



EFFICIENCY AND EASE OF INSTALLATION

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Strengthened by its continued commitment to technological research and its long experience in the heating/cooling systems market in Italy and Europe, Hokkaido is proud to announce the **PROJECT VRF R410A** line, a strong candidate for a leading product in the VRF systems market.

Efficiency, reliability and **application flexibility** are the quality solutions that the XRV Systems offer for the various applicative requirements of installers, designers and final customers.

PROJECT VRF R410A FULL DC INVERTER

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PROJECT VRF R410A FULL DC INVERTER - LINE UP
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XRV MULTI SYSTEM
Outdoor heat pump units



XRV PLUS MINI



2.5HP
single phase
HCNU 806 XRV



3.2HP
single phase
HCNU 1056 XRV

4.5HP
single phase
HCNU 1206 XRV



5HP
single phase
HCNU 1406 XRV

6HP
single phase
HCNU 1606 XRV



7HP
three-phase
HCYU 2006 XRV

8HP
three-phase
HCYU 2246 XRV

9HP
three-phase
HCYU 2606 XRV

10HP
three-phase
HCYU 2806 XRV

12HP
three-phase
HCYU 3356 XRV

Performance and consumption are based on the following test conditions:
Cooling: O.T. 35° C DB, 24° C WB - I.T. 27° C DB, 19° C WB (ISO 5151 Standard).
Heating: O.T. 7° C DB, 6° C WB - I.T. 20° C DB, 15° C WB (ISO 5151 Standard).

PROJECT VRF R410A FULL DC INVERTER - LINE UP
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XRV MULTI SYSTEM
Individual outdoor heat pump units



XRV INDIVIDUAL



14HP three-phase HCYUM 4006 XRV-I	16HP three-phase HCYUM 4506 XRV-I	18HP three-phase HCYUM 5006 XRV-I
20HP three-phase HCYUM 5606 XRV-I	22HP three-phase HCYUM 6156 XRV-I	



24HP three-phase HCYUM 6706 XRV-I	26HP three-phase HCYUM 7306 XRV-I	28HP three-phase HCYUM 7856 XRV-I
30HP three-phase HCYUM 8506 XRV-I	32HP three-phase HCYUM 9006 XRV-I	

Performance and consumption are based on the following test conditions:
Cooling: O.T. 35° C DB, 24° C WB - I.T. 27° C DB, 19° C WB (ISO 5151 Standard).
Heating: O.T. 7° C DB, 6° C WB - I.T. 20° C DB, 15° C WB (ISO 5151 Standard).

PROJECT VRF R410A FULL DC INVERTER - LINE UP

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XRV MULTI SYSTEM

Outdoor heat pump units - 2 pipes

XRV PREMIUM MODULAR



8~12HP



14~22HP

8HP	10HP	12HP	14HP
HCSU 2525 XRV-P	HCSU 2805 XRV-P	HCSU 3355 XRV-P	HCSU 4005 XRV-P
16HP	18HP	20HP	22HP
HCSU 4505 XRV-P	HCSU 5005 XRV-P	HCSU 5605 XRV-P	HCSU 6155 XRV-P

COMBINATIONS				
24HP	26HP	28HP	30HP	32HP
12 + 12	10 + 16	10 + 18	10 + 20	10 + 22
HCSU 3355 XRV-P HCSU 3355 XRV-P	HCSU 2805 XRV-P HCSU 4505 XRV-P	HCSU 2805 XRV-P HCSU 5005 XRV-P	HCSU 2805 XRV-P HCSU 5605 XRV-P	HCSU 2805 XRV-P HCSU 6155 XRV-P
34HP	36HP	38HP	40HP	42HP
12 + 22	18 + 18	16 + 22	18 + 22	20 + 22
HCSU 3355 XRV-P HCSU 6155 XRV-P	HCSU 5005 XRV-P HCSU 5005 XRV-P	HCSU 4505 XRV-P HCSU 6155 XRV-P	HCSU 5005 XRV-P HCSU 6155 XRV-P	HCSU 5605 XRV-P HCSU 6155 XRV-P
44HP	46HP	48HP	50HP	52HP
22 + 22	12 + 12 + 22	10 + 16 + 22	10 + 18 + 22	10 + 20 + 22
HCSU 6155 XRV-P HCSU 6155 XRV-P	HCSU 3355 XRV-P HCSU 3355 XRV-P HCSU 6155 XRV-P	HCSU 2805 XRV-P HCSU 4505 XRV-P HCSU 6155 XRV-P	HCSU 2805 XRV-P HCSU 5005 XRV-P HCSU 6155 XRV-P	HCSU 2805 XRV-P HCSU 5605 XRV-P HCSU 6155 XRV-P
54HP	56HP	58HP	60HP	62HP
10 + 22 + 22	12 + 22 + 22	18 + 18 + 22	16 + 22 + 22	18 + 22 + 22
HCSU 2805 XRV-P HCSU 6155 XRV-P HCSU 6155 XRV-P	HCSU 3355 XRV-P HCSU 6155 XRV-P HCSU 6155 XRV-P	HCSU 5005 XRV-P HCSU 5005 XRV-P HCSU 6155 XRV-P	HCSU 4505 XRV-P HCSU 6155 XRV-P HCSU 6155 XRV-P	HCSU 5005 XRV-P HCSU 6155 XRV-P HCSU 6155 XRV-P
64HP	66HP	68HP	70HP	72HP
20 + 22 + 22	22 + 22 + 22	12 + 12 + 22 + 22	10 + 16 + 22 + 22	10 + 18 + 22 + 22
HCSU 5605 XRV-P HCSU 6155 XRV-P HCSU 6155 XRV-P	HCSU 6155 XRV-P HCSU 6155 XRV-P HCSU 6155 XRV-P	HCSU 3355 XRV-P HCSU 3355 XRV-P HCSU 6155 XRV-P HCSU 6155 XRV-P	HCSU 2805 XRV-P HCSU 4505 XRV-P HCSU 6155 XRV-P HCSU 6155 XRV-P	HCSU 2805 XRV-P HCSU 5005 XRV-P HCSU 6155 XRV-P HCSU 6155 XRV-P
74HP	76HP	78HP	80HP	82HP
10 + 20 + 22 + 22	10 + 22 + 22 + 22	12 + 22 + 22 + 22	18 + 18 + 22 + 22	16 + 22 + 22 + 22
HCSU 2805 XRV-P HCSU 5605 XRV-P HCSU 6155 XRV-P HCSU 6155 XRV-P	HCSU 2805 XRV-P HCSU 6155 XRV-P HCSU 6155 XRV-P HCSU 6155 XRV-P	HCSU 3355 XRV-P HCSU 6155 XRV-P HCSU 6155 XRV-P HCSU 6155 XRV-P	HCSU 5005 XRV-P HCSU 5005 XRV-P HCSU 6155 XRV-P HCSU 6155 XRV-P	HCSU 4505 XRV-P HCSU 6155 XRV-P HCSU 6155 XRV-P HCSU 6155 XRV-P
84HP	86HP	88HP		
18 + 22 + 22 + 22	20 + 22 + 22 + 22	22 + 22 + 22 + 22		
HCSU 5005 XRV-P HCSU 6155 XRV-P HCSU 6155 XRV-P HCSU 6155 XRV-P	HCSU 5605 XRV-P HCSU 6155 XRV-P HCSU 6155 XRV-P HCSU 6155 XRV-P	HCSU 6155 XRV-P HCSU 6155 XRV-P HCSU 6155 XRV-P HCSU 6155 XRV-P		

PROJECT VRF R410A FULL DC INVERTER - LINE UP

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XRV MULTI SYSTEM

Outdoor heat recovery units - 3 pipes

XRV PLUS HEAT RECOVERY



8~12HP



14~18HP

8HP	10HP	12HP	14HP
HCSR 2526 XRV-R	HCSR 2806 XRV-R	HCSR 3356 XRV-R	HCSR 4006 XRV-R
16HP	18HP		
HCSR 4506 XRV-R	HCSR 5006 XRV-R		

COMBINATIONS				
20HP	22HP	24HP	26HP	28HP
10+10	10+12	10+14	12+14	12+16
HCSR 2806 XRV-R HCSR 2806 XRV-R	HCSR 2806 XRV-R HCSR 3356 XRV-R	HCSR 2806 XRV-R HCSR 4006 XRV-R	HCSR 3356 XRV-R HCSR 4006 XRV-R	HCSR 3356 XRV-R HCSR 4506 XRV-R
30HP	32HP	34HP	36HP	38HP
12+18	16+16	16+18	18+18	12+12+14
HCSR 3356 XRV-R HCSR 5006 XRV-R	HCSR 4506 XRV-R HCSR 4506 XRV-R	HCSR 4506 XRV-R HCSR 5006 XRV-R	HCSR 5006 XRV-R HCSR 5006 XRV-R	HCSR 3356 XRV-R HCSR 3356 XRV-R HCSR 4006 XRV-R
40HP	42HP	44HP	46HP	48HP
12+12+16	12+14+16	12+16+16	14+16+16	16+16+16
HCSR 3356 XRV-R HCSR 3356 XRV-R HCSR 4506 XRV-R	HCSR 3356 XRV-R HCSR 4006 XRV-R HCSR 4506 XRV-R	HCSR 3356 XRV-R HCSR 4506 XRV-R HCSR 4506 XRV-R	HCSR 4006 XRV-R HCSR 4506 XRV-R HCSR 4506 XRV-R	HCSR 4506 XRV-R HCSR 4506 XRV-R HCSR 4506 XRV-R
50HP	52HP	54HP		
16+16+18	16+18+18	18+18+18		
HCSR 4506 XRV-R HCSR 4506 XRV-R HCSR 5006 XRV-R	HCSR 4506 XRV-R HCSR 5006 XRV-R HCSR 5006 XRV-R	HCSR 5006 XRV-R HCSR 5006 XRV-R HCSR 5006 XRV-R		

HYDROMODULE



HHNMS 140 XRV-R
single phase

FLOW CONTROLLERS

NEW

HPFD 1-8 XRV-R	HPFD 4-20 XRV-R	HPFD 6-30 XRV-R
HPFD 8-40 XRV-R	HPFD 10-47 XRV-R	HPFD 12-47 XRV-R

PROJECT VRF R410A FULL DC INVERTER

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XRV MULTI SYSTEM

NEW



XRV PLUS MINI

NEW



XRV INDIVIDUAL

NEW



XRV PLUS
HEAT RECOVERY



XRV PREMIUM
MODULAR

FULL DC INVERTER TECHNOLOGY FOR ALL OUTDOOR UNITS RANGE

Full DC Inverter technology has always characterised the Hokkaido product range on the market of VRF systems, in heat pump and in heat recovery. These ranges are all equipped with a DC Inverter compressor and DC Inverter fan motor: outstanding results in terms of energy efficiency and reduced operating costs, as well as CO₂ emissions.

HERE'S WHAT MAKES THE HOKKAIDO RANGE "FULL"

Energy savings and comfort

Full DC Inverter technology (DC Inverter compressor and DC Inverter fan motor) applied to the XRV system outdoor units ensures high EER and COP values not only at full load, but also at partial load. This guarantees energy savings and high comfort in a wide outside temperature operating range, which has the following average values: cooling from -5° C to +43° C, heating from -20° C to +24° C.

HIGH EFFICIENCY DC INVERTER COMPRESSOR

Thanks to the use of DC Inverter compressors, which allow for quick and continuous changes of the amount of compressed refrigerant, the XRV system outdoor units are characterised by:

- rapid system start-up;
- quick response to changes in cooling or heating demand by users;
- reduced start&stop cycles.

The result is an efficient system that is highly reliable and durable.

DC FAN MOTOR

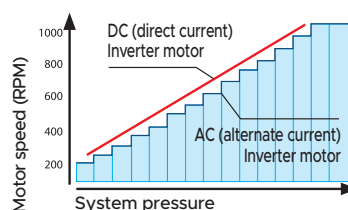
The use of the DC Inverter fan motor ensures energy savings during partial loads, as it adjusts the fan speed and helps make the unit more silent. The fan and outlet grille design guarantees increased air flow, thus resulting in low noise.



DC Inverter compressor



DC Inverter fan motor



NEW

XRV PLUS MINI

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Heat pump

66

HOKKAIDO

PROJECT VRF R410A FULL DC INVERTER

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XRV PLUS MINI Heat pump

NEW



HCNU 806 XRV

HCNU 1056 XRV
HCNU 1206 XRV

HCNU 1406 XRV
HCNU 1606 XRV

All units are equipped with a high efficiency Full DC Inverter compressor.

Slim, flexible design.

Fan with DC Inverter motor:

- broader fan speed modulations;
- less noise.

The efficient fan design and the sunburst grill allow an high airflow rate with low noise.

Splitting and height difference lengths

Model	HCNU 806 XRV	HCNU 1056 XRV	HCNU 1206 XRV	HCNU 1406 XRV	HCNU 1606 XRV
Maximum distance between O.U. and the farthest I.U.	40 m	50 m	50 m	70 m	70 m
Maximum distance from the first branch pipe to the farthest I.U.	20 m	20 m	20 m	20 m	20 m
Maximum height difference between O.U. (up high) and I.U.	10 m	20 m	20 m	30 m	30 m
Maximum height difference between O.U. (down low) and I.U.	10 m	20 m	20 m	20 m	20 m
Maximum height difference between I.U.	8 m	8 m	8 m	8 m	8 m
Maximum distance between I.U. and branch pipe	15 m	15 m	15 m	15 m	15 m
Maximum length of the pipes	50 m	65 m	65 m	100 m	100 m

Broad operating range:

- cooling -5° C ~ +55° C;
- heating -15° C ~ +27° C.

Auto-addressing of indoor units.

Model			HCNU 806 XRV	HCNU 1056 XRV	HCNU 1206 XRV	HCNU 1406 XRV	HCNU 1606 XRV
Power		HP	2.5	3.2	4.5	5	6
Rated capacity ¹	Cooling	kW	7.20	9.00	12.20	14.00	15.50
Rated absorbed power		kW	2.18	2.64	4.32	4.56	5.35
Energy efficiency coefficient (rated)		EER	3.30	3.41	2.83	3.07	2.90
Rated capacity ²	Heating	kW	7.20	9.00	14.00	16.00	18.00
Rated absorbed power		kW	1.82	2.12	3.17	4.08	5.71
Energy performance coefficient (rated)		COP	3.95	4.29	4.40	3.92	3.20
Electrical data							
Power supply		Ph-V-Hz	1-220~240V-50Hz				
Maximum current		A	9.45	9.45	15.50	15.50	15.50
Refrigerant circuit/features							
Refrigerant (GWP)			R410A (2088)				
Quantity refrigerant pre-load (tons of CO2 equivalent)		Kg	2.2 (4.594)	2.5 (5.220)	3 (6.264)	3.4 (7.099)	3.80 (7.934)
DC Inverter compressor		no. / type	1/ Rotary DC inverter				
Diameter refrigerant pipes	Liquid	Ø mm (inch)	9.53 (3/8")	9.53 (3/8")	9.53 (3/8")	9.53 (3/8")	9.53 (3/8")
	Gas	Ø mm (inch)	15.9 (5/8")	15.9 (5/8")	15.9 (5/8")	15.9 (5/8")	19.1 (3/4")
Product Specifications							
Dimensions		LxHxD	mm	982x712x440	950x840x426	1040x865x523	
Net weight		Kg	55	72.5	84	91.4	95.4
Sound pressure level at 1 m	max	dB(A)	54	54	56	56	56
	max	dB(A)	65	68	70	71	71
Fan air flow		m³/h	3700	5200	5000	5400	5200
Operating limits (outside temperature)	Cooling	°C	-5~-55	-5~-55	-5~-55	-5~-55	-5~-55
	Heating	°C	-15~-27	-15~-27	-15~-27	-15~-27	-15~-27
Max. connectable I.U.		no.	4	6	7	8	9
Capacity of connectable indoor units		%	50 - 130	50 - 130	50 - 130	50 - 130	50 - 130

(1) Cooling capacity tested in accordance with ISO 5151 Standards; outside temperature 35° C DB, 24° C WB and inside temperature 27° C DB, 19° C WB.

