
	5	212.6	39.6	68	255.1	47.5	140	81	70
	0	179.3	38.8	66	215.1	46.6	137	80	69
	-5	148.0	37.8	65	177.6	45.4	134	77	67
	-10	119.8	36.8	63	143.7	44.2	130	75	65
	-15	94.7	35.7	61	113.6	42.9	126	73	63
40	10	240.3	45.7	78	288.4	54.9	162	94	81
	5	206.5	45.1	77	247.8	54.1	160	92	80
	0	173.5	44.3	76	208.2	53.2	157	91	78
	-5	142.8	43.4	74	171.3	52.1	154	89	77
	-10	114.7	42.4	72	137.7	50.9	150	87	75
	-15	90.1	41.2	70	108.1	49.5	146	84	73
45	10	229.0	51.1	87	274.8	61.3	181	105	90
	5	195.8	50.6	86	235.0	60.7	179	104	90
	0	163.6	50.0	85	196.3	60.0	177	102	88
	-5	133.4	49.0	84	160.1	58.8	173	100	87
	-10	106.2	47.8	82	127.4	57.4	169	98	85
	-15	82.2	46.5	79	98.7	55.8	165	95	82
50	10	214.4	56.7	97	257.3	68.0	201	116	100
	5	181.8	56.4	96	218.1	67.7	200	116	100
	0	150.3	55.7	95	180.4	66.8	197	114	99
	-5	121.0	54.6	93	145.2	65.5	193	112	97
	-10	94.8	53.1	91	113.7	63.7	188	109	94
	-15	72.0	51.4	88	86.4	61.7	182	105	91
55	10	197.4	62.7	107	236.9	75.2	222	128	111
	5	165.3	62.4	106	198.4	74.9	221	128	110
	0	134.6	61.5	105	161.5	73.8	218	126	109
	-5	106.4	60.0	102	127.7	72.0	212	123	106
	-10	81.4	58.0	99	97.7	69.6	205	119	103
	-15	58.4	56.2	96	72.4	67.7	198	116	100
60	10	179.1	69.3	118	214.9	83.1	245	142	123
	5	147.2	68.7	117	176.7	82.4	243	141	121
	0	117.4	67.3	115	140.9	80.7	238	138	119
	-5	90.4	65.2	111	108.4	78.2	231	134	115

Legend

t_c Condensing Temperature (°C)

Q_o Cooling capacity (kW)

t_o Evaporating Temperature (°C)

P_e Power consumption (kW)

External cooling device is required.

- ! Cooling capacity is calculated based on superheat 5°C, subcooling 5°C.
- Evaporating and condensing temperatures are based on dew point valves.
- Performance data for individual input data check CURTIS software.

Version: RP0907

©2007 Curtis-Toledo, Inc.

Performance data - R series

R407C

Model		R-14H							
t _c (°C)	t _o (°C)	50Hz			60Hz				
		Q _o (kW)	P _e (kW)	380V (A)	Q _o (kW)	P _e (kW)	220V (A)	380V (A)	440V (A)
35	10	331.0	54.0	92	397.2	64.9	191	111	96
	5	275.7	52.4	90	330.8	62.9	186	107	93
	0	225.7	50.3	86	270.8	60.4	178	103	89
	-5	181.2	48.0	82	217.4	57.5	170	98	85
	-10	142.1	45.7	78	170.5	54.8	162	94	81
	-15	108.3	43.9	75	129.9	52.6	155	90	78
40	10	320.6	59.6	102	384.8	71.6	211	122	106
	5	265.9	57.9	99	319.1	69.5	205	119	103
	0	216.7	55.7	95	260.0	66.9	197	114	99
	-5	173.1	53.2	91	207.7	63.9	188	109	94
	-10	135.0	50.8	87	162.0	61.0	180	104	90
	-15	102.3	49.1	84	122.7	58.9	174	100	87
45	10	304.9	65.1	111	365.9	78.2	230	133	115
	5	251.4	63.4	108	301.7	76.1	224	130	112
	0	203.5	61.1	104	244.2	73.4	216	125	108
	-5	161.6	58.5	100	193.9	70.2	207	120	104
	-10	125.0	56.0	96	150.0	67.3	198	115	99
	-15	93.8	54.2	93	112.6	65.1	192	111	96
50	10	286.0	71.0	121	343.2	85.2	251	146	126
	5	234.0	69.3	118	280.8	83.2	245	142	123
	0	188.0	66.9	114	225.6	80.3	237	137	118
	-5	147.8	64.2	110	177.3	77.1	227	132	114
	-10	113.2	61.6	105	135.8	74.0	218	126	109
	-15	83.9	59.9	102	100.6	71.9	212	123	106
55	10	265.7	77.7	133	318.8	93.3	275	159	138
	5	215.4	76.1	130	258.4	91.3	269	156	135
	0	171.3	73.7	126	205.6	88.5	261	151	130
	-5	133.2	70.9	121	159.8	85.1	251	145	125
	-10	100.5	68.3	117	120.6	82.0	242	140	121
60	10	245.4	86.1	147	294.5	103.3	305	176	152
	5	196.8	84.7	145	236.2	101.7	300	174	150
	0	154.8	82.3	141	185.7	98.8	291	169	146
	-5	118.5	79.5	136	142.2	95.4	281	163	141

