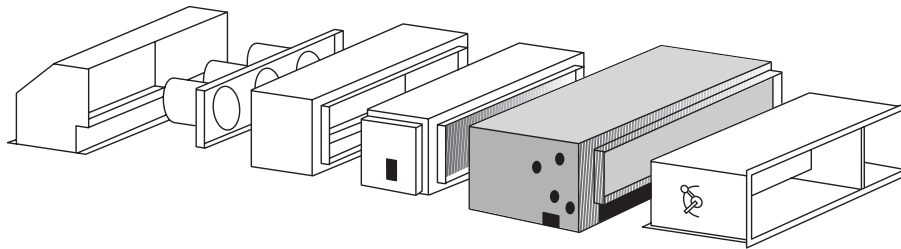


MHD

Ducted terminal air treatment units



Model	Cooling Output kW	Heating Output kW	Air Flow Rate m ³ /h	Code	€
MHD 4/3 (heat-exchanger 3 rows)	3,87	8,31	837	52200000	850,00
MHD 7/3 (heat-exchanger 3 rows)	7,04	14,19	1423	52220000	1.140,00
MHD 9/3 (heat-exchanger 3 rows)	9,20	18,71	1951	52240000	1.240,00
MHD 11/3 (heat-exchanger 3 rows)	10,59	21,34	2131	52260000	1.320,00
MHD 13/3 (heat-exchanger 3 rows)	13,09	28,25	3002	52280000	1.930,00
MHD 28/4 (heat-exchanger 4 rows)	27,81	53,88	4678	52300000	3.300,00
MHD 51/4 (heat-exchanger 4 rows)	50,63	100,06	9250	52320000	6.080,00

Data measured based on the following conditions:

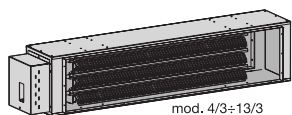
Standard unit (output static pressure = 0 Pa)

Max fan speed

Cooling: incoming water temperature 7 °C - outgoing water temperature 12 °C - incoming air temperature 27 °C dry bulb - 19 °C wet bulb

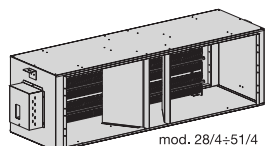
Heating: incoming water temperature 70 °C - outgoing water temperature 60 °C - incoming air temperature 20 °C

Accessories MHD



Electric heating section (380 V)

Electric heater				
4/3	7/3 - 9/3	11/3 - 13/3	28/4	51/4
3.000 W	6.000 W	9.000 W	12.000 W	18.000 W

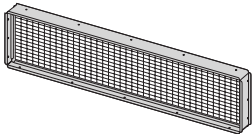
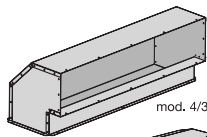
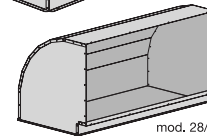
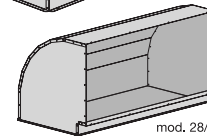
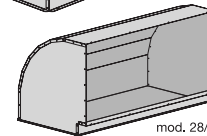
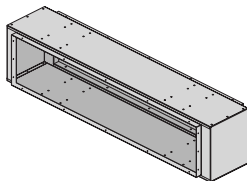
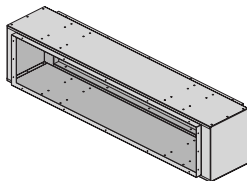
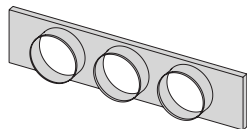


mod. 4/3	52202805	632,00
mod. 7/3	52222805	836,00
mod. 11/3	52262805	996,00
mod. 13/3	52282805	996,00
mod. 28/4	52302805	1.060,00
mod. 51/4	52322805	1.140,00

MHD

Ducted terminal air treatment units

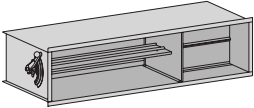
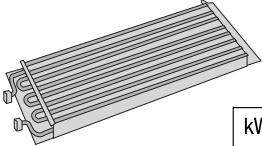
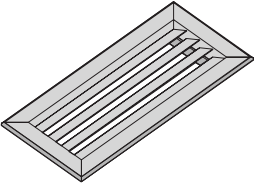
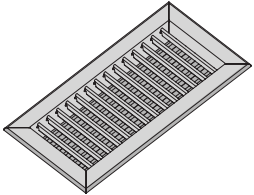
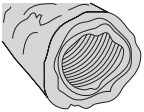

