

Hi-FLEXi W Series Heat Recovery

Hi-FLEXi W Series Heat Recovery can keep simultaneous cooling and heating from one system. And it has a new switch box, which is designed to improve energy efficiency. The products are more flexible to meet users' demands.

- Simultaneous Cooling and Heating
- Convenient Installation
- 360° Fitted Refrigerant Cooling Technology

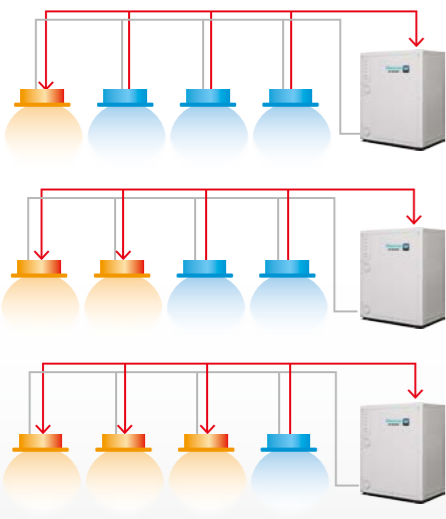


2-stage Heat Recovery

With 2-stage heat recovery from both refrigerant side and water source side, the heat recovery system realize energy saving at the greatest extent. Simultaneous cooling and heating in one system could be achieved.

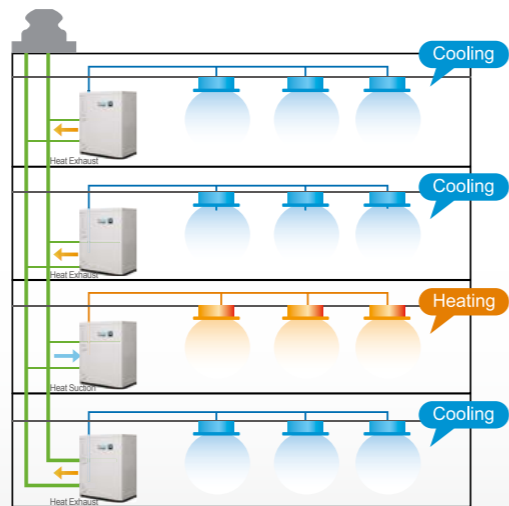
Heat recovery between indoor units

Heat exhausted from indoor unit in cooling mode could be transferred to the units which is in heating mode.



Heat recovery between outdoor units

The outdoor unit of cooling mode exhaust heat into water, and the other outdoor unit of heating mode absorb heat from water. So the heat recovery between outdoor units could be achieved via the water pipe.



Indoor Installation, Not affected by weather conditions

- It is invisible from the outside, ensure the beautiful facade of the building.
- It is very suitable for sound sensitive areas because there is no external running sound.
- It can operation normally even in the most extreme outside conditions, especially in geothermal operation.
- It has very high efficiency thanks to water cooled condenser.
- Indoor installation is more convenient and safer.



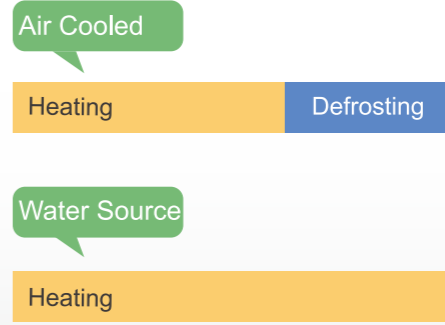
Simplify Installation Process

- There is no need for ventilation in equipment room.
- Save time and simplify installation process because there is no need for installing air duct for water source outdoor unit.



Continuously Heating Without Defrosting Operation

- Best comfort because of no temperature fluctuations during heating operation.
- Continuously heating thanks to no defrosting during heating operation.