Legend

t_c Condensing Temperature (°C)

Q_o Cooling capacity (kW)

t_o Evaporating Temperature (°C)

P_e Power consumption (kW)

External cooling device is required.

- ! Cooling capacity is calculated based on superheat 5°C, subcooling 5°C.
- Evaporating and condensing temperatures are based on dew point valves.
- Performance data for individual input data check CURTIS software.

Version: RP0907

Performance data - R series

R407C

Model		R-16H							
t _c (°C)	t _o (°C)	50Hz			60Hz				
		Q _o (kW)	P _e (kW)	380V (A)	Q _o (kW)	P _e (kW)	220V (A)	380V (A)	440V (A)
35	10	516.1	77.2	132	619.4	92.6	-	158	137
	5	424.5	74.7	128	509.4	89.6	-	153	132
	0	340.7	71.6	122	408.9	85.9	-	147	127
	-5	267.8	68.1	116	321.4	81.7	-	140	120
	-10	206.4	64.4	110	247.7	77.3	-	132	114
	-15	156.7	60.8	104	188.0	73.0	-	125	108
40	10	494.9	85.6	146	593.9	102.7	-	175	151
	5	404.5	83.0	142	485.4	99.6	-	170	147
	0	322.9	79.7	136	387.5	95.6	-	163	141
	-5	252.5	76.0	130	302.9	91.2	-	156	134
	-10	193.8	72.1	123	232.6	86.5	-	148	128
	-15	146.6	68.1	116	175.9	81.7	-	140	120
45	10	465.3	93.9	160	558.3	112.7	-	192	166
	5	377.8	91.2	156	453.4	109.4	-	187	161
	0	299.9	87.7	150	359.9	105.2	-	180	155
	-5	233.2	83.8	143	279.8	100.6	-	172	148
	-10	178.2	79.5	136	213.8	95.4	-	163	141
	-15	134.1	75.1	128	160.9	90.1	-	154	133
50	10	431.2	102.5	175	517.4	123.0	-	210	181
	5	347.9	99.7	170	417.5	119.6	-	204	176
	0	274.6	96.0	164	329.5	115.2	-	197	170
	-5	212.4	91.7	157	254.9	110.0	-	188	162
	-10	161.4	86.9	148	193.7	104.3	-	178	154
	-15	120.9	81.7	139	145.1	98.0	-	167	145
55	10	396.1	112.0	191	475.4	134.4	-	229	198
	5	317.8	109.1	186	381.3	130.9	-	223	193
	0	249.4	105.1	179	299.2	126.1	-	215	186
	-5	191.8	100.2	171	230.1	120.2	-	205	177
	-10	145.0	94.5	161	174.0	113.4	-	194	167
60	10	363.0	123.5	211	435.6	148.2	-	253	218
	5	289.6	120.3	205	347.6	144.4	-	246	213
	0	226.1	115.8	198	271.3	139.0	-	237	205
	-5	173.0	109.9	188	207.6	131.9	-	225	194

Legend

t_c Condensing Temperature (°C)

Q_o Cooling capacity (kW)

t_o Evaporating Temperature (°C)

P_e Power consumption (kW)

External cooling device is required.

