

Application guide

COMFAIR



- Providing indoor climate comfort





APPLICATION GUIDE

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Our company is a member of the Eurovent Certification Programme, The COMFAIR LENNOX fan coil units are tested and rated in accordance with Eurovent certification program,



Our products comply with the European standards,



Product designed and manufactured under a quality management system certified ISO 9001,



LENNOX have been providing environmental solutions since 1895, our range of COMFAIR fan coil units continues to meet the standards that have made LENNOX a household name. Flexible design solutions to meet YOUR needs and uncompromising attention to detail. Engineered to last, simple to maintain and Quality that comes as standard. Information on local contacts at www.lennox europe.com.

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CENTRIFUGAL FAN COIL UNITS - HC

Comfair Fan Coil units are designed to minimum dimensions, in particular the depth is limited to only 200mm. The HC version is available in a range of 7 different versions and 12 models in each range, allowing all types of mounting arrangement and configurations, for example :

- Vertical Cased – on feet or plinth, with air inlet top or bottom and supply air vertical or front discharge
- Horizontal Cased – with air inlet from the back, front or via a plenum
- Vertical or horizontal chassis units



Vertical cased units



Horizontal cased units



Vertical cased units

Standard units are complimented by a complete range of accessories and options, for example :

- auxiliary heating coil for 4 pipe operation
- control package with 3-way valves
- electric heating coil
- fresh air inlet with manual or motorised damper
- straight or 90° plenums for inlet or supply air (for chassis units only)
- decorative panel in metal or wood, pre-painted white (for chassis units only)

CHASSIS AND CASING

The chassis is constructed from galvanised sheet steel 0,8 mm. Mounting holes are provided on the back panel. Each unit, vertical or horizontal is equipped with a condensate drain pan which is insulated with thermal insulation 3mm thick, as are all parts of the chassis which come into contact with the treated air. Of modern and elegant design, the casing is finished to the LENNOX standard colour of RAL 9002 white, however the full range of RAL colours are available upon special request.

Casing is also constructed from 0,8mm sheet steel, galvanised and epoxy painted and protected by a plastic contact film which can be removed after final installation. These methods ensure high resistance to Rust, corrosion and liquid and chemical agents.

Diffuser grilles are manufactured by plastic injection techniques and can be ordered as adjustable as an option.

The control panel is located beneath a concealed opening on the top of the unit, always on the opposite side to the valves.



COILS

Coils are from aluminium fins mechanically expanded onto copper tubes. Headers are equipped with easy accessible air vents. Coil connections are female antitorison and as standard are located on the left side of the unit, but can be right side on request. The required connection side should always be clearly noted on the order.

Due to their high heating capacity even with reduced water temperatures COMFAIR HC model fan coil units are ideal for installations using solar energy or heat pumps.

Coils are pressure tested to 30 Bar.



FANS

Depending on the model, the HC units can contain 1, 2 or 3 double inlet centrifugal fans with aluminium blades, statically and dynamically balanced. The electric motor includes overload protection and has six standard

speeds, three of which are pre-selected at the factory. Construction is in accordance with all relevant international standards, with a permanently connected capacitor. The motor assembly is mounted on rubber anti-vibration mounts and is directly coupled to the fan shafts which results in particularly quiet operation.



CONTROL PANEL

Easily accessible. It is located on the opposite side to the coils connections. As standard, the controller includes an electronic card, a 3-way switch (off / summer / winter) and a 3 speed fan switch. Factory fitted options include : Ambient temperature sensor (TA), and a minimum water temperature thermostat (TC). Horizontal units for concealed mounting are delivered with a terminal box for connecting to remote mounted controllers.

AIR FILTER

Simple to fit and remove, it is manufactured from a metal frame containing a washable poly-propylene filter medium class EU1. It is located on the suction side of the fan.



All data are at Eurovent conditions.
<http://www.eurovent-certification.com/>

PROGRAM: FC-2-H

COMFAIR		HC	10	20	30	40	50	60	70	80	90
Sensible cooling capacity	kW	Min	0,51	0,81	1,2	1,31	1,5	2,12	2,3	3,13	3,29
		Med	0,65	0,9	1,57	1,71	1,93	2,68	2,67	3,62	4,11
		Max	0,74	1,02	1,76	2,17	2,18	3,08	3,15	3,96	4,82
Total cooling capacity	kW	Min	0,67	1,08	1,45	1,53	2,2	2,72	3,25	4,48	4,83
		Med	0,79	1,17	1,94	2,03	2,79	3,41	3,71	5,17	5,96
		Max	0,86	1,28	2,17	2,53	3,11	3,85	4,33	5,59	6,9
Heating capacity	kW	Min	0,85	1,47	1,87	2,11	2,57	3,12	3,79	5,36	5,62
		Med	1,1	1,65	2,33	2,64	3,27	3,94	4,37	6,18	6,98
		Max	1,25	1,87	2,59	3,28	3,66	4,48	5,14	6,69	8,13
Water pressure drops in cooling	kPa	Min	0,6	1,4	2,3	3,2	8,1	12,9	21,2	17,9	9,4
		Med	0,8	1,7	4,2	5,6	13	20,2	27,7	23,9	14,3
		Max	0,9	2	5,3	8,8	16,1	25,9	37,6	27,9	19,1
Water pressure drops in heating	kPa	Min	0,4	1	2,2	2,7	6,9	11	19,6	15,2	8,7
		Med	0,6	1,2	3,9	4,8	11,1	17,2	25,6	20,3	13,2
		Max	0,7	1,4	4,9	7,5	13,7	22	34,7	23,7	17,6
Fan electrical power	kW	Min	0,02	0,02	0,02	0,02	0,03	0,04	0,05	0,13	0,13
		Med	0,02	0,03	0,03	0,03	0,05	0,06	0,06	0,15	0,15
		Max	0,03	0,03	0,04	0,05	0,06	0,08	0,07	0,16	0,18
Voltage	V/Ph/Hz	-	230/1/50								
Sound power level	dB(A)	Min	33	37	34	33	37	38	42	51	51
		Med	41	41	41	40	43	47	46	56	58
		Max	46	45	44	47	47	52	52	58	64

PROGRAM: FC-4-H

COMFAIR		HC	10	20	30	40	50	60	70	80	90
Sensible cooling capacity	kW	Min	0,5	0,89	1,15	1,16	1,72	2	2,44	3,26	3,57
		Med	0,63	0,99	1,51	1,52	2,2	2,54	2,83	3,76	4,47
		Max	0,71	1,12	1,69	1,93	2,49	2,91	3,34	4,11	5,26
Total cooling capacity	kW	Min	0,65	1,04	1,38	1,44	2,1	2,61	3,35	4,28	4,58
		Med	0,77	1,13	1,85	1,9	2,66	3,26	3,83	4,95	5,66
		Max	0,84	1,23	2,08	2,38	2,96	3,69	4,47	5,35	6,57
Heating capacity	kW	Min	0,86	1,49	1,97	1,86	2,45	3,15	3,71	5,24	5,3
		Med	1,11	1,67	2,45	2,33	3,12	3,75	4,29	5,84	6,58
		Max	1,26	1,89	2,73	2,89	3,49	4,14	5,04	6,21	7,67
Water pressure drops in cooling	kPa	Min	0,39	1,4	2,5	3	5,72	10,2	28	7,5	18,4
		Med	0,52	1,7	4,5	5,2	8,82	15,7	36,5	10	28,1
		Max	0,61	2	5,7	8,2	10,7	20	49,8	11,6	37,8
Water pressure drops in heating	kPa	Min	1,06	3,6	7,4	6,6	13,9	20,5	32,8	70,7	84,5
		Med	1,67	4,1	11,5	10,7	22,1	29	44,3	87,3	130
		Max	2,1	5,7	13,9	16,4	27,9	35,1	61,5	99,1	177
Fan electrical power	kW	Min	0,02	0,02	0,02	0,02	0,03	0,04	0,05	0,13	0,13
		Med	0,02	0,03	0,03	0,03	0,05	0,06	0,06	0,15	0,15
		Max	0,03	0,03	0,04	0,05	0,06	0,08	0,07	0,16	0,18
Voltage	V/Ph/Hz	-	230/1/50								
Sound power level	dB(A)	Min	34	39	34	35	35	41	43	51	51
		Med	40	43	40	41	42	48	47	57	59
		Max	45	47	44	47	46	53	53	59	65

SIZES 10 TO 60 - 2 PIPES SYSTEM

COMFAIR	HC	10	20	30	40	50	60
Total cooling capacity ⁽¹⁾	W	865	1277	2072	2530	3111	3850
	Frig/h	746	1101	1787	2181	2682	3319
Sensible cooling capacity ⁽¹⁾	W	737	1021	1506	2167	2176	2658
	Frig/h	636	880	1298	1868	1875	2291
Heating capacity ⁽³⁾	W	1246	1869	2586	3279	3658	4481
	kcalh	1074	1611	2229	2826	3152	3863
Water flow ^{(1) (3)}	l/h	149	220	357	436	536	664
	l/s	0,041	0,061	0,099	0,121	0,149	0,184
Water pressure drops in cooling ⁽¹⁾	kPa	0,8	2	6	8,8	16,2	26
	mWG	0,08	0,2	0,6	0,88	1,62	2,6
Water pressure drops in heating ⁽³⁾	kPa	0,7	1,7	5,1	7,5	13,8	22,1
	mWG	0,07	0,17	0,51	0,75	1,38	2,21
Heating capacity ⁽²⁾	W	2,124	3,192	4,329	5,512	6,081	7,444
	kcalh	1,831	2,752	3,732	4,753	5,242	6,417
Water flow ⁽²⁾	l/h	183	275	373	485	524	642
	l/s	0,051	0,076	0,104	0,132	0,146	0,178
Water pressure drops in heating ⁽²⁾	kPa	0,9	2,4	5	7,9	11,8	18,5
	mWG	0,09	0,24	0,5	0,79	1,18	1,85
Electric heater capacity ⁽⁴⁾	W	-	1000			2000	
	kcal/h	-	860			1720	
Electric heater input current ⁽²⁾	A	-	4,35			8,7	
Air flow ⁽⁵⁾	m ³ /h	227	289	404	453	575	685
	m ³ /s	0,063	0,08	0,112	0,126	0,16	0,19
Fan speed ⁽⁵⁾	rpm	710	671	595	680	646	775
Sound power level ⁽⁶⁾	dB(A)	46	44		47		52
Motor electrical power ⁽⁷⁾	W	38	54	60	61	99	99
Motor electrical input ⁽⁷⁾	A	0,18	0,25	0,28		0,45	
Electrical supply	V/Ph/Hz	230/1/50					

Above mentioned technical data are calculated ar the following operating conditions:

- Maximum fan speed (maximum speed predetermined in the factory among the available speeds: 5 for HC 10, 40, 60 and 4 for HC20, 30 ,50)
- Standard unit without ducts (fancoil operating without external back pressure)

- (1) Cooling: entering water temperature 7°C, leaving water temperature 12°C, entering air temperature 27°C W.B.; 19°C D.B.
- (2) Heating: entering water temperature 70°C, leaving water temperature 60°C, entering air temperature 20°C
- (3) Heating: entering water temperature 50°C, same water flow as in cooling, entering air temperature 20°C
- (4) Electric heater: electric performances (supplied as accessory only)
- (5) Air flow and fan speed: fancoil performances with cleaned filter
- (6) Sound power level: sound power measured following ISO 23741
- (7) Electrical data referred to the maximum available speed

SIZES 10 TO 60 - 2 PIPES SYSTEM

CORRECTION COEFFICIENT FOR DIFFERENT AVAILABLE SPEEDS

COMFAIR	HC	10	20	30	40	50	60
Total cooling capacity	1	0,73	0,78	0,6	0,52	0,71 min	0,63
	2	0,77 min	0,84 min	0,67 min	0,60 min	0,8	0,71 min
	3	0,84	0,92 med	0,89 med	0,80 med	0,90 med	0,8
	4	0,92 med	1,00 max	1,00 max	0,9	1,00 max	0,88 med
	5	1,00 max	1,1	1,11	1,00 max	1,12	1,00 max
	6	1,08	1,32	1,23	1,12	1,26	1,13
Sensible cooling capacity	1	0,65	0,72	0,6	0,53	0,69 min	0,6
	2	0,69 min	0,79 min	0,68 min	0,60 min	0,78	0,69 min
	3	0,78	0,88 med	0,89 med	0,79 med	0,89 med	0,78
	4	0,88 med	1,00 max	1,00 max	0,89	1,00 max	0,87 med
	5	1,00 max	1,14	1,11	1,00 max	1,14	1,00 max
	6	1,13	1,35	1,24	1,13	1,29	1,14
Heating capacity	1	0,64	0,71	0,63	0,56	0,70 min	0,62
	2	0,68 min	0,78 min	0,72 min	0,64 min	0,79	0,70 min
	3	0,78	0,88 med	0,90 med	0,81 med	0,89 med	0,79
	4	0,88 med	1,00 max	1,00 max	0,9	1,00 max	0,88 med
	5	1,00 max	1,12	1,08	1,00 max	1,1	1,00 max
	6	1,25	1,22	1,17	1,1	1,21	1,1
Air flow	1	0,54	0,64	0,56	0,5	0,63 min	0,54
	2	0,60 min	0,72 min	0,67 min	0,58 min	0,73	0,63 min
	3	0,7	0,84 med	0,87 med	0,76 med	0,86 med	0,73
	4	0,83 med	1,00 max	1,00 max	0,88	1,00 max	0,84 med
	5	1,00 max	1,21	1,14	1,00 max	1,19	1,00 max
	6	1,22	1,42	1,32	1,17	1,41	1,19

Data indicated as min., med., max. concern the 3 standard speeds set at the factory. Upon customer request other 3 speeds among the 6 speeds available can be connected.

SIZES 70 TO 120 - 2 PIPES SYSTEM

COMFAIR	HC	70	80	90	100	110	120
Total cooling capacity ⁽¹⁾	W	4687	5589	6879	7978	10017	11011
	Frig/h	4041	4818	5930	6878	8635	9492
Sensible cooling capacity ⁽¹⁾	W	3,108	3,96	4811	6064	7913	8478
	Frig/h	2,679	3,414	4147	5227	6822	7309
Heating capacity ⁽³⁾	W	5,132	6,685	8110	10064	13080	14147
	kcalh	4,424	5,763	6991	8676	11273	12196
Water flow ^{(1) (3)}	l/h	808	964	1186	1376	1727	1898
	l/s	0,225	0,268	0,329	0,382	0,48	527
Water pressure drops in cooling ⁽¹⁾	kPa	56	28	43,1	26,6	21,5	26,8
	mWG	5,6	2,8	4,31	2,66	2,15	2,68
Water pressure drops in heating ⁽³⁾	kPa	47,6	23,8	36,6	23,3	18,8	21,8
	mWG	4,76	2,38	3,66	2,33	1,88	2,18
Heating capacity ⁽²⁾	W	8,471	11,138	13,491	16870	22016	23766
	kcalh	7303	9602	11630	14543	18979	20488
Water flow ⁽²⁾	l/h	730	960	1163	1487	1941	2095
	l/s	0,203	0,267	0,323	0,413	0,539	0,582
Water pressure drops in heating ⁽²⁾	kPa	34,8	21,1	31,5	23,7	20,6	24,8
	mWG	3,48	2,11	3,15	2,37	2,06	2,48
Electric heater capacity ⁽⁴⁾	W	2000	3000	3000	-	-	-
	kcal/h	1724	2586	2586	-	-	-
Electric heater input current ⁽⁴⁾	A	8,7	13,04	13,04	-	-	-
Air flow ⁽⁵⁾	m ³ /h	708	1058	1242	1356	2012	2003
	m ³ /s	0,197	0,294	0,345	0,377	0,559	0,556
Fan speed ⁽⁵⁾	rpm	746	920	1125	820	932	1085
Sound power level ⁽⁶⁾	dB(A)	52	58	64	63	67	66
Motor electrical power ⁽⁷⁾	W	97	210	207	213	277	273
Motor electrical input ⁽⁷⁾	A	0,44	0,96	0,95	0,97	1,27	1,25

Above mentioned technical data are calculated at the following operating conditions:

- Maximum fan speed (maximum speed predetermined in the factory among the available speeds: 6 for HC 70, 80, 90 and 5 for HC100, 120)
- Standard unit without ducts (fancoil operating without external back pressure)

- (1) Cooling: entering water temperature 7°C, leaving water temperature 12°C, entering air temperature 27°C W.B.; 19°C D.B.
- (2) Heating: entering water temperature 70°C, leaving water temperature 60°C, entering air temperature 20°C
- (3) Heating: entering water temperature 50°C, same water flow as in cooling, entering air temperature 20°C
- (4) Electric heater: electric performances (supplied as accessory only)
- (5) Air flow and fan speed: fancoil performances with cleaned filter
- (6) Sound power level: sound power measured following ISO 23741
- (7) Electrical data referred to the maximum available speed

SIZES 70 TO 120 - 2 PIPES SYSTEM

CORRECTION COEFFICIENT FOR DIFFERENT AVAILABLE SPEEDS

COMFAIR	HC	70	80	90	100	110	120
Total cooling capacity	1	0,56	0,80 min	0,70 min	0,73	0,55	0,56
	2	0,65	0,93 med	0,8	0,78 min	0,60 min	0,63 min
	3	0,75 min	1,00 max	0,86 med	0,86 med	0,77 med	0,78
	4	0,86 med	1,09	0,93	0,93	0,85	0,85 med
	5	1,00 max	1,17	1,00 max	1,00 max	1,00 max	1,00 max
	6	1,16	1,28	1,09	1,09	-	-
Sensible cooling capacity	1	0,54	0,79 min	0,68 min	0,71	0,53	0,54
	2	0,63	0,91 med	0,78	0,76 min	0,58 min	0,60 min
	3	0,73 min	1,00 max	0,85 med	0,85 med	0,75 med	0,78
	4	0,85 med	1,09	0,92	0,92	0,84	0,84 med
	5	1,00 max	1,18	1,00 max	1,00 max	1,00 max	1,00 max
	6	1,17	1,3	1,09	1,09	-	-
Heating capacity	1	0,54	0,80 min	0,69 min	0,72	0,54	0,55
	2	0,63	0,92 med	0,8	0,77 min	0,59 min	0,61 min
	3	0,74 min	1,00 max	0,86 med	0,85 med	0,76 med	0,78
	4	0,85 med	1,07	0,93	0,92	0,84	0,84 med
	5	1,00 max	1,13	1,00 max	1,00 max	1,00 max	1,00 max
	6	1,13	1,22	1,07	1,08	-	-
Air flow	1	0,5	0,74 min	0,62 min	0,65	0,44	0,46
	2	0,58	0,90 med	0,74	0,71 min	0,49 min	0,56 min
	3	0,69 min	1,00 max	0,82 med	0,81 med	0,68 med	0,71
	4	0,82 med	1,13	0,91	0,9	0,78	0,79 med
	5	1,00 max	1,25	1,00 max	1,00 max	1,00 max	1,00 max
	6	1,22	1,43	1,14	1,11	-	-

Data indicated as min., med., max. concern the 3 standard speeds set at the factory. Upon customer request other 3 speeds among the 6 speeds available can be connected.

SIZES 10 TO 60 - 4 PIPES SYSTEM

COMFAIR	HC	10	20	30	40	50	60
Total cooling capacity ⁽¹⁾	W	837	1234	2079	2376	2963	3680
	Frig/h	722	1064	1792	2048	2554	3173
Sensible cooling capacity ⁽¹⁾	W	809	1116	1691	1926	2490	2907
	Frig/h	697	962	1458	1660	2146	2506
Heating capacity ⁽²⁾	W	1261	1894	2726	2887	3489	4131
	kcalh	1087	1633	2350	2489	3008	3561
Water flow in cooling ⁽¹⁾	l/h	144	213	358	410	511	635
	l/s	0,04	0,059	0,099	0,114	0,142	0,176
Water flow in heating ⁽²⁾	l/h	109	163	235	249	301	356
	l/s	0,03	0,045	0,065	0,069	0,084	0,099
Water pressure drops in cooling ⁽¹⁾	kPa	0,8	2	5,7	8,2	14,5	23
	mWG	0,08	0,2	0,057	0,82	1,45	2,3
Water pressure drops in heating ⁽²⁾	kPa	0,3	0,7	1,7	2	3,4	4,2
	mWG	0,03	0,07	0,17	0,2	0,34	0,42
Heating capacity ⁽³⁾	W	771	1158	1666	1764	2132	2524
	kcalh	664	998	1436	1521	1838	2176
Water flow ⁽³⁾	l/h	133	200	287	304	368	435
	l/s	0,037	0,055	0,08	0,085	0,102	0,121
Water pressure drops in heating ⁽³⁾	kPa	0,5	1,2	2,8	3,3	5,7	7
	mWG	0,05	0,12	0,28	0,33	0,57	0,7
Air flow ⁽⁴⁾	m ³ /h	216	275	384	430	546	651
	m ³ /s	0,06	0,076	0,107	0,119	0,152	0,181
Fan speed ⁽⁴⁾	rpm	720	685	615	700	665	805
Sound power level ⁽⁵⁾	dB(A)	45	47	44	48	46	53
Motor electrical power ⁽⁶⁾	W	38	54	60	61	99	99
Motor electrical input ⁽⁶⁾	A	0,18	0,25	0,28		0,45	
Electrical supply	V/Ph/Hz	230/1/50					

Above mentioned technical data are calculated at the following operating conditions:

- Maximum fan speed (maximum speed predetermined in the factory among the available speeds: 6 for HC 70, 80, 90 and 5 for HC100, 120)
- Standard unit without ducts (fancoil operating without external back pressure)

- (1) Cooling: entering water temperature 7°C, leaving water temperature 12°C, entering air temperature 27°C W.B.; 19°C D.B.
- (2) Heating: entering water temperature 70°C, leaving water temperature 60°C, entering air temperature 20°C
- (3) Heating: entering water temperature 50°C, same water flow as in cooling, entering air temperature 20°C
- (4) Air flow and fan speed: fancoil performances with cleaned filter
- (5) Sound power level: sound power measured following ISO 23741
- (6) Electrical data referred to the maximum available speed

SIZES 10 TO 60 - 4 PIPES SYSTEM

CORRECTION COEFFICIENT FOR DIFFERENT AVAILABLE SPEEDS

COMFAIR	HC	10	20	30	40	50	60
Total cooling capacity	1	0,73	0,78	0,6	0,52	0,71 min	0,63
	2	0,77 min	0,84 min	0,67 min	0,60 min	0,8	0,71 min
	3	0,84	0,92 med	0,89 med	0,80 med	0,90 med	0,8
	4	0,92 med	1,00 max	1,00 max	0,9	1,00 max	0,88 med
	5	1,00 max	1,1	1,11	1,00 max	1,12	1,00 max
	6	1,08	1,32	1,23	1,12	1,26	1,13
Sensible cooling capacity	1	0,65	0,72	0,6	0,53	0,69 min	0,6
	2	0,69 min	0,79 min	0,68 min	0,60 min	0,78	0,69 min
	3	0,78	0,88 med	0,89 med	0,79 med	0,89 med	0,78
	4	0,88 med	1,00 max	1,00 max	0,89	1,00 max	0,87 med
	5	1,00 max	1,14	1,11	1,00 max	1,14	1,00 max
	6	1,13	1,35	1,24	1,13	1,29	1,14
Heating capacity	1	0,64	0,71	0,63	0,56	0,70 min	0,62
	2	0,68 min	0,78 min	0,72 min	0,64 min	0,79	0,70 min
	3	0,78	0,88 med	0,90 med	0,81 med	0,89 med	0,79
	4	0,88 med	1,00 max	1,00 max	0,9	1,00 max	0,88 med
	5	1,00 max	1,12	1,08	1,00 max	1,1	1,00 max
	6	1,25	1,22	1,17	1,1	1,21	1,1
Air flow	1	0,54	0,64	0,56	0,5	0,63 min	0,54
	2	0,60 min	0,72 min	0,67 min	0,58 min	0,73	0,63 min
	3	0,7	0,84 med	0,87 med	0,76 med	0,86 med	0,73
	4	0,83 med	1,00 max	1,00 max	0,88	1,00 max	0,84 med
	5	1,00 max	1,21	1,14	1,00 max	1,19	1,00 max
	6	1,22	1,42	1,32	1,17	1,41	1,19

Data indicated as min., med., max. concern the 3 standard speeds set at the factory. Upon customer request other 3 speeds among the 6 speeds available can be connected.

