



## (55) Series Solar Assisted VRF Modular Heat Pump

- Connects to 24 to 32 Panels (≥ Total 12.5KW)
- Runs on Solar & AC
- 72,000 & 96,000 BTU Cooling & Heating Capacities
- MC4 Connectors for Direct Solar Panel Hookup
- No Batteries Required





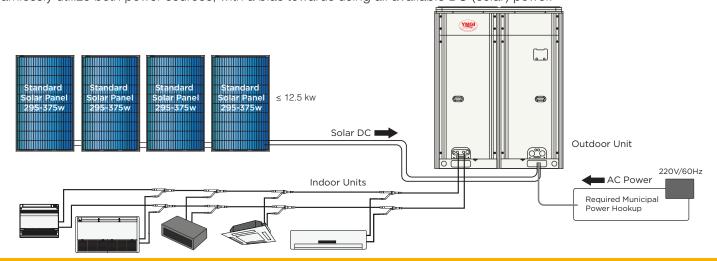


## Solar Powered State-of-the-Art Cooling and Heating

SOLAR SERIES VRF systems are cutting edge Heat Pump technology. Variable Refrigerant Flow, or VRF technology, is a heating and cooling system that routes 2 pipe refrigerant circuits from one outdoor unit to up to 20 indoor units. Using Variable Refrigerant Flow allows precise climate control at high efficiency even in extreme temperature ranges (operating at 80% efficiency at -22° F). SOLAR SERIES VRF systems are modular, and can be installed in modules of 3 units. Depending on the size of the PV Solar Panel array you install, SOLAR SERIES VRF systems can be wired directly to an array of up to 32 solar panels to offset power consumption, and have been tested up to 40 SEER.

A Solar Assisted VRF systems heat or cool multiple zones. Traditional refrigerant systems are either "on" and operating at 100% capacity or "off". VRF systems utilize inverter compressor technology, so they can operate at partial loads in the range of 30 to 70%, providing more consistent indoor temperatures, humidity levels, and increased energy efficiency.

No power is exported by the system, so no net metering agreement or special meter is required. The system can seamlessly utilize both power sources, with a bias towards using all available DC (solar) power.







## **Less Installation Space**

VRF Systems can be installed in smaller areas due to its compact footprint.

## **More Installation Options**

SOLAR SERIES VRF systems offer a variety of Indoor Unit options. If you're doing a retrofit, the SOLAR SERIES VRF can use our ducted Indoor Units and bolt onto existing duct work.



For new construction, we offer 4 different Indoor Units that allow you to go ductless, giving building occupants the flexibility to control their comfort at whatever level they would like in the room they are occupying.









Model		Unit	VRFO-96VP-S2C(55)5	VRFO-192VP-S2C(55)5	VRFO-288VP-S2C(55)5
Cooling Capacity		Btu/h	96,000	192,000	288,000
Cooling Capacity		kW	28.1	56.2	84.3
Heating Capacity		Btu/h	108,000	216,000	324,000
Heating Capacity		kW	31.6	63.2	94.8
		47 °F	100% / 108,000	100% / 108,000	100% / 108,000
Heating Capacities at Different		17 °F	100% / 108,000	100% / 108,000	100% / 108,000
OD Ambient Temperatures		-4 °F	100% / 108,000	100% / 108,000	100% / 108,000
		-22 °F	80% / 86,400	80% / 86,400	80% / 86,400
EER Ducted / Mixed / Non-Ducted			11.20 / 12.20 / 13.20	11.20 / 12.20 / 13.20	11.20 / 12.20 / 13.20
IEER Ducted / Mixed / Non-Ducted			20.00 / 22.50 / 25.00	20.00 / 22.50 / 25.00	20.00 / 22.50 / 25.00
COP 47 Ducted / Mixed / Non-Ducted			3.30 / 3.65 / 4.00	3.30 / 3.65 / 4.00	3.30 / 3.65 / 4.00
COP 17 Ducted / Mixed / Non-Ducted			2.25 / 2.33 / 2.40	2.25 / 2.33 / 2.40	2.25 / 2.33 / 2.40
Air flow volume		m³/h	14000	14000	14000
		CFM	8240	8240	8240
Sound Pressure Level		dB	61/71	61/71	61/71
ESP Power		WC	0.33"	0.33"	0.33"
Power Supply		V/Ø/Hz	208~230/3/60	2 x 208~230/3/60	3 x 208~230/3/60
Power Input Cooling	Ductless	kW	7.30	7.30	7.30
Power Input Heating	Ductless	kW	7.85	7.85	7.85
MCA		А	45	2 x 45	3 x 45
MOP		А	70	70	70
Gas pipe   Liquid Pipe		in.	3/8"   7/8"	2 x (3/8"   7/8")	3 x (3/8"   7/8")
Connection Method		-	Brazing	Brazing	Brazing
Compressor Manufacturer		-	Hitachi	Hitachi	Hitachi
Compressor Type		-	Inverter Scroll Hermetic	Inverter Scroll Hermetic	Inverter Scroll Hermetic
Compressor Quantity		No.	2	4	6
Motor Type		-	Permanent Magnet Synchronous Motor		
Fan Quantity		-	2	4	6
SEER (Without / With Solar Panels)		-	20 / 26-38	20 / 26-38	20 / 26-38
Capacity Adjustment Range		%~%	12%~120%	12%~120%	12%~120%
Maximum No. of IDU		units	20	40	60
Max. Equivalent Connection Pipe Length		feet	541-1/4	541-1/4	541-1/4
Cooling Operation Ambient Temp. Range		°F	14 ~ 126°	14 ~ 126°	14 ~ 126°
Heating Operation Ambient Temp. Range		°F	-22 ~75°	-22 ~75°	-22 ~75°
R410A Refrigerant Charge		OZ	398	2 x 398	3 x398
Unit Dimensions (WxHxD)		in.	52 3/4 x 63 1/4 x 30 1/8	52 3/4 x 63 1/4 x 30 1/8	52 3/4 x 63 1/4 x 30 1/8
Net Weight		lbs	749	2 x749	3 x 749
Maximum Number of Solar Panels @ 300W		Pcs	32	64	96

All specifications subject to change without notice. Images are for reference only. See website full details on operation and requirements.

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