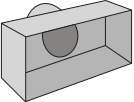
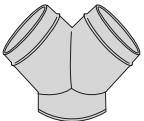

Accessories MHD

		Code	€															
	Extractable air intake filter (metal frame + filter)	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															
		mod. 28/4	52305600 120,00															
		mod. 51/4	52325600 176,00															
 	Air intake plenum 90°	mod. 4/3	52202220 126,00															
		mod. 7/3	52222220 154,00															
		mod. 9/3	52242220 160,00															
		mod. 11/3	52262220 170,00															
		mod. 13/3	52282220 186,00															
		mod. 28/4	52302220 274,00															
		mod. 51/4	52322220 372,00															
 	Air delivery plenum 90°	mod. 4/3	52202221 136,00															
		mod. 7/3	52222221 164,00															
		mod. 9/3	52242221 170,00															
		mod. 11/3	52262221 184,00															
		mod. 13/3	52282221 198,00															
		mod. 28/4	52302221 290,00															
		mod. 51/4	52322221 398,00															
	Straight intake plenum	mod. 4/3	52202210 154,00															
		mod. 7/3	52222210 178,00															
		mod. 9/3	52242210 194,00															
		mod. 11/3	52262210 220,00															
		mod. 13/3	52282210 250,00															
		mod. 28/4	52302210 340,00															
		mod. 51/4	52322210 464,00															
	Air delivery straight plenum	mod. 4/3	52202211 164,00															
		mod. 7/3	52222211 188,00															
		mod. 9/3	52242211 204,00															
		mod. 11/3	52262211 236,00															
		mod. 13/3	52282211 268,00															
		mod. 28/4	52302211 364,00															
		mod. 51/4	52322211 492,00															
	Air intake plenum for flexible ducts	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															
		mod. 28/4	52302216 278,00															
		mod. 51/4	52322216 364,00															
<table border="1" data-bbox="459 1832 963 1928"> <thead> <tr> <th colspan="5">Number of connection for each model</th> </tr> <tr> <th>4/3</th> <th>7/3 - 9/3</th> <th>11/3 - 13/3</th> <th>28/4</th> <th>51/4</th> </tr> </thead> <tbody> <tr> <td>2 x Ø 200</td> <td>3 x Ø 200</td> <td>4 x Ø 200</td> <td>2 x Ø 400</td> <td>4 x Ø 400</td> </tr> </tbody> </table>	Number of connection for each model					4/3	7/3 - 9/3	11/3 - 13/3	28/4	51/4	2 x Ø 200	3 x Ø 200	4 x Ø 200	2 x Ø 400	4 x Ø 400	Insulated air delivery plenum for flexible ducts	mod. 4/3	52202215 134,00
	Number of connection for each model																	
	4/3	7/3 - 9/3	11/3 - 13/3	28/4	51/4													
	2 x Ø 200	3 x Ø 200	4 x Ø 200	2 x Ø 400	4 x Ø 400													
	mod. 7/3	52222215 156,00																
	mod. 9/3	52242215 168,00																
	mod. 11/3	52262215 184,00																
mod. 13/3	52282215 288,00																	
mod. 28/4	52302215 300,00																	
mod. 51/4	52322215 406,00																	

MHD

Ducted terminal air treatment units

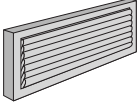
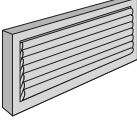
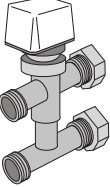



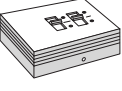

Accessories MHD

		Code	€
	Indoor/outdoor air intake plenum with manual damper	mod. 4/3	52202205 330,00
		mod. 7/3	52222205 418,00
		mod. 9/3	52242205 438,00
		mod. 11/3	52262205 546,00
		mod. 13/3	52282205 646,00
		mod. 28/4	52302205 912,00
		mod. 51/4	52322205 1.400,00
	Additional heat-exchanger	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
		mod. 28/4	52302800 868,00
		mod. 51/4	52322800 1.378,00
	Air intake grid (aluminium metal frame + 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
		mod. 28/4	52302230 336,00
		mod. 51/4	52322230 460,00
	Air delivery grid with adjustable fins (metal frame, 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
		mod. 28/4	52302231 336,00
		mod. 51/4	52322231 460,00
	PVC insulated flexible duct Ø 200 - 10 m lenght <i>only for models 4/3 -7/3 -9/3 -11/3 -13/3</i>	37900001	224,00
	Connecting plenum between flexible duct and circular cone diffuser <i>only for models 4/3 -7/3 -9/3 -11/3 -13/3</i>	37900031	210,00
	Connecting plenum between flexible duct and delivery air grid Ø 200 <i>only for models 4/3 -7/3 -9/3 -11/3 -13/3</i>	37900019	100,00
	135° Y branch Ø 200 <i>only for models 4/3 -7/3 -9/3 -11/3 -13/3</i>	37900010	160,00
	Millimetrically adjustable circular cone diffusers and butterfly damper Ø 200 <i>only for models 4/3 -7/3 -9/3 -11/3 -13/3</i>	diffuser 37900027	100,00