(2) Heating capacity tested in accordance with ISO 5151 Standards; outside temperature 7° C DB, 6° C WB and inside temperature 20° C DB, 15° C WB.

PROJECT VRF R410A FULL DC INVERTER

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XRV PLUS MINI Heat pump

NEW



HCYU 2006 XRV HCYU 2806 XRV
HCYU 2246 XRV HCYU 3356 XRV
HCYU 2606 XRV

Splitting and height difference lengths

Model	HCYU 2006 XRV	HCYU 2246 XRV	HCYU 2606 XRV	HCYU 2806 XRV	HCYU 3356 XRV
Maximum distance between O.U. and the farthest I.U.	110 m	110 m	110 m	110 m	110 m
Maximum distance from the first branch pipe to the farthest I.U.	40 m	40 m	40 m	40 m	40 m
Maximum height difference between O.U. (up high) and I.U.	50 m	50 m	50 m	50 m	50 m
Maximum height difference between O.U. (down low) and I.U.	40 m	40 m	40 m	40 m	40 m
Maximum height difference between I.U.	15 m	15 m	15 m	15 m	15 m
Maximum length of the pipes	150 m	150 m	150 m	150 m	150 m

All units are equipped with a high efficiency Full DC Inverter compressor.

DC Inverter motor fan:

- broader fan speed modulations;
- less noise.

Up to 20 indoor units connected to one compact outdoor unit.

Auto-addressing of indoor units.

Self-diagnosis function for main system problems.

Broad operating range:

- cooling -5° C ~ +48° C;
- heating -20° C ~ +24° C.

Auto-addressing of indoor units.

Model			HCYU 2006 XRV	HCYU 2246 XRV	HCYU 2606 XRV	HCYU 2806 XRV	HCYU 3356 XRV
Power		HP	7	8	9	10	12
Rated capacity ¹	Cooling	kW	20.00	22.40	26.00	28.50	33.50
Rated absorbed power		kW	5.20	6.77	10.04	12.23	15.30
Energy efficiency coefficient (rated)		EER	3.79	3.31	2.59	2.33	2.19
Rated capacity ²	Heating	kW	20.00	22.40	26.00	28.50	33.50
Rated absorbed power		kW	4.43	5.42	6.86	7.68	10.15
Energy performance coefficient (rated)		COP	4.51	4.13	3.79	3.71	3.30
Electrical data							
Power supply		Ph-V-Hz	3-380~415V50Hz				
Maximum current		A	12.00	12.40	15.00	18.40	19.60
Refrigerant circuit / features							
Refrigerant (GWP)			R410A (2088)				
Quantity refrigerant pre-load (tons of CO2 equivalent)		Kg	6.5 (13.572)	6.5 (13.572)	6.5 (13.572)	6.5 (13.572)	8 (16.704)
DC Inverter compressor		no. / type	1/ Rotary DC inverter			1/ Rotary DC inverter	
Pipe diameter	Liquid	Ø mm (inch)	9.53 (3/8")				12.7 (1/2")
	Gas	Ø mm (inch)	19.1 (3/4")		22.2 (7/8")		25.4 (1")
Product Specifications							
Dimensions	LxHxD	mm	1120x1558x528				
Net weight		Kg	143	143	144	144	157
Sound pressure level at 1 m	max	dB(A)	58		59	60	61
Sound power level	max	dB(A)	78		78		81
Fan air flow	max	m³/h	9000	9000	10000	11000	11300
Operating limits (outside temperature)	Cooling	°C	-5~48				
	Heating	°C	-20~24				
Max. connectable I.U.		no.	10	13	15	16	20
Capacity of connected indoor units		%	50 - 130				

(1) Cooling capacity tested in accordance with ISO 5151 Standards; outside temperature 35° C DB, 24° C WB and inside temperature 27° C DB, 19° C WB.

(2) Heating capacity tested in accordance with ISO 5151 Standards; outside temperature 7° C DB, 6° C WB and inside temperature 20° C DB, 15° C WB.



NEW

XRV INDIVIDUAL

.....

Heat pump

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HOKKAIDO

PROJECT VRF R410A FULL DC INVERTER

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XRV INDIVIDUAL Heat pump

NEW



HCYUM 4006 XRV-I
HCYUM 4506 XRV-I
HCYUM 5006 XRV-I

HCYUM 5606 XRV-I
HCYUM 6156 XRV-I

All units are equipped with a high efficiency Full DC Inverter compressor.

DC Inverter motor fan:

- broader fan speed modulations;
- less noise.

Self-diagnosis function for main system problems.

Individual modules from 40 to 90 kW for simplified installation without the need for modular units.

Elegant, compact design.

Splitting and height difference lengths

Model	HCYUM 4006 XRV-I	HCYUM 4506 XRV-I	HCYUM 5006 XRV-I	HCYUM 5606 XRV-I	HCYUM 6156 XRV-I
Maximum distance between O.U. and the farthest I.U.	200 m	200 m	200 m	200 m	200 m
Maximum distance from the first branch pipe to the farthest I.U.	40 m	40 m	40 m	40 m	40 m
Maximum height difference between O.U. (up high) and I.U.	90 m	90 m	90 m	90 m	90 m
Maximum height difference between O.U. (down low) and I.U.	110 m	110 m	110 m	110 m	110 m
Maximum height difference between I.U.	30 m	30 m	30 m	30 m	30 m
Maximum length of the pipes	1000 m	1000 m	1000 m	1000 m	1000 m

Broad operating range:

- cooling -5° C ~ +48° C;
- heating -23° C ~ +24° C.

Auto-addressing of indoor units.

Maximum number of connectable indoor units is 36.

Model			HCYUM 4006 XRV-I	HCYUM 4506 XRV-I	HCYUM 5006 XRV-I	HCYUM 5606 XRV-I	HCYUM 6156 XRV-I
Power		HP	14	16	18	20	22
Rated capacity ¹	Cooling	kW	40.00	45.00	50.00	56.00	61.50
Rated absorbed power		kW	11.00	12.90	14.70	16.00	20.20
Energy efficiency coefficient (rated)		EER	3.65	3.50	3.40	3.50	3.05
Rated capacity ²	Heating	kW	40.00	45.00	50.00	56.00	61.50
Rated absorbed power		kW	9.30	10.70	12.20	13.80	17.60
Energy performance coefficient (rated)		COP	4.30	4.20	4.10	4.05	3.50
Electrical data							
Power supply		Ph-V-Hz	3-380~415V50Hz				
Maximum current		A	25.80	25.80	26.20	35.00	37.00
Refrigerant circuit / features							
Refrigerant (GWP)			R410A (2088)				
Quantity refrigerant pre-load (tons of CO2 equivalent)		Kg	13 (27.144)	13 (27.144)	13 (27.144)	17 (35.496)	17 (35.496)
DC Inverter compressor		no. / type	1 / Scroll DC Inverter			2 / Scroll DC Inverter	
Pipe diameter	Liquid	Ø mm (inch)	15.9 (5/8")			19.1 (3/4")	
	Gas	Ø mm (inch)	31.8 (1"1/4)				
Product Specifications							
Dimensions	LxHxD	mm	1340x1635x850			1340x1635x825	
Net weight		Kg	277	277	295	344	344
Sound pressure level at 1 m	max	dB(A)	62	65		66	66
Sound power level	max	dB(A)	85	88			
Fan air flow	max	m³/h	13000	13000	13000	17000	17000
Operating limits (outside temperature)	Cooling	°C	-5~48				
	Heating	°C	-23~24				
Max. connectable I.U.		no.	23	26	29	33	36
Capacity of connectable indoor units		%	50 - 130				

(1) Cooling capacity tested in accordance with ISO 5151 Standards; outside temperature 35° C DB, 24° C WB and inside temperature 27° C DB, 19° C WB.

(2) Heating capacity tested in accordance with ISO 5151 Standards; outside temperature 7° C DB, 6° C WB and inside temperature 20° C DB, 15° C WB.

PROJECT VRF R410A FULL DC INVERTER

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XRV INDIVIDUAL Heat pump

NEW



HCYUM 6706 XRV-I
HCYUM 7306 XRV-I
HCYUM 7856 XRV-I

HCYUM 8506 XRV-I
HCYUM 9006 XRV-I

Splitting and height difference lengths

Model	HCYUM 6706 XRV-I	HCYUM 7306 XRV-I	HCYUM 7856 XRV-I	HCYUM 8506 XRV-I	HCYUM 9006 XRV-I
Maximum distance between O.U. and the farthest I.U.	200 m	200 m	200 m	200 m	200 m
Maximum distance from the first branch pipe to the farthest I.U.	40 m	40 m	40 m	40 m	40 m
Maximum height difference between O.U. (up high) and I.U.	90 m	90 m	90 m	90 m	90 m
Maximum height difference between O.U. (down low) and I.U.	110 m	110 m	110 m	110 m	110 m
Maximum height difference between I.U.	30 m	30 m	30 m	30 m	30 m
Maximum length of the pipes	1000 m	1000 m	1000 m	1000 m	1000 m

All units are equipped with a high efficiency Full DC Inverter compressor.

DC Inverter motor fan:

- broader fan speed modulations;
- less noise.

Self-diagnosis function for main system problems.

Individual modules from 40 to 90 kW for simplified installation without the need for modular units.

Elegant, compact design.

Broad operating range:

- cooling -5° C ~ +48° C;
- heating -23° C ~ +24° C.

Auto-addressing of indoor units.

Maximum number of connectable indoor units is 53.

Model			HCYUM 6706 XRV-I	HCYUM 7306 XRV-I	HCYUM 7856 XRV-I	HCYUM 8506 XRV-I	HCYUM 9006 XRV-I
Power		HP	24	26	28	30	32
Rated capacity ¹	Cooling	kW	67.00	73.00	78.50	85.00	90.00
Rated absorbed power		kW	21.60	21.60	24.90	28.30	32.10
Energy efficiency coefficient (rated)		EER	3.10	3.40	3.15	3.00	2.80
Rated capacity ²	Heating	kW	67.00	73.00	78.50	85.00	90.00
Rated absorbed power		kW	16.80	18.10	21.80	24.30	26.50
Energy performance coefficient (rated)		COP	4.00	4.05	3.60	3.50	3.40
Electrical data							
Power supply		Ph-V-Hz	3-380~415V50Hz				
Maximum current		A	41.40	39.80	43.80	50.00	52.00
Refrigerant circuit / features							
Refrigerant (GWP)			R410A (2088)				
Quantity refrigerant pre-load (tons of CO2 equivalent)		Kg	22 (45.936)	22 (45.936)	22 (45.936)	25 (52.200)	25 (52.200)
DC Inverter compressor		no. / type	2 / Scroll DC Inverter				
Pipe diameter	Liquid	Ø mm (inch)	19.1 (3/4")	22.2 (7/8")			38.1 (1 1/2)
	Gas	Ø mm (inch)	31.8 (1 1/4)				
Product specifications							
Dimensions	LxHxD	mm	1730x1830x850				
Net weight		Kg	407	429	429	475	475
Sound pressure level at 1 m	max	dB(A)	67	68			
Sound power level	max	dB(A)	89	90			
Fan air flow	max	m³/h	25000	25000	25000	24000	24000
Operating limits (outside temperature)	Cooling	°C	-5~48				
	Heating	°C	-23~24				
Max. connectable I.U.		no.	39	43	46	50	53
Capacity of connectable indoor units		%	50 - 130				

(1) Cooling capacity tested in accordance with ISO 5151 Standards; outside temperature 35° C DB, 24° C WB and inside temperature 27° C DB, 19° C WB.

(2) Heating capacity tested in accordance with ISO 5151 Standards; outside temperature 7° C DB, 6° C WB and inside temperature 20° C DB, 15° C WB.





XRV PREMIUM MODULAR

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Heat pump - 2 pipes

73

Combinations

74

HOKKAIDO

PROJECT VRF R410A FULL DC INVERTER

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XRV PREMIUM MODULAR

Heat pump - 2 pipes



FULL DC INVERTER

HCSU 2525 XRV-P
HCSU 2805 XRV-P
HCSU 3355 XRV-P

FULL DC INVERTER

HCSU 4005 XRV-P
HCSU 4505 XRV-P
HCSU 5005 XRV-P
HCSU 5605 XRV-P
HCSU 6155 XRV-P

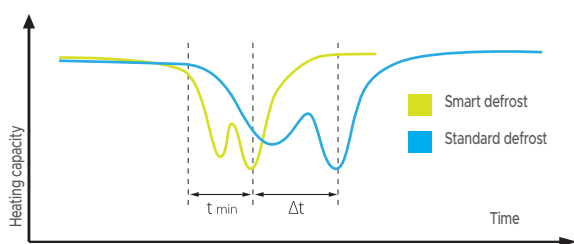
The range is characterised by 8 basic modules: 8, 10, 12, 14, 16, 18, 20 and 22HP. Wide range of available power: from 25.2 to 246.0 kW.

Fan design with the sharp-edged blade reduces airflow resistance. The outdoor units and the exchangers inside them are made with anti-corrosive treatments.

- COP values up to 5.09 (mod. 8HP)
- EER values up to 4.03 (mod. 8HP)

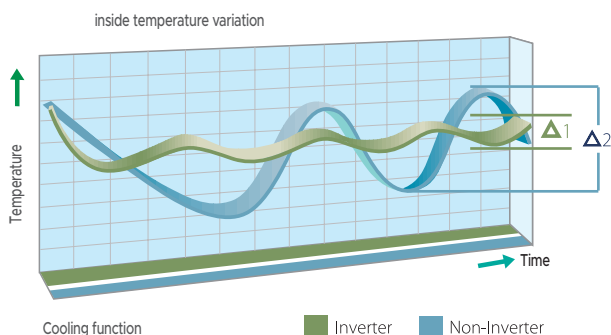
Smart defrost

Smart defrost technology calculates the time required for defrosting based on the current system conditions, eliminating heat losses from unnecessary defrosting. A special defrost valve reduces the time required for defrosting to a minimum of four minutes.

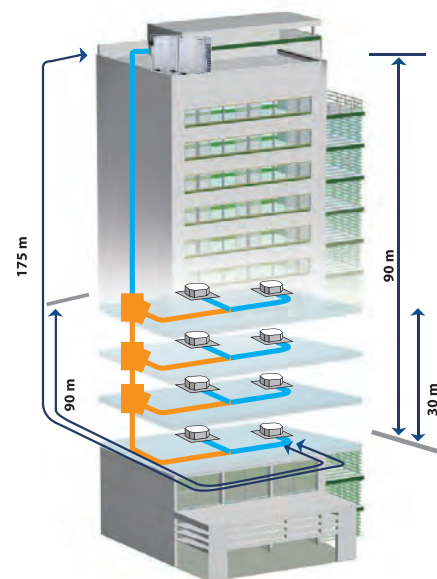


Fast cooling and heating

The DC Inverter compressor quickly reaches full capacity, ensuring faster cooling and heating with lower temperature variation during cooling/heating operations.



Splitting
and height
difference
lengths



The XRV PREMIUM Modular series can connect up to 64 indoor units. Total length of system piping: 1000 m

Maximum distance between O.U. and the farthest I.U. = 175 m (equivalent 200 m)

Maximum distance from the first branch pipe to the farthest I.U. = 90 m

Maximum height difference between O.U. (up high) and I.U. = 90 m

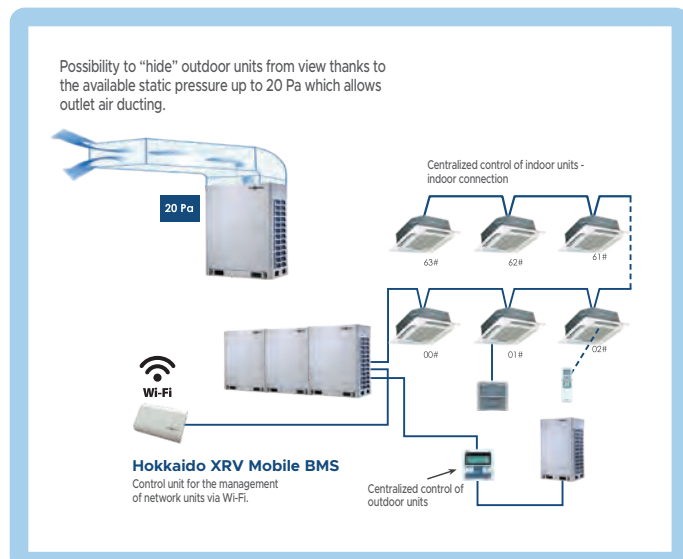
Maximum height difference between O.U. (down low) and I.U. = 110 m

Maximum height difference between I.U. = 30 m

Installation and operation

- Wide range of external operating temperatures: heating - 20° C / 24° C; cooling - 5° C / 43° C.
- Intelligent operating logic in modular combination with rotation and distribution of operating hours between the O.U.
- Backup function in modular combination.
- Silent operation and auto-addressing of the O.U.

