Contents

4. VRF SYSTEMS INDOOR UNIT SPECIFICATIONS

4

1. Air-to-Water Heatpump (Type W1)

1-1. Specifications

Unit specifications

INDOOR		MODEL	S-80MW1E5			S-125MW1E5		
PERFORMANCE TEST CONDITION			EN14511					
POWER SUPPLY		ø, Hz	1ø 50Hz			1ø 50Hz		
		V	220	230	240	220	230	240
COOLING	CAPACITY	kW	8.00	8.00	8.00	12.5	12.5	12.5
		BTU/h	27300	27300	27300	42700	42700	42700
		kcal/h(Fri./h)	-	-	-	-	-	-
	CURRENT	Rated/Max. A	0.28 / 1.17	0.28 / 1.18	0.28 / 1.19	0.50 / 1.17	0.52 / 1.18	0.52 / 1.19
	INPUT POWER	Rated/Max. kW	0.04 / 0.18	0.04 / 0.19	0.04 / 0.20	0.07 / 0.18	0.07 / 0.19	0.08 / 0.20
	ANNUAL CONSUMPTION	W	-	-	-	-	-	-
	EER/EER CLASS	(W/W) / ("A"~"G")	-	-	-	-	-	-
	EER	BTU/hW	-	-	-	-	-	-
	POWER FACTOR	%	-	-	-	-	-	-
	NOISE INDOOR	Rated/Max. dB (A)	35 / 37			37 / 39		
		Rated/Max. Power Level dB	48 / 50			50 / 52		
	NOISE OUTDOOR (H/L)	dB-A	-			-		
		Power Level dB	-			-		
HEATING	CAPACITY	kW	9.00	9.00	9.00	14.0	14.0	14.0
		BTU/h	30700	30700	30700	47800	47800	47800
		kcal/h(Fri./h)	-	-	-	-	-	-
	CURRENT	Rated/Max. A	0.36 / 13.7	0.36 / 14.3	0.37 / 14.9	0.59 / 13.7	0.61 / 14.3	0.62 / 14.9
	INPUT POWER	Rated/Max. kW	0.05 / 2.94	0.05 / 3.20	0.05 / 3.48	0.08 / 2.94	0.09 / 3.20	0.09 / 3.48
	COP/COP CLASS	(W/W) / ("A"~"G")	-	-	-	-	-	-
	COP	BTU/hW	-	-	-	-	-	-
	POWER FACTOR	%	-	-	-	-	-	-
	NOISE INDOOR	Rated/Max. dB (A)	34 / 37			36 / 39		
		Rated/Max. Power Level dB	47 / 50			49 / 52		
	NOISE OUTDOOR (H/L)	dB-A	-			-		
		Power Level dB	-			-		
EXTRA LOW TEMP	CAPACITY(kW)/INPUT POWER(W)/COP		-			-		
Cooling	MAX CURRENT(A)/MAX INPUT POWER(kW)		1.17 / 0.18	1.18 / 0.19	1.19 / 0.20	1.17 / 0.18	1.18 / 0.19	1.19 / 0.20
Heating	MAX CURRENT(A)/MAX INPUT POWER(kW)		13.7 / 2.94	14.3 / 3.20	14.9 / 3.48	13.7 / 2.94	14.3 / 3.20	14.9 / 3.48
STARTING CURRENT(A)/COMP OUTPUT(W)			-	-	-	-	-	-
NETWORK IMPEDANCE(ΩMAX.)			-			-		
FM OUTPUT (ID/OD) W			-	/	-	-	/	-
MOISTURE REMOVAL VOLUME		L/h (Pt/h)	-		(-)	-		(-)
Extarnal static pressure		Pa	-			-		
I/D WATER FLOW	COOL	L/min	22.9			35.8		
	HEAT	L/min	25.8			40.1		
Maximum working pressure (water)		MPa	0.3			0.3		
Minimum water amount		Litres	50			50		
PRO DIM	HEIGHT : H mm (inch)		892 (35-1/8)			892 (35-1/8)		
	WIDTH : W mm (inch)		502 (19-25/32)			502 (19-25/32)		
	DEPTH : D mm (inch)		353 (13-29/32)			353 (13-29/32)		
PAC DIM	HEIGHT : H mm (inch)		1,041 (41)			1,041 (41)		
	WIDTH : W mm (inch)		626 (24-21/32)			626 (24-21/32)		
	DEPTH : D mm (inch)		462 (18-7/32)			462 (18-7/32)		
MASS	(NET) kg (lb)		43 (95)			43 (95)		
	(GROSS) kg(lb)		50 (110)			50 (110)		
LAYERS LIMIT (actually)			3(4)			3(4)		
Operation Condition (Heat pump Opration)		Cool O.D(DBT)	-10 ~ 43					
		Heat O.D(DBT)	-20 ~ 43					
		Cool & Heat MIX O.D(DBT)	-10 ~ 43					
		Cool Water outlet	5 ~ 20					
		Heat Water outlet	25 ~ 45					
		Cool Water inlet	10 ~ 45					
		Heat Water inlet	10 ~ 45					
PIPING	PIPE DIAMETER mm (inch)		(Liquid)ø9.52 (3/8) (Gas)ø15.88 (5/8) (Water)ø31.75(1-1/4)			(Liquid)ø9.52 (3/8) (Gas)ø15.88 (5/8) (Water)ø31.75(1-1/4)		
	CONNECT METHOD, STD LENGTH m (ft)		flared type			flared type		
	ADD GAS AMOUNT g/m (oz/ft)		-		-	-		-
	PIPE LENGTH FOR ADDITIONAL GAS m (ft)		-		-	-		-

1. Air-to-Water Heatpump (Type W1)

1-2. Major Component Specifications
Indoor unit (A)

MODEL No.		**S-80MW1E5**
Power source		220-230-240V Single-phase 50Hz
Controller P.C.B. Ass'y		A748360
Electronic expansion valve		
Coil		HAM-MD12MS-111
Coil resistance (at 20°C)	Ω	WHT – RED : 46
		YEL – RED : 46
		ORG – RED : 46
		BLU – RED : 46
Valve body		HAM-BD30MS-3
Safety device		Bi-metal Thermostat Residual Current Circuit Breaker
Water Pump		
Model		PY-122NDJA3
Moter type		DC Motor
Rated voltage		311VDC
Power consumption (at rated voltage)	W	173
Rated total head	m	7.2
Rated capacity	L/min	Not less than 46
Brazed Pleate Heat Exchanger		
Model		V26Hx36 /1P-SC-F
Plate Material		Stainless steel
Brazed material		Copper
Number of plate		36
Total heat transfer area	m^2	1.36
Electrical heater		
Capacity	kW	1.0 + 2.0
Expansion Vessel		
Volume	L	10
Max Water pressure	bar	3
Pressure Relief Valve Water Circuit		
		Open: 300, Close: 265 and below
Flow Switch		
		Magnetic Lead Switch

1. Air-to-Water Heatpump (Type W1)

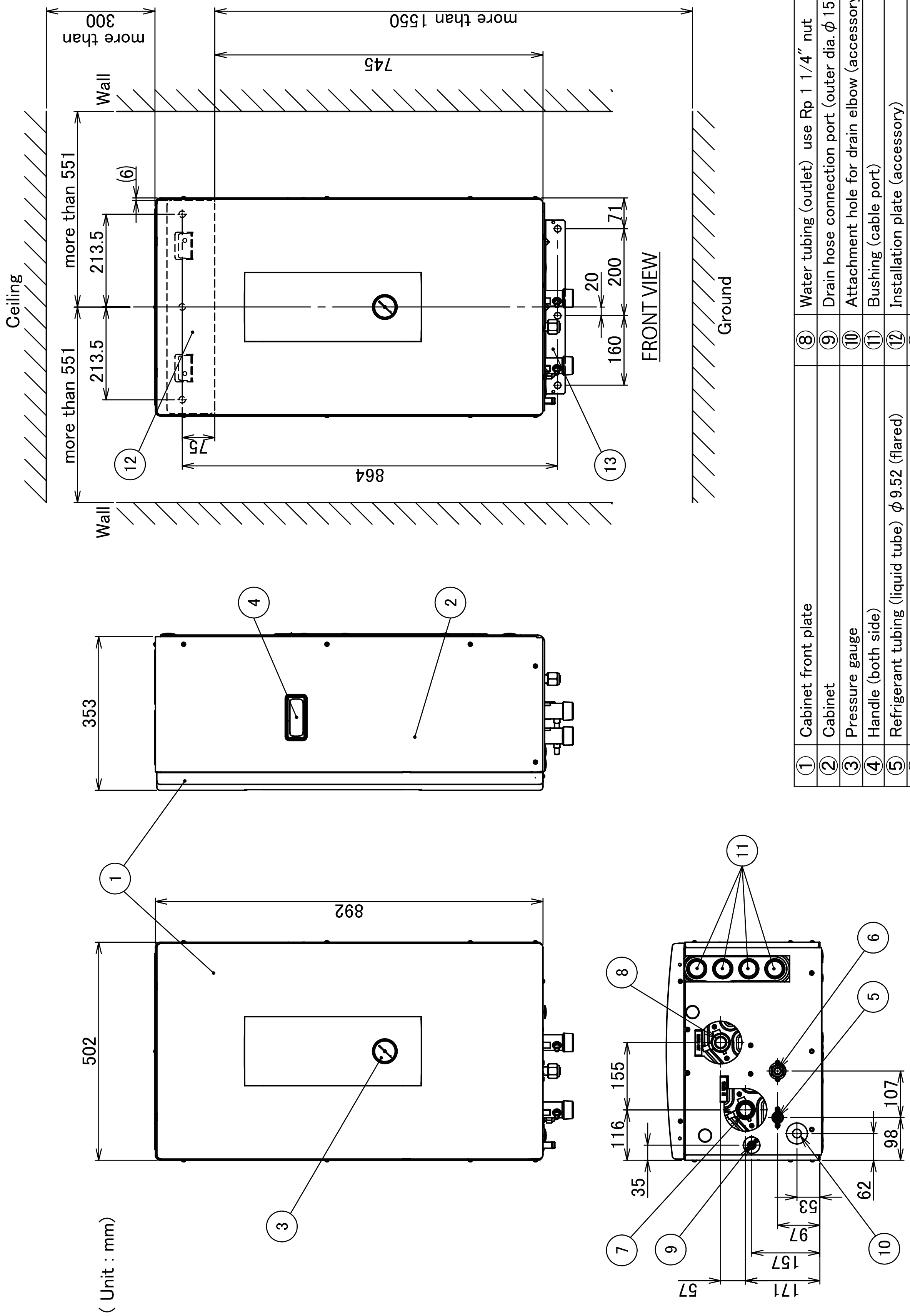
Indoor unit (B)

MODEL No.		S-125MW1E5
Power source		220-230-240V Single-phase 50Hz
Controller P.C.B. Ass'y		A748360
Electronic expansion valve		
Coil		HAM-MD12MS-111
Coil resistance (at 20°C)	Ω	WHT – RED : 46
		YEL – RED : 46
		ORG – RED : 46
		BLU – RED : 46
Valve body		HAM-BD30MS-3
Safety device		Bi-metal Thermostat Residual Current Circuit Breaker
Water Pump		
Model		PY-122NDJA3
Moter type		DC Motor
Rated voltage		311VDC
Power consumption (at rated voltage)	W	173
Rated total head	m	7.2
Rated capacity	L/min	Not less than 46
Brazed Pleate Heat Exchanger		
Model		V26Hx44 /1P-SC-F
Plate Material		Stainless steel
Brazed material		Copper
Number of plate		44
Total heat transfer area	m^2	1.68
Electrical heater		
Capacity	kW	1.0 + 2.0
Expansion Vessel		
Volume	L	10
Max Water pressure	bar	3
Pressure Relief Valve Water Circuit		
		Open: 300, Close: 265 and below
Flow Switch		
		Magnetic Lead Switch

1. Air-to-Water Heatpump (Type W1)

1-3. Dimensional Data

S-80MW1E5 / S-125MW1E5



①	Cabinet front plate
②	Cabinet
③	Pressure gauge
④	Handle (both side)
⑤	Refrigerant tubing (liquid tube) ϕ9.52 (flared)
⑥	Refrigerant tubing (gas tube) ϕ15.88 (flared)
⑦	Water tubing (inlet) use Rp 1 1/4″ nut
⑧	Water tubing (outlet) use Rp 1 1/4″ nut
⑨	Drain hose connection port (outer dia. ϕ15)
⑩	Attachment hole for drain elbow (accessory)
⑪	Bushing (cable port)
⑫	Installation plate (accessory)
⑬	Installation plate (accessory)

4

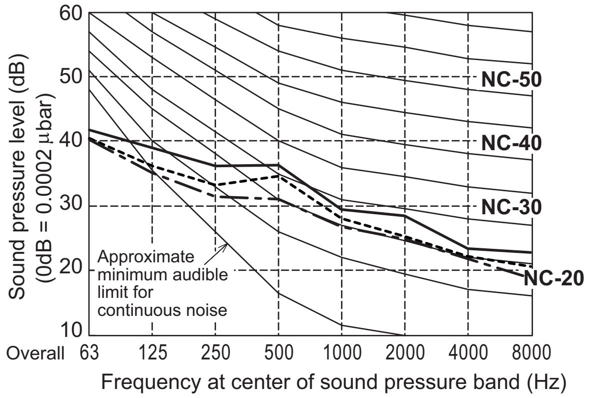
1. Air-to-Water Heatpump (Type W1)

1-4. Noise Criterion Curves

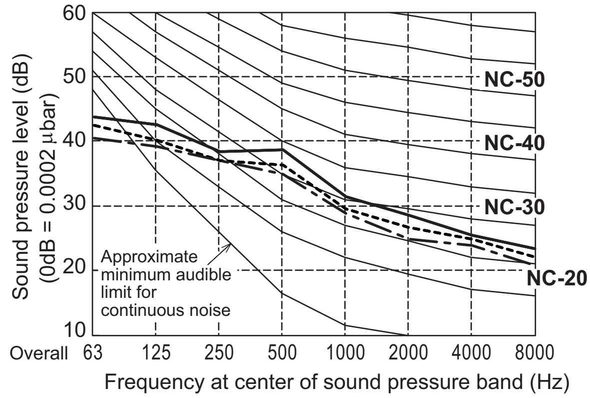
50Hz
High
Medium
Low

COOLING

MODEL	: S-80MW1E5	
SOUND LEVEL :	HIGH	37 dB(A)
	MEDIUM	35 dB(A)
	LOW	33 dB(A)
CONDITION	: 1.5 m directly below unit	

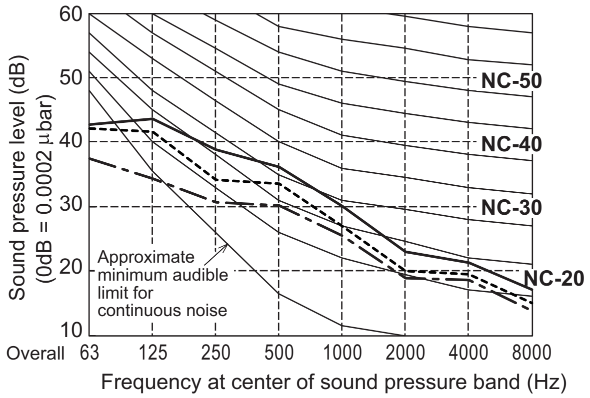


MODEL	: S-125MW1E5	
SOUND LEVEL :	HIGH	39 dB(A)
	MEDIUM	37 dB(A)
	LOW	36 dB(A)
CONDITION:	1.5 m directly below unit	

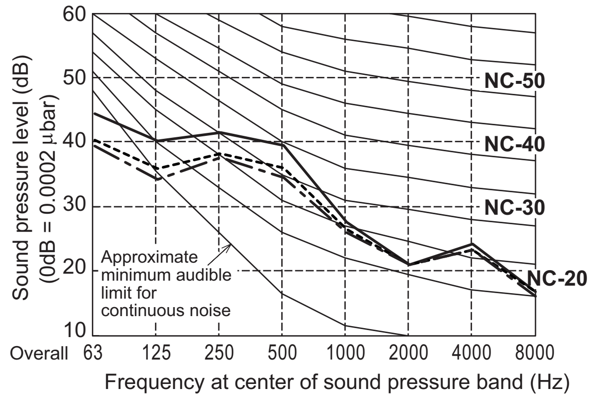


HEATING

MODEL	: S-80MW1E5	
SOUND LEVEL :	HIGH	37 dB(A)
	MEDIUM	34 dB(A)
	LOW	31 dB(A)
CONDITION	: 1.5 m directly below unit	

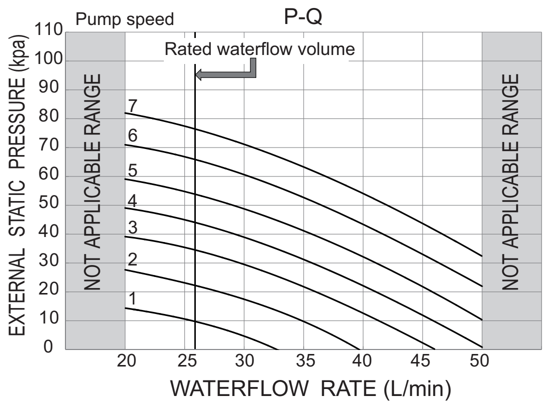


MODEL	: S-125MW1E5	
SOUND LEVEL :	HIGH	39 dB(A)
	MEDIUM	36 dB(A)
	LOW	35 dB(A)
CONDITION:	1.5 m directly below unit	

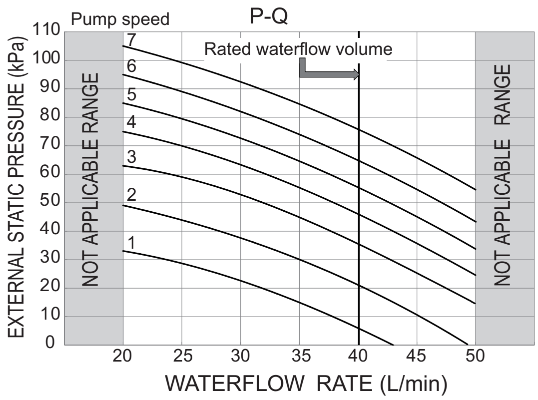


1-5. External Static Pressure Setting

S-80MW1E5



S-125MW1E5



Contents

8. CAPACITY TABLE

1. Capacity Ratio of Outdoor Unit

1-1. U-8MF2E8 (Cooling) Capacity Ratio 30-100%

TC: Total capacity (kW), PI: Power input (kW)

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor water outlet temp. : °C													
		7.0		10.0		15.0		18.0		20.0		25.0		30.0	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
	-10.0	14.9	2.49	17.0	2.83	20.4	3.40	22.4	3.74	23.1	3.86	25.0	4.17	26.9	4.48
	-5.0	14.9	2.50	17.0	2.83	20.4	3.40	22.4	3.74	23.1	3.86	25.0	4.17	26.9	4.48
	0.0	14.9	2.50	17.0	2.84	20.4	3.40	22.4	3.74	23.1	3.87	25.0	4.18	26.9	4.49
	5.0	14.9	2.51	17.0	2.85	20.4	3.41	22.4	3.75	23.1	3.88	25.0	4.18	26.9	4.49
	10.0	14.9	2.53	17.0	2.87	20.4	3.43	22.4	3.76	23.1	3.89	25.0	4.20	26.9	4.50
	15.0	14.9	2.58	17.0	2.91	20.4	3.46	22.4	3.79	23.1	3.91	25.0	4.22	26.9	4.52
100%	20.0	14.9	2.74	17.0	3.03	20.4	3.55	22.4	3.86	23.1	3.98	25.0	4.27	26.9	4.57
	25.0	14.9	3.04	17.0	3.38	20.4	3.85	22.4	4.10	23.1	4.19	25.0	4.44	26.9	4.71
	30.0	14.9	3.58	17.0	3.98	20.4	4.64	22.4	5.04	23.1	5.18	25.0	5.54	26.9	5.90
	35.0	14.9	4.47	17.0	4.98	20.4	5.83	22.4	6.33	23.1	6.51	25.0	6.96	26.1	7.01
	40.0	14.9	5.39	17.0	6.02	20.3	7.01	21.1	7.01	21.4	7.01	22.3	7.01	23.1	7.01
	43.0	14.9	5.98	17.0	6.69	18.8	7.01	19.6	7.01	19.9	7.01	20.7	7.01	21.5	7.01
	46.0	14.9	6.60	16.3	7.01	17.5	7.01	18.3	7.01	18.6	7.01	19.3	7.01	20.0	7.01

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor water outlet temp. : °C													
		7.0		10.0		15.0		18.0		20.0		25.0		30.0	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
	-10.0	13.4	2.24	15.3	2.55	18.3	3.06	20.2	3.36	20.8	3.48	22.5	3.76	24.2	4.03
	-5.0	13.4	2.25	15.3	2.55	18.3	3.06	20.2	3.37	20.8	3.48	22.5	3.76	24.2	4.04
	0.0	13.4	2.25	15.3	2.56	18.3	3.07	20.2	3.37	20.8	3.48	22.5	3.76	24.2	4.04
	5.0	13.4	2.26	15.3	2.57	18.3	3.07	20.2	3.38	20.8	3.49	22.5	3.77	24.2	4.05
	10.0	13.4	2.28	15.3	2.58	18.3	3.09	20.2	3.39	20.8	3.50	22.5	3.78	24.2	4.06
	15.0	13.4	2.33	15.3	2.62	18.3	3.12	20.2	3.41	20.8	3.52	22.5	3.80	24.2	4.07
90%	20.0	13.4	2.47	15.3	2.73	18.3	3.19	20.2	3.48	20.8	3.58	22.5	3.85	24.2	4.11
	25.0	13.4	2.79	15.3	3.10	18.3	3.45	20.2	3.67	20.8	3.76	22.5	3.99	24.2	4.23
	30.0	13.4	3.11	15.3	3.43	18.3	3.93	20.2	4.23	20.8	4.34	22.5	4.60	24.2	4.86
	35.0	13.4	3.90	15.3	4.31	18.3	4.97	20.2	5.35	20.8	5.49	22.5	5.83	24.2	6.17
	40.0	13.4	4.71	15.3	5.22	18.3	6.05	20.2	6.53	20.8	6.70	22.3	7.01	23.1	7.01
	43.0	13.4	5.23	15.3	5.80	18.3	6.73	19.6	7.01	19.9	7.01	20.7	7.01	21.5	7.01
	46.0	13.4	5.77	15.3	6.41	17.5	7.01	18.3	7.01	18.6	7.01	19.3	7.01	20.0	7.01

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor water outlet temp. : °C													
		7.0		10.0		15.0		18.0		20.0		25.0		30.0	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
	-10.0	11.9	2.00	13.6	2.27	16.3	2.72	17.9	2.99	18.5	3.09	20.0	3.34	21.5	3.59
	-5.0	11.9	2.00	13.6	2.27	16.3	2.72	17.9	3.00	18.5	3.09	20.0	3.34	21.5	3.59
	0.0	11.9	2.01	13.6	2.28	16.3	2.73	17.9	3.00	18.5	3.10	20.0	3.35	21.5	3.59
	5.0	11.9	2.02	13.6	2.29	16.3	2.74	17.9	3.00	18.5	3.10	20.0	3.35	21.5	3.60
	10.0	11.9	2.03	13.6	2.30	16.3	2.75	17.9	3.02	18.5	3.11	20.0	3.36	21.5	3.61
	15.0	11.9	2.08	13.6	2.34	16.3	2.77	17.9	3.04	18.5	3.14	20.0	3.38	21.5	3.62
80%	20.0	11.9	2.20	13.6	2.43	16.3	2.84	17.9	3.09	18.5	3.19	20.0	3.42	21.5	3.66
	25.0	11.9	2.54	13.6	2.80	16.3	3.06	17.9	3.26	18.5	3.33	20.0	3.54	21.5	3.75
	30.0	11.9	2.69	13.6	2.93	16.3	3.31	17.9	3.57	18.5	3.67	20.0	3.92	21.5	4.10
	35.0	11.9	3.37	13.6	3.69	16.3	4.20	17.9	4.48	18.5	4.58	20.0	4.83	21.5	5.07
	40.0	11.9	4.08	13.6	4.48	16.3	5.12	17.9	5.49	18.5	5.62	20.0	5.94	21.5	6.25
	43.0	11.9	4.52	13.6	4.98	16.3	5.71	17.9	6.13	18.5	6.28	20.0	6.64	21.3	6.93
	46.0	11.9	4.99	13.6	5.51	16.3	6.33	17.9	6.81	18.5	6.98	19.3	7.01	20.0	7.01