MHD

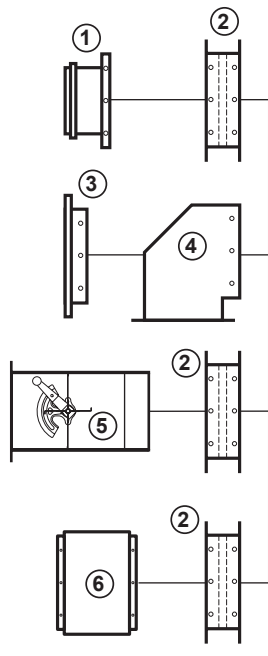
Ducted terminal air treatment units

Accessories MHD

		Code	€
	Bottom door grid cm 40 x 15	37900015	82,00
	Air delivery grid with adjustable fins (metal frame, without filter) and damper cm 40 x 20	37900021	98,00
	3-ways valve including ON/OFF actuator pipes and couplings	mod. 4/3 Ø 1/2" 37900080 170,00 mod. 7/3 Ø 3/4" 37900081 178,00 mod. 9/3-11/3 Ø 3/4" 37900082 204,00 mod. 13/3 Ø 1" 37900083 204,00 mod. 28/4 Ø 1" 1/2 37900084 608,00 mod. 51/4 Ø 2" 37900085 680,00	
	10 clamps Ø 60 - 325 <i>only for models 4/3 -7/3 -9/3 -11/3 -13/3</i>	37900017	60,00
	Fan thermostat 4/3÷51/4 4/3÷51/4	50005205	36,00
	Ø 200 flexible duct coupling <i>only for models 4/3 -7/3 -9/3 -11/3 -13/3</i>	37900051	32,00
	Remote control with summer/winter off switch and 3 speeds selector	50005225	48,00
	Remote control with room thermostat, summer/winter off switch and 3 speeds selector	50005230	82,00

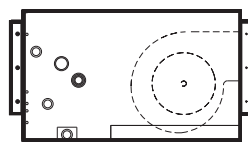
ASPIRATION

- 1) Air intake plenum for flexible ducts
- 2) Extractable intake filter
- 3) Air intake grid with filter
- 4) Air intake plenum 90°
- 5) Indoor/outdoor air intake plenum with manual damper
- 6) Air intake straight plenum



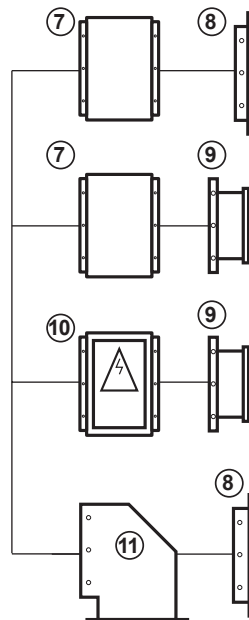
BASIC UNIT

AIR DIRECTION



AIR DELIVERY

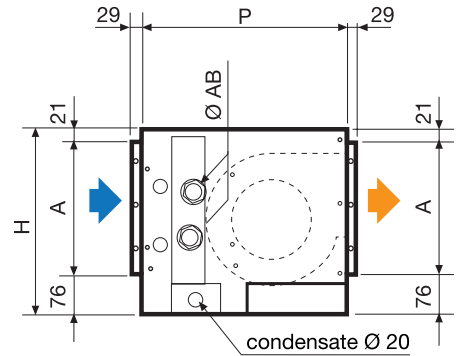
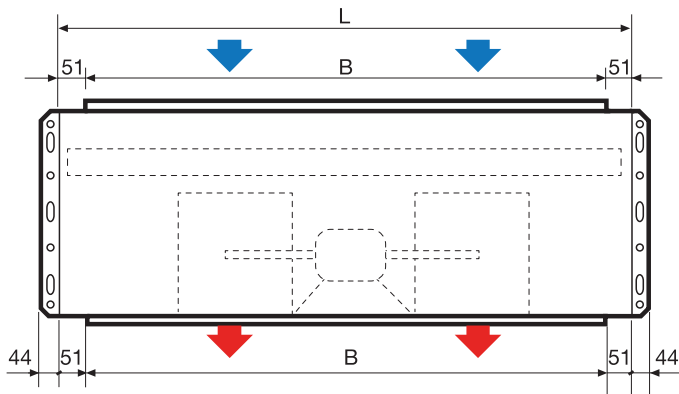
- 7) Air intake straight plenum
- 8) Air delivery grid
- 9) Air intake plenum for flexible ducts
- 10) Heating section with electric resistance
- 11) Air intake plenum 90°