Outdoor Unit Specifications



Hi-FLEXi W Series Heat Recovery		HP	8HP	10HP	12HP	14HP
Model Power Supply	AC 3Φ, 380 ~ 415V/50Hz(60Hz)		AVWW-76FKFW	AVWW-96FKFW	AVWW-114FKFW	AVWW-136FKFW
Cooling Operation	Nominal Capacity*1	kW	22.4	28.0	33.5	40.0
		KBtu/h	76.5	95.6	114.3	136.5
	Nominal Input	kW	3.85	5.04	6.32	7.84
	EER		5.82	5.55	5.30	5.10
Heating Operation	Nominal Capacity*1	kW	25.0	31.5	37.5	45.0
		KBtu/h	85.3	107.5	128.0	153.6
	Nominal Input	kW	4.08	5.25	6.45	8.03
	COP		6.12	6.00	5.81	5.60
Outer Dimensions	Height	mm	1030	1030	1030	1030
	Width	mm	820	820	820	820
	Depth	mm	560	560	560	560
	Area	m ²	0.46	0.46	0.46	0.46
Packing Dimensions	H×W×D	mm	1180×900×632	1180×900×632	1180×900×632	1180×900×632
Net Weight		Kg	166	166	171	171
Gross Weight		Kg	170	170	175	175
Sound Pressure Level *2	Cooling/Heating	dB(A)	49/51	51/53	53/54	55/57
	Water Temperature*3	°C	10~45	10~45	10~45	10~45
Water-Side Heat Exchanger	Water Flow Rate	L/min	76.7	96.0	115.0	138.3
	Water Pressure Drop	kPa	30	45	45	60
	Maximum Pressure Resistance	kgf/cm ²	20	20	20	20
	Liquid Pipe	mm	Φ9.53	Φ9.53	Φ12.7	Φ12.7
Refrigerant Connecting Pipes	Low Pressure Gas Pipe	mm	Φ19.05	Φ22.2	Φ25.4	Φ25.4
	High/Low Pressure Gas Pipe	mm	Φ15.88	Φ19.05	Φ22.2	Φ22.2
	Water Pipe		DN32	DN32	DN32	DN32
Water Connecting Pipes	Thread of Connector		G1-1/4B	G1-1/4B	G1-1/4B	G1-1/4B
	Drain Pipe	mm	Outer Diameter 18	Outer Diameter 18	Outer Diameter 18	Outer Diameter 18
	Recommended		12	15	18	21
MAX. Connectable Indoor Units	MAX.		19	24	29	34
	MAX. Piping Length*4	m	300(500)	300(500)	300(500)	300(500)



Hi-FLEXi W Series Heat Recovery		HP	16HP	18HP	20HP
Model Power Supply	AC 3Φ, 380 ~ 415V/50Hz(60Hz)		AVWW-154FKFW	AVWW-170FKFW	AVWW-190FKFW
Cooling Operation	Nominal Capacity*1	kW	45.0	50.0	56.0
		KBtu/h	153.6	170.6	191.1
	Nominal Input	kW	8.11	9.43	10.98
	EER		5.55	5.30	5.10
Heating Operation	Nominal Capacity*1	kW	50.0	56.0	63.0
		KBtu/h	170.6	191.1	215.0
	Nominal Input	kW	8.33	9.62	10.86
	COP		6.00	5.82	5.80
Outer Dimensions	Height	mm	1030	1030	1030
	Width	mm	1040	1040	1040
	Depth	mm	560	560	560
	Area	m ²	0.58	0.58	0.58
Packing Dimensions	H×W×D	mm	1180×1112×632	1180×1112×632	1180×1112×632
Net Weight		Kg	245	246	246
Gross Weight		Kg	250	251	251
Sound Pressure Level *2	Cooling/Heating	dB(A)	51/52	53/53	53/55
	Water Temperature*3	°C	10~45	10~45	10~45
Water-Side Heat Exchanger	Water Flow Rate	L/min	153.3	166.7	193.3
	Water Pressure Drop	kPa	40	45	60
	Maximum Pressure Resistance	kgf/cm ²	20	20	20
	Liquid Pipe	mm	Φ12.7	Φ15.88	Φ15.88
Refrigerant Connecting Pipes	Low Pressure Gas Pipe	mm	Φ28.6	Φ28.6	Φ28.6
	High/Low Pressure Gas Pipe	mm	Φ22.2	Φ22.2	Φ22.2
	Water Pipe		DN32	DN32	DN32
Water Connecting Pipes	Thread of Connector		G1-1/4B	G1-1/4B	G1-1/4B
	Drain Pipe	mm	Outer Diameter 18	Outer Diameter 18	Outer Diameter 18
	Recommended		23	26	29
MAX. Connectable Indoor Units	MAX.		39	43	48
	MAX. Piping Length*4	m	300(500)	300(500)	300(500)

