HOKKAIDO

Experience makes technology

General Catalogue 2013

Residential

Commercial

XRV Multi System

www.hokkaido.eu

HOKKAIDO

2013

Hokkaido is a brand of Termal Group, based in Italy and present in the international market, which has been a leader in the air conditioning sector throughout Europe since 30 years.

It is a brand that has been able to stand out in the market, offering a quality solution for the different application requirements of installers, retailers, designers and end users.

EXPERIENCE MAKES TECHNOLOGY

Energy saving, comfort and respect for the environment have always been the goals of Hokkaido, committed to the development of technological solutions that look to the future.

HOKKAIDO

With over 10 years of experience in providing reliable and high-tech products, Hokkaido brand, born in 2000, is a recognized leader in Italy and Europe in the production and marketing of air conditioners for residential, commercial and industrial applications.

OUR OFFICE

Hokkaido Italia, born in early 2008, has its headquarters in Bologna at the operational center of Termal Group to which it belongs. Hokkaido Italia is the company dedicated exclusively to the distribution of Hokkaido products on the Italian market.
A network of 25 agencies, widely distributed throughout the country is addressed to both wholesalers and installers of traditional heating and sanitary water channel.
The goal is to become the leader in its market with the offer of a wide and versatile range of products for the air-conditioning of residential, commercial and industrial environments, characterized by high technology, very high performance and highly competitive price.

A REALITY NOT ONLY THE EUROPEAN

In Europe, Hokkaido has been present since 1999, when Termal Group has expressed its sales force at international level too with the direct export of air conditioners in 30 different European and non-European countries.
The international network of dealers and distributor partners has developed faster and faster, mainly due to the variety and reliability of services offered.
In January 2009, the establishment of Termal International strengthens business development strategy of Hokkaido brand on international markets.

The new corporate structure allows to offer more flexible and innovative services, closer to customer needs, with special attention to the logistics organization, that has always been Termal Group's point of excellence: prompt deliveries throughout the EU territory, a vast assortment of spare parts and accessories ordered online and available in 24 hours, technical and training support both on site and at Termal Group's headquarters in Bologna.

All this gives customers a great operational and commercial flexibility, and therefore a strong competitiveness for a better management of the various local markets.

Being constantly engaged in improving the climate in the world means accepting the committment to use energy in an intelligent way, in order to protect the environment

THE NETWORK

The distribution is organized through channels dedicated to specific market segments and is assigned to 3 different commercial companies.

HOKKAIDO Italia

It is dedicated exclusively to the distribution of Hokkaido brand products on the Italian market with a network of agencies, distributed throughout the national territory. It is addressed to: wholesalers and installers of traditional heating and sanitary water channel.
www.hokkaidoitalia.it

CLIMAmio

Climamio is the franchising network of air-conditioning professionals that counts several outlets divided into: Store, Shop and Point, widely distributed throughout the country. At Climamio's retail outlets, a team of experienced and reliable professionals provides the customer with an integrated service of consulting, engineering, sales, installation, planned maintenance and qualified technical assistance. A qualified technical expertise and a consulting activity oriented to the needs of the customer, are the foundation for a relationship that can follow the whole life cycle of the product.
www.climamio.it

Termal International

Termal International is the channel dedicated to the direct export of Hokkaido products towards 30 different European and non-European countries. The international network is made up of dealers and distributor partners and provides quick deliveries throughout the EU territory.
www.termalinternational.it

HOKKAIDO

ERP Directive

ENERGY CLASSIFICATION IN FORCE SINCE JANUARY 1ST, 2013

On January 1st, 2013, new minimum energy efficiency values came into force to be observed in the production of new air-conditioning appliances, as required by **European Directive ERP (Energy Related Product)**. The European Directive ERP introduces:

- new methods for calculating energy efficiency, including the parameter of seasonal efficiency SCOP in Heating mode and SEER in cooling mode;
- obligation of producers to observe a minimum energy efficiency value and a maximum value of sound power for new products introduced to market.

With these new parameters, the manufacturers are obliged to adopt new design methods and the impacts are evident on the heat pump for the heating of residential environments. The purpose of the rule is to promote an eco-design of energy-using products and to reduce consumptions and CO_2 emissions. All this helps to meet the **European strategic plan '20 – 20 – 20' which involves within 2020:**

- 20% reduction of primary energy consumption
- 20% reduction of CO_2 emissions
- 20% use of renewable energy

ADVANTAGES

FOR THE CONSUMER

European directive ERP aims to increase the minimum efficiency of air conditioners, at the same time reordering the air conditioning sector by prohibiting the sale of products which are no longer considered efficient. Not only that, but with the introduction of new energy efficiency classes for air conditioning, consumers will have all the tools necessary for choosing the best device for their needs.

The new EU energy label regulations introduce new efficiency classes above current class A (A+, A++, A+++). Gradually, starting in 2013 and until 2019, these classes will more clearly indicate appliance consumption, highlighting both the differences in quality and performance differences between products.

The new labelling provides more details and information and make consumption, energy and appliance efficiency easier to read and understand, thus allowing consumers to make fully aware choices at the time of purchase.

FOR THE ENVIRONMENT

The new energy labelling reduces the consumption of precious natural resources and minimises environmental impact, suggesting the choice of the most efficient products, increasing transparency regarding air conditioner energy consumption and promoting the development of continuously more efficient appliances.

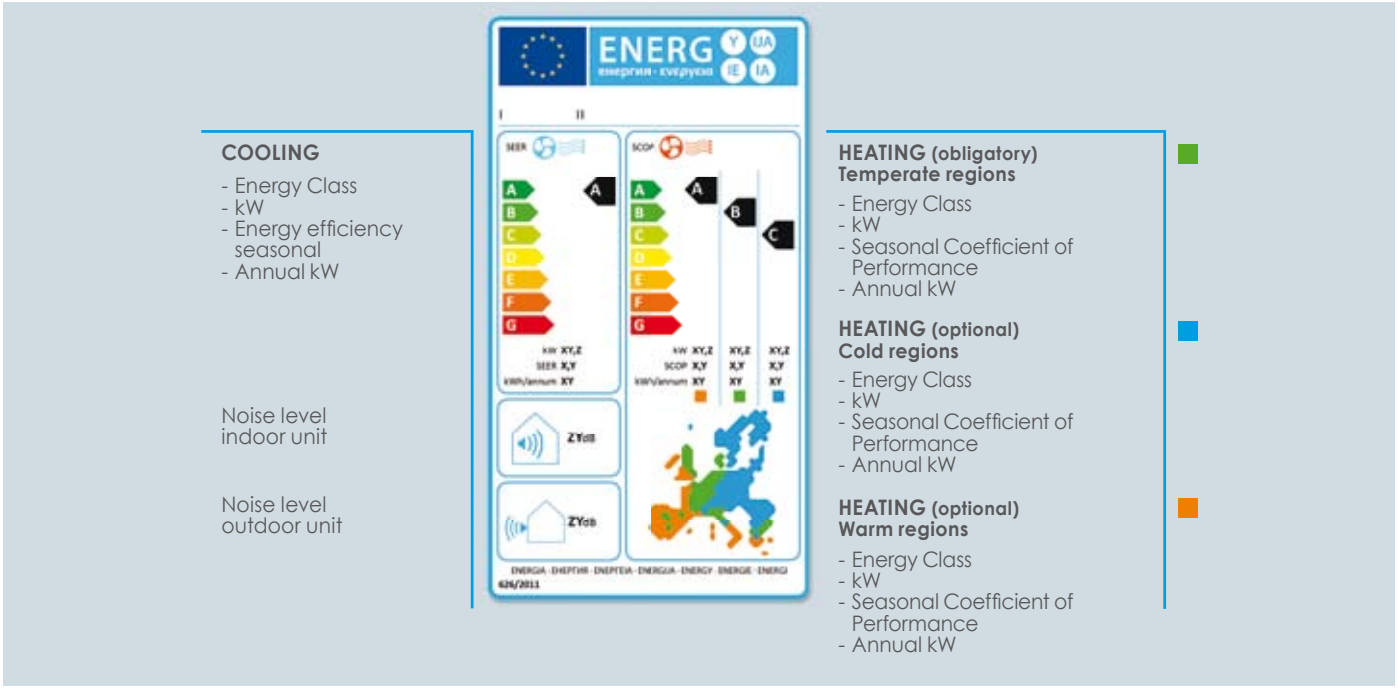
New energy label

THE FORMAT

Since January 1st, 2013, new energy label came into force.
In all product categories for which it was already planned, the label has kept the format and its simple design, that is the basic elements which make it recognizable:

- division in classes
- 7 classes of energy efficiency
- chromatic scale: the bright green colour indicates high energy efficiency products, while the red colour indicates the low energy efficiency products.

Energy efficiency in Heating mode **related to the seasonal COP** is clearly shown.



Furthermore, additional elements have been introduced for allowing the manufacturers – and consequently the retailers – to highlight the technological progress.

Every product will be supplied with its energy label, for which up to three new energy classes are planned (A+, A++, A+++) that gradually join the traditional scale from A to G.

Since January 1st, 2013, Air Conditioners of new production and/or new import must meet the energy efficiency minimum requirements, which must not be lower than "D" Class in Cooling mode and "A" Class in Heating mode, and these requirements will increase in future years.

Uniformity in all 27 EU Member States.

Neutral language, as texts have been replaced by pictograms that inform at a glance the users about the appliances' features and performance.
Acoustic declaration for the appliances: the noise represents a relevant classification standard.

The usual indication of sound pressure (amplitude of pressure wave, or sound wave influenced by the environment) is replaced by the parameter of sound power (energy supplied per unit of time, independent of the environment where the noise is radiated), whose value is higher than the sound pressure value (used in the previous rules) .

The product advertising material must necessarily indicate the reference to energy efficiency class to which the appliance belongs.

The rule, in force since January 1st, 2013 in all countries of the European Union, cannot be applied to the products introduced to market before that date.

For further information and details, Termal invites you to visit the following site www.newenergylabel.com.

RESIDENTIAL

ERP READY

2013

ERP READY

RESIDENTIAL RANGE 2013

new

PERFORMANCE LINE DC INVERTER

	2,00 kW	2,60 kW	3,50 kW	5,20 kW	5,30 kW	7,00 kW
WALL **HKEQ X**						

PREVIEW MULTISPLIT RANGE 2013*

new

MULTI LIBERTY DC INVERTER

INDOOR UNITS	2,00 kW	2,60 kW	3,50 kW	5,20 kW	5,30 kW	7,00 kW
WALL **HKEU X** series 8	new 	new 	new 		new 	
CASSETTE 60x60 ROUND FLOW **HTFU X** series 8						
DUCT MEDIUM STATIC PRESSURE **HUCU X** series 8						

OUTDOOR UNITS

DUAL

HCKU 408 X2
4,10 kW
HCKU 538 X2
5,30 kW

TRIPLE

HCKU 808 X3
8,00 kW

POKER

HCKU 1068 X4
10,50 kW

*** Products available starting from October 2013**

Performance and consumption are based on the following test conditions: heating E.T. 7° C DB, 6° C WB - I.T. 20° C DB - cooling E.T. 35° C DB, 24° C WB - I.T. 27° C DB, 19° C WB (ISO T1).

ERP READY

MONOSPLIT PERFORMANCE LINE DC INVERTER

new

HKEQ 261~701 X

LED Display

Available in 4 different power levels: 2.60~7.00 kW.

SEER 5.2 and SCOP 3.8 (3.50 kW model).

Models conforming to the Ecodesign Directive.

DC-Inverter power control.

Intelligent control of the internal fan during thermostatic pauses.

Defrosting operated from pc.

Thermostat operated from pc.

Timer ON or Timer OFF.

Autorestart in event of blackout.

"SLEEP" Function (energy saving).

ERP READY

MONOSPLIT PERFORMANCE LINE DC INVERTER

new

WALL HKEQ X

Model			HKEQ 261 X HCNQ 261 X	HKEQ 351 X HCNQ 351 X	HKEQ 521 X HCNQ 521 X	HKEQ 701 X HCNQ 701 X
Type			Heat pump			
Controller			IR Wireless			
Capacity (T=+35° C)	Cooling	W	2600 (1000~3100)	3500 (1050~3700)	5200 (1800~5700)	7000 (2500~7500)
Power Input (T=+35° C)	Cooling	W	760 (290~1100)	1060 (290~1330)	1680 (500~2100)	2100 (650~2400)
Annual Consumption	Cooling	kWh/a	176	235	355	480
Energy efficiency class seasonal	Cooling	626/2011[1]	A	A	A	A
Energy efficiency seasonal index	Cooling	SEER[2]	5,1	5,2	5,1	5,1
Design load (Pdesignc)	Cooling	kW	2,6	3,5	5,2	7,0
Capacity (T=+7° C)	Heating	W	2600 (1000~3800)	3500 (1050~4500)	5200 (1800~5700)	7000 (2500~8200)
Power Input (T=+7° C)	Heating	W	680 (290~1400)	1010 (290~1700)	1650 (500~2350)	2060 (650~2700)
Annual Consumption	Heating	kWh/a	957	1289	1908	2578
Energy efficiency class (average season)	Heating	626/2011[1]	A	A	A	A
Energy efficiency seasonal index (average season)	Heating	SCOP[2]	3,8	3,8	3,8	3,8
Design load (Pdesignh) @-10° C	Heating	kW	2,6	3,5	5,2	7,0
Temperature range	Cooling	°C	0° C (at indoor temperature over 16° C)			
T° operational limit (Tol)	Heating	°C	-15° C			
Removed wet		Lt/h	0,8	1,0	1,5	2,0
Noise level - I.U.	Hi-Mi-Lo	dB(A)	38-34-26	38-34-26	46-38-32	52-36-34
Sound power level - I.U.	Hi-Mi-Lo	dB(A)	50	50	58	64
Noise level - O.U.	Hi-Mi-Lo	dB(A)	48-44-42	50-46-44	52-50-48	56-50-48
Sound power level - O.U.	Hi-Mi-Lo	dB(A)	60	62	64	68
Electrical data						
Power supply			220-240V~/50Hz/1P to I.U.			220-240/50Hz/1P to O.U.
Power cable		V	165~265	165~265	165~265	165~265
Power cable		Type	3+T x 1,5 mm²	3+T x 2,5 mm²		
Current consumption	Cooling	A	3,5 (1,3~5,0)	4,9 (1,3~6,1)	7,7 (2,3~9,6)	9,6 (3,0~11,0)
Current consumption	Heating	A	3,1 (1,3~6,4)	4,6 (1,3~7,8)	7,6 (2,3~10,8)	9,4 (3,0~12,4)
Refrigerant circuit						
Refrigerant (GWP)[3]			R410A (1975)	R410A (1975)	R410A (1975)	R410A (1975)
Refrigerant Charge		kg	0,75	0,95	1,60	2,7
Max splitting distance		m	15			
Max splitting I.U. /O.U.		m	5/5			
MAX Splitting with Refrigerant Precharge		m	5			
Additional Refrigerant Charge		gr/m	20		30	
Compressor	Type		Rotary			
	Model		DA89M1C-81EZ8	DA108M1C-81EZ8	DA130S1C-20FZ	DA150S1C-20FZ
	Frequency range		20~120	20~120	20~120	20~120
Fan						
Max indoor air flow		m³/h	650	650	1050	1450
Power Input		W	18	18	35	50
Max outdoor air flow		m³/h	1900	1750	2400	3200
Power Input		W	30	30	68	105
Connections						
Cable connection between I.U. and O.U.		Type	3+T x 1,5 mm²	3+T x 2,5 mm²		3+T x 1,5 mm²
Refrigerant piping	Gas	mm/inch.	ø9,52(3/8")	ø12,70(1/2")	ø12,70(1/2")	ø15,88(5/8")
	Liquid	mm/inch.	ø6,35(1/4")	ø6,35(1/4")	ø6,35(1/4")	ø9,52(3/8")
Specifications						
Dimension (W x H x D)	I.U.	mm	799 x 280 x 183	799 x 280 x 183	1033 x 313 x 202	1240 x 325 x 250
	O.U.	mm	700 x 551 x 256	700 x 551 x 256	820 x 605 x 300	900 x 805 x 360
Net	I.U.	kg	10	10	14	20
	O.U.	kg	24	26	42	56

1 Commission Delegated Regulation (EU) No 626/2011 with regard to energy labelling of air conditioners.
2 Commission Delegated Regulation (EU) No 206/2012. Value measured according to EN14825.
3 Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere.This appliance contains a refrigerant fluid with a GWP equal to 1975. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 1975 times higher than 1 kg of CO_2, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.