SIZES 70 TO 120 - 4 PIPES SYSTEM

COMFAIR	HC	70	80	90	100	110	120
Total cooling capacity ⁽¹⁾	W	4470	5333	6569	7714	9703	10656
	Frig/h	3854	4597	5663	6650	8365	9186
Sensible cooling capacity ⁽¹⁾	W	3345	4323	5257	5863	7665	8205
	Frig/h	2884	3727	4532	5054	6608	7073
Heating capacity ⁽²⁾	W	5044	6193	7665	8388	10111	11433
	kcalh	4348	5339	6608	7231	8716	9856
Water flow in cooling ⁽¹⁾	l/h	771	919	1133	1330	1673	1837
	l/s	0,214	0,255	0,315	0,369	0,465	0,51
Water flow in heating ⁽²⁾	l/h	435	534	661	739	891	1088
	l/s	0,121	0,148	0,184	0,205	0,248	0,28
Water pressure drops in cooling ⁽¹⁾	kPa	50	24	38	24,9	21,7	25,1
	mWG	5	2,4	3,8	2,49	2,17	2,51
Water pressure drops in heating ⁽²⁾	kPa	7,5	13,9	21,7	48,4	27	34
	mWG	0,75	1,39	2,17	4,84	2,7	3,4
Heating capacity ⁽³⁾	W	3082	3785	4684	5126	6179	6987
	kcalh	2657	3263	4038	4419	5326	6023
Water flow ⁽³⁾	l/h	531	653	808	895	1078	1219
	l/s	0,148	0,181	0,224	0,248	0,3	0,339
Water pressure drops in heating ⁽³⁾	kPa	12,5	23,2	36,2	80,2	44,7	56,3
	mWG	1,25	2,32	3,62	8,02	4,47	5,63
Air flow ⁽⁴⁾	m ³ /h	673	1005	1180	1291	1916	1908
	m ³ /s	0,187	0,279	0,328	0,359	0,532	0,53
Fan speed ⁽⁴⁾	rpm	730	917	1070	855	815	1045
Sound power level ⁽⁵⁾	dB(A)	53	59	65	63	67	67
Motor electrical power ⁽⁶⁾	W	97	210	207	213	277	273
Motor electrical input ⁽⁶⁾	A	0,44	0,96	0,95	0,97	1,27	1,25
Electrical supply	V/Ph/Hz	230/1/50					

Above mentioned technical data are calculated at the following operating conditions:

- Maximum fan speed (maximum speed predetermined in the factory among the available speeds: 6 for HC 70, 80, 90 and 5 for HC100, 120)
- Standard unit without ducts (fancoil operating without external back pressure)

- (1) Cooling: entering water temperature 7°C, leaving water temperature 12°C, entering air temperature 27°C W.B.; 19°C D.B.
- (2) Heating: entering water temperature 70°C, leaving water temperature 60°C, entering air temperature 20°C
- (3) Heating: entering water temperature 50°C, same water flow as in cooling, entering air temperature 20°C
- (4) Air flow and fan speed: fancoil performances with cleaned filter
- (5) Sound power level: sound power measured following ISO 23741
- (6) Electrical data referred to the maximum available speed

SIZES 70 TO 120 - 4 PIPES SYSTEM

CORRECTION COEFFICIENT FOR DIFFERENT AVAILABLE SPEEDS

COMFAIR	HC	70	80	90	100	110	120
Total cooling capacity	1	0,56	0,80 min	0,70 min	0,72	0,55	0,56
	2	0,65	0,93 med	0,8	0,78 min	0,60 min	0,62 min
	3	0,75 min	1,00 max	0,86 med	0,85 med	0,77 med	0,79
	4	0,86 med	1,09	0,93	0,93	0,85	0,85 med
	5	1,00 max	1,17	1,00 max	1,00 max	1,00 max	1,00 max
	6	1,16	1,28	1,09	1,08	-	-
Sensible cooling capacity	1	0,54	0,79 min	0,68 min	0,7	0,52	0,53
	2	0,63	0,91 med	0,78	0,76 min	0,57 min	0,60 min
	3	0,73 min	1,00 max	0,85 med	0,84 med	0,75 med	0,77
	4	0,85 med	1,09	0,92	0,92	0,84	0,84 med
	5	1,00 max	1,18	1,00 max	1,00 max	1,00 max	1,00 max
	6	1,17	1,3	1,09	1,08	-	-
Heating capacity	1	0,54	0,80 min	0,69 min	0,77	0,62	0,63
	2	0,63	0,92 med	0,8	0,82 min	0,67 min	0,69 min
	3	0,74 min	1,00 max	0,86 med	0,88 med	0,81 med	0,82
	4	0,85 med	1,07	0,93	0,94	0,87	0,88 med
	5	1,00 max	1,13	1,00 max	1,00 max	1,00 max	1,00 max
	6	1,13	1,22	1,07	1,06	-	-
Air flow	1	0,5	0,74 min	0,62 min	0,65	0,44	0,46
	2	0,58	0,90 med	0,74	0,71 min	0,49 min	0,53 min
	3	0,69 min	1,00 max	0,82 med	0,81 med	0,68 med	0,71
	4	0,82 med	1,13	0,91	0,9	0,78	0,79 med
	5	1,00 max	1,25	1,00 max	1,00 max	1,00 max	1,00 max
	6	1,22	1,43	1,14	1,11	-	-

Data indicated as min., med., max. concern the 3 standard speeds set at the factory. Upon customer request other 3 speeds among the 6 speeds available can be connected.

WORKING LIMITS - HC



Maximum entering water temperature: 80°C
 Minimum entering water temperature: +4°C
 Maximum working pressure: 8 Bar

Maximum entering air temperature: 32°C
 Minimum entering air temperature: +4°C

WATER FLOW AND PRESSURE DROP LIMITS, 3R COIL

COMFAIR	HC	10	20	30	40	50	60	70	80	90	100	110	120
Minimal water flow	l/h	125	100					75	125		200	275	
Minimal water pressure drops	kPa	0,6	0,4	0,5		0,6		0,5			0,6	0,5	0,6
Maximal water flow	l/h	1275	1200	1125	1150	1025	1000	850	1400		2075	2900	2850
Maximal water pressure drops	kPa	58,6	59,5	59,6	61,2	59,2	59	62	59,1	60,1	60,6	60,6	60,4

Data given for medium water temperature at 9,5°C

WATER FLOW AND PRESSURE DROP LIMITS, AUXILIARY 1 ROW COIL

COMFAIR	HC	10	20	30	40	50	60	70	80	90	100	110	120
Minimal water flow	l/h	150		125					100		125		
Minimal water pressure drops	kPa	0,6		0,5		0,6	0,5	0,6		0,5			
Maximal water flow	l/h	1550	1500	1400	1375	1275	1350	1225	1100		1375	1325	
Maximal water pressure drops	kPa	60,7	59,3	60,3	61		60,4	59,5	59	60,1	59,6	59,7	58,8

Data given for medium water temperature at 65°C

3 WAYS VALVE

Using of 2 or 3 ways valves is compulsory when the unit is used for cooling to avoid condensate in the external structure (bearing structure and cabinet). As alternative install a regulating system to stop coil water entering when the fan is off.

MAXIMUM FAN STATIC PRESSURE

When the units is connected with ducts fan air flow is reduced due to the ducting pressure drops.

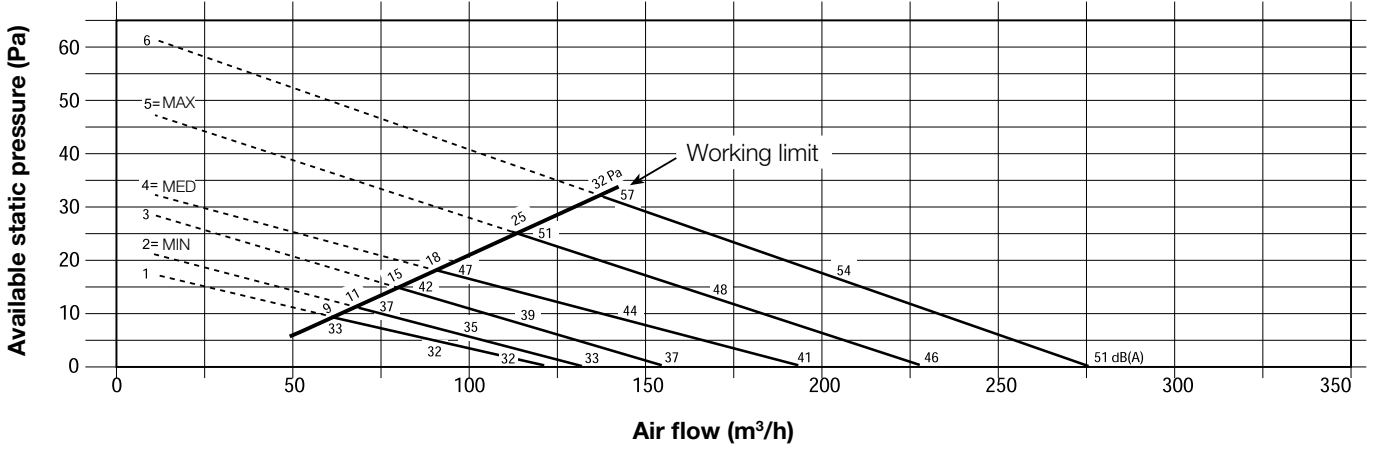
With very high pressure drops fancoil air flow becomes too low and electric motor which is connected to the fan can be damaged. For this reason we recommend static pressures lower than the maximum limit static pressures indicated in the schedule.

NOTE: When the fancoil is operating with the maximum operating indicated static pressure value, air flow is half in comparison with the unit without ducts at the same working speed. Definitely the static pressure limit corresponds to the back pressure ables to half fancoil air flow (as a consequence the fancoil unit performances like heating & cooling capacity, will be reduced of about 50%).

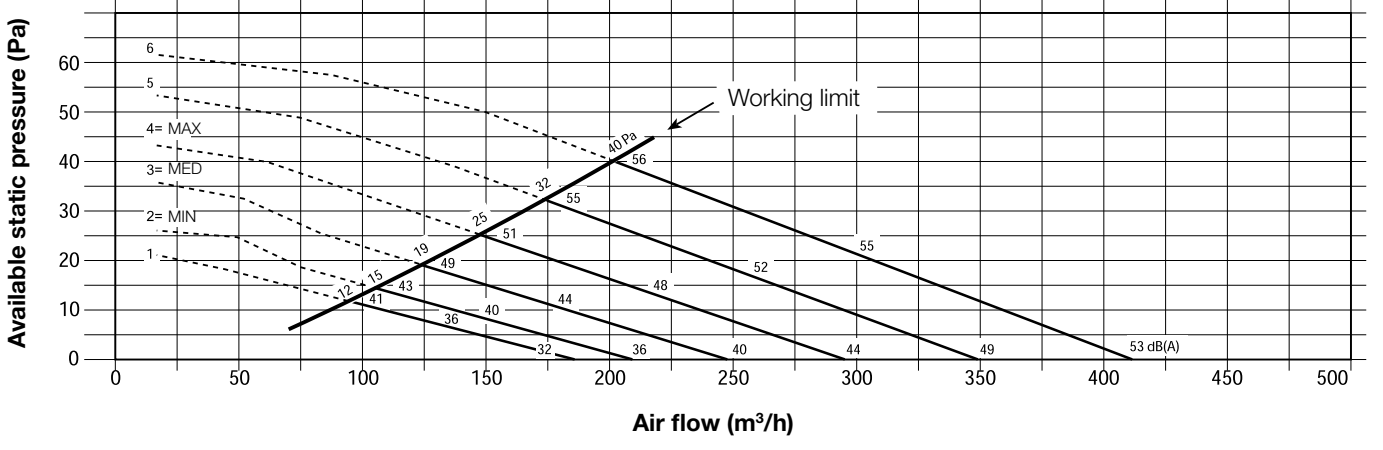
COMFAIR		HC	10	20	30	40	50	60	70	80	90	100	110	120
2 pipes system	1	Pa	9	12	7	9	19 min	12	15	41 min	33 min	44	37	47
	2	Pa	11 min	15 min	10 min	11 min	22	16 min	19	51 med	41	49 mni	47 min	58 min
	3	Pa	15	19 med	15 med	17 med	28 med	22	26 min	55 max	45 med	62 med	68 med	74
	4	Pa	18 med	25 max	19 max	22	32 max	28 med	34 med	60	49	68	79	80 med
	5	Pa	25 max	32	25	27 max	40	36 max	44 max	65	53 max	78 max	84 max	84 max
	6	Pa	32	40	32	37	49	45	54	70	60	84	-	-
4 pipes system	1	Pa	8	10	6	8	14 min	10	11	30 min	27 min	43	37	47
	2	Pa	9 min	12 min	8 min	9 min	17	13 min	15	38 med	33	48 min	47 min	58 min
	3	Pa	11	15 med	13 med	14 med	21 med	18	20 min	42 max	37 med	61 med	67 med	73
	4	Pa	15 med	19 max	15 max	17	25 max	22 med	28 med	50	40	67	75	79 med
	5	Pa	19 max	25	19	22 max	32	28 max	36 max	55	44 max	74 max	83 max	85 max
	6	Pa	25	32	24	30	38	35	44	60	51	82	-	-

Data indicated as min., med., max. concern the 3 standard speeds set at the factory. Upon customer request other 3 speeds among the 6 speeds available can be connected.

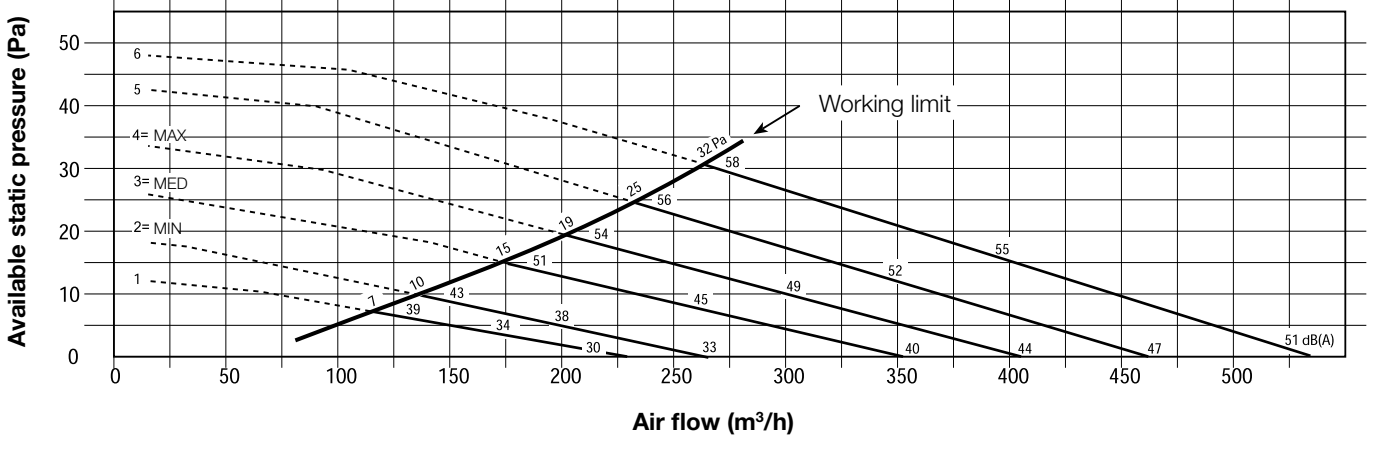
HC 1_ - 2 PIPES SYSTEM (3 ROW COIL DATA)



HC 2_ - 2 PIPES SYSTEM (3 ROW COIL DATA)

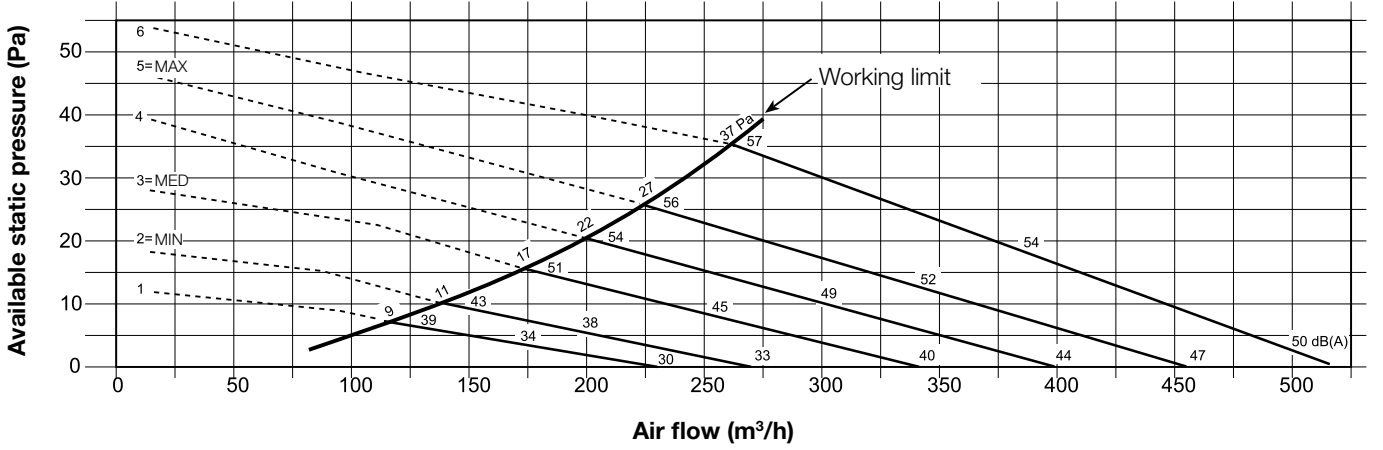


HC 3_ - 2 PIPES SYSTEM (3 ROW COIL DATA)

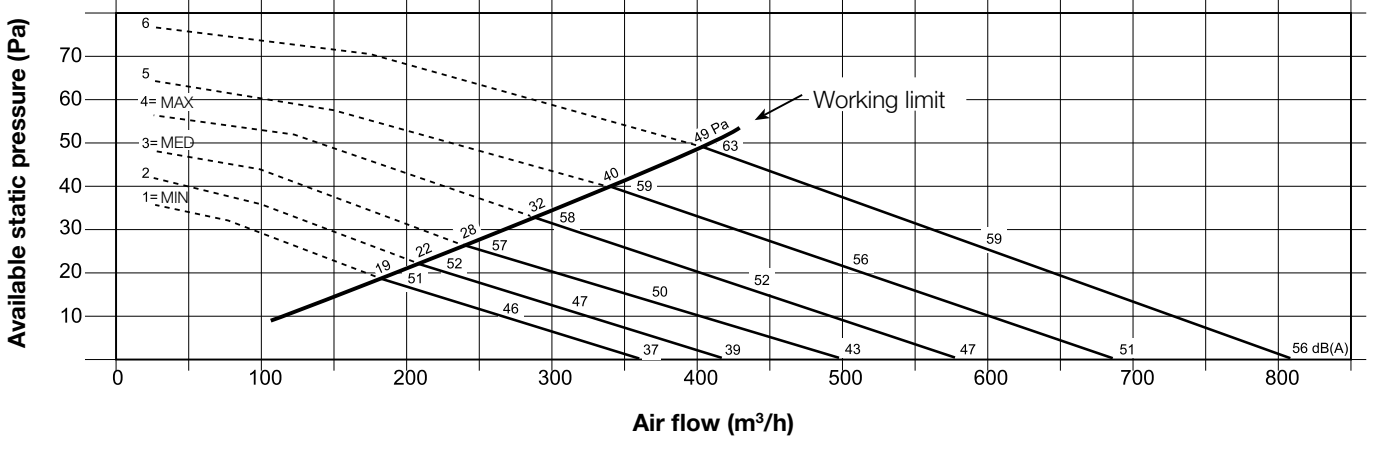


Data indicated as min., med., max. concern the 3 standard speeds set at the factory. Upon customer request other 3 speeds among the 6 speeds available can be connected.

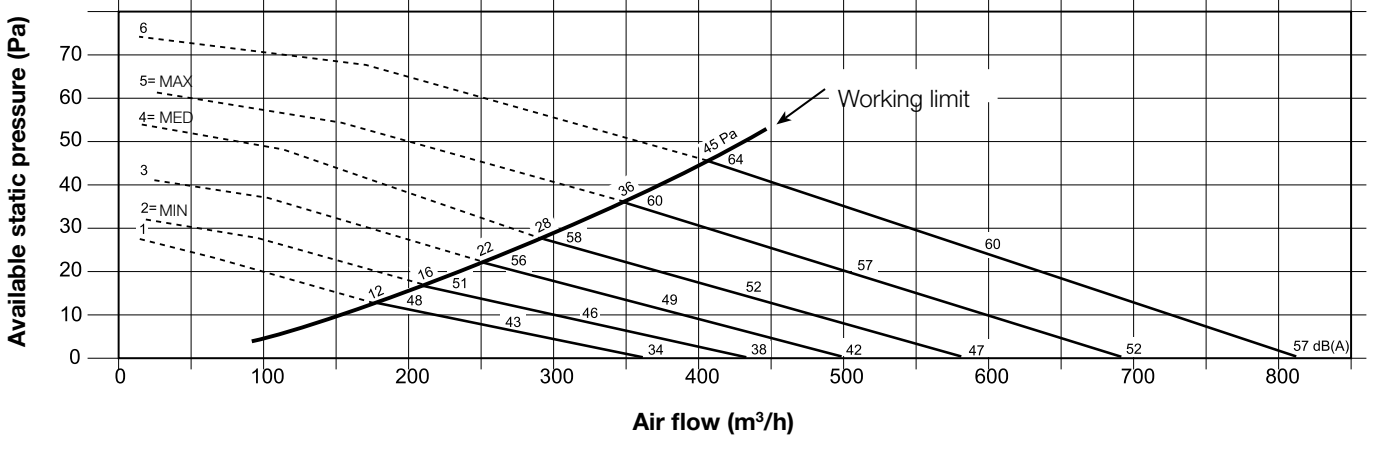
HC 4_ - 2 PIPES SYSTEM (3 ROW COIL DATA)



HC 5_ - 2 PIPES SYSTEM (3 ROW COIL DATA)

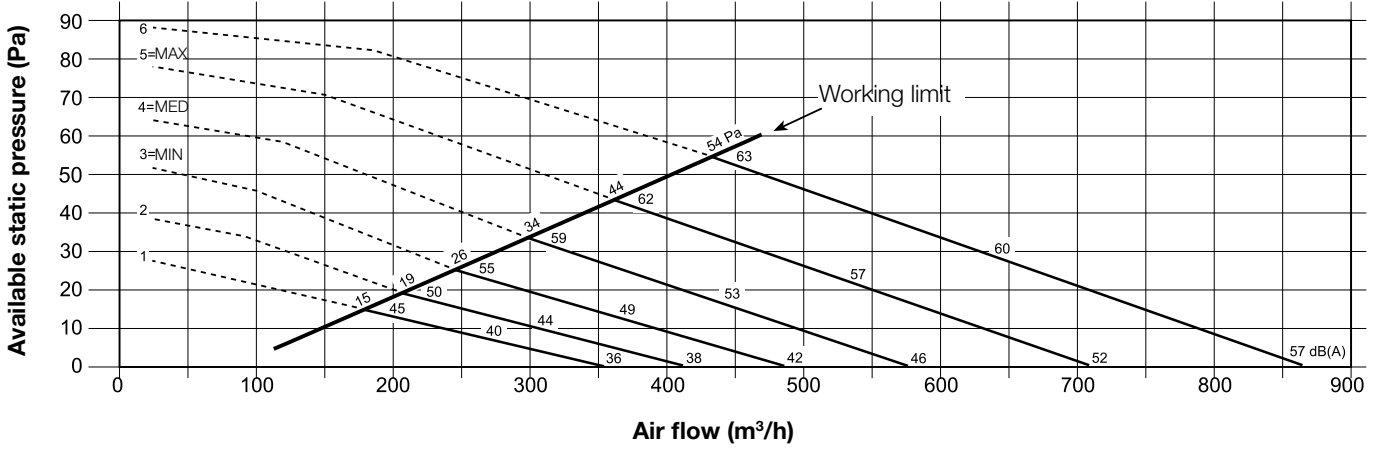


HC 6_ - 2 PIPES SYSTEM (3 ROW COIL DATA)

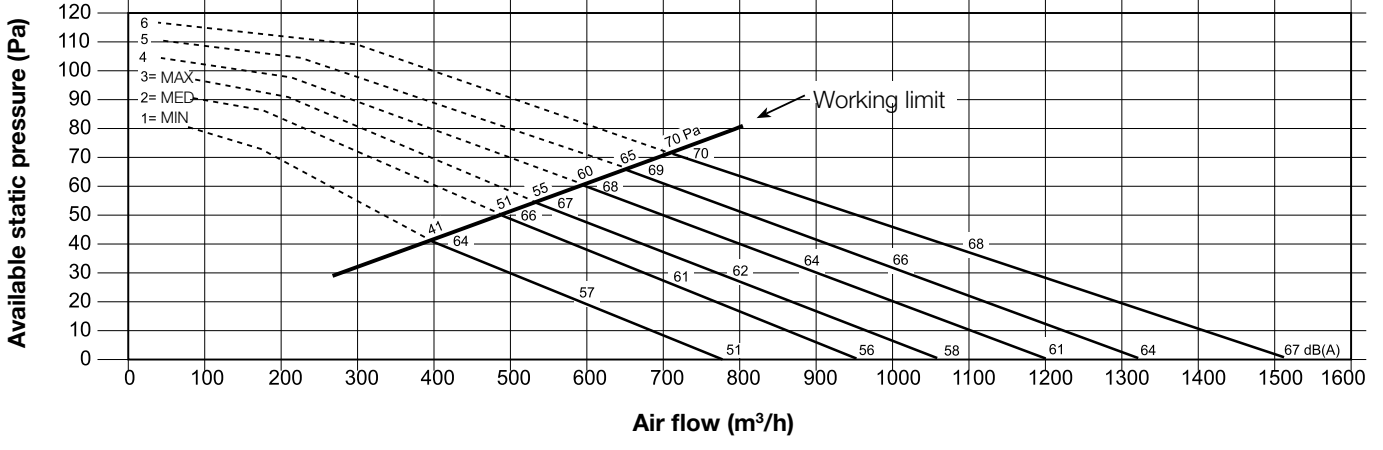


Data indicated as min., med., max. concern the 3 standard speeds set at the factory. Upon customer request other 3 speeds among the 6 speeds available can be connected.

