

TICA participates in the ECC programme for AHU. Check ongoing validity of certificate: [www.eurovent-certification.com](http://www.eurovent-certification.com) or [www.certiflash.com](http://www.certiflash.com)

Project Name : AHU	Material Code :	Selection Date : 30 August, 2018
Order Name : UPF	Product No. :	Date Printed : 30 August, 2018
Unit Model : TBC1922CHW-S	Version No. :	Editor :
Job Name : AHU01	Serial No. :	Quantity : 1

## Basic AHU Information

Supply Air Vol. : 15827 CFM	Supply Air EP : 1.9 in.wg
Exhaust Air Vol. : 0 CFM	Exhaust Air EP : 0.0 in.wg
Fresh Air Vol. : 1247 CFM	2nd Ret. Air Vol. : 0 CFM
Supply Air Spd : - m/s	Exhaust Air Spd : - m/s
(Unit Section, Vclass)	(Unit Section, Vclass)
Eurovent Energy Efficiency Class : <b>DC</b> ( 2016 )	ErP Identification Code : UVU
Door Location : Left *(Bottom Layer)	Install Location : Indoor
Install Method : CPT	External Leakage Rate : L2
Size : 2080*2300*3200 mm , H*W*L	Max. Internal Leakage Rate : - %
Unit Weight : 1324 kg	Design Outdoor Temperature (Basing on thermal bridge) : 41.0 °C
Section 1 : 2080*2300*3200 mm , H*W*L	Weight : 1324 kg

The above dimensions are for reference only. For actual sizes, please contact with manufacturer.

## Panel Specifications

Outer Panel : 0.5mm Pre-coated Steel	Inner Panel : 0.5mm Galvanised Steel
Inner Panel (Bot) : 0.7mm Galvanised Steel	Panel Thick : 50 mm
Panel Spec 1/2/3 : TBC1922/-/-	Base Height : 80 mm

## Supply Air Side

### 1 Inlet Section TBC1922CHW-S

Opening : GI Damper	Door Type : Hinged
Opening Size : 400*1600mm H*W	Door Direction : Left
Location : Top	Section Depth : 600 mm
Actuator Cont. : Manual	Actuator Model : -
Press. Drop : 47 Pa	DP Length : - mm
Mixing Ratio : 92.1 %	

\*Note : Please refer to appended drawing for the location of opening on side panel.

### 2 Primary Filter TBC1922CHW-S

Install Method : Frame	Frame Mat. : Galvanized Steel
Filter Type : Flat	Filter Brand : TICA
Filter Grade : G4 (90% Arr)	Spare : 0 Set
Initial PD : 70 Pa	Design PD : 125 Pa
Final PD : 180 Pa	Air Velocity : 0.15 m/s
Section Depth : 100 mm	
Door Spec. : -	Door Side : -
Self Purchase : No	



## Technical Report

Database Ver. : 20171109

Software Ver. : 2.0

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### Secondary Filter

TBC1922CHW-S

Install Method	: Frame	Frame Mat.	: Galvanized Steel
Filter Type	: Bag	Filter Brand	: TICA
Filter Grade	: F7 (80%Dus)	Spare	: 0 Set
Initial PD	: 110 Pa	Design PD	: 165 Pa
Final PD	: 220 Pa	Air Velocity	: 0.15 m/s
Section Depth	: 600 mm	Self Purchase	: No
Door Spec.	: -	Door Side	: -

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### Cooling Coil

TBC1922CHW-S

Coil Model	: 5PWF 6L-22Tx1990/22Tx1990	Fin Material	: Aluminium
Tube Material	: Copper	Frame Mat.	: Galvalume Zinc
No. of Coils	: 2	Cool Cap.	: 143.17 / 143.17 kW
Entering DB/WB	: 25.0 / 15.6 °C	Leaving DB/WB	: 9.3 / 9.3 °C
Entering RH	: 36.7 %	Leaving RH	: 99.5 %
PD	: 156 Pa	Water Temp	: 7.0 / 12.0 °C
Coil Dry PD	: 156 Pa	Coil Wet PD	: 203 Pa
Air Velocity	: 2.24 m/s	Water PD	: 23.88 kPa
Connection	: Thread	Water Flow	: 6.8 L/s
Header Size	: DN50	Tube Loc	: Left
DP Material	: Galvanized Steel	DP Loc	: Left
Section Depth	: 700 mm	DP Length	: 700 mm

Note1 : Fan selection is based on coil Dry PD.

Note2 : PD is the sum of coil dry PD and moisture eliminator PD.

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### Supply Fan

TBC1922CHW-S

New Air Vol	: 15825 CFM	Motor Type	: TEFC-IP55
Blower Brand	: Yilida	Motor Pwr-Pole	: 15-4 kW-Pole
Blower Type	: Forward Curved	Motor Brand	: ABB
Blower Model	: SYD500K	Motor Supply	: 380V/3Ph/50Hz
Supply Dir.	: FT	Motor Hz Type	: Single Speed
Supply Air Vel	: 18.35 m/s	Motor Eff	: 3rd Level Efficiency
Blower Spd	: 1014 RPM	Motor Loc	: Side Motor

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Max Spd : 1300 RPM	Air Velocity : 1.79 m/s
TSP : 3.88 in.wg	(Unit Section, Vclass)
Blower OP : 13.24 kW	Wiring Loc : Left
Total Eff : 65.9 %	Door Type : Hinged m/s
Power Input : 15.14 kW	Door Loc : Left
Outlet Type : None	Section Depth : 1200 mm
SFP int : 747.8 W/(m³/s)	

Note1 : The fan system effects are taken into account in the fan performance.

Note2 : Air density is set at 1.2kg/m³.

## SOUND

Sound Power		63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	Total(dBA)
Inlet	dB	65.33	76.64	79.14	88.64	86.17	86.47	84.17	77.07	93.08
Outlet	dB	65.33	76.64	79.14	88.64	86.17	86.47	84.17	77.07	93.08
Airborne	dB	66.93	78.10	77.00	80.70	73.85	75.55	74.19	69.44	85.21