

Low temperature hydrobox for VRV Air Conditioning Technical Data HXY-A8



HXY080A8V1BF HXY125A8V1BF

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#### **Features** 1 1 - 1 HXY-A8

#### For high efficiency space heating and cooling

- > Air to water connection to VRV for applications such as underfloor, -> Saves time on system design as all water-side components are fully air handling units, low temperature radiators, ...
- > Leaving water temperature range from 5°C to 45°C without electric -> Space saving contemporary wall mounted design heater
- > Super wide operating range for hot/cold water production from -20 to +43°C ambient outdoor temperature
- integrated with direct control over leaving water temperature
- > No gas connection or oil tank needed
- > Connectable to VRV IV heat pump and heat recovery



# 2 Specifications

## 1 - 1 HXY-A8

Technical specifications					HXY080A8	HXY125A8			
Cooling capacity	Nom.			kW	8.00 (1)	12.5 (1)			
Heating capacity	Nom.			kW	9.00 (2)	14.0 (2)			
Casing	Colour				White				
	Material				Precoated sheet metal				
Dimensions	Unit Height			mm	890				
	Width		mm	480					
	Depth			mm					
	Раскед	Height		mm	415				
	Unit Width			mm					
Woight	Unit k			mm	44.0				
weight	Packed unit kg			kg	470				
Packing	Material			ĸġ	Carton / EPS / PP (Straps)				
racking	Weight			ka	2.8				
PED	Category				Art3§3 / Excluded from scope of PED due to article 1, item 3.6 of 97/23/EC				
Pump	Nr of spe	eds			Inverter cont	rolled			
	Nominal Heating			kPa	85.0 (2)	65.0 (2)			
	ESP unit Cooling			kPa	88.0 (1) 73.0 (1)				
	Power input			W	110	135			
Water side Heat	Туре				Brazed pla	ate			
exchanger	Quantity				1				
	Water Min.			l/min	15.0 (3)				
	flow rate	Heating	Nom.	l/min	25.8 (2)	40.1 (2)			
		Cooling	Nom.	l/min	22.9 (1)	35.8 (1)			
	Insulation material				Foamed synthetic	elastomer			
Expansion vessel	Volume				10				
	Max. water pressure			bar	3				
	Pre pressure			bar	1				
Water filter	Diameter	perforatio	ns	mm	1.0				
	Material				Copper - brass - stainless steel				
Water circuit	Piping co	nnections	diameter	inch	G 1"1/4 (fem	.ale)			
	Safety va	IVe		bar	3				
	Nanome	ter			Yes				
	Drain valve / fill valve				Yes				
	Shut off valve				Yes				
Water circuit	Air purge				Vec				
Refrigerant					R-4104				
nenigerant	GWP				2.087.5				
Refrigerant circuit	Gas side (	diameter		mm	15.9				
	Liquid sig	le diamete	r	mm	952				
Sound pressure	Nom.			dBA	31 (4)				
level									
Operation range	Heating	Ambient	Min.	°C	-20				
			Max.	°C	24				
		Water	Min.	°C	25				
		side	Max.	°C	45				
	Cooling	Ambient	Min.	°CDB	10				
			Max.	°CDB	43				
		Water	Min.	°C	5				
		side	Max.	°C	20				
Flandski I	-:								
Electrical spe	cincatio	ns			HXYU8UA8	HX Y 125A8			
Power supply	Phase				1~				
	Frequenc	у		HZ	50				
	Voltage	Min		V	220-240	1			
	range	ange May		70	-iu 10				
Current	Recomm	ividX.		<sup>γ0</sup>	IU 				
Current - 50Hz	Nominal	al running current		Δ	0/0 2 5				
Wiring connec-	For				2.5				
tions	nower Type of wires				Wire type/size has to be selected according to applicable legislation				
uons	supply				wife type/size has to be selected acco	raing to applicable registation			
	Commu- Quantity				2				
	nication Type of wires				0,75 ~1,25 mm <sup>2</sup> (F1F2)				
	cable	, 0. W			U, U U U U U U U U U U U U U U U U U U				
	For con-	Quantity			2				
	nection Type of wires					² (P1P2)			
	with user								
	interface								
	OT SOL								