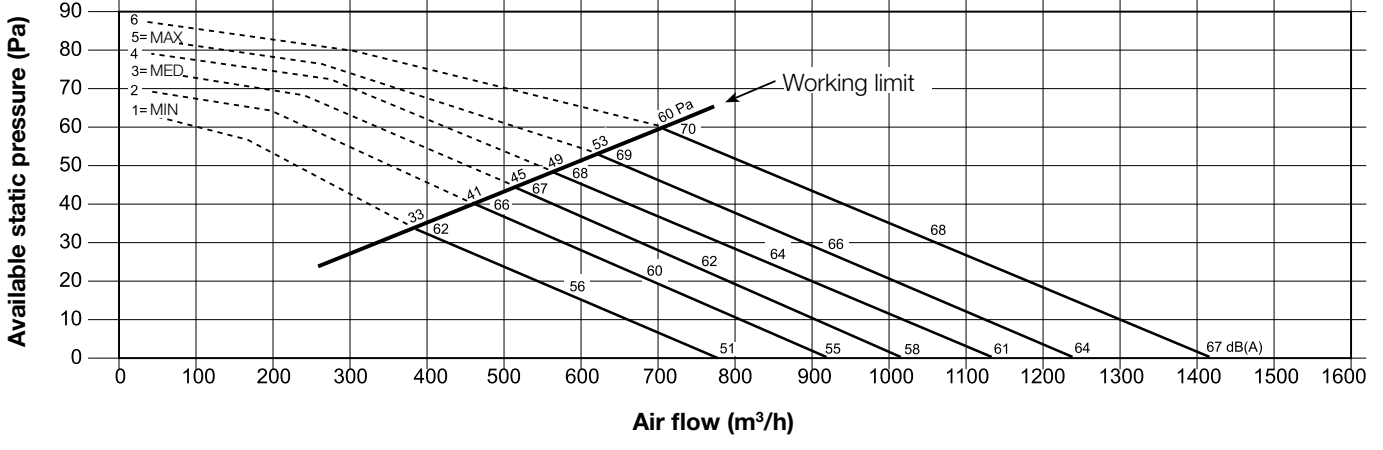
HC 7_ - 2 PIPES SYSTEM (3 ROW COIL DATA)



HC 8_ - 2 PIPES SYSTEM (3 ROW COIL DATA)

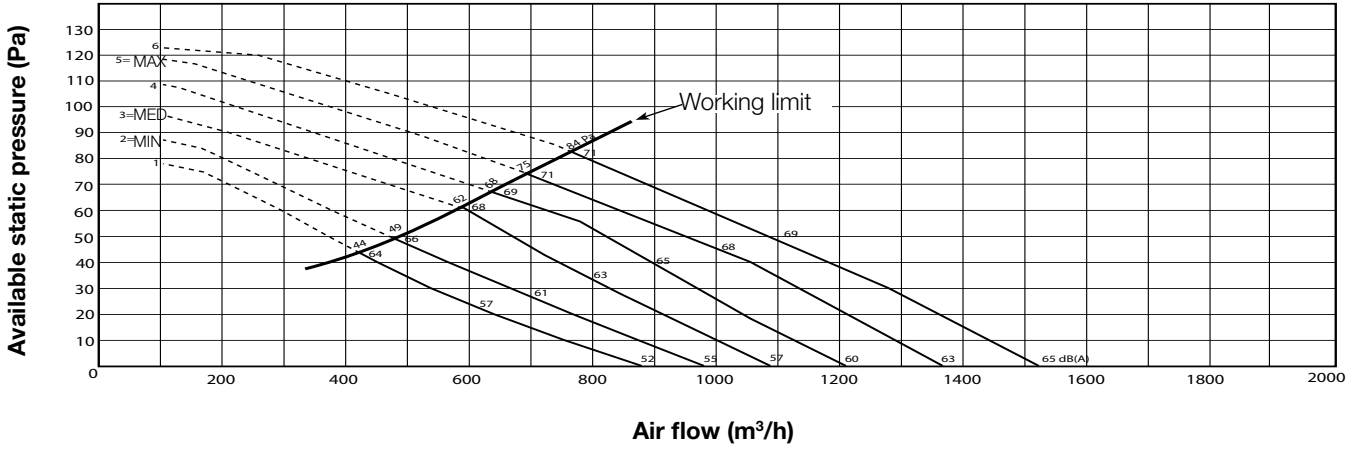


HC 9_ - 2 PIPES SYSTEM (3 ROW COIL DATA)

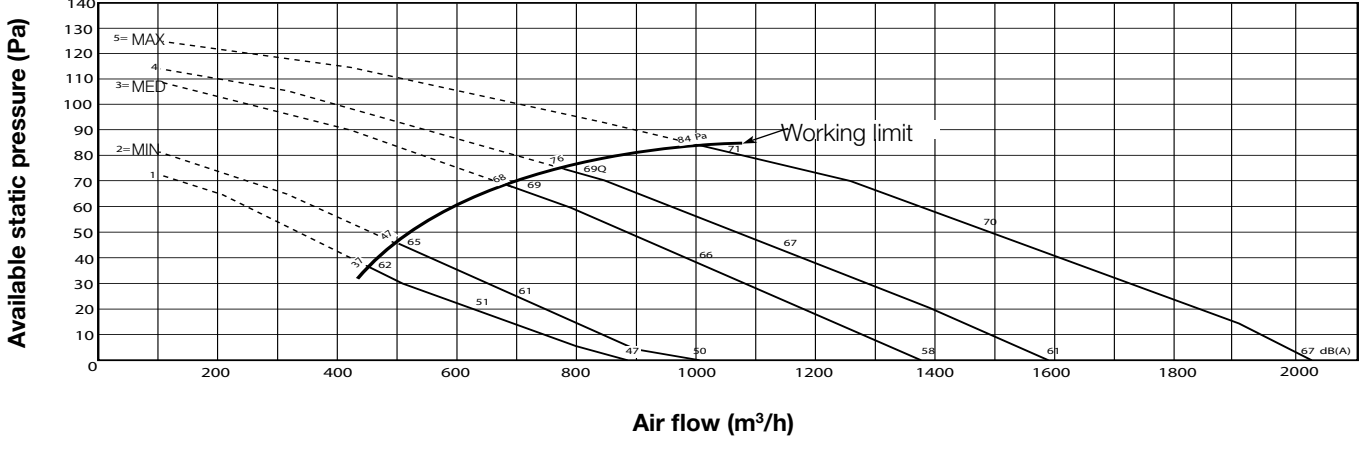


Data indicated as min., med., max. concern the 3 standard speeds set at the factory. Upon customer request other 3 speeds among the 6 speeds available can be connected.

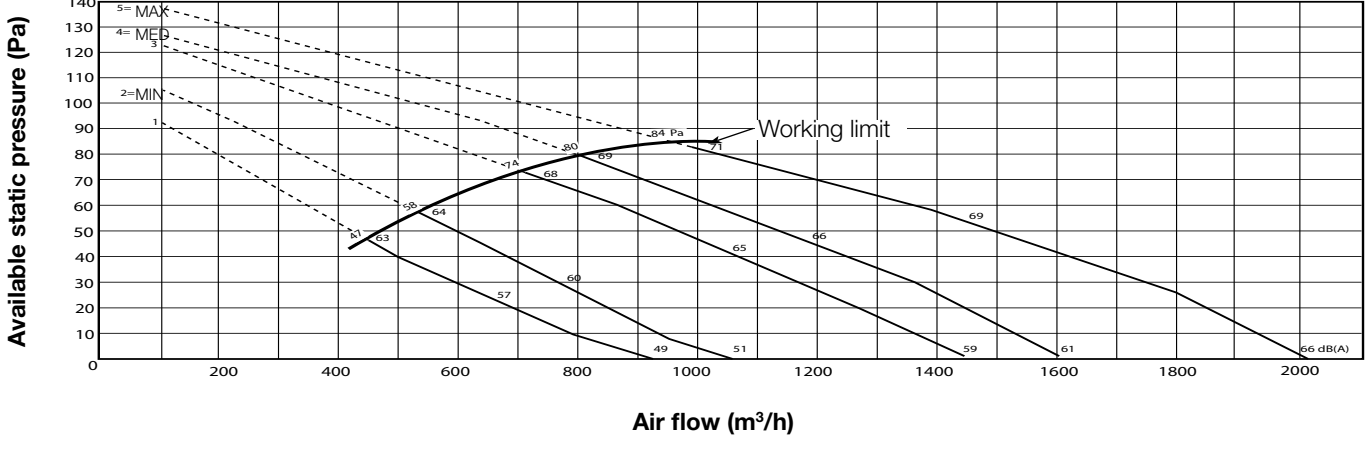
HC 10_ - 2 PIPES SYSTEM (3 ROW COIL DATA)



HC 11_ - 2 PIPES SYSTEM (3 ROW COIL DATA)

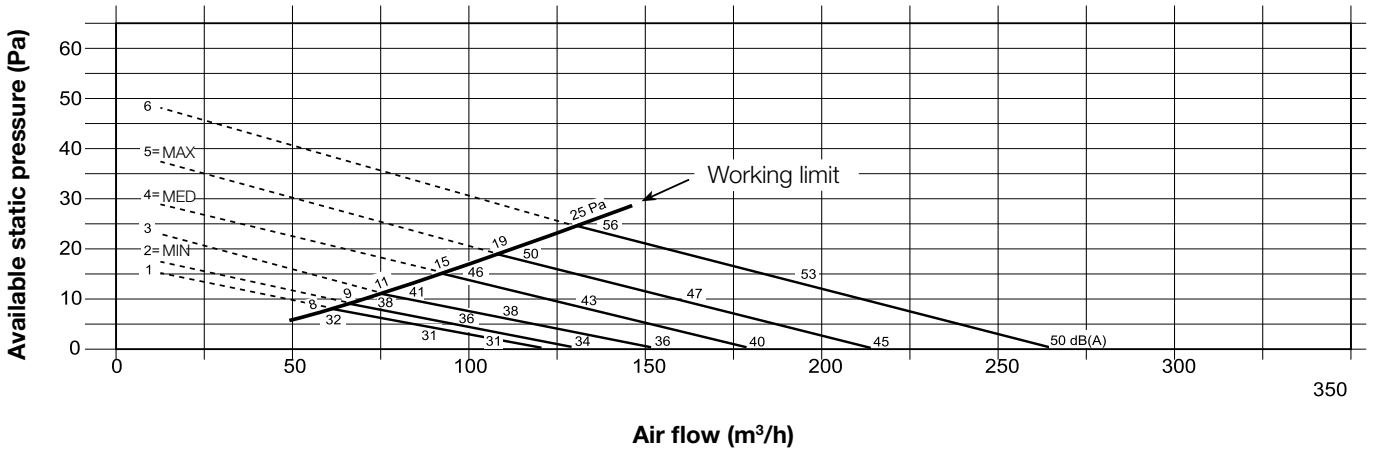


HC 12_ - 2 PIPES SYSTEM (3 ROW COIL DATA)

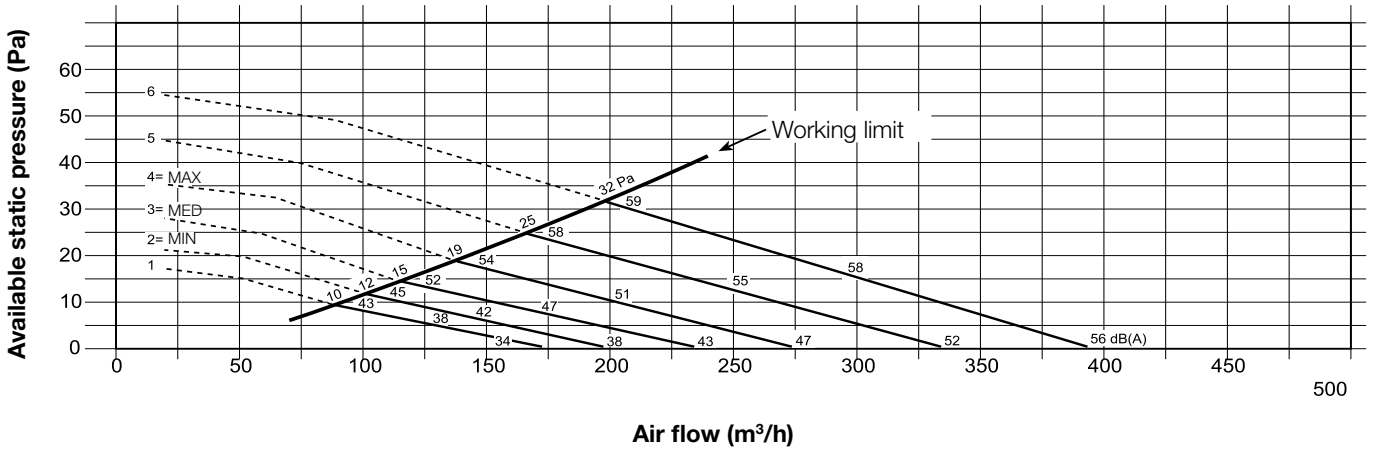


Data indicated as min., med., max. concern the 3 standard speeds set at the factory. Upon customer request other 3 speeds among the 6 speeds available can be connected.

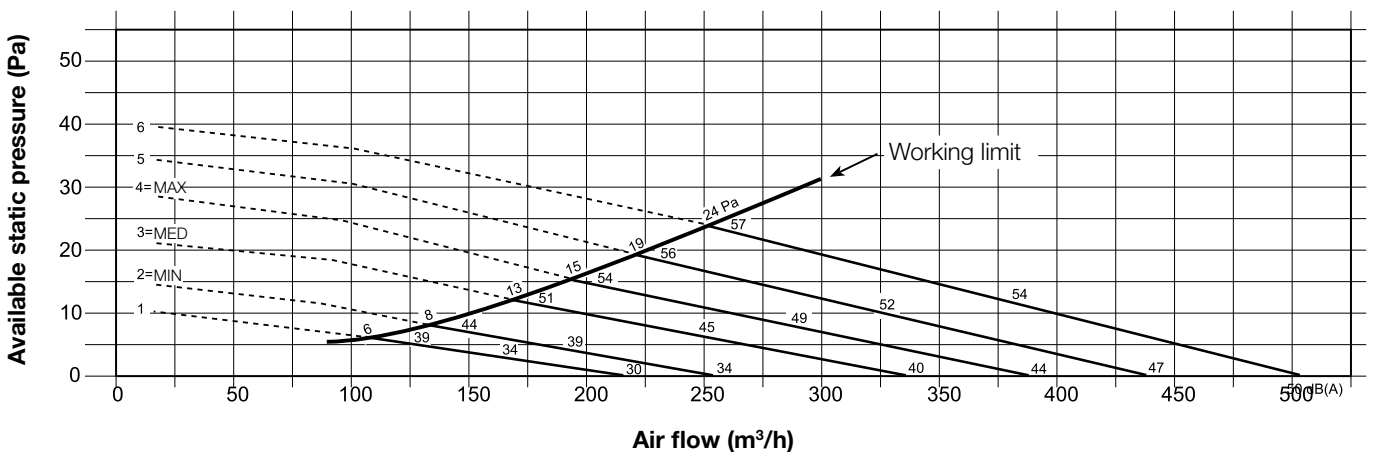
HC 1_ - 4 PIPES SYSTEM (3 ROW + 1 ROW COIL DATA)



HC 2_ - 4 PIPES SYSTEM (3 ROW + 1 ROW COIL DATA)

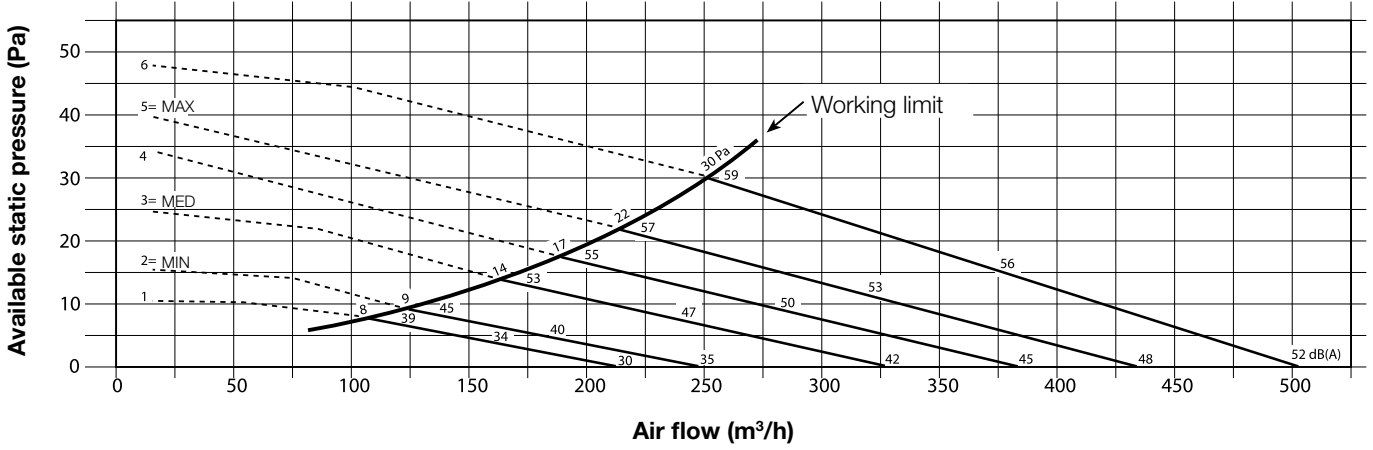


HC 3_ - 4 PIPES SYSTEM (3 ROW + 1 ROW COIL DATA)

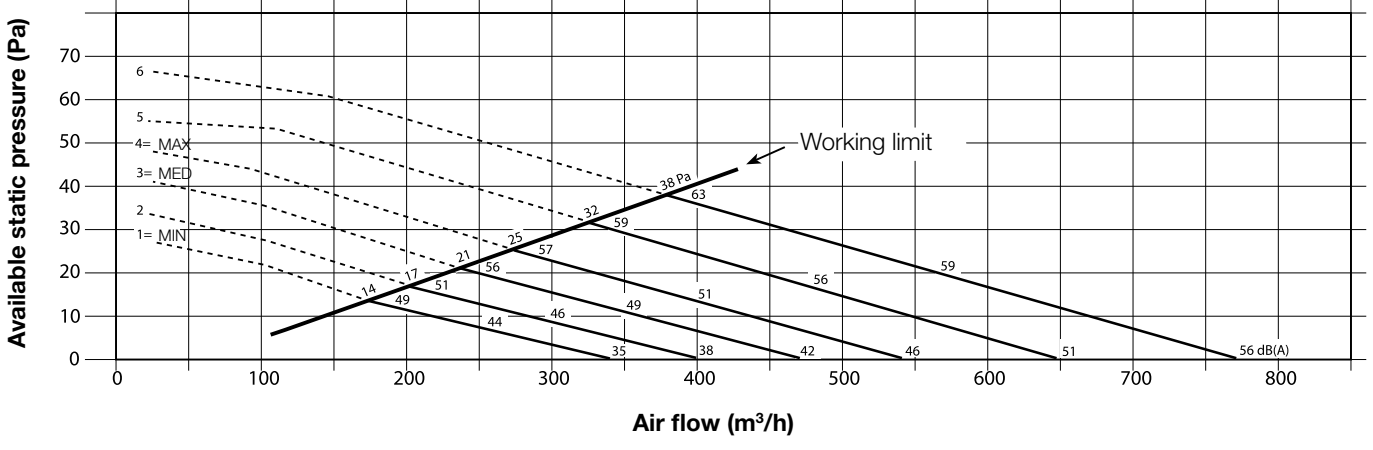


Data indicated as min., med., max. concern the 3 standard speeds set at the factory. Upon customer request other 3 speeds among the 6 speeds available can be connected.

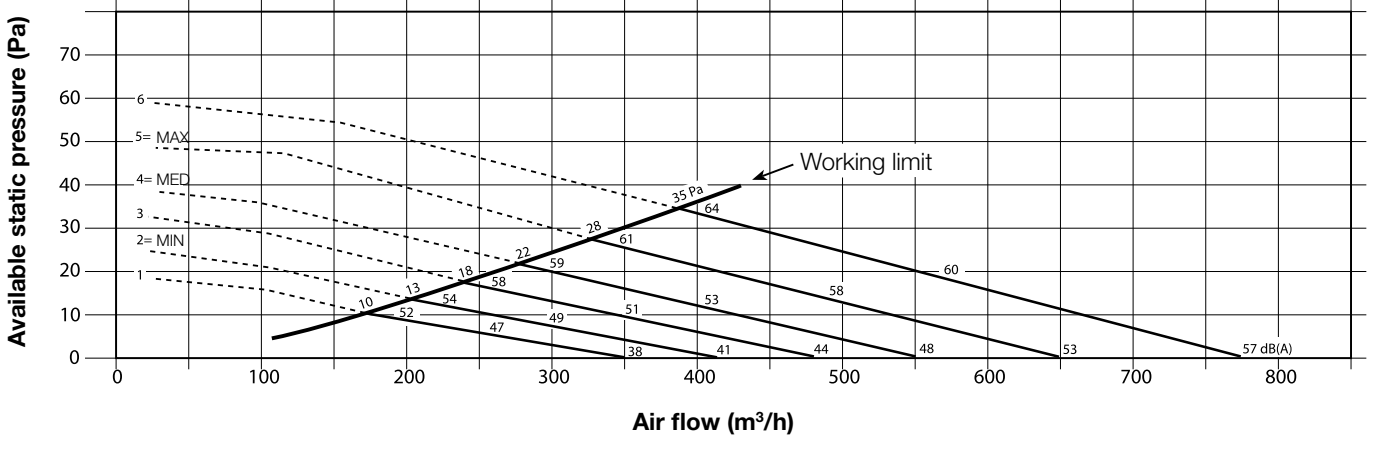
HC 4_ - 4 PIPES SYSTEM (3 ROW + 1 ROW COIL DATA)



HC 5_ - 4 PIPES SYSTEM (3 ROW + 1 ROW COIL DATA)

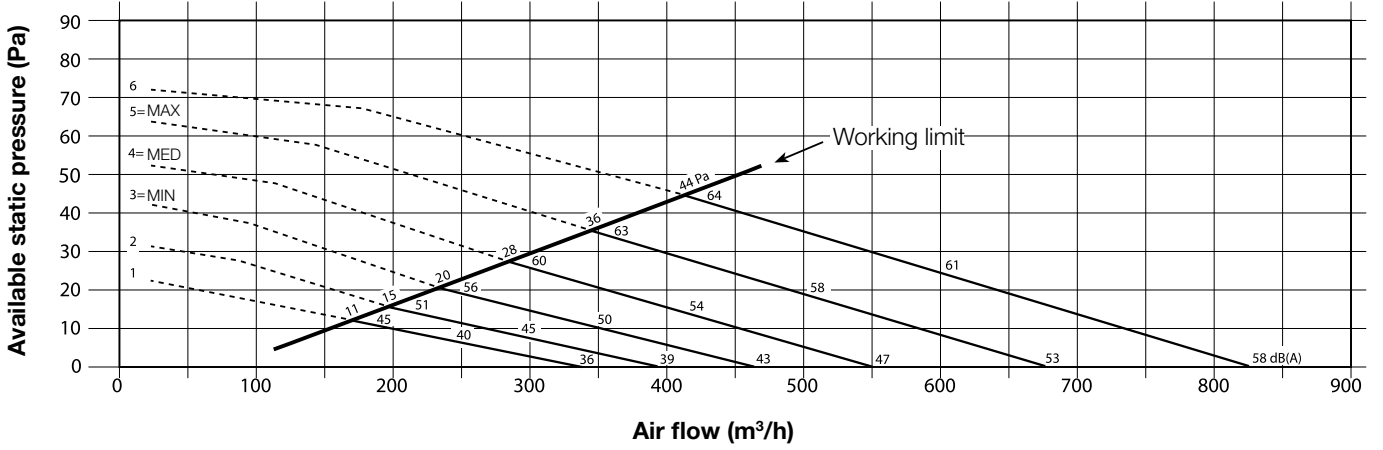


HC 6_ - 4 PIPES SYSTEM (3 ROW + 1 ROW COIL DATA)

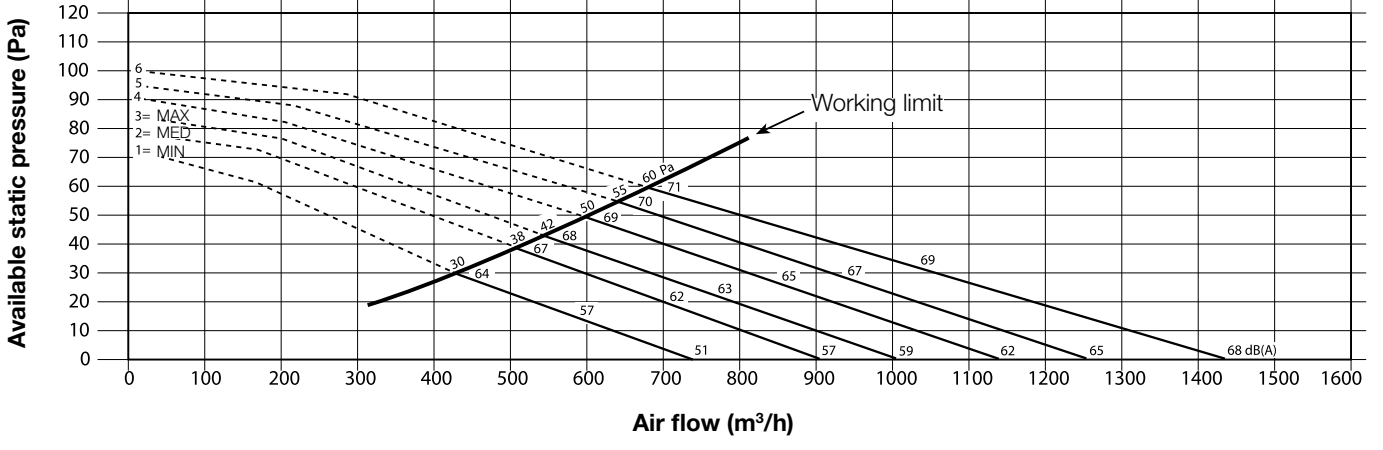


Data indicated as min., med., max. concern the 3 standard speeds set at the factory. Upon customer request other 3 speeds among the 6 speeds available can be connected.