- ! Cooling capacity is calculated based on superheat 5°C, subcooling 5°C.
- Evaporating and condensing temperatures are based on dew point valves.
- Performance data for individual input data check CURTIS software.

Version: RP0907

Performance data - R series

R407C

Model		R-17H							
t _c (°C)	t _o (°C)	50Hz			60Hz				
		Q _o (kW)	P _e (kW)	380V (A)	Q _o (kW)	P _e (kW)	220V (A)	380V (A)	440V (A)
35	10	595.9	89.1	152	715.0	106.9	-	183	158
	5	490.1	86.3	147	588.1	103.6	-	177	153
	0	394.0	82.8	141	472.8	99.4	-	170	146
	-5	309.6	78.8	135	371.5	94.6	-	161	139
	-10	237.3	74.1	126	284.8	88.9	-	152	131
	-15	177.2	68.7	117	212.6	82.4	-	141	122
40	10	568.9	98.4	168	682.6	118.1	-	202	174
	5	464.9	95.4	163	557.9	114.5	-	195	169
	0	372.0	91.9	157	446.4	110.3	-	188	163
	-5	291.3	87.7	150	349.5	105.2	-	180	155
	-10	222.9	82.9	142	267.5	99.5	-	170	147
	-15	166.4	77.4	132	199.7	92.9	-	159	137
45	10	531.8	107.3	183	638.1	128.8	-	220	190
	5	432.1	104.3	178	518.5	125.2	-	214	185
	0	344.1	100.7	172	412.9	120.8	-	206	178
	-5	268.6	96.5	165	322.3	115.8	-	198	171
	-10	205.3	91.6	156	246.3	109.9	-	188	162
	-15	153.4	85.8	146	184.0	103.0	-	176	152
50	10	489.6	116.4	199	587.5	139.7	-	238	206
	5	395.6	113.3	193	474.7	136.0	-	232	200
	0	313.8	109.7	187	376.6	131.6	-	225	194
	-5	244.3	105.5	180	293.2	126.6	-	216	187
	-10	186.5	100.4	171	223.8	120.5	-	206	178
	-15	139.6	94.3	161	167.5	113.2	-	193	167
55	10	446.3	126.2	215	535.6	151.4	-	259	223
	5	359.1	123.3	210	430.9	148.0	-	253	218
	0	284.0	119.7	204	340.8	143.6	-	245	212
	-5	220.7	115.3	197	264.9	138.4	-	236	204
	-10	168.6	109.9	188	202.3	131.9	-	225	194
60	10	405.6	138.0	236	486.7	165.6	-	283	244
	5	325.3	135.1	231	390.3	162.1	-	277	239
	0	256.8	131.5	224	308.1	157.8	-	269	233
	-5	199.7	126.9	217	239.7	152.3	-	260	225

Legend

t_c Condensing Temperature (°C)

Q_o Cooling capacity (kW)

t_o Evaporating Temperature (°C)

P_e Power consumption (kW)

External cooling device is required.

- ! Cooling capacity is calculated based on superheat 5°C, subcooling 5°C.
Evaporating and condensing temperatures are based on dew point valves.
Performance data for individual input data check CURTIS software.