NOTES:

*1. Operation Condition:

Cooling: Indoor Temperature 27°C DB/19°C WB, Water Inlet/Outlet 30/35°C.

Heating: Indoor Temperature 20°C DB/15°C WB, Water Inlet 20°C.

*2. The sound pressure is based on the following conditions.

1 Meter from the unit service cover surface, and 1.5 Meters from floor level.

The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

*3. When unit is operating out of the allowable water temperature range, it won't strat normally and will alarm.

*4. For Max. pipe length more than 300m, please contact our professional engineer.

Outdoor Unit Specifications



Hi-FLEXi W Series Heat Recovery		HP	22HP	24HP	26HP	28HP	30HP
Model Power Supply	AC 3Φ, 380 ~ 415V/50Hz(60Hz)		AVWW-210FKFW	AVWW-228FKFW	AVWW-250FKFW	AVWW-268FKFW	AVWW-286FKFW
Combination			AVWW-96FKFW AVWW-114FKFW	AVWW-114FKFW AVWW-114FKFW	AVWW-114FKFW AVWW-136FKFW	AVWW-114FKFW AVWW-154FKFW	AVWW-96FKFW AVWW-190FKFW
Cooling Operation	Nominal Capacity*1	kW	61.5	67.0	73.5	78.5	84.0
		KBtu/h	209.9	228.6	250.8	267.9	286.7
	Nominal Input	kW	11.4	12.6	14.2	14.4	16.0
	EER		5.41	5.30	5.19	5.44	5.24
Heating Operation	Nominal Capacity*1	kW	69.0	75.0	82.5	87.5	94.5
		KBtu/h	235.4	255.9	281.6	298.6	322.4
	Nominal Input	kW	11.7	12.9	14.5	14.8	16.1
	COP		5.90	5.81	5.70	5.92	5.87
Outer Dimensions	H×W×D	mm	1030×820×560+ 1030×820×560	1030×820×560+ 1030×820×560	1030×820×560+ 1030×820×560	1030×820×560+ 1030×1040×560	1030×820×560+ 1030×1040×560
	Area	m ²	0.9	0.9	0.9	1.0	1.0
Packing Dimensions	H×W×D	mm	1180×900×632+ 1180×900×632	1180×900×632+ 1180×900×632	1180×900×632+ 1180×900×632	1180×900×632+ 1180×1112×632	1180×900×632+ 1180×1112×632
Net Weight		Kg	337	342	342	416	412
Gross Weight		Kg	345	350	350	425	421
Sound Pressure Level *2	Cooling/Heating	dB(A)	56/57	56/57	58/60	56/57	56/58
Water-Side Heat Exchanger	Water Temperature*3	°C	10~45	10~45	10~45	10~45	10~45
	Water Flow Rate	L/min	211.0	230.0	253.3	268.3	289.3
	Water Pressure Drop	kPa	/	/	/	/	/
	Maximum Pressure Resistance	kgf/cm ²	20	20	20	20	20
Refrigerant Connecting Pipes	Liquid Pipe	mm	Φ15.88	Φ15.88	Φ19.05	Φ19.05	Φ19.05
	Low Pressure Gas Pipe	mm	Φ28.6	Φ28.6	Φ31.75	Φ31.75	Φ31.75
	High/Low Pressure Gas Pipe	mm	Φ25.4	Φ25.4	Φ25.4	Φ28.6	Φ28.6
Water Connecting Pipes	Water Pipe		DN32	DN32	DN32	DN32	DN32
	Thread of Connector		G1-1/4B	G1-1/4B	G1-1/4B	G1-1/4B	G1-1/4B
	Drain Pipe	mm	Outer Diameter 18				
MAX. Connectable Indoor Units	Recommended		33	36	39	40	40
	MAX.		53	58	63	64	64
MAX. Piping Length*4		m	300(500)	300(500)	300(500)	300(500)	300(500)