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor water outlet temp. : °C													
		7.0		10.0		15.0		18.0		20.0		25.0		30.0	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
	-10.0	10.5	1.65	11.9	1.87	14.3	2.24	15.7	2.47	16.2	2.55	17.5	2.75	18.8	2.96
	-5.0	10.5	1.65	11.9	1.87	14.3	2.25	15.7	2.47	16.2	2.55	17.5	2.75	18.8	2.96
	0.0	10.5	1.66	11.9	1.88	14.3	2.25	15.7	2.47	16.2	2.55	17.5	2.76	18.8	2.96
	5.0	10.5	1.66	11.9	1.89	14.3	2.26	15.7	2.48	16.2	2.56	17.5	2.76	18.8	2.96
	10.0	10.5	1.68	11.9	1.90	14.3	2.27	15.7	2.49	16.2	2.57	17.5	2.77	18.8	2.97
	15.0	10.5	1.72	11.9	1.93	14.3	2.29	15.7	2.51	16.2	2.59	17.5	2.79	18.8	2.99
70%	20.0	10.5	1.82	11.9	2.01	14.3	2.34	15.7	2.55	16.2	2.63	17.5	2.82	18.8	3.02
	25.0	10.5	2.16	11.9	2.30	14.3	2.52	15.7	2.68	16.2	2.75	17.5	2.91	18.8	3.09
	30.0	10.5	2.19	11.9	2.42	14.3	2.79	15.7	3.01	16.2	3.09	17.5	3.26	18.8	3.35
	35.0	10.5	2.72	11.9	2.95	14.3	3.30	15.7	3.49	16.2	3.56	17.5	3.72	18.8	3.87
	40.0	10.5	3.29	11.9	3.59	14.3	4.04	15.7	4.29	16.2	4.38	17.5	4.60	18.8	4.80
	43.0	10.5	3.65	11.9	3.99	14.3	4.51	15.7	4.80	16.2	4.91	17.5	5.16	18.8	5.39
	46.0	10.5	4.03	11.9	4.41	14.3	5.00	15.7	5.34	16.2	5.46	17.5	5.74	18.8	6.02

1. Capacity Ratio of Outdoor Unit

U-8MF2E8 (Cooling) **Capacity Ratio 30-100%**

TC: Total capacity (kW), PI: Power input (kW)

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor water outlet temp. : °C													
		7.0		10.0		15.0		18.0		20.0		25.0		30.0	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
60%	-10.0	9.0	1.26	10.2	1.43	12.2	1.71	13.4	1.88	13.9	1.95	15.0	2.10	16.1	2.26
	-5.0	9.0	1.26	10.2	1.43	12.2	1.72	13.4	1.89	13.9	1.95	15.0	2.10	16.1	2.26
	0.0	9.0	1.27	10.2	1.44	12.2	1.72	13.4	1.89	13.9	1.95	15.0	2.11	16.1	2.26
	5.0	9.0	1.27	10.2	1.44	12.2	1.72	13.4	1.89	13.9	1.96	15.0	2.11	16.1	2.26
	10.0	9.0	1.29	10.2	1.45	12.2	1.73	13.4	1.90	13.9	1.96	15.0	2.12	16.1	2.27
	15.0	9.0	1.32	10.2	1.48	12.2	1.75	13.4	1.92	13.9	1.98	15.0	2.13	16.1	2.28
	20.0	9.0	1.40	10.2	1.54	12.2	1.80	13.4	1.95	13.9	2.01	15.0	2.16	16.1	2.30
	25.0	9.0	1.72	10.2	1.77	12.2	1.93	13.4	2.05	13.9	2.10	15.0	2.23	16.1	2.36
	30.0	9.0	1.74	10.2	1.91	12.2	2.20	13.4	2.37	13.9	2.43	15.0	2.47	16.1	2.54
	35.0	9.0	2.06	10.2	2.20	12.2	2.43	13.4	2.54	13.9	2.58	15.0	2.68	16.1	2.77
	40.0	9.0	2.48	10.2	2.68	12.2	2.97	13.4	3.13	13.9	3.18	15.0	3.31	16.1	3.43
	43.0	9.0	2.75	10.2	2.97	12.2	3.32	13.4	3.50	13.9	3.57	15.0	3.72	16.1	3.86
	46.0	9.0	3.03	10.2	3.29	12.2	3.68	13.4	3.90	13.9	3.97	15.0	4.15	16.1	4.32

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor water outlet temp. : °C													
		7.0		10.0		15.0		18.0		20.0		25.0		30.0	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
50%	-10.0	7.5	0.950	8.5	1.07	10.2	1.29	11.2	1.41	11.6	1.46	12.5	1.58	13.4	1.69
	-5.0	7.5	0.950	8.5	1.08	10.2	1.29	11.2	1.42	11.6	1.46	12.5	1.58	13.4	1.69
	0.0	7.5	0.950	8.5	1.08	10.2	1.29	11.2	1.42	11.6	1.47	12.5	1.58	13.4	1.70
	5.0	7.5	0.960	8.5	1.09	10.2	1.30	11.2	1.42	11.6	1.47	12.5	1.58	13.4	1.70
	10.0	7.5	0.970	8.5	1.10	10.2	1.30	11.2	1.43	11.6	1.48	12.5	1.59	13.4	1.71
	15.0	7.5	1.00	8.5	1.12	10.2	1.32	11.2	1.44	11.6	1.49	12.5	1.60	13.4	1.71
	20.0	7.5	1.06	8.5	1.17	10.2	1.35	11.2	1.47	11.6	1.51	12.5	1.62	13.4	1.73
	25.0	7.5	1.31	8.5	1.34	10.2	1.46	11.2	1.55	11.6	1.58	12.5	1.68	13.4	1.78
	30.0	7.5	1.38	8.5	1.51	10.2	1.72	11.2	1.83	11.6	1.83	12.5	1.86	13.4	1.91
	35.0	7.5	1.55	8.5	1.64	10.2	1.78	11.2	1.88	11.6	1.92	12.5	2.04	13.4	2.16
	40.0	7.5	1.86	8.5	1.99	10.2	2.17	11.2	2.27	11.6	2.30	12.5	2.37	13.4	2.43
	43.0	7.5	2.06	8.5	2.21	10.2	2.42	11.2	2.54	11.6	2.58	12.5	2.66	13.4	2.74
	46.0	7.5	2.26	8.5	2.43	10.2	2.69	11.2	2.82	11.6	2.87	12.5	2.97	13.4	3.07

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor water outlet temp. : °C													
		7.0		10.0		15.0		18.0		20.0		25.0		30.0	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
40%	-10.0	6.0	0.700	6.8	0.790	8.1	0.940	9.0	1.04	9.3	1.07	10.0	1.16	10.8	1.24
	-5.0	6.0	0.700	6.8	0.790	8.1	0.950	9.0	1.04	9.3	1.07	10.0	1.16	10.8	1.24
	0.0	6.0	0.700	6.8	0.790	8.1	0.950	9.0	1.04	9.3	1.08	10.0	1.16	10.8	1.24
	5.0	6.0	0.710	6.8	0.800	8.1	0.950	9.0	1.04	9.3	1.08	10.0	1.16	10.8	1.25
	10.0	6.0	0.720	6.8	0.810	8.1	0.960	9.0	1.05	9.3	1.08	10.0	1.17	10.8	1.25
	15.0	6.0	0.740	6.8	0.820	8.1	0.970	9.0	1.06	9.3	1.09	10.0	1.18	10.8	1.26
	20.0	6.0	0.790	6.8	0.870	8.1	1.00	9.0	1.08	9.3	1.12	10.0	1.19	10.8	1.27
	25.0	6.0	0.990	6.8	1.00	8.1	1.08	9.0	1.14	9.3	1.17	10.0	1.24	10.8	1.31
	30.0	6.0	1.10	6.8	1.19	8.1	1.35	9.0	1.36	9.3	1.36	10.0	1.37	10.8	1.41
	35.0	6.0	1.17	6.8	1.23	8.1	1.37	9.0	1.46	9.3	1.49	10.0	1.58	10.8	1.66
	40.0	6.0	1.39	6.8	1.47	8.1	1.58	9.0	1.63	9.3	1.65	10.0	1.69	10.8	1.72
	43.0	6.0	1.53	6.8	1.63	8.1	1.76	9.0	1.82	9.3	1.85	10.0	1.89	10.8	1.93
	46.0	6.0	1.68	6.8	1.79	8.1	1.95	9.0	2.02	9.3	2.05	10.0	2.11	10.8	2.16

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor water outlet temp. : °C													
		7.0		10.0		15.0		18.0		20.0		25.0		30.0	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
30%	-10.0	4.5	0.490	5.1	0.560	6.1	0.670	6.7	0.730	6.9	0.750	7.5	0.810	8.1	0.870
	-5.0	4.5	0.490	5.1	0.560	6.1	0.670	6.7	0.730	6.9	0.760	7.5	0.820	8.1	0.870
	0.0	4.5	0.500	5.1	0.560	6.1	0.670	6.7	0.730	6.9	0.760	7.5	0.820	8.1	0.880
	5.0	4.5	0.500	5.1	0.560	6.1	0.670	6.7	0.740	6.9	0.760	7.5	0.820	8.1	0.880
	10.0	4.5	0.510	5.1	0.570	6.1	0.680	6.7	0.740	6.9	0.770	7.5	0.820	8.1	0.880
	15.0	4.5	0.530	5.1	0.590	6.1	0.690	6.7	0.750	6.9	0.770	7.5	0.830	8.1	0.890
	20.0	4.5	0.580	5.1	0.620	6.1	0.710	6.7	0.770	6.9	0.790	7.5	0.850	8.1	0.900
	25.0	4.5	0.740	5.1	0.740	6.1	0.780	6.7	0.820	6.9	0.840	7.5	0.880	8.1	0.930
	30.0	4.5	0.870	5.1	0.930	6.1	1.02	6.7	0.980	6.9	0.980	7.5	0.980	8.1	1.01
	35.0	4.5	0.890	5.1	0.950	6.1	1.06	6.7	1.12	6.9	1.15	7.5	1.21	8.1	1.27
	40.0	4.5	1.04	5.1	1.09	6.1	1.15	6.7	1.17	6.9	1.18	7.5	1.21	8.1	1.27
	43.0	4.5	1.14	5.1	1.19	6.1	1.27	6.7	1.30	6.9	1.31	7.5	1.33	8.1	1.35
	46.0	4.5	1.24	5.1	1.30	6.1	1.39	6.7	1.44	6.9	1.45	7.5	1.48	8.1	1.50

1. Capacity Ratio of Outdoor Unit

1-2. U-8MF2E8 (Heating) Capacity Ratio 30-100%

TC: Total capacity (kW), PI: Power input (kW)

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor water outlet temp. : °C													
			25.0		30.0		33.0		35.0		38.0		40.0		45.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
100%	-19.8	-20.0	14.8	6.72	13.1	6.46	12.0	6.26	11.3	6.09	10.2	5.80	9.5	5.56	7.5	4.82
	-14.7	-15.0	17.6	7.15	15.7	6.81	14.4	6.56	13.6	6.37	12.3	6.03	11.4	5.77	9.1	4.98
	-9.6	-10.0	20.8	7.36	18.8	7.34	17.3	7.03	16.3	6.80	14.8	6.41	13.7	6.11	11.0	5.23
	-4.4	-5.0	23.5	7.36	21.7	7.36	20.4	7.23	19.2	7.24	17.4	6.71	16.2	6.41	12.9	5.43
	-1.8	-2.5	24.9	7.36	23.1	7.36	22.0	7.36	20.9	7.21	19.0	7.00	17.6	6.67	14.1	5.61
	0.8	0.0	26.5	7.36	24.6	7.36	23.4	7.36	22.7	7.36	20.7	7.11	19.3	6.81	15.5	5.87
	2.8	2.0	27.9	7.36	25.8	7.36	24.7	7.36	23.9	7.36	22.1	7.12	20.4	6.75	15.7	5.60
	6.0	5.0	30.1	7.36	27.9	7.36	26.6	7.36	25.0	6.96	22.2	6.31	20.4	5.97	15.7	5.01
	7.0	6.0	30.9	7.36	28.6	7.36	26.9	7.13	25.0	6.63	22.2	6.02	20.4	5.72	15.7	4.82
	8.6	7.5	32.1	7.36	29.6	7.28	26.9	6.61	25.0	6.17	22.2	5.62	20.4	5.36	15.7	4.56
	11.2	10.0	34.3	7.34	29.6	6.40	26.9	5.83	25.0	5.46	22.2	5.01	20.4	4.80	15.7	4.13
	16.4	15.0	34.3	5.47	29.6	4.81	26.9	4.42	25.0	4.16	22.2	3.85	20.4	3.73	15.7	3.28
	24.0	18.0	34.3	5.47	29.6	4.77	26.9	4.35	25.0	4.07	22.2	3.65	20.4	3.38	15.7	2.68

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor water outlet temp. : °C													
			25.0		30.0		33.0		35.0		38.0		40.0		45.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
90%	-19.8	-20.0	14.6	6.72	12.9	6.47	11.8	6.27	11.1	6.10	10.0	5.81	9.3	5.58	7.3	4.85
	-14.7	-15.0	17.4	7.24	15.5	6.90	14.2	6.64	13.4	6.44	12.1	6.10	11.2	5.83	8.9	5.04
	-9.6	-10.0	20.9	7.50	18.6	7.45	17.1	7.13	16.1	6.89	14.6	6.49	13.5	6.18	10.8	5.29
	-4.4	-5.0	23.9	7.69	22.1	7.70	20.6	7.39	19.4	7.49	17.5	7.03	16.2	6.65	12.9	5.62
	-1.8	-2.5	25.5	7.69	23.5	7.69	22.4	7.68	21.1	7.59	19.1	7.22	17.7	6.90	14.1	5.82
	0.8	0.0	27.1	7.69	25.0	7.70	23.9	7.70	22.5	7.45	20.0	6.95	18.3	6.58	14.2	5.50
	2.8	2.0	28.5	7.69	26.3	7.69	24.2	7.21	22.5	6.85	20.0	6.42	18.3	6.11	14.2	5.16
	6.0	5.0	30.7	7.69	26.7	6.91	24.2	6.38	22.5	6.10	20.0	5.77	18.3	5.49	14.2	4.64
	7.0	6.0	30.8	7.60	26.7	6.68	24.2	6.13	22.5	5.84	20.0	5.52	18.3	5.27	14.2	4.49
	8.6	7.5	30.8	6.99	26.7	6.18	24.2	5.68	22.5	5.43	20.0	5.16	18.3	4.94	14.2	4.24
	11.2	10.0	30.8	6.05	26.7	5.39	24.2	4.99	22.5	4.79	20.0	4.60	18.3	4.42	14.2	3.85
	16.4	15.0	30.8	5.18	26.7	4.52	24.2	4.13	22.5	3.87	20.0	3.52	18.3	3.43	14.2	3.05
	24.0	18.0	30.8	5.18	26.7	4.52	24.2	4.13	22.5	3.87	20.0	3.47	18.3	3.21	14.2	2.55

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor water outlet temp. : °C													
			25.0		30.0		33.0		35.0		38.0		40.0		45.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
80%	-19.8	-20.0	14.6	6.92	12.9	6.65	11.8	6.44	11.1	6.27	10.0	5.96	9.2	5.73	7.3	4.97
	-14.7	-15.0	17.5	7.44	15.5	7.07	14.2	6.80	13.4	6.60	12.0	6.25	11.1	5.98	8.8	5.16
	-9.6	-10.0	21.0	7.93	18.6	7.69	17.1	7.33	16.1	7.08	14.5	6.66	13.5	6.34	10.7	5.42
	-4.4	-5.0	24.4	8.03	22.5	8.03	21.0	7.77	19.8	7.84	17.8	7.37	16.3	6.88	12.6	5.66
	-1.8	-2.5	26.0	8.03	23.7	7.89	21.5	7.51	20.0	7.25	17.8	6.79	16.3	6.46	12.6	5.37
	0.8	0.0	27.4	7.87	23.7	7.12	21.5	6.83	20.0	6.63	17.8	6.26	16.3	5.96	12.6	5.05
	2.8	2.0	27.4	7.27	23.7	6.59	21.5	6.35	20.0	6.18	17.8	5.85	16.3	5.58	12.6	4.75
	6.0	5.0	27.4	6.41	23.7	5.84	21.5	5.65	20.0	5.51	17.8	5.22	16.3	5.00	12.6	4.25
	7.0	6.0	27.4	6.18	23.7	5.58	21.5	5.38	20.0	5.25	17.8	5.00	16.3	4.79	12.6	4.12
	8.6	7.5	27.4	5.66	23.7	5.14	21.5	4.99	20.0	4.89	17.8	4.68	16.3	4.49	12.6	3.90
	11.2	10.0	27.4	4.84	23.7	4.45	21.5	4.37	20.0	4.32	17.8	4.17	16.3	4.03	12.6	3.54
	16.4	15.0	27.4	4.84	23.7	4.23	21.5	3.87	20.0	3.62	17.8	3.26	16.3	3.11	12.6	2.80
	24.0	18.0	27.4	4.84	23.7	4.23	21.5	3.87	20.0	3.62	17.8	3.26	16.3	3.02	12.6	2.41

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor water outlet temp. : °C													
			25.0		30.0		33.0		35.0		38.0		40.0		45.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
70%	-19.8	-20.0	14.9	7.26	13.1	6.97	12.0	6.74	11.3	6.56	10.1	6.24	9.4	5.99	7.4	5.20
	-14.7	-15.0	17.9	7.80	15.8	7.41	14.5	7.12	13.6	6.91	12.2	6.54	11.3	6.25	9.0	5.40
	-9.6	-10.0	21.5	8.24	19.0	8.05	17.5	7.65	16.4	7.41	14.8	6.97	13.7	6.64	11.0	5.77
	-4.4	-5.0	24.0	7.89	20.7	7.53	18.8	7.26	17.5	7.03	15.6	6.61	14.3	6.24	11.0	5.14
	-1.8	-2.5	24.0	7.18	20.7	6.90	18.8	6.67	17.5	6.48	15.6	6.11	14.3	5.83	11.0	4.91
	0.8	0.0	24.0	6.48	20.7	6.28	18.8	6.11	17.5	5.94	15.6	5.63	14.3	5.38	11.0	4.59
	2.8	2.0	24.0	5.95	20.7	5.80	18.8	5.67	17.5	5.74	15.6	5.26	14.3	5.03	11.0	4.31
	6.0	5.0	24.0	5.19	20.7	5.09	18.8	4.98	17.5	4.88	15.6	4.66	14.3	4.47	11.0	3.84
	7.0	6.0	24.0	4.89	20.7	4.82	18.8	4.74	17.5	4.65	15.6	4.46	14.3	4.29	11.0	3.73
	8.6	7.5	24.0	4.46	20.7	4.44	18.8	4.40	17.5	4.33	15.6	4.18	14.3	4.03	11.0	3.53
	11.2	10.0	24.0	4.46	20.7	3.90	18.8	3.86	17.5	3.83	15.6	3.73	14.3	3.62	11.0	3.21
	16.4	15.0	24.0	4.46	20.7	3.90	18.8	3.57	17.5	3.35	15.6	3.01	14.3	2.79	11.0	2.53
	24.0	18.0	24.0	4.46	20.7	3.90	18.8	3.57	17.5	3.35	15.6	3.01	14.3	2.79	11.0	2.24

1. Capacity Ratio of Outdoor Unit

U-8MF2E8 (Heating) **Capacity Ratio 30-100%**

TC: Total capacity (kW), PI: Power input (kW)

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor water outlet temp. : °C													
			25.0		30.0		33.0		35.0		38.0		40.0		45.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
	-19.8	-20.0	15.6	7.63	13.7	7.32	12.5	7.08	11.8	6.88	10.6	6.55	9.8	6.28	7.7	5.45
	-14.7	-15.0	18.7	8.25	16.5	7.80	15.1	7.49	14.2	7.26	12.8	6.87	11.8	6.57	9.4	5.74
	-9.6	-10.0	20.6	7.87	17.8	7.56	16.1	7.17	15.0	6.85	13.3	6.36	12.2	6.01	9.4	5.03
	-4.4	-5.0	20.6	6.62	17.8	6.45	16.1	6.24	15.0	6.05	13.3	5.71	12.2	5.43	9.4	4.49
	-1.8	-2.5	20.6	6.01	17.8	5.90	16.1	5.73	15.0	5.58	13.3	5.28	12.2	5.04	9.4	4.29
	0.8	0.0	20.6	5.41	17.8	5.36	16.1	5.24	15.0	5.11	13.3	4.86	12.2	4.65	9.4	3.99
60%	2.8	2.0	20.6	4.95	17.8	4.95	16.1	4.84	15.0	4.73	13.3	4.51	12.2	4.33	9.4	3.73
	6.0	5.0	20.6	4.20	17.8	4.26	16.1	4.21	15.0	4.14	13.3	3.98	12.2	3.84	9.4	3.34
	7.0	6.0	20.6	3.94	17.8	4.04	16.1	4.01	15.0	3.95	13.3	3.82	12.2	3.69	9.4	3.24
	8.6	7.5	20.6	3.93	17.8	3.72	16.1	3.72	15.0	3.68	13.3	3.58	12.2	3.47	9.4	3.07
	11.2	10.0	20.6	3.93	17.8	3.45	16.1	3.26	15.0	3.26	13.3	3.19	12.2	3.12	9.4	2.79
	16.4	15.0	20.6	3.93	17.8	3.45	16.1	3.16	15.0	2.97	13.3	2.68	12.2	2.48	9.4	2.20
	24.0	18.0	20.6	3.93	17.8	3.45	16.1	3.16	15.0	2.97	13.3	2.68	12.2	2.48	9.4	2.00

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor water outlet temp. : °C													
			25.0		30.0		33.0		35.0		38.0		40.0		45.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
	-19.8	-20.0	16.8	8.04	14.8	7.70	13.4	7.39	12.5	7.14	11.1	6.72	10.2	6.40	7.9	5.47
	-14.7	-15.0	17.1	7.38	14.8	6.85	13.4	6.51	12.5	6.27	11.1	5.86	10.2	5.57	7.9	4.72
	-9.6	-10.0	17.1	6.36	14.8	6.15	13.4	5.89	12.5	5.62	11.1	5.22	10.2	4.94	7.9	4.15
	-4.4	-5.0	17.1	5.34	14.8	5.23	13.4	5.07	12.5	4.94	11.1	4.68	10.2	4.46	7.9	3.72
	-1.8	-2.5	17.1	4.83	14.8	4.78	13.4	4.66	12.5	4.55	11.1	4.32	10.2	4.14	7.9	3.54
	0.8	0.0	17.1	4.34	14.8	4.31	13.4	4.22	12.5	4.13	11.1	3.94	10.2	3.79	7.9	3.28
50%	2.8	2.0	17.1	3.90	14.8	3.92	13.4	3.87	12.5	3.80	11.1	3.65	10.2	3.51	7.9	3.06
	6.0	5.0	17.1	3.28	14.8	3.37	13.4	3.37	12.5	3.33	11.1	3.23	10.2	3.13	7.9	2.76
	7.0	6.0	17.1	3.28	14.8	3.20	13.4	3.21	12.5	3.18	11.1	3.09	10.2	3.00	7.9	2.67
	8.6	7.5	17.1	3.28	14.8	2.95	13.4	2.98	12.5	2.97	11.1	2.90	10.2	2.83	7.9	2.53
	11.2	10.0	17.1	3.28	14.8	2.89	13.4	2.65	12.5	2.63	11.1	2.60	10.2	2.55	7.9	2.31
	16.4	15.0	17.1	3.28	14.8	2.89	13.4	2.65	12.5	2.49	11.1	2.25	10.2	2.10	7.9	1.82
	24.0	18.0	17.1	3.28	14.8	2.89	13.4	2.65	12.5	2.49	11.1	2.25	10.2	2.10	7.9	1.70

