

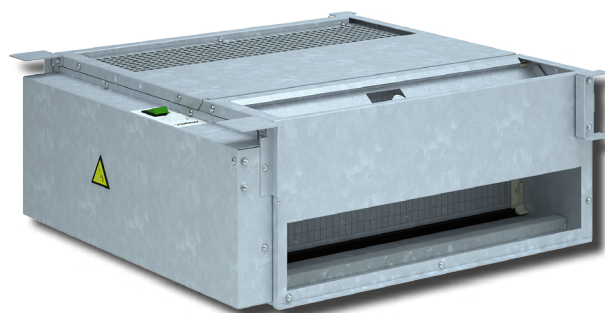
UFB_W

Handling units with Brushless motor Inverter (EC)
Floating floor installation



Variable Multi Flow

VMF



Typical installation

- LOWER ELECTRICITY CONSUMPTION
- VERY QUIET OPERATION
- EASY MAINTENANCE

Features

Air handling terminal for installations in floating floor, also called floating or raised floor.

IS a unit consisting of a fan unit with **brushless inverter motor**, enclosed in a metal structure with mixing chamber equipped with motor-driven damper, filter and electronic card.

The use of these units is expected within a floating floor, often used in offices or equipment rooms for data centre and similar.

In these systems there is often an air handling unit that cools the environment by entering the treated air in the underfloor and the buster units combine to improve the distribution in the rooms and, depending on the version, perform localized after-treatment.

Using the two ambient air temperature sensors (return air) and the underfloor air temperature sensors, the electronic regulation through the positioning of the motor-driven damper, performs a mix to reach the temperature

setpoint set with the local user interface (type VMF-E4) or by the supervision system.

Versions

UFB20W booster unit for UTA treated air distribution, the mix with the ambient air and any post-treatment using a water coil (heating, cooling, dehumidification) for the control of the room temperature.

- Unit is easy to install, as completely compatible with squares 600x600 mm used in these applications. Using the normal support systems of such floating floors allow to fully replace a square, obtaining a perfect joint, in line with the rest of the floor, with no "step".
- **Centrifugal fan with Brushless inverter** with continuous speed variation, 0-100%, which allows the exact adjustment to the requests of

the internal environment without temperature fluctuations. Also allows an electric savings and better acoustic comfort.

- Thickness contained (219 mm)
- **Water coil** for a possible post-heating for the temperature control in the room
- For a better air quality, the UFB are equipped with electro-statically pre-loaded filters.

Accessories

- **DSC4UFB**: Condensate drainage device for use when natural run-off is not possible.
- **VCF_U**: Kit consisting of motor-driven 3-way valve with insulating shell, insulated copper couplings and pipes. Versions with 230V~50Hz power supply
- **VMF-E4**: User interface from walls, allows the

control of the functions through the capacitive keyboard. **Obligatory to provide 1 for each Master unit**

For more information about the VMF system, refer to the specific documentation available on the site www.aermec.com

Technical data

FDB W				20		
Fan speed				H	M	L
Heating performance						
2-pipe systems						
Heating capacity (70°C)		(1)	kW	2,96	2,53	1,91
Water flow rate		(1)	l/h	260	222	167
pressure drops		(1)	kPa	6	4	3
Heating capacity (50°C)		(2)	kW	1,77	1,51	1,13
Water flow rate		(2)	l/h	258	210	144
pressure drops		(2)	kPa	6	5	2
Cooling performance						
Total cooling capacity		(3)	kW	1,50	1,22	0,84
Sensible cooling capacity		(3)	kW	1,24	1,00	0,67
Water flow rate		(3)	l/h	258	210	144
pressure drops		(3)	kPa	6	5	3
Water content		l				
Fan						
Fan		type/no		centrifugal/1		
Air flow rate		m³/h		290	220	140
Noise levels						
sound power level		(4)	dB(A)	50	43	31
Sound pressure level		dB(A)		42	35	23
Connections diameter						
Standard coil		Ø		1/2"		
Electrical characteristics						
Input power		W		12	8	5
Input current		A			0.12	
Electrical wirings		%		90	68	36
Power supply		V/ph/Hz		230V~50Hz		

H maximum speed; M average speed; L minimum speed
(1) Room air 20°C d.b.; Water (in/out) 70°C/60°C;
(2) Room air 20°C d.b.; Water (in) 50°C; Water flow rate as in cooling mode
(3) Room air 27°C d.b./19°C w.b.; Water (in/out) 7°C/12°C
(4) Sound power based on measures made in compliance with Eurovent regulation 8/2

Sizes and weights

UFB	20W		
Height	A	mm	219
Width	B	mm	571
Depth	C	mm	572
Weight		kg	16.5