ERP READY

MULTISPLIT MULTI LIBERTY DC INVERTER

OUTDOOR UNITS*

Sine Wave Inverter Technology: 180°

DC Inverter | R410A | -15°C | Auto diagnostics

2 I.U.

HCKU 408 X2 DUAL
HCKU 538 X2 DUAL

3 I.U.

HCKU 808 X3 TRIPLE

4 I.U.

HCKU 1068 X4 POKER

Energy efficiency values refer to the following combinations:
HCKU 408 X2 + 2 x HTFU 208 X - HCKU 538 X2 + 2 x HTFU 268 X - HCKU 808 X3 + 3 x HTFU 268 X - HCKU 1068 X4 + 4 x HTFU 268 X

Model			HCKU 408 X2	HCKU 538 X2	HCKU 808 X3	HCKU 1068 X4
Type			**DC Inverter**	**DC Inverter**	**DC Inverter**	**DC Inverter**
Indoor unit connectable		n°	**2**	**2**	**3**	**4**
Capacity (T=35°C)	Cooling	kW	4,10(1,54~5,50)	5,30(1,40~6,60)	8,00(1,38~9,80)	10,50(1,27~13,80)
Power Input (T=+35° C)	Cooling	kW	1,200(0,61~1,83)	1,570(0,41~2,09)	2,410(0,48~3,06)	3,250(0,55~4,31)
Annual Consumption	Cooling	kWh/a	282	344	488	701
Energy Efficiency Class Seasonal	Cooling	626/2011[1]	A	A+	A+	A
Energy Efficiency Class Seasonal Index	Cooling	SEER[2]	5,1	5,8	5,8	5,2
Energy Efficiency Rated	Cooling	31/2002[3]	A	A	A	A
Coefficient of Energy Efficiency Rated	Cooling	EER[4]	3,42	3,38	3,32	3,23
Design load (Pdesignc)	Cooling	kW	4,10	5,3	7,9	10,5
Capacity (T=+7° C)	Heating	kW	4,60(1,59~5,70)	5,80(1,30~6,40)	8,85(1,47~10,50)	11,70(1,59~14,40)
Power Input (T=+7° C)	Heating	kW	1,080(0,45~1,75)	1,462(0,37~1,80)	2,350(0,46~2,75)	3,100(0,61~4,23)
Annual Consumption	Heating	kWh/a	1540	2279	3589	4498
Energy Efficiency Class Seasonal (average season)	Heating	626/2011[1]	A+	A	A	A
Energy Efficiency Class Seasonal Index	Heating	SCOP[2]	4,0	3,8	3,8	3,8
Energy Efficiency Rated	Heating	31/2002[3]	A	A	A	A
Coefficient of Energy Efficiency Rated	Heating	COP[4]	4,26	3,97	3,77	3,77
Design load (Pdesignh)	Heating	kW	4,40	5,6	8,2	10,4
T° operational limit (Tol)	Heating	°C	-15	-15	-15	-15
Power supply		Ph-V-Hz	1-220~230V-50HZ	1-220~230V-50HZ	1-220~230V-50HZ	1-220~230V-50HZ
		I.U. ~ O.U.	O.U.	O.U.	O.U.	O.U.
Input Rated Current (Cooling - Heating)		A	5,00 - 4,50	7,00 - 7,40	10,8 - 10,3	15,3 - 15,8
Wiring cables i.u./o.u. (without ground)		n°	3 (internal and external side terminal board)	3 (internal and external side terminal board)	3 (internal and external side terminal board)	3 (internal and external side terminal board)
Refrigerant circuit						
Refrigerant Pipe Liquid/Gas side		mm/inch.	2 x ø6,35(1/4") - 2 x ø9,52(3/8")	2 x ø6,35(1/4") - 2 x ø9,52(3/8")	3 x ø6,35(1/4") – 3 x ø9,52(3/8")	4 x ø6,35(1/4") - 4 x ø9,52(3/8")
Refrigerating pipes adapter 9,53(3/8")→ 12,7(1/2")		n.	1	2	2	4
TOTAL Piping Length		m	15 + 15	15 + 15	15 + 15 + 15	15 + 15 + 15 +15
Max splitting level difference O.U./I.U. - I.U./ O.U.		m	10/10	10/10	10/10	10/10
Refrigerant Precharge		kg	1,55	1,9	2,4	2,7
MAX Splitting with Refrigerant Precharge (each I.U.)		m	5	5	5	5
Additional Refrigerant Charge	Liquid Pipe ø1/4"	g/m	15	15	15	15
Temperature range cooling		°C	-15°C ~ +50°C			
Temperature range heating		°C	-15°C ~ +24°C			
Indoor unit specifications						
Outdoor Unit	Dimension (WxHxD)	mm	845 700 320	845 700 320	900 860 315	990 965 345
	Net	kg	46	48	62	68
Max noise level 1 m		dB(A)	58	58	59	63
Max power sound level		dB(A)	63	63	67	69
Max air flow		m³/h	2500	2500	3500	5500

1 Commission Delegated Regulation (EU) No 626/2011 with regard to energy labelling of air conditioners.
2 Commission Delegated Regulation (EU) No 206/2012. Value measured according to EN14825.
3 Commission Delegated Regulation (EU) No 31/202 with regard to energy labelling of air conditioners.
4 Value measured according to EN14511.
5 Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere.This appliance contains a refrigerant fluid with a GWP equal to 1975. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 1975 times higher than 1 kg of CO_2, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.

*** Products available starting from October 2013**

ERP READY

MULTISPLIT MULTI LIBERTY DC INVERTER

INDOOR UNITS*

HTFU X

WALL

new

4 power levels: 2.05~5.00 kW.

Ultra-compact design: only 710 mm for the 2.05~2.60 kW models.

Infrared remote control.

HKEU X

Model			HKEU 208 X			HKEU 268 X			HKEU 358 X			HKEU 538 X		
Type			DC Inverter			DC Inverter			DC Inverter			DC Inverter		
Capacity	Cooling	kW	2,05			2,60			3,50			5,00		
	Heating	kW	2,30			2,90			3,80			5,20		
Electrical data														
Power supply		Ph-V-Hz	1-220~230V-50HZ			1-220~230V-50HZ			1-220~230V-50HZ			1-220~230V-50HZ		
		I.U.~O.U.	O.U.			O.U.			O.U.			O.U.		
Wiring cables i.u./o.u. (without ground)		n°	3 (internal - external side terminal board)			3 (internal - external side terminal board)			3 (internal - external side terminal board)			3 (internal - external side terminal board)		
Refrigerant circuit														
Refrigerant Pipe Liquid/Gas side		mm/inch.	ø6,35(1/4") - ø9,52(3/8")			ø6,35(1/4") - ø9,52(3/8")			ø6,35(1/4") - ø9,52(3/8")			ø6,35(1/4") - ø12,70(1/2")		
Specifications														
Indoor Unit	Dimension (WxHxD)	mm	710	250	189	710	250	189	790	275	196	930	275	198
	Net	kg	6,5			6,5			8			9		
Noise level 1 m (Hi/Mi/Lo)		dB(A)	36	32	28	36	32	28	42	35	29	46	42	36
Sound power level		dB(A)	49			51			55			59		
Air flow (Hi/Mi/Lo)		m³/h	550	450	350	550	450	350	620	520	400	800	700	600
Drain hose diameter		mm	25			25			25			25		
Remote Controller (st. equipment)		type	IR Wireless			IR Wireless			IR Wireless			IR Wireless		
Options														
Wired control			-											

CASSETTE 60x60 - ROUND FLOW

HTFU X

4 power levels: 2.00~5.00 kW.

Ultra-compact cassette.

Pre-set for external air intake connection.

Condensate drain pump.

Panel with 360° air diffusion.

Wide range of oscillation at 40°.

Electrical box inside the body machine.

Easy installation and maintenance.

Infrared remote control.

Model			HTFU 208 X			HTFU 268 X			HTFU 358 X			HTFU 538 X		
Type			DC Inverter			DC Inverter			DC Inverter			DC Inverter		
Capacity	Cooling	kW	2,00			2,60			3,50			5,00		
	Heating	kW	2,35			2,90			3,80			5,20		
Electrical data														
Power supply		Ph-V-Hz	1-220~230V-50HZ			1-220~230V-50HZ			1-220~230V-50HZ			1-220~230V-50HZ		
		I.U.~O.U.	O.U.			O.U.			O.U.			O.U.		
Wiring cables i.u./o.u. (without ground)		n°	3 (internal - external side terminal board)			3 (internal - external side terminal board)			3 (internal - external side terminal board)			3 (internal - external side terminal board)		
Refrigerant circuit														
Refrigerant Pipe Liquid/Gas side		mm/inch.	ø6,35(1/4") - ø9,52(3/8")			ø6,35(1/4") - ø9,52(3/8")			ø6,35(1/4") - ø9,52(3/8")			ø6,35(1/4") - ø12,70(1/2")		
Specifications														
Indoor Unit	Dimension (WxHxD)	mm	570	260	570	570	260	570	570	260	570	570	260	570
	Net	Kg	17			17			17			18		
Noise level 1 m (Hi/Mi/Lo)		dB(A)	42	38	34	42	38	34	42	38	34	44	39	35
Sound power level		dB(A)	53			53			54			57		
Air flow (Hi/Mi/Lo)		m³/h	580	510	400	580	510	400	580	550	420	750	700	560
Drain hose diameter		mm	20			20			20			20		
Remote Controller (st. equipment)		type	IR Wireless			IR Wireless			IR Wireless			IR Wireless		
Panel			TFP 352 IHR			TFP 352 IHR			TFP 352 IHR			TFP 352 IHR		
Panel	Dimension (WxHxD)	mm	647	50	647	647	50	647	647	50	647	647	50	647
	Net	kg	2,5			2,5			2,5			2,5		
Options														
Wired control			YES											

*** Products available starting from October 2013**

ERP READY

MULTISPLIT MULTI LIBERTY DC INVERTER

INDOOR UNITS*

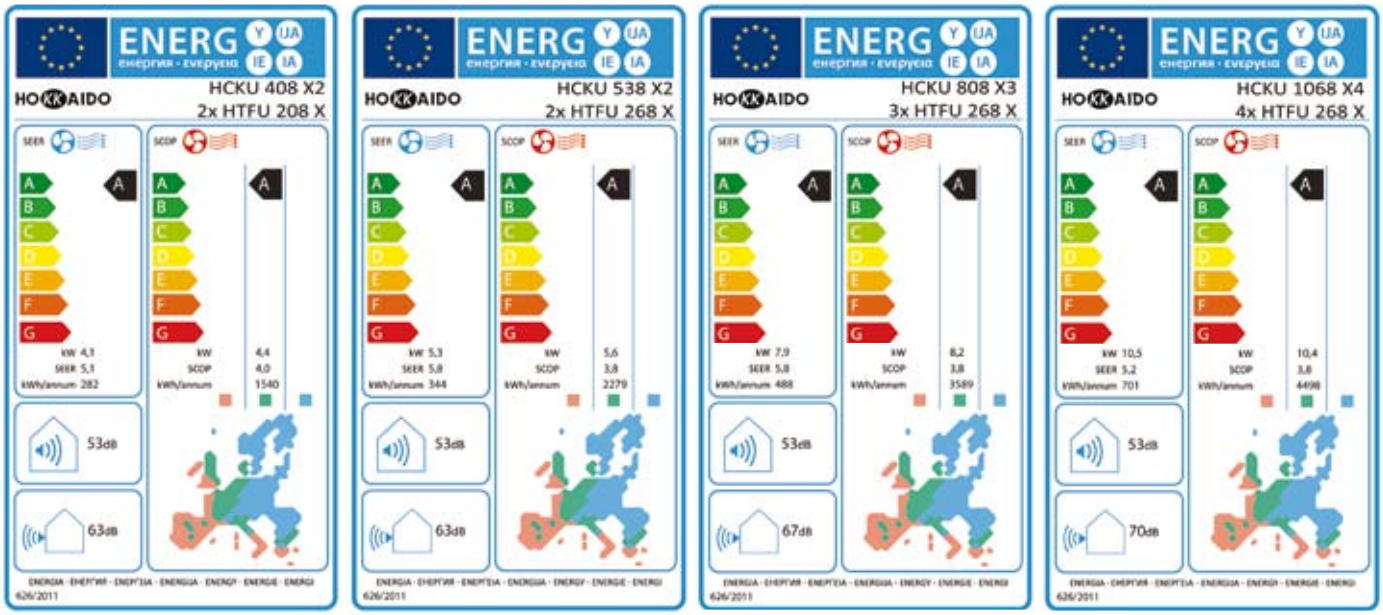
DUCT MEDIUM STATIC PRESSURE

HUCU X

- 4 power levels: 2.05~5.00 kW.
- Ultra-compact design.
- External air intake pre-set.
- Air intake from bottom or rear.
- Available static pressure: 40 Pa (2.05~3.50 kW); 70 Pa (5.00 kW).
- Condensate drain pump included.
- Movable electrical box.
- Infrared remote control.

Model			HUCU 208 X			HUCU 268 X			HUCU 358 X			HUCU 538 X		
Type			DC Inverter			DC Inverter			DC Inverter			DC Inverter		
Capacity	Cooling	kW	2,05			2,60			3,50			5,00		
	Heating	kW	2,35			2,90			3,80			5,20		
Electrical data														
Alimentazione		Ph-V-Hz	1-220~230V-50HZ			1-220~230V-50HZ			1-220~230V-50HZ			1-220~230V-50HZ		
		I.U.~O.U.	O.U.			O.U.			O.U.			O.U.		
Wiring cables i.u./o.u. (without ground)		n°	3 (internal - external side terminal board)			3 (internal - external side terminal board)			3 (internal - external side terminal board)			3 (internal - external side terminal board)		
Refrigerant circuit														
Refrigerant Pipe Liquid/Gas side		mm/inch.	ø6,35(1/4") - ø9,52(3/8")			ø6,35(1/4") - ø9,52(3/8")			ø6,35(1/4") - ø9,52(3/8")			ø6,35(1/4") - ø12,70(1/2")		
Specifications														
Indoor Unit	Dimension (WxHxD)	mm	700	210	635	700	210	635	700	210	635	920	210	635
	Net	kg	20			20			20			23		
Noise level 1 m (Hi/Mi/Lo)		dB(A)	42	37	35	42	37	35	42	39	37	45	37	35
Sound power level		dB(A)	34			34			34			37		
Air flow (Hi/Mi/Lo)		m³/h	800	690	520	800	690	520	1000	850	600	1150	900	600
Available static pressure		Pa	40			40			40			70		
Drain hose diameter		mm	16			16			16			16		
Remote Controller (st. equipment)		type	IR Wireless			IR Wireless			IR Wireless			IR Wireless		
Options														
Wired control			YES											

BEST COMBINATIONS



* Products available starting from October 2013

COMMERCIAL

ERP READY

2013

ERP READY

COMMERCIAL RANGE 2013

	5,30 kW	7,10 kW	10,80 kW	14,10 kW	17,60 kW
SLIM CASSETTE 84x84 **HTBI X** series 8					
CEILING/FLOOR **HSFI X** series 8	new 	new 	new 	new 	new 
DUCT MEDIUM STATIC PRESSURE **HUCI X** series 8					

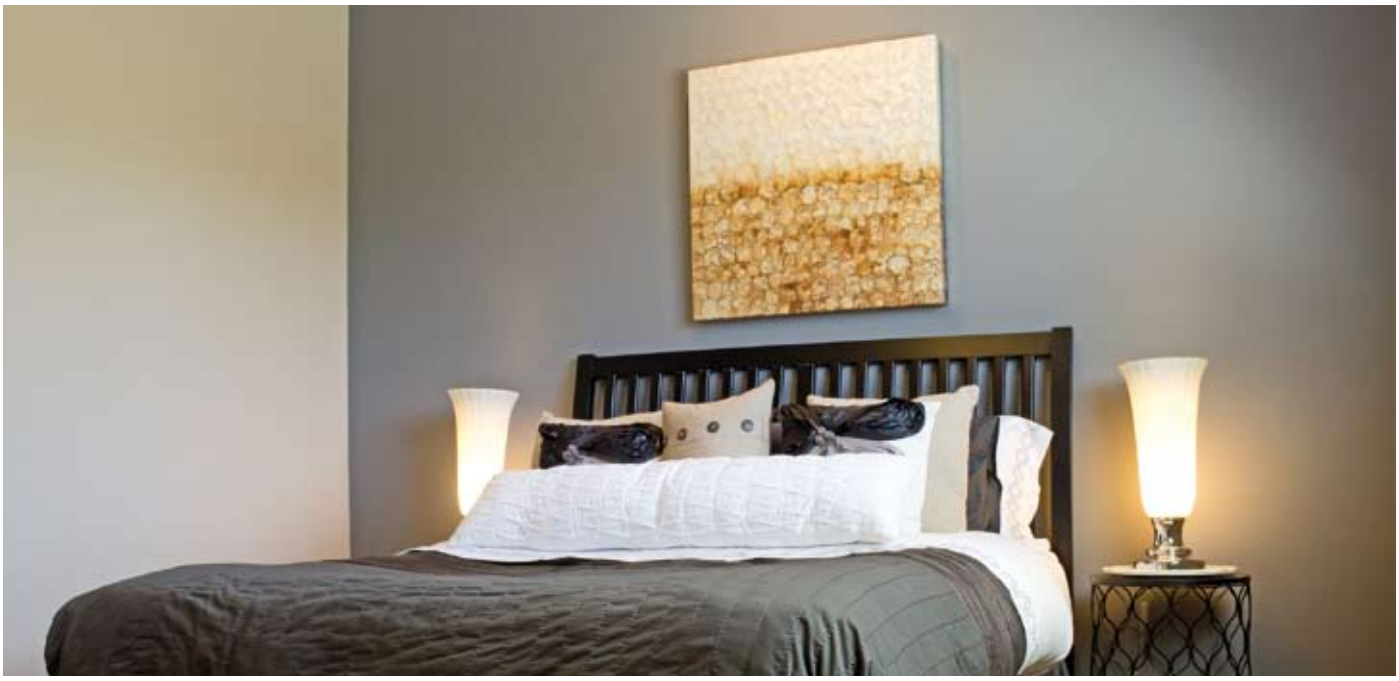
OUTDOOR UNITS

				
1Ph	**1Ph**	**3Ph**	**3Ph**	**3Ph**

Performance and consumption are based on the following test conditions: heating E.T. 7° C DB, 6° C WB - I.T. 20° C DB - cooling E.T. 35° C DB, 24° C WB - I.T. 27° C DB, 19° C WB (ISO T1).

ERP READY

COMMERCIAL DC INVERTER



The Commercial range is ideal for large spaces and significantly reduces installation and system management costs.

3 different types, 5 power levels, 14 models in total.