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor water outlet temp. : °C													
			25.0		30.0		33.0		35.0		38.0		40.0		45.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
	-19.8	-20.0	13.7	5.97	11.9	5.63	10.7	5.40	10.0	5.22	8.9	4.92	8.1	4.70	6.3	4.03
	-14.7	-15.0	13.7	5.37	11.9	5.01	10.7	4.77	10.0	4.60	8.9	4.31	8.1	4.10	6.3	3.49
	-9.6	-10.0	13.7	4.61	11.9	4.48	10.7	4.32	10.0	4.14	8.9	3.85	8.1	3.65	6.3	3.08
	-4.4	-5.0	13.7	3.86	11.9	3.80	10.7	3.69	10.0	3.60	8.9	3.42	8.1	3.27	6.3	2.76
	-1.8	-2.5	13.7	3.44	11.9	3.43	10.7	3.36	10.0	3.29	8.9	3.14	8.1	3.01	6.3	2.61
	0.8	0.0	13.7	3.04	11.9	3.07	10.7	3.03	10.0	2.98	8.9	2.86	8.1	2.76	6.3	2.42
40%	2.8	2.0	13.7	2.73	11.9	2.80	10.7	2.78	10.0	2.74	8.9	2.65	8.1	2.57	6.3	2.27
	6.0	5.0	13.7	2.47	11.9	2.41	10.7	2.43	10.0	2.41	8.9	2.35	8.1	2.29	6.3	2.05
	7.0	6.0	13.7	2.47	11.9	2.29	10.7	2.31	10.0	2.31	8.9	2.26	8.1	2.21	6.3	1.98
	8.6	7.5	13.7	2.47	11.9	2.18	10.7	2.15	10.0	2.16	8.9	2.13	8.1	2.08	6.3	1.89
	11.2	10.0	13.7	2.47	11.9	2.18	10.7	2.00	10.0	1.92	8.9	1.91	8.1	1.88	6.3	1.72
	16.4	15.0	13.7	2.47	11.9	2.18	10.7	2.00	10.0	1.89	8.9	1.71	8.1	1.60	6.3	1.36
	24.0	18.0	13.7	2.47	11.9	2.18	10.7	2.00	10.0	1.89	8.9	1.71	8.1	1.60	6.3	1.31

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor water outlet temp. : °C													
			25.0		30.0		33.0		35.0		38.0		40.0		45.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
	-19.8	-20.0	10.3	4.05	8.9	3.83	8.1	3.68	7.5	3.56	6.7	3.37	6.1	3.22	4.7	2.78
	-14.7	-15.0	10.3	3.64	8.9	3.43	8.1	3.27	7.5	3.15	6.7	2.96	6.1	2.82	4.7	2.42
	-9.6	-10.0	10.3	3.10	8.9	3.03	8.1	2.94	7.5	2.85	6.7	2.65	6.1	2.51	4.7	2.14
	-4.4	-5.0	10.3	2.54	8.9	2.53	8.1	2.48	7.5	2.43	6.7	2.33	6.1	2.24	4.7	1.92
	-1.8	-2.5	10.3	2.27	8.9	2.29	8.1	2.26	7.5	2.22	6.7	2.14	6.1	2.07	4.7	1.82
	0.8	0.0	10.3	2.01	8.9	2.06	8.1	2.05	7.5	2.02	6.7	1.96	6.1	1.90	4.7	1.68
30%	2.8	2.0	10.3	1.81	8.9	1.88	8.1	1.88	7.5	1.87	6.7	1.82	6.1	1.77	4.7	1.58
	6.0	5.0	10.3	1.75	8.9	1.63	8.1	1.65	7.5	1.65	6.7	1.62	6.1	1.59	4.7	1.44
	7.0	6.0	10.3	1.75	8.9	1.55	8.1	1.58	7.5	1.58	6.7	1.56	6.1	1.53	4.7	1.40
	8.6	7.5	10.3	1.75	8.9	1.55	8.1	1.47	7.5	1.48	6.7	1.47	6.1	1.45	4.7	1.33
	11.2	10.0	10.3	1.75	8.9	1.55	8.1	1.43	7.5	1.35	6.7	1.33	6.1	1.31	4.7	1.22
	16.4	15.0	10.3	1.75	8.9	1.55	8.1	1.43	7.5	1.35	6.7	1.24	6.1	1.16	4.7	0.97
	24.0	18.0	10.3	1.75	8.9	1.55	8.1	1.43	7.5	1.35	6.7	1.24	6.1	1.16	4.7	0.96

1. Capacity Ratio of Outdoor Unit

1-3. U-10MF2E8 (Cooling) Capacity Ratio 30-100%

TC: Total capacity (kW), PI: Power input (kW)

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor water outlet temp. : °C													
		7.0		10.0		15.0		18.0		20.0		25.0		30.0	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
	-10.0	18.7	2.95	21.2	3.35	25.5	4.02	28.0	4.43	28.9	4.58	31.3	4.94	33.6	5.31
	-5.0	18.7	2.96	21.2	3.36	25.5	4.03	28.0	4.43	28.9	4.58	31.3	4.95	33.6	5.32
	0.0	18.7	2.97	21.2	3.37	25.5	4.04	28.0	4.44	28.9	4.59	31.3	4.96	33.6	5.33
	5.0	18.7	2.99	21.2	3.39	25.5	4.05	28.0	4.45	28.9	4.60	31.3	4.97	33.6	5.34
	10.0	18.7	3.03	21.2	3.43	25.5	4.09	28.0	4.48	28.9	4.63	31.3	4.99	33.6	5.36
	15.0	18.7	3.15	21.2	3.52	25.5	4.16	28.0	4.55	28.9	4.69	31.3	5.05	33.6	5.41
100%	20.0	18.7	3.52	21.2	3.83	25.5	4.39	28.0	4.74	28.9	4.87	31.3	5.20	33.6	5.54
	25.0	18.7	3.68	21.2	4.16	25.5	4.98	28.0	5.49	28.9	5.68	31.3	6.16	33.6	6.66
	30.0	18.7	4.71	21.2	5.32	25.5	6.37	28.0	7.02	28.9	7.26	31.3	7.87	33.6	8.49
	35.0	18.7	5.83	21.2	6.58	25.5	7.88	28.0	8.67	28.9	8.97	31.1	9.62	32.1	9.62
	40.0	18.7	6.98	21.2	7.89	25.5	9.45	26.7	9.62	27.0	9.62	28.0	9.62	28.9	9.62
	43.0	18.7	7.72	21.2	8.73	24.1	9.62	25.0	9.62	25.4	9.62	26.3	9.62	27.2	9.62
	46.0	18.7	8.50	21.0	9.54	22.6	9.62	23.5	9.62	23.8	9.62	24.6	9.62	25.5	9.62

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor water outlet temp. : °C													
		7.0		10.0		15.0		18.0		20.0		25.0		30.0	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
	-10.0	16.8	2.66	19.1	3.02	22.9	3.63	25.2	3.99	26.0	4.12	28.1	4.45	30.2	4.79
	-5.0	16.8	2.67	19.1	3.03	22.9	3.63	25.2	3.99	26.0	4.13	28.1	4.46	30.2	4.79
	0.0	16.8	2.68	19.1	3.04	22.9	3.64	25.2	4.00	26.0	4.13	28.1	4.46	30.2	4.80
	5.0	16.8	2.70	19.1	3.05	22.9	3.65	25.2	4.01	26.0	4.15	28.1	4.48	30.2	4.81
	10.0	16.8	2.74	19.1	3.09	22.9	3.68	25.2	4.04	26.0	4.17	28.1	4.50	30.2	4.83
	15.0	16.8	2.84	19.1	3.17	22.9	3.75	25.2	4.10	26.0	4.22	28.1	4.55	30.2	4.87
90%	20.0	16.8	3.16	19.1	3.43	22.9	3.93	25.2	4.25	26.0	4.37	28.1	4.67	30.2	4.97
	25.0	16.8	3.30	19.1	3.66	22.9	4.26	25.2	4.63	26.0	4.76	28.1	5.08	30.2	5.31
	30.0	16.8	4.05	19.1	4.53	22.9	5.34	25.2	5.82	26.0	6.00	28.1	6.45	30.2	6.90
	35.0	16.8	5.03	19.1	5.64	22.9	6.64	25.2	7.25	26.0	7.48	28.1	8.04	30.2	8.60
	40.0	16.8	6.04	19.1	6.78	22.9	8.00	25.2	8.74	26.0	9.01	28.0	9.61	28.9	9.62
	43.0	16.8	6.68	19.1	7.50	22.9	8.88	25.0	9.61	25.4	9.62	26.3	9.62	27.2	9.62
	46.0	16.8	7.36	19.1	8.28	22.6	9.62	23.5	9.62	23.8	9.62	24.6	9.62	25.5	9.62

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor water outlet temp. : °C													
		7.0		10.0		15.0		18.0		20.0		25.0		30.0	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
	-10.0	14.9	2.37	17.0	2.69	20.4	3.23	22.4	3.55	23.1	3.67	25.0	3.96	26.9	4.26
	-5.0	14.9	2.37	17.0	2.69	20.4	3.23	22.4	3.55	23.1	3.67	25.0	3.97	26.9	4.26
	0.0	14.9	2.38	17.0	2.70	20.4	3.24	22.4	3.56	23.1	3.68	25.0	3.97	26.9	4.27
	5.0	14.9	2.40	17.0	2.72	20.4	3.25	22.4	3.57	23.1	3.69	25.0	3.98	26.9	4.28
	10.0	14.9	2.44	17.0	2.75	20.4	3.28	22.4	3.59	23.1	3.71	25.0	4.00	26.9	4.29
	15.0	14.9	2.53	17.0	2.83	20.4	3.33	22.4	3.64	23.1	3.76	25.0	4.04	26.9	4.33
80%	20.0	14.9	2.80	17.0	3.04	20.4	3.49	22.4	3.77	23.1	3.87	25.0	4.14	26.9	4.41
	25.0	14.9	3.00	17.0	3.33	20.4	3.86	22.4	4.19	23.1	4.27	25.0	4.46	26.9	4.67
	30.0	14.9	3.46	17.0	3.82	20.4	4.42	22.4	4.77	23.1	4.90	25.0	5.22	26.9	5.54
	35.0	14.9	4.31	17.0	4.78	20.4	5.55	22.4	6.00	23.1	6.16	25.0	6.57	26.9	6.97
	40.0	14.9	5.18	17.0	5.76	20.4	6.71	22.4	7.27	23.1	7.47	25.0	7.97	26.9	8.47
	43.0	14.9	5.74	17.0	6.38	20.4	7.45	22.4	8.08	23.1	8.31	25.0	8.87	26.9	9.44
	46.0	14.9	6.32	17.0	7.04	20.4	8.24	22.4	8.94	23.1	9.20	24.6	9.62	25.5	9.62

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor water outlet temp. : °C													
		7.0		10.0		15.0		18.0		20.0		25.0		30.0	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
	-10.0	13.1	1.95	14.8	2.22	17.8	2.66	19.6	2.93	20.3	3.02	21.9	3.27	23.5	3.51
	-5.0	13.1	1.96	14.8	2.22	17.8	2.66	19.6	2.93	20.3	3.03	21.9	3.27	23.5	3.51
	0.0	13.1	1.97	14.8	2.23	17.8	2.67	19.6	2.94	20.3	3.03	21.9	3.28	23.5	3.52
	5.0	13.1	1.98	14.8	2.25	17.8	2.68	19.6	2.95	20.3	3.04	21.9	3.28	23.5	3.52
	10.0	13.1	2.01	14.8	2.27	17.8	2.70	19.6	2.96	20.3	3.06	21.9	3.30	23.5	3.54
	15.0	13.1	2.09	14.8	2.33	17.8	2.75	19.6	3.00	20.3	3.10	21.9	3.33	23.5	3.57
70%	20.0	13.1	2.31	14.8	2.51	17.8	2.87	19.6	3.10	20.3	3.19	21.9	3.41	23.5	3.63
	25.0	13.1	2.55	14.8	2.82	17.8	3.26	19.6	3.42	20.3	3.48	21.9	3.64	23.5	3.82
	30.0	13.1	2.76	14.8	3.01	17.8	3.41	19.6	3.65	20.3	3.73	21.9	3.93	23.5	4.14
	35.0	13.1	3.44	14.8	3.78	17.8	4.30	19.6	4.61	20.3	4.72	21.9	4.98	23.5	5.24
	40.0	13.1	4.14	14.8	4.56	17.8	5.23	19.6	5.61	20.3	5.75	21.9	6.09	23.5	6.42
	43.0	13.1	4.58	14.8	5.05	17.8	5.81	19.6	6.25	20.3	6.41	21.9	6.79	23.5	7.17
	46.0	13.1	5.05	14.8	5.58	17.8	6.43	19.6	6.92	20.3	7.10	21.9	7.54	23.5	7.97

1. Capacity Ratio of Outdoor Unit

U-10MF2E8 (Cooling) **Capacity Ratio 30-100%**

TC: Total capacity (kW), PI: Power input (kW)

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor water outlet temp. : °C													
		7.0		10.0		15.0		18.0		20.0		25.0		30.0	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
	-10.0	11.2	1.49	12.7	1.70	15.3	2.03	16.8	2.24	17.4	2.31	18.8	2.49	20.2	2.68
	-5.0	11.2	1.50	12.7	1.70	15.3	2.04	16.8	2.24	17.4	2.31	18.8	2.50	20.2	2.68
	0.0	11.2	1.51	12.7	1.71	15.3	2.04	16.8	2.24	17.4	2.32	18.8	2.50	20.2	2.68
	5.0	11.2	1.52	12.7	1.72	15.3	2.05	16.8	2.25	17.4	2.33	18.8	2.51	20.2	2.69
	10.0	11.2	1.54	12.7	1.74	15.3	2.07	16.8	2.27	17.4	2.34	18.8	2.52	20.2	2.70
	15.0	11.2	1.60	12.7	1.79	15.3	2.10	16.8	2.30	17.4	2.37	18.8	2.55	20.2	2.72
60%	20.0	11.2	1.77	12.7	1.92	15.3	2.20	16.8	2.37	17.4	2.44	18.8	2.60	20.2	2.77
	25.0	11.2	2.03	12.7	2.23	15.3	2.49	16.8	2.60	17.4	2.64	18.8	2.76	20.2	2.90
	30.0	11.2	2.06	12.7	2.26	15.3	2.60	16.8	2.80	17.4	2.88	18.8	3.06	20.2	3.24
	35.0	11.2	2.57	12.7	2.79	15.3	3.12	16.8	3.30	17.4	3.36	18.8	3.52	20.2	3.67
	40.0	11.2	3.09	12.7	3.37	15.3	3.79	16.8	4.03	17.4	4.12	18.8	4.32	20.2	4.52
	43.0	11.2	3.42	12.7	3.73	15.3	4.22	16.8	4.50	17.4	4.60	18.8	4.83	20.2	5.06
	46.0	11.2	3.76	12.7	4.11	15.3	4.67	16.8	4.99	17.4	5.10	18.8	5.37	20.2	5.63

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor water outlet temp. : °C													
		7.0		10.0		15.0		18.0		20.0		25.0		30.0	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
	-10.0	9.3	1.12	10.6	1.28	12.7	1.53	14.0	1.68	14.5	1.73	15.6	1.87	16.8	2.01
	-5.0	9.3	1.13	10.6	1.28	12.7	1.53	14.0	1.68	14.5	1.74	15.6	1.87	16.8	2.01
	0.0	9.3	1.13	10.6	1.28	12.7	1.54	14.0	1.69	14.5	1.74	15.6	1.88	16.8	2.02
	5.0	9.3	1.14	10.6	1.29	12.7	1.54	14.0	1.69	14.5	1.75	15.6	1.88	16.8	2.02
	10.0	9.3	1.17	10.6	1.31	12.7	1.56	14.0	1.70	14.5	1.76	15.6	1.89	16.8	2.03
	15.0	9.3	1.21	10.6	1.35	12.7	1.59	14.0	1.73	14.5	1.78	15.6	1.91	16.8	2.05
50%	20.0	9.3	1.35	10.6	1.45	12.7	1.66	14.0	1.79	14.5	1.83	15.6	1.96	16.8	2.08
	25.0	9.3	1.60	10.6	1.76	12.7	1.87	14.0	1.95	14.5	1.98	15.6	2.07	16.8	2.18
	30.0	9.3	1.63	10.6	1.78	12.7	2.04	14.0	2.19	14.5	2.24	15.6	2.38	16.8	2.49
	35.0	9.3	1.92	10.6	2.05	12.7	2.25	14.0	2.35	14.5	2.39	15.6	2.47	16.8	2.55
	40.0	9.3	2.30	10.6	2.47	12.7	2.73	14.0	2.88	14.5	2.93	15.6	3.04	16.8	3.15
	43.0	9.3	2.53	10.6	2.74	12.7	3.04	14.0	3.21	14.5	3.27	15.6	3.41	16.8	3.53
	46.0	9.3	2.78	10.6	3.01	12.7	3.37	14.0	3.56	14.5	3.63	15.6	3.79	16.8	3.94

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor water outlet temp. : °C													
		7.0		10.0		15.0		18.0		20.0		25.0		30.0	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
	-10.0	7.5	0.830	8.5	0.940	10.2	1.12	11.2	1.23	11.6	1.27	12.5	1.37	13.4	1.47
	-5.0	7.5	0.830	8.5	0.940	10.2	1.12	11.2	1.23	11.6	1.27	12.5	1.38	13.4	1.48
	0.0	7.5	0.830	8.5	0.940	10.2	1.13	11.2	1.24	11.6	1.28	12.5	1.38	13.4	1.48
	5.0	7.5	0.840	8.5	0.950	10.2	1.13	11.2	1.24	11.6	1.28	12.5	1.38	13.4	1.48
	10.0	7.5	0.860	8.5	0.970	10.2	1.15	11.2	1.25	11.6	1.29	12.5	1.39	13.4	1.49
	15.0	7.5	0.900	8.5	1.00	10.2	1.17	11.2	1.27	11.6	1.31	12.5	1.41	13.4	1.50
40%	20.0	7.5	1.01	8.5	1.08	10.2	1.22	11.2	1.32	11.6	1.35	12.5	1.44	13.4	1.53
	25.0	7.5	1.27	8.5	1.36	10.2	1.38	11.2	1.44	11.6	1.46	12.5	1.53	13.4	1.60
	30.0	7.5	1.29	8.5	1.40	10.2	1.59	11.2	1.70	11.6	1.74	12.5	1.82	13.4	1.82
	35.0	7.5	1.43	8.5	1.51	10.2	1.62	11.2	1.72	11.6	1.76	12.5	1.87	13.4	1.97
	40.0	7.5	1.70	8.5	1.81	10.2	1.96	11.2	2.04	11.6	2.07	12.5	2.13	13.4	2.18
	43.0	7.5	1.87	8.5	2.00	10.2	2.18	11.2	2.27	11.6	2.31	12.5	2.38	13.4	2.44
	46.0	7.5	2.05	8.5	2.19	10.2	2.41	11.2	2.52	11.6	2.56	12.5	2.65	13.4	2.73

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor water outlet temp. : °C													
		7.0		10.0		15.0		18.0		20.0		25.0		30.0	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
	-10.0	5.6	0.580	6.4	0.660	7.6	0.790	8.4	0.870	8.7	0.900	9.4	0.970	10.1	1.04
	-5.0	5.6	0.590	6.4	0.660	7.6	0.790	8.4	0.870	8.7	0.900	9.4	0.970	10.1	1.04
	0.0	5.6	0.590	6.4	0.670	7.6	0.800	8.4	0.870	8.7	0.900	9.4	0.970	10.1	1.04
	5.0	5.6	0.600	6.4	0.670	7.6	0.800	8.4	0.880	8.7	0.910	9.4	0.970	10.1	1.04
	10.0	5.6	0.610	6.4	0.690	7.6	0.810	8.4	0.890	8.7	0.910	9.4	0.980	10.1	1.05
	15.0	5.6	0.650	6.4	0.710	7.6	0.830	8.4	0.900	8.7	0.930	9.4	0.990	10.1	1.06
30%	20.0	5.6	0.730	6.4	0.780	7.6	0.870	8.4	0.940	8.7	0.960	9.4	1.02	10.1	1.08
	25.0	5.6	1.00	6.4	0.990	7.6	1.00	8.4	1.03	8.7	1.05	9.4	1.09	10.1	1.14
	30.0	5.6	1.02	6.4	1.10	7.6	1.23	8.4	1.31	8.7	1.33	9.4	1.30	10.1	1.29
	35.0	5.6	1.07	6.4	1.12	7.6	1.25	8.4	1.33	8.7	1.36	9.4	1.43	10.1	1.50
	40.0	5.6	1.26	6.4	1.32	7.6	1.40	8.4	1.44	8.7	1.45	9.4	1.48	10.1	1.50
	43.0	5.6	1.37	6.4	1.45	7.6	1.55	8.4	1.59	8.7	1.61	9.4	1.64	10.1	1.67
	46.0	5.6	1.49	6.4	1.58	7.6	1.70	8.4	1.76	8.7	1.78	9.4	1.82	10.1	1.86

1. Capacity Ratio of Outdoor Unit

1-4. U-10MF2E8 (Heating) Capacity Ratio 30-100%

TC: Total capacity (kW), PI: Power input (kW)

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor water outlet temp. : °C													
			25.0		30.0		33.0		35.0		38.0		40.0		45.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
100%	-19.8	-20.0	19.6	9.20	17.4	8.86	16.1	8.58	15.1	8.36	13.7	7.95	12.7	7.62	10.1	6.61
	-14.7	-15.0	23.4	9.44	20.8	9.30	19.2	8.97	18.1	8.71	16.4	8.25	15.3	7.90	12.2	6.83
	-9.6	-10.0	26.3	9.71	24.9	9.69	23.0	9.57	21.7	9.26	19.7	8.74	18.3	8.34	14.7	7.16
	-4.4	-5.0	29.5	9.71	27.5	9.71	26.3	9.71	25.5	9.64	23.2	9.18	21.6	8.73	17.3	7.42
	-1.8	-2.5	31.3	9.71	29.1	9.71	27.9	9.71	27.1	9.71	25.3	9.55	23.5	8.99	18.9	7.64
	0.8	0.0	33.3	9.71	30.9	9.71	29.6	9.71	28.8	9.71	27.6	9.71	25.7	9.36	19.8	7.62
	2.8	2.0	34.9	9.71	32.5	9.71	31.1	9.71	30.2	9.71	28.0	9.24	25.7	8.70	19.8	7.19
	6.0	5.0	37.6	9.71	35.0	9.71	33.5	9.71	31.5	9.16	28.0	8.17	25.7	7.71	19.8	6.45
	7.0	6.0	38.6	9.71	35.9	9.71	33.8	9.43	31.5	8.75	28.0	7.81	25.7	7.40	19.8	6.22
	8.6	7.5	40.1	9.71	37.3	9.71	33.8	8.77	31.5	8.16	28.0	7.30	25.7	6.94	19.8	5.88
	11.2	10.0	42.7	9.71	37.3	8.56	33.8	7.76	31.5	7.24	28.0	6.52	25.7	6.23	19.8	5.34
	16.4	15.0	43.2	7.47	37.3	6.53	33.8	5.97	31.5	5.60	28.0	5.08	25.7	4.91	19.8	4.30
	24.0	18.0	43.2	6.89	37.3	6.03	33.8	5.52	31.5	5.18	28.0	4.67	25.7	4.33	19.8	3.54

