

UFB

Handling units Floating floor installation



- Low electrical consumption
- Fully silent operation
- Easy maintenance.



DESCRIPTION

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

UFB20: booster unit for the distribution of the UTA treated air, the mix with room air for the room temperature control.

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.

UFB20HE: booster unit for UTA treated air distribution, the mix with the ambient air and any post-treatment using electric heating coil (only in heating) for the control of the room temperature.

FEATURES

- 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.
- Compact dimensions, thickness 129 mm
- For a better air quality, the UFB are equipped with electro-statically pre-loaded filters.

ACCESSORIES ONLY AVAILABLE FOR UFB20W

USC4UFB: 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-E3: Wall mounted user interface, to be combined with accessories VMF-E19, VMF-E19I, VMF-E0X with grids GLF_N/M and GLL_N, can be controlled with VMF-IR control.

VMF-E4DX: Wall-mounted user interface. Grey front panel PANTONE 425C (METAL).

VMF-E4X: Wall-mounted user interface. Light grey front panel PANTONE COOL GRAY 1C.

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

TECHNICAL DATA

2-pipe

		UFB20W		
		1	2	3
		L	M	H
Heating performance 70 °C / 60 °C (1)				
Heating capacity	kW	1,91	2,53	2,96
Water flow rate system side	l/h	167	222	260
Pressure drop system side	kPa	3	4	6
Heating performance 50 °C (2)				
Heating capacity	kW	1,13	1,51	1,77
Water flow rate system side	l/h	144	210	258
Pressure drop system side	kPa		5	6
Cooling performance 7 °C / 12 °C (3)				
Cooling capacity	kW	0,84	1,22	1,50
Sensible cooling capacity	kW	0,67	1,00	1,24
Water flow rate system side	l/h	144	210	258
Pressure drop system side	kPa	3	5	6
Fan				
Type	type	Centrifugal		
Fan motor	type	Inverter		
Number	no.	1		
Air flow rate	m ³ /h	140	220	290
Input power	W	5	8	12
Electrical wiring		V1	V2	V3
Diameter hydraulic fittings				
Main coil	Ø	1/2"		
Power supply				
Power supply		230V~50Hz		

(1) Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C

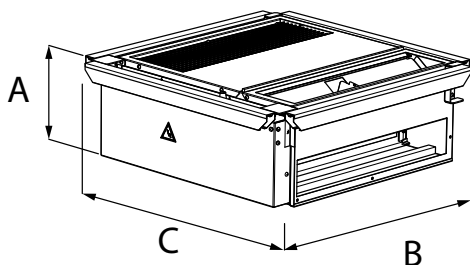
(2) Room air 20 °C d.b.; Water (in) 50 °C; Water flow rate as in cooling mode

(3) Room air temperature 27 °C d.b./19 °C w.b.; Water (in/out) 7 °C/12 °C; EUROVENT

2-pipe

		UFB20			UFB20EH		
		1	2	3	1	2	3
		L	M	H	L	M	H
Fan							
Type	type	Centrifugal			Centrifugal		
Fan motor	type	-			-		
Number	no.	1			1		
Air flow rate	m ³ /h	140	220	290	140	220	290
Input power	W	5	8	12	5	8	12
Electrical wiring		V1	V2	V3	V1	V2	V3
Diameter hydraulic fittings							
Main coil	Ø	1/2"			1/2"		
Electric heater							
Input power	W	-			500		
Maximum current	A	-			0,20		
Power supply							
Power supply		230V~50Hz			230V~50Hz		

DIMENSIONS AND WEIGHTS



		UFB20W	
Dimensions and weights			
A	mm	219	
B	mm	571	
C	mm	572	
Empty weight	kg	17	
		UFB20	UFB20HE
Dimensions and weights			
A	mm	219	219
B	mm	571	571
C	mm	572	572
Empty weight	kg	17	17

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Aermec S.p.A.

Via Roma, 996 - 37040 Bevilacqua (VR) - Italia
Tel. 0442633111 - Telefax 044293577
www.aermec.com