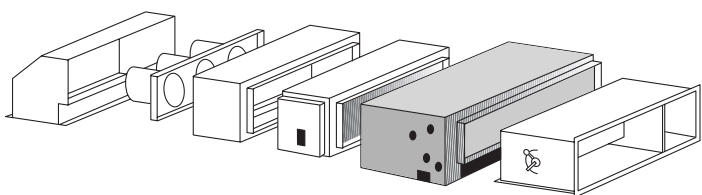


MHD

Ductable hydronic air treatment terminal units



SILENT VENTILATION



COMPLETE RANGE OF ACCESSORIES



DUCTED UNIT



LARGE AIR EXCHANGES



AIR FILTRATION

Technical and construction characteristics

Basic Unit:

- Load-bearing structure made of 1 mm thick galvanized sheet metal;
- Heat exchange coil in copper tube with fins continuous pack aluminum blocked on the tubes by means of mechanical expansion;
- The manifolds are equipped with male gas connections and valves easily accessible air vent;
- The hydraulic connections are on the left as standard;
- Electric fan unit consisting of one or two fans double inlet centrifuges with horizontally developed aluminum fans, statically and dynamically balanced;
- The electric motor, protected against overloads, has three speed, built according to international standards, with running capacitor always inserted, directly coupled to the fans and cushioned with elastic supports, particularly efficient and silent.

Accessories:

- Easily removable air filter section, consisting of a frame metal containing the filtering septum, regenerable by means of washing with water, EU2 filtration level;
- Internal/external air intake plenum with manual damper built in galvanized sheet metal, it allows the air to be exchanged in the rooms (internal air flow 100% - 66.6%, external air flow 0% 33.3%);
- Heating section with 380V electric resistance made according to international safety standards and supplied complete with automatic reset safety thermostat, interface relay for its control, electrical wiring and control panel with main switch and thermal magnetic protection.

Model	Cooling power kW	Thermal power kW	Air flow m ³ /h	Code	€
MHD 4/3 (batt. 3 ranks)	2,71	3,06	536	52200000	950,00
MHD 7/3 (batt. 3 ranks)	4,41	4,72	800	52220000	1.250,00
MHD 9/3 (batt. 3 ranks)	6,94	7,66	1419	52240000	1.400,00
MHD 11/3 (batt. 3 ranks)	8,28	9,04	1641	52260000	1.500,00
MHD 13/3 (batt. 3 ranks)	10,85	12,43	2401	52280000	2.100,00

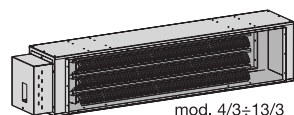
Data collected under the following conditions: - Standard free-mouth unit (external static pressure = 0 Pa)

- Maximum fan speed

- Cooling: inlet water temperature 7 °C - outlet water temperature 12 °C - inlet air temperature 27 °C D.B. - 19 °C B.U.

- Heating: inlet water temperature 45 °C - outlet water temperature 40 °C - inlet air temperature 20 °C

Accessories MHD

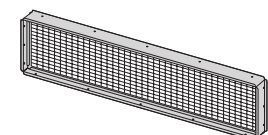


mod. 4/3÷13/3

Heating section with electric resistance

4/3	7/3 - 9/3	11/3 - 13/3
3.000 W	6.000 W	9.000 W

mod. 4/3	52202805	632,00
mod. 7/3	52222805	836,00
mod. 11/3	52262805	996,00
mod. 13/3	52282805	996,00



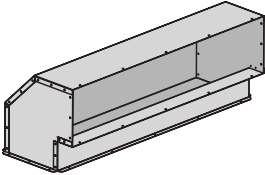
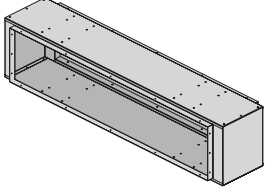
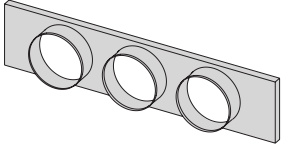
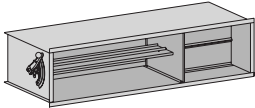
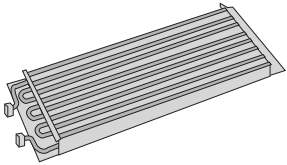
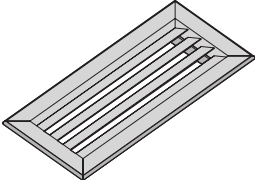
Removable return filter
(metal frame + filter media)

mod. 4/3	52205600	48,00
mod. 7/3	52225600	60,00
mod. 9/3	52245600	64,00
mod. 11/3	52265600	66,00
mod. 13/3	52285600	70,00