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor water outlet temp. : °C													
			25.0		30.0		33.0		35.0		38.0		40.0		45.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
90%	-19.8	-20.0	19.2	9.14	17.0	8.81	15.6	8.53	14.7	8.31	13.3	7.91	12.3	7.59	9.8	6.59
	-14.7	-15.0	22.9	9.71	20.3	9.27	18.7	8.93	17.7	8.67	16.0	8.22	14.8	7.87	11.8	6.82
	-9.6	-10.0	26.9	10.2	24.4	9.97	22.5	9.55	21.2	9.24	19.2	8.72	17.9	8.32	14.3	7.14
	-4.4	-5.0	30.2	10.2	28.0	10.2	26.8	10.2	25.5	10.1	23.1	9.39	21.5	8.93	17.1	7.57
	-1.8	-2.5	32.0	10.2	29.7	10.2	28.4	10.2	27.6	10.2	25.2	9.77	23.1	9.15	17.9	7.44
	0.8	0.0	34.0	10.2	31.6	10.2	30.2	10.2	28.4	9.61	25.2	8.94	23.1	8.45	17.9	7.04
	2.8	2.0	35.7	10.2	33.2	10.2	30.5	9.47	28.4	8.86	25.2	8.28	23.1	7.85	17.9	6.63
	6.0	5.0	38.5	10.2	33.6	9.12	30.5	8.40	28.4	7.91	25.2	7.47	23.1	7.10	17.9	6.01
	7.0	6.0	38.7	10.2	33.6	8.90	30.5	8.13	28.4	7.61	25.2	7.16	23.1	6.82	17.9	5.79
	8.6	7.5	38.9	9.44	33.6	8.25	30.5	7.55	28.4	7.09	25.2	6.70	23.1	6.40	17.9	5.48
	11.2	10.0	38.9	8.20	33.6	7.24	30.5	6.66	28.4	6.28	25.2	5.99	23.1	5.75	17.9	4.99
	16.4	15.0	38.9	6.54	33.6	5.74	30.5	5.26	28.4	4.94	25.2	4.66	23.1	4.53	17.9	4.01
	24.0	18.0	38.9	6.54	33.6	5.74	30.5	5.26	28.4	4.94	25.2	4.45	23.1	4.13	17.9	3.33

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor water outlet temp. : °C													
			25.0		30.0		33.0		35.0		38.0		40.0		45.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
80%	-19.8	-20.0	18.9	9.19	16.7	8.84	15.4	8.56	14.4	8.34	13.0	7.94	12.1	7.63	9.5	6.64
	-14.7	-15.0	22.6	9.80	20.1	9.33	18.5	8.99	17.4	8.72	15.7	8.27	14.5	7.92	11.6	6.86
	-9.6	-10.0	27.1	10.6	24.1	10.0	22.2	9.64	20.9	9.32	18.9	8.79	17.5	8.38	14.0	7.19
	-4.4	-5.0	30.9	10.6	28.6	10.6	27.1	10.4	25.2	10.2	22.4	9.34	20.5	8.75	15.9	7.21
	-1.8	-2.5	32.8	10.6	29.9	10.3	27.1	9.66	25.2	9.31	22.4	8.70	20.5	8.25	15.9	6.81
	0.8	0.0	34.5	10.4	29.9	9.29	27.1	8.78	25.2	8.51	22.4	8.02	20.5	7.63	15.9	6.47
	2.8	2.0	34.5	9.57	29.9	8.63	27.1	8.18	25.2	7.95	22.4	7.51	20.5	7.17	15.9	6.10
	6.0	5.0	34.5	8.50	29.9	7.70	27.1	7.32	25.2	7.13	22.4	6.77	20.5	6.47	15.9	5.51
	7.0	6.0	34.5	8.34	29.9	7.44	27.1	7.04	25.2	6.85	22.4	6.49	20.5	6.21	15.9	5.34
	8.6	7.5	34.5	7.66	29.9	6.88	27.1	6.54	25.2	6.38	22.4	6.08	20.5	5.84	15.9	5.05
	11.2	10.0	34.5	6.61	29.9	6.00	27.1	5.75	25.2	5.66	22.4	5.44	20.5	5.25	15.9	4.61
	16.4	15.0	34.5	6.14	29.9	5.39	27.1	4.95	25.2	4.65	22.4	4.23	20.5	4.13	15.9	3.70
	24.0	18.0	34.5	6.14	29.9	5.39	27.1	4.95	25.2	4.65	22.4	4.20	20.5	3.90	15.9	3.16

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor water outlet temp. : °C													
			25.0		30.0		33.0		35.0		38.0		40.0		45.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
70%	-19.8	-20.0	19.0	9.41	16.7	9.04	15.4	8.75	14.4	8.53	13.0	8.12	12.0	7.80	9.5	6.79
	-14.7	-15.0	22.8	10.1	20.1	9.57	18.5	9.21	17.4	8.94	15.7	8.47	14.5	8.11	11.5	7.03
	-9.6	-10.0	27.3	10.7	24.2	10.4	22.3	9.90	21.0	9.57	18.9	9.01	17.5	8.59	13.9	7.36
	-4.4	-5.0	30.2	10.2	26.1	9.59	23.7	9.24	22.1	8.95	19.6	8.39	18.0	7.91	13.9	6.56
	-1.8	-2.5	30.2	9.35	26.1	8.82	23.7	8.53	22.1	8.27	19.6	7.80	18.0	7.44	13.9	6.26
	0.8	0.0	30.2	8.49	26.1	8.06	23.7	7.83	22.1	7.62	19.6	7.21	18.0	6.89	13.9	5.89
	2.8	2.0	30.2	7.83	26.1	7.48	23.7	7.29	22.1	7.36	19.6	6.76	18.0	6.46	13.9	5.55
	6.0	5.0	30.2	6.89	26.1	6.64	23.7	6.50	22.1	6.36	19.6	6.05	18.0	5.81	13.9	4.99
	7.0	6.0	30.2	6.63	26.1	6.34	23.7	6.21	22.1	6.07	19.6	5.80	18.0	5.58	13.9	4.85
	8.6	7.5	30.2	6.06	26.1	5.86	23.7	5.77	22.1	5.67	19.6	5.45	18.0	5.25	13.9	4.60
	11.2	10.0	30.2	5.68	26.1	5.10	23.7	5.09	22.1	5.03	19.6	4.88	18.0	4.73	13.9	4.20
	16.4	15.0	30.2	5.68	26.1	5.00	23.7	4.59	22.1	4.32	19.6	3.91	18.0	3.71	13.9	3.37
	24.0	18.0	30.2	5.68	26.1	5.00	23.7	4.59	22.1	4.32	19.6	3.91	18.0	3.64	13.9	2.96

8

1. Capacity Ratio of Outdoor Unit

U-10MF2E8 (Heating) **Capacity Ratio 30-100%**

TC: Total capacity (kW), PI: Power input (kW)

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor water outlet temp. : °C													
			25.0		30.0		33.0		35.0		38.0		40.0		45.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
	-19.8	-20.0	19.5	9.61	17.2	9.23	15.8	8.94	14.8	8.70	13.3	8.29	12.3	7.96	9.7	6.94
	-14.7	-15.0	23.5	10.35	20.7	9.84	19.0	9.46	17.9	9.18	16.1	8.69	14.9	8.32	11.9	7.29
	-9.6	-10.0	25.9	9.98	22.4	9.57	20.3	9.03	18.9	8.66	16.8	8.06	15.4	7.62	11.9	6.41
	-4.4	-5.0	25.9	8.46	22.4	8.22	20.3	7.94	18.9	7.71	16.8	7.28	15.4	6.91	11.9	5.75
	-1.8	-2.5	25.9	7.70	22.4	7.54	20.3	7.32	18.9	7.12	16.8	6.75	15.4	6.45	11.9	5.50
	0.8	0.0	25.9	6.97	22.4	6.88	20.3	6.72	18.9	6.56	16.8	6.24	15.4	5.97	11.9	5.15
60%	2.8	2.0	25.9	6.41	22.4	6.38	20.3	6.25	18.9	6.12	16.8	5.84	15.4	5.61	11.9	4.85
	6.0	5.0	25.9	5.58	22.4	5.60	20.3	5.51	18.9	5.41	16.8	5.19	15.4	5.00	11.9	4.35
	7.0	6.0	25.9	5.26	22.4	5.32	20.3	5.26	18.9	5.17	16.8	4.98	15.4	4.81	11.9	4.24
	8.6	7.5	25.9	5.04	22.4	4.92	20.3	4.89	18.9	4.84	16.8	4.68	15.4	4.54	11.9	4.02
	11.2	10.0	25.9	5.04	22.4	4.45	20.3	4.32	18.9	4.30	16.8	4.21	15.4	4.10	11.9	3.68
	16.4	15.0	25.9	5.04	22.4	4.45	20.3	4.09	18.9	3.85	16.8	3.50	15.4	3.26	11.9	2.96
	24.0	18.0	25.9	5.04	22.4	4.45	20.3	4.09	18.9	3.85	16.8	3.50	15.4	3.26	11.9	2.67

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor water outlet temp. : °C													
			25.0		30.0		33.0		35.0		38.0		40.0		45.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
	-19.8	-20.0	20.8	9.97	18.3	9.56	16.8	9.24	15.7	9.00	14.0	8.49	12.8	8.10	9.9	6.94
	-14.7	-15.0	21.6	9.31	18.7	8.65	16.9	8.23	15.8	7.93	14.0	7.43	12.8	7.07	9.9	6.02
	-9.6	-10.0	21.6	8.08	18.7	7.80	16.9	7.46	15.8	7.13	14.0	6.64	12.8	6.29	9.9	5.32
	-4.4	-5.0	21.6	6.83	18.7	6.68	16.9	6.49	15.8	6.31	14.0	5.98	12.8	5.71	9.9	4.79
	-1.8	-2.5	21.6	6.21	18.7	6.13	16.9	5.98	15.8	5.83	14.0	5.55	12.8	5.32	9.9	4.58
	0.8	0.0	21.6	5.62	18.7	5.59	16.9	5.48	15.8	5.37	14.0	5.13	12.8	4.92	9.9	4.27
50%	2.8	2.0	21.6	5.16	18.7	5.15	16.9	5.06	15.8	4.96	14.0	4.76	12.8	4.58	9.9	4.01
	6.0	5.0	21.6	4.36	18.7	4.46	16.9	4.43	15.8	4.37	14.0	4.23	12.8	4.10	9.9	3.62
	7.0	6.0	21.6	4.24	18.7	4.24	16.9	4.23	15.8	4.19	14.0	4.07	12.8	3.95	9.9	3.52
	8.6	7.5	21.6	4.24	18.7	3.93	16.9	3.95	15.8	3.92	14.0	3.83	12.8	3.73	9.9	3.35
	11.2	10.0	21.6	4.24	18.7	3.76	16.9	3.50	15.8	3.50	14.0	3.45	12.8	3.38	9.9	3.07
	16.4	15.0	21.6	4.24	18.7	3.76	16.9	3.47	15.8	3.27	14.0	2.98	12.8	2.79	9.9	2.48
	24.0	18.0	21.6	4.24	18.7	3.76	16.9	3.47	15.8	3.27	14.0	2.98	12.8	2.79	9.9	2.30

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor water outlet temp. : °C													
			25.0		30.0		33.0		35.0		38.0		40.0		45.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
	-19.8	-20.0	17.3	7.54	14.9	7.13	13.5	6.84	12.6	6.62	11.2	6.25	10.3	5.97	7.9	5.15
	-14.7	-15.0	17.3	6.82	14.9	6.37	13.5	6.07	12.6	5.85	11.2	5.49	10.3	5.23	7.9	4.49
	-9.6	-10.0	17.3	5.88	14.9	5.72	13.5	5.51	12.6	5.28	11.2	4.93	10.3	4.68	7.9	3.98
	-4.4	-5.0	17.3	4.97	14.9	4.90	13.5	4.77	12.6	4.65	11.2	4.43	10.3	4.24	7.9	3.60
	-1.8	-2.5	17.3	4.52	14.9	4.48	13.5	4.38	12.6	4.29	11.2	4.09	10.3	3.93	7.9	3.43
	0.8	0.0	17.3	4.02	14.9	4.04	13.5	3.97	12.6	3.90	11.2	3.75	10.3	3.62	7.9	3.18
40%	2.8	2.0	17.3	3.64	14.9	3.69	13.5	3.66	12.6	3.61	11.2	3.49	10.3	3.38	7.9	3.00
	6.0	5.0	17.3	3.22	14.9	3.21	13.5	3.22	12.6	3.20	11.2	3.12	10.3	3.04	7.9	2.73
	7.0	6.0	17.3	3.22	14.9	3.06	13.5	3.08	12.6	3.07	11.2	3.00	10.3	2.93	7.9	2.65
	8.6	7.5	17.3	3.22	14.9	2.87	13.5	2.88	12.6	2.88	11.2	2.83	10.3	2.78	7.9	2.53
	11.2	10.0	17.3	3.22	14.9	2.87	13.5	2.66	12.6	2.58	11.2	2.56	10.3	2.53	7.9	2.33
	16.4	15.0	17.3	3.22	14.9	2.87	13.5	2.66	12.6	2.51	11.2	2.30	10.3	2.16	7.9	1.89
	24.0	18.0	17.3	3.22	14.9	2.87	13.5	2.66	12.6	2.51	11.2	2.30	10.3	2.16	7.9	1.80

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor water outlet temp. : °C													
			25.0		30.0		33.0		35.0		38.0		40.0		45.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
	-19.8	-20.0	13.0	5.17	11.2	4.90	10.2	4.70	9.5	4.56	8.4	4.32	7.7	4.14	6.0	3.60
	-14.7	-15.0	13.0	4.66	11.2	4.40	10.2	4.20	9.5	4.05	8.4	3.82	7.7	3.65	6.0	3.15
	-9.6	-10.0	13.0	4.02	11.2	3.93	10.2	3.81	9.5	3.69	8.4	3.44	7.7	3.28	6.0	2.81
	-4.4	-5.0	13.0	3.35	11.2	3.33	10.2	3.26	9.5	3.19	8.4	3.06	7.7	2.95	6.0	2.54
	-1.8	-2.5	13.0	3.01	11.2	3.03	10.2	2.98	9.5	2.94	8.4	2.83	7.7	2.73	6.0	2.42
	0.8	0.0	13.0	2.69	11.2	2.74	10.2	2.72	9.5	2.68	8.4	2.60	7.7	2.53	6.0	2.26
30%	2.8	2.0	13.0	2.44	11.2	2.52	10.2	2.51	9.5	2.49	8.4	2.43	7.7	2.37	6.0	2.13
	6.0	5.0	13.0	2.32	11.2	2.20	10.2	2.23	9.5	2.22	8.4	2.19	7.7	2.14	6.0	1.96
	7.0	6.0	13.0	2.32	11.2	2.11	10.2	2.14	9.5	2.14	8.4	2.11	7.7	2.07	6.0	1.90
	8.6	7.5	13.0	2.32	11.2	2.08	10.2	2.01	9.5	2.02	8.4	2.00	7.7	1.97	6.0	1.82
	11.2	10.0	13.0	2.32	11.2	2.08	10.2	1.94	9.5	1.84	8.4	1.82	7.7	1.80	6.0	1.69
	16.4	15.0	13.0	2.32	11.2	2.08	10.2	1.94	9.5	1.84	8.4	1.70	7.7	1.60	6.0	1.38
	24.0	18.0	13.0	2.32	11.2	2.08	10.2	1.94	9.5	1.84	8.4	1.70	7.7	1.60	6.0	1.36

1. Capacity Ratio of Outdoor Unit

1-5. U-12MF2E8 (Cooling)　　　　Capacity Ratio 30-100%

TC: Total capacity (kW), PI: Power input (kW)

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor water outlet temp. : °C													
		7.0		10.0		15.0		18.0		20.0		25.0		30.0	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
100%	-10.0	22.3	3.06	25.4	3.47	30.5	4.16	33.5	4.57	34.6	4.72	37.4	5.10	40.2	5.48
	-5.0	22.3	3.07	25.4	3.48	30.5	4.17	33.5	4.58	34.6	4.74	37.4	5.11	40.2	5.49
	0.0	22.3	3.09	25.4	3.50	30.5	4.19	33.5	4.60	34.6	4.76	37.4	5.13	40.2	5.51
	5.0	22.3	3.14	25.4	3.55	30.5	4.24	33.5	4.65	34.6	4.80	37.4	5.17	40.2	5.55
	10.0	22.3	3.26	25.4	3.67	30.5	4.34	33.5	4.74	34.6	4.89	37.4	5.27	40.2	5.64
	15.0	22.3	3.62	25.4	4.00	30.5	4.63	33.5	5.02	34.6	5.16	37.4	5.52	40.2	5.87
	20.0	22.3	3.75	25.4	4.22	30.5	5.28	33.5	5.98	34.6	6.25	37.4	6.95	40.2	7.69
	25.0	22.3	4.71	25.4	5.46	30.5	6.80	33.5	7.68	34.6	8.02	37.4	8.88	40.2	9.79
	30.0	22.3	5.90	25.4	6.82	30.5	8.46	33.5	9.52	34.6	9.92	37.4	11.0	40.2	12.0
	35.0	22.3	7.17	25.4	8.27	30.5	10.2	33.5	11.5	34.6	12.0	36.8	12.8	37.8	12.8
	40.0	22.3	8.49	25.4	9.79	30.5	12.1	32.3	12.8	32.7	12.8	33.7	12.8	34.7	12.8
	43.0	22.3	9.34	25.4	10.8	29.7	12.8	30.7	12.8	31.0	12.8	32.0	12.8	32.9	12.8
	46.0	22.3	10.2	25.4	11.8	28.1	12.8	28.9	12.6	28.9	12.4	28.9	11.7	28.9	11.2

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor water outlet temp. : °C													
		7.0		10.0		15.0		18.0		20.0		25.0		30.0	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
90%	-10.0	20.1	2.75	22.8	3.13	27.4	3.75	30.2	4.12	31.2	4.26	33.7	4.60	36.2	4.94
	-5.0	20.1	2.77	22.8	3.14	27.4	3.76	30.2	4.13	31.2	4.27	33.7	4.61	36.2	4.95
	0.0	20.1	2.79	22.8	3.16	27.4	3.78	30.2	4.15	31.2	4.29	33.7	4.63	36.2	4.97
	5.0	20.1	2.83	22.8	3.20	27.4	3.81	30.2	4.18	31.2	4.32	33.7	4.66	36.2	5.00
	10.0	20.1	2.93	22.8	3.29	27.4	3.90	30.2	4.26	31.2	4.40	33.7	4.73	36.2	5.07
	15.0	20.1	3.22	22.8	3.55	27.4	4.12	30.2	4.46	31.2	4.59	33.7	4.91	36.2	5.23
	20.0	20.1	3.45	22.8	3.83	27.4	4.45	30.2	4.82	31.2	4.96	33.7	5.45	36.2	5.96
	25.0	20.1	3.98	22.8	4.55	27.4	5.55	30.2	6.20	31.2	6.44	33.7	7.07	36.2	7.72
	30.0	20.1	5.01	22.8	5.72	27.4	6.98	30.2	7.77	31.2	8.07	33.7	8.83	36.2	9.62
	35.0	20.1	6.12	22.8	6.98	27.4	8.49	30.2	9.45	31.2	9.80	33.7	10.7	36.2	11.7
	40.0	20.1	7.26	22.8	8.29	27.4	10.1	30.2	11.2	31.2	11.6	33.7	12.7	34.7	12.8
	43.0	20.1	7.99	22.8	9.13	27.4	11.1	30.2	12.4	31.0	12.7	32.0	12.8	32.9	12.8
	46.0	20.1	8.76	22.8	10.0	27.4	12.2	28.9	12.6	28.9	12.4	28.9	11.7	28.9	11.1

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor water outlet temp. : °C													
		7.0		10.0		15.0		18.0		20.0		25.0		30.0	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
80%	-10.0	17.9	2.45	20.3	2.78	24.4	3.34	26.8	3.67	27.7	3.79	29.9	4.10	32.2	4.40
	-5.0	17.9	2.46	20.3	2.79	24.4	3.35	26.8	3.68	27.7	3.80	29.9	4.11	32.2	4.41
	0.0	17.9	2.48	20.3	2.81	24.4	3.36	26.8	3.69	27.7	3.82	29.9	4.12	32.2	4.42
	5.0	17.9	2.52	20.3	2.85	24.4	3.39	26.8	3.72	27.7	3.84	29.9	4.15	32.2	4.45
	10.0	17.9	2.61	20.3	2.93	24.4	3.46	26.8	3.78	27.7	3.90	29.9	4.20	32.2	4.50
	15.0	17.9	2.84	20.3	3.13	24.4	3.63	26.8	3.94	27.7	4.05	29.9	4.33	32.2	4.62
	20.0	17.9	3.15	20.3	3.49	24.4	4.04	26.8	4.37	27.7	4.50	29.9	4.73	32.2	4.97
	25.0	17.9	3.35	20.3	3.76	24.4	4.48	26.8	4.94	27.7	5.11	29.9	5.54	32.2	5.99
	30.0	17.9	4.23	20.3	4.76	24.4	5.68	26.8	6.26	27.7	6.47	29.9	7.02	32.2	7.58
	35.0	17.9	5.18	20.3	5.84	24.4	6.97	26.8	7.67	27.7	7.94	29.9	8.60	32.2	9.27
	40.0	17.9	6.15	20.3	6.95	24.4	8.31	26.8	9.15	27.7	9.46	29.9	10.3	32.2	11.1
	43.0	17.9	6.77	20.3	7.66	24.4	9.17	26.8	10.1	27.7	10.5	29.9	11.3	32.2	12.2
	46.0	17.9	7.43	20.3	8.41	24.4	10.1	26.8	11.1	27.7	11.5	28.9	11.7	28.9	11.1

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor water outlet temp. : °C													
		7.0		10.0		15.0		18.0		20.0		25.0		30.0	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
70%	-10.0	15.6	2.03	17.8	2.30	21.3	2.76	23.5	3.03	24.2	3.13	26.2	3.38	28.1	3.63
	-5.0	15.6	2.03	17.8	2.31	21.3	2.76	23.5	3.04	24.2	3.14	26.2	3.39	28.1	3.64
	0.0	15.6	2.05	17.8	2.32	21.3	2.78	23.5	3.05	24.2	3.15	26.2	3.40	28.1	3.65
	5.0	15.6	2.08	17.8	2.35	21.3	2.80	23.5	3.07	24.2	3.17	26.2	3.42	28.1	3.67
	10.0	15.6	2.15	17.8	2.41	21.3	2.85	23.5	3.12	24.2	3.22	26.2	3.46	28.1	3.71
	15.0	15.6	2.33	17.8	2.57	21.3	2.98	23.5	3.23	24.2	3.32	26.2	3.56	28.1	3.79
	20.0	15.6	2.69	17.8	2.96	21.3	3.36	23.5	3.55	24.2	3.62	26.2	3.82	28.1	4.02
	25.0	15.6	2.72	17.8	3.00	21.3	3.46	23.5	3.73	24.2	3.83	26.2	4.09	28.1	4.34
	30.0	15.6	3.32	17.8	3.69	21.3	4.31	23.5	4.68	24.2	4.82	26.2	5.17	28.1	5.52
	35.0	15.6	4.09	17.8	4.55	21.3	5.33	23.5	5.79	24.2	5.97	26.2	6.40	28.1	6.84
	40.0	15.6	4.86	17.8	5.42	21.3	6.37	23.5	6.94	24.2	7.15	26.2	7.67	28.1	8.20
	43.0	15.6	5.35	17.8	5.98	21.3	7.03	23.5	7.67	24.2	7.91	26.2	8.49	28.1	9.08
	46.0	15.6	5.87	17.8	6.57	21.3	7.74	23.5	8.45	24.2	8.71	26.2	9.37	28.1	10.0