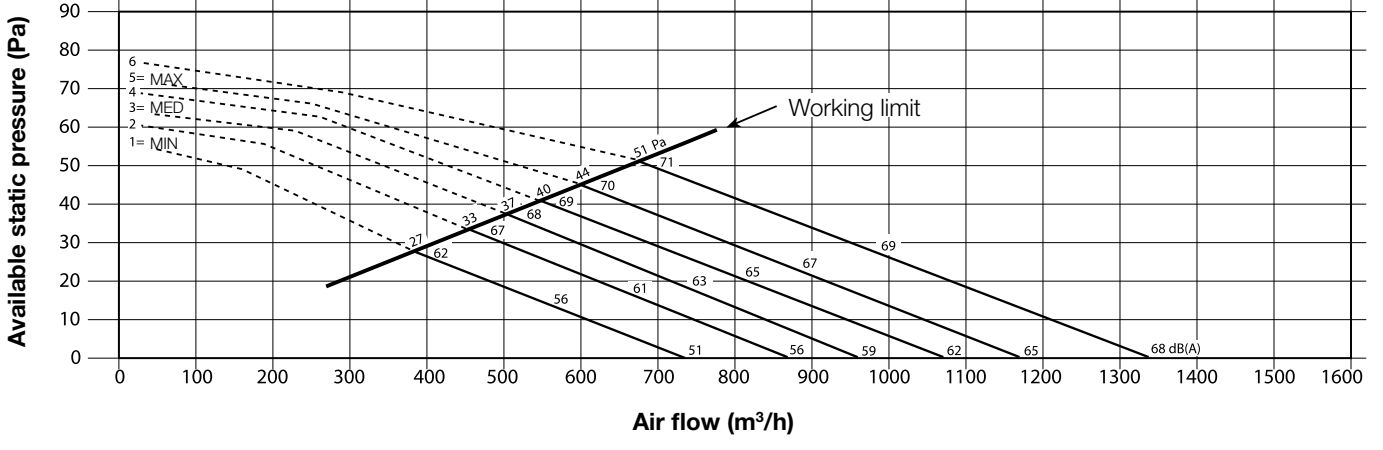
HC 7_ - 4 PIPES SYSTEM (3 ROW + 1 ROW COIL DATA)



HC 8_ - 4 PIPES SYSTEM (3 ROW + 1 ROW COIL DATA)

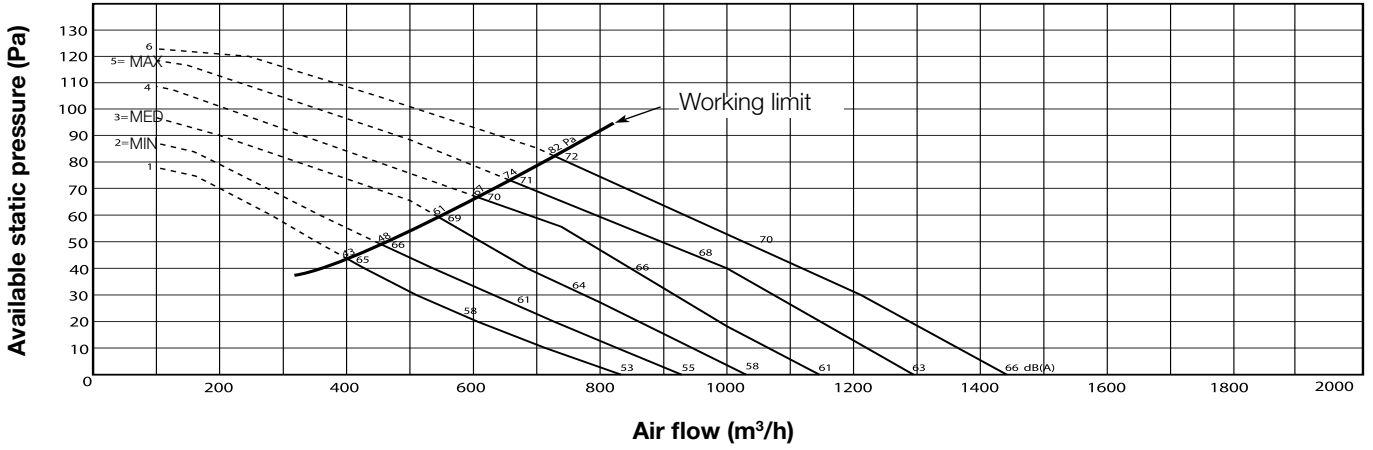


HC 9_ - 4 PIPES SYSTEM (3 ROW + 1 ROW COIL DATA)

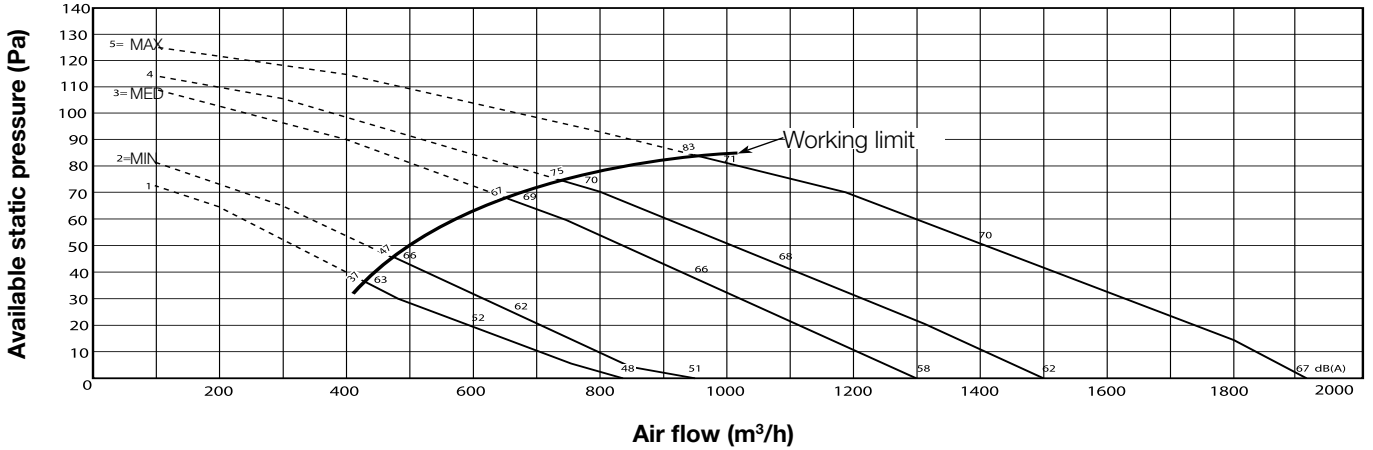


Data indicated as min., med., max. concern the 3 standard speeds set at the factory. Upon customer request other 3 speeds among the 6 speeds available can be connected.

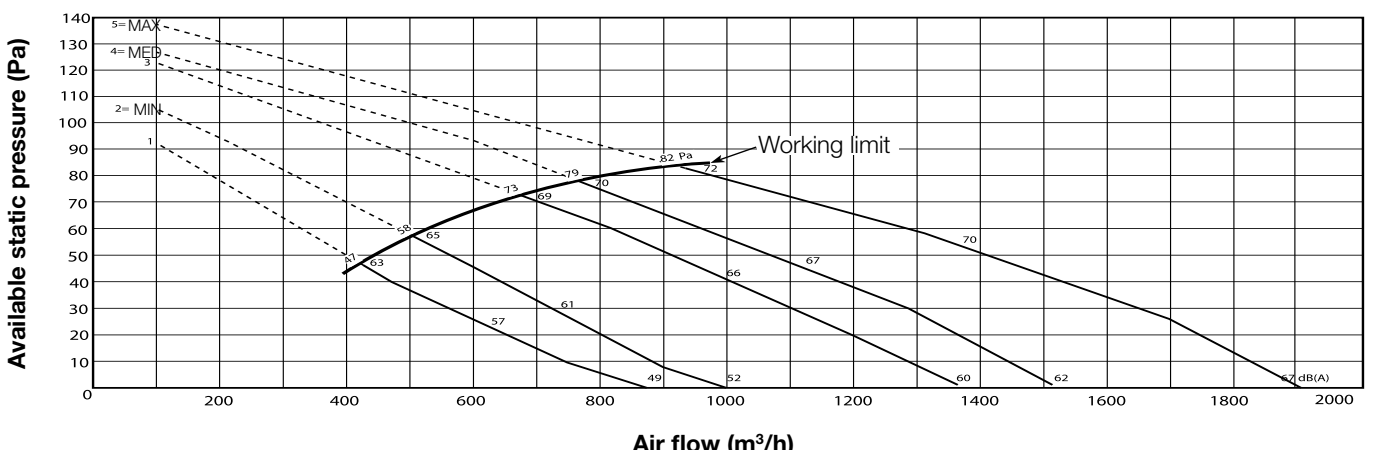
HC 10_ - 4 PIPES SYSTEM (3 ROW + 1 ROW COIL DATA)



HC 11_ - 4 PIPES SYSTEM (3 ROW + 1 ROW COIL DATA)



HC 12_ - 4 PIPES SYSTEM (3 ROW + 1 ROW COIL DATA)



Data indicated as min., med., max. concern the 3 standard speeds set at the factory. Upon customer request other 3 speeds among the 6 speeds available can be connected.

2 PIPES SYSTEM

COMFAIR	Speeds	Std Electric wiring (*)	Frequency spectrum - Ref. octave band (Hz)						Total sound power (dB(A))	
			125	250	500	1000	2000	4000		8000
HC 10	1		33,7	32,7	32,2	24	21,4	14,5	5,6	32
	2	Min	33	34,7	32,7	25,9	22,5	14,8	5,8	33
	3		36	37,6	37,1	30,6	25	17,6	6,9	37
	4	Med	37,9	41	41	35,4	29,5	21,1	8,8	41
	5	Max	42,1	45,1	45,5	40,8	35,6	27,7	16,1	46
	6		46,6	49,4	50,2	45,9	41,9	34,8	24,5	51
HC 20	1		29,2	34,8	31,9	23,5	19,6	14,7	10,1	32
	2	Min	33,1	37,8	36	28,8	23,7	17	11,5	36
	3	Med	36,9	40,9	40	33,6	28,5	20,9	13,7	40
	4	Max	40,2	43,9	43,9	38	33,5	25,2	16,9	44
	5		44,7	48,3	48,7	43	39,8	32,2	25,2	49
	6		48,8	51,9	51,9	46,9	45,6	37,7	29,9	53
HC 30	1		31,4	33,4	28,6	20,7	21,6	13,6	13	30
	2	Min	32,7	35,5	32,7	25	22,1	14	12,3	33
	3	Med	38,2	40,9	39,8	34,3	27,8	18,3	13,8	40
	4	Max	41,8	44,1	43,5	38,9	32,4	23,3	16,5	44
	5		44,5	46,5	46,2	42,2	36	28,1	19,3	47
	6		48,2	50,2	50,1	46,2	40,7	34	26,8	51
HC 40	1		31,4	33,4	28,6	20,7	21,6	13,6	13	30
	2	Min	32,7	35,5	32,7	25	22,1	14	12,3	33
	3	Med	38,2	40,9	39,8	34,3	27,8	18,3	13,8	40
	4		41,8	44,1	43,5	38,9	32,4	23,3	16,5	44
	5	Max	44,5	46,5	46,2	42,2	36	28,1	19,3	47
	6		48,2	50,2	50,1	46,2	40,7	34	26,8	50
HC 50	1	Min	35,3	39,2	35,5	26,3	29,2	25,1	23,9	37
	2		37,6	41	38,6	29,9	29,2	25	24,3	39
	3	Med	41,5	44,8	42,9	35,3	31,3	26	24,8	43
	4	Max	45,1	48	47	40,6	35,2	28	25,2	47
	5		49	51,2	50,8	45,2	39,9	32,5	28,6	51
	6		53,4	55,6	55,3	50,4	46,3	39,5	31,7	56
HC 60	1		32,3	36,2	32,5	23,3	26,2	22,1	20,9	34
	2	Min	36,6	40	37,6	28,9	28,2	24	23,3	38
	3		40,5	43,8	41,9	34,3	30,3	25	23,8	42
	4	Med	45,1	48	47	40,6	35,2	28	25,2	47
	5	Max	50	52,2	51,8	46,2	40,9	33,5	29,6	52
	6		54,4	56,6	56,3	51,4	47,3	40,5	32,7	57
HC 70	1		34,5	37,2	33,1	26,2	25,3	22,5	19,6	36
	2		35,4	40,3	37,1	29,7	27,5	24,2	21,6	38
	3	Min	39,7	43,3	41,4	34,5	31,2	26,1	22,3	42
	4	Med	43,1	46,9	46	39,8	36,3	28,3	24,8	46
	5	Max	48,5	51,3	51,3	45,6	42,4	34,5	27	52
	6		53,2	56,2	55,8	51,1	48,6	41,8	32,9	57
HC 80	1	Min	47,6	50,7	50,3	45,1	41,8	36	29	51
	2	Med	52,3	55	55,2	50,2	47,3	41,9	34,3	56
	3	Max	53,9	56,9	56,8	52,3	49,7	44,6	37,5	58
	4		56,3	59,7	59,5	55,4	53	48,4	42,2	61
	5		59,5	62,6	62,1	58,3	56,1	51,8	46,3	64
	6		62,5	65,7	64,9	61,4	59,3	55,4	50,7	67
HC 90	1	Min	48	50,1	50,7	45	51,3	36,2	29,8	51
	2		50,7	53,4	54,5	49,1	45,8	40,6	33,4	55
	3	Med	53,4	56,2	57	52,4	49,4	44,6	37,6	58
	4		55,9	59,1	59,6	55,4	52,7	48,2	42,1	61
	5	Max	58,8	61,9	62,4	58,4	55,9	51,7	46,4	64
	6		61,3	65	65	61,6	59,2	55,3	50,8	67
HC 100	1		52,3	53,5	50,8	46,7	40,6	31,9	28,3	52
	2	Min	54,7	56,2	53,8	50,1	44,1	35,3	28,5	55
	3	Med	56,7	57,8	55,5	52,2	46,8	38,6	30,9	57
	4		59,5	60,7	58,1	55,2	50,3	42,9	38,1	60
	5	Max	62,1	63,5	60,7	58,3	53,8	46,9	39,9	63
	6		63,3	65,7	62,5	60,2	56,1	49,7	43	65
HC 110	1		50,4	49,1	46	41,3	34,1	26,6	24,1	47
	2	Min	52,9	51,6	49	44,7	37,8	29,1	23,6	50
	3	Med	60,2	58,8	56,4	53,1	47,7	39,7	31,6	58
	4		62,1	61,6	59	56,2	51,4	44,2	37,7	61
	5	Max	67,1	67,1	64,4	62,2	58,3	52,3	46,1	67
HC 120	1		52,8	51,1	47,5	43,5	36,7	29,4	25,7	49
	2	Min	54,7	52,9	49,6	45,4	39,4	31,3	26,2	51
	3		60,7	60,2	57,1	53,8	49,2	41,6	33,8	59
	4	Med	62,4	62,2	58,9	55,9	51,6	44,7	37,8	61
	5	Max	68,8	66,9	63,2	61,1	57,3	51,5	45,4	66

Data indicated as min., med., max. concern the 3 standard speeds set at the factory. Upon customer request other 3 speeds among the 6 speeds available can be connected.

4 PIPES SYSTEM

COMFAIR	Speeds	Std Electric wiring (*)	Frequency spectrum - Ref. octave band (Hz)						Total sound power (dB(A))	
			125	250	500	1000	2000	4000		8000
HC 10	1		32,7	31,7	31,2	23	20,4	13,5	4,6	31
	2	Min	34	35,7	33,7	26,9	23,5	15,8	6,8	34
	3		35	36,6	36,4	29,6	24	16,6	5,9	36
	4	Med	36,9	40	40	34,4	28,5	20,1	7,8	40
	5	Max	41,1	44,1	44,5	39,8	34,6	26,7	15,1	45
	6		45,6	48,4	49,2	44,9	40,9	33,8	23,5	50
HC 20	1		31,2	36,8	33,9	25,5	21,6	16,7	12,1	34
	2	Min	35,1	39,8	38	30,8	25,7	19	13,5	38
	3	Med	39,9	43,9	43	36,6	31,5	23,9	16,7	43
	4	Max	43,2	46,9	46,9	41	36,5	28,2	19,9	47
	5		47,7	51,3	51,7	46	42,8	35,2	28,2	52
	6		51,8	54,9	54,9	49,9	48,6	40,7	32,9	56
HC 30	1		34,4	33,4	28,6	20,7	21,6	13,6	13	30
	2	Min	33,7	36,5	33,7	26	23,1	15	13,3	34
	3	Med	38,2	40,9	39,8	34,3	27,8	18,3	13,8	40
	4	Max	41,8	44,1	43,5	38,9	32,4	23,3	16,5	44
	5		44,5	46,5	46,2	42,2	36	28,1	19,3	47
	6		47,2	49,2	49,1	45,2	39,7	33	25,8	50
HC 40	1		31,4	33,4	28,6	20,7	21,6	13,6	13	30
	2	Min	34,7	37,5	34,7	27	24,1	16	14,3	35
	3	Med	40,2	42,9	41,8	36,3	29,8	20,3	15,8	42
	4		42,8	45,1	44,5	39,9	33,4	24,3	17,5	45
	5	Max	45,5	47,5	47,2	43,2	37	29,1	20,3	48
	6		50,2	52,2	52,1	48,2	42,7	36	28,8	52
HC 50	1	Min	33,3	37,2	33,5	24,3	27,2	23,1	21,9	35
	2		36,6	40	37,6	28,9	28,2	24	23,3	38
	3	Med	40,5	43,8	41,9	34,3	30,3	25	23,8	42
	4	Max	44,1	47	46	39,6	34,2	27	24,2	46
	5		49	51,2	50,8	45,2	39,9	32,5	28,6	51
	6		53,4	55,6	55,3	50,4	46,3	39,5	31,7	56
HC 60	1		36,3	40,2	36,5	27,3	30,2	26,1	24,9	38
	2	Min	39,6	43	40,6	31,9	31,2	27	26,3	41
	3		42,5	45,8	43,9	36,3	32,3	27	25,8	44
	4	Med	46,1	49	48	41,6	36,2	29	26,2	48
	5	Max	51	53,2	52,8	47,2	41,9	34,5	30,6	53
	6		54,4	56,6	56,3	51,4	47,3	40,5	32,7	57
HC 70	1		34,5	37,2	33,1	26,2	25,3	22,5	19,6	36
	2		36,4	41,3	38,1	30,7	28,5	25,2	22,6	39
	3	Min	40,7	44,3	42,4	35,5	32,2	27,1	23,3	43
	4	Med	44,1	47,9	47	40,8	37,3	29,3	25,8	47
	5	Max	49,5	52,3	52,3	46,6	43,4	35,5	28	53
	6		54,2	57,2	56,8	52,1	49,6	42,8	33,9	58
HC 80	1	Min	47,6	50,7	50,3	45,1	41,8	36	29	51
	2	Med	53,3	56	56,2	51,2	48,3	42,9	35,3	57
	3	Max	54,9	57,9	57,8	53,3	50,7	45,6	38,5	59
	4		57,3	60,7	60,5	56,4	54	49,4	43,2	62
	5		60,5	63,6	63,1	59,3	57,1	52,8	47,3	65
	6		63,5	66,7	65,9	62,4	60,3	56,4	51,7	68
HC 90	1	Min	48	50,1	50,7	45	41,3	36,2	29,8	51
	2		51,7	54,4	55,5	50,1	46,8	41,6	34,4	56
	3	Med	54,4	57,2	58	53,4	50,4	45,6	38,6	59
	4		56,9	60,1	60,6	56,4	53,7	49,2	43,1	62
	5	Max	59,8	62,9	63,4	59,4	56,9	52,7	47,4	65
	6		62,3	66	66	62,6	60,2	56,3	51,8	68
HC 100	1		53,3	54,5	51,8	47,7	41,6	32,9	29,3	53
	2	Min	54,7	56,2	53,8	50,1	44,1	35,3	28,5	55
	3	Med	57,7	58,8	56,5	53,2	47,8	39,6	31,9	58
	4		60,5	61,7	59,1	56,2	51,3	43,9	39,1	61
	5	Max	62,1	63,5	60,7	58,3	53,8	46,9	39,9	63
	6		64,3	66,7	63,5	61,2	57,1	50,7	44	66
HC 110	1		51,4	50,1	47	42,3	35,1	27,6	25,1	48
	2	Min	53,9	52,6	50	45,7	38,8	30,1	24,6	51
	3	Med	60,2	58,8	56,4	53,1	47,7	39,7	31,6	58
	4		63,1	62,6	60	57,2	52,4	45,2	38,7	62
	5	Max	67,1	67,1	64,4	62,2	58,3	52,3	46,1	67
HC 120	1		52,8	51,1	47,5	43,5	36,7	29,4	25,7	49
	2	Min	55,7	53,9	50,6	46,4	40,4	32,3	27,2	52
	3		61,7	61,2	58,1	54,8	50,2	42,6	34,8	60
	4	Med	63,4	63,2	59,9	56,9	52,6	45,7	38,8	62
	5	Max	67,8	67,9	64,2	62,1	58,3	52,5	46,4	67

Data indicated as min., med., max. concern the 3 standard speeds set at the factory. Upon customer request other 3 speeds among the 6 speeds available can be connected.