Hi-FLEXi W Series Heat Recovery		HP	32HP	34HP	36HP	38HP	40HP
Model Power Supply	AC 3Φ, 380 ~ 415V/50Hz(60Hz)		AVWW-304FKFW	AVWW-326FKFW	AVWW-344FKFW	AVWW-360FKFW	AVWW-380FKFW
Combination			AVWW-114FKFW AVWW-190FKFW	AVWW-136FKFW AVWW-190FKFW	AVWW-154FKFW AVWW-190FKFW	AVWW-170FKFW AVWW-190FKFW	AVWW-190FKFW AVWW-190FKFW
Cooling Operation	Nominal Capacity*1	kW	89.5	96.0	101.0	106.0	112.0
		KBtu/h	305.4	327.6	344.7	361.7	382.1
	Nominal Input	kW	17.3	18.8	19.1	20.4	22.0
	EER		5.17	5.10	5.29	5.19	5.10
Heating Operation	Nominal Capacity*1	kW	100.5	108.0	113.0	119.0	126.0
		KBtu/h	342.9	368.6	385.6	406.0	429.9
	Nominal Input	kW	17.3	18.9	19.2	20.5	21.7
	COP		5.81	5.72	5.89	5.81	5.80
Outer Dimensions	H×W×D	mm	1030×820×560+ 1030×1040×560	1030×820×560+ 1030×1040×560	1030×1040×560+ 1030×1040×560	1030×1040×560+ 1030×1040×560	1030×1040×560+ 1030×1040×560
	Area	m ²	1.0	1.0	1.2	1.2	1.2
Packing Dimensions	H×W×D	mm	1180×900×632+ 1180×1112×632	1180×900×632+ 1180×1112×632	1180×1112×632+ 1180×1112×632	1180×1112×632+ 1180×1112×632	1180×1112×632+ 1180×1112×632
Net Weight		Kg	417	417	491	492	492
Gross Weight		Kg	426	426	501	502	502
Sound Pressure Level *2	Cooling/Heating	dB(A)	56/58	58/60	56/58	56/58	56/58
Water-Side Heat Exchanger	Water Temperature*3	°C	10~45	10~45	10~45	10~45	10~45
	Water Flow Rate	L/min	308.3	331.7	346.7	360.0	386.7
	Water Pressure Drop	kPa	/	/	/	/	/
	Maximum Pressure Resistance	kgf/cm ²	20	20	20	20	20
Refrigerant Connecting Pipes	Liquid Pipe	mm	Φ19.05	Φ19.05	Φ19.05	Φ19.05	Φ19.05
	Low Pressure Gas Pipe	mm	Φ31.75	Φ31.75	Φ31.75	Φ38.1	Φ38.1
	High/Low Pressure Gas Pipe	mm	Φ28.6	Φ28.6	Φ28.6	Φ31.75	Φ31.75
Water Connecting Pipes	Water Pipe		DN32	DN32	DN32	DN32	DN32
	Thread of Connector		G1-1/4B	G1-1/4B	G1-1/4B	G1-1/4B	G1-1/4B
	Drain Pipe	mm	Outer Diameter 18				
MAX. Connectable Indoor Units	Recommended		40	40	40	40	40
	MAX.		64	64	64	64	64
MAX. Piping Length*4		m	300(500)	300(500)	300(500)	300(500)	300(500)

NOTES:

- *1. Operation Condition:
Cooling:Indoor Temperature 27°C DB/19°C WB, Water Inlet/Outlet 30/35°C.
Heating:Indoor Temperature 20°C DB/15°C WB, Water Inlet 20°C.
- *2. The sound pressure is based on the following conditions.
1 Meter from the unit service cover surface, and 1.5 Meters from floor level.
The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.
- *3. When unit is operating out of the allowable water temperature range, it won't strat normally and will alarm.
- *4. For Max.pipe length more than 300m, please contact our professional engineer.