1. Capacity Ratio of Outdoor Unit

U-12MF2E8 (Cooling) **Capacity Ratio 30-100%**

TC: Total capacity (kW), PI: Power input (kW)

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor water outlet temp. : °C													
		7.0		10.0		15.0		18.0		20.0		25.0		30.0	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
60%	-10.0	13.4	1.55	15.2	1.76	18.3	2.11	20.1	2.32	20.8	2.39	22.4	2.58	24.1	2.78
	-5.0	13.4	1.56	15.2	1.76	18.3	2.11	20.1	2.32	20.8	2.40	22.4	2.59	24.1	2.78
	0.0	13.4	1.57	15.2	1.78	18.3	2.12	20.1	2.33	20.8	2.41	22.4	2.60	24.1	2.79
	5.0	13.4	1.59	15.2	1.80	18.3	2.14	20.1	2.35	20.8	2.42	22.4	2.61	24.1	2.80
	10.0	13.4	1.65	15.2	1.85	18.3	2.18	20.1	2.38	20.8	2.46	22.4	2.64	24.1	2.83
	15.0	13.4	1.78	15.2	1.96	18.3	2.27	20.1	2.46	20.8	2.53	22.4	2.71	24.1	2.89
	20.0	13.4	2.14	15.2	2.31	18.3	2.52	20.1	2.67	20.8	2.72	22.4	2.87	24.1	3.03
	25.0	13.4	2.17	15.2	2.38	18.3	2.73	20.1	2.94	20.8	3.02	22.4	3.21	24.1	3.40
	30.0	13.4	2.45	15.2	2.68	18.3	3.05	20.1	3.27	20.8	3.34	22.4	3.54	24.1	3.73
	35.0	13.4	3.02	15.2	3.31	18.3	3.79	20.1	4.07	20.8	4.17	22.4	4.43	24.1	4.68
	40.0	13.4	3.58	15.2	3.95	18.3	4.55	20.1	4.90	20.8	5.02	22.4	5.34	24.1	5.65
	43.0	13.4	3.94	15.2	4.35	18.3	5.02	20.1	5.42	20.8	5.56	22.4	5.92	24.1	6.27
	46.0	13.4	4.32	15.2	4.78	18.3	5.53	20.1	5.98	20.8	6.14	22.4	6.54	24.1	6.93

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor water outlet temp. : °C													
		7.0		10.0		15.0		18.0		20.0		25.0		30.0	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
50%	-10.0	11.2	1.17	12.7	1.32	15.2	1.58	16.8	1.74	17.3	1.80	18.7	1.94	20.1	2.09
	-5.0	11.2	1.17	12.7	1.33	15.2	1.59	16.8	1.75	17.3	1.80	18.7	1.95	20.1	2.09
	0.0	11.2	1.18	12.7	1.34	15.2	1.60	16.8	1.75	17.3	1.81	18.7	1.95	20.1	2.10
	5.0	11.2	1.20	12.7	1.36	15.2	1.61	16.8	1.77	17.3	1.82	18.7	1.96	20.1	2.11
	10.0	11.2	1.24	12.7	1.39	15.2	1.64	16.8	1.79	17.3	1.85	18.7	1.99	20.1	2.13
	15.0	11.2	1.34	12.7	1.48	15.2	1.70	16.8	1.85	17.3	1.90	18.7	2.03	20.1	2.17
	20.0	11.2	1.65	12.7	1.72	15.2	1.87	16.8	1.98	17.3	2.03	18.7	2.14	20.1	2.26
	25.0	11.2	1.73	12.7	1.89	15.2	2.15	16.8	2.31	17.3	2.36	18.7	2.48	20.1	2.53
	30.0	11.2	1.81	12.7	1.94	15.2	2.18	16.8	2.34	17.3	2.40	18.7	2.54	20.1	2.68
	35.0	11.2	2.22	12.7	2.40	15.2	2.68	16.8	2.84	17.3	2.90	18.7	3.04	20.1	3.17
	40.0	11.2	2.63	12.7	2.86	15.2	3.22	16.8	3.43	17.3	3.50	18.7	3.68	20.1	3.85
	43.0	11.2	2.89	12.7	3.15	15.2	3.56	16.8	3.80	17.3	3.88	18.7	4.09	20.1	4.29
	46.0	11.2	3.16	12.7	3.46	15.2	3.92	16.8	4.19	17.3	4.28	18.7	4.52	20.1	4.74

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor water outlet temp. : °C													
		7.0		10.0		15.0		18.0		20.0		25.0		30.0	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
40%	-10.0	8.9	0.860	10.2	0.970	12.2	1.16	13.4	1.28	13.8	1.32	15.0	1.42	16.1	1.53
	-5.0	8.9	0.860	10.2	0.980	12.2	1.17	13.4	1.28	13.8	1.32	15.0	1.43	16.1	1.53
	0.0	8.9	0.870	10.2	0.980	12.2	1.17	13.4	1.29	13.8	1.33	15.0	1.43	16.1	1.54
	5.0	8.9	0.890	10.2	1.00	12.2	1.19	13.4	1.30	13.8	1.34	15.0	1.44	16.1	1.55
	10.0	8.9	0.920	10.2	1.03	12.2	1.21	13.4	1.32	13.8	1.36	15.0	1.46	16.1	1.56
	15.0	8.9	1.00	10.2	1.09	12.2	1.26	13.4	1.36	13.8	1.40	15.0	1.49	16.1	1.59
	20.0	8.9	1.22	10.2	1.26	12.2	1.37	13.4	1.45	13.8	1.49	15.0	1.57	16.1	1.65
	25.0	8.9	1.37	10.2	1.49	12.2	1.68	13.4	1.75	13.8	1.75	15.0	1.78	16.1	1.82
	30.0	8.9	1.40	10.2	1.52	12.2	1.71	13.4	1.83	13.8	1.87	15.0	1.97	16.1	2.08
	35.0	8.9	1.64	10.2	1.75	12.2	1.90	13.4	1.98	13.8	2.01	15.0	2.08	16.1	2.14
	40.0	8.9	1.93	10.2	2.07	12.2	2.28	13.4	2.39	13.8	2.43	15.0	2.52	16.1	2.61
	43.0	8.9	2.11	10.2	2.27	12.2	2.51	13.4	2.64	13.8	2.69	15.0	2.80	16.1	2.90
	46.0	8.9	2.30	10.2	2.48	12.2	2.76	13.4	2.91	13.8	2.97	15.0	3.09	16.1	3.21

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor water outlet temp. : °C													
		7.0		10.0		15.0		18.0		20.0		25.0		30.0	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
30%	-10.0	6.7	0.610	7.6	0.690	9.1	0.820	10.1	0.900	10.4	0.930	11.2	1.00	12.1	1.08
	-5.0	6.7	0.610	7.6	0.690	9.1	0.820	10.1	0.900	10.4	0.930	11.2	1.01	12.1	1.08
	0.0	6.7	0.620	7.6	0.700	9.1	0.830	10.1	0.910	10.4	0.940	11.2	1.01	12.1	1.08
	5.0	6.7	0.630	7.6	0.710	9.1	0.840	10.1	0.920	10.4	0.950	11.2	1.02	12.1	1.09
	10.0	6.7	0.660	7.6	0.730	9.1	0.860	10.1	0.930	10.4	0.960	11.2	1.03	12.1	1.10
	15.0	6.7	0.720	7.6	0.780	9.1	0.890	10.1	0.960	10.4	0.990	11.2	1.06	12.1	1.12
	20.0	6.7	0.890	7.6	0.910	9.1	0.980	10.1	1.03	10.4	1.05	11.2	1.11	12.1	1.17
	25.0	6.7	1.09	7.6	1.17	9.1	1.24	10.1	1.23	10.4	1.23	11.2	1.25	12.1	1.28
	30.0	6.7	1.12	7.6	1.20	9.1	1.33	10.1	1.41	10.4	1.44	11.2	1.52	12.1	1.59
	35.0	6.7	1.22	7.6	1.28	9.1	1.36	10.1	1.44	10.4	1.47	11.2	1.54	12.1	1.62
	40.0	6.7	1.42	7.6	1.49	9.1	1.60	10.1	1.66	10.4	1.67	11.2	1.72	12.1	1.75
	43.0	6.7	1.54	7.6	1.63	9.1	1.76	10.1	1.83	10.4	1.85	11.2	1.90	12.1	1.94
	46.0	6.7	1.67	7.6	1.77	9.1	1.93	10.1	2.00	10.4	2.03	11.2	2.09	12.1	2.15

1. Capacity Ratio of Outdoor Unit

1-6. U-12MF2E8 (Heating) Capacity Ratio 30-100%

TC: Total capacity (kW), PI: Power input (kW)

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor water outlet temp. : °C													
			25.0		30.0		33.0		35.0		38.0		40.0		45.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
	-19.8	-20.0	22.7	10.4	20.3	10.1	18.8	9.75	17.7	9.50	16.1	9.04	14.9	8.68	12.0	7.53
	-14.7	-15.0	27.0	11.0	24.2	10.5	22.4	10.1	21.1	9.86	19.2	9.36	17.9	8.97	14.4	7.79
	-9.6	-10.0	32.0	12.0	28.8	11.2	26.7	10.8	25.2	10.4	23.0	9.86	21.5	9.43	17.3	8.14
	-4.4	-5.0	35.2	12.2	33.6	12.2	31.3	11.5	29.6	11.0	27.0	10.3	25.2	9.84	20.4	8.41
	-1.8	-2.5	37.1	12.2	35.0	12.2	34.1	12.2	32.3	11.7	29.5	10.7	27.5	10.2	22.2	8.65
	0.8	0.0	39.2	12.2	36.8	12.2	35.5	12.2	34.8	12.2	32.1	11.4	30.0	10.6	23.6	8.69
100%	2.8	2.0	41.0	12.2	38.6	12.2	37.1	12.2	36.2	12.2	33.3	11.3	30.6	10.3	23.6	8.30
	6.0	5.0	43.9	12.2	41.3	12.2	39.8	12.2	37.5	11.5	33.3	10.1	30.6	9.14	23.6	7.46
	7.0	6.0	45.0	12.2	42.3	12.2	40.3	12.0	37.5	11.0	33.3	9.64	30.6	8.78	23.6	7.19
	8.6	7.5	46.6	12.2	43.8	12.2	40.3	11.2	37.5	10.3	33.3	9.05	30.6	8.25	23.6	6.81
	11.2	10.0	49.5	12.2	44.4	11.1	40.3	9.96	37.5	9.20	33.3	8.11	30.6	7.41	23.6	6.20
	16.4	15.0	51.4	10.2	44.4	8.68	40.3	7.82	37.5	7.26	33.3	6.44	30.6	5.91	23.6	5.04
	24.0	18.0	51.4	8.61	44.4	7.34	40.3	6.60	37.5	6.11	33.3	5.41	30.6	4.94	23.6	4.22

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor water outlet temp. : °C													
			25.0		30.0		33.0		35.0		38.0		40.0		45.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
	-19.8	-20.0	22.1	10.2	19.7	9.87	18.1	9.57	17.1	9.33	15.5	8.89	14.4	8.54	11.5	7.44
	-14.7	-15.0	26.3	10.8	23.5	10.3	21.7	9.98	20.5	9.70	18.6	9.21	17.3	8.84	13.8	7.68
	-9.6	-10.0	31.3	11.8	28.0	11.1	25.9	10.6	24.5	10.3	22.3	9.73	20.7	9.31	16.7	8.03
	-4.4	-5.0	36.0	12.8	33.6	12.5	31.1	11.7	29.4	11.1	26.8	10.5	24.9	9.96	20.0	8.50
	-1.8	-2.5	38.0	12.8	35.7	12.8	34.0	12.5	32.1	11.9	29.2	10.9	27.2	10.3	21.3	8.51
	0.8	0.0	40.2	12.8	37.7	12.8	36.3	12.8	33.8	11.8	30.0	10.5	27.5	9.79	21.3	8.07
90%	2.8	2.0	42.0	12.8	39.4	12.8	36.3	11.8	33.8	11.0	30.0	9.72	27.5	9.11	21.3	7.66
	6.0	5.0	45.0	12.8	40.0	11.6	36.3	10.6	33.8	9.86	30.0	8.82	27.5	8.28	21.3	6.94
	7.0	6.0	45.1	12.8	40.0	11.4	36.3	10.3	33.8	9.54	30.0	8.47	27.5	7.95	21.3	6.70
	8.6	7.5	46.3	12.5	40.0	10.6	36.3	9.59	33.8	8.92	30.0	7.93	27.5	7.47	21.3	6.35
	11.2	10.0	46.3	11.0	40.0	9.40	36.3	8.52	33.8	7.94	30.0	7.10	27.5	6.72	21.3	5.79
	16.4	15.0	46.3	8.31	40.0	7.25	36.3	6.63	33.8	6.21	30.0	5.59	27.5	5.34	21.3	4.71
	24.0	18.0	46.3	7.37	40.0	6.49	36.3	5.96	33.8	5.60	30.0	5.07	27.5	4.72	21.3	3.92

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor water outlet temp. : °C													
			25.0		30.0		33.0		35.0		38.0		40.0		45.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
	-19.8	-20.0	21.6	9.98	19.1	9.64	17.6	9.36	16.6	9.13	15.0	8.72	13.9	8.39	11.0	7.34
	-14.7	-15.0	25.7	10.7	22.9	10.2	21.1	9.87	19.9	9.59	18.0	9.11	16.7	8.74	13.3	7.61
	-9.6	-10.0	30.7	11.7	27.4	11.0	25.3	10.5	23.9	10.2	21.6	9.65	20.1	9.22	16.1	7.96
	-4.4	-5.0	36.9	13.3	33.6	12.7	31.1	11.9	29.3	11.4	26.6	10.6	24.4	10.0	18.9	8.24
	-1.8	-2.5	39.0	13.3	35.6	12.8	32.2	11.6	30.0	10.9	26.7	10.1	24.4	9.47	18.9	7.79
	0.8	0.0	41.1	13.3	35.6	11.6	32.2	10.6	30.0	9.95	26.7	9.27	24.4	8.81	18.9	7.44
80%	2.8	2.0	41.1	12.2	35.6	10.8	32.2	9.92	30.0	9.33	26.7	8.71	24.4	8.29	18.9	7.04
	6.0	5.0	41.1	11.0	35.6	9.72	32.2	8.96	30.0	8.43	26.7	7.90	24.4	7.53	18.9	6.40
	7.0	6.0	41.1	10.9	35.6	9.51	32.2	8.68	30.0	8.14	26.7	7.59	24.4	7.23	18.9	6.18
	8.6	7.5	41.1	10.1	35.6	8.84	32.2	8.09	30.0	7.59	26.7	7.11	24.4	6.80	18.9	5.86
	11.2	10.0	41.1	8.82	35.6	7.78	32.2	7.16	30.0	6.75	26.7	6.38	24.4	6.13	18.9	5.35
	16.4	15.0	41.1	6.93	35.6	6.11	32.2	5.62	30.0	5.29	26.7	5.01	24.4	4.88	18.9	4.35
	24.0	18.0	41.1	6.93	35.6	6.11	32.2	5.62	30.0	5.29	26.7	4.80	24.4	4.47	18.9	3.65

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor water outlet temp. : °C													
			25.0		30.0		33.0		35.0		38.0		40.0		45.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
	-19.8	-20.0	21.2	10.0	18.8	9.68	17.3	9.39	16.2	9.16	14.6	8.74	13.5	8.41	10.7	7.36
	-14.7	-15.0	25.4	10.7	22.5	10.2	20.7	9.85	19.5	9.57	17.6	9.10	16.3	8.73	13.0	7.61
	-9.6	-10.0	30.4	11.7	27.0	11.1	24.9	10.6	23.5	10.2	21.2	9.67	19.7	9.24	15.7	7.97
	-4.4	-5.0	36.0	12.7	31.1	11.3	28.2	10.6	26.3	10.3	23.3	9.57	21.4	8.95	16.5	7.48
	-1.8	-2.5	36.0	11.6	31.1	10.4	28.2	9.83	26.3	9.52	23.3	8.96	21.4	8.53	16.5	7.11
	0.8	0.0	36.0	10.6	31.1	9.60	28.2	9.05	26.3	8.79	23.3	8.30	21.4	7.92	16.5	6.76
70%	2.8	2.0	36.0	9.88	31.1	8.94	28.2	8.45	26.3	8.51	23.3	7.80	21.4	7.45	16.5	6.39
	6.0	5.0	36.0	8.81	31.1	8.00	28.2	7.59	26.3	7.41	23.3	7.05	21.4	6.75	16.5	5.80
	7.0	6.0	36.0	8.67	31.1	7.76	28.2	7.32	26.3	7.13	23.3	6.77	21.4	6.49	16.5	5.62
	8.6	7.5	36.0	7.98	31.1	7.19	28.2	6.81	26.3	6.66	23.3	6.36	21.4	6.12	16.5	5.34
	11.2	10.0	36.0	6.91	31.1	6.30	28.2	6.02	26.3	5.93	23.3	5.72	21.4	5.53	16.5	4.88
	16.4	15.0	36.0	6.43	31.1	5.68	28.2	5.23	26.3	4.93	23.3	4.49	21.4	4.39	16.5	3.98
	24.0	18.0	36.0	6.43	31.1	5.68	28.2	5.23	26.3	4.93	23.3	4.49	21.4	4.19	16.5	3.44

1. Capacity Ratio of Outdoor Unit

U-12MF2E8 (Heating) **Capacity Ratio 30-100%**

TC: Total capacity (kW), PI: Power input (kW)

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor water outlet temp. : °C													
			25.0		30.0		33.0		35.0		38.0		40.0		45.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
60%	-19.8	-20.0	21.3	10.1	18.8	9.69	17.3	9.39	16.2	9.16	14.6	8.74	13.5	8.40	10.7	7.36
	-14.7	-15.0	25.6	10.7	22.6	10.3	20.8	9.88	19.6	9.60	17.6	9.11	16.3	8.74	12.9	7.62
	-9.6	-10.0	30.7	11.6	26.7	10.9	24.2	10.3	22.5	9.83	20.0	9.15	18.3	8.66	14.2	7.30
	-4.4	-5.0	30.8	9.94	26.7	9.42	24.2	9.09	22.5	8.82	20.0	8.30	18.3	7.86	14.2	6.56
	-1.8	-2.5	30.8	9.11	26.7	8.68	24.2	8.41	22.5	8.17	20.0	7.73	18.3	7.39	14.2	6.28
	0.8	0.0	30.8	8.29	26.7	7.95	24.2	7.74	22.5	7.54	20.0	7.16	18.3	6.86	14.2	5.91
	2.8	2.0	30.8	7.66	26.7	7.39	24.2	7.22	22.5	7.05	20.0	6.73	18.3	6.45	14.2	5.59
	6.0	5.0	30.8	6.77	26.7	6.59	24.2	6.47	22.5	6.33	20.0	6.05	18.3	5.82	14.2	5.05
	7.0	6.0	30.8	6.51	26.7	6.30	24.2	6.19	22.5	6.06	20.0	5.81	18.3	5.60	14.2	4.92
	8.6	7.5	30.8	5.97	26.7	5.84	24.2	5.77	22.5	5.67	20.0	5.47	18.3	5.29	14.2	4.68
	11.2	10.0	30.8	5.73	26.7	5.11	24.2	5.11	22.5	5.07	20.0	4.93	18.3	4.79	14.2	4.29
	16.4	15.0	30.8	5.73	26.7	5.08	24.2	4.69	22.5	4.43	20.0	4.03	18.3	3.81	14.2	3.50
	24.0	18.0	30.8	5.73	26.7	5.08	24.2	4.69	22.5	4.43	20.0	4.03	18.3	3.77	14.2	3.12

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor water outlet temp. : °C													
			25.0		30.0		33.0		35.0		38.0		40.0		45.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
50%	-19.8	-20.0	22.2	10.2	19.6	9.76	17.9	9.45	16.8	9.21	15.1	8.78	14.0	8.44	11.8	7.86
	-14.7	-15.0	25.7	10.5	22.2	9.79	20.1	9.32	18.8	8.98	16.7	8.42	15.3	8.02	11.8	6.85
	-9.6	-10.0	25.7	9.21	22.2	8.87	20.1	8.45	18.8	8.09	16.7	7.55	15.3	7.16	11.8	6.07
	-4.4	-5.0	25.7	7.84	22.2	7.64	20.1	7.41	18.8	7.21	16.7	6.83	15.3	6.51	11.8	5.48
	-1.8	-2.5	25.7	7.16	22.2	7.04	20.1	6.85	18.8	6.68	16.7	6.35	15.3	6.09	11.8	5.25
	0.8	0.0	25.7	6.50	22.2	6.44	20.1	6.31	18.8	6.17	16.7	5.89	15.3	5.66	11.8	4.93
	2.8	2.0	25.7	5.99	22.2	5.99	20.1	5.88	18.8	5.77	16.7	5.53	15.3	5.32	11.8	4.65
	6.0	5.0	25.7	5.22	22.2	5.27	20.1	5.20	18.8	5.12	16.7	4.94	15.3	4.78	11.8	4.21
	7.0	6.0	25.7	4.93	22.2	5.02	20.1	4.98	18.8	4.91	16.7	4.75	15.3	4.61	11.8	4.10
	8.6	7.5	25.7	4.85	22.2	4.66	20.1	4.65	18.8	4.61	16.7	4.48	15.3	4.36	11.8	3.91
	11.2	10.0	25.7	4.85	22.2	4.31	20.1	4.14	18.8	4.13	16.7	4.05	15.3	3.96	11.8	3.60
	16.4	15.0	25.7	4.85	22.2	4.31	20.1	3.99	18.8	3.78	16.7	3.46	15.3	3.24	11.8	2.95
	24.0	18.0	25.7	4.85	22.2	4.31	20.1	3.99	18.8	3.78	16.7	3.46	15.3	3.24	11.8	2.71

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor water outlet temp. : °C													
			25.0		30.0		33.0		35.0		38.0		40.0		45.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
40%	-19.8	-20.0	20.6	8.53	17.8	8.07	16.1	7.74	15.0	7.50	13.3	7.09	12.2	6.78	9.4	5.86
	-14.7	-15.0	20.6	7.73	17.8	7.22	16.1	6.88	15.0	6.64	13.3	6.25	12.2	5.96	9.4	5.13
	-9.6	-10.0	20.6	6.72	17.8	6.52	16.1	6.27	15.0	5.98	13.3	5.62	12.2	5.34	9.4	4.57
	-4.4	-5.0	20.6	5.71	17.8	5.61	16.1	5.46	15.0	5.33	13.3	5.08	12.2	4.87	9.4	4.14
	-1.8	-2.5	20.6	5.21	17.8	5.17	16.1	5.05	15.0	4.94	13.3	4.73	12.2	4.55	9.4	3.97
	0.8	0.0	20.6	4.73	17.8	4.73	16.1	4.64	15.0	4.55	13.3	4.37	12.2	4.21	9.4	3.70
	2.8	2.0	20.6	4.32	17.8	4.35	16.1	4.29	15.0	4.22	13.3	4.07	12.2	3.94	9.4	3.49
	6.0	5.0	20.6	3.71	17.8	3.80	16.1	3.79	15.0	3.75	13.3	3.65	12.2	3.55	9.4	3.19
	7.0	6.0	20.6	3.71	17.8	3.63	16.1	3.63	15.0	3.61	13.3	3.52	12.2	3.43	9.4	3.10
	8.6	7.5	20.6	3.71	17.8	3.38	16.1	3.41	15.0	3.40	13.3	3.33	12.2	3.26	9.4	2.97
	11.2	10.0	20.6	3.71	17.8	3.32	16.1	3.09	15.0	3.06	13.3	3.03	12.2	2.98	9.4	2.75
	16.4	15.0	20.6	3.71	17.8	3.32	16.1	3.09	15.0	2.93	13.3	2.69	12.2	2.54	9.4	2.26
	24.0	18.0	20.6	3.71	17.8	3.32	16.1	3.09	15.0	2.93	13.3	2.69	12.2	2.54	9.4	2.15