AIR PRESSURE DROPS FOR THE MAIN ACCESSORIES - HC



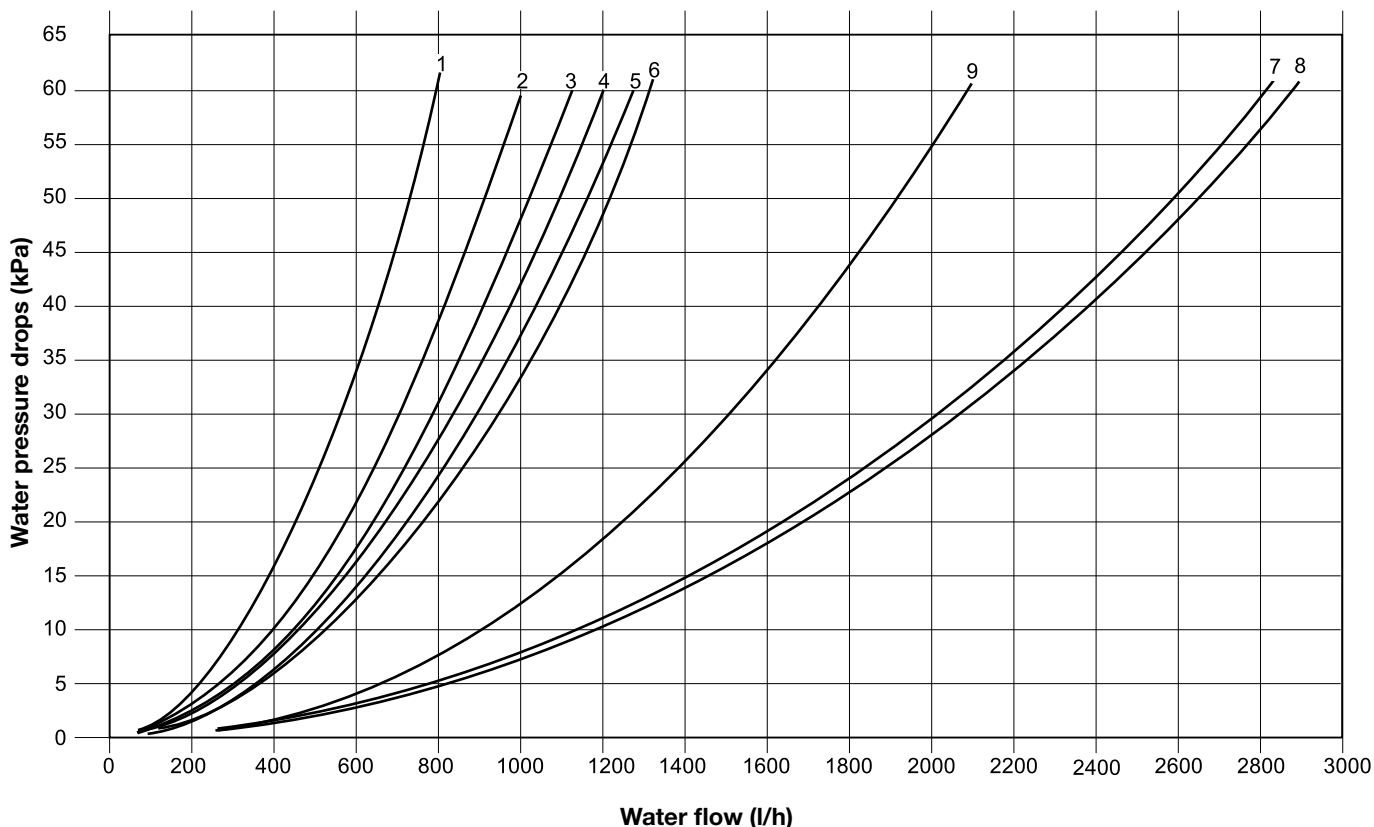
Air flow (m ³ /h)	Description of the accessories									
	Straight connection duct	90° intake/supply duct	Telescopic extension for straight and 90° duct	Supply plenum with circular connections	Intake plenum with circular connections	Painted lower panel with grill	Supply grill	Intake grill	Std filter in medium stemming condition	Std filter in lift stemming condition (cleaning is necessary)
COMFAIR HC 10										
276	0,8	3,2	0,8	12,3	12,3	7,2	19,6	19,6	5,4	10,9
250	0,7	2,6	0,7	10,1	10,1	5,9	16	16	4,5	8,9
225	0,5	2,1	0,5	8,2	8,2	4,8	13	13	3,6	7,2
200	0,4	1,7	0,4	6,5	6,5	3,8	10,3	10,3	2,9	5,7
175	0,3	1,3	0,3	4,9	4,9	2,9	7,9	7,9	2,2	4,4
150	-	0,9	-	3,6	3,6	2,1	5,8	5,8	1,6	3,2
125	-	0,7	-	2,5	2,5	1,5	4	4	1,1	2,2
100	-	0,4	-	1,6	1,6	0,9	2,6	2,6	0,7	1,4
75	-	-	-	0,9	0,9	0,5	1,4	1,4	0,4	0,8
60	-	-	-	0,6	0,6	0,3	0,9	0,9	0,3	0,5
COMFAIR HC 20										
411	0,6	2,7	0,6	6,9	6,9	6	15,4	15,4	4,7	9,4
400	0,6	2,6	0,6	6,5	6,5	5,7	14,6	14,6	4,4	8,9
350	0,4	2	0,4	5	5	4,4	11,2	11,2	3,4	6,8
300	0,3	1,4	0,3	3,7	3,7	3,2	8,2	8,2	2,5	5
250	-	1	-	2,6	2,6	2,2	5,7	5,7	1,7	3,5
200	-	0,6	-	1,6	1,6	1,4	3,6	3,6	1,1	2,2
150	-	0,4	-	0,9	0,9	0,8	2,1	2,1	0,6	1,2
100	-	-	-	0,4	0,4	0,4	0,9	0,9	0,3	0,6
90	-	-	-	0,3	0,3	0,3	0,7	0,7	0,2	0,4
COMFAIR HC 30										
533	0,6	2,4	0,6	9	9	5,2	13,2	13,2	4,2	8,3
500	0,5	2,1	0,5	7,9	7,9	4,6	11,6	11,6	3,7	7,3
450	0,4	1,7	0,4	6,4	6,4	3,7	9,4	9,4	3	5,9
400	0,3	1,3	0,3	5,1	5,1	2,9	7,4	7,4	2,3	4,7
350	-	1	-	3,9	3,9	2,2	5,7	5,7	1,8	3,6
300	-	0,8	-	2,9	2,9	1,6	4,2	4,2	1,3	2,6
250	-	0,5	-	2	2	1,1	2,9	2,9	0,9	1,8
200	-	0,3	-	1,3	1,3	0,7	1,9	1,9	0,6	1,2
150	-	-	-	0,7	0,7	0,4	1	1	0,3	0,7
100	-	-	-	0,3	0,3	-	0,5	0,5	0,1	0,3
COMFAIR HC 40										
530	0,6	2,4	0,6	8,9	8,9	5,1	13,1	13,1	4,1	8,2
500	0,5	2,1	0,5	7,9	7,9	4,6	11,6	11,6	3,7	7,3
450	0,4	1,7	0,4	6,4	6,4	3,7	9,4	9,4	3	5,9
400	0,3	1,3	0,3	5,1	5,1	2,9	7,4	7,4	2,3	4,7
350	-	1	-	3,9	3,9	2,2	5,7	5,7	1,8	3,6
300	-	0,8	-	2,9	2,9	1,6	4,2	4,2	1,3	2,6
250	-	0,5	-	2	2	1,1	2,9	2,9	0,9	1,8
200	-	0,3	-	1,3	1,3	0,7	1,9	1,9	0,6	1,2
150	-	-	-	0,7	0,7	0,4	1	1	0,3	0,7
100	-	-	-	0,3	0,3	-	0,5	0,5	0,1	0,3
COMFAIR HC 50										
812	0,9	3,3	0,9	7,4	7,4	7,3	18,5	18,5	5,9	11,9
800	0,8	3,2	0,8	7,2	7,2	7,1	18	18	5,8	11,5
700	0,6	2,5	0,6	5,5	5,5	5,4	13,8	13,8	4,4	8,8
600	0,5	1,8	0,5	4	4	4	10,1	10,1	3,2	6,5
500	0,3	1,3	0,3	2,8	2,8	2,8	7	7	2,3	4,5
400	-	0,8	-	1,8	1,8	1,8	4,5	4,5	1,4	2,9
300	-	0,5	-	1	1	1	2,5	2,5	0,8	1,6
200	-	-	-	0,4	0,4	0,4	1,1	1,1	0,4	0,7
150	-	-	-	0,3	0,3	-	0,6	0,6	0,2	0,4

AIR PRESSURE DROPS FOR THE MAIN ACCESSORIES - HC



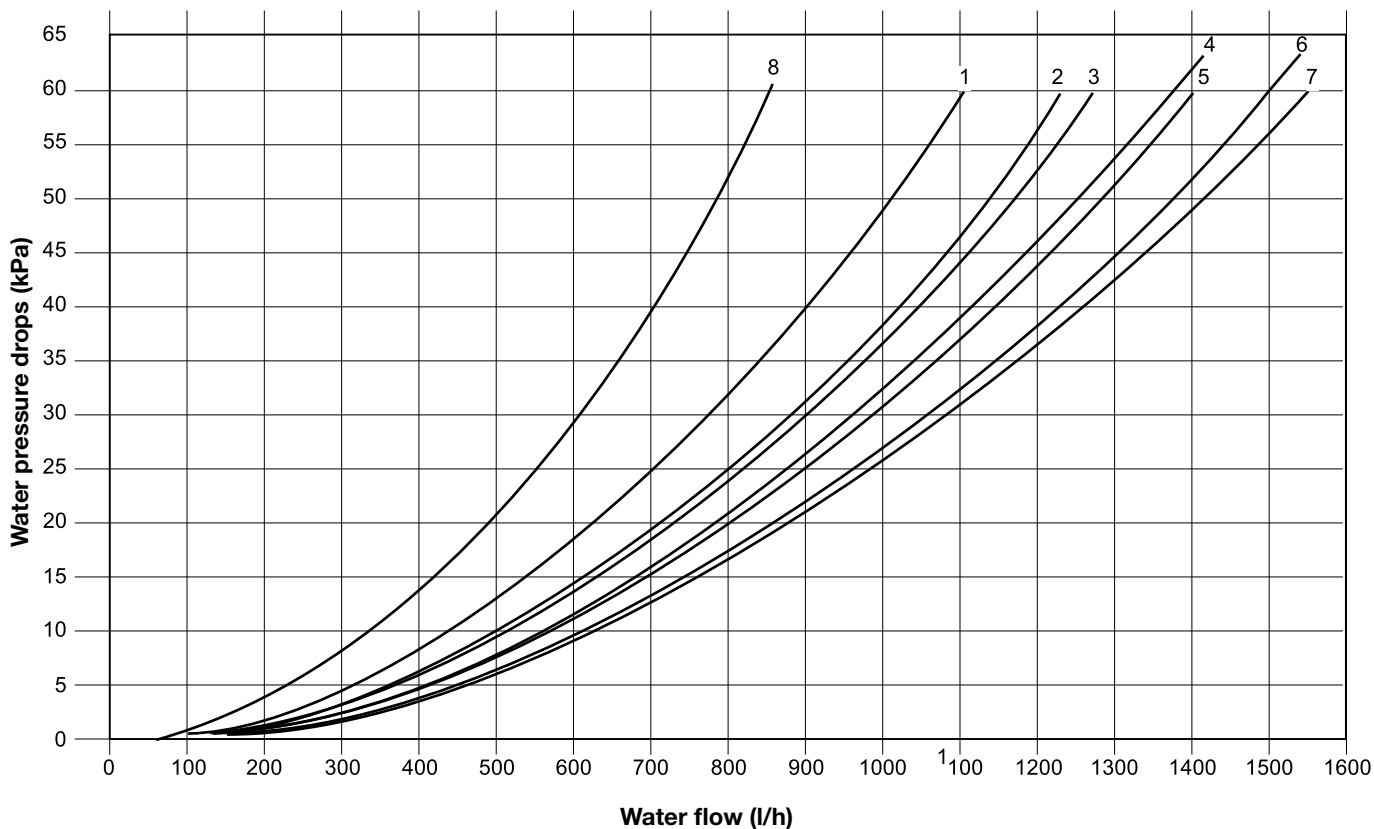
Air flow (m ³ /h)	Description of the accessories									
	Straight connection duct	90° intake/supply duct	Telescopic extension for straight and 90° duct	Supply plenum with circular connections	Intake plenum with circular connections	Painted lower panel with grill	Supply grill	Intake grill	Std filter in medium stemming condition	Std filter in lift stemming condition (cleaning is necessary)
COMFAIR HC 60										
814	0,9	3,3	0,9	7,4	7,4	7,4	18,6	18,6	6	11,9
800	0,8	3,2	0,8	7,2	7,2	7,1	18	18	5,8	11,5
700	0,6	2,5	0,6	5,5	5,5	5,4	13,8	13,8	4,4	8,8
600	0,5	1,8	0,5	4	4	4	10,1	10,1	3,2	6,5
500	0,3	1,3	0,3	2,8	2,8	2,8	7	7	2,3	4,5
400	-	0,8	-	1,8	1,8	1,8	4,5	4,5	1,4	2,9
300	-	0,5	-	1	1	1	2,5	2,5	0,8	1,6
200	-	-	-	0,4	0,4	0,4	1,1	1,1	0,4	0,7
150	-	-	-	0,3	0,3	-	0,6	0,6	0,2	0,4
COMFAIR HC 70										
867	0,8	3,8	0,8	8,4	8,4	8,4	21,2	21,2	11	22
800	0,7	3,3	0,7	7,2	7,2	7,2	18,1	18,1	9,4	18,7
750	0,6	2,9	0,6	6,3	6,3	6,3	15,9	15,9	8,2	16,4
700	0,5	2,5	0,5	5,5	5,5	5,5	13,8	13,8	7,2	14,3
650	0,4	2,1	0,4	4,7	4,7	4,7	11,9	11,9	6,2	12,3
600	0,4	1,8	0,4	4	4	4	10,2	10,2	5,3	10,5
550	0,3	1,5	0,3	3,4	3,4	3,4	8,5	8,5	4,4	8,8
500	0,3	1,3	0,3	2,8	2,8	2,8	7,1	7,1	3,7	7,3
450	-	1	-	2,3	2,3	2,3	5,7	5,7	3	5,9
400	-	0,8	-	1,8	1,8	1,8	4,5	4,5	2,3	4,7
350	-	0,6	-	1,4	1,4	1,4	3,5	3,5	1,8	3,6
300	-	0,5	-	1	1	1	2,5	2,5	1,3	2,6
250	-	0,3	-	0,7	0,7	0,7	1,8	1,8	0,9	1,8
200	-	-	-	0,4	0,4	0,4	1,1	1,1	0,6	1,2
150	-	-	-	0,3	0,3	0,3	0,6	0,6	0,3	0,7
COMFAIR HC 80										
1511	1,3	7,7	1,3	24,3	24,3	17,1	43,2	43,2	14,4	28,7
1400	1,1	6,6	1,1	20,9	20,9	14,6	37,1	37,1	12,3	24,6
1300	1	5,7	1	18	18	12,6	32	32	10,6	21,2
1200	0,8	4,9	0,8	15,3	15,3	10,8	27,2	27,2	9,1	18,1
1100	0,7	4,1	0,7	12,9	12,9	9	22,9	22,9	7,6	15,2
1000	0,6	3,4	0,6	10,6	10,6	7,5	18,9	18,9	5,3	12,6
900	0,5	2,7	0,5	8,6	8,6	6,1	15,3	15,3	5,1	10,2
800	0,4	2,2	0,4	6,8	6,8	4,8	12,1	12,1	4	8
700	0,3	1,7	0,3	5,2	5,2	3,7	9,3	9,3	3,1	6,2
600	-	1,2	-	3,8	3,8	2,7	6,8	6,8	2,3	4,5
500	-	0,8	-	2,7	2,7	1,9	4,7	4,7	1,6	3,1
400	-	0,5	-	1,7	1,7	1,2	3	3	1	2
COMFAIR HC 90										
1410	1,2	6,7	1,2	21,3	21,3	14,9	11,2	11,2	12,5	25
1300	1	5,7	1	18,1	18,1	12,6	9,5	9,5	10,6	21,2
1200	0,8	4,9	0,8	15,4	15,4	10,8	8,1	8,1	9,1	18,1
1100	0,7	4,1	0,7	13	13	9	6,8	6,8	7,6	15,2
1000	0,6	3,4	0,6	10,7	10,7	7,5	5,6	5,6	6,3	12,6
900	0,5	2,7	0,5	8,7	8,7	6,1	4,6	4,6	5,1	10,2
800	0,4	2,2	0,4	6,9	6,9	4,8	3,6	3,6	4	8
700	0,3	1,7	0,3	5,2	5,2	3,7	2,8	2,8	3,1	6,2
600	-	1,2	-	3,9	3,9	2,7	2	2	2,3	4,5
500	-	0,8	-	2,7	2,7	1,9	1,4	1,4	1,6	3,1
400	-	0,5	-	1,7	1,7	1,2	0,9	0,9	1	2

3 ROWS COIL (Ref. water medium temperature 9,5°C)



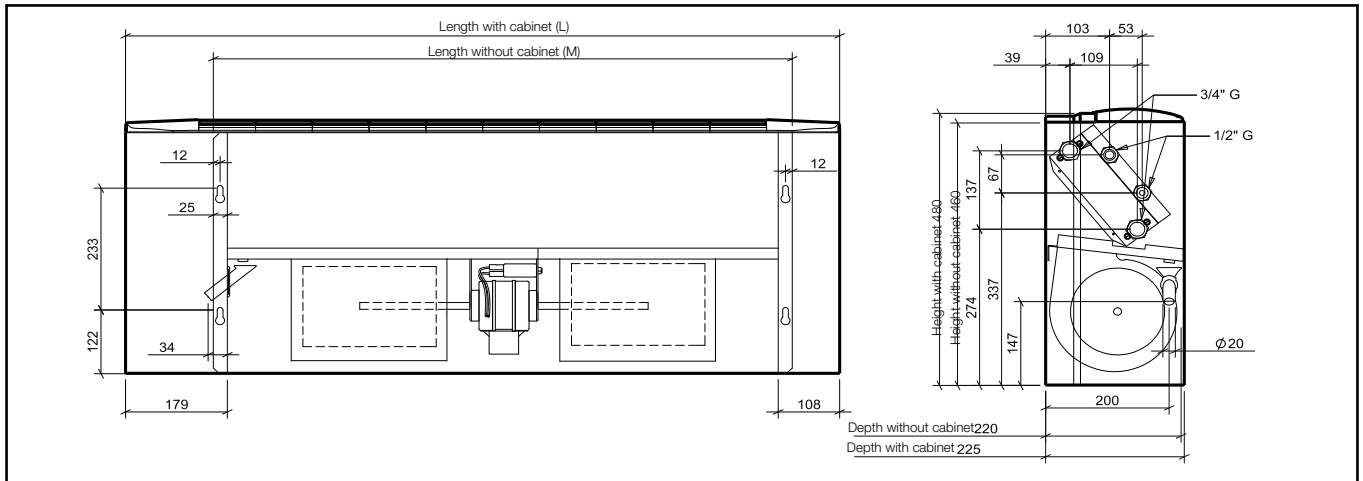
1 = HC70 2 = HC50, 60 3 = HC30, 40 4 = HC20, 5 = HC10, 6 = HC80,90, 7 = HC120, 8 = HC110, 9 = HC100

1 ROW COIL (Ref. water medium temperature 65°C)



1 = HC70 2 = HC50, 60 3 = HC30, 40 4 = HC20, 5 = HC10, 6 = HC80,90, 7 = HC120, 8 = HC110, 9 = HC100

GENERAL DIMENSIONS - SIZES 10 TO 60



2 PIPES SYSTEM

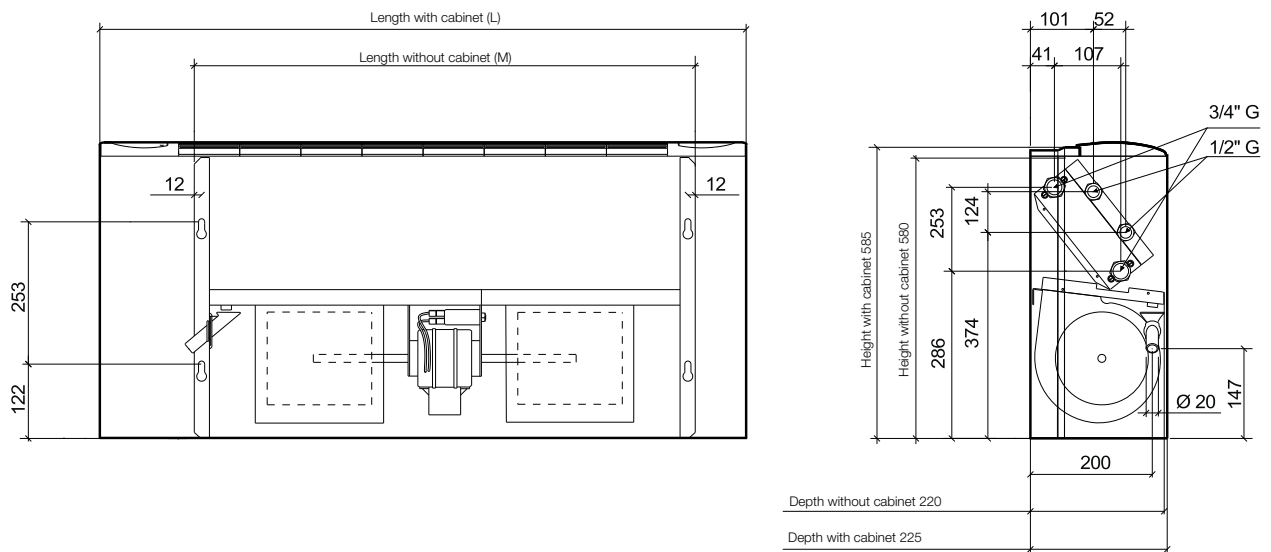
COMFAIR		HC	10	20	30	40	50	60
Fans number		N°	1		2			
Coils number		N°	1					
Coil used for both cooling and heating	Rows number	N°	3					
	Finned pack length	mm	290	490	690		890	
	Number of pipes for row	N°	8					
	Fin spacing	mm	2,1		2,5	2,1	2,5	2,1
	Number of feeding circuits	mm	3					
	Shape	mm x mm	25 x 22					
	Finned pack depth	mm	66					
	Frontal surface	m ²	0,058	0,098	0,138		0,178	
	Fins total surface	m ²	3,278	5,538	6,635	7,798	8,558	10,059
	Water content	l	0,59	0,93	1,27		1,61	
Hydraulic connection (Ø female gas)	Ø	3/4»						
Fancoil general features	Length with cabinet	l (mm)	660	860	1060		1260	
	Length without cabinet	M (mm)	420	620	820		1020	
	Net weight	kg	14	17	22	23	27	28

4 PIPES SYSTEM

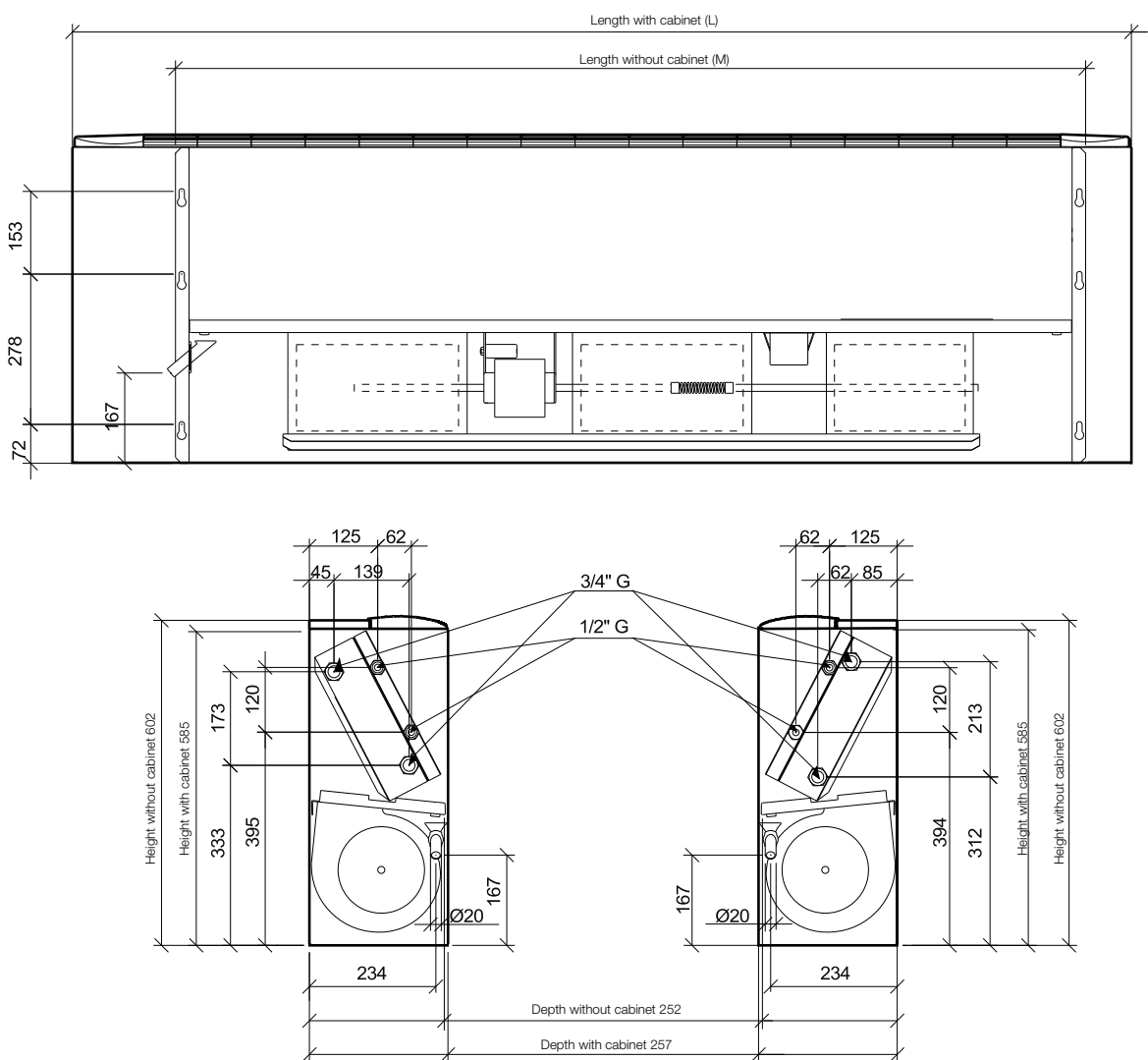
COMFAIR		HC	10	20	30	40	50	60
Fans number		N°	1		2			
Coils number		N°	2					
Coil used for cooling	Rows number	N°	3					
	Finned pack length	mm	290	490	690		890	
	Number of pipes for row	N°	8					
	Fin spacing	mm	2,1		2,5	2,1	2,5	2,1
	Number of feeding circuits	mm	3					
	Shape	mm x mm	25 x 22					
	Finned pack depth	mm	66					
	Frontal surface	m ²	0,058	0,098	0,138		0,178	
	Fins total surface	m ²	3,278	5,538	6,635	7,798	8,558	10,0559
	Water content	l	0,59	0,93	1,27		1,61	
	Hydraulic connection (Ø female gas)	Ø	3/4»					
	Coil used for heating	Rows number	N°	1				
Finned pack length		mm	280	480	680		890	
Number of pipes for row		N°	8					
Fin spacing		mm	2,1		2,5	2,1	2,5	2,1
Number of feeding circuits		mm	1					
Shape		mm x mm	25 x 25					
Finned pack depth		mm	25					
Frontal surface		m ²	0,056	0,096	0,136		0,176	
Fins total surface		m ²	1,233	2,115	2,544	2,996	3,292	3,877
Water content		l	0,19	0,31	0,42		0,53	
Hydraulic connection (Ø female gas)	Ø	1/2»						
Fancoil general features	Length with cabinet	l (mm)	660	860	1060		1260	
	Length without cabinet	M (mm)	420	620	820		1020	
	Net weight	kg	15	18	23	24	28	29

GENERAL DIMENSIONS - SIZES 70 TO 120

SIZES 70 TO 90



SIZES 70 TO 90



2 PIPES SYSTEM

COMFAIR		HC	70	80	90	100	110	120
Fans number		N°	2			3		
Coils number		N°	1					
Coil used for both cooling and heating	Rows number	N°	3					
	Finned pack length	mm	890	1090		1225	1525	
	Number of pipes for row	N°	12					
	Fin spacing	mm	2,5	2,1		2,5	2,1	
	Number of feeding circuits	mm	3	6		8		
	Shape	mm x mm	25 x 22					
	Finned pack depth	mm	66					
	Frontal surface	m ²	0,267	0,327		0,368	0,458	
	Fins total surface	m ²	15,088	18,479		20,767	21,996	25,853
	Water content	l	2,42	2,93		3,28	4,04	
	Hydraulic connection (Ø female gas)	Ø	3/4"					
Fancoil general features	Length with cabinet	l (mm)	1260	1460	1	1660	1960	
	Length without cabinet	M (mm)	1020	1220		1380	1680	
	Net weight	kg	30	35	36	46	55	57