MHD

Ductable hydronic air treatment terminal units

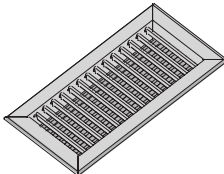
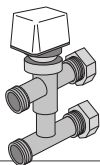

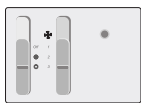

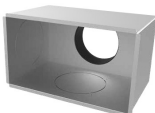
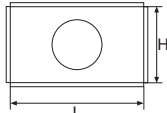

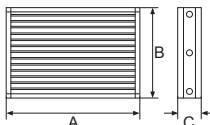

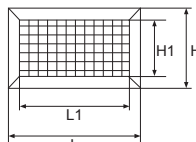

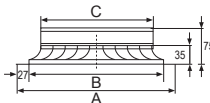

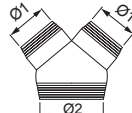




Accessories MHD

				Codice	€																	
	90° plenum of air intake	mod. 4/3	592 x 360 x (H) 315 mm	52202220	126,00																	
		mod. 7/3	942 x 360 x (H) 315 mm	52222220	154,00																	
		mod. 9/3	1042 x 360 x (H) 340 mm	52242220	160,00																	
		mod. 11/3	1282 x 360 x (H) 340 mm	52262220	170,00																	
		mod. 13/3	1282 x 360 x (H) 390 mm	52282220	186,00																	
	90° air delivery plenum	mod. 4/3	592 x 360 x (H) 315 mm	52202221	136,00																	
		mod. 7/3	942 x 360 x (H) 315 mm	52222221	164,00																	
		mod. 9/3	1042 x 360 x (H) 340 mm	52242221	170,00																	
		mod. 11/3	1282 x 360 x (H) 340 mm	52262221	184,00																	
		mod. 13/3	1282 x 360 x (H) 390 mm	52282221	198,00																	
	Straight plenum of air intake	mod. 4/3	648 x 254 x (H) 219 mm	52202210	154,00																	
		mod. 7/3	998 x 254 x (H) 219 mm	52222210	178,00																	
		mod. 9/3	1098 x 254 x (H) 244 mm	52242210	194,00																	
		mod. 11/3	1338 x 254 x (H) 244 mm	52262210	220,00																	
		mod. 13/3	1338 x 254 x (H) 294 mm	52282210	250,00																	
	Straight plenum of air delivery	mod. 4/3	648 x 254 x (H) 219 mm	52202211	164,00																	
		mod. 7/3	998 x 254 x (H) 219 mm	52222211	188,00																	
		mod. 9/3	1098 x 254 x (H) 244 mm	52242211	204,00																	
		mod. 11/3	1338 x 254 x (H) 244 mm	52262211	236,00																	
		mod. 13/3	1338 x 254 x (H) 294 mm	52282211	268,00																	
	Suction plenum for flex pipes	mod. 4/3		52202216	120,00																	
		mod. 7/3		52222216	142,00																	
		mod. 9/3		52242216	154,00																	
		mod. 11/3		52262216	202,00																	
		mod. 13/3		52282216	204,00																	
	<table border="1"> <thead> <tr> <th colspan="3">Number of attacks per model</th> </tr> <tr> <th>4/3</th> <th>7/3 - 9/3</th> <th>11/3 - 13/3</th> </tr> </thead> <tbody> <tr> <td>2 x Ø 200</td> <td>3 x Ø 200</td> <td>4 x Ø 200</td> </tr> </tbody> </table>		Number of attacks per model			4/3	7/3 - 9/3	11/3 - 13/3	2 x Ø 200	3 x Ø 200	4 x Ø 200											
	Number of attacks per model																					
	4/3	7/3 - 9/3	11/3 - 13/3																			
	2 x Ø 200	3 x Ø 200	4 x Ø 200																			
	Insulated delivery plenum for flex pipes		mod. 4/3		52202215	134,00																
		mod. 7/3		52222215	156,00																	
		mod. 9/3		52242215	168,00																	
		mod. 11/3		52262215	184,00																	
		mod. 13/3		52282215	288,00																	
	Air intake plenum internal/external with manual shutter	mod. 4/3	590 x 400 x (H) 240 mm	52202205	330,00																	
		mod. 7/3	940 x 400 x (H) 240 mm	52222205	418,00																	
		mod. 9/3	1040 x 400 x (H) 265 mm	52242205	438,00																	
		mod. 11/3	1280 x 400 x (H) 265 mm	52262205	546,00																	
		mod. 13/3	1280 x 400 x (H) 310 mm	52282205	646,00																	
	Additional battery					mod. 4/3	52202800	202,00														
						mod. 7/3	52222800	290,00														
						mod. 9/3	52242800	300,00														
						mod. 11/3	52262800	332,00														
						mod. 13/3	52282800	396,00														
	<table border="1"> <thead> <tr> <th></th> <th>4/3 1 rango</th> <th>7/3 1 rango</th> <th>9/3 1 rango</th> <th>11/3 1 rango</th> <th>13/3 1 rango</th> </tr> </thead> <tbody> <tr> <td>kW</td> <td>4,19</td> <td>6,99</td> <td>9,15</td> <td>10,54</td> <td>13,98</td> </tr> <tr> <td>kcal/h</td> <td>3.607</td> <td>6.031</td> <td>7.890</td> <td>9.086</td> <td>12.057</td> </tr> </tbody> </table>			4/3 1 rango	7/3 1 rango	9/3 1 rango	11/3 1 rango	13/3 1 rango	kW	4,19	6,99	9,15	10,54	13,98	kcal/h	3.607	6.031	7.890	9.086	12.057		
	4/3 1 rango	7/3 1 rango	9/3 1 rango	11/3 1 rango	13/3 1 rango																	
kW	4,19	6,99	9,15	10,54	13,98																	
kcal/h	3.607	6.031	7.890	9.086	12.057																	
	Fixed aluminum intake grille with filter	mod. 4/3		52202230	156,00																	
		mod. 7/3		52222230	176,00																	
		mod. 9/3		52242230	192,00																	
		mod. 11/3		52262230	218,00																	
		mod. 13/3		52262230	218,00																	