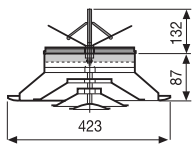
MHD

Ducted terminal air treatment units

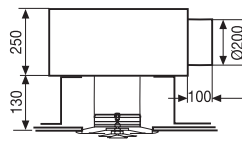
Dimensions MHD



Diffuseur circulaire



Connecting plenum



Mod.	4/3	7/3	9/3	11/3	13/3	28/3	51/4
A	197	197	197	222	272	572	572
B	548	898	898	1237	1237	1239	1926
L	650	1000	1000	1339	1339	1341	2028
P	533	533	533	533	533	853	853
H	299	299	299	324	374	675	675
Ø AB	1/2"	1/2"	1/2"	3/4"	1"	1 1/4"	1 1/2"

Values in mm

Technical datasheet MHD

DESCRIPTION	U.M.	4/3	7/3	9/3	11/3	13/3	28/4	51/4	
Total cooling output (**)	kW	3,87	7,04	9,20	10,59	13,09	27,81	50,63	
Heating output standard battery 70 °C (**)	kW	8,31	14,19	18,71	21,34	28,25	53,88	100,06	
Heating output standard battery 60 °C (**)	kW	6,69	11,43	15,07	17,19	22,76	43,41	80,61	
Air flow rate (**)	m ³ /h	max.	837	1423	1951	2131	3002	4678	9250
		med.	739	1149	1686	1801	2282	3733	7470
		min.	644	852	1278	1275	1597	3066	6151
Total cooling output (***)	kW	3,51	6,16	8,56	9,86	12,44	25,98	47,30	
Heating output standard battery 70 °C (***)	kW	7,03	12,04	17,05	19,43	26,38	49,24	91,48	
Heating output standard battery 50 °C (***)	kW	4,46	8,47	11,17	12,74	16,87	32,18	59,76	
Air flow rate (***)	m ³ /h	max.	598	1017	1601	1749	2615	3875	7662
		med.	506	786	1435	1532	2014	3155	6311
		min.	413	448	1026	959	1228	2486	4988
Water flow rate (cooling)	l/h	604	1061	1472	1696	2140	4469	8137	
Water pressure drop (cooling)	kPa	15,2	23,7	29,4	27,6	32,5	29,6	34,8	
Water flow rate (heating)	l/h	605	1036	1467	1671	2269	4235	7867	
Water pressure drop (heating)	kPa	11,9	17,6	22,7	20,9	28,4	20,7	25,3	
Heat-exchanger rows	n.	3	3	3	3	3	4	4	
Heat-exchanger connections	"	1/2	1/2	3/4	3/4	1	1 1/4	1 1/4	
Air delivery static pressure	Pa	80	80	80	80	100	150	150	
Minimum back-pressure	Pa	0	0	0	0	0	60	60	
Fans	n.	1	2	2	2	2	1	2	
Power supply		230V/1/50Hz							
Electric power input	W	162	218	322	340	582	1320	2600	
Max running current	A	0,74	1,00	1,47	1,55	2,65	6,01	12,05	
Noise level (*)	dB(A)	min.	63	58	61	58	62	69	71
		med.	67	65	68	65	69	73	76
		max.	68	69	70	69	74	78	81
Net weight	kg	28	36	41	46	57	117	192	

Data measured based on the following conditions:

Cooling: incoming water temperature 7 °C - outgoing water temperature 12 °C - incoming air temperature 27 °C dry bulb - 19 °C wet bulb

Heating: incoming water temperature 70 °C - outgoing water temperature 60 °C - incoming air temperature 20 °C

(*) Noise levels measured according to ISO 23741 standards

(**) Referred to air delivery static pressure = 0 Pa (without ducting)

(***) Referred to air delivery static pressure = 80 Pa (4-7-9-11) 100 Pa (13) 150 Pa (28-51) (with ducting)