Indoor units

SLIM Cassette 84x84:
Height 205 mm (Models 538 & 718), motorized panel, 360° air distribution, individual control flaps, new touch screen Wired Control (with motorized panel), possibility of TWIN installation.

New Ceiling/Floor:
New design extremely elegant, vertical & horizontal swinging of air outlet flaps, wide angle of air distribution.

Duct Medium Static Pressure:
Compact design, air intake from bottom or rear, infrared remote control, pre-set for outdoor air connection, electrical box condensate drain pump included.

Outdoor units

Ultra-compact design.
Low noise level.
High efficiency and energy saving.
Operation in cooling mode with outside temperature down to -15° C (5.30~17.60 kW).
Operation in heating mode with outside temperature down to -15° C.
Control and adjustment of refrigerant flow with capillary and electronic expansion valve EXV (Expansion Valve), to maintain optimum performance in all working conditions.

All the outdoor units are equipped with: **Sine Wave Inverter Technology: 180°**

- Significant reduction of noise level and vibrations.
- Considerable increase in efficiency at low frequencies.
- Increase in frequency range from 10Hz to 130 Hz.

HOKKAIDO

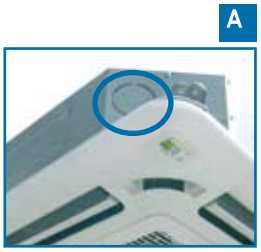
ERP READY

COMMERCIAL DC INVERTER

SLIM CASSETTE 84x84

The Commercial range has been expanded with the introduction of a new compact size Cassette.
It is only 205 mm in height and can be installed even in the most narrow and difficult ceilings.
The new optional panel (TBP-LF 716 X) allows for optimal 360° air distribution.
The centre part of the panel is equipped with a motor that is able to lower the filter to facilitate weekly cleaning operations.

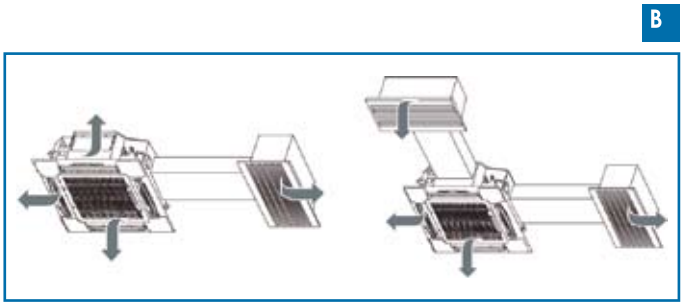
Each single air distribution flap can be controlled separately. Pre-setting for access and integration with external air (A).



Panel TBP-LF 716 X
(optional)
ROUND FLOW

Pre-set for ducting air delivery on two sides (B).

Drain pipe of the condensate discharge outlet that allows raising the outlet up to 750 mm from the flush panel.



With the Lift panel the new wired control, optional, with Touch Screen must be used.

- Ability to control the drop-down of the panel for filter cleaning.
- Individual and separate inspection of each of the 4 air diffusion flaps.
- Built-in temperature sensor for Follow me function.

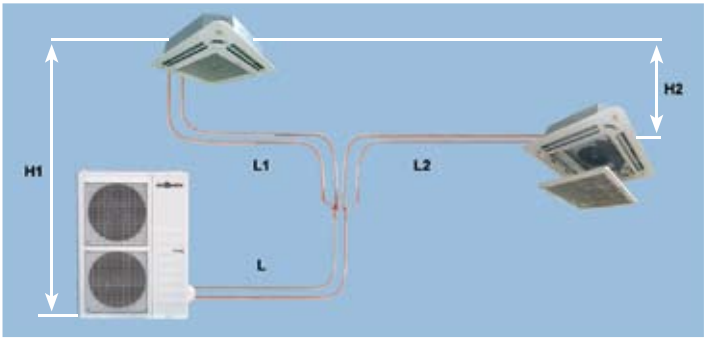
1	Mode	6	Follow me
2	Fan	7	Filter
3	Adjust (Temp.)	8	Select Swing set
4	Timer / Cancel	9	LED intemp
5	Sleep	10	Clock

TWIN combination

For new Slim Cassettes only, there is the possibility of TWIN system for HCSI 1418 X Model.
Only one Wired Control is needed. As Units are controlled by only one Wired Control, TWIN application is advised for wide commercial spaces.
In fact, TWIN Indoor Units cannot be controlled individually.

Splitting lengths

MAX length	L1 + L2 + L = 50 m
Height difference I.U./O.U.	H1 = 20 m
Height difference I.U./I.U.	H2 = 0,5 m



			2 x HTBI 718 X
HCSI 1418 X	Capacity Cooling	kW	14,60
	Power Input Cooling	kW	4,52
	EER		3,23
	Capacity Heating	kW	15,80
	Power Input Heating	kW	4,21
	COP		3,75
	I.U. Noise level (Lo)	dB(A)	31
	Pipe set		DIS-180-1T
	Control	without Lift Panel	1 x DTW IHXR / DTW 2 IHXR
		with Lift panel	1 x DTW IHXR Touch
	Interface		-

ERP READY

COMMERCIAL DC INVERTER

HTBI X SLIM CASSETTE 84x84

Model			HTBI 538 X HCKI 538 X	HTBI 718 X HCKI 718 X	HTBI 1088 X HCSI 1088 X	HTBI 1418 X HCSI 1418 X
Type			DC-Inverter	DC-Inverter	DC-Inverter	DC-Inverter
Capacity (T=+35° C)	Cooling	W	5270(1578~6077)	7030(1899~7830)	10560(3068~11978)	14060(4346~15484)
Power Input (T=+35° C)	Cooling	W	1460(310~2030)	2130(380~2620)	3290(600~4250)	4380(1200~6010)
Annual Consumption	Cooling	kWh/a	331	400	680	
Energy efficiency class seasonal	Cooling	626/2011[1]	A+	A++	A	
Energy efficiency seasonal index	Cooling	SEER[2]	5,6	6,2	5,4	
Energy Efficiency Rated	Cooling	31/2002[3]				A
Coefficient of Energy Efficiency Rated	Cooling	EER[4]				3,21
Design load (Pdesignc)	Cooling	kW	5,30	7,10	10,50	
Capacity (T=+7° C)	Heating	W	5870(1607~6574)	7626(1987~8473)	11150(3155~12504)	16400(4908~18260)
Power Input (T=+7° C)	Heating	W	1460(280~2020)	2050(370~2630)	3260(600~4250)	4420(1170~5910)
Annual Consumption	Heating	kWh/a	2182	2951	3788	
Energy efficiency class (average season)	Heating	626/2011[1]	A	A	A	
Energy efficiency seasonal index (average season)	Heating	SCOP[2]	3,4	3,7	3,4	
Energy Efficiency Rated	Heating	31/2002[3]				A
Coefficient of Energy Efficiency Rated	Heating	COP[4]				3,71
Design load (Pdesignh)	Heating	kW	5,30	7,80	9,20	
T° operational limit (Tol)	Heating	°C	-15	-15	-15	
Power supply		Ph-V-Hz	1-220~240V-50HZ	1-220~240V-50HZ	3-380~400V-50HZ	3-380~400V-50HZ
		I.U.~O.U.	I.U. + O.U.	I.U. + O.U.	I.U. + O.U.	I.U. + O.U.
Current consumption (MAX)		A	15	15	11	13,5
Wiring cables i.u./o.u. (without ground)		n°	STP(2 plus + ordinary one)	STP(2 plus + ordinary one)	STP(2 plus + ordinary one)	STP(2 plus + ordinary one)
Refrigerant circuit						
Refrigerant Pipe Liquid/Gas side		mm/inch.	ø6,35(1/4") - ø12,7(1/2")	ø9,52(3/8") - ø15,88(5/8")	ø9,52(3/8") - ø15,88(5/8")	ø9,52(3/8") - ø15,88(5/8")
Max splitting distance indoor/outdoor		m	30	50	65	65
Max splitting level difference I.U./O.U.		m	20/9	25/9	30/20	30/20
Refrigerant (GWP)[5]			R410A(1975)	R410A(1975)	R410A(1975)	R410A(1975)
Refrigerant Precharge		kg	1,80	2,20	2,70	3,80
MAX Splitting with Refrigerant Precharge		m	5	5	5	5
Additional Refrigerant Charge		g/m	15	30	30	30
Temperature range Cooling		°C	-15°C ~ +50°C	-15°C ~ +50°C	-15°C ~ +50°C	-15°C ~ +50°C
Temperature range Heating		°C	-15°C ~ +24°C	-15°C ~ +24°C	-15°C ~ +24°C	-15°C ~ +24°C
Indoor Unit specifications						
Indoor Unit	Dimension (WxHxD)	mm	840 205 840	840 205 840	840 245 840	840 300 840
	Net	kg	22	22	25	31
Noise level - I.U.	Hi-Mi-Lo	dB(A)	47 43 36	49 45 41	54 51 47	53 50 46
Sound power level - I.U.	Hi-Mi-Lo	dB(A)	58	59	65	
Air flow (Hi/Mi/Lo)		m3/h	1150 950 800	1250 1050 900	2010 1750 1480	2100 1750 1500
Drain hose diameter		mm	32	32	32	32
Remote Controller (st. equipment)		Type	IR Wireless	IR Wireless	IR Wireless	IR Wireless
Outdoor Unit Specifications						
Outdoor Unit	Dimension (WxHxD)	mm	842 695 324	895 862 313	990 966 354	940 1369 392
	Net	kg	44	59	77	102
Noise level - O.U.	Hi-Mi-Lo	dB(A)	58	62	63	63
Sound power level - O.U.	Hi-Mi-Lo	dB(A)	65	69	70	69
Max air flow		m3/h	2500	3500	5500	7200
Accessories						
Panel			**TBP 716 X**	**TBP 716 X**	**TBP 716 X**	**TBP 716 X**
Panel	Dimension (WxHxD)	mm	950 55 950	950 55 950	950 55 950	950 55 950
	Net	kg	5	5	5	5
Options						
LIFT panel			**TBP-LF 716 X**	**TBP-LF 716 X**	**TBP-LF 716 X**	**TBP-LF 716 X**
Wired control			**DTW IHXR / DTW 2 IHXR / DTWS IHXR**			
Wired control (with Lift Panel)			**DTW IHXR Touch**			
Centralized control			**DTC IHXR / DTCWT IHXR**			
Weekly timer			**DTWT IHXR**			

1 Commission Delegated Regulation (EU) No 626/2011 with regard to energy labelling of air conditioners.
2 Commission Delegated Regulation (EU) No 206/2012. Value measured according to EN14825.
3 Commission Delegated Regulation (EU) No 31/202 with regard to energy labelling of air conditioners.
4 Value measured according to EN14511.
5 Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere.This appliance contains a refrigerant fluid with a GWP equal to 1975. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 1975 times higher than 1 kg of CO_2, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.

ERP READY

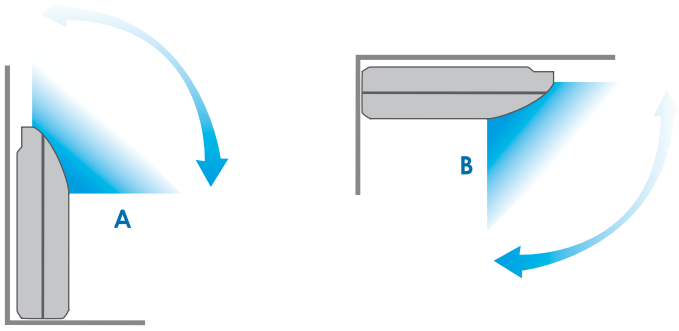
COMMERCIAL DC INVERTER

CEILING/FLOOR

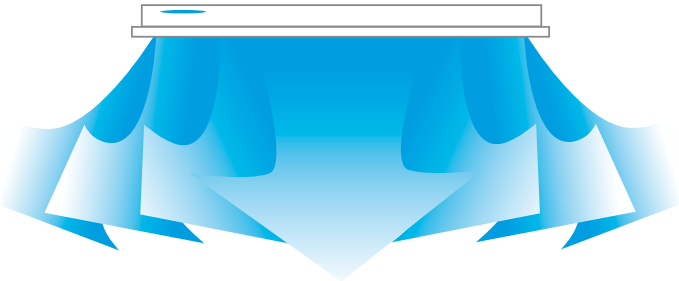
new

New design simple and elegant, for residential, commercial and industrial applications.

Vertical swinging of air outlet flaps, both in floor type installation (A) and ceiling type installation (B).



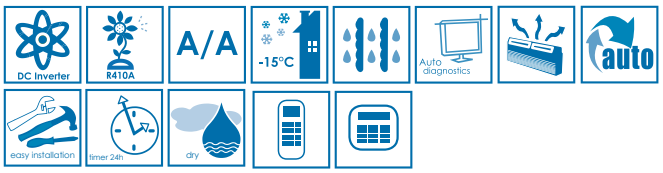
Horizontal swinging with wide angle of air distribution.



ERP READY

COMMERCIAL DC INVERTER

HSFI X CEILING/FLOOR



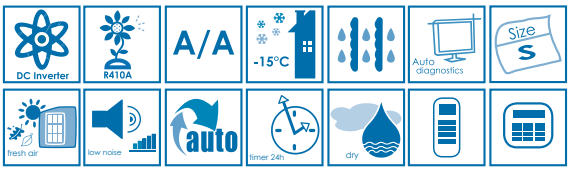
Model			HSFI 538 X HCKI 538 X	HSFI 718 X HCKI 718 X	HSFI 1088 X HCSI 1088 X	HSFI 1418 X HCSI 1418 X	HSFI 1768 X HCSI 1768 X
Type			DC-Inverter	DC-Inverter	DC-Inverter	DC-Inverter	DC-Inverter
Capacity (T=+35° C)	Cooling	W	5274(1578~6077)	7050(1899~7830)	10565(3068~12037)	14070(4323~15542)	16360(4908~17967)
Power Input (T=+35° C)	Cooling	W	1445(300~2020)	2100(380~2610)	3270(600~4250)	4380(1200~6000)	5110(1370~6930)
Annual Consumption	Cooling	kWh/a	331	463	645		
Energy efficiency class seasonal	Cooling	626/2011[1]	A+	A+	A+		
Energy efficiency seasonal index	Cooling	SEER[2]	5,6	5,6	5,8		
Energy Efficiency Rated	Cooling	31/2002[3]				A	A
Coefficient of Energy Efficiency Rated	Cooling	EER[4]				3,21	3,21
Design load (Pdesignc)	Cooling	kW	5,30	7,10	10,70		
Capacity (T=+7° C)	Heating	W	5863(1607~6661)	7635(1987~8502)	11150(3155~12563)	16450(4908~18348)	16950(5750~20890)
Power Input (T=+7° C)	Heating	W	1430(280~2000)	2030(370~2620)	3140(590~4120)	4420(1170~5910)	5280(1390~6980)
Annual Consumption	Heating	kWh/a	2061	2955	3912		
Energy efficiency class (average season)	Heating	626/2011[1]	A	A	A		
Energy efficiency seasonal index (average season)	Heating	SCOP[2]	3,6	3,6	3,4		
Energy Efficiency Rated	Heating	31/2002[3]				A	A
Coefficient of Energy Efficiency Rated	Heating	COP[4]				3,72	3,61
Design load (Pdesignh)	Heating	kW	5,30	7,60	9,50		
T° operational limit (Tol)	Heating	°C	-15	-15	-15		
Power supply		Ph-V-Hz	1-220~240V-50HZ	1-220~240V-50HZ	3-380~400V-50HZ	3-380~400V-50HZ	3-380~400V-50HZ
		I.U. + O.U.	I.U. + O.U.	I.U. + O.U.	I.U. + O.U.	I.U. + O.U.	I.U. + O.U.
Current consumption (MAX)		A	15	15	11	7,68 - 7,27	8,9 - 9,43
Wiring cables i.u./o.u. (without ground)		n°	STP (2 plus + ordinary one)	STP (2 plus + ordinary one)	STP (2 plus + ordinary one)	STP (2 plus + ordinary one)	STP (2 plus + ordinary one)
Refrigerant circuit							
Refrigerant Pipe Liquid/Gas side		mm/inch.	ø6,35(1/4") - ø12,7(1/2")	ø9,52(3/8") - ø15,88(5/8")	ø9,52(3/8") - ø15,88(5/8")	ø9,52(3/8") - ø15,88(5/8")	ø9,52(3/8") - ø15,88(5/8")
Max splitting distance indoor/outdoor		m	30	50	65	65	65
Max splitting level difference I.U./O.U.		m	20/9	25/9	30/12	30/20	30/20
Refrigerant (GWP)[5]			R410A(1975)	R410A(1975)	R410A(1975)	R410A(1975)	R410A(1975)
Refrigerant Precharge		kg	1,80	2,20	2,70	3,80	4,60
MAX Splitting with Refrigerant Precharge		m	5	5	5	5	5
Additional Refrigerant Charge		g/m	15	30	30	30	30
Temperature range Cooling		°C	-15°C ~ +50°C	-15°C ~ +50°C	-15°C ~ +50°C	-15°C ~ +50°C	-15°C ~ +50°C
Temperature range Heating		°C	-15°C ~ +24°C	-15°C ~ +24°C	-15°C ~ +24°C	-15°C ~ +24°C	-15°C ~ +24°C
Indoor Unit specifications							
Indoor Unit	Dimension (WxHxD)	mm	1068 675 235	1068 675 235	1285 675 235	1650 675 235	1650 675 235
	Net	kg	25	25	30	38	38
Noise level - I.U.	Hi-Mi-Lo	dB(A)	42 37 34	43 38 35	52 49 46	54 51 47	54 51 47
Sound power level - I.U.	Hi-Mi-Lo	dB(A)	56	62	63		
Air flow (Hi/Mi/Lo)		m3/h	900 750 600	1300 1100 950	1850 1650 1450	2300 1900 1700	2300 1900 1700
Drain hose diameter		mm	25	25	25	25	25
Remote Controller (st. equipment)		Type	IR Wireless	IR Wireless	IR Wireless	IR Wireless	IR Wireless
Outdoor Unit Specifications							
Outdoor Unit	Dimension (WxHxD)	mm	842 695 324	895 862 313	990 966 354	940 1369 392	940 1369 392
	Net	kg	44	59	77	102	107
Noise level - O.U.	Hi-Mi-Lo	dB(A)	58	62	63	63	63
Sound power level - O.U.	Hi-Mi-Lo	dB(A)	65	69	70	69	69
Max air flow		m3/h	2500	3500	5500	7200	7200
Options							
Wired control			DTW IHXR / DTW 2 IHXR / DTWS IHXR				
Centralized control			DTC IHXR				
Weekly timer			DTWT IHXR				

1 Commission Delegated Regulation (EU) No 626/2011 with regard to energy labelling of air conditioners.
2 Commission Delegated Regulation (EU) No 206/2012. Value measured according to EN14825.
3 Commission Delegated Regulation (EU) No 31/202 with regard to energy labelling of air conditioners.
4 Value measured according to EN14511.
5 Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere.This appliance contains a refrigerant fluid with a GWP equal to 1975. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 1975 times higher than 1 kg of CO_2, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.