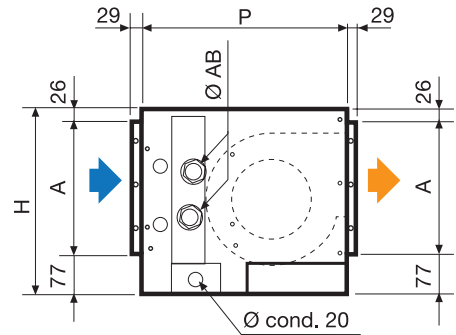
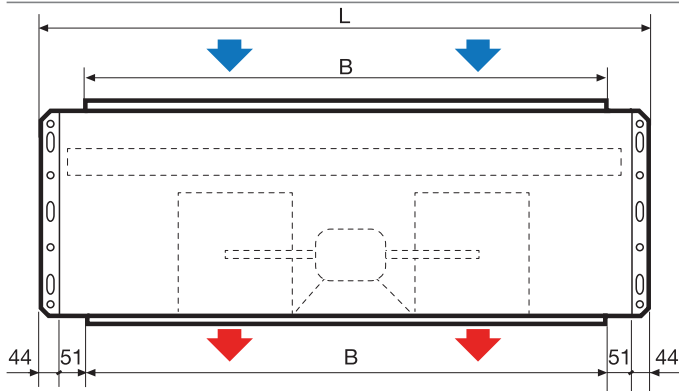
MHD