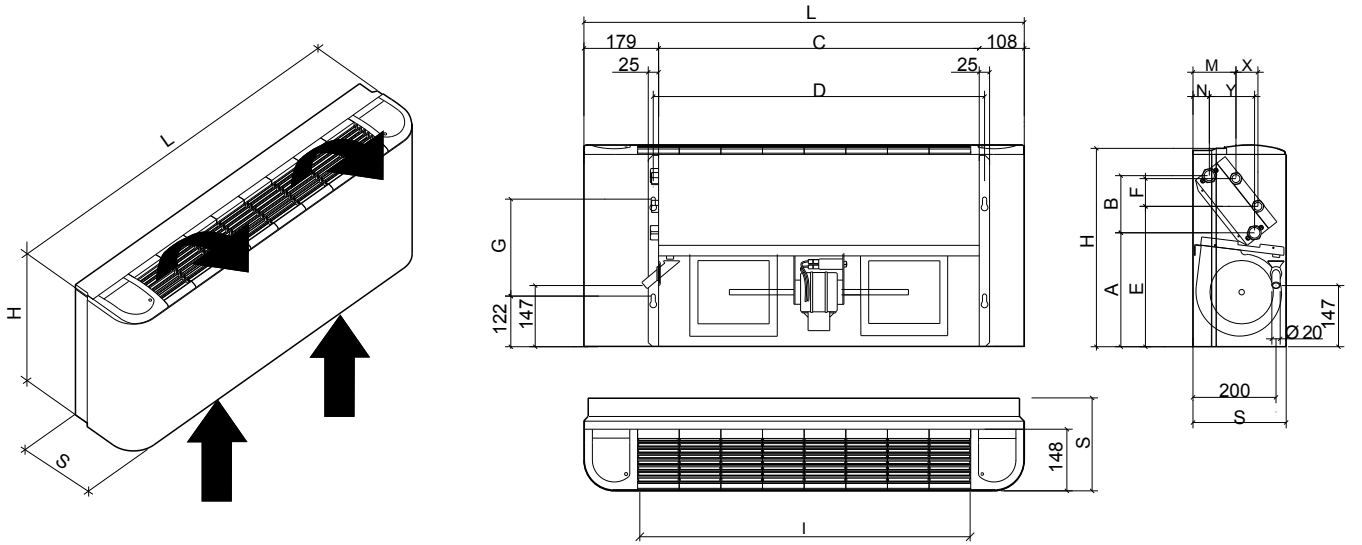
4 PIPES SYSTEM

COMFAIR		HC	70	80	90	100	110	120
Fans number		N°	2			3		
Coils number		N°	2					
Coil used for cooling	Rows number	N°	3					
	Finned pack length	mm	890	1090		1225	1525	
	Number of pipes for row	N°	12					
	Fin spacing	mm	2,5	2,1		2,5	2,1	
	Number of feeding circuits	mm	3	6		8		
	Shape	mm x mm	25 x 22					
	Finned pack depth	mm	66					
	Frontal surface	m ²	0,267	0,327		0,368	0,458	
	Fins total surface	m ²	15,088	18,479		20,767	21,996	25,853
	Water content	l	2,42	2,93		3,28	4,04	
	Hydraulic connection (Ø female gas)	Ø	3/4"					
Coil used for heating	Rows number	N°	1					
	Finned pack length	mm	880	1080		1225	1525	
	Number of pipes for row	N°	12					
	Fin spacing	mm	2,1	2,5	2,1		2,5	2,1
	Number of feeding circuits	mm	1			2	3	
	Shape	mm x mm	25 x 25					
	Finned pack depth	mm	25					
	Frontal surface	m ²	0,176	0,216		0,368	0,458	
	Fins total surface	m ²	3,877	9,515		8,095	8,558	10,077
	Water content	l	0,53	1,29		1,09	1,35	
	Hydraulic connection (Ø female gas)	Ø	1/2"					
Fancoil general features	Length with cabinet	l (mm)	1260	1460		1660	1960	
	Length without cabinet	M (mm)	1020	1220		1380	1680	
	Net weight	kg	32	38	39	49	58	60

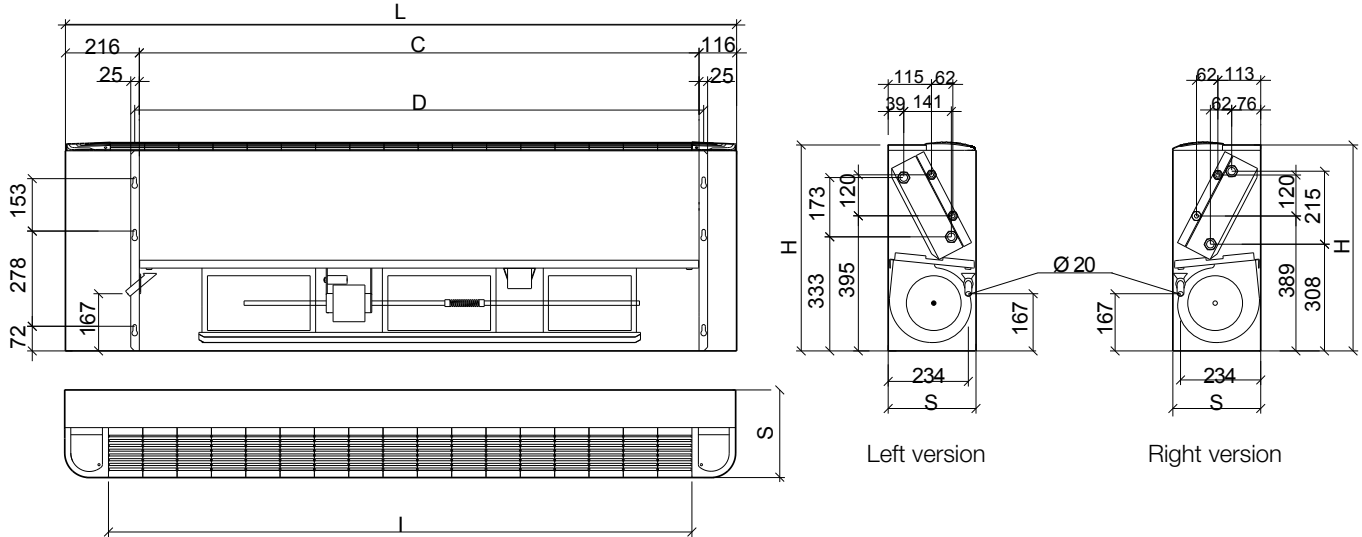
VERSION 0

Wall mounted with cabinet (bottom air intake)

HC 10 - 90



HC 100 - 120

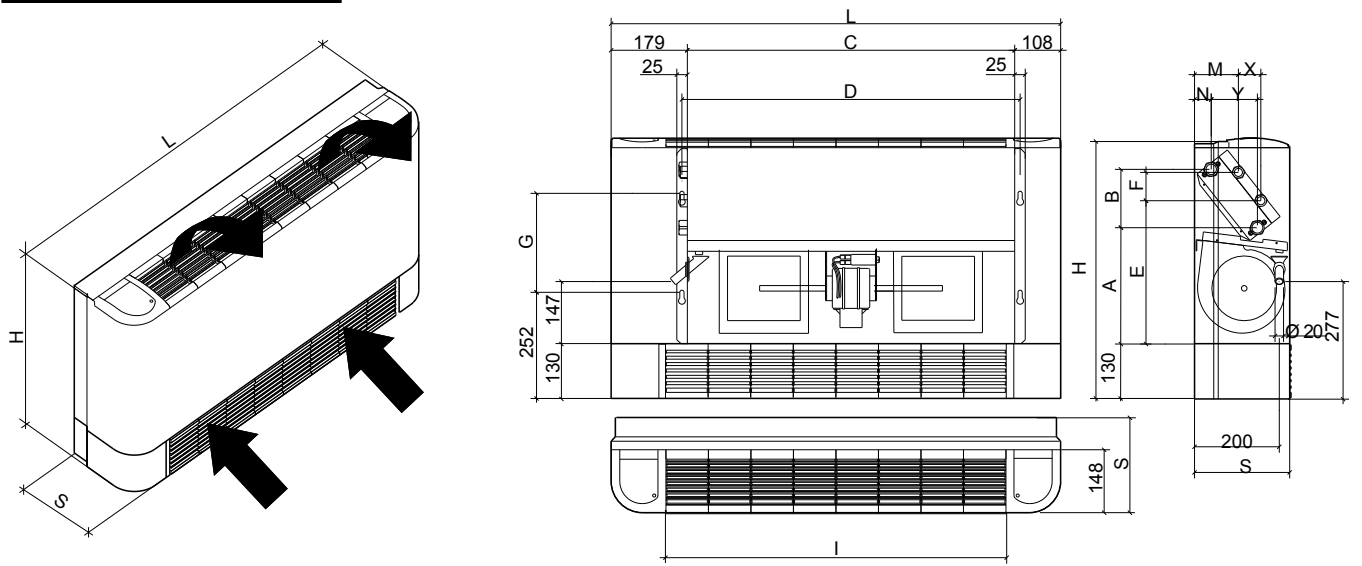


N.B : On the models HC100, HC110 and HC120 the fold on the cabined is not foreseen!

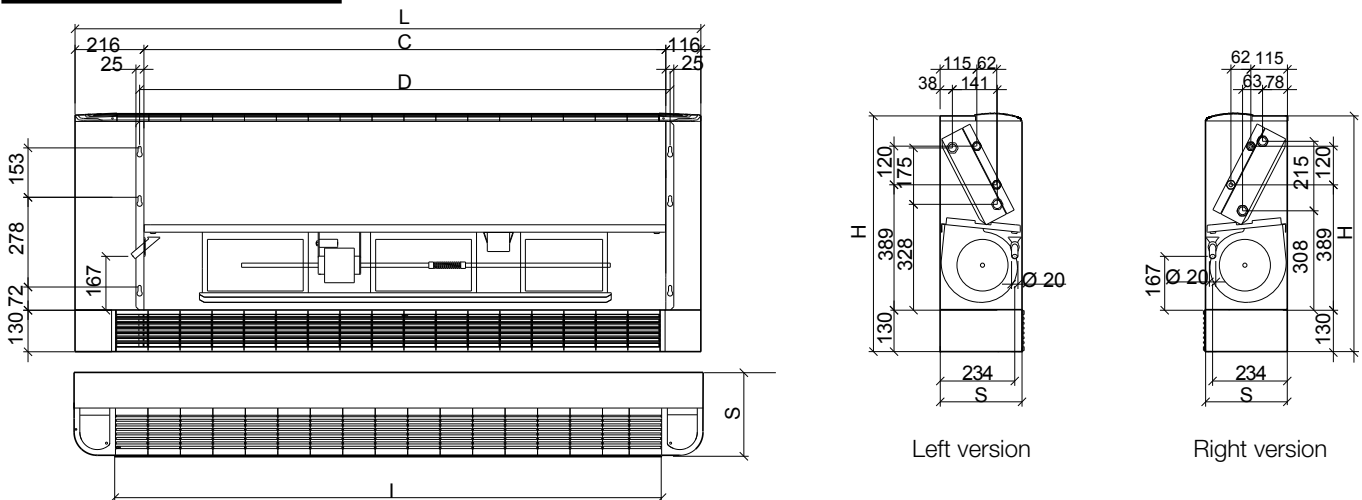
COMFAIR		HC	10	20	30	40	50	60	70	80	90	100	110	120
Dimensions	H	mm	480	480	480	480	480	480	580	580	580	602	602	602
	L	mm	660	860	1060	1060	1260	1260	1260	1460	1460	1661	1961	1961
	S	mm	225	225	225	225	225	225	225	225	225	257	257	257
	C	mm	370	570	770	770	970	970	970	1170	1170	1335	1635	1635
Distance between slots	D	mm	395	595	795	795	995	995	995	1195	1195	1362	1662	1662
	G	mm	233	233	233	233	233	233	253	253	253	-	-	-
Standard coil	N	mm	39	39	39	39	39	39	41	41	41	-	-	-
	Y	mm	109	109	109	109	109	109	107	107	107	-	-	-
	A	mm	274	274	274	274	274	274	268	268	268	-	-	-
	B	mm	137	137	137	137	137	137	137	253	253	253	-	-
Auxiliary coil	M	mm	103	103	103	103	103	103	101	101	101	-	-	-
	X	mm	53	53	53	53	53	53	52	52	52	-	-	-
	E	mm	337	337	337	337	337	337	374	374	374	-	-	-
	F	mm	67	67	67	67	67	67	67	124	124	124	-	-
N° of grilles, 100 mm step	I	Nr	4	6	8	8	10	10	10	12	12	14	17	17

VERSION 8 **Wall mounted with cabinet (frontal air intake with cabinet)**

HC 18 - 98



HC 108 - 128



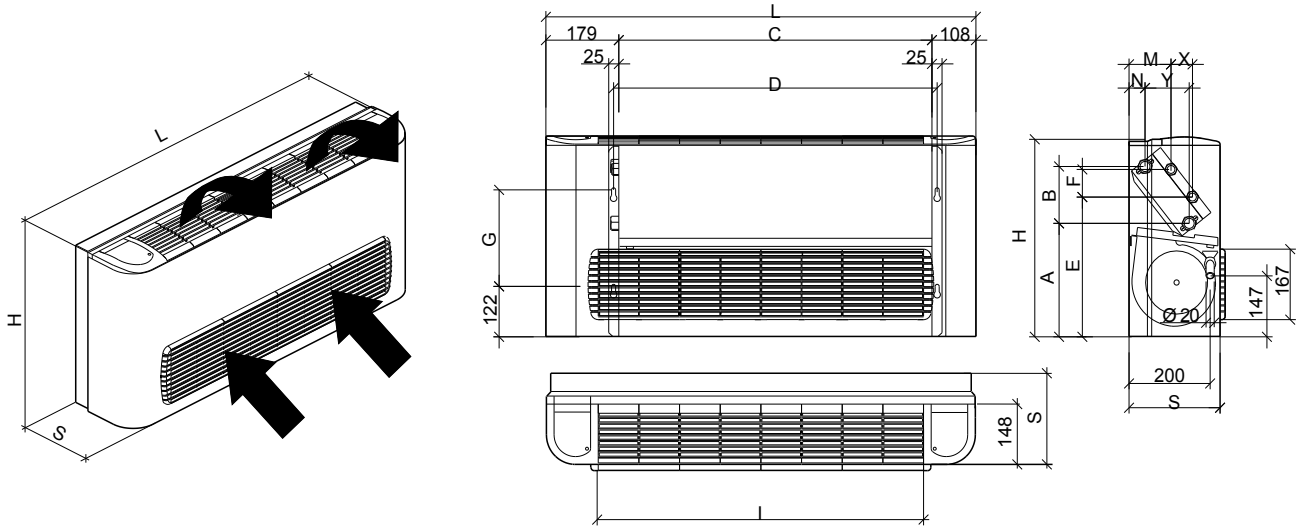
N.B : On the models HC108, HC118 and HC128 the fold on the cabined is not foreseen!

COMFAIR		HC	18	28	38	48	58	68	78	88	98	108	118	128
Dimensions	H	mm	610	610	610	610	610	610	715	715	715	735	735	735
	L	mm	660	860	1060	1060	1260	1260	1260	1460	1460	1661	1961	1961
	S	mm	225	225	225	225	225	225	225	225	225	257	257	257
	C	mm	370	570	770	770	970	970	970	1170	1170	1335	1635	1635
Distance between slots	D	mm	395	595	795	795	995	995	995	1195	1195	1362	1662	1662
	G	mm	233	233	233	233	233	233	253	253	253	-	-	-
Standard coil	N	mm	39	39	39	39	39	39	41	41	41	-	-	-
	Y	mm	109	109	109	109	109	109	107	107	107	-	-	-
	A	mm	274	274	274	274	274	274	268	268	268	-	-	-
	B	mm	137	137	137	137	137	137	253	253	253	-	-	-
Auxiliary coil	M	mm	103	103	103	103	103	103	101	101	101	-	-	-
	X	mm	53	53	53	53	53	53	52	52	52	-	-	-
	E	mm	337	337	337	337	337	337	374	374	374	-	-	-
	F	mm	67	67	67	67	67	67	124	124	124	-	-	-
N° of grilles, 100 mm step	I	Nr	4	6	8	8	10	10	10	12	12	14	17	17

VERSION 5

Wall mounted with cabinet (frontal air intake)

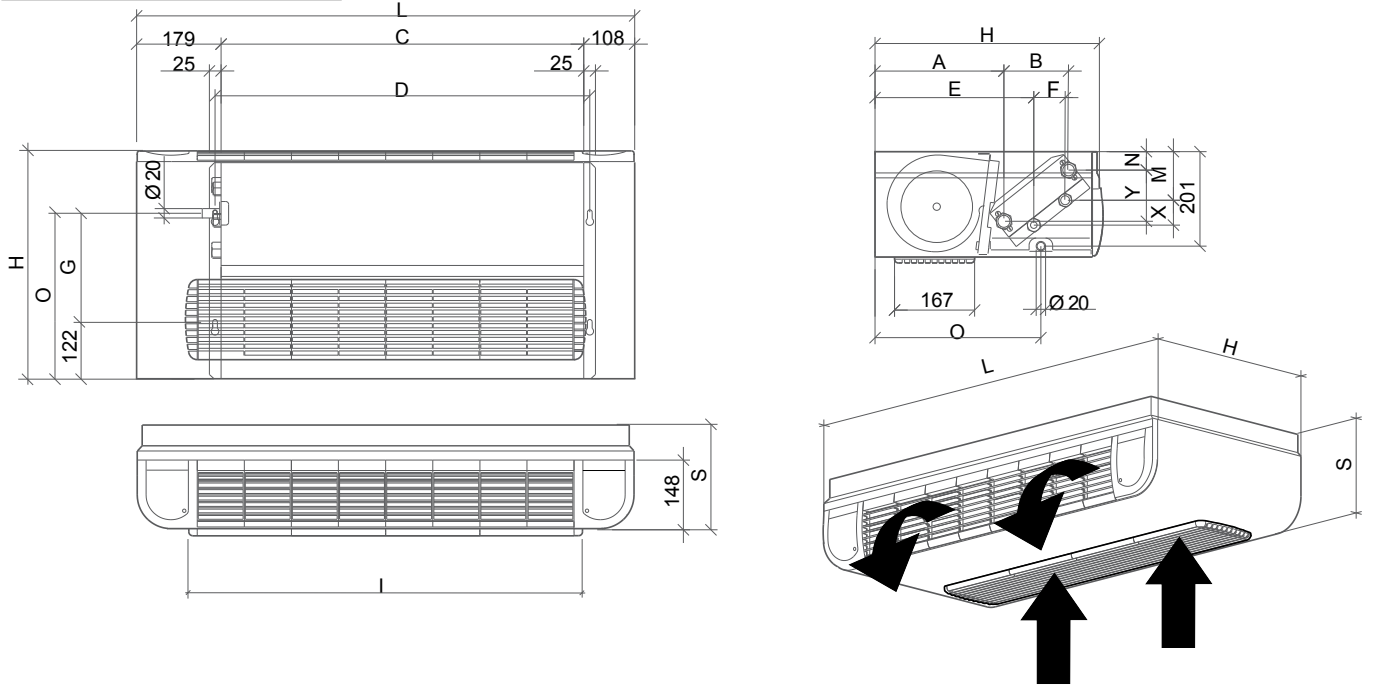
HC 15 - 95



VERSION 4

Horizontal ceiling models with cabinet (bottom air intake)

HC 14 - 94



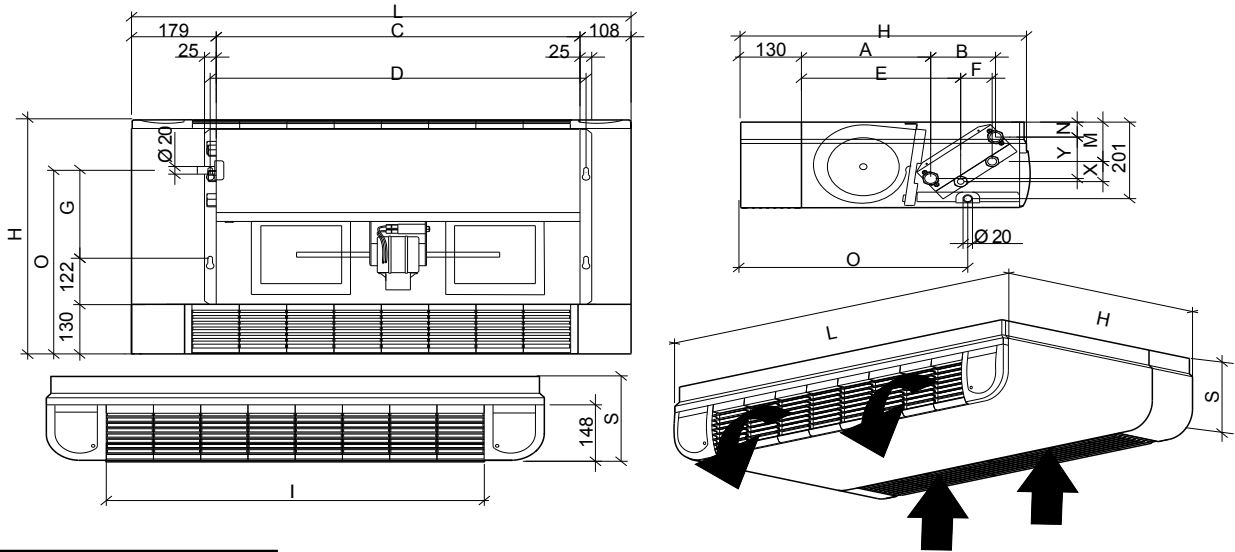
VERSIONS 5 AND 4

COMFAIR		HC	15	25	35	45	55	65	75	85	95
			14	24	34	44	54	64	74	84	94
Dimensions	H	mm	480	480	480	480	480	480	585	585	585
	L	mm	660	860	1060	1060	1260	1260	1260	1460	1460
	S	mm	225	225	225	225	225	225	225	225	225
	C	mm	370	570	770	770	970	970	970	1.170	1.170
Distance between slots	D	mm	395	595	795	795	995	995	995	1.195	1.195
	G	mm	233	233	233	233	233	233	253	253	253
Standard coil	N	mm	39	39	39	39	39	39	41	41	41
	Y	mm	109	109	109	109	109	109	107	107	107
	A	mm	274	274	274	274	274	274	268	268	268
	B	mm	137	137	137	137	137	137	253	253	253
Auxiliary coil	M	mm	103	103	103	103	103	103	101	101	101
	X	mm	53	53	53	53	53	53	52	52	52
	E	mm	337	337	337	337	337	337	374	374	374
	F	mm	67	67	67	67	67	67	124	124	124
N° of grilles, 100 mm step	I	Nr	4	6	8	8	10	10	10	12	12
Condensate discharge	O	mm	352	352	352	402	402	402	372	372	372

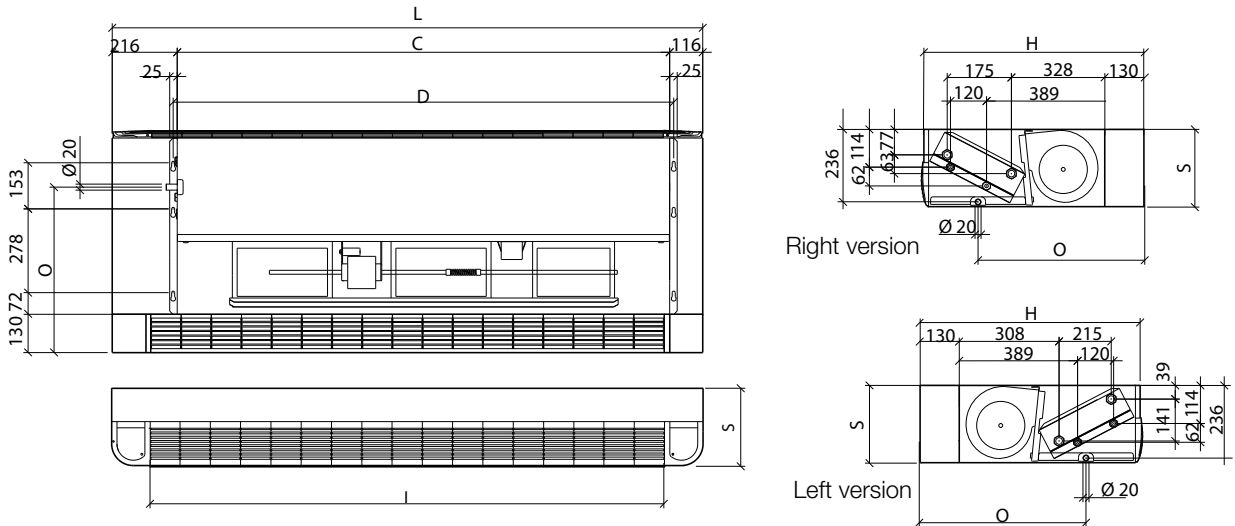
VERSION 1

Horizontal ceiling models with cabinet (bottom air intake with socle)

HC 11 - 91



HC 101 - 121



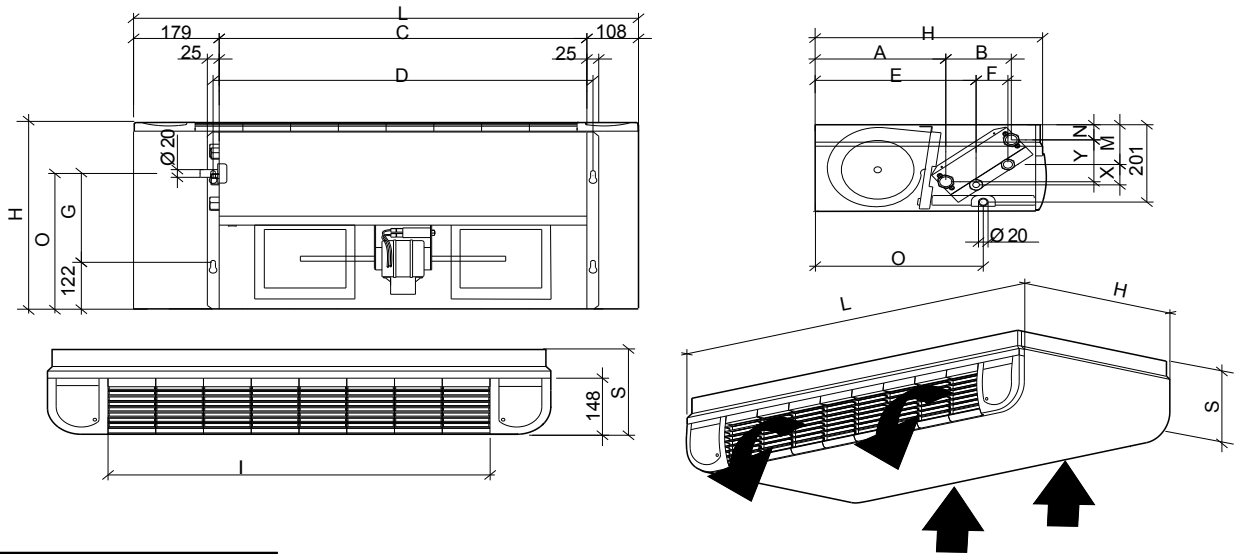
N.B : On the models HC101, HC111 and HC121 the fold on the cabined is not foreseen!