Network wiring diagram



PROJECT VRF R410A FULL DC INVERTER

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XRV PREMIUM MODULAR

Heat pump - 2 pipes



Model / Combination			HCSU 2525 XRV-P	HCSU 2805 XRV-P	HCSU 3355 XRV-P	HCSU 4005 XRV-P	HCSU 4505 XRV-P	HCSU 5005 XRV-P	HCSU 5605 XRV-P
Power			8	10	12	14	16	18	20
Rated capacity (1)	Cooling	HP	25.20	28.00	33.50	40.00	45.00	50.00	56.00
		kW	6.25	7.49	8.91	11.66	13.64	14.71	16.47
		EER	4.03	3.74	3.76	3.43	3.30	3.40	3.40
		%	211.4	211	199	194.6	192.6	194.6	194.2
Rated capacity (2)	Heating	kW	27.00	31.50	37.50	40.00	45.00	50.00	56.00
		kW	5.30	6.89	8.91	9.83	11.69	12.50	14.00
		COP	5.09	4.57	4.21	4.07	3.85	4.00	4.00
		%	133.8	133.8	133.4	135.4	135.4	133.8	133
Seasonal energy efficiency (ηs,c) average									
Electrical data									
Power supply		Ph-V-Hz	3-380~415V-50Hz	3-380~415V-50Hz	3-380~415V-50Hz	3-380~415V-50Hz	3-380~415V-50Hz	3-380~415V-50Hz	3-380~415V-50Hz
Maximum current		A	20.00	21.00	23.00	27.30	29.90	34.40	41.20
Refrigerant circuit / features									
Refrigerant		type (GWP)	R410A (2088)	R410A (2088)	R410A (2088)	R410A (2088)	R410A (2088)	R410A (2088)	R410A (2088)
Quantity refrigerant pre-load (tons of CO2 equivalent)(3)		Kg (t)	9 (18.792)	9 (18.792)	11 (22.968)	13 (27.144)	13 (27.144)	13 (27.144)	16 (33.408)
DC Inverter compressor		no. / type	1/Scroll DC Inverter	1/Scroll DC Inverter	1/Scroll DC Inverter	2/Scroll DC Inverter	2/Scroll DC Inverter	2/Scroll DC Inverter	2/Scroll DC Inverter
Diameter refrigerant pipes(4)	Liquid	Ø mm (inch)	12.7 (1/2")	12.7 (1/2")	12.7 (1/2")	15.9 (5/8")	15.9 (5/8")	15.9 (5/8")	15.9 (5/8")
	Gas		25.4 (1")	25.4 (1")	25.4 (1")	31.8 (1 1/4)	31.8 (1 1/4)	31.8 (1 1/4)	31.8 (1 1/4)
	Parallel oil		6.35 (1/4")	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")
Max pipe length		m	1000	1000	1000	1000	1000	1000	1000
Max height difference between indoor units		m	30	30	30	30	30	30	30
Max height difference between outdoor and indoor units		up-down OU	m	90 - 110	90 - 110	90 - 110	90 - 110	90 - 110	90 - 110
Product Specifications									
Dimensions (5)		LxHxD	mm	990x1635x790	990x1635x790	990x1635x790	1340x1635x790	1340x1635x790	1340x1635x790
Net weight		Kg	219	219	237	297	297	305	340
Sound pressure level at 1 m		max	dB(A)	59	63	62	66	66	66
Sound power level		max	dB(A)	79	83	82	88	88	88
Fan air flow		max	m³/h	12000	12000	12000	14000	14000	16000
Operating limit (outside temperature)	Cooling	°C / DB	-5 / 43	-5°C / 43°C	-5°C / 43°C	-5°C / 43°C	-5°C / 43°C	-5°C / 43°C	-5°C / 43°C
	Heating	°C / WB	-20 / 24	-20°C / 24°C	-20°C / 24°C	-20°C / 24°C	-20°C / 24°C	-20°C / 24°C	-20°C / 24°C
Max. connectable IU		no.	13	16	20	23	26	29	33
Capacity of connectable indoor units		%	50 - 130	50 - 130	50 - 130	50 - 130	50 - 130	50 - 130	50 - 130

Model / Combination			HCSU 6155 XRV-P HCSU 6155 XRV-P	HCSU 3355 XRV-P HCSU 3355 XRV-P HCSU 6155 XRV-P	HCSU 2805 XRV-P HCSU 4505 XRV-P HCSU 6155 XRV-P	HCSU 2805 XRV-P HCSU 5005 XRV-P HCSU 6155 XRV-P	HCSU 2805 XRV-P HCSU 5605 XRV-P HCSU 6155 XRV-P	HCSU 2805 XRV-P HCSU 6155 XRV-P HCSU 6155 XRV-P	HCSU 3355 XRV-P HCSU 6155 XRV-P HCSU 6155 XRV-P	
Power			HP	44 (22+22)	46 (12+12+22)	48 (10+16+22)	50 (10+18+22)	52 (10+20+22)	54 (10+22+22)	56 (12+22+22)
Rated capacity (1)		Cooling	kW	123.00	128.50	134.50	139.50	145.50	151.00	156.50
Rated absorbed power			kW	39.68	37.66	40.97	42.04	43.80	47.17	48.59
Rated energy efficiency coefficient			EER	3.10	3.41	3.28	3.32	3.32	3.20	3.22
Seasonal energy efficiency (ηs,c)			%	187.8	199	197.1	197.8	197.7	195.5	191.5
Rated capacity (2)		Heating	kW	123.00	136.50	138.00	143.00	149.00	154.50	160.50
Rated absorbed power			kW	32.36	34.00	34.76	35.57	37.07	39.25	41.27
Rated energy performance coefficient			COP	3.80	4.01	3.97	4.02	4.02	3.94	3.89
Seasonal energy efficiency (ηs,c) average			%	133	133.4	134.1	133.5	133.3	133.3	133.1
Electrical data										
Power supply			Ph-V-Hz	3-380~415V-50Hz	3-380~415V-50Hz	3-380~415V-50Hz	3-380~415V-50Hz	3-380~415V-50Hz	3-380~415V-50Hz	3-380~415V-50Hz
Maximum current			A	89.80	90.90	95.80	100.30	107.10	110.80	112.80
Refrigerant circuit / features										
Refrigerant			type (GWP)	R410A (2088)	R410A (2088)	R410A (2088)	R410A (2088)	R410A (2088)	R410A (2088)	R410A (2088)
Quantity refrigerant pre-load (tons of CO2 equivalent)(3)			Kg (t)	32 (66.816)	38 (79.344)	38 (79.344)	38 (79.344)	41 (85.608)	41 (85.608)	43 (89.784)
DC Inverter compressor			no. / type	4/Scroll DC Inverter	4/Scroll DC Inverter	5/Scroll DC Inverter	5/Scroll DC Inverter	5/Scroll DC Inverter	5/Scroll DC Inverter	5/Scroll DC Inverter
Diameter refrigerant pipes(4)		Liquid	Ø mm (inch)	19.1 (3/4")	19.1 (3/4")	19.1 (3/4")	19.1 (3/4")	22.2 (7/8")	22.2 (7/8")	22.2 (7/8")
		Gas	Ø mm (inch)	38.1 (1"1/2")	38.1 (1"1/2")	38.1 (1"1/2")	38.1 (1"1/2")	41.3 (1"5/8")	41.3 (1"5/8")	41.3 (1"5/8")
		Parallel oil	Ø mm (inch)	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")
Max pipe length			m	1000	1000	1000	1000	1000	1000	1000
Max height difference between indoor units			m	30	30	30	30	30	30	30
Max height difference between outdoor and indoor units			up-down OU	m	90 - 110	90 - 110	90 - 110	90 - 110	90 - 110	90 - 110
Product Specifications										
Dimensions (5)		LxHxD	mm	2780x1635x790	3520x1635x790	3870x1635x790	3870x1635x790	3870x1635x790	3870x1635x790	3870x1635x790
Net weight			Kg	680	814	856	864	899	899	917
Sound pressure level at 1 m		max	dB(A)	69	69	70	70	70	70	70
Sound power level			max	dB(A)	91	90	92	92	92	92
Fan air flow			max	m³/h	32000	40000	42000	44000	44000	44000
Operating limit (outside temperature)			Cooling	°C / DB	-5°C / 43°C	-5°C / 43°C	-5°C / 43°C	-5°C / 43°C	-5°C / 43°C	-5°C / 43°C
			Heating	°C / WB	-20°C / 24°C	-20°C / 24°C	-20°C / 24°C	-20°C / 24°C	-20°C / 24°C	-20°C / 24°C
Max. connectable I.U.			no.	64	64	64	64	64	64	64
Capacity of connectable indoor units			%	50 - 130	50 - 130	50 - 130	50 - 130	50 - 130	50 - 130	50 - 130

(1) Cooling capacity tested in accordance with ISO 5151 Standards; outside temperature 35°C DB, 24°C WB and inside temperature 27°C DB, 19° WB.
(2) Heating capacity tested in accordance with ISO 5151 Standards; outside temperature 7°C DB, 6°C WB and inside temperature 20°C DB, 15°C WB.
(3) Refer to the label inside the unit to calculate the additional refrigerant charge.
(4) When several outdoor units are paired the diameters indicated refer to the section up to the first branch, with a length equivalent or less than 90m.
(5) Space between the paired units = 100 mm.

PROJECT VRF R410A FULL DC INVERTER

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XRV PREMIUM MODULAR

Heat pump - 2 pipes



HCSU 6155 XRV-P	HCSU 3355 XRV-P HCSU 3355 XRV-P	HCSU 2805 XRV-P HCSU 4505 XRV-P	HCSU 2805 XRV-P HCSU 5005 XRV-P	HCSU 2805 XRV-P HCSU 5605 XRV-P	HCSU 2805 XRV-P HCSU 6155 XRV-P	HCSU 3355 XRV-P HCSU 6155 XRV-P	HCSU 5005 XRV-P HCSU 5005 XRV-P	HCSU 4505 XRV-P HCSU 6155 XRV-P	HCSU 5005 XRV-P HCSU 6155 XRV-P	HCSU 5605 XRV-P HCSU 6155 XRV-P
22	24 (12+12)	26 (10+16)	28 (10+18)	30 (10+20)	32 (10+22)	34 (12+22)	36 (18+18)	38 (16+22)	40 (18+22)	42 (20+22)
61.50	67.00	73.00	78.00	84.00	89.50	95.00	100.00	106.50	111.50	117.50
19.84	17.82	21.13	22.20	23.96	27.33	28.75	29.42	33.48	34.55	36.31
3.10	3.76	3.45	3.51	3.51	3.27	3.30	3.40	3.18	3.23	3.24
187.8	199	201.8	202.8	202.6	199.4	193.4	194.6	190.2	191.2	191
61.50	75.00	76.50	81.50	87.50	93.00	99.00	100.00	106.50	111.50	117.50
16.18	17.82	18.58	19.39	20.89	23.07	25.09	25.00	27.87	28.68	30.18
3.80	4.21	4.12	4.20	4.19	4.03	3.95	4.00	3.82	3.89	3.89
133	133.4	134.6	133.8	133.4	133.4	133.2	133.8	134.2	133.4	133
3-380~415V-50Hz	3-380~415V-50Hz	3-380~415V-50Hz	3-380~415V-50Hz	3-380~415V-50Hz	3-380~415V-50Hz	3-380~415V-50Hz	3-380~415V-50Hz	3-380~415V-50Hz	3-380~415V-50Hz	3-380~415V-50Hz
44.90	46.00	50.90	55.40	62.20	65.90	67.90	68.80	74.80	79.30	86.10
R410A (2088)	R410A (2088)	R410A (2088)	R410A (2088)	R410A (2088)	R410A (2088)	R410A (2088)	R410A (2088)	R410A (2088)	R410A (2088)	R410A (2088)
16 (33.408)	22 (45.936)	22 (45.936)	23 (48.024)	25 (52.200)	25 (52.200)	27 (56.376)	26 (54.288)	29 (60.552)	29 (60.552)	32 (66.816)
2/Scroll DC Inverter	2/Scroll DC Inverter	3/Scroll DC Inverter	3/Scroll DC Inverter	3/Scroll DC Inverter	3/Scroll DC Inverter	3/Scroll DC Inverter	4/Scroll DC Inverter	4/Scroll DC Inverter	4/Scroll DC Inverter	4/Scroll DC Inverter
15.9 (5/8")	15.9 (5/8")	19.1 (3/4")	19.1 (3/4")	19.1 (3/4")	19.1 (3/4")	19.1 (3/4")	19.1 (3/4")	19.1 (3/4")	19.1 (3/4")	19.1 (3/4")
31.8 (1"1/4)	28.6 (1"1/8)	31.8 (1"1/4")	31.8 (1"1/4")	31.8 (1"1/4")	31.8 (1"1/4")	31.8 (1"1/4")	38.1 (1"1/2")	38.1 (1"1/2")	38.1 (1"1/2")	38.1 (1"1/2")
6.35 (1/4")	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")
1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
30	30	30	30	30	30	30	30	30	30	30
90 - 110	90 - 110	90 - 110	90 - 110	90 - 110	90 - 110	90 - 110	90 - 110	90 - 110	90 - 110	90 - 110
1340x1635x790	2080x1635x790	2430x1635x790	2430x1635x790	2430x1635x790	2430x1635x790	2430x1635x790	2780x1635x790	2780x1635x790	2780x1635x790	2780x1635x790
340	474	516	524	559	559	577	610	637	645	680
66	65	68	68	68	68	67	69	69	69	69
88	85	89	89	89	89	89	91	91	91	91
16000	24000	26000	28000	28000	28000	28000	32000	30000	32000	32000
-5°C / 43°C	-5°C / 43°C	-5°C / 43°C	-5°C / 43°C	-5°C / 43°C	-5°C / 43°C	-5°C / 43°C	-5°C / 43°C	-5°C / 43°C	-5°C / 43°C	-5°C / 43°C
-20°C / 24°C	-20°C / 24°C	-20°C / 24°C	-20°C / 24°C	-20°C / 24°C	-20°C / 24°C	-20°C / 24°C	-20°C / 24°C	-20°C / 24°C	-20°C / 24°C	-20°C / 24°C
36	39	43	46	50	53	56	59	63	64	64
50 - 130	50 - 130	50 - 130	50 - 130	50 - 130	50 - 130	50 - 130	50 - 130	50 - 130	50 - 130	50 - 130

