

## THE NEW REFERENCE FOR 'SLEEK' AND 'SAVINGS'.



Blue Star is India's leading HVAC solutions provider with more than 75 years of experience in this industry.

Blue Star is always committed to come up with products very suitable for Indian tropical conditions. VRF V S is new Side Discharge VRF System with many distinguishing features very relevant for India.

VRF VS that was developed, tested and validated in our NABL accredited R&D lab is being manufactured in Blue Star's State of the art manufacturing facility at Dadra. It is very sleek and compact, powerful and efficient product.

Apart from its wide range of products and solutions, Blue Star is also committed to its customers with wide service network across the length and breadth of the country.

#### **VRF V S - Outdoor Units Line up**



### Indoor Units Line up

Appearance	Туре	0.6TR	0.8TR	1TR	1.3TR	1 <i>.</i> 5TR	1.6TR	1.7TR	2TR	2.3TR	2.5TR	2.8TR	3TR	3.2TR	4TR	5TR	6TR	8TR	10TR
	Hi-Wall Units		•	•	•	•		•	•		•	•							
	Four-Way Cassettes			•	•	•		•	•	•		•		•	•	•			
	Compact Cassettes	•	•	•	•	•													
	One-Way Cassettes	•	•	•	•		•		•										
	Two-Way Cassettes	•	•	•	•	•		•	•										
	Floor Cum Ceiling Mounted Units					•			•				•		•	•			
	Verticools								•	•		•		•	•				
	Concealed Splits		•	•	•	•			•										
	Ductable IDUs					•			•		•		•		•	•	•	•	
	Floor Mounted Packaged Units										1					•		•	•

	Treated Fresh Air Unit	3.5 TR	5.5 TR	6.8 TR
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AHU Kit	5TR	6.5 TR	8 TR	10 TR	12.5TR	15 TR	
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### Wide Range of Controllers



# **VRF V S Features**

#### **Compact Design with Less Foot Print**

#### **Sleek and Compact Design:**

This unit is very suitable for applications where floor space is limited or not available.

Light weight and compact construction makes it suitable for mounting on wall or balconies saving floor area.





#### **Efficient DC Inverter Compressors**

Optimally selected inverter compressors used in these units are very efficient at partial load conditions.

Special design motor with permanent rare earth magnet and concentrated winding increases the efficiency of the compressor by 7%

Superior internal oil lubrication results in reliable operation



#### **Unique Design**

- With CFD analysis, outdoor units are designed for maximum airflow with minimum pressure drop
- Condenser coil are made out of helical inner grooved copper tubes for maximum heat transfer efficiency
- Coated Aluminium fins for corrosion resistance
- Refrigerant cooled heat sink ensures reliable operation even at very high ambient temperature as high as 56 deg. C
- Weather proof design with Power coated sheet metal enclosure





#### **Special BLDC Motor**



Special BLDC type fan motor used in this unit is 30% more efficient as compared to conventional motors.

It gives flexible capacity control with unique speed control design logic

#### **Conformal Coating for PCBs**

All the PCBs are coated with a special acrylic-based polymer film. This special conformal coat adheres to the norms of circuit board topology

This special coating protects PCBs from the harmful effects of Moisture, Heat, Fungus, Chemical, Dust



#### **Economy Mode for Power Saving**

In Economy mode, we can set the capacity of the unit at 25%, 50 % and 75% as per the requirement. This will help for optimal utilisation of capacity to match with the required load, which in turn can result in power savings

This feature also helps to run the system with lower capacity power back generator



Utilise AC for critical spaces

#### **Quiet Mode Operation**

Quiet mode operation is helpful in night time when ambient noise is relatively lower and noise from AC can be disturbing for the occupants in the nearby areas. With this feature, the outdoor unit can be made to operate at lower speed of condenser fan motor and compressor.



#### **Longer Refrigerant Piping**

Longer refrigerant pipe length as high as 300m total length is possible. Locating the outdoor unit away from the conditioned space can improve the aesthetics of the building. Level difference between outdoor and indoor units can be as high as 50 m.



#### **AHU Operation with VRF V S System**

AHUs can be integrated with VRF V S outdoor units with the help of AHU kits.

With specially designed Blue Star AHU kit, we can connect customised AHUs to VRF outdoor units to suit various applications like pharma requirements, operation theatres in hospitals, function halls, banquet hall etc.

With the help of AHU kits, Blue Star's Side Discharge VRF System can be used for variety of applications without any limitation.

Along with AHUs, other conventional VRF indoor units can also be integrated. This feature is very unique to Blue Star VRF System.



#### **Key Card and Motion Sensor Control**

This feature is very useful in applications like hotels, hospitals or hostel rooms for ON/OFF of the indoor units through key card access.

This feature is inbuilt with most of the indoor units.

This can also be integrated with motion sensors as per the requirement.



#### **Technical Data- VRF V S**

		Si	de Discharge	VRF Outdoor U	nits - Technical	Data	-	-	-							
Description	Unit	IVRFB-04SC/SH	IVRFB-05SC/SH	IVRFB-06SC/SH	IVRFB-08SC/SH	IVRFB-10SC/SH	IVRFB-12SC/SH	IVRFB-14SC/SH	IVRFB-16SC/SH							
Capacity	HP	4	5	6	8	10	12	14	16							
Nominal Cooling Capacity	TR	3.2	4	4.8	6.4	8	9.6	11.2	12.8							
Nominal Cooling Capacity	kW	11.2	14.0	16.9	22.4	28.0	33.6	39.4	45.0							
Nominal Heating Capacity	kW	12.3	15.4	18.6	24.6	31.0	37.0	43	49.5							
Dimensions WxDxH	mm	900 x 350 x 1215	900 x 350 x 1215	900 x 350 x 1215	1020 x 420 x 1465	1020 x 420 x 1465	1020 x 420 x 1465	1320X420X1640	1320X420X1640							
Net Weight	kg	95/97	101/103	111/114	153/156	163/166	176/180	236/240	238/242							
Operating Temperature							10 deg.C to 56 deg. C									
Range	Heating Mode				-10 deg.C to	24 deg. C		400/								
Electrical Power Supply		220-240/1PH/50Hz ±10% 380-415/3PH/50Hz ±10%														
Refrigerant				•	R41	0A										
Refrigerant Pre Charge	kg	3.3	3.7	4.2	5.7	7.9	9	11	11.5							
	Quantity-No.	1	1	1	1	1	1	1	1							
Compressor	Туре	Hermetically Sealed Twin Rotary DC Inverter Hermetically Sealed DC In Scroll														
Type of Condenser					Tube Fin Type	e Air cooled										
Fan Type					Axial Flo	w Туре										
No. of Fan	No	1	1	1	2	2	2	2	2							
Air Quantity	CFM	4000	4000	4000	5500	6400	6400	7700	7700							
Motor Type		Brushless DC														
Motor Quantity	No.	1	1	1	2	2	2	2	2							
Power supply to Motor					230V, 50Hz, 5	Single Phase										
Field Suction Pipe-OD	mm	Φ15.9	Ф15.9	Φ19.01	Φ22.2	Φ22.2	Φ28.6	Φ28.6	Φ28.6							
Field Liquid Pipe-OD	mm	Φ9.52	Ф9.52	Φ9.52	Ф9.52	Ф9.52	Φ12.7	Φ12.7	Φ12.7							