COMFAIR		HC	11	21	31	41	51	61	71	81	91	101	111	121
Dimensions	H	mm	610	610	610	610	610	610	710	710	710	732	732	732
	L	mm	660	860	1060	1060	1260	1260	1260	1460	1460	1661	1961	1961
	S	mm	225	225	225	225	225	225	225	225	225	257	257	257
	C	mm	370	570	770	770	970	970	970	1170	1170	1335	1635	1635
Distance between slots	D	mm	395	595	795	795	995	995	995	1195	1195	1362	1662	1662
	G	mm	233	233	233	233	233	233	253	253	253	-	-	-
Standard coil	N	mm	39	39	39	39	39	39	41	41	41	-	-	-
	Y	mm	109	109	109	109	109	109	107	107	107	-	-	-
	A	mm	274	274	274	274	274	274	268	268	268	-	-	-
	B	mm	137	137	137	137	137	137	253	253	253	-	-	-
Auxiliary coil	M	mm	103	103	103	103	103	103	101	101	101	-	-	-
	X	mm	53	53	53	53	53	53	52	52	52	-	-	-
	E	mm	337	337	337	337	337	337	374	374	374	-	-	-
	F	mm	67	67	67	67	67	67	124	124	124	-	-	-
N° of grilles, 100 mm step	I	Nr	4	6	8	8	10	10	10	12	12	14	17	17
Condensate discharge	O	mm	482	482	482	482	482	482	532	532	532	552	552	552

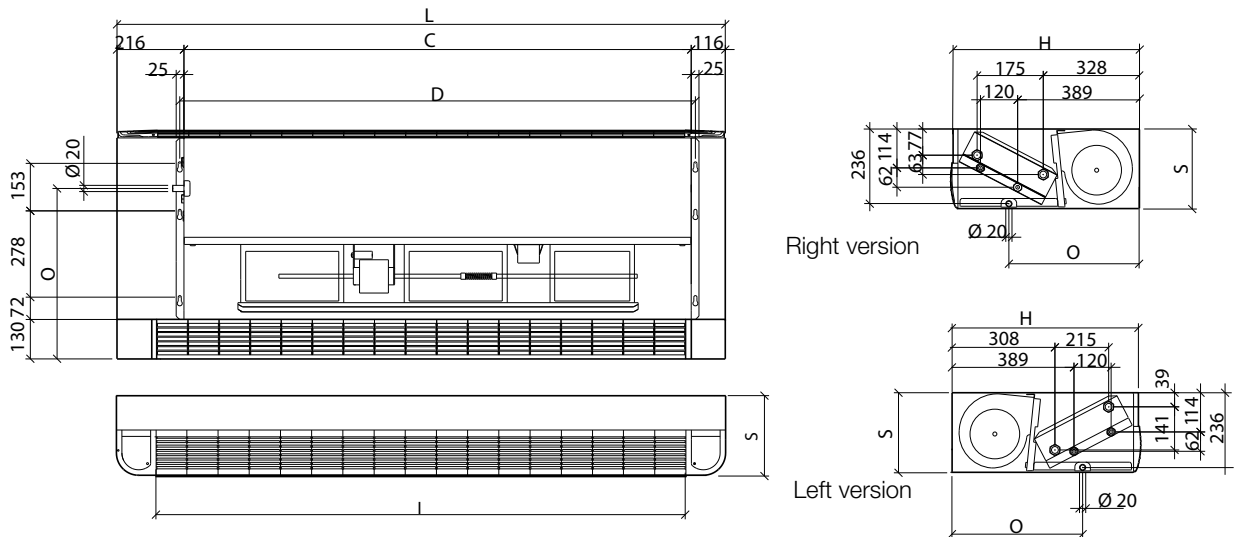
VERSION 9

Horizontal ceiling models with cabinet (bottom air intake with socle)

HC 19 - 99



HC 109 - 129



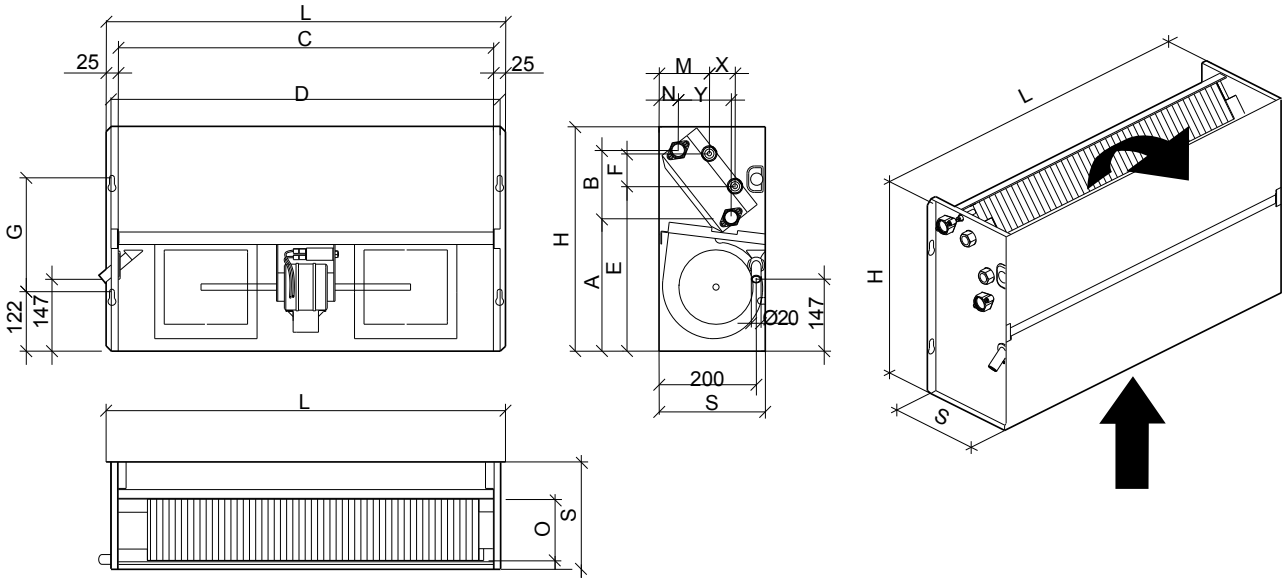
N.B : On the models HC109, HC119 and HC129 the fold on the cabined is not foreseen!

COMFAIR		HC	19	29	39	49	59	69	79	89	99	109	119	129
Dimensions	H	mm	480	480	480	480	480	480	580	580	580	602	602	602
	L	mm	660	860	1060	1060	1260	1260	1260	1460	1460	1661	1961	1961
	S	mm	225	225	225	225	225	225	225	225	225	257	257	257
Distance between slots	D	mm	395	595	795	795	995	995	995	1195	1195	1362	1662	1662
	G	mm	233	233	233	233	233	233	253	253	253	-	-	-
Standard coil	N	mm	39	39	39	39	39	39	41	41	41	-	-	-
	Y	mm	109	109	109	109	109	109	107	107	107	-	-	-
	A	mm	274	274	274	274	274	274	268	268	268	-	-	-
	B	mm	137	137	137	137	137	137	253	253	253	-	-	-
Auxiliary coil	M	mm	103	103	103	103	103	103	101	101	101	-	-	-
	X	mm	53	53	53	53	53	53	52	52	52	-	-	-
	E	mm	337	337	337	337	337	337	374	374	374	-	-	-
	F	mm	67	67	67	67	67	67	124	124	124	-	-	-
N° of grilles, 100 mm step	I	Nr	4	6	8	8	10	10	10	12	12	14	17	17
Condensate discharge	O	mm	352	352	352	352	352	352	402	402	402	422	422	422

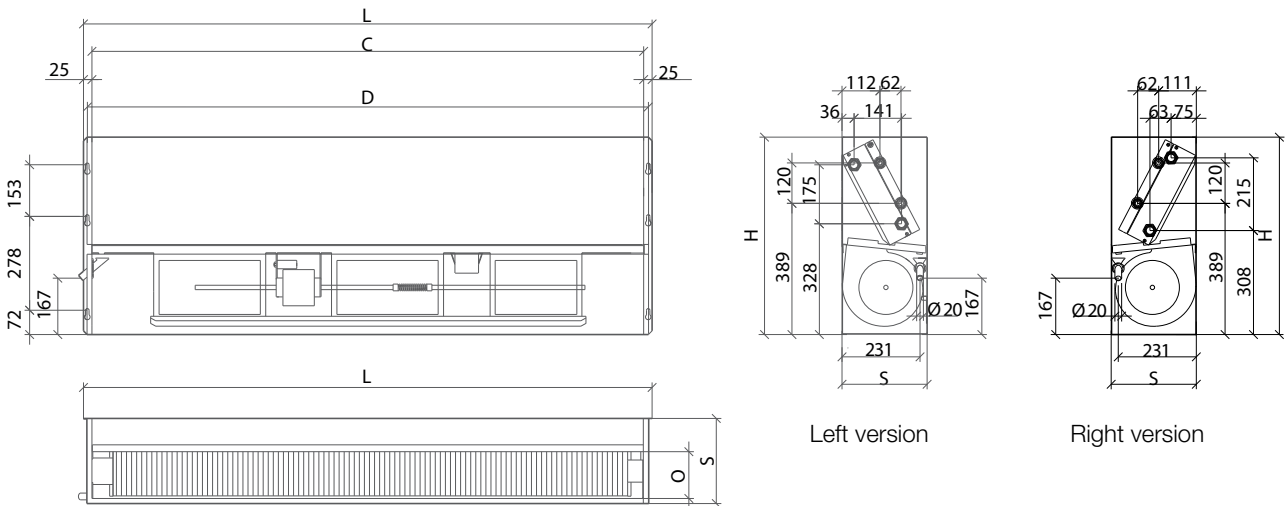
VERSION 2

Vertical recessed model (top air discharge)

HC 12 - 92



HC 102 - 122

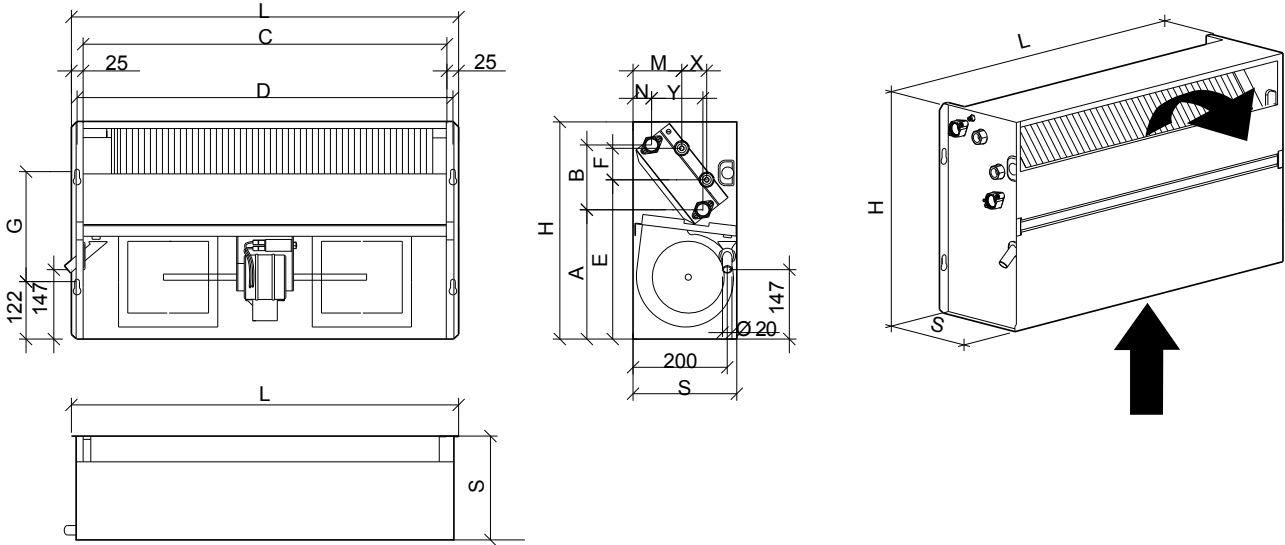


COMFAIR		HC	12	22	32	42	52	62	72	82	92	102	112	122
Dimensions	H	mm	460	460	460	460	460	460	565	565	565	585	585	585
	L	mm	420	620	820	820	1020	1020	1020	1220	1220	1385	1685	1685
	S	mm	220	220	220	220	220	220	220	220	220	252	252	252
	C	mm	370	570	770	770	970	970	970	1170	1170	1335	1635	1635
Distance between slots	D	mm	395	595	795	795	995	995	995	1195	1195	1362	1662	1662
	G	mm	233	233	233	233	233	233	253	253	253	-	-	-
Standard coil	N	mm	39	39	39	39	39	39	41	41	41	-	-	-
	Y	mm	109	109	109	109	109	109	107	107	107	-	-	-
	A	mm	274	274	274	274	274	274	268	268	268	-	-	-
	B	mm	137	137	137	137	137	137	253	253	253	-	-	-
Auxiliary coil	M	mm	103	103	103	103	103	103	101	101	101	-	-	-
	X	mm	53	53	53	53	53	53	52	52	52	-	-	-
	E	mm	337	337	337	337	337	337	374	374	374	-	-	-
	F	mm	67	67	67	67	67	67	124	124	124	-	-	-
Condensate discharge	O	mm	134	134	134	134	134	134	119	119	119	139	139	139

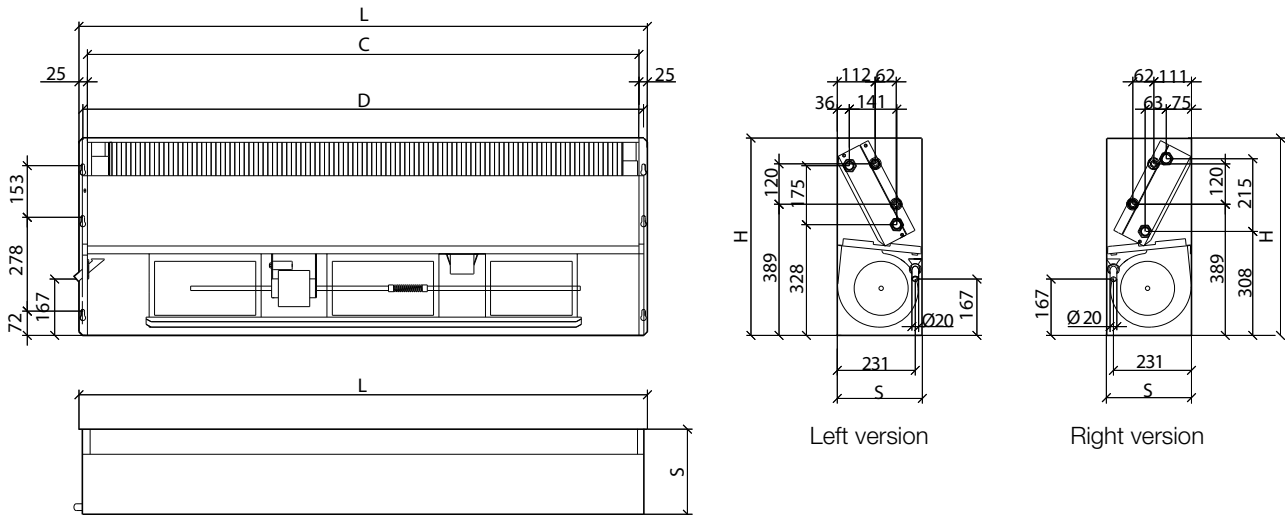
VERSION 7

Vertical recessed model (frontal air discharge)

HC 17 - 97



HC 107 - 127

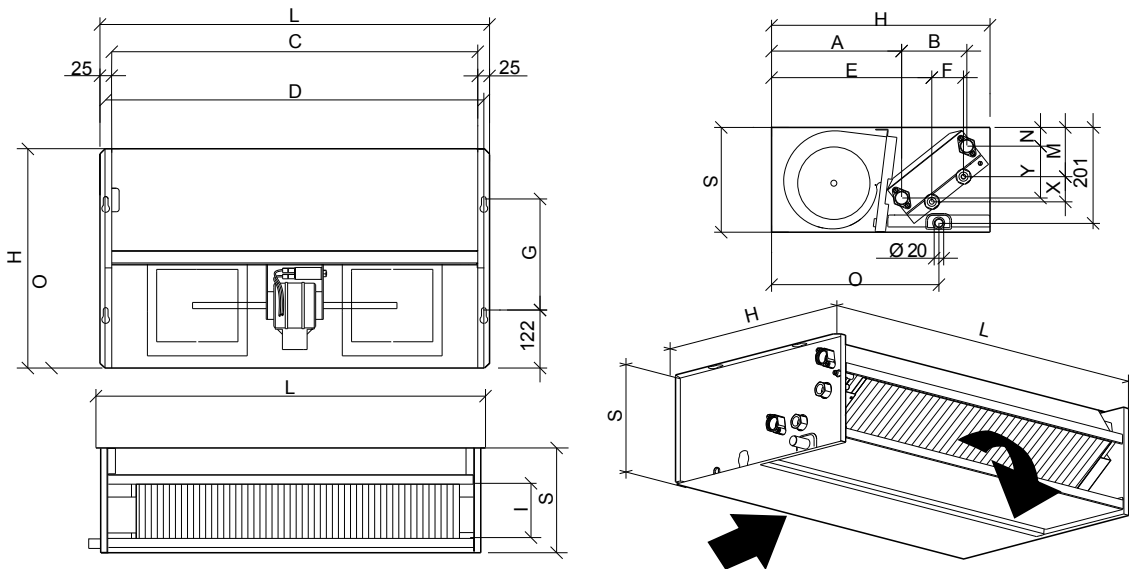


COMFAIR		HC	17	27	37	47	57	67	77	87	97	107	117	127
Dimensions	H	mm	460	460	460	460	460	460	565	565	565	585	585	585
	L	mm	420	620	820	820	1020	1020	1020	1220	1220	1385	1685	1685
	S	mm	220	220	220	220	220	220	220	220	220	252	252	252
	C	mm	370	570	770	770	970	970	970	1170	1170	1335	1635	1635
Distance between slots	D	mm	395	595	795	795	995	995	995	1195	1195	1362	1662	1662
	G	mm	233	233	233	233	233	233	253	253	253	-	-	-
Standard coil	N	mm	39	39	39	39	39	39	41	41	41	-	-	-
	Y	mm	109	109	109	109	109	109	107	107	107	-	-	-
	A	mm	274	274	274	274	274	274	268	268	268	-	-	-
	B	mm	137	137	137	137	137	137	137	253	253	253	-	-
Auxiliary coil	M	mm	103	103	103	103	103	103	101	101	101	-	-	-
	X	mm	53	53	53	53	53	53	52	52	52	-	-	-
	E	mm	337	337	337	337	337	337	374	374	374	-	-	-
	F	mm	67	67	67	67	67	67	124	124	124	-	-	-

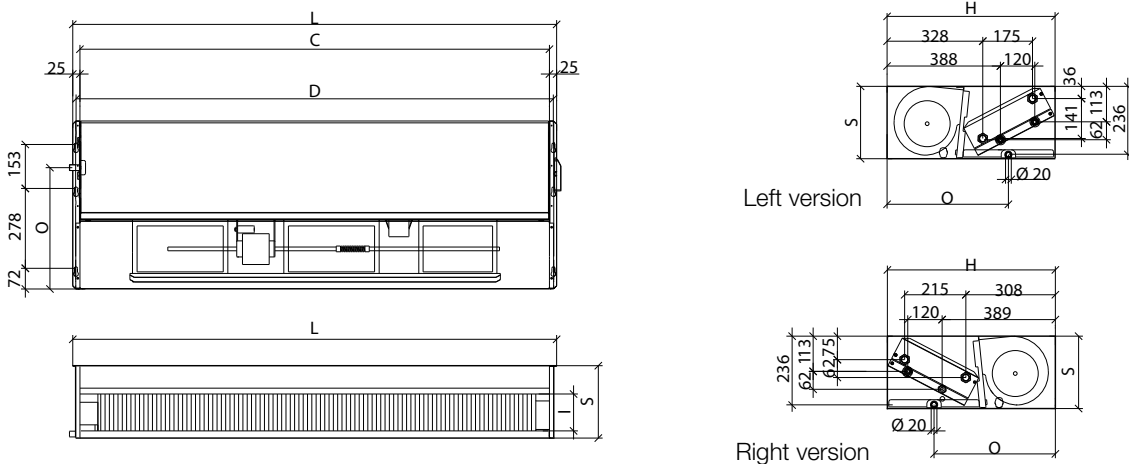
VERSION 3

Horizontal ceiling recessed model (top air discharge)

HC 13 - 93



HC 103 - 123

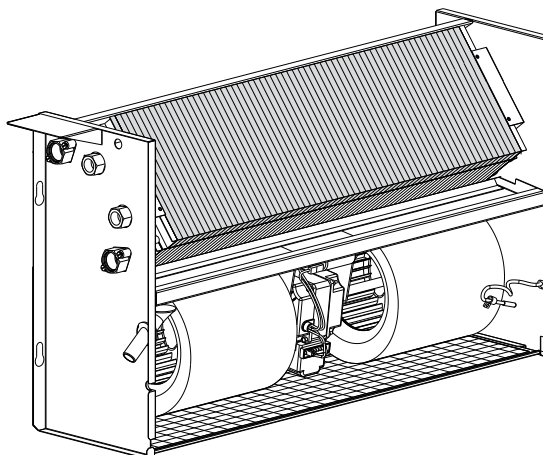


COMFAIR		HC	13	23	33	43	53	63	73	83	93	103	113	123
Dimensions	H	mm	460	460	460	460	460	460	565	565	565	585	585	585
	L	mm	420	620	820	820	1020	1020	1020	1220	1220	1385	1685	1685
	S	mm	220	220	220	220	220	220	220	220	220	252	252	252
	C	mm	370	570	770	770	970	970	970	1170	1170	1335	1635	1635
Distance between slots	D	mm	395	595	795	795	995	995	995	1195	1195	1362	1662	1662
	G	mm	233	233	233	233	233	233	253	253	253	-	-	-
Standard coil	N	mm	39	39	39	39	39	39	41	41	41	-	-	-
	Y	mm	109	109	109	109	109	109	107	107	107	-	-	-
	A	mm	274	274	274	274	274	274	268	268	268	-	-	-
	B	mm	137	137	137	137	137	137	253	253	253	-	-	-
Auxiliary coil	M	mm	103	103	103	103	103	103	101	101	101	-	-	-
	X	mm	53	53	53	53	53	53	52	52	52	-	-	-
	E	mm	337	337	337	337	337	337	374	374	374	-	-	-
	F	mm	67	67	67	67	67	67	124	124	124	-	-	-
N° of grilles, 100 mm step	I	Nr	115	115	115	115	115	115	99	99	99	129	129	129
Condensate discharge	O	mm	352	352	352	352	352	352	402	402	402	422	422	422

SINGLE ROW AUXILIARY COIL

This is used in 4-pipe systems, which comprise 2 independent water circuits: one for cooling and the other for heating. In this case, the auxiliary coil is used for heating. The constructional characteristics are similar to those of the main coil with brass inlet/outlet headers and air valves. The fittings have a diameter of 1/2" with internal GAS thread.

The fan coil model in which the auxiliary coil is to be installed must be specified at the time of ordering.

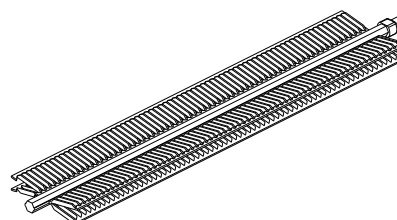
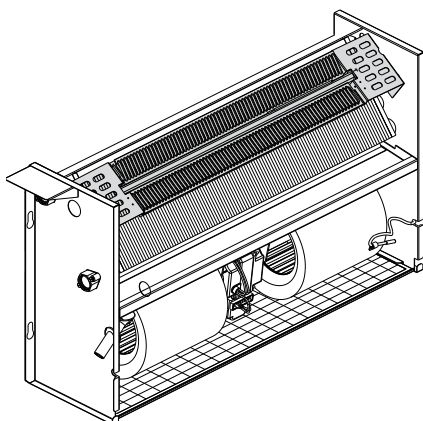


COMFAIR	HC	10	20	30	40	50	60	70	80	90	100	110	120
Heating capacity	W	1261	1894	2726	2887	3489	4131	5044	6193	7665	8388	10111	11433
	kCal/h	1087	1633	2350	2489	3008	3561	4348	5339	6608	7231	8716	9856
Water flow	l/h	109	163	235	249	301	356	435	534	661	739	981	1008
	l/s	0,03	0,405	0,065	0,069	0,084	0,176	0,121	0,148	0,184	0,205	0,273	0,28
Water pressure drops	kPa	0,3	0,7	1,7	2	3,4	4,2	7,5	13,9	21,7	48,4	27	34
	m C.A.	0,03	0,07	0,17	0,2	0,34	0,42	0,75	1,39	2,17	4,84	2,7	3,4

The technical data refer to the following conditions: maximum fan speed, indicated water flow rate, inflowing water temperature at 70°C, inflowing air temperature at 20°C.