HCSU 5005 XRV-P HCSU 5005 XRV-P HCSU 6155 XRV-P	HCSU 4505 XRV-P HCSU 6155 XRV-P HCSU 6155 XRV-P	HCSU 5005 XRV-P HCSU 6155 XRV-P HCSU 6155 XRV-P	HCSU 5605 XRV-P HCSU 6155 XRV-P HCSU 6155 XRV-P	HCSU 6155 XRV-P HCSU 6155 XRV-P HCSU 6155 XRV-P	HCSU 3355 XRV-P HCSU 3355 XRV-P HCSU 6155 XRV-P	HCSU 2805 XRV-P HCSU 4505 XRV-P HCSU 6155 XRV-P	HCSU 2805 XRV-P HCSU 5005 XRV-P HCSU 6155 XRV-P	HCSU 2805 XRV-P HCSU 5605 XRV-P HCSU 6155 XRV-P	HCSU 2805 XRV-P HCSU 6155 XRV-P HCSU 6155 XRV-P	HCSU 3355 XRV-P HCSU 6155 XRV-P HCSU 6155 XRV-P
58 (18+18+22)	60 (16+22+22)	62 (18+22+22)	64 (20+22+22)	66 (22+22+22)	68 (12+12+22+22)	70 (10+16+22+22)	72 (10+18+22+22)	74 (10+20+22+22)	76 (10+22+22+22)	78 (12+22+22+22)
161.50	168.00	173.00	179.00	184.50	190.00	196.00	201.00	207.00	212.50	218.00
49.26	53.32	54.39	56.15	59.52	57.50	60.81	61.88	63.64	67.01	68.43
3.28	3.15	3.18	3.19	3.10	3.30	3.22	3.25	3.25	3.17	3.19
192.3	189.4	190.1	189.9	187.8	193.4	194.8	195.3	195.2	193.6	190.6
161.50	168.00	173.00	179.00	184.50	198.00	199.50	204.50	210.50	216.50	222.00
41.18	44.05	44.86	46.36	48.54	50.18	50.94	51.75	53.25	55.43	57.45
3.92	3.81	3.86	3.86	3.80	3.95	3.92	3.95	3.95	3.90	3.86
133.5	133.8	133.3	133	133	133.2	133.8	133.4	133.2	133.2	133.1
3-380~415V-50Hz	3-380~415V-50Hz	3-380~415V-50Hz	3-380~415V-50Hz	3-380~415V-50Hz	3-380~415V-50Hz	3-380~415V-50Hz	3-380~415V-50Hz	3-380~415V-50Hz	3-380~415V-50Hz	3-380~415V-50Hz
113.70	119.70	124.20	131.00	134.70	135.80	140.70	145.20	152.00	155.70	157.70
R410A (2088)	R410A (2088)	R410A (2088)	R410A (2088)	R410A (2088)	R410A (2088)	R410A (2088)	R410A (2088)	R410A (2088)	R410A (2088)	R410A (2088)
42 (87.696)	45 (93.960)	45 (93.960)	48 (100.224)	48 (100.224)	54 (112.752)	54 (112.752)	54 (112.752)	57 (119.016)	57 (119.016)	59 (123.192)
6/Scroll DC Inverter	6/Scroll DC Inverter	6/Scroll DC Inverter	6/Scroll DC Inverter	6/Scroll DC Inverter	6/Scroll DC Inverter	7/Scroll DC Inverter	7/Scroll DC Inverter	7/Scroll DC Inverter	7/Scroll DC Inverter	7/Scroll DC Inverter
22.2 (7/8")	22.2 (7/8")	22.2 (7/8")	22.2 (7/8")	22.2 (7/8")	25.4 (1")	25.4 (1")	25.4 (1")	25.4 (1")	25.4 (1")	25.4 (1")
41.3 (1"5/8")	41.3 (1"5/8")	41.3 (1"5/8")	41.3 (1"5/8")	41.3 (1"5/8")	44.5 (1"3/4")	44.5 (1"3/4")	44.5 (1"3/4")	44.5 (1"3/4")	44.5 (1"3/4")	44.5 (1"3/4")
6.35 (1/4")	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")
1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
30	30	30	30	30	30	30	30	30	30	30
90 - 110	90 - 110	90 - 110	90 - 110	90 - 110	90 - 110	90 - 110	90 - 110	90 - 110	90 - 110	90 - 110
4220x1635x790	4220x1635x790	4220x1635x790	4220x1635x790	4220x1635x790	4960x1635x790	5310x1635x790	5310x1635x790	5310x1635x790	5310x1635x790	5310x1635x790
950	977	985	1020	1020	1154	1196	1204	1239	1239	1257
71	71	71	71	71	70	71	71	71	71	71
93	93	93	93	93	92	93	93	93	93	93
48000	46000	48000	48000	48000	56000	58000	60000	60000	60000	60000
-5°C / 43°C	-5°C / 43°C	-5°C / 43°C	-5°C / 43°C	-5°C / 43°C	-5°C / 43°C	-5°C / 43°C	-5°C / 43°C	-5°C / 43°C	-5°C / 43°C	-5°C / 43°C
-20°C / 24°C	-20°C / 24°C	-20°C / 24°C	-20°C / 24°C	-20°C / 24°C	-20°C / 24°C	-20°C / 24°C	-20°C / 24°C	-20°C / 24°C	-20°C / 24°C	-20°C / 24°C
64	64	64	64	64	64	64	64	64	64	64
50 - 130	50 - 130	50 - 130	50 - 130	50 - 130	50 - 130	50 - 130	50 - 130	50 - 130	50 - 130	50 - 130

- (1) Cooling capacity tested in accordance with ISO 5151 Standards; outside temperature 35°C DB, 24°C WB and inside temperature 27°C DB, 19° WB.
 (2) Heating capacity tested in accordance with ISO 5151 Standards; outside temperature 7°C DB, 6°C WB and inside temperature 20°C DB, 15°C WB.
 (3) Refer to the label inside the unit to calculate the additional refrigerant charge.
 (4) When several outdoor units are paired the diameters indicated refer to the section up to the first branch, with a length equivalent or less than 90m.
 (5) Space between the paired units = 100 mm.

PROJECT VRF R410A FULL DC INVERTER

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XRV PREMIUM MODULAR

Heat pump - 2 pipes



Model / Combination			HCSU 500S XRV-P HCSU 500S XRV-P HCSU 615S XRV-P HCSU 615S XRV-P	HCSU 450S XRV-P HCSU 615S XRV-P HCSU 615S XRV-P HCSU 615S XRV-P	HCSU 500S XRV-P HCSU 615S XRV-P HCSU 615S XRV-P HCSU 615S XRV-P	HCSU 560S XRV-P HCSU 615S XRV-P HCSU 615S XRV-P HCSU 615S XRV-P	HCSU 615S XRV-P HCSU 615S XRV-P HCSU 615S XRV-P HCSU 615S XRV-P
Power		HP	80 (18+18+22+22)	82 (16+22+22+22)	84 (18+22+22+22)	86 (20+22+22+22)	88 (22+22+22+22)
Rated capacity (1)	Cooling	kW	223.00	229.50	234.50	240.50	246.00
Rated absorbed power		kW	69.10	73.16	74.23	75.99	79.36
Rated energy efficiency coefficient		EER	3.23	3.14	3.16	3.16	3.10
Seasonal energy efficiency (ηs,c)		%	191.2	189	189.5	189.4	187.8
Rated capacity (2)	Heating	kW	223.00	229.50	234.50	240.50	246.00
Rated absorbed power		kW	57.36	60.23	61.04	62.54	64.72
Rated energy performance coefficient		COP	3.89	3.81	3.84	3.85	3.80
Seasonal energy efficiency (ηs,c) average		%	133.4	133.6	133.2	133	133
Electrical data							
Power supply		Ph-V-Hz	3-380~415V-50Hz	3-380~415V-50Hz	3-380~415V-50Hz	3-380~415V-50Hz	3-380~415V-50Hz
Maximum current		A	158.60	164.60	169.10	175.90	179.60
Refrigerant circuit / features							
Refrigerant		type (GWP)	R410A (2088)	R410A (2088)	R410A (2088)	R410A (2088)	R410A (2088)
Quantity refrigerant pre-load (tons of CO2 equivalent)(3)		Kg (t)	58 (121.104)	61 (127.368)	61 (127.368)	64 (133.632)	64 (133.632)
DC Inverter compressor		no. / type	8/Scroll DC Inverter	8/Scroll DC Inverter	8/Scroll DC Inverter	8/Scroll DC Inverter	8/Scroll DC Inverter
Diameter refrigerant pipes(4)	Liquid	Ø mm (inch)	25.4 (1")	25.4 (1")	25.4 (1")	25.4 (1")	25.4 (1")
	Gas	Ø mm (inch)	44.5 (1"3/4")	44.5 (1"3/4")	44.5 (1"3/4")	44.5 (1"3/4")	44.5 (1"3/4")
	Parallel oil	Ø mm (inch)	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")
Max pipe length		m	1000	1000	1000	1000	1000
Max height difference between indoor units		m	30	30	30	30	30
Max height difference between outdoor and indoor units		up-down OU	m	90 - 110	90 - 110	90 - 110	90 - 110
Product specifications							
Dimensions (5)		LxHxD	mm	5660x1635x790	5660x1635x790	5660x1635x790	5660x1635x790
Net weight		Kg	1290	1317	1325	1360	1360
Sound pressure level at 1 m	max	dB(A)	72	72	72	72	72
Sound power level	max	dB(A)	94	94	94	94	94
Fan air flow	max	m3/h	64000	62000	64000	64000	64000
Operating limit (outside temperature)	Cooling	°C / DB	-5°C / 43°C	-5°C / 43°C	-5°C / 43°C	-5°C / 43°C	-5°C / 43°C
	Heating	°C / WB	-20°C / 24°C	-20°C / 24°C	-20°C / 24°C	-20°C / 24°C	-20°C / 24°C
Max. connectable I.U.		no.	64	64	64	64	64
Capacity of connectable indoor units		%	50 - 130	50 - 130	50 - 130	50 - 130	50 - 130

(1) Cooling capacity tested in accordance with ISO 5151 Standards; outside temperature 35° C DB, 24° C WB and inside temperature 27° C DB, 19° WB.

(2) Heating capacity tested in accordance with ISO 5151 Standards; outside temperature 7° C DB, 6° C WB and inside temperature 20° C DB, 15° C WB.

(3) Refer to the label inside the unit to calculate the additional refrigerant charge.

(4) When several outdoor units are paired the diameters indicated refer to the section up to the first branch, with a length equivalent or less than 90m.

(5) Space between the paired units = 100 mm.



NEW

XRV PLUS HEAT RECOVERY

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PROJECT VRF R410A FULL DC INVERTER

.....

XRV PLUS HEAT RECOVERY

Heat recovery - 3 pipes

NEW



FULL DC INVERTER

HCSRU 2526 XRV-R
HCSRU 2806 XRV-R
HCSRU 3356 XRV-R



FULL DC INVERTER

HCSRU 4006 XRV-R
HCSRU 4506 XRV-R
HCSRU 5006 XRV-R

Splitting and height difference lengths

Max distance between O.U. and the farthest I.U. = 200 m

Max distance from the divider to the farthest I.U. = 40 m

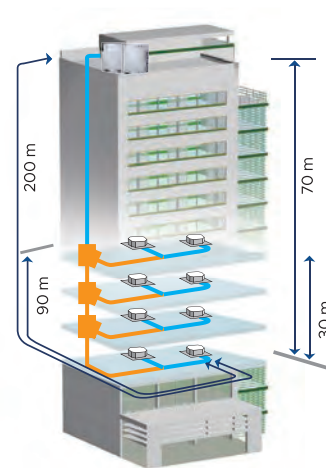
Max distance from the first branch pipe to the farthest I.U. = 90 m

Max height difference between O.U. (up high) and I.U. = 70 m

Max height difference between O.U. (down) and the I.U. = 110 m

Max height difference between I.U. = 30 m

Maximum length of the pipes = 1000 m



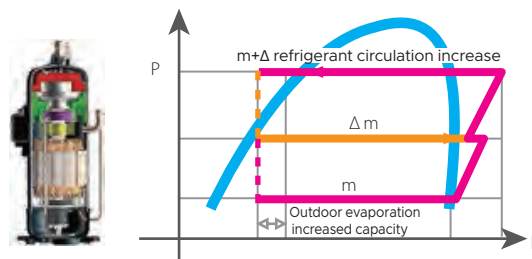
Heating during defrost

XRV Plus remarkably reduces defrost time thanks to the particular structure of the heat exchanger, therefore with non-stop operation.

High performance

Thanks to the steam-injected DC Inverter compressor, HOKKAIDO 3-pipe outdoor units are capable of operating down to -25°C , providing significantly higher heating capacities especially at colder outside temperatures.

The compressor is designed to modulate down to a minimum of 7%, greatly increasing the efficiency of the entire system at partial loads.



Fan and exchanger

Outdoor unit heat exchangers are divided in two parts: a left and right structure, so that there are two independent circuits in one outdoor unit. Each outdoor unit has two fans, which allow control each heat exchanger structure individually.

2-pipe system



3-pipe system



Branch pipe kit

Branch pipe downstream of the first indoor unit

Code	A - Capacity of connectable indoor units (kW)
DIS-22-1RI/B	$A < 16.6$
DIS-180-1RI/B	$16.6 \leq A < 33.0$
DIS-371-1RI/B	$33.0 \leq A < 66.0$
DIS-540-1RH Plus	$66.0 \leq A < 92.0$
DIS-1344-1RH Plus	$92.0 \leq A < 135.0$

Branch pipe kit for outdoor unit connection

Code	Outdoor Units
DOS 2-1RH Plus	2 Outdoor KITS
DOS 3-1RH Plus	3 Outdoor KITS
OH-BAL-KT*	T-shaped fitting for oil parallel pipe

* Included in the KIT DOS 3-1RH Plus.

PROJECT VRF R410A FULL DC INVERTER

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XRV PLUS HEAT RECOVERY

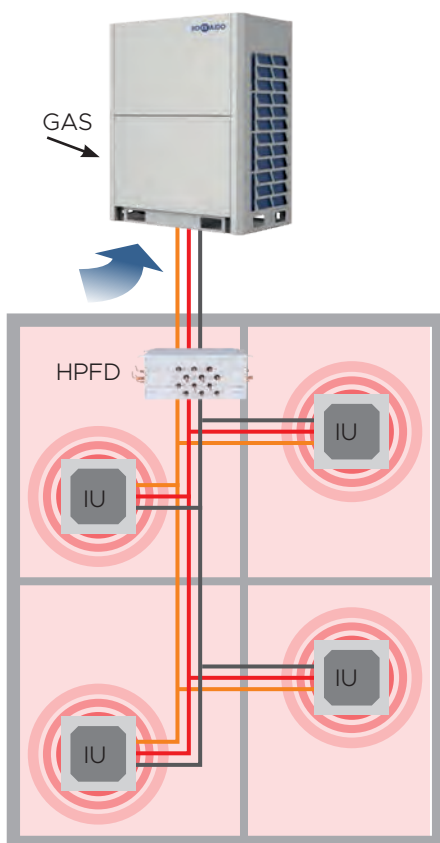
Heat recovery - 3 pipes

NEW

OPERATING MODE

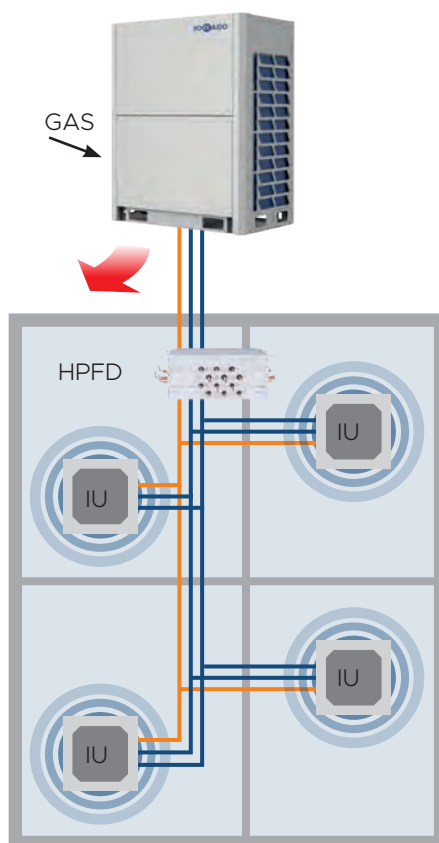
Heating function

The system heats rooms to the desired temperature during the winter.