Ductable hydronic air treatment terminal units

Accessori MHD

		Code	€
	Adjustable aluminum delivery grille without filter	mod. 4/3	52202231 156,00
		mod. 7/3	52222231 176,00
		mod. 9/3	52242231 192,00
		mod. 11/3	52262231 218,00
		mod. 13/3	52262231 218,00
	3-way on-off valve or 2-pipe systems	mod. 4/3 Ø 1/2"	37900080 196,00
		mod. 7/3 Ø 3/4"	37900081 206,00
		mod. 9/3-11/3 Ø 3/4"	37900082 230,00
		mod. 13/3 Ø 1"	37900083 236,00
	Mechanical consensus thermostat for wall-mounted electronic room thermostat or basic control	50005205	36,00
	Basic wall control for managing the 3 speeds and for winter/summer selection	36205212	52,00
	Wall-mounted electronic room thermostat with summer-off-winter selector and 3-speed switch	50005230	82,00
	Insulated plenum designed for 3 inputs, made of galvanized sheet metal with external insulation in 3 mm thick closed cell polyethylene and equipped as standard with a circular PPS collar 150/200 mm (L 410 mm - H 210 mm).		37900069 200,00
	Calibration damper for plenum composed of a frame and a double row of horizontal and vertical fins which are individually adjustable. (A 385 mm - B 180 mm - C 50 mm)		37900073 56,00
	White painted aluminum delivery vent consisting of a frame and a double row of individually adjustable horizontal and vertical fins with clip fixing. (L 432 mm - L1 400 mm - H 232 mm - H1 200 mm)		37900070 110,00
	Circular diffuser in white painted aluminium RAL - 9016 with butterfly damper and integrated collar. (A 310 mm - B 260 mm - C 200 mm)		37900027 142,00
	Insulated 3-way branch, operating temperature 0 °C to +70 °C, PP material and coating polyethylene insulation with aluminum covering. (Ø1 200 mm - Ø2 250 mm)		37900216 146,00
	Insulated reduction for insulated 3-way branch, operating temperature from 0 °C to +70 °C, PP material and aluminum coating. (Ø1 250 mm - Ø2 200 mm)		37900446 50,00
	Kit 10 cable ties Ø 60 - 325	37900017	70,00
	Flex hose joint sleeve Ø 200	37900051	40,00

Dimensions MHD



Mod.	4/3	7/3	9/3	11/3	13/3
A	197	197	222	222	272
B	548	898	998	1238	1238
L	740	1090	1190	1430	1430
P	533	533	533	533	533
H	300	300	325	325	375
Ø AB	1/2"	3/4"	3/4"	3/4"	1"

Values in mm

Technical data table MHD

DESCRIPTION	U.M.	4/3	7/3	9/3	11/3	13/3	
Total cooling capacity (1)	W	max.	2714	4412	6936	8277	10850
		med.	2683	4084	6797	8066	9764
		min.	2543	3678	6536	7596	8081
Total thermal power (2)	W	max.	3060	4720	7660	9040	12430
		med.	3030	4350	7470	8760	11010
		min.	2860	3900	7100	8210	8960
Total thermal power (3)	W	max.	3640	5640	9120	10770	14730
		med.	3600	5200	8890	10440	13070
		min.	3400	4660	8450	9790	10670
Air flow	m ³ /h	max.	536	800	1419	1641	2401
		med.	528	721	1371	1575	2041
		min.	491	629	1282	1446	1560
Cooling water flow rate (1)	l/h	max.	484	777	1225	1459	1936
		med.	479	720	1197	1418	1736
		min.	454	650	1143	1336	1438
Heating water flow rate (2)	l/h	max.	534	822	1335	1575	2165
		med.	527	758	1301	1526	1918
		min.	498	679	1237	1430	1562
Cooling water side pressure drops (4) Pressure losses on the heating water side (4) Number of battery ranks	kPa	13,4	19,9	28,3	27,7	23,9	
Useful static pressure	Pa	max.	52	42	55	56	70
		med.	50	34	50	50	50
		min.	44	26	44	42	29
Electrical supply	230V/1/50Hz						
Electrical absorption	W	162	218	322	340	582	
Current absorbed	A	0,74	1,00	1,47	1,55	2,65	
Sound power level (5)	dB(A)	max.	61	58	66	66	66
		med.	60	56	65	65	67
		min.	58	55	62	63	63
Net weight	Kg	25	33	38	44	53	

Data collected under the following conditions:

(1) Cooling: inlet water temperature 7 °C - outlet water temperature 12 °C - inlet air temperature 27 °C D.B. - 19 °C B.w.

(2) Heating: inlet water temperature 45 °C - outlet water temperature 40 °C - inlet air temperature 20 °C

(3) Heating: inlet water temperature 50 °C - outlet water temperature 45 °C - inlet air temperature 20 °C

(4) Value referred to the maximum operating speed (5) Sound power levels measured according to EN 16583: 2015