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor water outlet temp. : °C													
			25.0		30.0		33.0		35.0		38.0		40.0		45.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
30%	-19.8	-20.0	15.4	5.87	13.3	5.57	12.1	5.36	11.3	5.20	10.0	4.93	9.2	4.73	7.1	4.12
	-14.7	-15.0	15.4	5.32	13.3	5.01	12.1	4.79	11.3	4.63	10.0	4.37	9.2	4.18	7.1	3.63
	-9.6	-10.0	15.4	4.62	13.3	4.51	12.1	4.37	11.3	4.22	10.0	3.95	9.2	3.77	7.1	3.26
	-4.4	-5.0	15.4	3.93	13.3	3.88	12.1	3.80	11.3	3.71	10.0	3.56	9.2	3.43	7.1	2.96
	-1.8	-2.5	15.4	3.55	13.3	3.55	12.1	3.49	11.3	3.43	10.0	3.30	9.2	3.19	7.1	2.83
	0.8	0.0	15.4	3.18	13.3	3.22	12.1	3.19	11.3	3.15	10.0	3.05	9.2	2.96	7.1	2.65
	2.8	2.0	15.4	2.90	13.3	2.97	12.1	2.96	11.3	2.93	10.0	2.85	9.2	2.78	7.1	2.51
	6.0	5.0	15.4	2.70	13.3	2.62	12.1	2.64	11.3	2.63	10.0	2.58	9.2	2.53	7.1	2.31
	7.0	6.0	15.4	2.70	13.3	2.51	12.1	2.54	11.3	2.53	10.0	2.50	9.2	2.45	7.1	2.25
	8.6	7.5	15.4	2.70	13.3	2.44	12.1	2.39	11.3	2.40	10.0	2.37	9.2	2.33	7.1	2.16
	11.2	10.0	15.4	2.70	13.3	2.44	12.1	2.28	11.3	2.18	10.0	2.17	9.2	2.15	7.1	2.01
	16.4	15.0	15.4	2.70	13.3	2.44	12.1	2.28	11.3	2.17	10.0	2.01	9.2	1.91	7.1	1.68
	24.0	18.0	15.4	2.70	13.3	2.44	12.1	2.28	11.3	2.17	10.0	2.01	9.2	1.91	7.1	1.64

1. Capacity Ratio of Outdoor Unit

1-7. U-14MF2E8 (Cooling)

Capacity Ratio 30-100%

TC: Total capacity (kW), PI: Power input (kW)

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor water outlet temp. : °C													
		7.0		10.0		15.0		18.0		20.0		25.0		30.0	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
	-10.0	26.7	3.90	30.3	4.43	36.4	5.30	40.0	5.83	41.3	6.03	44.7	6.51	48.0	7.00
	-5.0	26.7	3.92	30.3	4.45	36.4	5.32	40.0	5.85	41.3	6.04	44.7	6.53	48.0	7.01
	0.0	26.7	3.96	30.3	4.48	36.4	5.36	40.0	5.88	41.3	6.07	44.7	6.56	48.0	7.04
	5.0	26.7	4.03	30.3	4.55	36.4	5.42	40.0	5.94	41.3	6.13	44.7	6.61	48.0	7.09
	10.0	26.7	4.20	30.3	4.71	36.4	5.56	40.0	6.07	41.3	6.26	44.7	6.73	48.0	7.20
	15.0	26.7	4.59	30.3	5.12	36.4	5.92	40.0	6.39	41.3	6.57	44.7	7.01	48.0	7.46
100%	20.0	26.7	4.63	30.3	5.35	36.4	6.76	40.0	7.69	41.3	8.05	44.7	8.98	48.0	9.96
	25.0	26.7	5.95	30.3	6.93	36.4	8.70	40.0	9.85	41.3	10.3	44.7	11.4	48.0	12.6
	30.0	26.7	7.45	30.3	8.65	36.4	10.8	40.0	12.2	41.3	12.7	44.7	14.1	48.0	15.5
	35.0	26.7	9.06	30.3	10.5	36.4	13.0	40.0	14.7	41.3	15.3	43.9	16.3	45.1	16.3
	40.0	26.7	10.7	30.3	12.4	36.4	15.4	38.7	16.3	39.1	16.3	40.2	16.3	41.4	16.3
	43.0	26.7	11.8	30.3	13.7	35.5	16.3	36.3	16.0	36.3	15.7	36.3	14.9	36.3	14.1
	46.0	26.7	13.0	28.6	13.7	28.6	12.5	28.6	11.8	28.6	11.6	28.6	11.0	28.6	10.4

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor water outlet temp. : °C													
		7.0		10.0		15.0		18.0		20.0		25.0		30.0	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
	-10.0	24.0	3.51	27.3	3.99	32.7	4.78	36.0	5.26	37.2	5.43	40.2	5.87	43.2	6.31
	-5.0	24.0	3.53	27.3	4.01	32.7	4.80	36.0	5.27	37.2	5.45	40.2	5.88	43.2	6.32
	0.0	24.0	3.57	27.3	4.04	32.7	4.83	36.0	5.30	37.2	5.47	40.2	5.91	43.2	6.34
	5.0	24.0	3.64	27.3	4.10	32.7	4.88	36.0	5.35	37.2	5.52	40.2	5.95	43.2	6.39
	10.0	24.0	3.79	27.3	4.24	32.7	5.00	36.0	5.46	37.2	5.62	40.2	6.05	43.2	6.47
	15.0	24.0	4.19	27.3	4.59	32.7	5.28	36.0	5.71	37.2	5.87	40.2	6.27	43.2	6.67
90%	20.0	24.0	4.25	27.3	4.72	32.7	5.52	36.0	6.10	37.2	6.35	40.2	7.01	43.2	7.70
	25.0	24.0	5.00	27.3	5.74	32.7	7.07	36.0	7.92	37.2	8.25	40.2	9.07	43.2	9.93
	30.0	24.0	6.31	27.3	7.23	32.7	8.87	36.0	9.91	37.2	10.3	40.2	11.3	43.2	12.3
	35.0	24.0	7.70	27.3	8.82	32.7	10.8	36.0	12.0	37.2	12.5	40.2	13.7	43.2	14.9
	40.0	24.0	9.15	27.3	10.5	32.7	12.8	36.0	14.3	37.2	14.9	40.2	16.3	41.4	16.3
	43.0	24.0	10.1	27.3	11.6	32.7	14.1	36.0	15.8	36.3	15.7	36.3	14.9	36.3	14.1
	46.0	24.0	11.1	27.3	12.7	28.6	12.5	28.6	11.8	28.6	11.6	28.6	11.0	28.6	10.4

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor water outlet temp. : °C													
		7.0		10.0		15.0		18.0		20.0		25.0		30.0	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
	-10.0	21.3	3.13	24.2	3.55	29.1	4.26	32.0	4.68	33.1	4.84	35.7	5.22	38.4	5.61
	-5.0	21.3	3.15	24.2	3.57	29.1	4.27	32.0	4.69	33.1	4.85	35.7	5.24	38.4	5.62
	0.0	21.3	3.18	24.2	3.60	29.1	4.30	32.0	4.72	33.1	4.87	35.7	5.26	38.4	5.64
	5.0	21.3	3.24	24.2	3.65	29.1	4.34	32.0	4.76	33.1	4.91	35.7	5.30	38.4	5.68
	10.0	21.3	3.37	24.2	3.77	29.1	4.44	32.0	4.85	33.1	5.00	35.7	5.37	38.4	5.75
	15.0	21.3	3.71	24.2	4.06	29.1	4.67	32.0	5.05	33.1	5.19	35.7	5.55	38.4	5.91
80%	20.0	21.3	3.87	24.2	4.29	29.1	5.00	32.0	5.42	33.1	5.58	35.7	5.97	38.4	6.33
	25.0	21.3	4.17	24.2	4.72	29.1	5.67	32.0	6.28	33.1	6.50	35.7	7.08	38.4	7.68
	30.0	21.3	5.28	24.2	5.98	29.1	7.20	32.0	7.95	33.1	8.23	35.7	8.95	38.4	9.68
	35.0	21.3	6.49	24.2	7.34	29.1	8.82	32.0	9.74	33.1	10.1	35.7	10.9	38.4	11.8
	40.0	21.3	7.72	24.2	8.75	29.1	10.5	32.0	11.6	33.1	12.0	35.7	13.1	38.4	14.1
	43.0	21.3	8.52	24.2	9.66	29.1	11.6	32.0	12.9	33.1	13.3	35.7	14.5	36.3	14.1
	46.0	21.3	9.35	24.2	10.6	28.6	12.5	28.6	11.8	28.6	11.6	28.6	11.0	28.6	10.4

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor water outlet temp. : °C													
		7.0		10.0		15.0		18.0		20.0		25.0		30.0	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
	-10.0	18.7	2.58	21.2	2.93	25.5	3.51	28.0	3.86	28.9	3.99	31.3	4.31	33.6	4.63
	-5.0	18.7	2.60	21.2	2.95	25.5	3.53	28.0	3.87	28.9	4.00	31.3	4.32	33.6	4.64
	0.0	18.7	2.63	21.2	2.97	25.5	3.55	28.0	3.89	28.9	4.02	31.3	4.34	33.6	4.66
	5.0	18.7	2.68	21.2	3.02	25.5	3.59	28.0	3.93	28.9	4.05	31.3	4.37	33.6	4.68
	10.0	18.7	2.79	21.2	3.11	25.5	3.66	28.0	4.00	28.9	4.12	31.3	4.43	33.6	4.74
	15.0	18.7	3.06	21.2	3.34	25.5	3.84	28.0	4.15	28.9	4.27	31.3	4.56	33.6	4.86
70%	20.0	18.7	3.28	21.2	3.63	25.5	4.21	28.0	4.56	28.9	4.67	31.3	4.90	33.6	5.15
	25.0	18.7	3.32	21.2	3.67	25.5	4.25	28.0	4.62	28.9	4.76	31.3	5.12	33.6	5.48
	30.0	18.7	4.12	21.2	4.61	25.5	5.42	28.0	5.91	28.9	6.10	31.3	6.56	33.6	7.02
	35.0	18.7	5.09	21.2	5.69	25.5	6.70	28.0	7.32	28.9	7.54	31.3	8.11	33.6	8.68
	40.0	18.7	6.07	21.2	6.80	25.5	8.03	28.0	8.77	28.9	9.05	31.3	9.74	33.6	10.4
	43.0	18.7	6.69	21.2	7.51	25.5	8.88	28.0	9.71	28.9	10.0	31.3	10.8	33.6	11.6
	46.0	18.7	7.35	21.2	8.26	25.5	9.79	28.0	10.7	28.6	10.9	28.6	10.3	28.6	9.80

1. Capacity Ratio of Outdoor Unit

U-14MF2E8 (Cooling) **Capacity Ratio 30-100%**

TC: Total capacity (kW), PI: Power input (kW)

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor water outlet temp. : °C													
		7.0		10.0		15.0		18.0		20.0		25.0		30.0	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
	-10.0	16.0	1.98	18.2	2.24	21.8	2.69	24.0	2.95	24.8	3.05	26.8	3.29	28.8	3.54
	-5.0	16.0	1.99	18.2	2.25	21.8	2.70	24.0	2.96	24.8	3.06	26.8	3.30	28.8	3.54
	0.0	16.0	2.01	18.2	2.27	21.8	2.71	24.0	2.98	24.8	3.07	26.8	3.32	28.8	3.56
	5.0	16.0	2.05	18.2	2.31	21.8	2.74	24.0	3.00	24.8	3.10	26.8	3.34	28.8	3.58
	10.0	16.0	2.14	18.2	2.38	21.8	2.80	24.0	3.06	24.8	3.15	26.8	3.38	28.8	3.62
	15.0	16.0	2.34	18.2	2.56	21.8	2.94	24.0	3.17	24.8	3.26	26.8	3.48	28.8	3.70
60%	20.0	16.0	2.60	18.2	2.86	21.8	3.29	24.0	3.46	24.8	3.53	26.8	3.71	28.8	3.90
	25.0	16.0	2.63	18.2	2.90	21.8	3.34	24.0	3.61	24.8	3.71	26.8	3.95	28.8	4.20
	30.0	16.0	3.01	18.2	3.31	21.8	3.80	24.0	4.09	24.8	4.19	26.8	4.46	28.8	4.71
	35.0	16.0	3.72	18.2	4.11	21.8	4.74	24.0	5.11	24.8	5.24	26.8	5.58	28.8	5.91
	40.0	16.0	4.44	18.2	4.92	21.8	5.70	24.0	6.16	24.8	6.32	26.8	6.74	28.8	7.15
	43.0	16.0	4.90	18.2	5.43	21.8	6.31	24.0	6.83	24.8	7.01	26.8	7.48	28.8	7.94
	46.0	16.0	5.38	18.2	5.98	21.8	6.96	24.0	7.54	24.8	7.75	26.8	8.28	28.6	8.72

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor water outlet temp. : °C													
		7.0		10.0		15.0		18.0		20.0		25.0		30.0	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
	-10.0	13.3	1.49	15.2	1.69	18.2	2.02	20.0	2.22	20.7	2.29	22.3	2.47	24.0	2.66
	-5.0	13.3	1.50	15.2	1.70	18.2	2.03	20.0	2.23	20.7	2.30	22.3	2.48	24.0	2.66
	0.0	13.3	1.52	15.2	1.71	18.2	2.04	20.0	2.24	20.7	2.31	22.3	2.49	24.0	2.67
	5.0	13.3	1.55	15.2	1.74	18.2	2.07	20.0	2.26	20.7	2.33	22.3	2.51	24.0	2.69
	10.0	13.3	1.62	15.2	1.80	18.2	2.11	20.0	2.30	20.7	2.37	22.3	2.54	24.0	2.72
	15.0	13.3	1.78	15.2	1.93	18.2	2.21	20.0	2.39	20.7	2.45	22.3	2.61	24.0	2.78
50%	20.0	13.3	2.05	15.2	2.25	18.2	2.47	20.0	2.59	20.7	2.64	22.3	2.78	24.0	2.92
	25.0	13.3	2.08	15.2	2.28	18.2	2.61	20.0	2.81	20.7	2.89	22.3	3.07	24.0	3.25
	30.0	13.3	2.20	15.2	2.37	18.2	2.65	20.0	2.85	20.7	2.92	22.3	3.10	24.0	3.29
	35.0	13.3	2.72	15.2	2.95	18.2	3.32	20.0	3.53	20.7	3.61	22.3	3.79	24.0	3.97
	40.0	13.3	3.24	15.2	3.53	18.2	4.01	20.0	4.28	20.7	4.37	22.3	4.61	24.0	4.84
	43.0	13.3	3.57	15.2	3.90	18.2	4.44	20.0	4.75	20.7	4.86	22.3	5.13	24.0	5.39
	46.0	13.3	3.91	15.2	4.29	18.2	4.90	20.0	5.25	20.7	5.37	22.3	5.68	24.0	5.98

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor water outlet temp. : °C													
		7.0		10.0		15.0		18.0		20.0		25.0		30.0	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
	-10.0	10.7	1.10	12.1	1.24	14.5	1.48	16.0	1.63	16.5	1.68	17.9	1.81	19.2	1.95
	-5.0	10.7	1.10	12.1	1.25	14.5	1.49	16.0	1.63	16.5	1.69	17.9	1.82	19.2	1.95
	0.0	10.7	1.12	12.1	1.26	14.5	1.50	16.0	1.65	16.5	1.70	17.9	1.83	19.2	1.96
	5.0	10.7	1.15	12.1	1.29	14.5	1.52	16.0	1.66	16.5	1.71	17.9	1.84	19.2	1.97
	10.0	10.7	1.20	12.1	1.33	14.5	1.56	16.0	1.69	16.5	1.75	17.9	1.87	19.2	2.00
	15.0	10.7	1.33	12.1	1.44	14.5	1.63	16.0	1.76	16.5	1.81	17.9	1.92	19.2	2.04
40%	20.0	10.7	1.61	12.1	1.71	14.5	1.82	16.0	1.91	16.5	1.95	17.9	2.04	19.2	2.14
	25.0	10.7	1.64	12.1	1.78	14.5	2.03	16.0	2.18	16.5	2.23	17.9	2.36	19.2	2.40
	30.0	10.7	1.67	12.1	1.82	14.5	2.06	16.0	2.21	16.5	2.26	17.9	2.39	19.2	2.53
	35.0	10.7	1.98	12.1	2.12	14.5	2.32	16.0	2.43	16.5	2.47	17.9	2.56	19.2	2.64
	40.0	10.7	2.35	12.1	2.53	14.5	2.80	16.0	2.94	16.5	3.00	17.9	3.12	19.2	3.23
	43.0	10.7	2.58	12.1	2.78	14.5	3.10	16.0	3.27	16.5	3.33	17.9	3.48	19.2	3.61
	46.0	10.7	2.82	12.1	3.06	14.5	3.41	16.0	3.61	16.5	3.68	17.9	3.85	19.2	4.01

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor water outlet temp. : °C													
		7.0		10.0		15.0		18.0		20.0		25.0		30.0	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
	-10.0	8.0	0.770	9.1	0.880	10.9	1.05	12.0	1.15	12.4	1.19	13.4	1.28	14.4	1.37
	-5.0	8.0	0.780	9.1	0.880	10.9	1.05	12.0	1.15	12.4	1.19	13.4	1.28	14.4	1.37
	0.0	8.0	0.800	9.1	0.900	10.9	1.06	12.0	1.16	12.4	1.20	13.4	1.29	14.4	1.38
	5.0	8.0	0.820	9.1	0.920	10.9	1.08	12.0	1.18	12.4	1.21	13.4	1.30	14.4	1.39
	10.0	8.0	0.870	9.1	0.950	10.9	1.11	12.0	1.20	12.4	1.24	13.4	1.32	14.4	1.41
	15.0	8.0	0.970	9.1	1.04	10.9	1.17	12.0	1.25	12.4	1.28	13.4	1.37	14.4	1.45
30%	20.0	8.0	1.25	9.1	1.25	10.9	1.31	12.0	1.37	12.4	1.39	13.4	1.45	14.4	1.52
	25.0	8.0	1.28	9.1	1.39	10.9	1.56	12.0	1.66	12.4	1.68	13.4	1.68	14.4	1.70
	30.0	8.0	1.31	9.1	1.42	10.9	1.59	12.0	1.69	12.4	1.73	13.4	1.82	14.4	1.91
	35.0	8.0	1.45	9.1	1.52	10.9	1.62	12.0	1.71	12.4	1.76	13.4	1.85	14.4	1.94
	40.0	8.0	1.70	9.1	1.79	10.9	1.94	12.0	2.01	12.4	2.03	13.4	2.09	14.4	2.13
	43.0	8.0	1.85	9.1	1.97	10.9	2.14	12.0	2.22	12.4	2.25	13.4	2.32	14.4	2.38
	46.0	8.0	2.02	9.1	2.15	10.9	2.35	12.0	2.45	12.4	2.49	13.4	2.57	14.4	2.64

1. Capacity Ratio of Outdoor Unit

1-8. U-14MF2E8 (Heating) Capacity Ratio 30-100%

TC: Total capacity (kW), PI: Power input (kW)

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor water outlet temp. : °C													
			25.0		30.0		33.0		35.0		38.0		40.0		45.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
100%	-19.8	-20.0	25.8	11.6	23.1	11.2	21.3	10.9	20.1	10.7	18.3	10.2	17.0	9.82	13.6	8.59
	-14.7	-15.0	30.7	12.4	27.4	11.9	25.4	11.5	24.0	11.2	21.8	10.6	20.3	10.2	16.4	8.90
	-9.6	-10.0	36.4	13.2	32.7	12.6	30.3	12.2	28.7	11.8	26.1	11.2	24.4	10.7	19.7	9.28
	-4.4	-5.0	42.1	14.3	38.3	13.5	35.6	12.8	33.7	12.4	30.7	11.7	28.7	11.2	23.2	9.60
	-1.8	-2.5	44.5	14.3	41.8	14.3	38.8	13.5	36.7	12.9	33.5	12.1	31.2	11.5	25.2	9.87
	0.8	0.0	47.1	14.3	44.2	14.3	42.2	14.2	40.0	13.5	36.5	12.5	34.0	12.0	27.6	10.2
	2.8	2.0	49.4	14.3	46.3	14.3	44.6	14.3	42.4	13.8	38.7	12.7	36.2	12.0	28.3	10.0
	6.0	5.0	53.0	14.3	49.7	14.3	47.8	14.3	45.0	13.5	40.0	11.9	36.7	10.9	28.3	9.03
	7.0	6.0	54.2	14.3	50.9	14.3	48.3	14.0	45.0	12.9	40.0	11.4	36.7	10.4	28.3	8.72
	8.6	7.5	56.2	14.3	52.8	14.3	48.3	13.1	45.0	12.1	40.0	10.7	36.7	9.81	28.3	8.26
	11.2	10.0	59.8	14.3	53.3	12.9	48.3	11.6	45.0	10.8	40.0	9.55	36.7	8.82	28.3	7.53
	16.4	15.0	61.7	11.7	53.3	10.1	48.3	9.10	45.0	8.49	40.0	7.58	36.7	7.05	28.3	6.15
	24.0	18.0	61.7	9.83	53.3	8.47	48.3	7.67	45.0	7.14	40.0	6.46	36.7	6.02	28.3	5.18

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor water outlet temp. : °C													
			25.0		30.0		33.0		35.0		38.0		40.0		45.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
90%	-19.8	-20.0	25.1	11.5	22.4	11.1	20.6	10.8	19.4	10.6	17.6	10.1	16.3	9.73	13.0	8.53
	-14.7	-15.0	29.9	12.1	26.7	11.7	24.6	11.3	23.2	11.0	21.1	10.5	19.6	10.1	15.7	8.80
	-9.6	-10.0	35.6	13.2	31.8	12.5	29.5	12.0	27.8	11.7	25.3	11.1	23.6	10.6	18.9	9.19
	-4.4	-5.0	42.6	14.6	38.2	13.7	35.4	13.1	33.4	12.6	30.4	11.9	28.3	11.3	22.8	9.72
	-1.8	-2.5	45.7	15.0	41.6	14.4	38.6	13.6	36.5	13.1	33.2	12.4	30.9	11.7	24.8	10.0
	0.8	0.0	48.3	15.0	45.2	15.0	42.0	14.2	39.7	13.5	36.0	12.5	33.0	11.8	25.5	9.76
	2.8	2.0	50.6	15.0	47.4	15.0	43.5	13.9	40.5	12.9	36.0	11.6	33.0	11.0	25.5	9.28
	6.0	5.0	54.3	15.0	48.0	13.5	43.5	12.4	40.5	11.6	36.0	10.6	33.0	10.0	25.5	8.43
	7.0	6.0	54.4	15.0	48.0	13.3	43.5	12.1	40.5	11.2	36.0	10.1	33.0	9.62	25.5	8.14
	8.6	7.5	55.5	14.4	48.0	12.4	43.5	11.3	40.5	10.5	36.0	9.51	33.0	9.05	25.5	7.72
	11.2	10.0	55.5	12.7	48.0	11.0	43.5	9.98	40.5	9.34	36.0	8.52	33.0	8.16	25.5	7.05
	16.4	15.0	55.5	9.56	48.0	8.43	43.5	7.75	40.5	7.30	36.0	6.74	33.0	6.52	25.5	5.77
	24.0	18.0	55.5	8.94	48.0	7.88	43.5	7.25	40.5	6.83	36.0	6.20	33.0	5.78	25.5	4.83