Cooling function

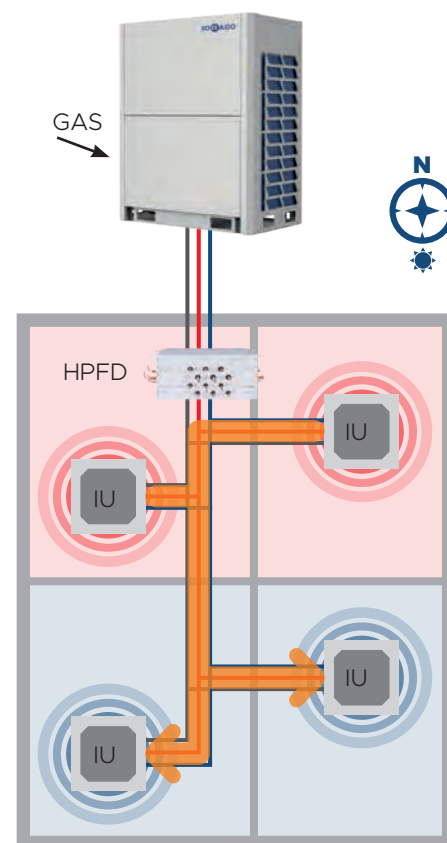
The system cools rooms to the desired temperature during the summer.



Energy recovery

A need to cool and heat simultaneously may arise during mid-seasons or when buildings have different sun exposure.

The XRV Plus Heat Recovery system uses its 3 pipes to recover part of the energy to meet these dual needs.



PROJECT VRF R410A FULL DC INVERTER

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XRV PLUS HEAT RECOVERY

Heat recovery - 3 pipes

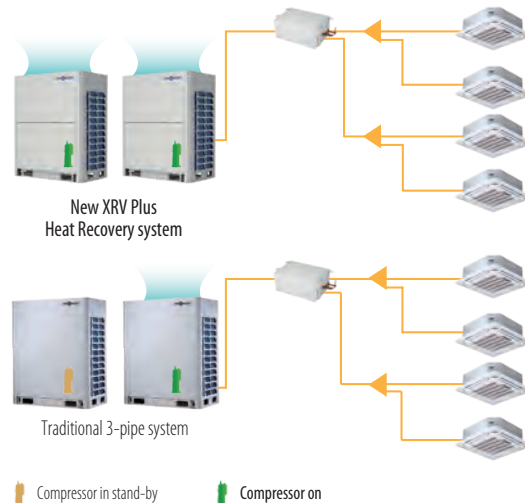
NEW

HIGH EFFICIENCY

Independent control of exchangers and compressors

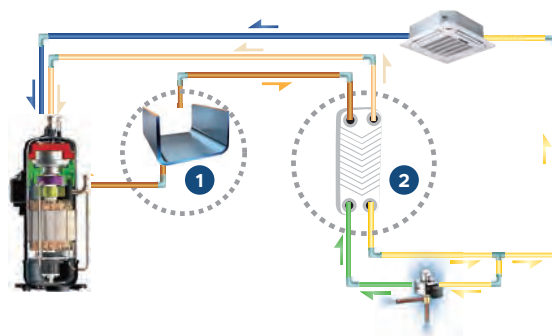
The control of the heat exchangers and compressors is independent, to provide maximum performance in both cooling and heating.

As a result, if the compressor of one unit in a system made up of several modules is not running due to a lower load demand, the respective heat exchanger stays active to maximise the exchange surface and therefore the efficiency of the system.



Additional exchanger for sub-cooling control

The addition of a plate heat exchanger as a secondary intercooler increases refrigerant sub-cooling and improves energy efficiency by 10%.



WIDE RANGE OF APPLICATION

Combinable system

The new HCSRU XRV-R series supplies up to 18HP of capacity in a single unit and up to a maximum of 54HP in a combination of 3 modules, covering all types of applications and building extensions.



8-10-12HP
(single fan)



14-16-18HP
(dual fan)



20-36HP

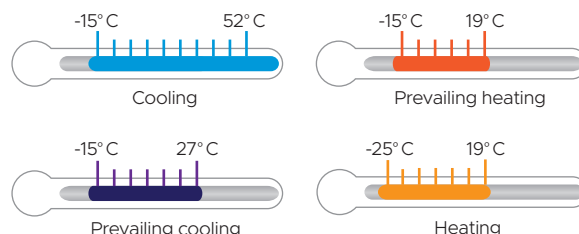


38-54HP

Broad operating range

HCSRU XRV-R offers a wide range of guaranteed operation. It can operate stably at outside temperatures from -15° C to 52° C in cooling mode and from -25° C to 19° C in heating mode.

Simultaneous cooling and heating is guaranteed from -15° C to 27° C in prevailing cooling mode and from -15° C to 19° C in prevailing heating mode.



PROJECT VRF R410A FULL DC INVERTER

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XRV PLUS HEAT RECOVERY

Heat recovery - 3 pipes

NEW

HIGHLY RELIABLE

Outdoor unit rotation cycle

In systems with several outdoor units, the operating logic of the compressors correctly rotates and distributes the operating hours, optimising the use of each component and extending the useful life of the entire system.



cycle 1



cycle 2



cycle 3

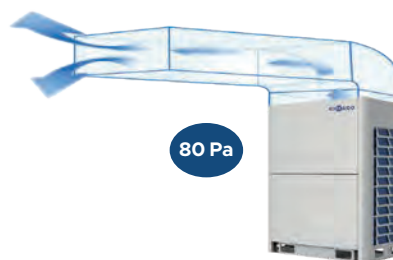
Compressor backup

In multi-module systems, if a single unit is in alarm conditions and fails, it is compensated for by the other units and allows continuity of service until the failed unit is repaired.



Fan static pressure

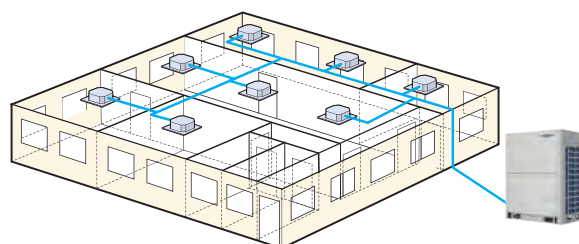
The fan can be set to provide up to 80 Pa of useful static pressure. In this way, the outdoor unit can be installed in technical rooms or in areas where the correct natural flow of air cannot be guaranteed, channelling the expulsion of air from the unit to the outside.



EASY INSTALLATION AND MAINTENANCE

Automatic addressing

The outdoor unit can assign the addresses of the indoor units automatically. The wireless and wired controls can check and change the address of each indoor unit.



PROJECT VRF R410A FULL DC INVERTER

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XRV PLUS HEAT RECOVERY

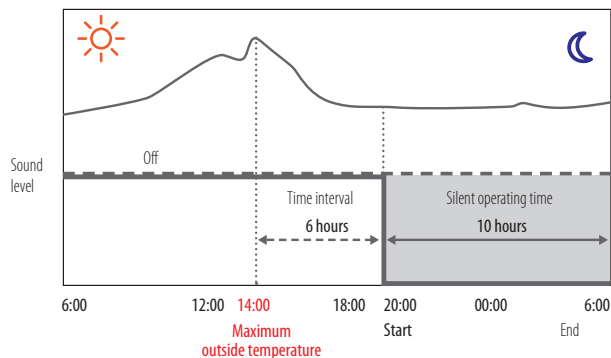
Heat recovery - 3 pipes

NEW

UNPARALLELED COMFORT

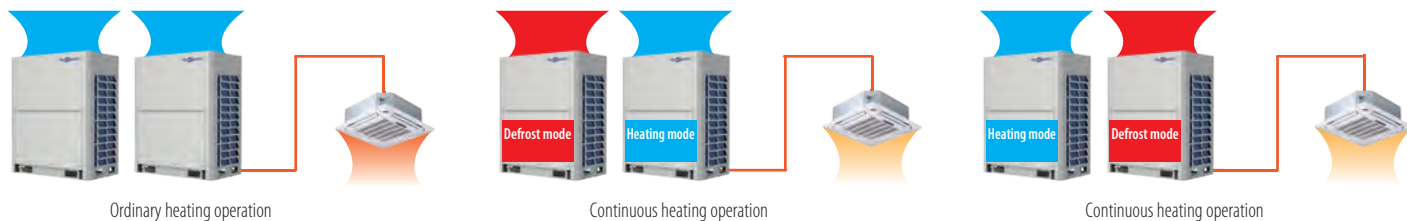
Silent mode

Multiple sound power attenuation modes are available depending on the specific needs, if discrete unit operation is required: night hours only or continuously, and with different degrees of attenuation, limiting only the maximum fan frequency or also the compressor frequency.



Continuous heating

As an alternative to the traditional reverse cycle defrosting technology, it is possible for systems consisting of several HCSRU XRV-R modules to keep the space heating active by defrosting the exchangers of the modules alternately and independently. In this way, heat can be supplied continuously without the system stopping during defrosting.



FLOW CONTROLLER

Single HPDF

- Extended cooling mode operation down to -15° C.
- Management of any third-party leak detectors and isolation of any leakage downstream of the MS box by means of a suitable shut-off valve.
- Possible management of up to 8 indoor units with a total capacity of up to 32 kW (operating in the same mode).
- Compact and lightweight for installation.
- No condensate drain required.
- Extremely precise control via 3200-step electronic valve.
- Silent operation.



HPFD 1-8 XRV-R

Multiple HPDF

- Versions with 4, 6, 8, 10 and 12 connections available.
- Up to 5 indoor units can be connected for each connection (operating in the same mode), for a total of up to 47 indoor units per HPFD box in the 12 connections version.
- Up to 16 kW manageable per connection, or 28 kW by connecting 2 connections.



HPFD 4-20 XRV-R



HPFD 6-30 XRV-R



HPFD 8-40 XRV-R



HPFD 10-47 XRV-R



HPFD 12-47 XRV-R

PROJECT VRF R410A FULL DC INVERTER

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XRV PLUS HEAT RECOVERY

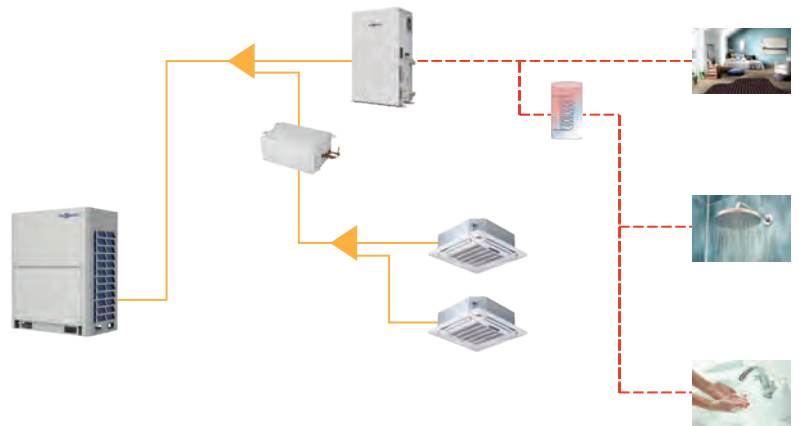
Heat recovery - 3 pipes

NEW

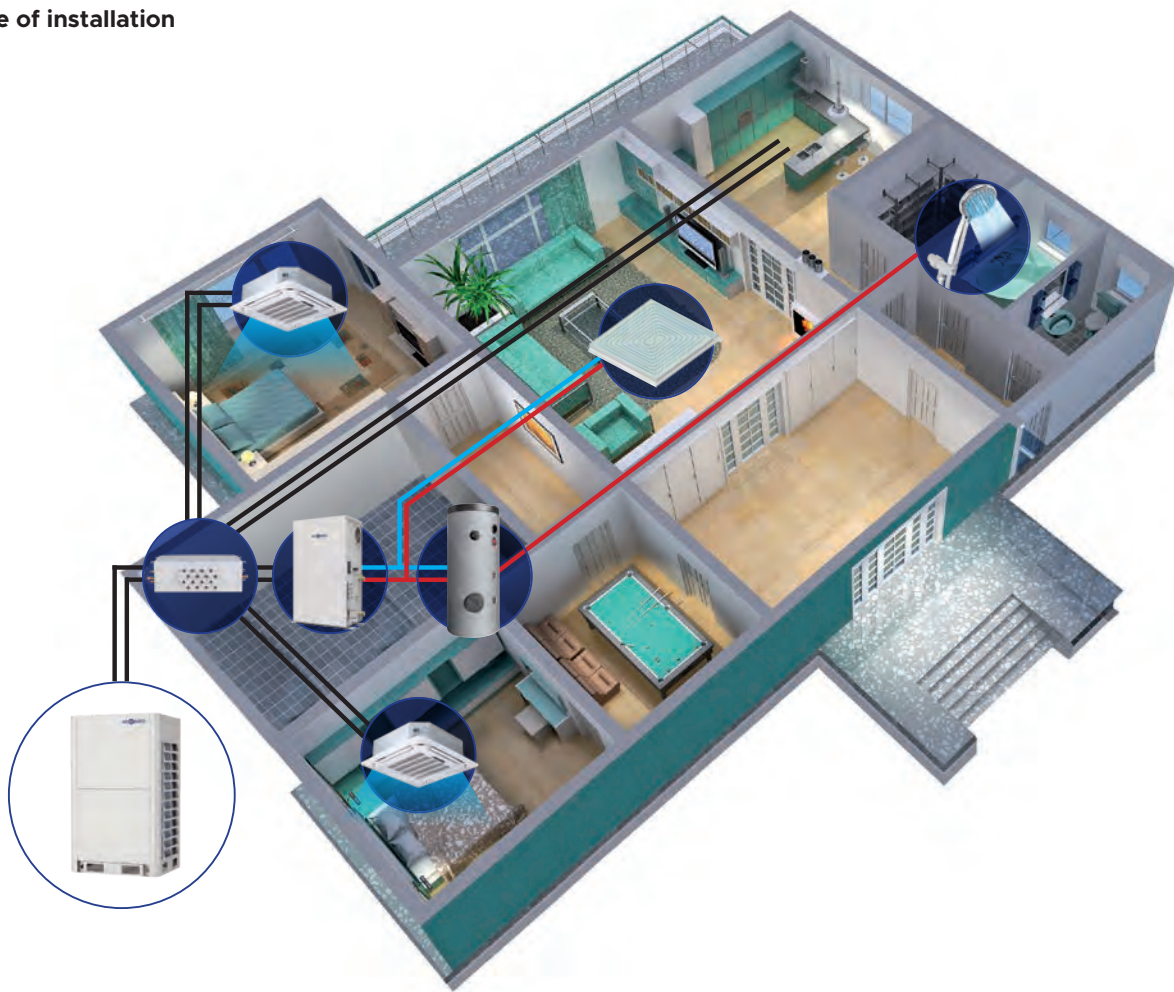
HOT WATER AND HEATING

Maximum flexibility of use

In addition to the simultaneous supply of cooling and heating through indoor units belonging to the same system, the HCSRU XRV-R series can manage high-temperature hydronic modules for hot water production up to 80°C and low-temperature heating (radiant floor or high-efficiency radiators).



Example of installation



PROJECT VRF R410A FULL DC INVERTER

.....

