





-  **Indoor Units**  
VRF indoor units
-  **Ventilation**  
Heat recovery ventilator (HRV)
-  **Control Systems**  
Smart control systems
-  **AHU Connection Kit**  
Connect to Midea or third party DX AHU



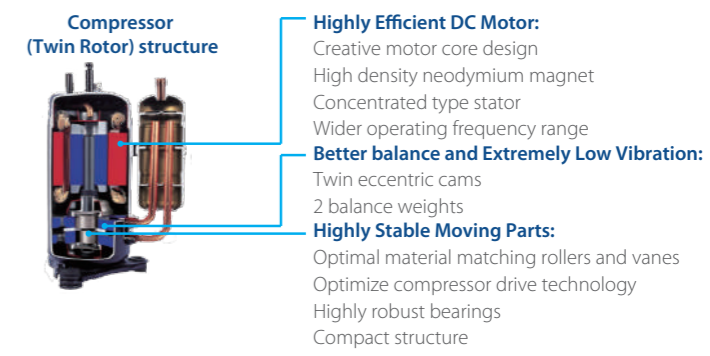
# Mini VVR Cooltek CO Series Heat Pump

Optimized design for small buildings

- ▶ Two Options: Standard and Mini C Series
- ▶ Capacity Up to 18kw
- ▶ Connectable Indoor Units Quantity up to 9
- ▶ Refrigerant Cooling PCB (Available for Mini C Series Only)
- ▶ Precise Oil Control Technology
- ▶ Advanced Silence Technology
- ▶ Compact, Easy Installation






## DC Inverter Compressor

DC inverter compressor makes the output of the outdoor unit to be modulated by the cooling or heating demands of the zone that it controls. This advanced system ensures precise temperature regulation and highly efficient energy usage, making a significant contribution to the limiting the impact on the environment.



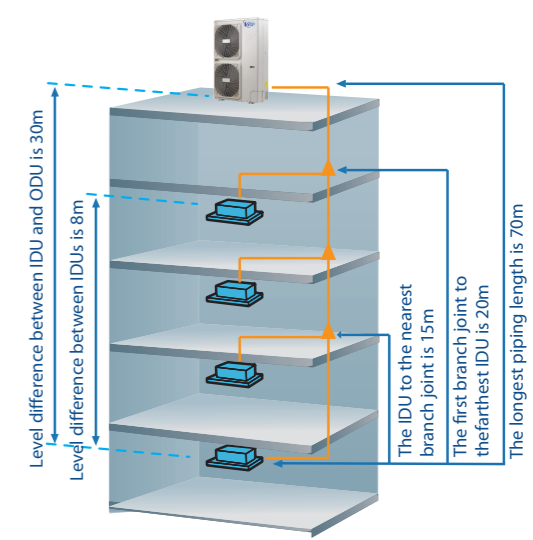
## Wide Capacity Range

Mini VVR has two options, standard series and Mini C series. For standard series, it has 6 models from 8kW to 18kW. For Mini C series, it has 5 models from 8kW to 16kW. The Mini VVR is perfect for commercial and residential applications: small offices, villas, apartments, shops, etc.

Mini C series			Standard series	
8kW	10-12kW	14-16kW	10.5kW	12-16kW
				

## Long Piping Capability

Piping length	Capability (m(ft.))				
	Mini C series			Standard series	
	8kW	10-12kW	14-16kW	10.5kW	12-16kW
Total piping length	50(164)	65(213)	100(328)	100(328)	100(328)
Longest piping length-actual/equivalent	35/40 (115/131)	45/50 (148/164)	60/70 (197/230)	45/50 (148/164)	60/70 (197/230)
Longest piping length after first branch	20(66)	20(66)	20(66)	20(66)	20(66)
Longest piping length after nearest branch	15(49)	15(49)	15(49)	15(49)	15(49)
Largest level difference between IDUs and ODU-ODU up/down	10/10 (33/33)	20/20 (66/66)	30/20 (98/66)	30/20 (98/66)	30/20 (98/66)
Largest level difference between IDUs	8(26)	8(26)	8(26)	8(26)	8(26)

