

# PROJECT VRF R410A FULL DC INVERTER

## XRV SMART MODULAR Heat pump - 2 pipes



**FULL DC INVERTER**  
HCSU 2524 XRV-K  
HCSU 2804 XRV-K

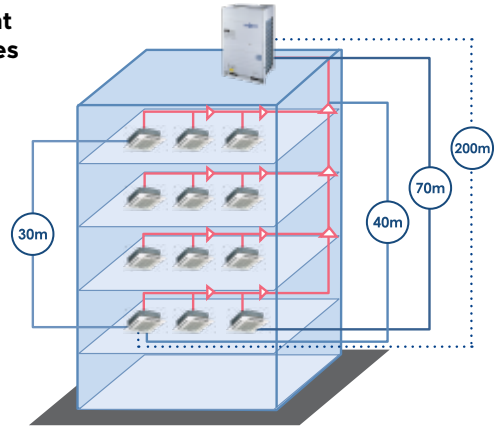
8 and 10HP units are equipped with a DC Inverter compressor.

All units are equipped with a DC Inverter fan motor:

- wider fan speed adjustment range
- reduced noise level

Silent operation, auto-addressing of indoor units.

### Splitting lengths and height differences



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

Maximum distance from the first branch pipe to the farthest = 40 m (90 m\*)

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

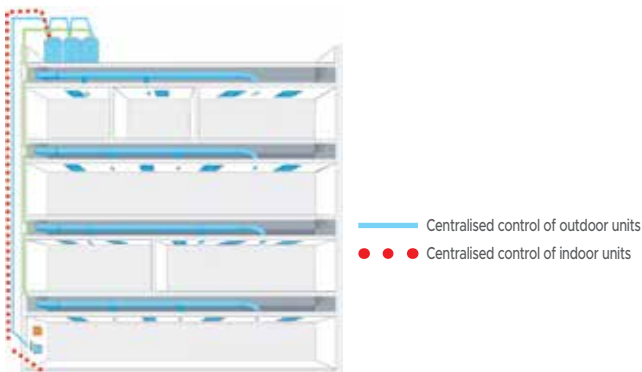
Maximum height difference between O.U. (down low) and I.U. = 110 m

Maximum height difference between I.U. = 30 m

Maximum length of the pipes = 1000 m

\* Upon approval of the technical department.

### Centralized control wiring diagram

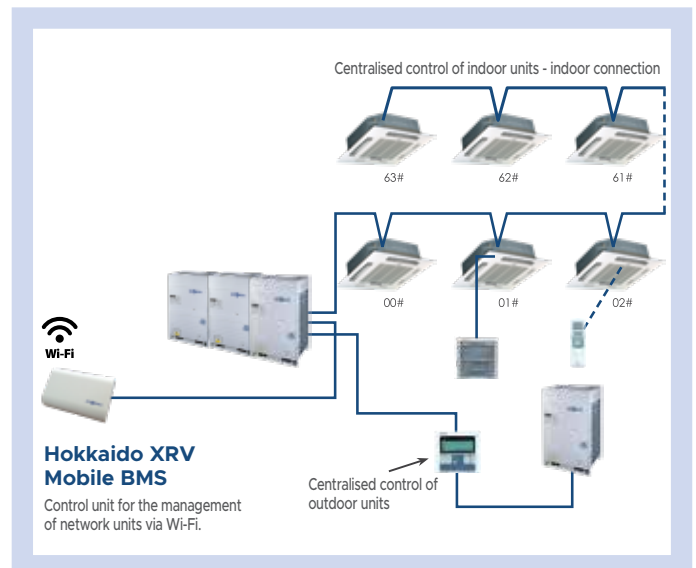


### Outgoing air



Possibility to “hide” outdoor units from view thanks to the available pressure head, up to 20 Pa, which allows outlet air ducting.

### Network wiring diagram



## XRV SMART MODULAR Heat pump - 2 pipes

Model / Combination		HCSU 2524 XRV-K	HCSU 2804 XRV-K	HCSU 2524 XRV-K HCSU 2524 XRV-K	HCSU 2524 XRV-K HCSU 2804 XRV-K	HCSU 2804 XRV-K HCSU 2804 XRV-K
<b>Power</b>	<b>HP</b>	<b>8</b>	<b>10</b>	<b>16</b>	<b>18</b>	<b>20</b>
Rated cooling capacity (1)	kW	25.2	28.0	50.4	53.2	56.0
Rated heating capacity (2)	kW	27.0	31.5	54.0	58.5	63.0
<b>Electrical data</b>						
Power supply	Ph-V-Hz	3-380~415V-50Hz				
Electric consumption in cooling mode (rated)	kW	5.87	7.19	11.74	13.06	14.39
Electric consumption in heating mode (rated)	kW	6.15	7.60	12.30	13.75	15.21
EER performance coefficient in cooling mode	W/W	4.29	3.89	4.29	4.07	3.89
COP performance coefficient in heating mode	W/W	4.39	4.14	4.39	4.25	4.14
<b>Refrigerant circuit/features</b>						
Refrigerant	type (GWP)	R410A (2088)				
	Kg (tons CO2)	9 (18.792)	9 (18.792)	18 (37.584)	18 (37.584)	18 (37.584)
DC Inverter compressor	no. / type	1/Scroll DC Inverter HITACHI		2/Scroll DC Inverter HITACHI		
Refrigerant connections (3)	Liquid	Ø mm (inch)	9.53 (3/8")	9.53 (3/8")	12.7 (1/2")	15.9 (5/8")
	Gas	Ø mm (inch)	22.2 (7/8")	22.2 (7/8")	28.6 (9/8")	28.6 (9/8")
	Parallel oil	Ø mm (inch)	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")
Max pipe length	m	1000	1000	1000	1000	1000
Max height difference between indoor units	m	30	30	30	30	30
Max height difference between outdoor and indoor units	O.U. up-down	m	70 - 110	70 - 110	70 - 110	70 - 110
<b>Product specifications</b>						
Dimensions (4)	LxHxD	mm	960x1615x765	960x1615x765	2020x1615x765	2020x1615x765
Net weight		Kg	200	200	400	400
Sound pressure level at 1 m	max	dB(A)	57	57	62	62
Sound pressure level at 2.5 m	max	dB(A)	49	49	54	54
Fan air flow	max	m³/h	11500	11500	23000	23000
Operating temp. range in cooling mode		°C / DB	-5 / 43	-5 / 43	-5 / 43	-5 / 43
Operating temp. range in heating mode		°C / WB	-20 / 24	-20 / 24	-20 / 24	-20 / 24
<b>Connectable indoor units</b>	<b>no.</b>		<b>13</b>	<b>16</b>	<b>26</b>	<b>29</b>
Capacity of connected indoor unit	%		50 - 130	50 - 130	50 - 130	50 - 130

(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° 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.

(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 90m.

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