XRV PLUS HEAT RECOVERY

Heat recovery - 3 pipes

NEW

Model / Combination			HCSRU 2526 XRV-R	HCSRU 2806 XRV-R	HCSRU 3356 XRV-R	HCSRU 4006 XRV-R	HCSRU 4506 XRV-R	HCSRU 5006 XRV-R
Power		HP	8	10	12	14	16	18
Rated capacity ¹	Cooling	kW	22.40	28.00	33.50	40.00	45.00	50.00
Rated absorbed power		kW	5.25	7.18	8.64	9.83	12.00	13.81
Energy efficiency coefficient (rated)		EER	4.27	3.90	3.88	4.07	3.75	3.62
Seasonal energy efficiency (η _{s,c})		%	306	299	289	265	264	272
Rated capacity ²	Heating	kW	22.40	28.00	33.50	40.00	45.00	50.00
Rated absorbed power		kW	3.96	5.46	6.57	8.26	9.78	11.90
Energy performance coefficient (rated)		COP	5.66	5.13	5.10	4.84	4.60	4.20
Seasonal energy efficiency (η _{s,c}) average		%	164	167	181	171	170	165
Electrical data								
Power supply		Ph-V-Hz	3-380~415V-50Hz	3-380~415V-50Hz	3-380~415V-50Hz	3-380~415V-50Hz	3-380~415V-50Hz	3-380~415V-50Hz
Maximum current		A	18.00	22.00	24.00	28.00	34.00	36.00
Refrigerant circuit								
Refrigerant (GWP)			R410A (2088)	R410A (2088)	R410A (2088)	R410A (2088)	R410A (2088)	R410A (2088)
Quantity refrigerant pre-load ³		Kg	8	8	8	10	10	10
Tons of CO2 equivalent		t	16.704	16.704	16.704	20.880	20.880	20.880
DC Inverter compressor			no. / type	1 / Scroll DC inverter	1 / Scroll DC inverter	1 / Scroll DC inverter	1 / Scroll DC inverter	1 / Scroll DC inverter
Pipe diameter ⁴	Liquid	ø mm (inch)	9.53 (3/8")	9.53 (3/8")	12.7 (1/2")	12.7 (1/2")	12.7 (1/2")	15.9 (5/8")
	High pressure gas		19.1 (3/4")	22.2 (7/8")	28.6 (9/8")	28.6 (9/8")	28.6 (9/8")	28.6 (9/8")
	Low pressure gas		15.9 (5/8")	19.1 (3/4")	19.1 (3/4")	22.2 (7/8")	22.2 (7/8")	22.2 (7/8")
Product Specifications								
Dimensions ⁵	LxHxD	mm	990x1635x790	990x1635x790	990x1635x790	1340x1635x825	1340x1635x825	1340x1635x825
Net weight		Kg	232	232	232	300	300	300
Sound pressure level at 1 m		dB(A)	58	58	60	61	64	65
Sound power level		dB(A)	78	78	81	81	88	88
Fan air flow		m³/h	9000	9500	10000	14000	14900	15800
Fan static pressure	Std/Max	Pa	0/80	0/80	0/80	0/80	0/80	0/80
Operating limits (outside temperature)	Cooling ⁶	°C (DB)	-15~52	-15~52	-15~52	-15~52	-15~52	-15~52
	Heating	°C (WB)	-25~19	-25~19	-25~19	-25~19	-25~19	-25~19
Max. connectable I.U.		no.	20	25	30	36	40	45
Capacity of connectable indoor units ⁷		%	50-200:	50-200:	50-200:	50-200:	50-200:	50-200:

Model / Combination			HCSRU 4506 XRV-R HCSRU 4506 XRV-R	HCSRU 4506 XRV-R HCSRU 5006 XRV-R	HCSRU 5006 XRV-R HCSRU 5006 XRV-R	HCSRU 3356 XRV-R HCSRU 3356 XRV-R HCSRU 4006 XRV-R	HCSRU 3356 XRV-R HCSRU 3356 XRV-R HCSRU 4506 XRV-R	HCSRU 3356 XRV-R HCSRU 4006 XRV-R HCSRU 4506 XRV-R
Power		HP	32 (16+16)	34 (16+18)	36 (18+18)	38 (12+12+14)	40 (12+12+16)	42 (12+14+16)
Rated capacity ¹	Cooling	kW	90.00	95.00	100.00	107.00	112.00	118.50
Rated absorbed power		kW	24.00	25.81	28.72	27.10	29.27	30.46
Energy efficiency coefficient (rated)		EER	3.75	3.68	3.48	3.95	3.83	3.89
Seasonal energy efficiency (η _{s,c})		%	264	268	272	281	280.7	272.7
Rated capacity ²	Heating	kW	90.00	95.00	100.00	107.00	112.00	118.50
Rated absorbed power		kW	19.57	21.69	21.83	21.4	22.92	24.62
Energy performance coefficient (rated)		COP	4.60	4.38	4.58	5.00	4.89	4.81
Seasonal energy efficiency (η _{s,c}) average		%	170	167.5	165	177.7	177.3	174
Electrical data								
Power supply	Ph-V-Hz		3-380~415V-50Hz	3-380~415V-50Hz	3-380~415V-50Hz	3-380~415V-50Hz	3-380~415V-50Hz	3-380~415V-50Hz
Maximum current	A		68.00	70.00	72.00	76.00	82.00	86.00
Refrigerant circuit								
Refrigerant (GWP)			R410A (2088)	R410A (2088)	R410A (2088)	R410A (2088)	R410A (2088)	R410A (2088)
Quantity refrigerant pre-load ³	Kg		20	20	20	26	26	28
Tons of CO2 equivalent	t		41.760	41.760	41.760	54.288	54.288	58.464
DC Inverter compressor		no. / type	2 / Scroll DC inverter	2 / Scroll DC inverter	2 / Scroll DC inverter	3 / Scroll DC inverter	3 / Scroll DC inverter	3 / Scroll DC inverter
Pipe diameter ⁴	Liquid	Ø mm (inch)	19.1 (3/4")	19.1 (3/4")	19.1 (3/4")	19.1 (3/4")	19.1 (3/4")	19.1 (3/4")
	High pressure gas		34.9 (1" 3/8")	34.9 (1" 3/8")	41.3 (1" 5/8")	41.3 (1" 5/8")	41.3 (1" 5/8")	41.3 (1" 5/8")
	Low pressure gas		28.6 (9/8")	28.6 (9/8")	28.6 (9/8")	34.9 (1" 3/8")	34.9 (1" 3/8")	34.9 (1" 3/8")
Product Specifications								
Dimensions ⁵	LxHxD	mm	2780x1635x825	2780x1635x825	2780x1635x825	3520x1635x825	3520x1635x825	3870x1635x825
Net weight		Kg	600	600	600	764	764	832
Sound pressure level at 1 m		dB(A)	67	68	68	65	67	67
Sound power level		dB(A)	91	91	91	86	89	89
Fan air flow		m³/h	29800	30700	31600	34000	34900	38900
Fan static pressure	Std/Max	Pa	0/80	0/80	0/80	0/80	0/80	0/80
Operating limits (outside temperature)	Cooling ⁶	°C (DB)	-15~52	-15~52	-15~52	-15~52	-15~52	-15~52
	Heating	°C (WB)	-25~19	-25~19	-25~19	-25~19	-25~19	-25~19
Max. connectable I.U.		no.	64	64	64	64	64	64
Capacity of connectable indoor units ⁷		%	50-200:	50-200:	50-200:	50-200:	50-200:	50-200:

- Cooling capacity tested in accordance with ISO 5151 Standards; outside temperature 35° C DB, 24° C WB and inside temperature 27° C DB, 19° WB.
- Heating capacity tested in accordance with ISO 5151 Standards; outside temperature 7° C DB, 6° C WB and inside temperature 20° C DB, 15° C WB.
- Refer to the label inside the unit to calculate the additional refrigerant charge.

- When several outdoor units are paired the diameters indicated refer to the section up to the first branch, with a length equivalent or less than 90m.
- Space between the paired units = 100 mm.
- Operation between -15° C and -5° C only possible in combination with single HPFD.
- The maximum percentage varies depending on the type of indoor units connected. Please refer to the technical manual for specific information.

PROJECT VRF R410A FULL DC INVERTER

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XRV PLUS HEAT RECOVERY

Heat recovery - 3 pipes

NEW

HCSRU 2806 XRV-R HCSRU 2806 XRV-R	HCSRU 2806 XRV-R HCSRU 3356 XRV-R	HCSRU 2806 XRV-R HCSRU 4006 XRV-R	HCSRU 3356 XRV-R HCSRU 4006 XRV-R	HCSRU 3356 XRV-R HCSRU 4506 XRV-R	HCSRU 3356 XRV-R HCSRU 5006 XRV-R
20 (10+10)	22 (10+12)	24 (10+14)	26 (12+14)	28 (12+16)	30 (12+18)
56.00	61.50	68.00	73.50	78.50	83.50
14.36	15/82	17.01	18.46	20.64	22.45
3.90	3.89	4.00	3.98	3.80	3.72
299	294	282	277	276.5	280.5
56.00	61.50	68.00	73.50	78.50	83.50
10.92	12.03	13.72	14.83	16.35	18.47
5.13	5.11	4.96	4.96	4.80	4.52
167	174	169	176	175.5	173
3-380~415V-50Hz	3-380~415V-50Hz	3-380~415V-50Hz	3-380~415V-50Hz	3-380~415V-50Hz	3-380~415V-50Hz
44.00	46.00	50.00	52.00	58.00	60.00
R410A (2088)	R410A (2088)	R410A (2088)	R410A (2088)	R410A (2088)	R410A (2088)
16	16	18	18	18	18
33.408	33.408	37.580	37.580	37.580	37.580
2 / Scroll DC inverter	2 / Scroll DC inverter	2 / Scroll DC inverter	2 / Scroll DC inverter	2 / Scroll DC inverter	2 / Scroll DC inverter
15.9 (5/8")	15.9 (5/8")	15.9 (5/8")	19.1 (3/4")	19.1 (3/4")	19.1 (3/4")
28.6 (9/8")	28.6 (9/8")	34.9 (1" 3/8")	34.9 (1" 3/8")	34.9 (1" 3/8")	34.9 (1" 3/8")
28.6 (9/8")	28.6 (9/8")	28.6 (9/8")	28.6 (9/8")	28.6 (9/8")	28.6 (9/8")
2080x1635x790	2080x1635x790	2430x1635x825	2430x1635x825	2430x1635x825	2430x1635x825
464	464	532	532	532	532
61	62	63	64	65	66
81	83	83	84	89	89
19000	19500	23500	24000	24900	25800
0/80	0/80	0/80	0/80	0/80	0/80
-15~-52	-15~-52	-15~-52	-15~-52	-15~-52	-15~-52
-25~-19	-25~-19	-25~-19	-25~-19	-25~-19	-25~-19
50	55	61	64	64	64
50-200:	50-200:	50-200:	50-200:	50-200:	50-200:

HCSRU 3356 XRV-R HCSRU 4506 XRV-R HCSRU 4506 XRV-R	HCSRU 4006 XRV-R HCSRU 4506 XRV-R HCSRU 4506 XRV-R	HCSRU 4506 XRV-R HCSRU 4506 XRV-R HCSRU 4506 XRV-R	HCSRU 4506 XRV-R HCSRU 4506 XRV-R HCSRU 5006 XRV-R	HCSRU 4506 XRV-R HCSRU 5006 XRV-R HCSRU 5006 XRV-R	HCSRU 5006 XRV-R HCSRU 5006 XRV-R HCSRU 5006 XRV-R
44 (12+16+16)	46 (14+16+16)	48 (16+16+16)	50 (16+16+18)	52 (16+18+18)	54 (18+18+18)
123.50	130.00	135.00	140.00	145.00	150.00
32.64	33.83	36	37.81	39.62	41.44
3.78	3.84	3.75	3.70	3.66	3.62
272.3	264.3	264	266.7	269.3	272
123.50	130.00	135.00	140.00	145.00	150.00
26.13	27.83	29.35	31.47	33.59	35.71
4.73	4.67	4.60	4.45	4.32	4.20
173.7	170.3	170	168.3	166.7	165
3-380~415V-50Hz	3-380~415V-50Hz	3-380~415V-50Hz	3-380~415V-50Hz	3-380~415V-50Hz	3-380~415V-50Hz
92.00	96.00	102.00	104.00	106.00	108.00
R410A (2088)	R410A (2088)	R410A (2088)	R410A (2088)	R410A (2088)	R410A (2088)
28	30	30	30	30	30
58.464	62.640	62.640	62.640	62.640	62.640
3 / Scroll DC inverter	3 / Scroll DC inverter	3 / Scroll DC inverter	3 / Scroll DC inverter	3 / Scroll DC inverter	3 / Scroll DC inverter
19.1 (3/4")	19.1 (3/4")	19.1 (3/4")	19.1 (3/4")	19.1 (3/4")	19.1 (3/4")
41.3 (1" 5/8")	41.3 (1" 5/8")	41.3 (1" 5/8")	41.3 (1" 5/8")	41.3 (1" 5/8")	41.3 (1" 5/8")
34.9 (1" 3/8")	34.9 (1" 3/8")	34.9 (1" 3/8")	34.9 (1" 3/8")	34.9 (1" 3/8")	34.9 (1" 3/8")
3870x1635x825	4220x1635x825	4220x1635x825	4220x1635x825	4220x1635x825	4220x1635x825
832	900	900	900	900	900
68	68	69	69	69	70
91	91	93	93	93	93
39800	43800	44700	45600	46500	47400
0/80	0/80	0/80	0/80	0/80	0/80
-15~-52	-15~-52	-15~-52	-15~-52	-15~-52	-15~-52
-25~-19	-25~-19	-25~-19	-25~-19	-25~-19	-25~-19
64	64	64	64	64	64
50-200:	50-200:	50-200:	50-200:	50-200:	50-200:

- Cooling capacity tested in accordance with ISO 5151 Standards; outside temperature 35° C DB, 24° C WB and inside temperature 27° C DB, 19° WB.
- Heating capacity tested in accordance with ISO 5151 Standards; outside temperature 7° C DB, 6° C WB and inside temperature 20° C DB, 15° C WB.
- Refer to the label inside the unit to calculate the additional refrigerant charge.

- When several outdoor units are paired the diameters indicated refer to the section up to the first branch, with a length equivalent or less than 90m.
- Space between the paired units = 100 mm.
- Operation between -15° C and -5° C only possible in combination with single HPFD.
- The maximum percentage varies depending on the type of indoor units connected. Please refer to the technical manual for specific information.

PROJECT VRF R410A FULL DC INVERTER

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XRV PLUS HEAT RECOVERY Flow dividers

NEW

Simultaneous cooling and heating within the same system is made possible by special flow dividers (HPFD) placed between the outdoor and indoor units which sort the refrigerant in liquid and gaseous phases between the rooms requiring cooling or heating.

Several versions are available, with single or multiple connections.



Model			HPFD 1-8 XRV-R		HPFD 4-20 XRV-R		HPFD 6-30 XRV-R		HPFD 8-40 XRV-R		HPFD 10-47 XRV-R		HPFD 12-47 XRV-R		
Number of connections			1		4		6		8		10		12		
Max. number of indoor units per each connection ¹			8		5		5		5		5		5		
Max. total number of indoor units per divider ¹			8		20		30		40		47		47		
Max. capacity for each connection ²			kW		32		16		16		16		16		
Max. total capacity of indoor units per divider			kW		32		49		63		85		85		
Pipe connections	Connection to outdoor unit	Liquid	Ø mm	9.53 / 12.7		9.53 / 12.7 / 15.9 / 19.1		9.53 / 12.7 / 15.9 / 19.1		12.7 / 15.9 / 19.1 / 22.2		12.7 / 15.9 / 19.1 / 22.2		12.7 / 15.9 / 19.1 / 22.2	
		Gas-High pressure	Ø mm	15.9 / 19.1 / 22.2		19.1 / 22.2 / 28.6		19.1 / 22.2 / 28.6		22.2 / 28.6 / 34.9		22.2 / 28.6 / 34.9		22.2 / 28.6 / 34.9	
		Gas- Low pressure	Ø mm	12.7 / 15.9 / 19.1		15.9 / 19.1 / 22.2 / 28.6		15.9 / 19.1 / 22.2 / 28.6		19.1 / 22.2 / 28.6		19.1 / 22.2 / 28.6		19.1 / 22.2 / 28.6	
	Connection to indoor unit	Liquid	Ø mm	6.35 / 9.53		6.35 / 9.53		6.35 / 9.53		6.35 / 9.53		6.35 / 9.53		6.35 / 9.53	
		Gas	Ø mm	12.7 / 15.9		12.7 / 15.9		12.7 / 15.9		12.7 / 15.9		12.7 / 15.9		12.7 / 15.9	
External dimensions		LxHxD	mm	440x195x296		668x250x574		668x250x574		974x250x574		974x250x574		974x250x574	
Net weight			Kg	10.5		33		36		48		51		54	
Sound pressure level ³			dB(A)	40		44		45		47		47		47	
Sound power level ³			dB(A)	60		63		65		65		65		65	
Power supply			Ph-V-Hz					1-220~240V-50Hz							

1. Any indoor units connected to the same connection as the MS box must run in the same mode.

2. For MS boxes with 4 to 12 connections, indoor units with a capacity of 16 kW to 28 kW can be connected to 2 connections through connection kit FQZHN-09A.