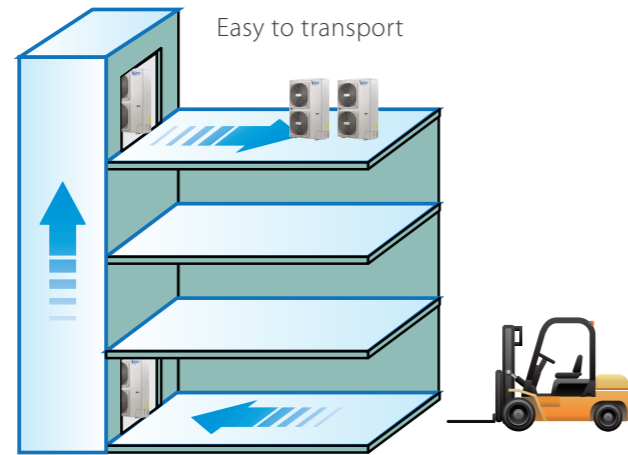


### More Convenient Piping Connector – Branch Box

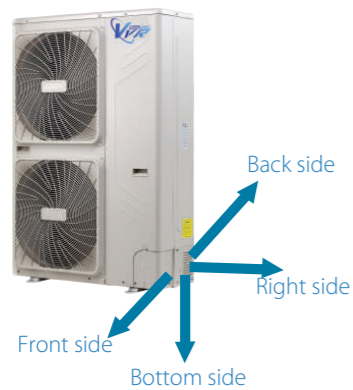


### Easy Installation

The mini VRF can be transported by elevator which makes installation dramatically easy, and effectively reduces time and labor thanks to the small size.



### Four-Way Piping Connection



A four-direction space is available for connecting pipes and wiring in various installation sites.

### Mini VRF Cooltek CO (Standard Series) - Heat 208~230V, 1N, 60Hz

HP			4	4.5	5	6
Model			OURF-V105H/DVN1	OURF-V120H/DVN1	OURF-V140H/DVN1	OURF-V160H/DVN1
Power supply		V/N/Hz	208-230/1/60			
Cooling <sup>1</sup>	Capacity	kW	10.5	12.0	14.0	15.5
		kBtu/h	35.8	40.9	47.8	52.9
	Power input	kW	2.68	3.25	3.95	4.52
	EER		3.92	3.69	3.54	3.43
Heating <sup>2</sup>	Capacity	kW	11.5	13.2	15.4	17.0
		kBtu/h	39.2	45.0	52.5	58.0
	Power input	kW	2.90	3.47	4.16	4.77
	COP		3.97	3.80	3.70	3.56
Connectable indoor unit	Total capacity		45~130% of outdoor unit capacity			
	Max. quantity		5	6	6	7
Compressor	Type		DC Inverter			
	Quantity		1	1	1	1
Fan motor	Type		DC motor			
	Quantity		1	2	2	2
Refrigerant	Type		R410A			
	Factory charging	kg(lbs.)	3(6.6)	3.3(7.3)	3.9(8.6)	3.9(8.6)
Pipe connections <sup>3</sup>	Liquid pipe	mm(in.)	Φ9.53(Φ3/8)	Φ9.53(Φ3/8)	Φ9.53(Φ3/8)	Φ9.53(Φ3/8)
	Gas pipe	mm(in.)	Φ15.9(Φ5/8)	Φ15.9(Φ5/8)	Φ15.9(Φ5/8)	Φ19.1(Φ3/4)
Air flow rate		m <sup>3</sup> /h	5100	6000	6000	6000
Sound pressure level <sup>4</sup>		dB(A)	57	57	57	57
Net dimension (WxHxD)		mm	1075x966x396	900x1327x400	900x1327x400	900x1327x400
		inch	42-21/64 x38-1/32 x15-19/32	35-7/14x52-1/4x15-3/4	35-7/14x52-1/4x15-3/4	35-7/14x52-1/4x15-3/4
Packing size (WxHxD)		mm	1120x1100x435	1030x1456x435	1030x1456x435	1030x1456x435
		inch	44-3/32 x43-5/16 x17-1/8	40-9/16x57-5/16x17-1/8	40-9/16x57-5/16x17-1/8	40-9/16x57-5/16x17-1/8
Net weight		kg(lbs.)	78(171.9)	95(209.4)	95(209.4)	102(224.9)
Gross weight		kg(lbs.)	85(187.3)	106(233.7)	106(233.7)	113(249.1)
Operating temperature range		°C(°F)	Cooling -15~43°C (5~109.4°F) Heating -15~27°C(5~80.6°F)			

Notes:  
 1. Indoor temperature 27°C(80.6°F) DB, 19°C(66.2°F) WB; outdoor temperature 35°C(95°F) DB; equivalent refrigerant piping length 7.5m(24.6ft.) with zero level difference.  
 2. Indoor temperature 20°C(68°F) DB/15°C(59°F) WB; Outdoor temperature 7°C(44.6°F) DB/6°C(42.8°F) WB; equivalent refrigerant piping length 7.5m(24.6ft.) with zero level difference.  
 3. Diameters given are those of the unit's accessories.  
 4. Sound values are measured in a semi-anechoic room, at a position of 1m(3.28ft.) in front of the unit and 1m(3.28ft.) above the floor.

