

## Treated Fresh Air System



Ducted type central air conditioners help to prevent the spread of infectious contaminants when used properly with prescribed guidelines

More Fresh air circulation rates help to dilute the indoor contaminants including viral particles in an air conditioned space. It becomes necessary to ensure increased fresh air intake through various means.

Blue Star's new range of DX type Treated Fresh Units are specially designed to cater to the requirements of air conditioned spaces where fresh air intake through the conventional air conditioners is difficult.

For example, in a large Showroom, it is very difficult to make too many external wall openings for fresh air intake due to safety and aesthetics related issues. With Blue Star Treated Fresh Air unit, outside air can be treated and distributed to the conditioned space uniformly with ducting arrangement with minimum openings. These units can also be used along with other non ducted type indoor units like cassettes or hi wall indoor units which do not have provision to draw outside fresh air.

These units are specially made to filter, precool and dehumidify the outside air and inject into the conditioned space to enhance ventilation for better Indoor Air Quality with more oxygen. This is very simple readymade system, which is very easy to install and maintain.

### **Enhanced Ventilation enhances infection control**

When air is diluted, the concentration of particles carrying microorganisms if present will be reduced. It will be easy to handle and remove the particles with less concentration with certain treatments. Enclosed spaces with concentrated people crowd with poor ventilation may increase the chances of infection spread.

Enhanced ventilation and clean environment result in better Indoor Air Quality too. With outside fresh air added, the conditioned space is kept under positive pressure thus preventing outside polluted air to get in through other openings. This ensures dust free clean inside atmosphere.

Hence, it is very important to provide precooled, dehumidified outside fresh air with filtration. This is possible only with the help of special treated fresh air units.

### **BLUE STAR TREATED FRESH AIR UNITS**

There are 3 different models of Treat Fresh Units available: 750CFM, 1000 CFM and 1150CFM.



**An Air conditioned show room with Blue Star Treated Fresh Air Unit enhances shopping experience for customers.**



### Features of Blue Star's new series Treated Fresh Air units:

Blue Star's new series TFA unit is a specially designed DX system which provides pre-cooled, dehumidified and clean fresh air to the conditioned spaces. Compared to other fresh air treatment system, it is relatively simple to design, install and operate.

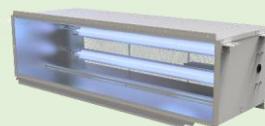
This system comes with many distinguishing features

- ❖ These units can work even at very high ambient temperature of 52 deg. C.
- ❖ There is no deration at higher ambient temperature conditions
- ❖ Multiple speeds and hence multiple CFM options is possible
- ❖ Longer ducting length with 8mm ESP
- ❖ Longer Refrigerant piping length upto 30 m
- ❖ It is equipped with a sophisticated controller with touch screen operation.

- Option for cordless operation
- Timer based filter alarm
- Display for supply air and entry air temperatures
- 3 speed setting
- Hand set lock facility
- Group Control and BMS options



It will be very easy to treat the air when diluted. Treated fresh air system improves the effectiveness of special active filters, UVGI air disinfection system that can be used to deactivate infectious particles including viral contaminations.





DX Type TFA System: Technical Data				
Model		DSAT-42R3	DSAT-66R3	DSAT-82R3
Cooling Capacity	KW	12.3	19.2	23.9
	TR	3.5	5.5	6.8
Airflow (H/M/L)	CFM	750/690/630	1000/950/880	1150/1010/930
External Static Pressure	Pa	80	80	80
Filter		Non-woven polyester media enclosed by HDFE mesh		
Power Supply		380/ 420 V, 3 ph, 50Hz, AC Supply		
External Finish		Pure Polyester Power Coated		
<b>Refrigerant Pipe Connections</b>				
Suction Φ	mm (In)	15.87 (5/8")	22.2 (7/8")	22.2 (7/8")
Liquid Φ	mm (In)	9.5 (3/8")	9.5 (3/8")	12.7 (1/2")
Refrigerant		R 410A		
Ambient Temperature Operating Range	deg, C	25 deg. C - 52 deg. C		
<b>INDOOR UNIT</b>				
Unit Dimension(WXDXH)	mm	760X950X390	900X950X390	1100X1100X390
Net Weight	kg	55	67	88
Blower Type		Centrifugal forward curved, Double inlet, Double width		
Motor Type		Ventilated, Resilient Mounting		
Power supply	V/Ph/Hz	230V, 1 ph, 50Hz, AC Supply	230V, 1 ph, 50Hz, AC Supply	230V, 1 ph, 50Hz, AC Supply
Power Output	W	187	228	228
No. of Speeds		3	3	3
Drain Connection Φ	mm	19.3 (3/4")	19.3 (3/4")	19.3 (3/4")
Controller		Microprocessor Based with Touch Screen operated handset		
<b>OUTDOOR UNIT</b>				
Quantity	No.	1	1	1
Overall Dimensions (WXDXH)	mm	1020X420X655	1020X420X945	1230X550X945
Net Weight	kg	75	94	106
<b>Compressor</b>				
Quantity	No.	1	1	1
Type		Hermtically sealed, Twin rotary	Hermtically Sealed, Scroll	Hermtically Sealed, Scroll
Power Supply	V/PH/HZ	380/ 420 V, 3 ph, 50Hz, AC Supply	380/ 420 V, 3 ph, 50Hz, AC Supply	380/ 420 V, 3 ph, 50Hz, AC Supply
Fan type		Propeller		
<b>Motor for Fan</b>				
Type		Face mounting, Drip proof		
Quantity	No.	1	1	1
Power Supply	V/HZ/PH	230V, 1 ph, 50Hz, AC Supply	230V, 1 ph, 50Hz, AC Supply	415 V, 3 ph, 50Hz, AC Supply
Power Output	W	187	250	370
Specifications are subject to change without any prior notification due to continuous product improvement				