Outdoor Unit Specifications



Hi-FLEXi W Series Heat Recovery		HP	42HP	44HP	46HP	48HP	50HP
Model Power Supply	AC 3Φ, 380 ~ 415V/50Hz(60Hz)		AVWW-400FKFW	AVWW-418FKFW	AVWW-440FKFW	AVWW-456FKFW	AVWW-476FKFW
Combination			AVWW-96FKFW AVWW-114FKFW AVWW-190FKFW	AVWW-114FKFW AVWW-114FKFW AVWW-190FKFW	AVWW-96FKFW AVWW-154FKFW AVWW-190FKFW	AVWW-96FKFW AVWW-170FKFW AVWW-190FKFW	AVWW-96FKFW AVWW-190FKFW AVWW-190FKFW
Cooling Operation	Nominal Capacity*1	kW	117.5	123.0	129.0	134.0	140.0
		KBtu/h	401.0	419.7	440.3	457.3	477.7
	Nominal Input	kW	22.3	23.6	24.1	25.5	27.0
	EER		5.26	5.21	5.35	5.27	5.19
Heating Operation	Nominal Capacity*1	kW	132.0	138.0	144.5	150.5	157.5
		KBtu/h	450.4	470.9	493.0	513.5	537.4
	Nominal Input	kW	22.6	23.8	24.4	25.7	27.0
	COP		5.85	5.81	5.91	5.85	5.84
Outer Dimensions	H×W×D	mm	1030×820×560+ 1030×820×560+ 1030×1040×560	1030×820×560+ 1030×820×560+ 1030×1040×560	1030×820×560+ 1030×1040×560+ 1030×1040×560	1030×820×560+ 1030×1040×560+ 1030×1040×560	1030×820×560+ 1030×1040×560+ 1030×1040×560
	Area	m ²	1.5	1.5	1.6	1.6	1.6
Packing Dimensions	H×W×D	mm	1180×900×632+ 1180×900×632+ 1180×1112×632	1180×900×632+ 1180×900×632+ 1180×1112×632	1180×900×632+ 1180×1112×632+ 1180×1112×632	1180×900×632+ 1180×1112×632+ 1180×1112×632	1180×900×632+ 1180×1112×632+ 1180×1112×632
Net Weight		Kg	583	588	657	658	658
Gross Weight		Kg	596	601	671	672	672
Sound Pressure Level *2	Cooling/Heating	dB(A)	58/60	58/60	58/60	58/60	58/60
Water-Side Heat Exchanger	Water Temperature*3	°C	10~45	10~45	10~45	10~45	10~45
	Water Flow Rate	L/min	404.3	423.3	442.7	456.0	482.7
	Water Pressure Drop	kPa	/	/	/	/	/
	Maximum Pressure Resistance	kgf/cm ²	20	20	20	20	20
Refrigerant Connecting Pipes	Liquid Pipe	mm	Ø19.05	Ø19.05	Ø19.05	Ø19.05	Ø19.05
	Low Pressure Gas Pipe	mm	Ø38.1	Ø38.1	Ø38.1	Ø38.1	Ø38.1
	High/Low Pressure Gas Pipe	mm	Ø31.75	Ø31.75	Ø31.75	Ø31.75	Ø31.75
Water Connecting Pipes	Water Pipe		DN32	DN32	DN32	DN32	DN32
	Thread of Connector		G1-1/4B	G1-1/4B	G1-1/4B	G1-1/4B	G1-1/4B
	Drain Pipe	mm	Outer Diameter 18				
MAX. Connectable Indoor Units	Recommended		40	40	40	40	40
	MAX.		64	64	64	64	64
MAX. Piping Length*4		m	300(500)	300(500)	300(500)	300(500)	300(500)