ERP READY

COMMERCIAL DC INVERTER

HUCI X DUCT MEDIUM STATIC PRESSURE



Model			HUCI 538 X HCKI 538 X	HUCI 718 X HCKI 718 X	HUCI 1088 X HCSI 1088 X	HUCI 1418 X HCSI 1418 X	HUCI 1768 X HCSI 1768 X
Type			DC-Inverter	DC-Inverter	DC-Inverter	DC-Inverter	DC-Inverter
Capacity (T=+35° C)	Cooling	W	5285(1578~6048)	7038(1899~7888)	10565(3068~12037)	14060(4324~15630)	16695(4967~18260)
Power Input (T=+35° C)	Cooling	W	1460(300~2020)	2070(370~2610)	3260(600~4240)	4380(1200~6000)	5200(1380~7050)
Annual Consumption	Cooling	kWh/a	320	443	720		
Energy efficiency class seasonal	Cooling	626/2011[1]	A+	A+	A		
Energy efficiency seasonal index	Cooling	SEER[2]	5,8	5,6	5,1		
Energy Efficiency Rated	Cooling	31/2002[3]				A	A
Coefficient of Energy Efficiency Rated	Cooling	EER[4]				3,21	3,21
Design load (Pdesignc)	Cooling	kW	5,30	7,10	10,50		
Capacity (T=+7° C)	Heating	W	5860(1607~6661)	7600(1987~8531)	11135(3155~12563)	17010(4967~18552)	19060(5785~18260)
Power Input (T=+7° C)	Heating	W	1465(290~2010)	2000(370~2610)	3050(580~4090)	4560(1180~5920)	5220(1390~6990)
Annual Consumption	Heating	kWh/a	2182	3170	3912		
Energy efficiency class (average season)	Heating	626/2011[1]	A	A	A		
Energy efficiency seasonal index (average season)	Heating	SCOP[2]	3,4	3,4	3,4		
Energy Efficiency Rated	Heating	31/2002[3]				A	A
Coefficient of Energy Efficiency Rated	Heating	COP[4]				3,73	3,65
Design load (Pdesignh)	Heating	kW	5,30	7,70	9,50		
T° operational limit (Tol)	Heating	°C	-15	-15	-15		
Power supply		Ph-V-Hz	1-220~240V-50HZ	1-220~240V-50HZ	3-380~400V-50HZ	3-380~400V-50HZ	3-380~400V-50HZ
		I.U. + O.U.	I.U. + O.U.	I.U. + O.U.	I.U. + O.U.	I.U. + O.U.	I.U. + O.U.
Current consumption (MAX)		A	15	15	11	13,5	13,5
Wiring cables i.u./o.u. (without ground)		n°	STP (2 plus + ordinary one)	STP (2 plus + ordinary one)	STP (2 plus + ordinary one)	STP (2 plus + ordinary one)	STP (2 plus + ordinary one)
Refrigerant circuit							
Refrigerant Pipe Liquid/Gas side		mm/inch.	ø6,35(1/4") - ø12,7(1/2")	ø9,52(3/8") - ø15,88(5/8")	ø9,52(3/8") - ø15,88(5/8")	ø9,52(3/8") - ø15,88(5/8")	ø9,52(3/8") - ø15,88(5/8")
Max splitting distance indoor/outdoor		m	30	50	65	65	65
Max splitting level difference I.U./O.U.		m	20/9	25/9	30/12	30/20	30/20
Refrigerant (GWP)[5]			R410A(1975)	R410A(1975)	R410A(1975)	R410A(1975)	R410A(1975)
Refrigerant Precharge		kg	1,80	2,20	2,70	3,80	4,60
MAX Splitting with Refrigerant Precharge		m	5	5	5	5	5
Additional Refrigerant Charge		g/m	15	30	30	30	30
Temperature range Cooling		°C	-15°C ~ +50°C	-15°C ~ +50°C	-15°C ~ +50°C	-15°C ~ +50°C	-15°C ~ +50°C
Temperature range Heating		°C	-15°C ~ +24°C	-15°C ~ +24°C	-15°C ~ +24°C	-15°C ~ +24°C	-15°C ~ +24°C
Indoor Unit specifications							
Indoor Unit	Dimension (WxHxD)	mm	920 210 635	920 270 635	1140 270 775	1200 300 865	1200 300 865
	Net	Kg	22	26,5	35	45	45
Noise level - I.U.	Hi-Mi-Lo	dB(A)	42 38 36	42 39 36	47 44 38	46 41 37	46 41 37
Sound power level - I.U.	Hi-Mi-Lo	dB(A)	59	58	65		
Air flow (Hi/Mi/Lo)		m3/h	850 700 550	1150 1000 850	1850 1550 1200	3010 2410 1940	3010 2410 1940
Available static pressure		Pa	70	70	80	100	100
Air discharge flange	Dimension (WxH)	mm	713x119	713x179	933x179	968x204	968x204
Drain hose diameter		mm	25	25	25	25	25
Remote Controller (st. equipment)		Type	IR Wireless	IR Wireless	IR Wireless	IR Wireless	IR Wireless
Outdoor Unit Specifications							
Outdoor Unit	Dimension (WxHxD)	mm	842 695 324	895 862 313	990 966 354	940 1369 392	940 1369 392
	Net	kg	44	59	77	102	107
Noise level - O.U.	Hi-Mi-Lo	dB(A)	58	62	63	63	63
Sound power level - O.U.	Hi-Mi-Lo	dB(A)	65	69	70	69	69
Max air flow		m3/h	2500	3500	5500	7200	7200
Options							
Wired control			DTW IHXR / DTW 2 IHXR / DTWS IHXR				
Centralized control			DTC IHXR / DTCWT IHXR				
Weekly timer			DTWT IHXR				

1 Commission Delegated Regulation (EU) No 626/2011 with regard to energy labelling of air conditioners.
2 Commission Delegated Regulation (EU) No 206/2012. Value measured according to EN14825.
3 Commission Delegated Regulation (EU) No 31/202 with regard to energy labelling of air conditioners.
4 Value measured according to EN14511.
5 Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere.This appliance contains a refrigerant fluid with a GWP equal to 1975. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 1975 times higher than 1 kg of CO_2, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.

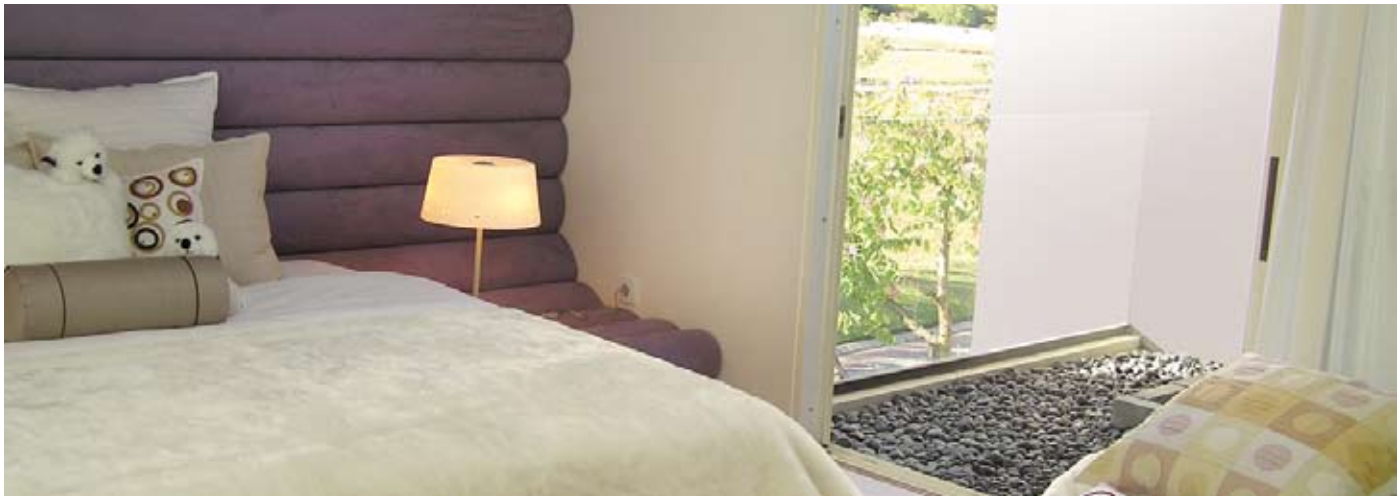
2013

Mobile

TMCZ 105 F

new

Cooling, heating effect and dehumidification.
Cooling capacity: 3.0 kW.
LED display.
4 air ventilation speeds (during cooling).
Timer function for on delay (in hours).
Timer function for off delay (in hours).
Sleep feature for night-time function.
Infrared remote control.
Window slide kit.
Dual condensate drain modes.
Extendable corrugated pipe with inner recovery.



Model			TMCZ 105 F
Power supply		Ph-V-Hz	1-220~240-50
Nominal capacity in cooling mode	P_{rated} for cooling	kW	3,00
Rated power input for cooling	P_{EER}	kW	1,20
Rated energy efficiency index		EERd	2,60
Energy efficiency class in cooling mode			A
Energy consumption for equipments with single duct cooling function	Q_{SD}	kWh/h	1,10
Nominal capacity in heating mode	P_{rated} for heating	kW	3,00
Rated power input for heating	P_{COP}	kW	1,00
Coefficient of nominal efficiency		COPd	3,10
Energy efficiency class in heating mode			A++
Energy consumption for equipments with single duct heating function	Q_{SD}	kWh/h	0,80
Sound power level	L_{WA}	dB(A)	62
Sound pressure level		dB(A)	52
Refrigerant		Type	R410A
Global warming potential	GWP	$kgCO_2$ eq.	1975
Dimensions	(WxHxD)	mm	300x778x505
Net weight		kg	28
Dehumidifying capacity		L/h	4,6
Air flow		m^3/h	400
Air exhaust flexible pipe		mm (Ø)	150
		mm (Length)	210~1400

Dehumidifiers

DT16-A1 - DT80-A1

new

Residential dehumidifying (16 L/day).
R134A refrigerant.
LED display.
2 air ventilation speeds.
Timer function for on delay (in hours).
Timer function for off delay (in hours).
Digital hygrostat for detecting and controlling humidity.
Possibility of setting desired humidity level.
2.50 L tank.
Possibility of continuous drainage.

DT16-A1

Large capacity dehumidification (80 L/day).
R410A refrigerant.
LED display.
2 air ventilation speeds.
Timer function for on delay (in hours).
Timer function for off delay (in hours).
Digital hygrostat for detecting and controlling humidity.
Possibility of setting desired humidity level.
9.00 L tank.
Possibility of continuous drainage.

DT80-A1

Model			DT16-A1	DT80-A1
Power supply		Ph-V-Hz	1-220~240-50	1-220~240-50
Nominal capacity of dehumdifying	(30° C RH80%)	lt/day	16	80
Control			Electronic	Electronic
Type of defrost			Fan	Fan
Defrosting			Automatic	Automatic
Humidity detection and control			Digital hygrostat	Digital hygrostat
Consumption		W/h	410	1100
Sound pressure level		dB(A)	42	48
Air flow		m^3/h	126	135
Current intensity		A	1,80	5,00
Capacity of the tank supplied		L	2,50	9,00
Range of use		°C	5° ~ 35°	5° ~ 35°
Refrigerant		Type	R134A	R410A
Dimensions	(WxHxD)	mm	365x490x215	300x625x505
Net weight		kg	13,2	21

Heat pump water heater

TWMI 190C

65° C max temperature of domestic hot water.

Actual **COP** 3.50.

Wide range of operating ambient temperatures: 5° ~ 43° C.

Speed of reaching heating capacity with cold start: 260 minutes (with incoming water temperature of 15° C, outgoing water temperature of 45° C and ambient temperature of 15° C).

Minimum tank dispersions: -2.2° C in 24 hours with ambient temperature 15° C and average temperature of the tank of 43° C.

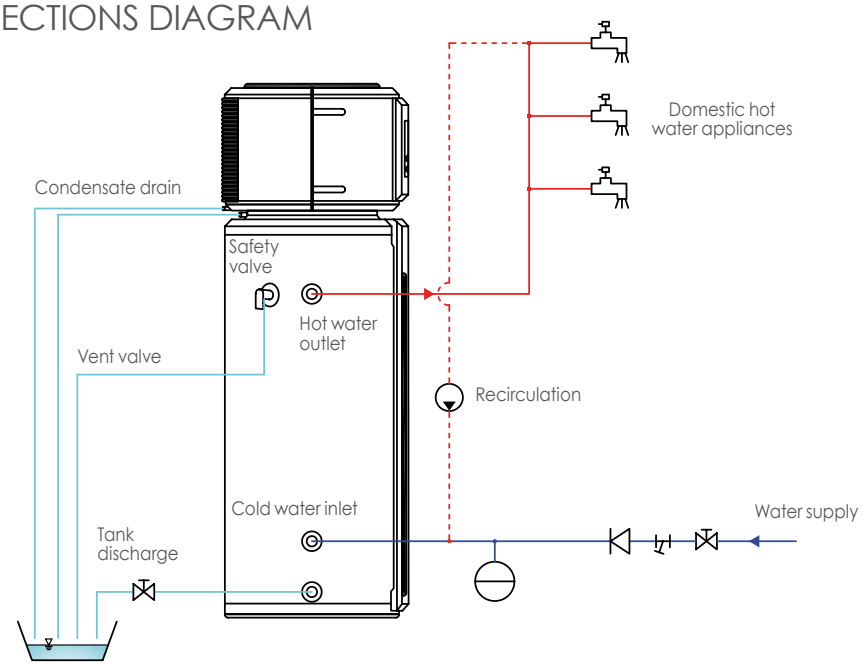
Anti-legionella function: 70° C (activating the electrical resistor).

Customisable **programming**: timer for time bands, very useful in case of reduced rates at night.

Model		**TWMI 190 C**
Operating Mode		Heat Pump
Operating Range		+5°C~+43°C
Power supply		220~240V-1ph-50Hz
Total Tank Capacity	L	190
Electric Heater	kW	1,00
Noise level	dB(A)	48
Dimensions (DxH)	mm	ø568x1580
Weight	kg	101
Refrigerant Gas (Type/Quantity)	kg	R134A/0,80
Hydraulic pipeline	mm	DN20
COP*	W/W	3,50
COP DHW**	W/W	2,76
Tank Dispersion 24/h (43°C Average temp.)	°C	2,2° C
Full Heating Capacity (Inlet Temp. 15°C / Output temp. 45°C)	min.	260
Max. hot water available during rapid tank emptying	L	157 (min. 40,4° C)
Full Heating Capacity Power consumption	kWh	2,0
Hourly Absorption	kWh	0,42

* (Air 15/12 °C - Water 15/45 °C); ** (EN 16147 tapping cycle "L").
Maximum temperature of hot water produced: with 65° C max compressor for 5°~43° C outside. With 70° C max electrical resistance for -30°~43° C outside.

HYDRAULIC CONNECTIONS DIAGRAM



TWMI 300A

Domestic **hot water** from 45° C to 60° C only when the heat pump is operating.

Actual **COP** 3.41

Wide range of operating ambient temperatures: 7°~ 43° C.

Speed of reaching heating capacity with cold start: 203 minutes with incoming water temperature of 15° C, outgoing water temperature of 45° C and ambient temperature of 15° C.

Minimum tank dispersions: -1.8° C in 24 hours with ambient temperature 15° C and average temperature of the tank 43° C.

Anti-legionella function: the built-in DHWT-IHA kit is programmed to activate a periodic weekly cycle that brings the water temperature to 70° C (through the use of the electrical resistor).

Customisable **programming**: timer for time bands, very useful in case of reduced rates at night.

Defrost function: all the units are equipped with automatic defrost valves.

Integrated heat exchanger for additional solar system.

Model		TWMI 300 A
Operating Mode		Heat Pump
Operating Range		-7° C~+43° C
Power supply		220~240V-1ph-50Hz
Total Tank Capacity	L	300
Electric Heater	kW	1,50
Noise level	dB(A)	46,6
Dimensions (DxH)	mm	ø650x1920
Weight	kg	123
Refrigerant Gas (Type/Quantity)	kg	R134A/1,20
Hydraulic pipeline	mm	DN20
COP*	W/W	3,41
COP DHW**	W/W	2,98
Tank Dispersion 24/h (Average temp. 43° C)	°C	1,8° C
Full Heating Capacity (Inlet Temp. 15° C / Output temp. 45° C)	min.	203
Max. hot water available during rapid tank emptying	Lt	293 (min. 40,1° C)
Full Heating Capacity Power consumption	kWh	2,90
Hourly Absorption	kWh	0,88
Built-in heat exchanger	m^3	0,7

* (Air 15/12 °C - Water 15/45 °C); ** (EN 16147 tapping cycle "L").