Version: RP0907

Performance data - R series

R407C

Model		R-18H							
t _c (°C)	t _o (°C)	50Hz			60Hz				
		Q _o (kW)	P _e (kW)	380V (A)	Q _o (kW)	P _e (kW)	220V (A)	380V (A)	440V (A)
35	10	625.8	92.6	158	751.0	111.1	-	190	164
	5	514.7	90.0	154	617.6	108.0	-	184	159
	0	413.9	86.5	148	496.6	103.8	-	177	153
	-5	325.2	82.3	140	390.2	98.8	-	169	146
	-10	249.4	77.3	132	299.2	92.8	-	158	137
	-15	186.1	71.5	122	223.3	85.8	-	146	126
40	10	597.6	101.9	174	717.1	122.3	-	209	180
	5	488.3	99.2	169	586.0	119.0	-	203	176
	0	390.8	95.7	163	468.9	114.8	-	196	169
	-5	306.0	91.4	156	367.2	109.7	-	187	162
	-10	234.2	86.4	147	281.1	103.7	-	177	153
	-15	174.9	80.7	138	209.9	96.8	-	165	143
45	10	558.7	110.9	189	670.4	133.1	-	227	196
	5	453.9	108.2	185	544.7	129.8	-	222	191
	0	361.5	104.6	179	433.8	125.5	-	214	185
	-5	282.2	100.4	171	338.7	120.5	-	206	178
	-10	215.7	95.3	163	258.8	114.4	-	195	169
	-15	161.1	89.4	153	193.3	107.3	-	183	158
50	10	514.3	120.3	205	617.1	144.4	-	246	213
	5	415.6	117.5	201	498.7	141.0	-	241	208
	0	329.7	113.9	194	395.6	136.7	-	233	202
	-5	256.7	109.6	187	308.0	131.5	-	225	194
	-10	196.0	104.4	178	235.2	125.3	-	214	185
	-15	146.6	98.1	167	175.9	117.7	-	201	174
55	10	468.9	130.9	223	562.6	157.1	-	268	232
	5	377.2	128.0	219	452.6	153.6	-	262	226
	0	298.3	124.3	212	357.9	149.2	-	255	220
	-5	232.0	119.8	205	278.3	143.8	-	245	212
	-10	177.2	114.1	195	212.6	136.9	-	234	202
	-15	129.8	108.2	185	158.0	129.8	-	222	191
60	10	426.0	144.1	246	511.2	172.9	-	295	255
	5	341.7	141.0	241	410.0	169.2	-	289	249
	0	269.8	137.0	234	323.7	164.4	-	281	242
	-5	209.8	131.9	225	251.8	158.3	-	270	233

Legend

t_c Condensing Temperature (°C)

Q_o Cooling capacity (kW)

t_o Evaporating Temperature (°C)

P_e Power consumption (kW)

External cooling device is required.

- ! Cooling capacity is calculated based on superheat 5°C, subcooling 5°C.
- Evaporating and condensing temperatures are based on dew point valves.
- Performance data for individual input data check CURTIS software.

Version: RP0907

Performance data - R series

R407C

Model		R-19H							
t _c (°C)	t _o (°C)	50Hz			60Hz				
		Q _o (kW)	P _e (kW)	380V (A)	Q _o (kW)	P _e (kW)	220V (A)	380V (A)	440V (A)
35	10	740.9	117.7	201	889.1	141.3	-	241	208
	5	625.6	112.5	192	750.7	135.0	-	230	199
	0	514.0	107.3	183	616.7	128.8	-	220	190
	-5	410.4	101.7	174	492.5	122.0	-	208	180
	-10	318.0	95.4	163	381.6	114.5	-	195	169
	-15	238.2	88.5	151	285.8	106.2	-	181	157
40	10	713.7	129.1	220	856.4	155.0	-	265	228
	5	597.2	124.3	212	716.6	149.2	-	255	220
	0	486.2	119.0	203	583.5	142.8	-	244	211
	-5	384.9	113.2	193	461.8	135.9	-	232	200
	-10	295.4	106.7	182	354.5	128.0	-	219	189
	-15	218.9	99.5	170	262.7	119.4	-	204	176
45	10	669.4	140.6	240	803.3	168.8	-	288	249
	5	555.5	135.9	232	666.6	163.1	-	278	240
	0	448.4	130.7	223	538.1	156.9	-	268	231
	-5	351.7	124.8	213	422.0	149.8	-	256	221
	-10	267.0	118.2	202	320.4	141.9	-	242	209
	-15	195.4	110.8	189	234.4	133.0	-	227	196
50	10	614.0	152.8	261	736.8	183.3	-	313	270
	5	505.4	148.3	253	606.5	178.0	-	304	262
	0	404.5	143.2	245	485.4	171.9	-	293	253
	-5	314.0	137.3	234	376.9	164.8	-	281	243
	-10	235.7	130.6	223	282.8	156.8	-	268	231
	-15	169.8	123.1	210	203.8	147.7	-	252	218
55	10	552.4	166.6	284	662.9	199.9	-	341	295
	5	451.1	162.5	277	541.3	195.0	-	333	287
	0	357.8	157.7	269	429.3	189.2	-	323	279
	-5	274.9	152.0	259	329.8	182.3	-	311	269
	-10	203.5	145.4	248	244.2	174.5	-	298	257
60	10	489.1	184.0	314	586.9	220.8	-	377	326
	5	396.2	180.6	308	475.5	216.7	-	370	319
	0	311.4	176.4	301	373.6	211.7	-	361	312
	-5	236.5	171.4	293	283.8	205.6	-	351	303