3. The sound levels are measured in a semi-anechoic chamber, 1 m below the MS BOX during the mode change.

Avoid installing the MS BOXes in environments with low noise requirements.

Hydromodule

NEW



HHNMS 140 XRV-R

Model			HHNMS 140 XRV-R
Rated capacity ¹	Heating	kW	14
	Heating	°C	-20~30
Operating limits (outside temperature)	Domestic water	°C	-20~43
		°C	25~80
Delivery water temperature adjustment range			25~80
Electrical data			
Power supply		Ph-V-Hz	1-220~240V-50Hz
Maximum current		A	16
Product specifications			
External dimensions		LxHxD	mm
Net weight		Kg	450x795x300
Sound pressure level		dB(A)	63
Sound power level		dB(A)	43
Water flow		Std (Min~Max)	m³/h
Water pressure		Min~Max	bar
Connections	Freon Liquid/Gas	Ø mm (inch)	2.4 (1.2~2.9)
	Inlet/outlet water	Ø mm (inch)	1~3
Serial control		type	9.52 (3/8") / 12.7 (1/2")
			25.4 (1")
			Wired remote control

1. Heating capacity tested in accordance with ISO 5151 Standards; outside temperature 7°C DB, 6°C WB and inlet/outlet water temperature 40°C DB, 45°C WB.

PROJECT VRF R410A FULL DC INVERTER

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PREMIUM - P SERIES INDOOR UNITS

kW		2.20	2.80	3.60	4.50	5.60	7.10	9.00	11.20	12.50	14.00	16.00	20.00	28.00
Cassette	compact 60x60  HTFU XRV-P	•	•	•	•									
	84x84  HTBU XRV-P					•	•	•	•		•			
Ducted	medium static pressure  HUCU XRV-P	•	•	•	•	•	•	•	•		•			
	high static pressure  HVDU XRV-P						•	•	•		•	•	•	•
	all-outside air  HVDU-F XRV-P									•	•			
Wall	 HKEU XRV-P	•	•	•	•	•	•	•						
Floor	floor / ceiling  HSFU XRV-P					•	•	•	•		•			
	recessed  HFIU XRV-P	•	•	•	•									
	console  HFCU XRV-P		•	•		•								

PROJECT VRF R410A FULL DC INVERTER

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HTFU XRV-P Compact cassette 60x60



The control must be purchased as an accessory



Ultra-compact design

22 dB(A) (2.20~2.80 kW) | Extremely quiet

360° air diffusion

Condensate drain pump with possibility of raising the discharge up to 500 mm from the lower height

Model			HTFU 225 XRV-P	HTFU 285 XRV-P	HTFU 365 XRV-P	HTFU 455 XRV-P
Control (included)		type	none			
Rated cooling capacity		kW	2.20	2.80	3.60	4.50
Rated heating capacity		kW	2.40	3.20	4.00	5.00
Electrical data						
Power supply		Ph-V-Hz	1-220~240V-50Hz			
Electrical absorption		W	35	35	40	50
Product specifications						
Air flow (1)	Max~Min	m³/h	576~405		604~400	
Sound pressure level at 1.4 m (1)	Max~Min	dB(A)	35~22		41~28	
Sound power level (1)	Max~Min	dB(A)	51~38		56~43	
External dimensions	LxHxD	mm	630x260x570			
Net weight		Kg	18		19.2	
Refrigerant connections	Liquid/Gas	Ø mm (inch)	6.35 (1/4") - 12.7 (1/2")			
Condensate drain		Ø mm	32			
Accessories						
Decorative panel			TFP 155 XRV-P			
Dimensions	LxHxD	mm	647x50x647			
Net weight		Kg	2.5			
Remote control			DHIR-5-6-XRV-K-P			
Wired remote control			DHW-5-6-XRV-K-P			
Optional parts						
Centralized control			see page 117			

(1) Values related to Max and Min speed of 7 levels settable by remote control.

HTBU XRV-P Cassette 84x84



The control must be purchased as an accessory



Optimised fan design to attenuate air resistance and reduce noise level

Condensate drain pump with possibility of raising the discharge up to 750 mm from the lower height

Pre-set for the connection of an outside air intake channel

Model			HTBU 565 XRV-P	HTBU 715 XRV-P	HTBU 905 XRV-P	HTBU 1125 XRV-P	HTBU 1405 XRV-P
Control (included)		type	none				
Rated cooling capacity		kW	5.60	7.10	9.00	11.20	14.00
Rated heating capacity		kW	6.30	8.00	10.00	12.50	16.00
Electrical data							
Power supply		Ph-V-Hz	1-220~240V-50Hz				
Electrical absorption		W	31	46	75		94
Product specifications							
Air flow (1)	Max~Min	m³/h	1029~704	1200~748	1596~1034		1727~1224
Sound pressure level at 1.4 m (1)	Max~Min	dB(A)	43~34	45~34	47~36		50~38
Sound power level (1)	Max~Min	dB(A)	56~47	58~47	61~50		64~52
External dimensions		LxHxD	840x230x840		840x300x840		
Net weight		Kg	23.2		28.4		30.7
Refrigerant connections	Liquid/Gas	Ø mm (inch)	9.52 (3/8") - 15.9 (5/8")				
Condensate drain		Ø mm	32				
Accessories							
Decorative panel			TBP 712 IHXR				
Dimensions	LxHxD	mm	950x70x950				
Net weight		Kg	5.8				
Remote control			DHIR-5-6-XRV-K-P				
Wired remote control			DHW-5-6-XRV-K-P				
Optional parts							
Centralized control			see page 117				

(1) Values related to Max and Min speed of 7 levels settable by remote control.

CLEAN AIR UV-KIT

AIR PURIFYING DEVICE FOR DUCTED SYSTEMS

TMS-UV02
TMS-UV04



AN ALL-IN-ONE SOLUTION FOR ELIMINATING VIRUSES AND BACTERIA

The UV-C air purification device has the ability to modify the DNA or RNA of micro-organisms, preventing them from reproducing and thus being harmful. UV-C light is able to inactivate 99.99% of viruses.

Use in ducted systems is recommended as it does not expose humans to UV-C light and allows disinfection and air purification.

The device technology is able to degrade numerous organic compounds by oxidation.

The filter attracts and retains moisture molecules that are naturally present in the air, capturing fine dust and oxides. This process encourages faster decomposition of substances that are harmful to humans.

This product is therefore capable of:

- Effectively eliminating micro-organisms that are harmful to human health, such as moulds and viruses
- Decomposing organic compounds present in the air such as benzene, formaldehyde, ammonia, ether, TVOC and other organic chemical compounds
- Eliminating unpleasant odours

This device can be connected to ducted indoor units so that they only operate when the air conditioning system is switched on.

TMS-UV02: for models HUCU 225-1405 XRV-P; HVDU 715-1405 XRV-P.

TMS-UV04: for models HVDU 1605-2805 XRV-P.

PROJECT VRF R410A FULL DC INVERTER

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HUCU XRV-P

Ducted with medium static pressure



The control must be purchased as an accessory



Only 210 mm high (2.20~7.10 kW) | Ultra-compact design: perfect for use in hotels thanks to its small size

Available static pressure: **50 Pa** (2.20~7.10 kW); **100 Pa** (9.00~11.20 kW); **150 Pa** (14.00 kW)

Air intake from bottom or rear

Condensate drain pump with possibility of raising the discharge up to 750 mm from the lower height

Compatible with systems **AIRZONE**

Model			HUCU 225 XRV-P	HUCU 285 XRV-P	HUCU 365 XRV-P	HUCU 455 XRV-P
Control (included)		type	none			
Rated cooling capacity		kW	2.20	2.80	3.60	4.50
Rated heating capacity		kW	2.60	3.20	4.00	5.00
Electrical data						
Power supply		Ph-V-Hz	1-220~240V-50Hz			
Electrical absorption		W	40	40	45	92
Product specifications						
Air flow (1)	Max~Min	m³/h	520~300		580~370	800~400
Fan static pressure	Std/Max	Pa	10/50			
Sound pressure level at 1.4 m (1)	Max~Min	dB(A)	32~23		33~25	36~25
Sound power level (1)	Max~Min	dB(A)	50~41		51~43	54~43
Dimensions	LxHxD	mm	780x210x500			1000x210x500
Net weight		Kg	18			21.5
Refrigerant connections	Liquid/Gas	Ø mm (inch)	6.35 (1/4") - 12.7 (1/2")			
Condensate drain		Ø mm	25			
Accessories						
Remote control			DHIR-5-6-XRV-K-P			
Wired remote control			DHW-5-6-XRV-K-P			
Optional parts						
Centralized control			see page 117			

(1) Values related to Max and Min speed of 7 levels settable by remote control.

Model			HUCU 565 XRV-P	HUCU 715 XRV-P	HUCU 905 XRV-P	HUCU 1125 XRV-P	HUCU 1405 XRV-P
Control (included)		type	none				
Rated cooling capacity		kW	5.60	7.10	9.00	11.20	14.00
Rated heating capacity		kW	6.30	8.00	10.00	12.50	15.50
Electrical data							
Power supply		Ph-V-Hz	1-220~240V-50Hz				
Electrical absorption		W	92	98	120	200	250
Product specifications							
Air flow (1)	Max~Min	m³/h	830~560	1000~680	1260~780	1500~1080	1960~1360
Fan static pressure	Std/Max	Pa	10/50		20/100		40/150
Sound pressure level at 1.4 m (1)	Max~Min	dB(A)	36~28	37~28	37~28	39~33	41~33
Sound power level (1)	Max~Min	dB(A)	54~46	55~46	55~46	57~51	59~51
Dimensions	LxHxD	mm	1000x210x500	1220x210x500	1230x270x775		1290x300x865
Net weight		Kg	21.5	27.5	37		46.5
Refrigerant connections	Liquid/Gas	Ø mm (inch)	9.52 (3/8") - 15.9 (5/8")				
Condensate drain		Ø mm	25				
Accessories							
Remote control			DHIR-5-6-XRV-K-P				
Wired remote control			DHW-5-6-XRV-K-P				
Optional parts							
Centralized control			see page 117				

(1) Values related to Max and Min speed of 7 levels settable by remote control.

PROJECT VRF R410A FULL DC INVERTER

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HVDU XRV-P

Ducted with high static pressure



The control must be purchased as an accessory



Available static pressure:

200 Pa (7.10~16.00 kW)

250 Pa (20.00~28.00 kW)

423 mm high (7.10~16.00 kW) | Compact size

Rear air intake

Ease of maintenance

Compatible with systems **AIRZONE**

Model			HVDU 715 XRV-P	HVDU 905 XRV-P	HVDU 1125 XRV-P	HVDU 1405 XRV-P	HVDU 1605 XRV-P	HVDU 2005 XRV-P	HVDU 2805 XRV-P
Control (included)	type					none			
Rated cooling capacity	kW		7.10	9.00	11.20	14.00	16.00	20.00	28.00
Rated heating capacity	kW		8.00	10.00	12.50	16.00	17.00	22.50	31.50
Electrical data									
Power supply	Ph-V-Hz					1-220~240V-50Hz			
Electrical absorption	W		180	220	380	420	700	990	1200
Product specifications									
Air flow (1)	Max~Min	m³/h	1360~1160	1420~1140	1870~1350	2240~1600	2660~1880		4330~3730
Fan static pressure	Std/Max	Pa			100/200				170/250
Sound pressure level at 1.4 m (1)	Max~Min	dB(A)	46~42	50~45	50~45	53~48	54~50		57~50
Sound power level (1)	Max~Min	dB(A)	64~60	68~63	68~63	71~66	72~68		75~68
Dimensions	LxHxD	mm		965x423x690		1322x423x691			1454x515x931
Net weight		Kg	41	51	51	68	68		130
Refrigerant connections	Liquid/Gas	Ø mm (inch)			9.52 (3/8") - 15.9 (5/8")				12.7 (1/2") - 22.2 (7/8")
Condensate drain		Ø mm			25				32
Accessories									
Remote control						DHIR-5-6-XRV-K-P			
Wired remote control						DHW-5-6-XRV-K-P			
Optional parts									
Centralized control						see page 117			

(1) Values related to Max and Min speed of 7 levels settable by remote control.

HVDU-F XRV-P

All-outside air ducted



The control must be purchased as an accessory



These air handling units can be connected together with the indoor units to the same refrigerant system, thus increasing the design flexibility and significantly reducing operating costs

423 mm high | Ultra-compact design

200 Pa | Max static pressure of fans

Automatic "all-outside air" function to save energy when the outside temperature drops below the set temperature

Model			HVDU-F 1255 XRV-P	HVDU-F 1405 XRV-P
Control (included)				none
Rated cooling capacity (1)	kW		12.50	14.00
Rated heating capacity (2)	kW		10.50	12.00
Electrical data				
Power supply	Ph-V-Hz			1-220~240V-50Hz
Electrical absorption	W			480
Product specifications				
Air flow (3)	Max~Min	m³/h		2000~1500
Fan static pressure	Std/Max	Pa		180/200
Sound pressure level at 1.4 m (3)	Max~Min	dB(A)		48~42
Sound power level (3)	Max~Min	dB(A)		66~60
Dimensions	LxHxD	mm		1322x423x691
Net weight		Kg		68
Refrigerant connections	Liquid/Gas	Ø mm (inch)		9.52 (3/8") - 15.9 (5/8")
Condensate drain		Ø mm		25
Operating field (100% outdoor air)	Cooling	°C		-5 / 16
	Heating			20 / 43
Accessories				
Remote control				DHIR-5-6-XRV-K-P
Wired remote control				DHW-5-6-XRV-K-P
Optional parts				
Centralized control				see page 117

(1) Cooling test conditions: 100% outdoor air 33°C DB, 28°C WB. (2) Heating test conditions: 100% outdoor air 0°C DB, -2.9°C WB. (3) Values related to Max and Min speed of 7 levels settable by remote control.

PROJECT VRF R410A FULL DC INVERTER

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HKEU XRV-P Wall



The control must be purchased as an accessory



New design

203 mm deep (2.20 kW) | Extremely compact design

29 dB(A) (2.20~2.80 kW) | Extremely quiet

Standard washable filter

Model			HKEU 225 XRV-P	HKEU 285 XRV-P	HKEU 365 XRV-P	HKEU 455 XRV-P	HKEU 565 XRV-P	HKEU 715 XRV-P	HKEU 905 XRV-P
Control (included)		type	none						
Rated cooling capacity		kW	2.20	2.80	3.60	4.50	5.60	7.10	9.00
Rated heating capacity		kW	2.40	3.20	4.00	5.00	6.30	8.00	10.00
Electrical data									
Power supply		Ph-V-Hz	1-220~240V-50Hz						
Electrical absorption		W	28		30	40	45	55	82
Product specifications									
Air flow (1)	Max~Min	m³/h	422~356	417~316	656~488	594~424	747~547	1195~809	1421~867
Sound pressure level at 1 m (1)	Max~Min	dB(A)	31~29	31~29	33~30	35~31	38~34	44~36	48~38
Sound power level (1)	Max~Min	dB(A)	46~44	46~44	48~45	50~46	53~49	59~51	63~53
Dimensions	LxHxD	mm	835x280x203		990x315x223			1194x343x262	
Net weight		Kg	8.4	9.5	11.4	12.8		17	
Refrigerant connections	Liquid/Gas	Ø mm (inch)	6.35 (1/4") - 12.7 (1/2")				9.52 (3/8") - 15.9 (5/8")		
Condensate drain		Ø mm	16						
Accessories									
Remote control		DHIR-5-6-XRV-K-P							
Wired remote control		DHW-5-6-XRV-K-P							
Optional parts									
Centralized control		see page 117							

(1) Values related to Max and Min speed of 7 levels settable by remote control.