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor water outlet temp. : °C													
			25.0		30.0		33.0		35.0		38.0		40.0		45.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
80%	-19.8	-20.0	24.5	11.5	21.7	11.1	20.0	10.8	18.8	10.5	17.0	10.0	15.8	9.67	12.5	8.48
	-14.7	-15.0	29.2	12.1	26.0	11.6	24.0	11.2	22.6	10.9	20.4	10.4	19.0	10.0	15.1	8.76
	-9.6	-10.0	34.9	13.0	31.1	12.4	28.7	12.0	27.1	11.6	24.6	11.0	22.8	10.5	18.3	9.15
	-4.4	-5.0	42.8	14.7	38.2	13.8	35.3	13.3	33.3	12.9	30.2	12.1	28.1	11.5	22.4	9.87
	-1.8	-2.5	46.7	15.5	41.7	14.4	38.5	13.6	36.0	13.0	32.0	12.1	29.3	11.4	22.7	9.44
	0.8	0.0	49.3	15.5	42.7	13.6	38.7	12.5	36.0	11.9	32.0	11.2	29.3	10.7	22.7	9.02
	2.8	2.0	49.3	14.2	42.7	12.7	38.7	11.7	36.0	11.2	32.0	10.5	29.3	10.0	22.7	8.55
	6.0	5.0	49.3	12.7	42.7	11.4	38.7	10.6	36.0	10.1	32.0	9.57	29.3	9.13	22.7	7.78
	7.0	6.0	49.3	12.7	42.7	11.2	38.7	10.2	36.0	9.75	32.0	9.20	29.3	8.78	22.7	7.52
	8.6	7.5	49.3	11.8	42.7	10.4	38.7	9.53	36.0	9.11	32.0	8.64	29.3	8.26	22.7	7.14
	11.2	10.0	49.3	10.2	42.7	9.12	38.7	8.44	36.0	8.11	32.0	7.76	29.3	7.47	22.7	6.54
	16.4	15.0	49.3	8.42	42.7	7.45	38.7	6.86	36.0	6.47	32.0	6.14	29.3	5.97	22.7	5.35
	24.0	18.0	49.3	8.42	42.7	7.45	38.7	6.86	36.0	6.47	32.0	5.88	29.3	5.49	22.7	4.51

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor water outlet temp. : °C													
			25.0		30.0		33.0		35.0		38.0		40.0		45.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
70%	-19.8	-20.0	24.1	11.5	21.3	11.1	19.6	10.8	18.4	10.5	16.6	10.1	15.4	9.70	12.2	8.52
	-14.7	-15.0	28.8	12.2	25.6	11.7	23.6	11.3	22.2	11.0	20.0	10.5	18.6	10.1	14.8	8.80
	-9.6	-10.0	34.6	13.0	30.7	12.6	28.3	12.1	26.7	11.7	24.1	11.1	22.4	10.6	17.8	9.21
	-4.4	-5.0	43.2	14.9	37.3	13.4	33.8	12.8	31.5	12.4	28.0	11.6	25.7	10.8	19.8	9.08
	-1.8	-2.5	43.2	13.6	37.3	12.3	33.8	11.9	31.5	11.5	28.0	10.8	25.7	10.3	19.8	8.64
	0.8	0.0	43.2	12.5	37.3	11.3	33.8	11.0	31.5	10.6	28.0	10.1	25.7	9.60	19.8	8.23
	2.8	2.0	43.2	11.6	37.3	10.5	33.8	10.2	31.5	10.3	28.0	9.46	25.7	9.05	19.8	7.78
	6.0	5.0	43.2	10.3	37.3	9.44	33.8	9.21	31.5	9.00	28.0	8.57	25.7	8.21	19.8	7.08
	7.0	6.0	43.2	10.1	37.3	9.15	33.8	8.89	31.5	8.66	28.0	8.24	25.7	7.90	19.8	6.87
	8.6	7.5	43.2	9.33	37.3	8.48	33.8	8.28	31.5	8.10	28.0	7.75	25.7	7.46	19.8	6.53
	11.2	10.0	43.2	8.07	37.3	7.42	33.8	7.34	31.5	7.23	28.0	6.98	25.7	6.76	19.8	5.99
	16.4	15.0	43.2	7.83	37.3	6.94	33.8	6.41	31.5	6.05	28.0	5.53	25.7	5.41	19.8	4.91
	24.0	18.0	43.2	7.83	37.3	6.94	33.8	6.41	31.5	6.05	28.0	5.52	25.7	5.16	19.8	4.27

1. Capacity Ratio of Outdoor Unit

U-14MF2E8 (Heating) **Capacity Ratio 30-100%**

TC: Total capacity (kW), PI: Power input (kW)

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor water outlet temp. : °C													
			25.0		30.0		33.0		35.0		38.0		40.0		45.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
60%	-19.8	-20.0	24.2	11.6	21.4	11.1	19.6	10.8	18.4	10.5	16.6	10.1	15.3	9.70	12.1	8.52
	-14.7	-15.0	29.1	12.3	25.7	11.8	23.6	11.4	22.2	11.0	20.0	10.5	18.5	10.1	14.7	8.81
	-9.6	-10.0	34.9	13.0	31.0	12.7	28.5	12.2	26.8	11.8	24.0	11.1	22.0	10.5	17.0	8.87
	-4.4	-5.0	37.0	11.8	32.0	11.4	29.0	11.0	27.0	10.7	24.0	10.1	22.0	9.53	17.0	7.99
	-1.8	-2.5	37.0	10.8	32.0	10.5	29.0	10.2	27.0	9.90	24.0	9.38	22.0	8.97	17.0	7.65
	0.8	0.0	37.0	9.81	32.0	9.64	29.0	9.39	27.0	9.15	24.0	8.70	22.0	8.34	17.0	7.22
	2.8	2.0	37.0	9.07	32.0	8.97	29.0	8.77	27.0	8.58	24.0	8.18	22.0	7.86	17.0	6.83
	6.0	5.0	37.0	8.01	32.0	8.02	29.0	7.88	27.0	7.72	24.0	7.38	22.0	7.11	17.0	6.20
	7.0	6.0	37.0	7.71	32.0	7.68	29.0	7.54	27.0	7.40	24.0	7.10	22.0	6.85	17.0	6.03
	8.6	7.5	37.0	7.06	32.0	7.13	29.0	7.04	27.0	6.93	24.0	6.69	22.0	6.48	17.0	5.75
	11.2	10.0	37.0	7.00	32.0	6.27	29.0	6.26	27.0	6.21	24.0	6.05	22.0	5.89	17.0	5.29
	16.4	15.0	37.0	7.00	32.0	6.22	29.0	5.76	27.0	5.45	24.0	4.98	22.0	4.72	17.0	4.35
	24.0	18.0	37.0	7.00	32.0	6.22	29.0	5.76	27.0	5.45	24.0	4.98	22.0	4.67	17.0	3.90

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor water outlet temp. : °C													
			25.0		30.0		33.0		35.0		38.0		40.0		45.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
50%	-19.8	-20.0	25.3	11.7	22.2	11.2	20.4	10.9	19.1	10.6	17.2	10.1	15.9	9.74	12.5	8.55
	-14.7	-15.0	30.4	12.5	26.7	11.8	24.2	11.3	22.5	10.9	20.0	10.2	18.3	9.72	14.2	8.33
	-9.6	-10.0	30.8	11.1	26.7	10.7	24.2	10.2	22.5	9.80	20.0	9.16	18.3	8.69	14.2	7.41
	-4.4	-5.0	30.8	9.50	26.7	9.27	24.2	9.00	22.5	8.76	20.0	8.31	18.3	7.93	14.2	6.70
	-1.8	-2.5	30.8	8.70	26.7	8.55	24.2	8.33	22.5	8.13	20.0	7.74	18.3	7.43	14.2	6.43
	0.8	0.0	30.8	7.91	26.7	7.85	24.2	7.68	22.5	7.52	20.0	7.19	18.3	6.91	14.2	6.04
	2.8	2.0	30.8	7.31	26.7	7.31	24.2	7.18	22.5	7.05	20.0	6.76	18.3	6.51	14.2	5.71
	6.0	5.0	30.8	6.39	26.7	6.45	24.2	6.37	22.5	6.27	20.0	6.06	18.3	5.86	14.2	5.19
	7.0	6.0	30.8	6.05	26.7	6.15	24.2	6.10	22.5	6.02	20.0	5.83	18.3	5.66	14.2	5.06
	8.6	7.5	30.8	5.95	26.7	5.72	24.2	5.71	22.5	5.66	20.0	5.51	18.3	5.36	14.2	4.83
	11.2	10.0	30.8	5.95	26.7	5.31	24.2	5.10	22.5	5.09	20.0	5.00	18.3	4.90	14.2	4.47
	16.4	15.0	30.8	5.95	26.7	5.31	24.2	4.93	22.5	4.68	20.0	4.30	18.3	4.04	14.2	3.69
	24.0	18.0	30.8	5.95	26.7	5.31	24.2	4.93	22.5	4.68	20.0	4.30	18.3	4.04	14.2	3.41

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor water outlet temp. : °C													
			25.0		30.0		33.0		35.0		38.0		40.0		45.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
40%	-19.8	-20.0	24.7	10.3	21.3	9.76	19.3	9.37	18.0	9.08	16.0	8.60	14.7	8.23	11.3	7.13
	-14.7	-15.0	24.7	9.37	21.3	8.75	19.3	8.35	18.0	8.07	16.0	7.59	14.7	7.25	11.3	6.26
	-9.6	-10.0	24.7	8.15	21.3	7.92	19.3	7.63	18.0	7.28	16.0	6.85	14.7	6.52	11.3	5.60
	-4.4	-5.0	24.7	6.96	21.3	6.84	19.3	6.67	18.0	6.51	16.0	6.20	14.7	5.95	11.3	5.09
	-1.8	-2.5	24.7	6.37	21.3	6.31	19.3	6.18	18.0	6.05	16.0	5.79	14.7	5.57	11.3	4.89
	0.8	0.0	24.7	5.80	21.3	5.80	19.3	5.69	18.0	5.58	16.0	5.36	14.7	5.17	11.3	4.57
	2.8	2.0	24.7	5.30	21.3	5.34	19.3	5.27	18.0	5.19	16.0	5.01	14.7	4.85	11.3	4.32
	6.0	5.0	24.7	4.58	21.3	4.68	19.3	4.67	18.0	4.63	16.0	4.51	14.7	4.39	11.3	3.96
	7.0	6.0	24.7	4.58	21.3	4.48	19.3	4.49	18.0	4.46	16.0	4.36	14.7	4.25	11.3	3.86
	8.6	7.5	24.7	4.58	21.3	4.18	19.3	4.22	18.0	4.21	16.0	4.13	14.7	4.04	11.3	3.70
	11.2	10.0	24.7	4.58	21.3	4.12	19.3	3.84	18.0	3.81	16.0	3.77	14.7	3.71	11.3	3.43
	16.4	15.0	24.7	4.58	21.3	4.12	19.3	3.84	18.0	3.65	16.0	3.37	14.7	3.19	11.3	2.86
	24.0	18.0	24.7	4.58	21.3	4.12	19.3	3.84	18.0	3.65	16.0	3.37	14.7	3.19	11.3	2.72

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor water outlet temp. : °C													
			25.0		30.0		33.0		35.0		38.0		40.0		45.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
30%	-19.8	-20.0	18.5	7.13	16.0	6.77	14.5	6.52	13.5	6.33	12.0	6.01	11.0	5.77	8.5	5.05
	-14.7	-15.0	18.5	6.48	16.0	6.11	14.5	5.85	13.5	5.66	12.0	5.35	11.0	5.12	8.5	4.47
	-9.6	-10.0	18.5	5.64	16.0	5.51	14.5	5.35	13.5	5.17	12.0	4.85	11.0	4.64	8.5	4.02
	-4.4	-5.0	18.5	4.82	16.0	4.77	14.5	4.67	13.5	4.57	12.0	4.38	11.0	4.23	8.5	3.67
	-1.8	-2.5	18.5	4.37	16.0	4.37	14.5	4.30	13.5	4.23	12.0	4.07	11.0	3.94	8.5	3.51
	0.8	0.0	18.5	3.94	16.0	3.98	14.5	3.95	13.5	3.89	12.0	3.78	11.0	3.67	8.5	3.30
	2.8	2.0	18.5	3.60	16.0	3.69	14.5	3.67	13.5	3.64	12.0	3.55	11.0	3.46	8.5	3.14
	6.0	5.0	18.5	3.37	16.0	3.27	14.5	3.29	13.5	3.28	12.0	3.22	11.0	3.16	8.5	2.90
	7.0	6.0	18.5	3.37	16.0	3.14	14.5	3.17	13.5	3.17	12.0	3.12	11.0	3.06	8.5	2.83
	8.6	7.5	18.5	3.37	16.0	3.05	14.5	3.00	13.5	3.00	12.0	2.97	11.0	2.93	8.5	2.72
	11.2	10.0	18.5	3.37	16.0	3.05	14.5	2.86	13.5	2.74	12.0	2.74	11.0	2.71	8.5	2.55
	16.4	15.0	18.5	3.37	16.0	3.05	14.5	2.86	13.5	2.73	12.0	2.54	11.0	2.42	8.5	2.15
	24.0	18.0	18.5	3.37	16.0	3.05	14.5	2.86	13.5	2.73	12.0	2.54	11.0	2.42	8.5	2.10

1. Capacity Ratio of Outdoor Unit

1-9. U-16MF2E8 (Cooling) Capacity Ratio 30-100%

TC: Total capacity (kW), PI: Power input (kW)

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor water outlet temp. : °C													
		7.0		10.0		15.0		18.0		20.0		25.0		30.0	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
	-10.0	30.0	3.99	34.1	4.53	40.9	5.42	45.0	5.96	46.5	6.16	50.3	6.65	54.0	7.15
	-5.0	30.0	4.02	34.1	4.56	40.9	5.45	45.0	5.99	46.5	6.18	50.3	6.68	54.0	7.17
	0.0	30.0	4.07	34.1	4.60	40.9	5.50	45.0	6.03	46.5	6.23	50.3	6.72	54.0	7.21
	5.0	30.0	4.18	34.1	4.71	40.9	5.59	45.0	6.12	46.5	6.32	50.3	6.81	54.0	7.29
	10.0	30.0	4.43	34.1	4.95	40.9	5.81	45.0	6.33	46.5	6.52	50.3	7.00	54.0	7.48
	15.0	30.0	4.60	34.1	5.14	40.9	6.04	45.0	6.99	46.5	7.37	50.3	8.37	54.0	9.45
100%	20.0	30.0	5.17	34.1	6.13	40.9	7.95	45.0	9.17	46.5	9.64	50.3	10.9	54.0	12.2
	25.0	30.0	6.65	34.1	7.85	40.9	10.1	45.0	11.6	46.5	12.1	50.3	13.6	54.0	15.2
	30.0	30.0	8.25	34.1	9.70	40.9	12.4	45.0	14.1	46.5	14.8	50.3	16.5	54.0	18.3
	35.0	30.0	9.97	34.1	11.7	40.9	14.8	45.0	16.9	46.5	17.6	49.1	18.8	50.3	18.8
	40.0	30.0	11.8	34.1	13.8	40.9	17.5	43.7	18.8	44.2	18.8	45.4	18.8	45.6	18.0
	43.0	30.0	13.0	34.1	15.2	37.5	16.4	37.5	15.5	37.5	15.1	37.5	14.4	37.5	13.6
	46.0	29.6	13.9	29.6	13.2	29.6	12.0	29.6	11.3	29.6	11.1	29.6	10.5	29.6	9.98

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor water outlet temp. : °C													
		7.0		10.0		15.0		18.0		20.0		25.0		30.0	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
	-10.0	27.0	3.60	30.7	4.08	36.8	4.89	40.5	5.37	41.9	5.55	45.2	6.00	48.6	6.44
	-5.0	27.0	3.62	30.7	4.11	36.8	4.91	40.5	5.40	41.9	5.57	45.2	6.02	48.6	6.46
	0.0	27.0	3.67	30.7	4.15	36.8	4.95	40.5	5.43	41.9	5.61	45.2	6.05	48.6	6.50
	5.0	27.0	3.76	30.7	4.24	36.8	5.03	40.5	5.51	41.9	5.68	45.2	6.12	48.6	6.56
	10.0	27.0	3.98	30.7	4.43	36.8	5.21	40.5	5.67	41.9	5.84	45.2	6.27	48.6	6.70
	15.0	27.0	4.21	30.7	4.70	36.8	5.51	40.5	6.00	41.9	6.18	45.2	6.62	48.6	7.08
90%	20.0	27.0	4.26	30.7	4.98	36.8	6.30	40.5	7.18	41.9	7.52	45.2	8.40	48.6	9.34
	25.0	27.0	5.52	30.7	6.44	36.8	8.11	40.5	9.20	41.9	9.61	45.2	10.7	48.6	11.8
	30.0	27.0	6.91	30.7	8.03	36.8	10.1	40.5	11.4	41.9	11.8	45.2	13.1	48.6	14.5
	35.0	27.0	8.40	30.7	9.74	36.8	12.1	40.5	13.7	41.9	14.3	45.2	15.8	48.6	17.3
	40.0	27.0	9.96	30.7	11.5	36.8	14.4	40.5	16.2	41.9	16.9	45.2	18.6	45.6	18.0
	43.0	27.0	11.0	30.7	12.7	36.8	15.8	37.5	15.5	37.5	15.1	37.5	14.4	37.5	13.6
	46.0	27.0	12.0	29.6	13.2	29.6	12.0	29.6	11.3	29.6	11.1	29.6	10.5	29.6	9.98

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor water outlet temp. : °C													
		7.0		10.0		15.0		18.0		20.0		25.0		30.0	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
	-10.0	24.0	3.20	27.3	3.64	32.7	4.35	36.0	4.79	37.2	4.95	40.2	5.34	43.2	5.74
	-5.0	24.0	3.23	27.3	3.66	32.7	4.37	36.0	4.80	37.2	4.96	40.2	5.36	43.2	5.76
	0.0	24.0	3.27	27.3	3.70	32.7	4.41	36.0	4.84	37.2	5.00	40.2	5.39	43.2	5.78
	5.0	24.0	3.35	27.3	3.77	32.7	4.47	36.0	4.90	37.2	5.06	40.2	5.45	43.2	5.84
	10.0	24.0	3.53	27.3	3.94	32.7	4.62	36.0	5.03	37.2	5.18	40.2	5.56	43.2	5.94
	15.0	24.0	3.82	27.3	4.26	32.7	4.98	36.0	5.35	37.2	5.49	40.2	5.84	43.2	6.20
80%	20.0	24.0	3.86	27.3	4.29	32.7	5.02	36.0	5.54	37.2	5.77	40.2	6.37	43.2	6.99
	25.0	24.0	4.54	27.3	5.22	32.7	6.42	36.0	7.20	37.2	7.49	40.2	8.24	43.2	9.03
	30.0	24.0	5.73	27.3	6.57	32.7	8.06	36.0	9.01	37.2	9.36	40.2	10.3	43.2	11.2
	35.0	24.0	7.00	27.3	8.02	32.7	9.81	36.0	10.9	37.2	11.4	40.2	12.5	43.2	13.6
	40.0	24.0	8.32	27.3	9.54	32.7	11.7	36.0	13.0	37.2	13.5	40.2	14.8	43.2	16.1
	43.0	24.0	9.17	27.3	10.5	32.7	12.9	36.0	14.4	37.2	14.9	37.5	14.4	37.5	13.6
	46.0	24.0	10.1	27.3	11.6	29.6	12.0	29.6	11.3	29.6	11.1	29.6	10.5	29.6	9.98

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor water outlet temp. : °C													
		7.0		10.0		15.0		18.0		20.0		25.0		30.0	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
	-10.0	21.0	2.65	23.9	3.00	28.6	3.59	31.5	3.95	32.6	4.08	35.2	4.41	37.8	4.74
	-5.0	21.0	2.67	23.9	3.02	28.6	3.61	31.5	3.97	32.6	4.10	35.2	4.42	37.8	4.75
	0.0	21.0	2.70	23.9	3.05	28.6	3.64	31.5	3.99	32.6	4.12	35.2	4.45	37.8	4.77
	5.0	21.0	2.77	23.9	3.11	28.6	3.69	31.5	4.04	32.6	4.17	35.2	4.49	37.8	4.81
	10.0	21.0	2.91	23.9	3.24	28.6	3.80	31.5	4.14	32.6	4.26	35.2	4.58	37.8	4.89
	15.0	21.0	3.23	23.9	3.57	28.6	4.07	31.5	4.37	32.6	4.49	35.2	4.78	37.8	5.07
70%	20.0	21.0	3.27	23.9	3.62	28.6	4.22	31.5	4.58	32.6	4.71	35.2	5.04	37.8	5.37
	25.0	21.0	3.48	23.9	3.93	28.6	4.72	31.5	5.21	32.6	5.39	35.2	5.86	37.8	6.35
	30.0	21.0	4.42	23.9	5.00	28.6	5.99	31.5	6.61	32.6	6.84	35.2	7.43	37.8	8.03
	35.0	21.0	5.43	23.9	6.14	28.6	7.36	31.5	8.11	32.6	8.39	35.2	9.10	37.8	9.83
	40.0	21.0	6.47	23.9	7.32	28.6	8.79	31.5	9.69	32.6	10.0	35.2	10.9	37.8	11.7
	43.0	21.0	7.13	23.9	8.08	28.6	9.71	31.5	10.7	32.6	11.1	35.2	12.0	37.5	12.8
	46.0	21.0	7.84	23.9	8.89	28.6	10.70	29.6	10.7	29.6	10.44	29.6	9.91	29.6	9.40

8

1. Capacity Ratio of Outdoor Unit

U-16MF2E8 (Cooling) **Capacity Ratio 30-100%**

TC: Total capacity (kW), PI: Power input (kW)

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor water outlet temp. : °C													
		7.0		10.0		15.0		18.0		20.0		25.0		30.0	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
	-10.0	18.0	2.02	20.5	2.30	24.5	2.75	27.0	3.02	27.9	3.12	30.2	3.37	32.4	3.62
	-5.0	18.0	2.04	20.5	2.31	24.5	2.76	27.0	3.03	27.9	3.13	30.2	3.38	32.4	3.63
	0.0	18.0	2.07	20.5	2.34	24.5	2.78	27.0	3.05	27.9	3.15	30.2	3.40	32.4	3.65
	5.0	18.0	2.12	20.5	2.38	24.5	2.82	27.0	3.09	27.9	3.19	30.2	3.43	32.4	3.68
	10.0	18.0	2.23	20.5	2.48	24.5	2.90	27.0	3.16	27.9	3.26	30.2	3.49	32.4	3.73
	15.0	18.0	2.51	20.5	2.72	24.5	3.09	27.0	3.32	27.9	3.41	30.2	3.63	32.4	3.85
60%	20.0	18.0	2.58	20.5	2.85	24.5	3.31	27.0	3.58	27.9	3.68	30.2	3.93	32.4	4.15
	25.0	18.0	2.61	20.5	2.89	24.5	3.34	27.0	3.61	27.9	3.71	30.2	3.97	32.4	4.22
	30.0	18.0	3.18	20.5	3.53	24.5	4.13	27.0	4.50	27.9	4.63	30.2	4.97	32.4	5.30
	35.0	18.0	3.92	20.5	4.37	24.5	5.13	27.0	5.58	27.9	5.75	30.2	6.17	32.4	6.58
	40.0	18.0	4.68	20.5	5.23	24.5	6.15	27.0	6.70	27.9	6.90	30.2	7.41	32.4	7.92
	43.0	18.0	5.17	20.5	5.78	24.5	6.81	27.0	7.42	27.9	7.65	30.2	8.22	32.4	8.79
	46.0	18.0	5.68	20.5	6.36	24.5	7.51	27.0	8.20	27.9	8.45	29.6	8.82	29.6	8.37