Legend

t_c Condensing Temperature (°C)

Q_o Cooling capacity (kW)

t_o Evaporating Temperature (°C)

P_e Power consumption (kW)

External cooling device is required.

- ! Cooling capacity is calculated based on superheat 5°C, subcooling 5°C.
- Evaporating and condensing temperatures are based on dew point valves.
- Performance data for individual input data check CURTIS software.

Version: RP0907

Performance data - R series

R407C

Model		R-21H							
t _c (°C)	t _o (°C)	50Hz			60Hz				
		Q _o (kW)	P _e (kW)	380V (A)	Q _o (kW)	P _e (kW)	220V (A)	380V (A)	440V (A)
35	10	864.7	137.3	234	1037.6	164.8	-	281	243
	5	733.7	132.1	226	880.4	158.6	-	271	234
	0	606.9	126.7	216	728.3	152.1	-	260	224
	-5	489.8	120.7	206	587.8	144.9	-	247	214
	-10	385.2	114.2	195	462.2	137.1	-	234	202
	-15	294.6	107.2	183	353.5	128.6	-	220	190
40	10	818.1	150.9	258	981.7	181.0	-	309	267
	5	692.5	146.0	249	831.0	175.3	-	299	258
	0	571.6	140.6	240	685.9	168.8	-	288	249
	-5	460.0	134.5	230	552.0	161.4	-	276	238
	-10	360.9	127.7	218	433.0	153.3	-	262	226
	-15	275.1	120.4	206	330.1	144.5	-	247	213
45	10	758.9	164.2	280	910.7	197.0	-	336	290
	5	639.5	159.7	273	767.4	191.6	-	327	282
	0	525.2	154.4	264	630.2	185.2	-	316	273
	-5	420.3	148.1	253	504.4	177.8	-	303	262
	-10	327.5	141.0	241	393.1	169.2	-	289	250
	-15	247.7	133.2	227	297.3	159.9	-	273	236
50	10	693.9	178.2	304	832.6	213.8	-	365	315
	5	580.5	174.1	297	696.5	208.9	-	357	308
	0	472.9	168.8	288	567.5	202.5	-	346	299
	-5	375.0	162.3	277	450.0	194.7	-	332	287
	-10	289.0	154.7	264	346.8	185.6	-	317	274
	-15	215.7	146.1	249	258.8	175.4	-	299	259
55	10	628.4	194.5	332	754.1	233.4	-	398	344
	5	520.2	190.6	325	624.3	228.7	-	390	337
	0	418.9	185.1	316	502.7	222.1	-	379	327
	-5	327.8	178.1	304	393.3	213.7	-	365	315
	-10	248.4	169.8	290	298.0	203.7	-	348	300
	-15	181.7	161.9	276	218.0	194.7	-	332	287
60	10	567.2	215.2	367	680.6	258.3	-	441	381
	5	462.9	211.3	361	555.5	253.6	-	433	374
	0	366.8	205.5	351	440.2	246.6	-	421	364
	-5	281.7	197.9	338	338.0	237.5	-	405	350

Legend

t_c Condensing Temperature (°C)

Q_o Cooling capacity (kW)

t_o Evaporating Temperature (°C)

P_e Power consumption (kW)

External cooling device is required.

- ! Cooling capacity is calculated based on superheat 5°C, subcooling 5°C.
Evaporating and condensing temperatures are based on dew point valves.
Performance data for individual input data check CURTIS software.