Hi-FLEXi W Series Heat Recovery		HP	52HP	54HP	56HP	58HP	60HP
Model Power Supply	AC 3Φ, 380 ~ 415V/50Hz(60Hz)		AVWW-494FKFW	AVWW-516FKFW	AVWW-534FKFW	AVWW-550FKFW	AVWW-570FKFW
Combination			AVWW-114FKFW AVWW-190FKFW AVWW-190FKFW	AVWW-136FKFW AVWW-190FKFW AVWW-190FKFW	AVWW-154FKFW AVWW-190FKFW AVWW-190FKFW	AVWW-170FKFW AVWW-190FKFW AVWW-190FKFW	AVWW-190FKFW AVWW-190FKFW AVWW-190FKFW
Cooling Operation	Nominal Capacity*1	kW	145.5	152.0	157.0	162.0	168.0
		KBtu/h	496.4	518.6	535.7	552.7	573.2
	Nominal Input	kW	28.3	29.8	30.1	31.4	32.9
	EER		5.14	5.10	5.22	5.16	5.10
Heating Operation	Nominal Capacity*1	kW	163.5	171.0	176.0	182.0	189.0
		KBtu/h	557.9	583.5	600.5	621.0	644.9
	Nominal Input	kW	28.2	29.8	30.1	31.3	32.6
	COP		5.80	5.75	5.86	5.81	5.80
Outer Dimensions	H×W×D	mm	1030×820×560+ 1030×1040×560+ 1030×1040×560	1030×820×560+ 1030×1040×560+ 1030×1040×560	1030×1040×560+ 1030×1040×560+ 1030×1040×560	1030×1040×560+ 1030×1040×560+ 1030×1040×560	1030×1040×560+ 1030×1040×560+ 1030×1040×560
	Area	m ²	1.6	1.6	1.7	1.7	1.7
Packing Dimensions	H×W×D	mm	1180×900×632+ 1180×1112×632+ 1180×1112×632	1180×900×632+ 1180×1112×632+ 1180×1112×632	1180×1112×632+ 1180×1112×632+ 1180×1112×632	1180×1112×632+ 1180×1112×632+ 1180×1112×632	1180×1112×632+ 1180×1112×632+ 1180×1112×632
Net Weight		Kg	663	663	737	738	738
Gross Weight		Kg	677	677	752	753	753
Sound Pressure Level *2	Cooling/Heating	dB(A)	58/60	60/62	58/60	58/60	58/60
Water-Side Heat Exchanger	Water Temperature*3	°C	10~45	10~45	10~45	10~45	10~45
	Water Flow Rate	L/min	501.7	525.0	540.0	553.3	580.0
	Water Pressure Drop	kPa	/	/	/	/	/
	Maximum Pressure Resistance	kgf/cm ²	20	20	20	20	20
Refrigerant Connecting Pipes	Liquid Pipe	mm	Ø19.05	Ø19.05	Ø22.2	Ø22.2	Ø22.2
	Low Pressure Gas Pipe	mm	Ø38.1	Ø38.1	Ø38.1	Ø38.1	Ø38.1
	High/Low Pressure Gas Pipe	mm	Ø31.75	Ø31.75	Ø38.1	Ø38.1	Ø38.1
Water Connecting Pipes	Water Pipe		DN32	DN32	DN32	DN32	DN32
	Thread of Connector		G1-1/4B	G1-1/4B	G1-1/4B	G1-1/4B	G1-1/4B
	Drain Pipe	mm	Outer Diameter 18				
MAX. Connectable Indoor Units	Recommended		40	40	40	40	40
	MAX.		64	64	64	64	64
MAX. Piping Length*4		m	300(500)	300(500)	300(500)	300(500)	300(500)

NOTES:

*1. Operation Condition:

Cooling:Indoor Temperature 27°CDB/19°C WB, Water Inlet/Outlet 30/35°C.
Heating:Indoor Temperature 20°C DB/15°C WB, Water Inlet 20°C.

*2. The sound pressure is based on the following conditions.

1 Meter from the unit service cover surface, and 1.5 Meters from floor level.

The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

*3. When unit is operating out of the allowable water temperature range, it won't strat normally and will alarm.

*4. For Max.pipe length more than 300m, please contact our professional engineer.