Maximum temperature of hot water produced: with 60° C max compressor for 7°~43° C outside, 55° C max for 2°~7° C outside, 50° C max for -2°~2° C outside, 45° C max for -7°~-2° C outside. With 60° C max electrical resistance; 70° C for anti-legionella cycle.

4 METHODS OF INSTALLATION

30Pa static pressure allows ducts up to 10 metres (max 5 bends) for conveying cold water to the outside, or inside of rooms to be cooled during summer time.

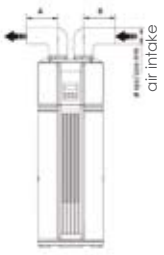
WITHOUT DUCTING

1 air outlet air intake

This connection allows the introduction of fresh air into the room

AIR INTAKE AND OUTLET WITH DUCTING

2 air outlet air intake

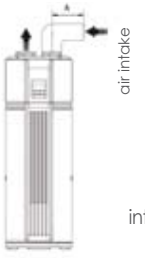


AIR OUTLET WITH DUCTING

3 air outlet air intake

AIR INTAKE WITH DUCTING

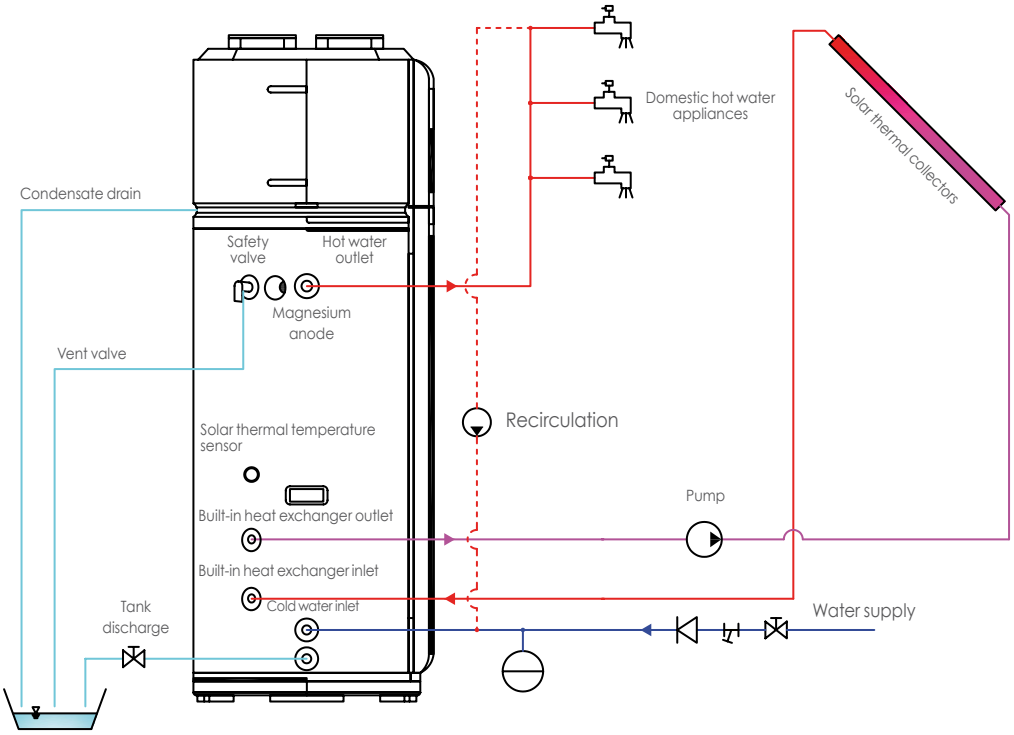
4 air outlet air intake



This connection allows the introduction of fresh air into the room

TWMI 300A

HYDRAULIC CONNECTIONS DIAGRAM



Heat exchanger

ETIN 201~1001 - ETIS 1501~380V

8 power levels: 200~2000 m^3/h.

Compact size and ultra lightweight.

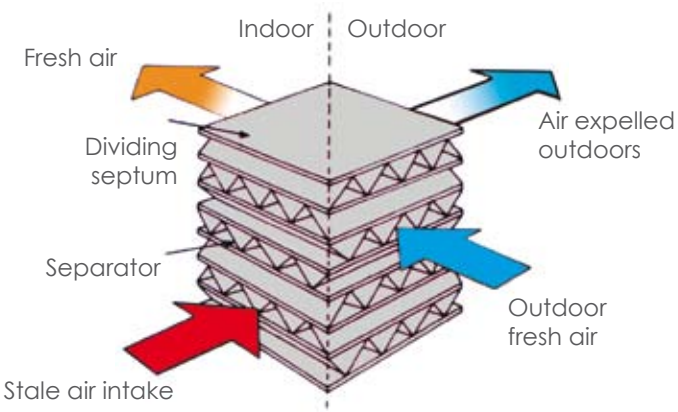
Low acoustic impact: only 27 dB(A) for 200 m^3/h model.

Wired remote control supplied standard.

ETIN 201~1001

ETIS 1501~2001 380V

The ventilation units with heat recovery are suited for use in bars, offices, gyms, changing rooms and all spaces where it is necessary to circulate the air due to the presence of polluting or toxic substances.
The units consist of two centrifugal fans: one introduces clean air filtered from outside and 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. The indoor air heats or cools the outdoor air that is introduced without coming into contact with it.



Model			ETIN 201	ETIN 301	ETIN 401	ETIN 501	ETIN 801	ETIN 1001	ETIS 1501	ETIS 2001
Power supply		Ph-V-Hz	1-220~240-50						3-380~415-50	
Power input		W	20	40	80	120	360		900	1100
Input Rated Current		A	0,5	0,56	1	1	2	2,4	3,2	3,6
Air flow		m3/h	200	300	400	500	800	1000	1500	2000
Available Static Pressure		Pa	75		80		100		160	170
Enthalpy exch. Efficiency (winter)(*)		%	55		60					
Enthalpy exch. Efficiency (summer) (*)		%	50							
Body size	(DxHxW)	mm	666x264x655	744x270x599	744x270x804	824x270x904	1116x388x884	1116x388x1134	1500x540x1200	1550x540x1400
Flange	diameter/depth	mm	ø144/100			ø194/100	ø242/100		370x350/50	
Net		kg	22	23	30	35,5	57,5	59	160	175
Max Noise level 1,5 m		dB(A)	27	30	32	35	39	40	51	53
Max Noise level 2,5 m		dB(A)	20	23	25	28	32	33	44	46

(*) Following ENV 308 rule		DB	Relative humidity
WINTER Heating	Outdoor air	-5°C	80%
	Indoor air	20°C	50%

(*) Following ENV 308 rule		DB	Relative humidity
SUMMER Cooling	Outdoor air	32°C	50%
	Indoor air	26°C	50%

XRV MULTI SYSTEM

2013

XRV MULTI SYSTEM

XRV MULTI SYSTEM DC INVERTER

XRV SYSTEMS WITH HEAT PUMP

MINI XRV

6HP
three-phase
HCSU 1551 XRV

XRV SYSTEMS

XRV three-phase single units

8HP	10HP	12HP	14HP	16HP
HCSU 2501 XRV-2	HCSU 3001 XRV-2	HCSU 3501 XRV	HCSU 4001 XRV	HCSU 4501 XRV

XRV three-phase combined units

18HP	20HP	22HP	24HP	26HP
8+10	10+10	10+12	10+14	10+16
HCSU 2501 XRV-2 HCSU 3001 XRV-2	HCSU 3001 XRV-2 HCSU 3001 XRV-2	HCSU 3001 XRV-2 HCSU 3501 XRV	HCSU 3001 XRV-2 HCSU 4001 XRV	HCSU 3001 XRV-2 HCSU 4501 XRV
28HP	**30HP**	**32HP**	**34HP**	**36HP**
12+16	14+16	16+16	10+10+14	10+10+16
HCSU 3501 XRV HCSU 4501 XRV	HCSU 4001 XRV HCSU 4501 XRV	HCSU 4501 XRV HCSU 4501 XRV	HCSU 3001 XRV-2 HCSU 3001 XRV-2 HCSU 4001 XRV	HCSU 3001 XRV-2 HCSU 3001 XRV-2 HCSU 4501 XRV
38HP	**40HP**	**42HP**	**44HP**	**46HP**
10+12+14	10+14+16	10+16+16	12+16+16	14+16+16
HCSU 3001 XRV-2 HCSU 3501 XRV HCSU 4001 XRV	HCSU 3001 XRV-2 HCSU 4001 XRV HCSU 4501 XRV	HCSU 3001 XRV-2 HCSU 4501 XRV HCSU 4501 XRV	HCSU 3501 XRV HCSU 4501 XRV HCSU 4501 XRV	HCSU 4001 XRV HCSU 4501 XRV HCSU 4501 XRV
48HP	**50HP**	**52HP**	**54HP**	**56HP**
16+16+16	12+12+12+14	12+12+12+16	12+12+14+16	12+12+16+16
HCSU 4501 XRV HCSU 4501 XRV HCSU 4501 XRV	HCSU 3501 XRV HCSU 3501 XRV HCSU 3501 XRV HCSU 4001 XRV	HCSU 3501 XRV HCSU 3501 XRV HCSU 3501 XRV HCSU 4501 XRV	HCSU 3501 XRV HCSU 3501 XRV HCSU 4001 XRV HCSU 4501 XRV	HCSU 3501 XRV HCSU 3501 XRV HCSU 4501 XRV HCSU 4501 XRV
58HP	**60HP**	**62HP**	**64HP**	
10+16+16+16	12+16+16+16	14+16+16+16	16+16+16+16	
HCSU 3001 XRV-2 HCSU 4501 XRV HCSU 4501 XRV HCSU 4501 XRV	HCSU 3501 XRV HCSU 4501 XRV HCSU 4501 XRV HCSU 4501 XRV	HCSU 4001 XRV HCSU 4501 XRV HCSU 4501 XRV HCSU 4501 XRV	HCSU 4501 XRV HCSU 4501 XRV HCSU 4501 XRV HCSU 4501 XRV	

Thanks to its continued efforts on technological research and its long experience in the heating/cooling systems market in Italy and Europe, Hokkaido has introduced the XRV Systems, a product that is a candidate for a leading role in the VRF systems market.

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

The mini XRV units are especially suited for residential and light commercial applications.

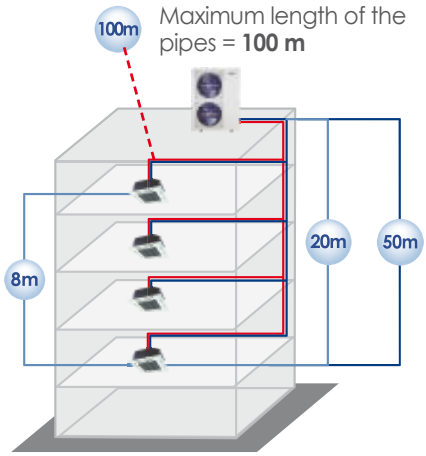
The XRV system fully meets new air conditioning requirements of medium and large buildings.

XRV MULTI SYSTEM DC INVERTER

MINI XRV WITH HEAT PUMP

HCSU 1551 XRV 15,5 kW (3Ph)

Maximum distance between the outdoor unit and the farthest indoor unit = **50 m**
Maximum distance from the first branch pipe to the farthest indoor unit = **20 m**
Maximum height difference between the outdoor unit (up high) and the indoor units = **20 m**
Maximum height difference between the outdoor unit (down low) and the indoor units = **20 m**
Maximum height difference between indoor units = **8 m**
Maximum length of the pipes = **100 m**



Model			HCSU 1551 XRV
Cooling capacity (1)		kW	15,50
Heating capacity (2)		kW	18,00
Electrical data			
Power supply		Ph-V-Hz	3-380~415-50
Electrical power absorption in cooling mode (fully operational)		kW / A	4,25 / 8,0
Electrical power absorption in heating mode (fully operational)		kW / A	4,45 / 8,34
EER coeff. performance cooling		W/W	3,65
COP coeff. performance heating		W/W	4,04
Refrigerant circuit			
Refrigerant		type	R410A
Compressor		type	Scroll DC Inverter HITACHI
Air flow fan	(Lo/Hi)	m^3/h	4300/6500
Sound pressure level at 1 m	(Lo/Hi)	dB(A)	56/57
Sound pressure level at 2,5 m	(Lo/Hi)	dB(A)	48/49
Refrigerant pipes	Liquid/Gas side	mm/inch.	ø9,53 (3/8") - ø15,9 (5/8")
Total pipe length		m	100
Max height difference(i.u.-i.u.)		m	8
Max height difference (o.u.-i.u.)		m	20
Temp. range cooling		°C / DB	-15°C / 48°C
Temp. range heating		°C / WB	-15°C / 21°C
No. connectable i.u.		n°	**7**
Capacity of the connected i.u.		%	50 - 130
Size and weight			
Dimension (WxHxD)		mm	940x1245x400
Net weight		kg	115

Notes:
(1) Cooling capacity tested in accordance with ISO 5151 Standards; outdoor temperature 35° C DB, 24° C WB and indoor temperature 27° C DB, 19° C WB.
(2) Heating capacity tested in accordance with ISO 5151 Standards; outdoor temperature 7°C DB, 6°C WB and indoor temperature 20° C DB, 15° C WB.

XRV MULTI SYSTEM DC INVERTER

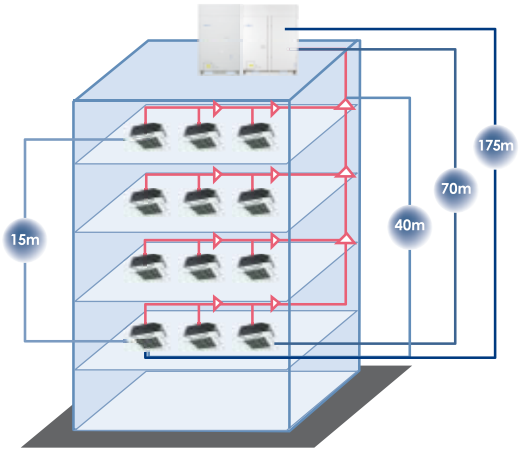
XRV SYSTEMS WITH HEAT PUMP

HCSU 2501 XRV-2 25 kW (3Ph)
HCSU 3001 XRV-2 30 kW (3Ph)

HCSU 3501 XRV 35 kW (3Ph)
HCSU 4001 XRV 40 kW (3Ph)
HCSU 4501 XRV 45 kW (3Ph)

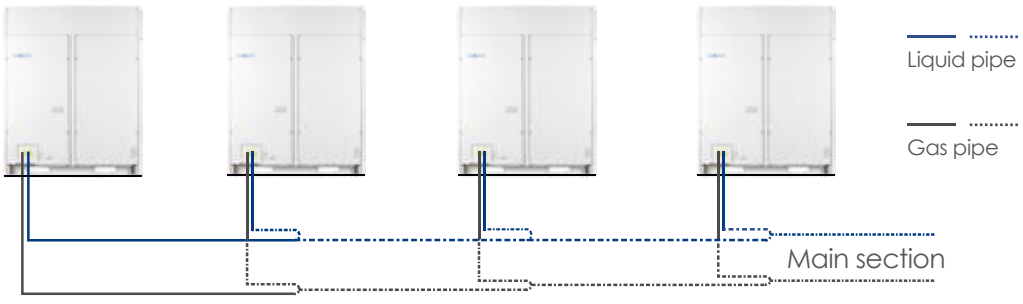
Splitting lengths and height differences

Maximum distance between the outdoor unit and the farthest indoor unit **= 175 m**
Maximum distance from the first branch pipe to the farthest indoor unit **= 40 m**
Maximum height difference between the outdoor unit (up high) and the indoor units = **70 m**
Maximum height difference between the outdoor unit (down low) and the indoor units = **40 m**
Maximum height difference between indoor units = **15 m**
Maximum length of the pipes = **500 m** (>30HP) or **350 m** (≤ 30HP)



Refrigeration system

Connection between the units and the system



Gas and oil parallel connection

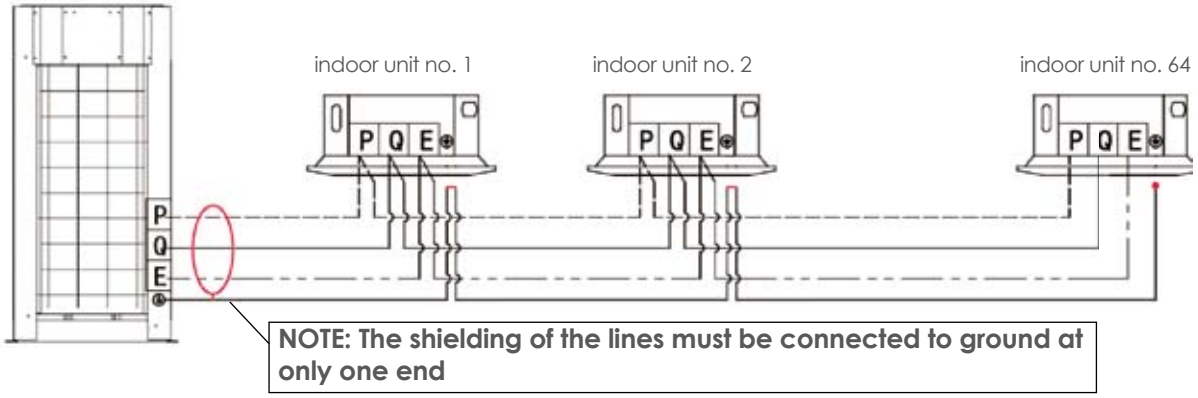
When 2-3-4 outdoor units are combined, a connection to balance the gas pressure and the level of oil in the compressors must be created.