Performance data - R series

R407C

Model		R-23H							
t _c (°C)	t _o (°C)	50Hz			60Hz				
		Q _o	P _e	380V	Q _o	P _e	220V	380V	440V
		(kW)	(kW)	(A)	(kW)	(kW)	(A)	(A)	(A)
35	10	1104.8	171.5	293	1325.7	205.9	-	351	303
	5	938.7	164.3	281	1126.4	197.2	-	337	291
	0	777.0	157.3	269	932.4	188.8	-	322	278
	-5	627.0	149.8	256	752.5	179.8	-	307	265
	-10	493.2	141.7	242	591.8	170.0	-	290	251
	-15	377.6	133.0	227	453.1	159.6	-	272	235
40	10	1048.2	187.9	321	1257.8	225.5	-	385	332
	5	888.3	181.3	309	1066.0	217.5	-	371	321
	0	733.5	174.3	298	880.3	209.2	-	357	308
	-5	590.6	166.8	285	708.7	200.2	-	342	295
	-10	463.4	158.6	271	556.0	190.3	-	325	281
	-15	353.8	149.8	256	424.5	179.8	-	307	265
45	10	975.7	204.1	348	1170.8	244.9	-	418	361
	5	823.1	198.0	338	987.7	237.6	-	406	350
	0	676.4	191.2	326	811.6	229.4	-	392	338
	-5	541.5	183.7	314	649.8	220.4	-	376	325
	-10	422.2	175.2	299	506.6	210.3	-	359	310
	-15	320.0	166.1	284	384.0	199.4	-	340	294
50	10	895.5	221.4	378	1074.6	265.7	-	454	392
	5	750.1	215.6	368	900.1	258.8	-	442	381
	0	611.5	208.8	356	733.8	250.6	-	428	369
	-5	485.2	201.0	343	582.3	241.2	-	412	356
	-10	374.4	192.2	328	449.3	230.6	-	394	340
	-15	280.3	182.5	311	336.3	219.0	-	374	323
55	10	814.7	241.6	412	977.6	289.9	-	495	427
	5	675.4	235.8	402	810.5	282.9	-	483	417
	0	544.5	228.8	391	653.4	274.5	-	469	405
	-5	426.6	220.4	376	512.0	264.5	-	452	390
	-10	324.2	210.8	360	389.0	253.0	-	432	373
60	10	738.9	267.3	456	886.7	320.8	-	548	473
	5	604.3	261.1	446	725.2	313.3	-	535	462
	0	479.9	253.5	433	575.9	304.2	-	519	449
	-5	369.5	244.3	417	443.3	293.1	-	500	432

Legend

t_c Condensing Temperature (°C)

Q_o Cooling capacity (kW)

t_o Evaporating Temperature (°C)

P_e Power consumption (kW)

External cooling device is required.

- ! Cooling capacity is calculated based on superheat 5°C, subcooling 5°C.
- Evaporating and condensing temperatures are based on dew point valves.
- Performance data for individual input data check CURTIS software.

Version: RP0907



Legendary Reliability.

CURTIS® FACILITIES INCLUDE A 144,000 SQUARE FOOT FACILITY IN ST. LOUIS, MISSOURI, AS WELL AS FACILITIES IN BUFFALO, NEW YORK AND SAN DIEGO, CALIFORNIA. ALL PHASES OF PRODUCTION, FROM DESIGN AND ENGINEERING TO FINAL ASSEMBLY AND SHIPPING MEET OR EXCEED THE HIGHEST INDUSTRY STANDARDS. STATE-OF-THE-ART COMPUTER AIDED DESIGN ALLOWS CURTIS® TO MEET THE HUNDREDS OF CUSTOMER SPECIFIED COMPRESSOR PACKAGE CONFIGURATIONS.



ISO 9001: 2000 registered



The Symbol of Quality & Excellence Since 1854

1905 Kienlen Avenue • St. Louis, Missouri 63133
Phone 314-383-1300 or 800-925-5431 • Fax 314-381-1439
www.curtistoledo.com • info@curtistoledo.com

Form No. 1007
©2007 Curtis-Toledo®, Inc.