(1)Tamb 35°C - LWE 18°C (DT=5°C) | (2)DB/WB 7°C/6°C - LWC 35°C (DT=5°C) | (3)Flow switch setting |



## 2 Specifications 1 - 1 HXY-A8

(4)The sound pressure level is measured via a microphone at a 1m distance from the unit. It is a relative value, depending on the distance and acoustic environment. | Contains fluorinated greenhouse gases

#### Options 3

3 - 1 Options

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Option	Option kit	HXY080A*V1B(F)	HXY125A*V1B(F)
Drain pan	EKHBDPCA2	0	0
Demand PCB	<b>EKRP1AHTA</b>	0	0
Remote user interface	EKRUAHTB	0	0
Backup heater	EKBUHAA6(W1/V3)	0	0
) Wired room thermostat	EKRTWA	0	0
) Wireless room thermostat	EKRTR1	0	0
2) External sensor room thermostat	EKRTETS	0	0

Notes
(1) Requires demand PCB ·EKRP1AHTA·
(2) Can only be used in combination with wireless room thermostat ·EKRTR1·.

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## 4 Dimensional drawings

4 - 1 Dimensional Drawings



# 5 Piping diagrams

5 - 1 Piping Diagrams

## HXY-A8



Thermistor	Description
R1T	Outlet water heat exchanger thermistor
R2T	Inlet water exchanger thermistor
R3T	Refrigerant liquid side thermistor
R4T	Refrigerant gas side thermistor

	Flare conn.	$\langle \rightarrow \rangle$	Check valve	•	Brazed conn.	<u> </u>	Quick coupling
_]	Screw conn.		Flange conn.	×	Pinched pipe	$\rightarrow$	Spinned pipe

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## 6 Wiring diagrams

6 - 1 Wiring Diagrams - Single Phase



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# 6 Wiring diagrams

6 - 2 Notes & Legend

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#### NOTES TO GO THROUGH BEFORE STARTING THE UNIT:

X1M: Field wiring terminal for high voltage X2M: Field wiring terminal for low voltage



#### SWITCHBOX LAYOUT:



. 1 1010 11	istui			
#: Field s	supp	ied		
Part number	1	Description		
A1P		Main PCB (master)		
A2P		User interface PCB		
A3P	+	Control PCB		
A4P	*	Demand PCB		
A5P	*	Remote user interface PCB		
A6P	*	Thermostat PCB		
A7P	*	Receiver PCB		
C1-C3	+	Filter capacitor		
F1U (A*P)		Fuse (T. 3.15A, 250V)		
HAP (A*P)		PCB   FD		
K1F	+	Flectronic expansion valve		
K*R (A3P)		PCB relay		
M1P		Pump		
PC (A7P)	*	Power circuit		
PS (A1P)		Switching power supply		
Q*DI	#	Farth leakage circuit breaker		
R1H (A6P)	*	Humidity sensor		
R1T		Leaving water thermistor		
R1T (A6P)	*	Ambient sensor		
R2T		Returning water thermistor		
R2T	*	External sensor (floor or ambient)		
R3T		Refrigerant liquid thermistor		
R4T		Refrigerant gas thermistor		
S1L		Flow switch		
S1S	#	Thermostat input 1		
S2S	#	Thermostat input 2		
S3S	#	Operation ON input		
S4S	#	Operation OFF input		
SS1 (A1P)		Selector switch (emergency)		
SS1 (A2P)	1	Selector switch (main/sub)		
SS1 (A5P)	*	Selector switch (main/sub)		
T1R	1	Diode bridge		
V1C - V2C	1	Ferrite core noise filter		
X1M - X2M	1	Terminal strip		
X*A (A*P)	1	PCB corrector		
X*M (A*P)	*	PCB terminal strip		
71F (A1P)	1	Noise filter		

F

LEGEND:

\*: Field installed option

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**External connection diagrams External Connection Diagrams** 7 - 1

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# 8 Operation range

8 - 1 Operation Range

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Daikin Europe N.V. Naamloze Vennootschap - Zandvoordestraat 300 - 8400 Oostende - Belgium - www.daikin.eu - BE 0412 120 336 - RPR Oostende (Responsible Editor)



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