XRV MULTI SYSTEM DC INVERTER

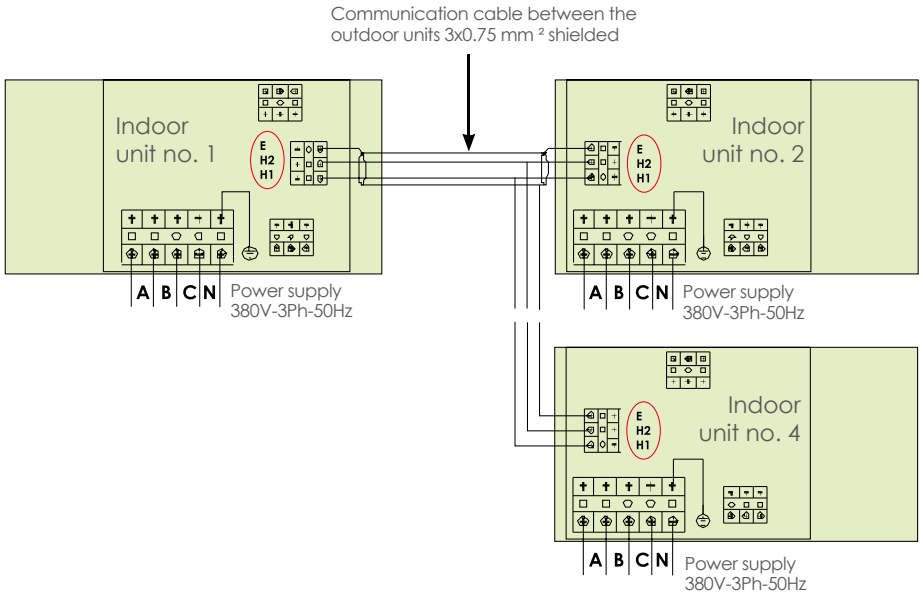
XRV SYSTEMS WITH HEAT PUMP

Electrical system

Communication cable between outdoor and indoor units



Connection between the XRV outdoor units (max 4 units)



Branch pipes

Branch pipes for XRV Systems (downstream of the first branch pipe)	
Code	A - Capacity of the connectible indoor units (kW)
DIS-22-1T	A<16,8
DIS-180-1T	16,8≤A<22,4
	22,4≤A<33,0
DIS-371-1T	33,0≤A<47,0
	47,0≤A<71,0
DIS-540-1H	71,0≤A<104,0
	104,0≤A<134,4
DIS-1344-1H	134,4≤A

Branch pipe kit for outdoor unit connection	
Code	Outdoor units
DOS 2-1H	Two outdoor unit kit
DOS 3-1H	Three outdoor unit kit
DOS 4-1H	Four outdoor unit kit
OH-BAL-KT*	T-shaped fitting for oil parallel pipe
GH-BAL-KT*	T-shaped fitting for gas parallel pipe

* Included in the DOS 3-1H and DOS 4-1H kits

XRV MULTI SYSTEM DC INVERTER

XRV SYSTEMS WITH HEAT PUMP

The range is characterised by 5 basic modules: 8, 10, 12, 14 and 16HP.

The outdoor units can also be combined up to 4 modules, for a maximum of 64HP, on a single system.

Model / Combination			HCSU 2501 XRV-2	HCSU 3001 XRV-2	HCSU 3501 XRV	HCSU 4001 XRV	HCSU 4501 XRV
Power		**HP**	**8**	**10**	**12**	**14**	**16**
Cooling capacity (1)		kW	25,00	30,00	35,00	40,00	45,00
Heating capacity (2)		kW	28,00	33,00	38,00	45,00	50,00
Electrical data							
Power supply		Ph-V-Hz	3-380~415-50				
Electrical power absorption in cooling mode (fully operational)		kW / A	7,13 / 10,3	8,17 / 13,1	9,84 / 16,7	11,36 / 20,7	12,94 / 23,7
Electrical power absorption in heating mode (fully operational)		kW / A	6,88 / 10,5	7,98 / 13,0	9,21 / 15,3	10,87 / 18,9	12,12 / 21,3
EER coeff. performance cooling		W/W	3,51	3,67	3,56	3,52	3,48
COP coeff. performance heating		W/W	4,07	4,14	4,13	4,14	4,13
Refrigerant circuit							
Refrigerant		type	R410A				
DC inverter Compressor		n° / type	1 / Scroll DC Inverter HITACHI				
Scroll Compressor		n° / type	1 / Scroll HITACHI			2 / Scroll HITACHI	
Air flow fan	(Lo/Hi)	m3/h	10675 / 12500		11955 / 14000	12875 / 14000	
Sound pressure level at 1 m	(Lo/Hi)	dB(A)	55/57		56/58	58/60	
Sound pressure level at 2,5 m	(Lo/Hi)	dB(A)	47/49		48/50	50/52	
Refrigerant pipes (3)	Liquid	mm/inch.	ø12,7 (1/2")			ø15,9 (5/8")	
	Gas	mm/inch.	ø25,4 (1")			ø28,6 (9/8")	
	Parallel oil	mm/inch.	ø6,35 (1/4")				
	Parallel gas	mm/inch.	ø19,1 (3/4")				
Total pipe length		m	350				
Max height difference(i.u.-i.u.)		m	15				
Max height difference (o.u.-i.u.)		m	70 (outdoor unit above) - 40 (outdoor unit below)				
Temp. range cooling		°C / DB	-5°C / 48°C				
Temp. range heating		°C / WB	-15°C / 27°C				
No. connectable i.u.		n°	**13**	**16**			**20**
Capacity of the connected i.u.		%	50 - 130				
Size and weight							
Dimension (WxHxD) (4)		mm	980x1615x800		1380x1630x830		
Net weight		kg	300		330	400	

Notes:
(1) Cooling capacity tested in accordance with ISO 5151 Standards; outdoor temperature 35° C DB, 24° C WB and indoor temperature 27° C DB, 19° C WB.
(2) Heating capacity tested in accordance with ISO 5151 Standards; outdoor temperature 7°C DB, 6°C WB and indoor temperature 20° C DB, 15° C WB.

XRV MULTI SYSTEM DC INVERTER

OUTDOOR UNITS

HCSU 2501 XRV-2 HCSU 3001 XRV-2	HCSU 3001 XRV-2 HCSU 3001 XRV-2	HCSU 3001 XRV-2 HCSU 3501 XRV	HCSU 3001 XRV-2 HCSU 4001 XRV	HCSU 3001 XRV-2 HCSU 4501 XRV	HCSU 3501 XRV HCSU 4501 XRV	HCSU 4001 XRV HCSU 4501 XRV	HCSU 4501 XRV HCSU 4501 XRV
18	**20**	**22**	**24**	**26**	**28**	**30**	**32**
55,00	60,00	65,00	70,00	75,00	80,00	85,00	90,00
61,00	66,00	71,00	78,00	83,00	88,00	95,00	100,00
3-380~415-50							
15,3 / 23,4	16,34 / 26,2	18,01 / 28,8	19,53 / 33,8	21,11 / 36,8	22,78 / 40,4	24,30 / 44,4	25,88 / 47,4
14,86 / 23,5	15,96 / 26	17,19 / 28,3	18,85 / 31,9	20,10 / 34,7	21,33 / 36,6	22,99 / 40,2	24,24 / 42,6
3,59	3,67	3,61	3,58	3,55	3,51	3,5	3,48
4,1	4,14	4,13	4,14	4,13	4,13	4,13	4,13
R410A							
2 / Scroll DC Inverter HITACHI							
2 / Scroll HITACHI			3 / Scroll HITACHI			4 / Scroll HITACHI	
10675 / 25000		10675 / 26500			11955 / 28000	12875 / 28000	
55/60	55/60,5	55/61,8			56/62,1	58/63	
47/52	47/52,5	47/53,8			48/54,1	50/55	
ø15,9 (5/8")		ø15,9 (5/8")	ø19,1 (3/4")				
ø28,6 (9/8")		ø34,9 (1" 3/8")	ø34,9 (1" 3/8")				
ø6,35 (1/4")							
ø19,1 (3/4")							
350							500
15							
70 (outdoor unit above) - 40 (outdoor unit below)							
-5°C / 48°C							
-15°C / 27°C							
20	**24**		**28**			**32**	
50 - 130							
2060x1615x800		2460x1630x830			2860x1630x830		
600	630	700			730	800	

Notes:
(3) 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 90 m.
(4) Space between the paired units = 100 mm.

XRV MULTI SYSTEM DC INVERTER

XRV SYSTEMS WITH HEAT PUMP

Model / Combination			HCSU 3001 XRV-2 HCSU 3001 XRV-2 HCSU 4001 XRV	HCSU 3001 XRV-2 HCSU 3001 XRV-2 HCSU 4501 XRV	HCSU 3001 XRV-2 HCSU 3501 XRV HCSU 4501 XRV	HCSU 3001 XRV-2 HCSU 4001 XRV HCSU 4501 XRV	HCSU 3001 XRV-2 HCSU 4501 XRV HCSU 4501 XRV	HCSU 3501 XRV HCSU 4501 XRV HCSU 4501 XRV
Power		**HP**	**34**	**36**	**38**	**40**	**42**	**44**
Cooling capacity (1)		kW	100,00	105,00	110,00	115,00	120,00	125,00
Heating capacity (2)		kW	111,00	116,00	121,00	128,00	133,00	138,00
Electrical data								
Power supply		Ph-V-Hz	3-380~415-50					
Electrical power absorption in cooling mode (fully operational)		kW / A	27,70 / 46,9	29,28 / 49,9	30,95 / 53,5	32,47 / 57,5	34,05 / 60,5	35,72 / 64,1
Electrical power absorption in heating mode (fully operational)		kW / A	26,83 / 44,9	28,08 / 47,3	29,31 / 49,6	30,97 / 53,2	32,22 / 53,6	33,45 / 57,9
EER coeff. performance cooling		W/W	3,61	3,59	3,55	3,54	3,52	3,5
COP coeff. performance heating		W/W	4,14	4,13	4,13	4,13	4,13	4,13
Refrigerant circuit								
Refrigerant		type	R410A					
DC inverter Compressor		n° / type	3 / Scroll DC Inverter HITACHI					
Scroll Compressor		n° / type	4 / Scroll HITACHI			5 / Scroll HITACHI		
Air flow fan	(Lo/Hi)	m3/h	10675 / 39000		10675 / 40500			11955 / 42000
Sound pressure level at 1 m	(Lo/Hi)	dB(A)	55/63		55/63,3	55/64		56/64,3
Sound pressure level at 2,5 m	(Lo/Hi)	dB(A)	47/55		47/55,3	47/56		48/56,3
Refrigerant pipes (3)	Liquid	mm/inch.	ø19,1 (3/4")					
	Gas	mm/inch.	ø41,3 (1" 5/8")					
	Parallel oil	mm/inch.	ø6,35 (1/4")					
	Parallel gas	mm/inch.	ø19,1 (3/4")					
Total pipe length		m	500					
Max height difference(i.u.-i.u.)		m	15					
Max height difference (o.u.-i.u.)		m	70 (outdoor unit above) - 40 (outdoor unit below)					
Temp. range cooling		°C / DB	-5°C / 48°C					
Temp. range heating		°C / WB	-15°C / 27°C					
No. connectable i.u.		n°	**36**			**42**		
Capacity of the connected i.u.		%	50 - 130					
Size and weight								
Dimension (WxHxD) (4)		mm	3540x1630x830		3940x1630x830			4340x1630x830
Net weight		kg	1000		1030	1100		1130

Notes:
(1) Cooling capacity tested in accordance with ISO 5151 Standards; outdoor temperature 35° C DB, 24° C WB and indoor temperature 27° C DB, 19° C WB.
(2) Heating capacity tested in accordance with ISO 5151 Standards; outdoor temperature 7°C DB, 6°C WB and indoor temperature 20° C DB, 15° C WB.

XRV MULTI SYSTEM DC INVERTER

OUTDOOR UNITS

HCSU 4001 XRV HCSU 4501 XRV HCSU 4501 XRV	HCSU 4501 XRV HCSU 4501 XRV HCSU 4501 XRV	HCSU 3501 XRV HCSU 3501 XRV HCSU 3501 XRV HCSU 4001 XRV	HCSU 3501 XRV HCSU 3501 XRV HCSU 3501 XRV HCSU 4501 XRV	HCSU 3501 XRV HCSU 3501 XRV HCSU 4001 XRV HCSU 4501 XRV	HCSU 3501 XRV HCSU 3501 XRV HCSU 4501 XRV HCSU 4501 XRV	HCSU 3001 XRV-2 HCSU 4501 XRV HCSU 4501 XRV HCSU 4501 XRV	HCSU 3501 XRV HCSU 4501 XRV HCSU 4501 XRV HCSU 4501 XRV	HCSU 4001 XRV HCSU 4501 XRV HCSU 4501 XRV HCSU 4501 XRV	HCSU 4501 XRV HCSU 4501 XRV HCSU 4501 XRV HCSU 4501 XRV
46	**48**	**50**	**52**	**54**	**56**	**58**	**60**	**62**	**64**
130,00	135,00	145,00	150,00	155,00	160,00	165,00	170,00	175,00	180,00
145,00	150,00	159,00	164,00	171,00	176,00	183,00	188,00	195,00	200,00
3-380~415-50									
37,24 / 68,1	38,82 / 71,1	40,88 / 70,8	42,46 / 73,8	43,98 / 77,8	45,56 / 80,8	46,99 / 84,2	48,66 / 87,8	50,18 / 91,8	51,76 / 94,8
35,11 / 61,5	36,36 / 63,9	38,50 / 64,8	39,75 / 67,2	41,41 / 70,8	42,66 / 73,2	44,34 / 76,9	45,57 / 79,2	47,23 / 82,8	48,48 / 85,2
3,49	3,48	3,55	3,53	3,52	3,51	3,51	3,49	3,49	3,48
4,13	4,13	4,13	4,13	4,13	4,13	4,13	4,13	4,13	4,13
R410A									
	4 / Scroll DC Inverter HITACHI								
6 / Scroll HITACHI	5 / Scroll HITACHI			6 / Scroll HITACHI		7 / Scroll HITACHI		8 / Scroll HITACHI	
12875 / 42000	11955 / 56000					10675 / 56000	11955 / 56000	12875 / 56000	
58/64,7	56/64,6			56/65,1		55/65,5	56/65,6	58/66	
50/56,7	48/56,6			48/57,1		47/57,5	48/57,6	50/58	
	ø22,2 (7/8")								
	ø44,5(1" 3/4")								
ø6,35 (1/4")									
ø19,1 (3/4")									
500									
15									
70 (outdoor unit above) - 40 (outdoor unit below)									
-5°C / 48°C									
-15°C / 27°C									
48	**54**				**58**			**64**	
50 - 130									
4340x1630x830	5820x1630x830								
1200	1330			1440		1500	1530	1600	

Notes:
(3) 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 90 m.
(4) Space between the paired units = 100 mm.

XRV MULTI SYSTEM DC INVERTER

MINI XRV - XRV SYSTEMS

INDOOR UNITS

	1,80 kW	2,20 kW	2,80 kW	3,60 kW	4,50 kW	5,60 kW
CASSETTE 60x60 ROUND FLOW HTFU XRV						
CASSETTE 84x84 HTBU XRV						
DUCT LOW STATIC PRESSURE HRDU XRV						
DUCT MEDIUM STATIC PRESSUR HUCU XRV						
DUCT HIGH STATIC PRESSURE HVDU XRV						
CONSOLE HFIU XRV						
FLOOR/CEILING HSFU XRV						
EXPOSED FLOOR HFLU XRV						
HIDDEN FLOOR HFCU XRV						
WALL HKEU XRV						

Performance and consumption are based on the following test conditions: heating E.T. 7° C DB, 6° C WB - I.T. 20° C DB - cooling E.T. 35° C DB, 24° C WB - I.T. 27° C DB, 19° C WB (ISO T1).

XRV MULTI SYSTEM DC INVERTER

MINI XRV - XRV SYSTEMS

7,10 kW	9,00 kW	11,20 kW	14,00 kW	16,00 kW	20,00 kW	28,00 kW
						
						
new 		new 		new 		
						
						
						

XRV MULTI SYSTEM DC INVERTER

MINI XRV - XRV SYSTEMS

INDOOR UNITS

HTFU XRV CASSETTE 60x60 - ROUND FLOW

4 power levels: 2.20~4.50 kW.

Ultra-compact cassette.

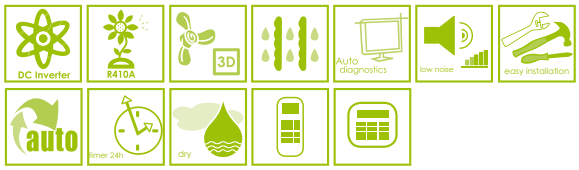
TFP 352 IHRS panel with 360° air diffusion only for the XRV cassette.

Wide range of oscillation at 40°.

Electrical box inside.

External air intake pre-set.

Condensate drain pump with possibility of raising the discharge up to 360 mm from the outlet height.