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor water outlet temp. : °C													
		7.0		10.0		15.0		18.0		20.0		25.0		30.0	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
	-10.0	15.0	1.52	17.0	1.73	20.5	2.07	22.5	2.27	23.3	2.35	25.1	2.53	27.0	2.72
	-5.0	15.0	1.54	17.0	1.74	20.5	2.08	22.5	2.28	23.3	2.36	25.1	2.54	27.0	2.73
	0.0	15.0	1.56	17.0	1.76	20.5	2.10	22.5	2.30	23.3	2.37	25.1	2.56	27.0	2.74
	5.0	15.0	1.60	17.0	1.80	20.5	2.13	22.5	2.32	23.3	2.40	25.1	2.58	27.0	2.76
	10.0	15.0	1.69	17.0	1.87	20.5	2.19	22.5	2.38	23.3	2.45	25.1	2.63	27.0	2.80
	15.0	15.0	1.90	17.0	2.05	20.5	2.32	22.5	2.49	23.3	2.56	25.1	2.72	27.0	2.89
50%	20.0	15.0	2.03	17.0	2.23	20.5	2.57	22.5	2.78	23.3	2.83	25.1	2.95	27.0	3.08
	25.0	15.0	2.06	17.0	2.26	20.5	2.60	22.5	2.81	23.3	2.88	25.1	3.07	27.0	3.26
	30.0	15.0	2.28	17.0	2.49	20.5	2.83	22.5	3.03	23.3	3.10	25.1	3.28	27.0	3.45
	35.0	15.0	2.82	17.0	3.09	20.5	3.54	22.5	3.79	23.3	3.89	25.1	4.12	27.0	4.34
	40.0	15.0	3.37	17.0	3.71	20.5	4.26	22.5	4.58	23.3	4.70	25.1	4.99	27.0	5.27
	43.0	15.0	3.71	17.0	4.10	20.5	4.72	22.5	5.09	23.3	5.22	25.1	5.54	27.0	5.86
	46.0	15.0	4.08	17.0	4.51	20.5	5.21	22.5	5.62	23.3	5.77	25.1	6.14	27.0	6.50

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor water outlet temp. : °C													
		7.0		10.0		15.0		18.0		20.0		25.0		30.0	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
	-10.0	12.0	1.12	13.6	1.27	16.4	1.52	18.0	1.67	18.6	1.72	20.1	1.86	21.6	1.99
	-5.0	12.0	1.13	13.6	1.28	16.4	1.53	18.0	1.68	18.6	1.73	20.1	1.87	21.6	2.00
	0.0	12.0	1.15	13.6	1.30	16.4	1.54	18.0	1.69	18.6	1.74	20.1	1.88	21.6	2.01
	5.0	12.0	1.19	13.6	1.33	16.4	1.57	18.0	1.71	18.6	1.76	20.1	1.90	21.6	2.03
	10.0	12.0	1.26	13.6	1.39	16.4	1.61	18.0	1.75	18.6	1.80	20.1	1.93	21.6	2.06
	15.0	12.0	1.42	13.6	1.52	16.4	1.71	18.0	1.84	18.6	1.88	20.1	2.00	21.6	2.12
40%	20.0	12.0	1.58	13.6	1.73	16.4	1.96	18.0	2.04	18.6	2.07	20.1	2.16	21.6	2.25
	25.0	12.0	1.61	13.6	1.76	16.4	2.01	18.0	2.16	18.6	2.22	20.1	2.35	21.6	2.49
	30.0	12.0	1.64	13.6	1.79	16.4	2.04	18.0	2.19	18.6	2.24	20.1	2.38	21.6	2.52
	35.0	12.0	2.02	13.6	2.18	16.4	2.42	18.0	2.55	18.6	2.60	20.1	2.72	21.6	2.82
	40.0	12.0	2.40	13.6	2.61	16.4	2.92	18.0	3.10	18.6	3.16	20.1	3.31	21.6	3.45
	43.0	12.0	2.65	13.6	2.88	16.4	3.24	18.0	3.44	18.6	3.51	20.1	3.69	21.6	3.85
	46.0	12.0	2.90	13.6	3.16	16.4	3.57	18.0	3.80	18.6	3.88	20.1	4.08	21.6	4.28

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor water outlet temp. : °C													
		7.0		10.0		15.0		18.0		20.0		25.0		30.0	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
	-10.0	9.0	0.790	10.2	0.900	12.3	1.07	13.5	1.18	14.0	1.21	15.1	1.31	16.2	1.40
	-5.0	9.0	0.800	10.2	0.910	12.3	1.08	13.5	1.18	14.0	1.22	15.1	1.31	16.2	1.41
	0.0	9.0	0.820	10.2	0.920	12.3	1.09	13.5	1.19	14.0	1.23	15.1	1.32	16.2	1.42
	5.0	9.0	0.850	10.2	0.950	12.3	1.11	13.5	1.21	14.0	1.25	15.1	1.34	16.2	1.43
	10.0	9.0	0.900	10.2	0.990	12.3	1.15	13.5	1.24	14.0	1.28	15.1	1.37	16.2	1.45
	15.0	9.0	1.03	10.2	1.10	12.3	1.22	13.5	1.31	14.0	1.34	15.1	1.42	16.2	1.50
30%	20.0	9.0	1.23	10.2	1.33	12.3	1.41	13.5	1.45	14.0	1.48	15.1	1.53	16.2	1.60
	25.0	9.0	1.25	10.2	1.36	12.3	1.53	13.5	1.64	14.0	1.68	15.1	1.77	16.2	1.84
	30.0	9.0	1.28	10.2	1.38	12.3	1.56	13.5	1.66	14.0	1.70	15.1	1.80	16.2	1.89
	35.0	9.0	1.45	10.2	1.53	12.3	1.65	13.5	1.70	14.0	1.73	15.1	1.83	16.2	1.92
	40.0	9.0	1.71	10.2	1.82	12.3	1.98	13.5	2.06	14.0	2.09	15.1	2.16	16.2	2.22
	43.0	9.0	1.87	10.2	2.00	12.3	2.19	13.5	2.29	14.0	2.33	15.1	2.41	16.2	2.48
	46.0	9.0	2.04	10.2	2.19	12.3	2.41	13.5	2.53	14.0	2.57	15.1	2.67	16.2	2.75

1. Capacity Ratio of Outdoor Unit

1-10. U-16MF2E8 (Heating) Capacity Ratio 30-100%

TC: Total capacity (kW), PI: Power input (kW)

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor water outlet temp. : °C													
			25.0		30.0		33.0		35.0		38.0		40.0		45.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
100%	-19.8	-20.0	27.9	13.4	24.9	13.0	23.0	12.6	21.7	12.4	19.7	11.8	18.3	11.4	14.7	9.92
	-14.7	-15.0	33.1	14.1	29.6	13.6	27.5	13.1	25.9	12.8	23.6	12.2	22.0	11.7	17.7	10.2
	-9.6	-10.0	39.3	15.2	35.3	14.5	32.7	14.0	31.0	13.6	28.2	12.9	26.3	12.3	21.3	10.7
	-4.4	-5.0	45.9	16.8	41.3	15.6	38.4	14.8	36.4	14.3	33.2	13.5	31.0	12.9	25.0	11.0
	-1.8	-2.5	49.5	17.4	45.1	16.5	41.9	15.6	39.7	14.9	36.2	14.0	33.8	13.3	27.3	11.4
	0.8	0.0	52.3	17.4	49.1	17.4	45.6	16.4	43.2	15.6	39.4	14.4	36.8	13.8	29.8	11.7
	2.8	2.0	54.7	17.4	51.4	17.4	48.3	16.7	45.8	15.9	41.8	14.7	39.1	13.8	31.5	11.9
	6.0	5.0	58.6	17.4	55.1	17.4	53.0	17.3	50.0	16.4	44.4	14.4	40.7	13.1	31.5	10.7
	7.0	6.0	60.0	17.4	56.4	17.4	53.7	17.1	50.0	15.7	44.4	13.8	40.7	12.6	31.5	10.3
	8.6	7.5	62.1	17.4	58.4	17.4	53.7	16.0	50.0	14.7	44.4	12.9	40.7	11.8	31.5	9.77
	11.2	10.0	66.0	17.4	59.3	15.9	53.7	14.2	50.0	13.1	44.4	11.6	40.7	10.6	31.5	8.89
	16.4	15.0	68.5	14.5	59.3	12.4	53.7	11.2	50.0	10.4	44.4	9.21	40.7	8.46	31.5	7.25
	24.0	18.0	68.5	12.3	59.3	10.5	53.7	9.42	50.0	8.74	44.4	7.74	40.7	7.09	31.5	6.09

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor water outlet temp. : °C													
			25.0		30.0		33.0		35.0		38.0		40.0		45.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
90%	-19.8	-20.0	27.1	13.3	24.1	12.9	22.3	12.5	21.0	12.2	19.0	11.7	17.6	11.2	14.1	9.84
	-14.7	-15.0	32.3	14.0	28.8	13.5	26.6	13.0	25.1	12.7	22.8	12.1	21.2	11.6	17.0	10.2
	-9.6	-10.0	38.4	15.1	34.4	14.4	31.8	13.8	30.1	13.4	27.3	12.7	25.5	12.2	20.5	10.6
	-4.4	-5.0	46.0	16.9	41.2	15.8	38.2	15.1	36.1	14.6	32.9	13.7	30.6	13.0	24.6	11.2
	-1.8	-2.5	50.2	17.9	45.0	16.6	41.7	15.7	39.4	15.0	35.8	14.2	33.3	13.5	26.8	11.5
	0.8	0.0	53.6	18.2	49.0	17.4	45.4	16.4	42.9	15.6	39.0	14.5	36.4	13.9	28.3	11.6
	2.8	2.0	56.1	18.2	51.9	17.8	48.1	16.7	45.0	15.6	40.0	13.9	36.7	13.1	28.3	11.0
	6.0	5.0	60.1	18.2	53.3	16.5	48.3	15.1	45.0	14.1	40.0	12.6	36.7	11.9	28.3	9.96
	7.0	6.0	60.2	18.2	53.3	16.3	48.3	14.7	45.0	13.6	40.0	12.1	36.7	11.4	28.3	9.62
	8.6	7.5	61.7	17.8	53.3	15.2	48.3	13.7	45.0	12.7	40.0	11.3	36.7	10.7	28.3	9.11
	11.2	10.0	61.7	15.6	53.3	13.4	48.3	12.2	45.0	11.4	40.0	10.2	36.7	9.64	28.3	8.31
	16.4	15.0	61.7	11.9	53.3	10.4	48.3	9.47	45.0	8.88	40.0	8.01	36.7	7.68	28.3	6.78
	24.0	18.0	61.7	10.6	53.3	9.30	48.3	8.55	45.0	8.04	40.0	7.29	36.7	6.78	28.3	5.66

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor water outlet temp. : °C													
			25.0		30.0		33.0		35.0		38.0		40.0		45.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
80%	-19.8	-20.0	26.4	13.2	23.5	12.8	21.6	12.4	20.3	12.1	18.4	11.6	17.0	11.2	13.5	9.78
	-14.7	-15.0	31.6	14.0	28.1	13.4	25.9	13.0	24.4	12.6	22.1	12.0	20.5	11.6	16.4	10.1
	-9.6	-10.0	37.7	15.0	33.6	14.4	31.0	13.8	29.3	13.4	26.6	12.7	24.7	12.2	19.8	10.6
	-4.4	-5.0	46.2	17.1	41.2	16.0	38.1	15.3	36.0	14.9	32.6	13.9	30.3	13.3	24.3	11.4
	-1.8	-2.5	50.4	18.0	45.0	16.7	41.6	15.8	39.2	15.1	35.6	14.4	32.6	13.6	25.2	11.2
	0.8	0.0	54.8	18.9	47.4	16.5	43.0	15.1	40.0	14.2	35.6	13.3	32.6	12.6	25.2	10.7
	2.8	2.0	54.8	17.4	47.4	15.4	43.0	14.2	40.0	13.3	35.6	12.5	32.6	11.9	25.2	10.1
	6.0	5.0	54.8	15.6	47.4	13.9	43.0	12.8	40.0	12.1	35.6	11.3	32.6	10.8	25.2	9.18
	7.0	6.0	54.8	15.6	47.4	13.6	43.0	12.4	40.0	11.6	35.6	10.9	32.6	10.4	25.2	8.87
	8.6	7.5	54.8	14.4	47.4	12.6	43.0	11.6	40.0	10.9	35.6	10.2	32.6	9.76	25.2	8.41
	11.2	10.0	54.8	12.6	47.4	11.1	43.0	10.2	40.0	9.66	35.6	9.16	32.6	8.81	25.2	7.69
	16.4	15.0	54.8	9.94	47.4	8.77	43.0	8.07	40.0	7.60	35.6	7.22	32.6	7.02	25.2	6.27
	24.0	18.0	54.8	9.94	47.4	8.77	43.0	8.07	40.0	7.60	35.6	6.90	32.6	6.43	25.2	5.26

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor water outlet temp. : °C													
			25.0		30.0		33.0		35.0		38.0		40.0		45.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
70%	-19.8	-20.0	26.0	13.3	23.0	12.8	21.2	12.5	19.9	12.2	17.9	11.6	16.6	11.2	13.2	9.81
	-14.7	-15.0	31.1	14.1	27.6	13.5	25.4	13.1	23.9	12.7	21.6	12.1	20.0	11.6	15.9	10.1
	-9.6	-10.0	37.3	15.0	33.2	14.6	30.6	14.0	28.8	13.5	26.0	12.8	24.2	12.2	19.2	10.6
	-4.4	-5.0	46.8	17.5	41.5	16.2	37.6	15.2	35.0	14.7	31.1	13.7	28.5	12.8	22.0	10.7
	-1.8	-2.5	48.0	16.6	41.5	14.9	37.6	14.1	35.0	13.6	31.1	12.8	28.5	12.2	22.0	10.2
	0.8	0.0	48.0	15.2	41.5	13.7	37.6	13.0	35.0	12.6	31.1	11.9	28.5	11.4	22.0	9.71
	2.8	2.0	48.0	14.1	41.5	12.8	37.6	12.1	35.0	12.2	31.1	11.2	28.5	10.7	22.0	9.18
	6.0	5.0	48.0	12.6	41.5	11.5	37.6	10.9	35.0	10.6	31.1	10.1	28.5	9.69	22.0	8.34
	7.0	6.0	48.0	12.4	41.5	11.1	37.6	10.5	35.0	10.2	31.1	9.73	28.5	9.32	22.0	8.08
	8.6	7.5	48.0	11.4	41.5	10.3	37.6	9.78	35.0	9.56	31.1	9.14	28.5	8.79	22.0	7.67
	11.2	10.0	48.0	9.88	41.5	9.01	37.6	8.65	35.0	8.52	31.1	8.22	28.5	7.95	22.0	7.03
	16.4	15.0	48.0	9.23	41.5	8.17	37.6	7.53	35.0	7.10	31.1	6.48	28.5	6.34	22.0	5.74
	24.0	18.0	48.0	9.23	41.5	8.17	37.6	7.53	35.0	7.10	31.1	6.46	28.5	6.03	22.0	4.97

1. Capacity Ratio of Outdoor Unit

U-16MF2E8 (Heating) **Capacity Ratio 30-100%**

TC: Total capacity (kW), PI: Power input (kW)

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor water outlet temp. : °C													
			25.0		30.0		33.0		35.0		38.0		40.0		45.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
	-19.8	-20.0	26.2	13.3	23.1	12.8	21.2	12.5	19.9	12.2	17.9	11.6	16.6	11.2	13.1	9.80
	-14.7	-15.0	31.4	14.2	27.8	13.6	25.5	13.1	24.0	12.7	21.6	12.1	20.0	11.6	15.9	10.1
	-9.6	-10.0	37.7	15.0	33.4	14.7	30.7	14.0	28.9	13.6	26.1	12.8	24.2	12.3	18.9	10.5
	-4.4	-5.0	41.1	14.2	35.6	13.5	32.2	13.0	30.0	12.6	26.7	11.9	24.4	11.3	18.9	9.42
	-1.8	-2.5	41.1	13.0	35.6	12.4	32.2	12.1	30.0	11.7	26.7	11.1	24.4	10.6	18.9	9.01
	0.8	0.0	41.1	11.9	35.6	11.4	32.2	11.1	30.0	10.8	26.7	10.3	24.4	9.84	18.9	8.50
60%	2.8	2.0	41.1	11.0	35.6	10.6	32.2	10.4	30.0	10.1	26.7	9.66	24.4	9.27	18.9	8.04
	6.0	5.0	41.1	9.68	35.6	9.46	32.2	9.29	30.0	9.10	26.7	8.70	24.4	8.37	18.9	7.27
	7.0	6.0	41.1	9.32	35.6	9.06	32.2	8.89	30.0	8.72	26.7	8.36	24.4	8.06	18.9	7.08
	8.6	7.5	41.1	8.54	35.6	8.40	32.2	8.29	30.0	8.16	26.7	7.87	24.4	7.61	18.9	6.74
	11.2	10.0	41.1	8.23	35.6	7.36	32.2	7.36	30.0	7.29	26.7	7.10	24.4	6.90	18.9	6.19
	16.4	15.0	41.1	8.23	35.6	7.30	32.2	6.75	30.0	6.37	26.7	5.82	24.4	5.51	18.9	5.06
	24.0	18.0	41.1	8.23	35.6	7.30	32.2	6.75	30.0	6.37	26.7	5.82	24.4	5.45	18.9	4.52

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor water outlet temp. : °C													
			25.0		30.0		33.0		35.0		38.0		40.0		45.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
	-19.8	-20.0	27.2	13.4	24.0	12.9	22.0	12.5	20.6	12.2	18.5	11.7	17.1	11.2	13.5	9.83
	-14.7	-15.0	32.7	14.4	28.9	13.7	26.5	13.2	24.9	12.8	22.2	12.1	20.4	11.5	15.7	9.83
	-9.6	-10.0	34.3	13.2	29.6	12.7	26.9	12.1	25.0	11.6	22.2	10.8	20.4	10.3	15.7	8.72
	-4.4	-5.0	34.3	11.2	29.6	11.0	26.9	10.6	25.0	10.3	22.2	9.80	20.4	9.35	15.7	7.87
	-1.8	-2.5	34.3	10.3	29.6	10.1	26.9	9.83	25.0	9.59	22.2	9.12	20.4	8.75	15.7	7.55
	0.8	0.0	34.3	9.33	29.6	9.25	26.9	9.05	25.0	8.86	22.2	8.46	20.4	8.13	15.7	7.09
50%	2.8	2.0	34.3	8.61	29.6	8.60	26.9	8.45	25.0	8.29	22.2	7.95	20.4	7.66	15.7	6.69
	6.0	5.0	34.3	7.52	29.6	7.58	26.9	7.49	25.0	7.37	22.2	7.11	20.4	6.88	15.7	6.06
	7.0	6.0	34.3	7.11	29.6	7.23	26.9	7.17	25.0	7.07	22.2	6.84	20.4	6.63	15.7	5.91
	8.6	7.5	34.3	6.98	29.6	6.71	26.9	6.70	25.0	6.64	22.2	6.46	20.4	6.28	15.7	5.64
	11.2	10.0	34.3	6.98	29.6	6.22	26.9	5.97	25.0	5.95	22.2	5.85	20.4	5.72	15.7	5.20
	16.4	15.0	34.3	6.98	29.6	6.22	26.9	5.76	25.0	5.45	22.2	5.00	20.4	4.69	15.7	4.27
	24.0	18.0	34.3	6.98	29.6	6.22	26.9	5.76	25.0	5.45	22.2	5.00	20.4	4.69	15.7	3.93

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor water outlet temp. : °C													
			25.0		30.0		33.0		35.0		38.0		40.0		45.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
	-19.8	-20.0	27.4	12.2	23.7	11.6	21.5	11.09	20.0	10.75	17.8	10.16	16.3	9.72	12.6	8.41
	-14.7	-15.0	27.4	11.1	23.7	10.4	21.5	9.87	20.0	9.53	17.8	8.96	16.3	8.55	12.6	7.37
	-9.6	-10.0	27.4	9.63	23.7	9.35	21.5	9.00	20.0	8.59	17.8	8.07	16.3	7.67	12.6	6.57
	-4.4	-5.0	27.4	8.20	23.7	8.06	21.5	7.85	20.0	7.66	17.8	7.30	16.3	7.00	12.6	5.96
	-1.8	-2.5	27.4	7.49	23.7	7.42	21.5	7.27	20.0	7.11	17.8	6.80	16.3	6.54	12.6	5.72
	0.8	0.0	27.4	6.81	23.7	6.81	21.5	6.68	20.0	6.55	17.8	6.29	16.3	6.06	12.6	5.34
40%	2.8	2.0	27.4	6.22	23.7	6.26	21.5	6.18	20.0	6.08	17.8	5.87	16.3	5.68	12.6	5.04
	6.0	5.0	27.4	5.35	23.7	5.48	21.5	5.47	20.0	5.41	17.8	5.27	16.3	5.13	12.6	4.61
	7.0	6.0	27.4	5.35	23.7	5.23	21.5	5.24	20.0	5.21	17.8	5.08	16.3	4.96	12.6	4.49
	8.6	7.5	27.4	5.35	23.7	4.88	21.5	4.92	20.0	4.90	17.8	4.81	16.3	4.71	12.6	4.29
	11.2	10.0	27.4	5.35	23.7	4.79	21.5	4.46	20.0	4.42	17.8	4.38	16.3	4.31	12.6	3.98
	16.4	15.0	27.4	5.35	23.7	4.79	21.5	4.46	20.0	4.24	17.8	3.90	16.3	3.68	12.6	3.29
	24.0	18.0	27.4	5.35	23.7	4.79	21.5	4.46	20.0	4.24	17.8	3.90	16.3	3.68	12.6	3.12

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor water outlet temp. : °C													
			25.0		30.0		33.0		35.0		38.0		40.0		45.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
	-19.8	-20.0	20.6	8.42	17.8	7.99	16.1	7.69	15.0	7.46	13.3	7.08	12.2	6.79	9.4	5.93
	-14.7	-15.0	20.6	7.64	17.8	7.20	16.1	6.88	15.0	6.66	13.3	6.28	12.2	6.01	9.4	5.23
	-9.6	-10.0	20.6	6.64	17.8	6.48	16.1	6.29	15.0	6.07	13.3	5.69	12.2	5.43	9.4	4.70
	-4.4	-5.0	20.6	5.66	17.8	5.59	16.1	5.47	15.0	5.35	13.3	5.12	12.2	4.94	9.4	4.28
	-1.8	-2.5	20.6	5.12	17.8	5.11	16.1	5.03	15.0	4.94	13.3	4.76	12.2	4.60	9.4	4.09
	0.8	0.0	20.6	4.59	17.8	4.65	16.1	4.60	15.0	4.54	13.3	4.40	12.2	4.27	9.4	3.83
30%	2.8	2.0	20.6	4.19	17.8	4.29	16.1	4.28	15.0	4.24	13.3	4.12	12.2	4.02	9.4	3.63
	6.0	5.0	20.6	3.91	17.8	3.79	16.1	3.82	15.0	3.81	13.3	3.74	12.2	3.66	9.4	3.35
	7.0	6.0	20.6	3.91	17.8	3.64	16.1	3.68	15.0	3.67	13.3	3.62	12.2	3.55	9.4	3.27
	8.6	7.5	20.6	3.91	17.8	3.53	16.1	3.47	15.0	3.47	13.3	3.44	12.2	3.38	9.4	3.14
	11.2	10.0	20.6	3.91	17.8	3.53	16.1	3.30	15.0	3.16	13.3	3.15	12.2	3.12	9.4	2.93
	16.4	15.0	20.6	3.91	17.8	3.53	16.1	3.30	15.0	3.15	13.3	2.92	12.2	2.77	9.4	2.45
	24.0	18.0	20.6	3.91	17.8	3.53	16.1	3.30	15.0	3.15	13.3	2.92	12.2	2.77	9.4	2.39