HSFU XRV-P Floor/ceiling



The control must be purchased as an accessory



Auto Swing function | Optimises the distribution of air flow in the room

Built-in electronic expansion valve

Easy installation with unit mounted to the floor or to the ceiling

Model			HSFU 565 XRV-P	HSFU 715 XRV-P	HSFU 905 XRV-P	HSFU 1125 XRV-P	HSFU 1405 XRV-P
Control (included)		type	none				
Rated cooling capacity		kW	5.60	7.10	9.00	11.20	14.00
Rated heating capacity		kW	6.30	8.00	10.00	12.50	15.00
Electrical data							
Power supply		Ph-V-Hz	1-220~240V-50Hz				
Electrical absorption		W	115	115	130	180	180
Product specifications							
Air flow (1)	Max~Min	m³/h	930~720		1280~1050	1890~1580	
Sound pressure level at 1 m (1)	Max~Min	dB(A)	43~38		45~40	47~42	
Sound power level (1)	Max~Min	dB(A)	56~51		58~53	60~55	
Dimensions	LxHxD	mm	990x660x203		1280x660x203	1670x680x244	
Net weight		Kg	28		35	48	
Refrigerant connections	Liquid/Gas	Ø mm (inch)	9.52 (3/8") - 15.9 (5/8")				
Condensate drain		Ø mm	16				
Accessories							
Remote control			DHIR-5-6-XRV-K-P				
Wired remote control			DHW-5-6-XRV-K-P				
Optional parts							
Centralized control			see page 117				

(1) Values related to Max and Min speed of 7 levels settable by remote control.

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HFIU XRV-P Console



The control must be purchased as an accessory



210 mm deep | Ultra-compact design

Double air distribution mode: from above and/or below

7 fan speeds

Front and side air intake

Anti-formaldehyde filter | To eliminate the harmful effects of the gases released in rooms

Model			HFIU 225 XRV-P	HFIU 285 XRV-P	HFIU 365 XRV-P	HFIU 455 XRV-P
Control (included)			none			
Rated cooling capacity		kW	2.20	2.80	3.60	4.50
Rated heating capacity		kW	2.60	3.20	4.00	5.00
Electrical data						
Power supply		Ph-V-Hz	1-220~240V-50Hz			
Electrical absorption		W	20	25	25	35
Product specifications						
Air flow (1)	Max~Min	m³/h	430~229	510~229	510~229	660~400
Sound pressure level at 1 m (1)	Max~Min	dB(A)	38~26	39~27	39~27	42~36
Sound power level (1)	Max~Min	dB(A)	54~42	55~43		58~52
Dimensions	LxHxD	mm	700x600x210			
Net weight		Kg	14	15		
Refrigerant connections	Liquid/Gas	Ø mm (inch)	6.35 (1/4") - 12.7 (1/2")			
Condensate drain		Ø mm	16			
Accessories						
Remote control			DHIR-5-6-XRV-K-P			
Wired remote control			DHW-5-6-XRV-K-P			
Optional parts						
Centralized control			see page 117			

(1) Values related to Max and Min speed of 7 levels settable by remote control.

HFCU XRV-P Recessed floor



The control must be purchased as an accessory



29 dB(A) (2.80 kW) | Extremely quiet

Air intake from bottom

212 mm | Maximum compactness for flush-mounted installation

Model		HFCU 285 XRV-P		HFCU 365 XRV-P		HFCU 565 XRV-P			
Control (included)			none						
Rated cooling capacity		kW	2.80		3.60		5.60		
Rated heating capacity		kW	3.20		4.00		6.30		
Electrical data									
Power supply		Ph-V-Hz	1-220~240V-50Hz						
Electrical absorption		W	45		55		88		
Product specifications									
Air flow (1)		Max~Min	m³/h	569~421		624~375		1150~830	
Fan static pressure		Std/Max	Pa	10/10					
Sound pressure level at 1 m (1)		Max~Min	dB(A)	36~29		37~30		41~31	
Sound power level (1)		Max~Min	dB(A)	54~47		55~48		59~49	
Dimensions		LxHxD	mm	840x545x212		1040x545x212		1340x545x212	
Net weight			Kg	21		25.5		30.5	
Refrigerant connections		Liquid/Gas	Ø mm (inch)	6.35 (1/4") - 12.7 (1/2")				9.52 (3/8") - 15.9 (5/8")	
Condensate drain			Ø mm	16					
Accessories									
Remote control			DHIR-5-6-XRV-K-P						
Wired remote control			DHW-5-6-XRV-K-P						
Optional parts									
Centralized control			see page 117						

(1) Values related to Max and Min speed of 7 levels settable by remote control.

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TOTAL HEAT EXCHANGER

NEW

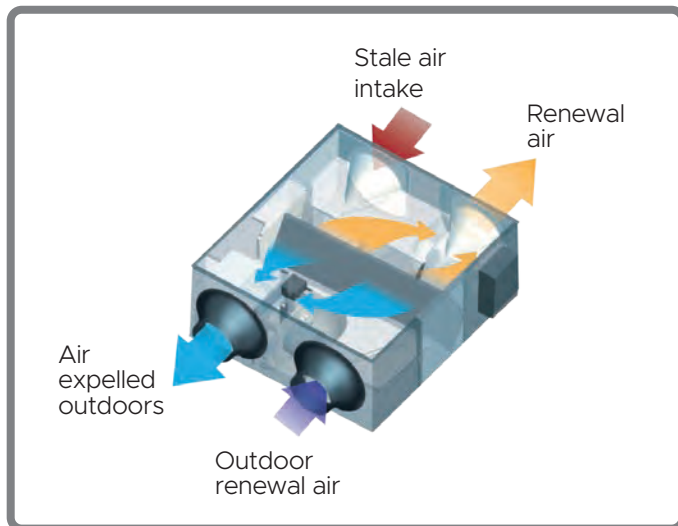


EHIN 204~404



EHIN 504~2004

The control must be purchased as an accessory



Enthalpy heat recovery unit. Energy recovery during heat exchanges in rooms

Ventilation units with heat recovery are suited for use in bars, restaurants, offices, gyms, changing rooms and all rooms where air needs to be exchanged during hours of operation.

The units consist of two centrifugal fans: one introduces clean air filtered from outside and the other one expels the stale air from the inside. The two air flows go through one blade heat exchanger, in which part of the heat is recovered.

Depending on the season, the indoor air heats or cools the outdoor air, which is introduced without coming into contact with it.

- 8 power sizes: 200~2000 m³/h.
- DC Inverter fan.

Model			EHIN 204	EHIN 304	EHIN 404	EHIN 504	EHIN 804	EHIN 1004	EHIN 1504	EHIN 2004	
Control (included)		type	None								
Exchange efficiency ¹	Enthalpy	%	77.5	72.1	73.5	74.0	72.3	76.0	69.4	74.7	
	Thermal	%	81.1	75.5	77.7	80.6	78.7	82.8	75.5	77.2	
Electrical data											
Power supply		Ph-V-Hz	1-220~240-50								
Power absorption		W	70	100	110	150	320	380	680	950	
Rated absorbed current		A	0.64	0.84	0.97	1.2	2.4	2.9	3.8	5.7	
Product specifications											
External dimensions	LxHxD	mm	801x272x1195	914x272x1195	1204x272x1276	1106x390x1311	1286x390x1311	1526x390x1311	1425x615x1740	1625x685x1811	
Net weight		Kg	46.5	56.5	71.5	76	80	90	181.5	208.5	
Sound power level	Hi	dB(A)	45	48	48	50	55	54	69	70	
Treated air		m³/h	200	300	400	500	800	1000	1500	2000	
Fan static pressure	Hi	Pa	100	90	100	90	140	160	180	200	
Ducting flange		mm	ø144	ø144	ø198	ø244	ø244	ø244	346x326	346x326	
Condensate drain			Not required						Necessary		
Field of application		°C	-7~43 DB (max RH 80%)								
Degree of protection			IPX2								
Specific energy consumption ²	SEC	kWh/m² a	-41.50	-	-	-	-	-	-	-	
Class SEC ²			A	-	-	-	-	-	-	-	
Accessories											
Mandatory wired remote control			DHW EH								

1. Values related to the high speed of the 3 levels settable by wired remote control.

2. Mandatory data for residential ventilation units (RVU) only.

EU Ecodesign Directive 1253/2014 for non-residential ventilation units (NRVU) and residential ventilation (RVU).

EU Energy Labelling 1254/2014 Residential Ventilation Unit (RVU).



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EEV KIT

NEW

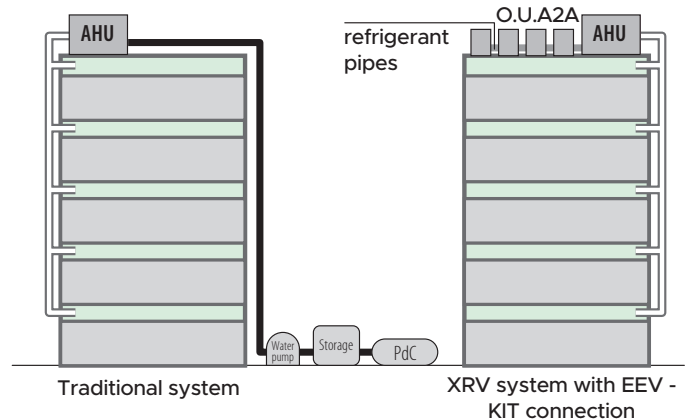
Kit for connecting AHU with direct expansion coil to Hokkaido XRV systems.



HAHU 2-9 XRV-R
HAHU 9-20 XRV-R
HAHU 20-36 XRV-R
HAHU 36-56 XRV-R

Traditional VS XRV systems with EET-KIT

Below is a comparison between a traditional connection system and an XRV system with EEV-KIT connection.



EEV-KIT lets you connect direct air handling unit expansion coils to XRV systems.

These kits are composed of an expansion valve and electronic control to manage refrigerant flow toward the AHU: in this way, AHU systems can make use of the advantages linked to XRV technology.

EEV-KIT Advantages

High energy efficiency thanks to XRV technology which involves:

- improved inside temperature control in rooms;
- reduced energy consumption linked to Inverter technology;
- reduced outdoor unit start&stop cycles;
- lower installation and maintenance costs with respect to traditional systems which use an AHU.

EEV-KIT Application diagrams

Diagram type A: Mixed system indoor unit XRV + AHU

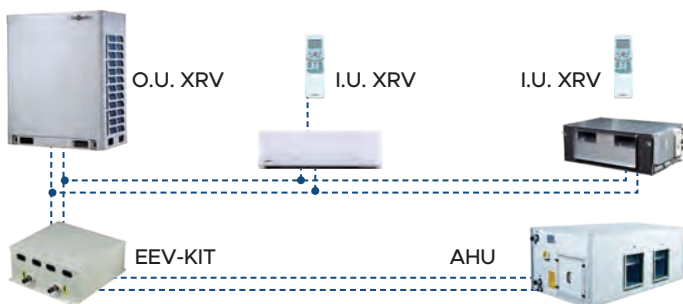
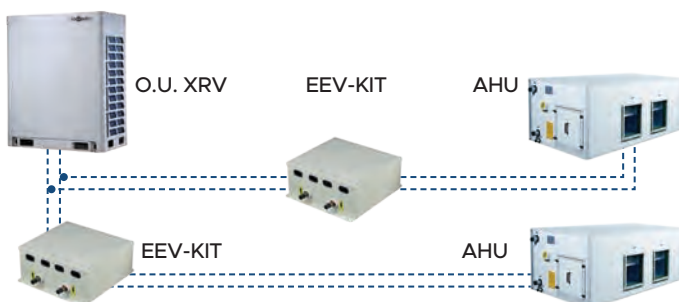


Diagram type B: AHU only



Installation and operation

Here are a series of instructions regarding EEV-KIT functionality and the correct installation methods.

- Failure feedback function: error codes can be shown on the display when malfunctions occur. It is also possible to verify the set temperature.
- Maximum number of EEV-Kit that can be connected to an AHU: 4 (maximum reachable capacity 224 kW).
- Maximum distance between EEV Kits and AHU: 8 m. Kit can be connected with XRV systems with R410A refrigerant gas, except for heat recovery systems (XRV 3 pipes).

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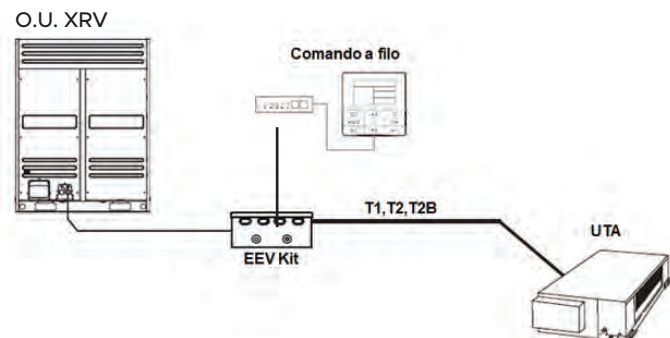
EEV KIT

NEW

Technical data

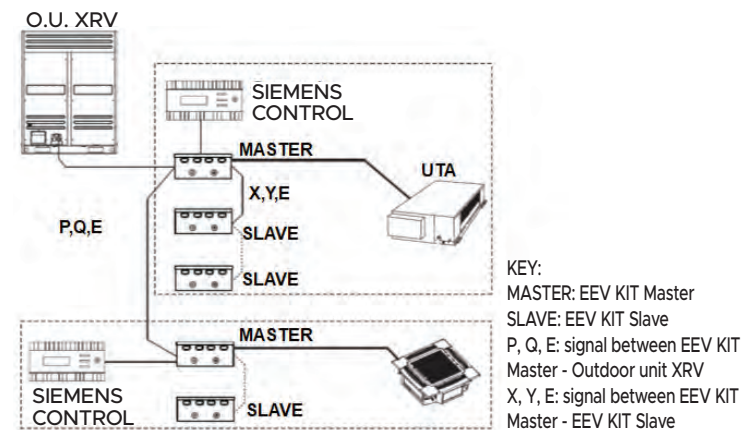
Model	HAHU 2-9 XRV-R	HAHU 9-20 XRV-R	HAHU 20-36 XRV-R	HAHU 36-56 XRV-R
Rated capacity (kW)	2.20~9.00	9.10~20.00	20.10~36.00	36.10~56.00
Power supply (Ph-V-Hz)	1-220~240V-50Hz			
H x L x P (mm)	375 x 350 x 150			
Net weight (kg)	5.7	5.7	5.9	6
In/out refrigerant connections [Ø mm (inch)]	6.35 (1/4")	9.52 (3/8")	12.7 (1/2")	15.9 (5/8")
Serial control (type)	Wired remote control			
Optional parts				
Third-party control	Siemens POL 638.70			
Centralized control	See compatibility table			

Electrical connections diagram



Room temperature control occurs with the same logic as an XRV: comparing the temperature detected by the T1 sensor and the setting temperature Ts, it is possible to start or stop the outdoor unit, calculate the required thermal load and manage the refrigerant flow through the electronic expansion valve.

Master-slave connection logic



In the case of parallel connections of more than one EEV-KIT to service a AHU, the connection logic to be followed is that of Master-Slave.

EEV-KIT type selection

Model	HP	I.U. rated capacity (kW)
HAHU 2-9 XRV-R	0.8	Between 2.20 and 2.80 kW
	1	Between 2.80 and 3.60 kW
	1.2	Between 3.60 and 4.50 kW
	1.7	Between 4.50 and 5.60 kW
	2	Between 5.60 and 7.10 kW
	2.5	Between 7.10 and 8.00 kW
HAHU 9-20 XRV-R	3	Between 8.00 and 9.00 kW
	3.2	Between 9.00 and 11.20 kW
	4	Between 11.20 and 14.00 kW
	5	Between 14.00 and 18.00 kW
HAHU 20-36 XRV-R	6	Between 18.00 and 20.00 kW
	8	Between 20.00 and 25.00 kW
	10	Between 25.00 and 30.00 kW
	12	Between 30.00 and 36.00 kW
HAHU 36-56 XRV-R	14	Between 36.00 and 40.00 kW
	16	Between 40.00 and 45.00 kW
	18	Between 45.00 and 50.00 kW
	20	Between 50.00 and 56.00 kW

The choice of the quantities and capacity of the EEV KITS to be installed is related to the power of the AHU to which it must be connected.

Example

If the AHU has a capacity of 92 kW, 2 EEV-KITs can be installed:

- HAHU 20-36 XRV-K - setting capacity 12HP;
- HAHU 36-56 XRV-K - setting capacity 20HP.