Model		HTFU 222 XRV	HTFU 282 XRV	HTFU 362 XRV	HTFU 452 XRV
Cooling capacity	kW	2,20	2,80	3,60	4,50
Heating capacity	kW	2,60	3,20	4,00	5,00
Moisture Removal	l/h	1,0	1,0	1,2	1,5
Power supply	Ph-V-Hz	1-220~240-50			
Power consumption	W	48	48	56	56
Air flow (Lo/Mi/Hi)	m3/h	238 / 313 / 414		314 / 409 / 521	
Noise level 1,5 m (Lo/Mi/Hi)	dB(A)	23/33/36		29/35/41	
Noise level 2,5 m (Lo/Mi/Hi)	dB(A)	15/25/28		21/27/33	
Unit dimension (WxHxD)	mm	575x265x575			
Grille size (WxHxD)	mm	647x50x647			
Net weight (body + grille)	kg	20		22	
Refrigerant pipes Liquid/Gas side	mm/inch.	ø6,35 (1/4") - ø12,7 (1/2")			
Drain hose diameter	ø mm	25			
Drain pump head	mm	(up to) 360			
Refrigerant Control	type	Electronic Expansion Valve box			
Remote Control	type	IR Remote Control (included)			

XRV MULTI SYSTEM DC INVERTER

MINI XRV - XRV SYSTEMS

INDOOR UNITS

HTBU XRV CASSETTE 84x84

5 power levels: 5.50~14.00 kW.

3D coaxial fan: reduces the resistances to rotation and allows for a uniform distribution of air in the heat exchanger and when the air exits the 4 outlets.

Opening angle of flap up to 42°.

Low resistance and low noise fan profile.

Innovative design of air delivery opening and flap to reduce blackening of the ceiling and the condensing formation.

TBP 711 IHXR panel and 4 removable corners for easy installation.

Condensing drain pump with possibility of raising the discharge up to 360 mm from the outlet height.

Built-in electronic control (accessible from the panel).

Pre-set for duct connection of fresh-air intake and duct for cooling/heating a small adjacent room.

Model		HTBU 561 XRV	HTBU 711 XRV	HTBU 901 XRV	HTBU 1121 XRV	HTBU 1401 XRV
Cooling capacity	kW	5,50	7,10	9,00	11,20	14,00
Heating capacity	kW	6,30	8,00	10,00	12,50	15,00
Moisture Removal	l/h	1,8	2,4	3,0	3,8	4,0
Power supply	Ph-V-Hz	1-220~240-50				
Power consumption	W	90	115	160		180
Air flow (Lo/Mi/Hi)	m3/h	650/800/950	820/1010/1220	1120/1300/1540		1280/1500/1800
Noise level 1,5 m (Lo/Mi/Hi)	dB(A)	36/38/39		36/38/40	37/39/41	44/47/50
Noise level 2,5 m (Lo/Mi/Hi)	dB(A)	29/31/32		29/31/33	30/32/34	37/40/43
Unit dimension (WxHxD)	mm	840x230x840		840x300x840		
Grille size (WxHxD)	mm	950x46x950				
Net weight (body + grille)	kg	32		38		
Refrigerant pipes Liquid/Gas side	mm/inch.	ø9,53 (3/8") - ø15,9 (5/8")				
Drain hose diameter	ø mm	32				
Fresh air intake	ø mm	75				
Air intake for adjacent room	mm	350 x 85		350 x 155		
Drain pump head	mm	(up to) 360				
Refrigerant Control	type	Electronic Expansion Valve box				
Remote Control	type	IR Remote Control (included)				

XRV MULTI SYSTEM DC INVERTER

MINI XRV - XRV SYSTEMS

INDOOR UNITS

HRDU XRV DUCT LOW STATIC PRESSURE

6 power levels: 1.80~5.60 kW.

Ultra-compact design: only 190 mm in height; thanks to its small size it is ideal for use in hotels.

Low acoustic impact: only 21 dB(A) for models from 1.80~2.20 kW.

Bottom air intake.

Body made of ABS.

Available static pressure: 5 Pa.

Filter supplied standard.

Model		HRDU 182 XRV	HRDU 222 XRV	HRDU 282 XRV	HRDU 362 XRV	HRDU 452 XRV	HRDU 562 XRV
Cooling capacity	kW	1,80	2,20	2,80	3,60	4,50	5,60
Heating capacity	kW	2,20	2,60	3,20	4,00	5,00	6,30
Moisture Removal	l/h	0,6	0,7	1,0	1,2	1,5	1,8
Power supply	Ph-V-Hz	1-220~240-50					
Power consumption	W	40					56
Air flow (Lo/Mi/Hi)	m3/h	250/323/446		267/359/527		512/634/767	
Noise level 1 m (Lo/Mi/Hi)	dB(A)	21/27/33	21/29/34	30/34/36		31/35/37	
Noise level 2,5 m (Lo/Mi/Hi)	dB(A)	13/19/25	13/21/26	22/26/28		23/27/29	
Dimension (WxHxD)	mm	850x190x405				1030x190x430	
Available static pressure	Pa	5					
Net	kg	11,5				14	
Refrigerant pipes Liquid/Gas side	mm/inch.	ø6,35 (1/4") - ø12,7 (1/2")					ø9,53 (3/8") - ø15,9 (5/8")
Drain hose diameter	ø mm	16					
Fresh air intake	ø mm	-					
Refrigerant Control	type	Electronic Expansion Valve box					
Remote Control	type	IR Remote Control (included)					

XRV MULTI SYSTEM DC INVERTER

MINI XRV - XRV SYSTEMS

INDOOR UNITS

HUCU XRV DUCT MEDIUM STATIC PRESSURE

7 power levels: 2.80~11.20 kW.

Ultra-compact design: only 210 mm (2.80~5.60 kW) and 270 mm (7.10~11.20 kW) in height.

Low acoustic impact: only 29 dB(A) for model from 7.10 kW.

4 ventilation speeds (high optional) can be set on the electronic control.

Available static pressure: 30 Pa (2.80~7.10 kW); 50 Pa (9.00 kW); 80 Pa (11.20 kW).

Bottom or rear intake selectable at time of installation with interchangeable panel.

Condensing drain pump included.

Pre-cut for external air intake fitting.

Aluminium alloy filter supplied as standard.

Electrical box can be removed from the machine body and installed up to 1 m.

Display board can be freely positioned of up to 3 m.

Model		HUCU 282 XRV	HUCU 362 XRV	HUCU 452 XRV	HUCU 562 XRV	HUCU 712 XRV	HUCU 902 XRV	HUCU 1122 XRV
Cooling capacity	kW	2,80	3,60	4,50	5,60	7,10	9,00	11,20
Heating capacity	kW	3,20	4,00	5,00	6,30	8,00	10,00	12,50
Moisture Removal	l/h	1,0	1,2	1,5	1,8	2,4	3,0	3,8
Power supply	Ph-V-Hz	1-220~240-50						
Power consumption	W	62	67	115		163	231	357
Air flow (ULo/Lo/Mi/Hi)	m3/h	320/410/530/570		583/667/850/958		821/905/1050/1207	1033/1167/1350/1558	1400/1564/1800/2036
Noise level 1,5 m (Lo/Hi)	dB(A)	36/40		32/41		29/42	35/44	38/48
Noise level 2,5 m (Lo/Hi)	dB(A)	29/33		25/34		22/35	28/37	31/41
Dimension (WxHxD)	mm	700x210x635		920x210x635		920x270x635	1140x270x775	
Available static pressure (Lo/Hi)	Pa	10/30					20/50	40/80
Net	kg	21,5		27		31	41	
Refrigerant pipes Liquid/Gas side	mm/inch.	ø6,35 (1/4") - ø12,7 (1/2")			ø9,53 (3/8") - ø15,9 (5/8")			
Drain hose diameter	ø mm	25						
Refrigerant Control	type	Electronic Expansion Valve box						
Remote Control	type	IR Remote Control (included)						

XRV MULTI SYSTEM DC INVERTER

MINI XRV - XRV SYSTEMS

INDOOR UNITS

HVDU XRV DUCT HIGH STATIC PRESSURE

5 power levels: 7.10~28.00 kW.

Ultra-compact design: only 400 mm in height for 14.00 kW model.

Low acoustic impact: only 44 dB(A) for 7.10 kW model.

Available static pressure: 196 Pa.

Rear air intake.

Filter supplied standard.

Ease of maintenance.

new new new

Model		HVDU 714 XRV	HVDU 1124 XRV	HVDU 1604 XRV	HVDU 2004 XRV	HVDU 2804 XRV
Cooling capacity	kW	7,10	11,20	14,00	20,00	28,00
Heating capacity	kW	8,00	12,50	15,50	22,50	31,50
Moisture Removal	l/h	2,4	3,8	4,8	7	10
Power supply	Ph-V-Hz	1-220~240-50				
Power consumption	W	263	524	832	1450	
Air flow (Lo/Mi/Hi)	m3/h	1236/1399/1510	1644/1950/2117	2700/3200/3890	3200/3820/4180	3300/3940/4400
Noise level 1,5 m (Lo/Mi/Hi)	dB(A)	44/46/48	47/49/52	50/52/54	55/58/61	
Noise level 2,5 m (Lo/Mi/Hi)	dB(A)	37/39/41	40/42/45	43/45/47	48/51/54	
Dimension (WxHxD)	mm	952x420x690		1200x400x600	1425x500x928	
Available static pressure	Pa	40(30-196)	50(30-196)		196	
Net	kg	45	50,6	70	122	
Refrigerant pipes Liquid/Gas side	mm/inch.	ø9,53 (3/8") - ø15,9 (5/8")			2 x ø9,53 (3/8") - 2 x ø15,9 (5/8")	
Drain hose diameter	ø mm	32				
Fresh air intake	ø mm	-				
Refrigerant Control	type	EEV box already connected			2 x Box with electronic expansion valve	
Remote Control	type	Wired control (included)				

XRV MULTI SYSTEM DC INVERTER

MINI XRV - XRV SYSTEMS

INDOOR UNITS

HFIU XRV CONSOLE

4 power levels: 2.20~4.50kW.

Ultra-compact measurements: only 210 mm in depth.

Double air outlet control: upper and lower.

Front and side air intake.

5 fan speeds.

Anti-formaldehyde filter.

Model			HFIU 222 XRV	HFIU 282 XRV	HFIU 362 XRV	HFIU 452 XRV
Cooling capacity		kW	2,20	2,80	3,60	4,50
Heating capacity		kW	2,60	3,20	4,00	5,00
Moisture Removal		l/h	0,7	1,0	1,2	1,5
Power supply		Ph-V-Hz	1-220~240-50			
Power consumption		W	20	25		45
Air flow	(Lo/Mi/Hi)	m3/h	229/345/430	229/430/510		400/512/660
Noise level 1 m	(Lo/Mi/Hi)	dB(A)	26/32/38	27/33/39		36/39/42
Noise level 2,5 m	(Lo/Mi/Hi)	dB(A)	18/24/30	19/25/31		28/31/34
Dimension (WxHxD)		mm	700x600x210			
Net		kg	13			
Refrigerant pipes Liquid/Gas side		mm/inch.	ø6,35 (1/4") - ø12,7 (1/2")			
Drain hose diameter		ø mm	16			
Refrigerant Control		type	Electronic Expansion Valve box			
Remote Control		type	IR Remote Control (included)			

XRV MULTI SYSTEM DC INVERTER

MINI XRV - XRV SYSTEMS

INDOOR UNITS

HSFU XRV FLOOR/CEILING

5 power levels: 3.60~11.20 kW.

3 fan speeds.

Motorized horizontal and vertical flaps for optimal air flow control, 3D ventilation (Auto Swing and Wide Angle functions).

Easy installation with unit attached to the wall or ceiling (brackets supplied standard).

Waterproofing of the condensing drain tank (special treatment with water-repellent film).

Built-in electronic expansion valve.

Electric and refrigeration connections accessible from the air intake grille.

Model		HSFU 361 XRV	HSFU 561 XRV	HSFU 711 XRV	HSFU 901 XRV	HSFU 1121 XRV
Cooling capacity	kW	3,60	5,60	7,10	9,00	11,20
Heating capacity	kW	4,00	6,30	8,00	10,00	12,50
Moisture Removal	l/h	1,2	1,9	2,4	3,0	3,8
Power supply	Ph-V-Hz	1-220~240-50				
Power consumption	W	120	122	125	130	182
Air flow (Lo/Mi/Hi)	m3/h	500/570/650	500/600/800		700/900/1200	1730/1860/1980
Noise level 1 m (Lo/Mi/Hi)	dB(A)	38/41/43			40/43/45	42/45/47
Noise level 2,5 m (Lo/Mi/Hi)	dB(A)	30/33/35			32/35/37	34/37/39
Dimension (WxHxD)	mm	990x660x206			1280x660x206	1670x680x244
Net	kg	29			37	54
Refrigerant pipes Liquid/Gas side	mm/inch.	ø6,35 (1/4") - ø12,7 (1/2")	ø9,53 (3/8") - ø15,9 (5/8")			
Drain hose diameter	ø mm	25				
Refrigerant Control	type	Electronic Expansion Valve box				
Remote Control	type	IR Remote Control (included)				

XRV MULTI SYSTEM DC INVERTER

MINI XRV - XRV SYSTEMS

INDOOR UNITS

HFLU XRV EXPOSED FLOOR

2 power levels: 5.60~7.10 kW.

Lower air intake.

Built-in expansion valve and electronic control.

Fast extraction of air filters and removal of panel for maintenance and cleaning.

Easy installation.

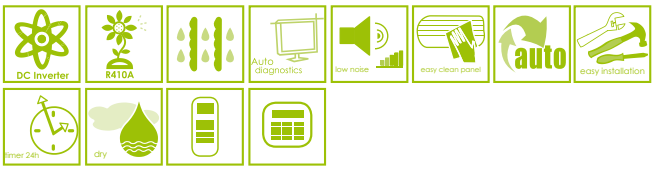
Model		HFLU 561 XRV	HFLU 711 XRV
Cooling capacity	kW	5,60	7,10
Heating capacity	kW	6,30	8,00
Moisture Removal	l/h	1,8	2,4
Power supply	Ph-V-Hz	1-220~240-50	
Power consumption	W	88	130
Air flow (Lo/Mi/Hi)	m3/h	830/970/1150	870/1100/1380
Noise level 1 m (Lo/Mi/Hi)	dB(A)	37/39/41	38/41/43
Noise level 2,5 m (Lo/Mi/Hi)	dB(A)	29/31/33	30/33/35
Dimension (WxHxD)	mm	1500x625x220	
Net	kg	44	
Refrigerant pipes Liquid/Gas side	mm/inch.	ø9,53 (3/8") - ø15,9 (5/8")	
Drain hose diameter	ø mm	25	
Refrigerant Control	type	Electronic Expansion Valve box	
Remote Control	type	IR Remote Control (included)	

XRV MULTI SYSTEM DC INVERTER

MINI XRV - XRV SYSTEMS

INDOOR UNITS

HFCU XRV HIDDEN FLOOR



5 power levels: 2.80~7.10 kW.

Extremely quiet: only 33 dB(A) for the 2.80 kW model.

Available static pressure: 12 Pa.

Lower air intake.

Built-in expansion valve and electronic control.

Easy installation.

Model		**HFCU 281 XRV**	**HFCU 361 XRV**	**HFCU 451 XRV**	**HFCU 561 XRV**	**HFCU 711 XRV**
Cooling capacity	kW	2,80	3,60	4,50	5,60	7,10
Heating capacity	kW	3,20	4,00	5,00	6,30	8,00
Moisture Removal	l/h	1,0	1,2	1,5	1,8	2,4
Power supply	Ph-V-Hz	1-220~240-50				
Power consumption	W	46	35	49	88	130
Air flow (Lo/Mi/Hi)	m3/h	421/485/569	375/522/624	440/542/660	830/970/1150	870/1100/1380
Noise level 1 m (Lo/Mi/Hi)	dB(A)	33/35/37	35/37/39		37/39/41	38/41/43
Noise level 2,5 m (Lo/Mi/Hi)	dB(A)	25/27/29	27/29/31		29/31/33	30/33/35
Dimension (WxHxD)	mm	840x544x212	1036x544x212		1336x544x212	
Available static pressure	Pa	12				
Net	kg	30	37		44	
Refrigerant pipes Liquid/Gas side	mm/inch.	ø6,35 (1/4") - ø12,7 (1/2")			ø9,53 (3/8") - ø15,9 (5/8")	
Drain hose diameter	ø mm	25				
Refrigerant Control	type	Electronic Expansion Valve box				
Remote Control	type	IR Remote Control (included)				

XRV MULTI SYSTEM DC INVERTER

MINI XRV - XRV SYSTEMS

INDOOR UNITS

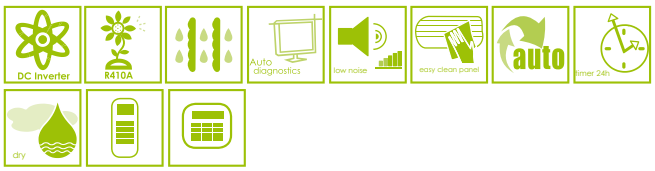
HKEU XRV WALL

4 power levels: 2.20~5.60 kW.

Extremely quiet: only 29 dB(A) for models from 2.20~ 3.60 kW.