## Mini WR Cooltek CO (Mini C series) - Heat Pump

220~240V, 1N, 50(60)Hz

HP		3		4		4.5	
Model		OURF-V80H/DHN1		OURF-V100H/DHN1		OURF-V120H/DHN1	
Power supply		V/N/Hz		220-240/1/ 50(60)			
Cooling <sup>1</sup>	Capacity	kW	8.0	10.0	12.0		
		kBtu/h	27.3	34.1	40.9		
	Power input	kW	2	2.55	3.1		
	EER		4	3.92	3.87		
Heating <sup>2</sup>	Capacity	kW	9.0	12.0	14.0		
		kBtu/h	30.7	40.9	47.8		
	Power input	kW	1.95	2.97	3.45		
	COP		4.62	4.04	4.06		
Connectable indoor unit	Total capacity		45~130% of outdoor unit capacity				
	Max. quantity		4	6	7		
Compressor	Type		DC inverter				
	Quantity		1				
Fan motor	Type		DC				
	Quantity		1				
Refrigerant	Type		R410A				
	Factory charge	kg(lbs.)	2.2(4.8)	2.35(5.2)	3(6.6)		
Pipe connections <sup>3</sup>	Liquid pipe	mm(in.)	Φ9.53(Φ3/8)				
	Gas pipe	mm(in.)	Φ15.9(Φ5/8)				
Airflow rate	m <sup>3</sup> /h	3700	5200	5000			
Sound pressure level <sup>4</sup>	dB(A)	54	54	56			
Net dimension (WxHxD)	mm	982x712x440	950x840x426				
	inch	38-21/32x28-1/32x17-21/64	37-13/32x33-5/64x16-49/64				
Packed dimensions (WxHxD)	mm	1048x810x485	1025x950x510				
	inch	41-17/64x31-57/64x193/32	40-23/64x37-13/32x20-5/64				
Net weight	kg(lbs.)	53(116.6)	71.5(157.3)	83(182.6)			
Gross weight	kg(lbs.)	57.5(126.5)	81(178.2)	92(202.4)			
Operating temperature range	°C(°F)	Cooling: -5~55(23~131), Heating: -15~27(5~80.6)					

## Notes:

- Indoor temperature 27°C(80.6°F) DB, 19°C(66.2°F) WB; outdoor temperature 35°C(95°F) DB; equivalent refrigerant piping length 7.5m(24.6ft.) with zero level difference.
- Indoor temperature 20°C(68°F) DB/15°C(59°F) WB; Outdoor temperature 7°C(44.6°F) DB/6°C(42.8°F) WB; equivalent refrigerant piping length 7.5m(24.6ft.) with zero level difference.
- Diameters given are those of the unit's accessories.
- Sound values are measured in a semi-anechoic room, at a position of 1m(3.28ft.) in front of the unit and 1m(3.28ft.) above the floor.

HP		5		6	
Model		OURF-V140H/DHN1		OURF-V160H/DHN1	
Power supply		V/N/Hz		220-240/1/ 50(60)	
Cooling <sup>1</sup>	Capacity	kW	14.0	15.5	
		kBtu/h	47.8	52.9	
	Power input	kW	3.75	4.8	
	EER		3.73	3.23	
Heating <sup>2</sup>	Capacity	kW	16.0	18.0	
		kBtu/h	54.6	61.4	
	Power input	kW	3.85	4.65	
	COP		4.16	3.87	
Connectable indoor unit	Total capacity		45~130% of outdoor unit capacity		
	Max. quantity		8	9	
Compressor	Type		DC inverter		
	Quantity		1		
Fan motor	Type		DC		
	Quantity		1		
Refrigerant	Type		R410A		
	Factory charge	kg(lbs.)	3.4(7.5)	3.8(8.4)	
Pipe connections <sup>3</sup>	Liquid pipe	mm(in.)	Φ9.53(Φ3/8)		
	Gas pipe	mm(in.)	Φ15.9(Φ5/8)		
Airflow rate	m <sup>3</sup> /h	5400	5200		
Sound pressure level <sup>4</sup>	dB(A)	56	56		
Net dimension (WxHxD)	mm	1040x865x523			
	inch	40-15/16x34-1/16x20-19/32			
Packed dimensions (WxHxD)	mm	1120x980x560			
	inch	44-3/32x38-37/64x22-3/64			
Net weight	kg(lbs.)	90.4(198.9)	94.4(207.7)		
Gross weight	kg(lbs.)	100.4(220.9)	104.4(229.7)		
Operating temperature range	°C(°F)	Cooling: -5~55(23~131), Heating: -15~27(5~80.6)			

## Notes:

- Indoor temperature 27°C(80.6°F) DB, 19°C(66.2°F) WB; outdoor temperature 35°C(95°F) DB; equivalent refrigerant piping length 7.5m(24.6ft.) with zero level difference.
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