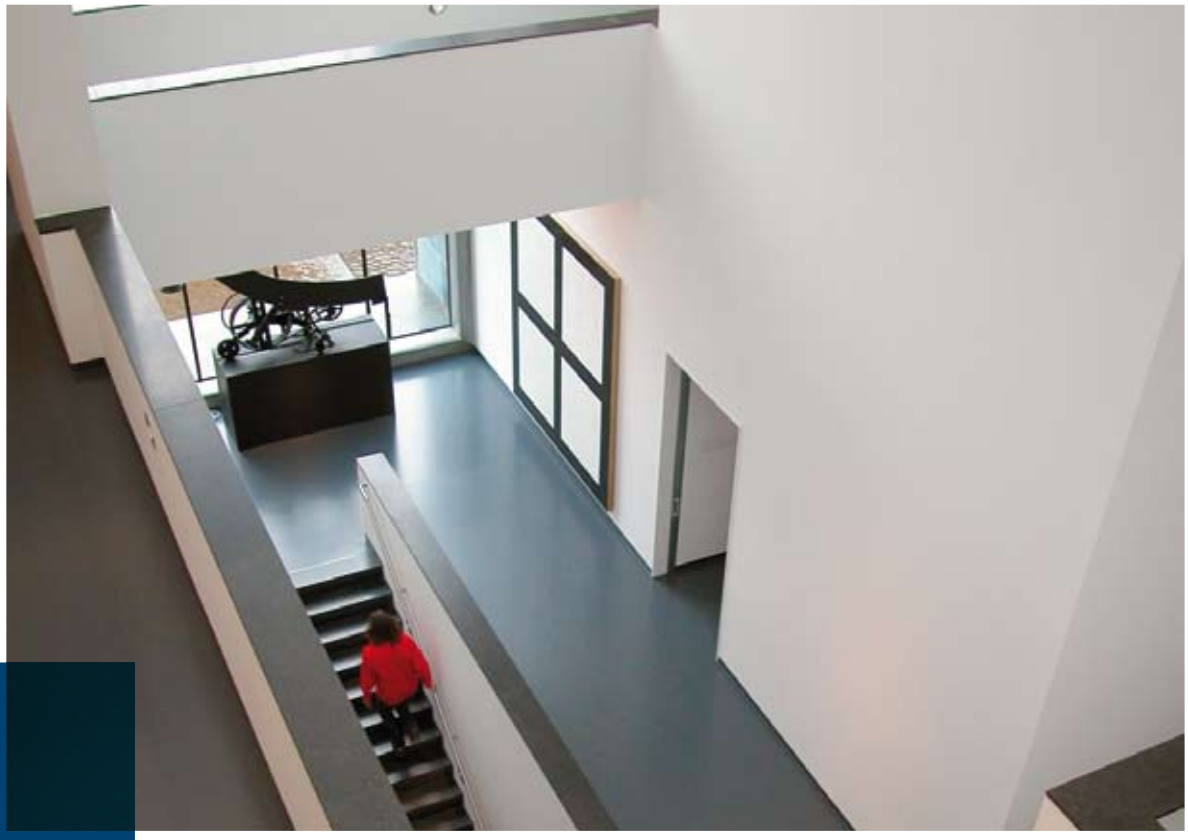
New built-in electronic expansion valve that operates at 2000 pulses per minute.

Standard washable filter and anti-formaldehyde filter.



Model		HKEU 222 XRV	HKEU 282 XRV	HKEU 362 XRV	HKEU 562 XRV
Cooling capacity	kW	2,20	2,80	3,60	5,60
Heating capacity	kW	2,60	3,20	4,00	6,30
Moisture Removal	l/h	0,7	1,0	1,2	1,8
Power supply	Ph-V-Hz	1-220~240-50			
Power consumption	W	30			45
Air flow (Lo/Mi/Hi)	m3/h	420/500/580			650/760/900
Noise level 1 m (Lo/Mi/Hi)	dB(A)	29/32/35			34/38/40
Noise level 2,5 m (Lo/Mi/Hi)	dB(A)	21/24/27			26/30/32
Dimension (WxHxD)	mm	915x290x230			1075x315x230
Net	kg	13			15
Refrigerant pipes Liquid/Gas side	mm/inch.	ø6,35 (1/4") - ø12,7 (1/2")			ø9,53 (3/8") - ø15,9 (5/8")
Drain hose diameter	Ø mm	20			
Refrigerant Control	type	Electronic Expansion Valve box			
Remote Control	type	IR Remote Control (included)			

CONTROLS

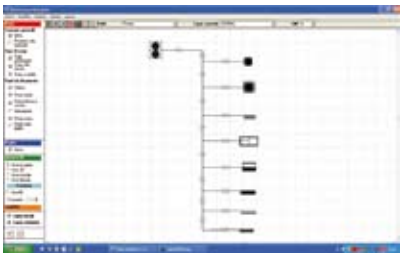


2013

XRV DESIGN SOFTWARE

1

Homepage of the multi-language software for designing XRV Systems.



2

Ability to insert type and capacity of the indoor units, length of the pipes and sequence of connection.

3

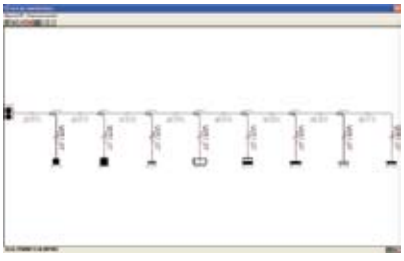
Ability to enter data for each individual room: summer and winter thermal loads, design temperature and simultaneous use factor.

4

Ability to import AUTOCAD files, which can be used as a basis on which to design the system.

5

Provides the choice of indoor and outdoor units suited to the system to be built, the sizing of pipes and branch pipes in the refrigerator system.



6

It allows viewing a full report on all system components.

The single line diagram of the pipes can be copied directly to Word or Excel documents or exported into.DXF files that can be integrated with an AUTOCAD design.

The final report is a summary of the units used, the pipes divided into the various diameters, the branch pipes, the system's electrical wiring diagrams and selected control connection diagrams.

CONTROLS

RESIDENTIAL/MULTI
COMMERCIAL
XRV MULTI SYSTEM

STANDARD INDIVIDUAL

new

HKEQ X
(Performance Line)

HKEU X
(Multi Liberty)

HFIU XRV

HTFU X
HSFI X
HTBU XRV
HSFU XRV
HRDU XRV
(Multi Liberty)

HUCU X (Multi Liberty)
HUCI X
HTFU XRV
HUCU XRV
HVDU XRV
HFLU XRV
HFCU XRV
HKEU XRV

DTW-IHXR-TOUCH
HTBI X

Able to control lift panel for filter cleaning.

- Ambient temperature range: 17° C~30° C.
- Mode: auto, cooling, dehumidification, heating, ventilation.
- Clock, timer and fan speed setting.
- Setting the motorized flaps for all or single use.
- Fan speed: low, medium, high or automatic.
- Follow me function: built-in temperature sensor for an accurate ambient temperature control.

CONTROLS

RESIDENTIAL/MULTI
COMMERCIAL
XRV MULTI SYSTEM

OPTIONALS

DTW2-IHXRV

WIRED REMOTE CONTROL

- Ambient temperature range: 17° C~30° C.
- Mode: auto, cooling, dehumidification, heating, ventilation.
- Clock, timer and fan speed setting.
- Setting for motorized flaps.
- Fan speed: low, medium, high or automatic.
- ECO function, with automatic variation of the ambient temperature setting.

DTW-IHXR
DTWS-IHXR*

WIRED REMOTE CONTROL

Can be used to control from 1 to 4 units simultaneously.

- Ambient temperature range: 17° C~30° C.
- Mode: auto, cooling, dehumidification, heating, ventilation.
- Clock, timer and fan speed setting.
- Setting for motorized flaps.
- Fan speed: low, medium, high or automatic.
- ECO function, with automatic variation of the ambient temperature setting.

* Built-in temperature sensor and FOLLOW ME function.

DTC-IHXR

CENTRALISED CONTROL

- Max of 64 units can be connected.
- The following can be set on individual or all units: ON/OFF, ambient temperature, fan speed, flap setting and timer programming.
- Memory of set functions.
- Set function lock (cooling/heating, keyboard remote control).
- Display for operating modes (temp. sensors, batteries and environment).
- Display of alarm codes and safety devices.
- Connection to PC, with adapter.

DTC-2-IHXR

new

CENTRALISED CONTROL

- Centralized Control with a particularly charming and attractive design.
- It allows the control of the Indoor Units and Heat Pump for hot water:
  - up to 16 Indoor Units;
  - 1 Heat Pump for hot water.

DTCWT-IHXR

CENTRALISED CONTROL WITH WEEKLY TIMER

- Max of 64 units can be connected.
- Possibility of 4 daily settings (Mon-Sun) on single or on all units: ON/OFF, operating mode, ambient temperature, and fan speed.
- Memory of set functions.
- Set function lock (cooling/heating, keyboard remote control).
- Display for operating modes (temp. sensors, batteries and environment).
- Display of alarm codes and safety devices.

OPTIONALS

DTWT-IHXR

WEEKLY PROGRAMMER

4 daily settings of:
- Start-up/shut-down times.
- Operating mode.
- Fan speed.
- Display of alarms and protection devices.
- Can be combined with remote control and/or wired control.

Note: if this wired control is used, connection to a centralised control is not possible.

BH-UHXRV

BADGE HOTEL

Interface for ON/OFF remote with reactivation of the functions set at restart.

DTMBS-IHXR

INTERFACE

1 Output signal for Emergency stop/Alarm
2 4 ports for XYE
3 4 ports for K1K2E
4 LAN port

new

DTMBS-IHXR interface, is the real physical hardware that allows the connection of:
- up to max. 64 Outdoor Units;
- up to max. 256 Indoor Units;
- divided in max. 16 refrigerant circuits;
- LAN connection (RJ45) for PC, Router, Hub, Switch;
- up to max. 4 DTMBS-IHXR can be connected to only one PC (so as to control up to 1024 Indoor Units).

BMS2-UHXRV

NETWORK CONTROL SOFTWARE (V.3.1)

- XRV system management and control software.
- Operating settings.
- Display of operating modes.
- Display of alarms and protection devices.

DTCO-UHXRV

CENTRALISED CONTROL FOR OUTDOOR UNITS

Centralised control connected to outdoor units (max 32) for viewing the operating parameters and alarms of the outdoor units.

DT-BOX-IHXR

BOX

Box for wall-installation of wired controls.

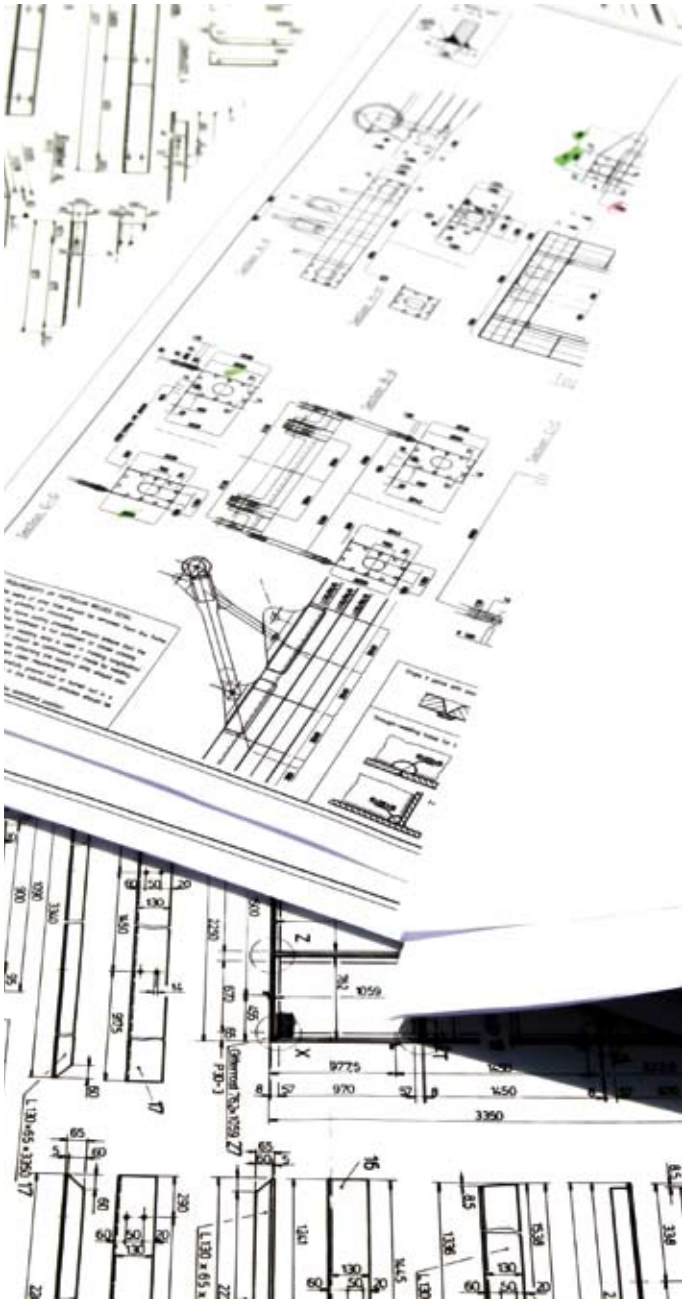
TECHNICAL COURSES - KEY TO ICONS

2013

TECHNICAL COURSES

Hokkaido organizes technical courses at its headquarters or at dealers' facilities, in collaboration with its agencies in order to deepen technicians' and designers' knowledge of various topics, including:

- **Refrigerant circuit**
- **Installation problems**
- **Fault diagnostics**
- **Assistance**
- **Design of systems with variable capacities**
- **Use of "Easy Solution" software**



KEY TO ICONS

RESIDENTIAL/MULTI
COMMERCIAL
XRV MULTI SYSTEM

DC INVERTER TECHNOLOGY
It ensures the best levels of efficiency and high energy savings, thereby guaranteeing that the temperature parameters selected are reached evenly and quickly.

ATTENTION TO THE ENVIRONMENT
All products use environmentally friendly R410A refrigerant gas, bi component mixture without CFCs and ozone friendly, which ensures maximum efficiency and running economy.

ENERGY CLASS
The most part of units have a class a efficiency rating both in cooling and heating.

MICROCOMPUTER CONTROLLED DEFROSTING
The microcomputer is able to detect a fall off in heating capacity of the system, due to frostening on outdoor unit heat exchanger and activates defrosting function. When this function is on, a LED on indoor unit's front panel lights up.

RANGE OF OPERATION
The most part of units can operate in heating with an outdoor temperature of -15° C.

AUTO-RESTART FUNCTION
Automatic switching on after a power outage. In case of blackout, when the power supply returns, the equipment starts up again with the previously selected settings.

SLEEP MODE
Improves comfort during the nocturnal use, by reducing (in heating) or increasing (in cooling) the set temperature gradually.

TIMER WITH DEFERRED PROGRAMMING

INTELLIGENT CONTROL OF THE INTERNAL FAN
In heating mode:
- during thermostatic breaks the fan speed is automatically maintained to avoid discomfort caused by currents of cold air;
- in pre-heating, the air conditioner will not emit air until the heat exchanger has reached the programmed temperature.

DRY

3-DIMENSIONAL COAXIAL FAN
The 60x60 cassette-type model have been designed to house a special (3-dimensional, coaxial) fan which, by reducing resistance to rotation, allows even distribution of the airflow onto the heat exchanger, guaranteeing comfort and wellbeing in the air-conditioned environment.

AUTO SWING AND WIDE ANGLE FUNCTIONS
The innovative 3D system (Auto Swing and Wide Angle) is present on the floor/ceiling model; the horizontal and vertical flaps are motorized to achieve optimum airflow, allowing a better distribution of air inside the air-conditioned environment.

COMPACT DESIGN
Indoor units show a compact and modern design, guaranteeing a wide versatility of application leading to quality air-conditioning.

LOW SOUND LEVELS
Made with innovative technologies, the wide range of indoor units is designed to give a customized response to all requirements of ambient comfort.

EXTERNAL AIR
Pre-cut for external air inlet fitting.

EASE OF MAINTENANCE
The auto diagnosis functions on the remote controls and on the indoor and outdoor units provide all the information required to identify malfunctions, thus facilitating and reducing technical assistance.

CENTRALIZED CONTROL
With centralized control (optional) you can control up to 64 indoor units, console model only.

KEY TO ICONS

RESIDENTIAL
COMMERCIAL
XRV MULTI SYSTEM

EASE OF MAINTENANCE

24H TIMER

IR WIRELESS

WIRED CONTROL

EASY CLEAN PANEL

STATIC PRESSURE

ECONOMIC RUNNING FUNCTION
The operating software automatically sets certain operating parameters in order to obtain the desired temperature with the least expenditure of energy.

EASY TO USE REMOTE CONTROL
The remote controls provided allow the end-user to select the ambient conditions of each area as required and to achieve maximum comfort.

VERSATILITY OF CONTROL SYSTEMS
The control systems allow many combinations of controls; individual or group. The application can easily be incorporated into a BMS control system.

EASY SYSTEM MODIFICATION
It is feasible and simple to make modifications to the system if the need arises. It is, in fact, possible to connect indoor units up to a total rated capacity of 130% of the outdoor unit.

REDUCED OPERATING COSTS
The modular systems have high efficiency compressors with continuous DC Inverter modulation which allow energy savings of 30% compared to conventional systems and require less maintenance.

MAXIMUM DESIGN FLEXIBILITY
The total length of the cooling pipes can reach 100 m with a height difference between the units of 20 m for Mini units and 500 m with a height difference of 70 m for modular units, thus making it easier to adapt the system to the structure of the building.
Thanks to the compact and modular design of the outdoor units, they can be positioned in outdoor locations where space is limited.

COMPACT DESIGN
The weight and compact design of the outdoor units facilitate easy transportation and positioning, with a consequent reduction in the installation time and operating costs.

EASY REMOVAL OF MACHINE PANEL
Thanks to a new fastening located inside the units, its ergonomic design allows for easy removal of the panel and improves the overall design of the machine.

NOTES

Due to the continuing technological evolution of our products, we reserve the right to change technical specifications at any time and without prior notice.
The products shown are only examples of the types of applications.

CE

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