ELECTRICAL HEATER

The heating element kit is used during heating to integrate the heating power of the main coil or alternative as the only heating element. The power of the heating element depends on the size of the fan coil on which it is mounted; the larger the fan coil, the greater the power of the heating element. The kit comprises the heating element with aluminium heatsink, safety thermostat, control relay and relative wiring and is already built into the fan coil complete with all electrical connections.



**ELECTRICAL SUPPLY:
230V/1/50HZ**

COMFAIR	HC	10	20	30	40	50	60	70	80	90	100	110	120
Heating capacity	W	-	1000	1000	1000	2000	2000	2000	3000	3000	*	*	*
	A	-	4,35	4,35	4,35	8,7	8,7	8,7	13,04	13,04	*	*	*

* On request

ON/OFF 2-WAY VALVE KIT

ON/OFF 2-way solenoid valves with bypass (2 fittings) are available.

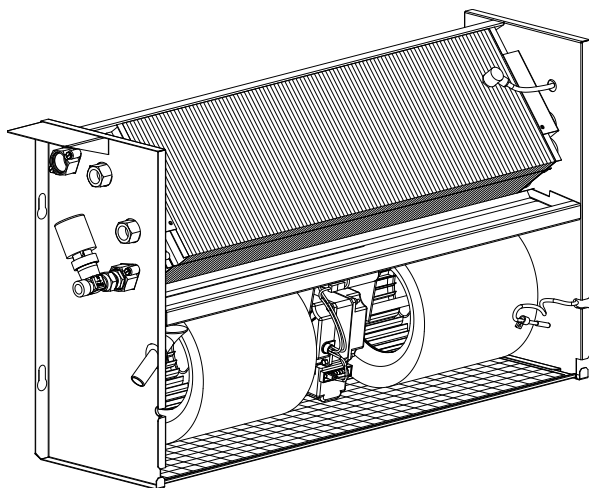
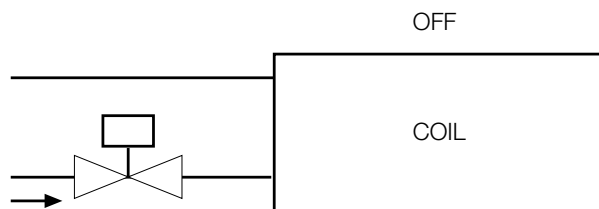
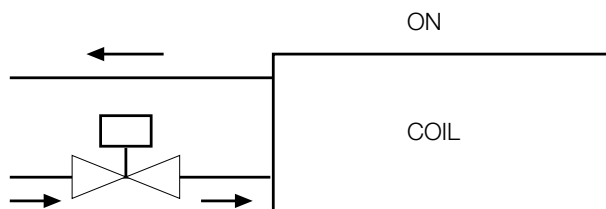
The valve body is in brass; as ON/OFF electrothermal actuator (power supply 230V AC) controls the membrane. When there is no power supply, the valve is closed. The electrothermal actuator is silent during operation.

The kit comprises valve body, electrothermal actuator, flared copper pipes, ring nuts and gaskets for fixing to the fan coil. The valve kit is already installed on the fan coil complete with the water and electrical connections necessary for operation.

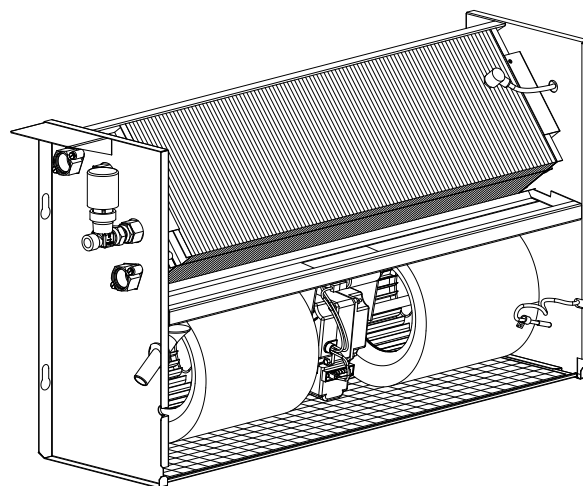
The fan coil model and the coil (standard or auxiliary) to which the kit refers must be specified at the time of ordering.

TECHNICAL DATA:

Electrical power supply	V/Hz	230/50-60
Input	VA	3
Breakway starting current	A (230 V)	0,3
Working current	A (230 V)	0,013
Max travel	mm	4
Pressure	N	90
Opening time	min	3
Max. differential pressure (with valve Ø 1/2")	Bar	1,5
Max. differential pressure (with valve Ø 3/4")	Bar	0,5
Working room temperature	°C	50
Protection rating (vertical installation)		IP43
Protection rating (horizontal installation)		IP40
Insulation		Double or reinforced
Connecting cable		Two pin Ø 0,5 mm ²
Size		68,5x50x50

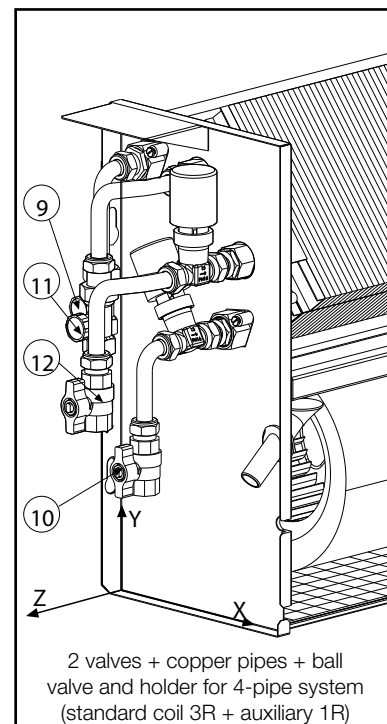
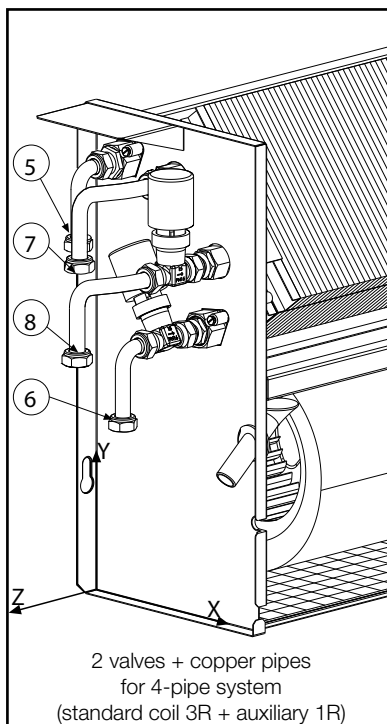
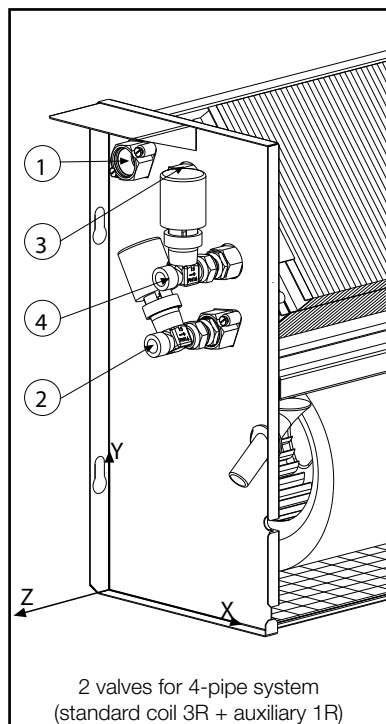


Installation on STANDARD COIL



Installation on AUXILIARY COIL

ON/OFF 2-WAY VALVE KIT



COMFAIR		HC 10 - 60				HC 70 - 90			
Coil	Ref.	X	Y	Z	Fitting	X	Y	Z	Fitting
Standard	1	40	10	18	3/4" F	39	411	25	3/4" F
	2	143	277	90	1/2" M	145	273	110	3/4" M
Auxiliary	3	113	405	10	1/2" F	103	404	25	1/2" F
	4	155	333	83	1/2" M	155	373	95	3/4" M
Standard	5	40	343	55	1/2" F	38	483	55	3/4" F
	6	145	213	120	1/2" F	150	235	132	3/4" F
Auxiliary	7	30	315	50	1/2" F	30	400	62	3/4" F
	8	80	245	105	1/2" F	77	277	122	3/4" F
Standard	9	40	260	55	1/2" F	38	388	55	3/4" F
	10	145	152	120	1/2" F	150	175	132	3/4" F
Auxiliary	11	30	233	50	1/2" F	30	305	62	3/4" F
	12	80	185	105	1/2" F	77	220	122	3/4" F

COMFAIR		HC 100 - 120 : left side				HC 100 - 120 : right side			
Coil	Ref.	X	Y	Z	Fitting	X	Y	Z	Fitting
Standard	1	34	503	4	3/4" M	75	523	9	3/4" M
	2	175	328	126	3/4" M	137	308	130	3/4" M
Auxiliary	3	110	508	4	1/2" M	100	508	4	1/2" M
	4	173	388	91	1/2" M	174	388	126	1/2" M
Standard	5	34	471	149	3/4" F	32	484	150	3/4" F
	6	175	286	149	3/4" F	137	258	153	3/4" F
Auxiliary	7	98	476	149	3/4" F	96	469	150	3/4" F
	8	134	304	156	3/4" F	124	339	150	3/4" F
Standard	9	36	355	149	1" F	32	377	150	1" F
	10	176	187	149	1" F	137	167	153	1" F
Auxiliary	11	100	381	149	3/4" F	96	381	150	3/4" F
	12	136	249	156	3/4" F	174	292	150	3/4" F

F = Female gas fittings: M = Male gas fittings

ON/OFF 3-WAY VALVE KIT

ON/OFF 3-way solenoid valves with bypass (4 fittings) are available.

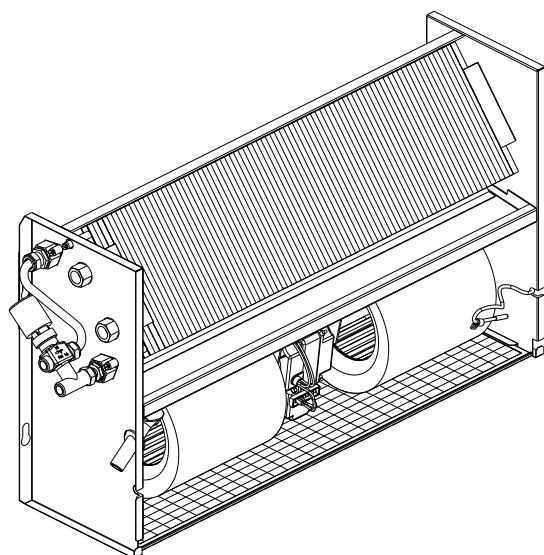
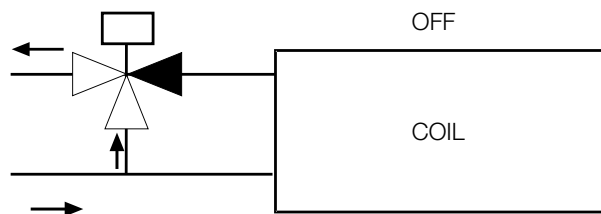
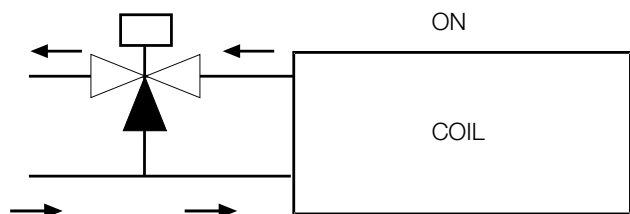
The valve body is in brass; as ON/OFF electrothermal actuator (power supply 230V AC) controls the membrane. When there is no power supply, the valve is closed. The electrothermal actuator is silent during operation.

The kit comprises valve body, electrothermal actuator, flared copper pipes, ring nuts and gaskets for fixing to the fan coil. The valve kit is already installed on the fan coil complete with the water and electrical connections necessary for operation.

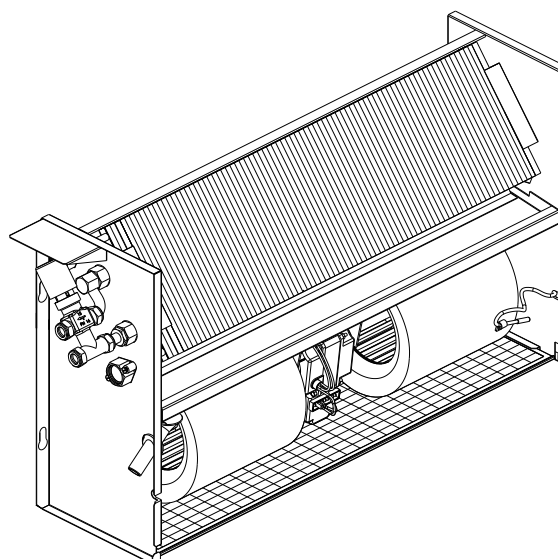
The fan coil model and the coil (standard or auxiliary) to which the kit refers must be specified at the time of ordering.

TECHNICAL DATA:

Electrical power supply	V/Hz	230/50-60
Input	VA	3
Breakway starting current	A (230 V)	0,3
Working current	A (230 V)	0,013
Max travel	mm	4
Pressure	N	90
Opening time	min	3
Max. differential pressure (with valve Ø 1/2")	Bar	1,5
Max. differential pressure (with valve Ø 3/4")	Bar	0,5
Working room temperature	°C	50
Protection rating (vertical installation)		IP43
Protection rating (horizontal installation)		IP40
Insulation		Double or reinforced
Connecting cable		Two pin Ø 0,5 mm ²
Size		68,5x50x50

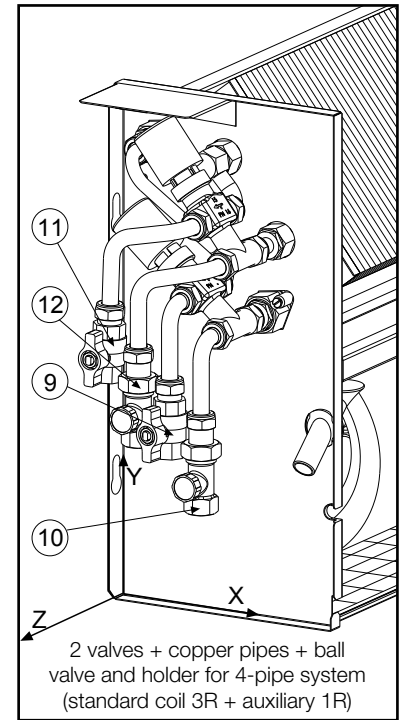
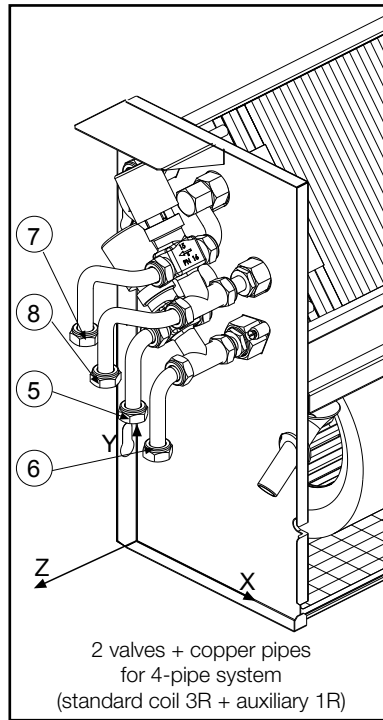
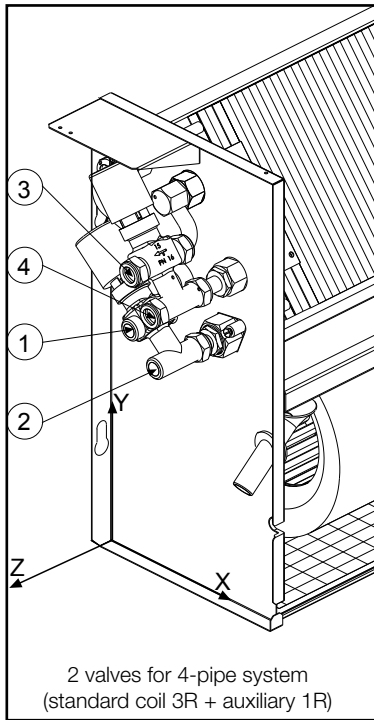


Installation on STANDARD COIL



Installation on AUXILIARY COIL

ON/OFF 3-WAY VALVE KIT



COMFAIR		HC 10 - 60				HC 70 - 90			
Coil	Ref.	X	Y	Z	Fitting	X	Y	Z	Fitting
Standard	1	115	295	90	1/2" M	110	293	110	3/4" M
	2	147	270	90	1/2" M	145	273	110	3/4" M
Auxiliary	3	130	370	92	1/2" M	120	398	115	3/4" M
	4	155	335	92	1/2" M	153	375	115	3/4" M
Standard	5	115	225	110	1/2" F	110	255	133	3/4" F
	6	147	200	110	1/2" F	145	235	133	3/4" F
Auxiliary	7	57	278	120	1/2" F	40	302	145	3/4" F
	8	85	250	120	1/2" F	82	277	145	3/4" F
Standard	9	115	165	110	1/2" F	110	162	133	3/4" F
	10	147	122	110	1/2" F	145	178	133	3/4" F
Auxiliary	11	55	220	117	1/2" F	40	205	145	3/4" F
	12	87	167	117	1/2" F	82	220	145	3/4" F

COMFAIR		HC 100 - 120 : left side				HC 100 - 120 : right side			
Coil	Ref.	X	Y	Z	Fitting	X	Y	Z	Fitting
Standard	1	85	376	125	3/4" M	71	385	124	3/4" M
	2	174	328	125	3/4" M	135	307	124	3/4" M
Auxiliary	3	140	413	106	1/2" M	139	412	106	1/2" M
	4	173	388	106	1/2" M	171	387	106	1/2" M
Standard	5	16	274	146	3/4" F	30	263	158	3/4" F
	6	176	285	146	3/4" F	137	265	145	3/4" F
Auxiliary	7	95	298	171	3/4" F	87	330	158	3/4" F
	8	135	303	171	3/4" F	173	345	156	3/4" F
Standard	9	16	160	146	1" F	30	148	158	1" F
	10	176	187	146	1" F	137	167	145	1" F
Auxiliary	11	95	244	171	3/4" F	87	235	157	3/4" F
	12	135	209	171	3/4" F	173	291	156	3/4" F

F = Female gas fittings; M = Male gas fittings

CONDENSATE DRAIN PUMP

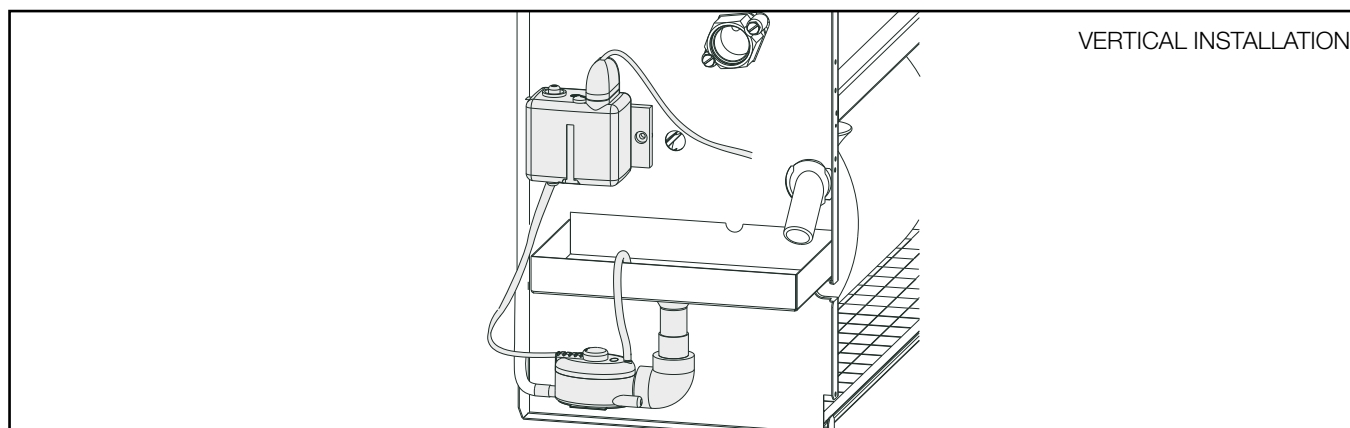
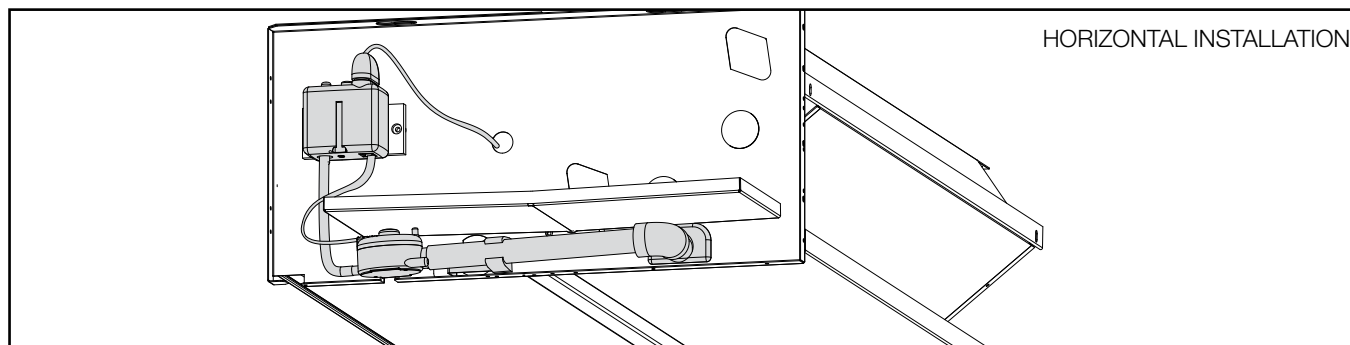
This pump is used to eliminate the condensation that collects in the tray in installations where there is no self-emptying outlet. The pump comes with filter to withhold impurities, float with activation contact, suction pipe, pump body complete with control electronics and overheating protection, wiring.

PUMP

Alarm contact normally closed that automatically cuts off the air conditioning system compressor or valve, thermal protection 90° on the pump coil, electrical connection by plug (delivered with 1 m cable), rubber mounting bracket included, ...

AVANTAGES

Small size, low noise level.



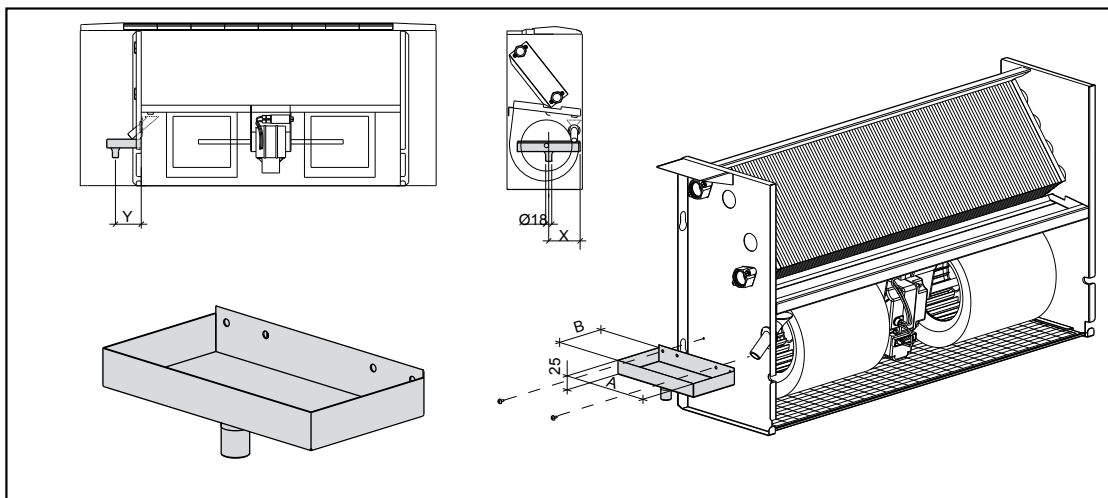
COMFAIR		For HC 1_ to HC 6_	For HC 7_ to HC 12_
Mains supply	V/Hz - W	230/50Hz - 18	
Max. flow rate	l/h	8	20
Max. suction head	m	1	2
Max. discharge head	m	6	
Alarm contact		NC 8 A resistive	
Thermal protection (overheat)	°C	90	
Sound level at 1 m	dB(A)	<28	<34
Pump dimensions (L x l x h)	mm	66 x 44 x 60	
Detection unit dimensions (L x l x h)	mm	55 x 38 x 32	
Weight (including box)	kg	±0.350	
Packaging	Nr of boxes	25	

AUXILIARY CONDENSATE COLLECTING TRAY

The painted, galvanised sheet metal auxiliary drip tray is used to collect condensate from the valves and the pipes connecting to the unit.

VERTICAL VERSION (INSULATED)

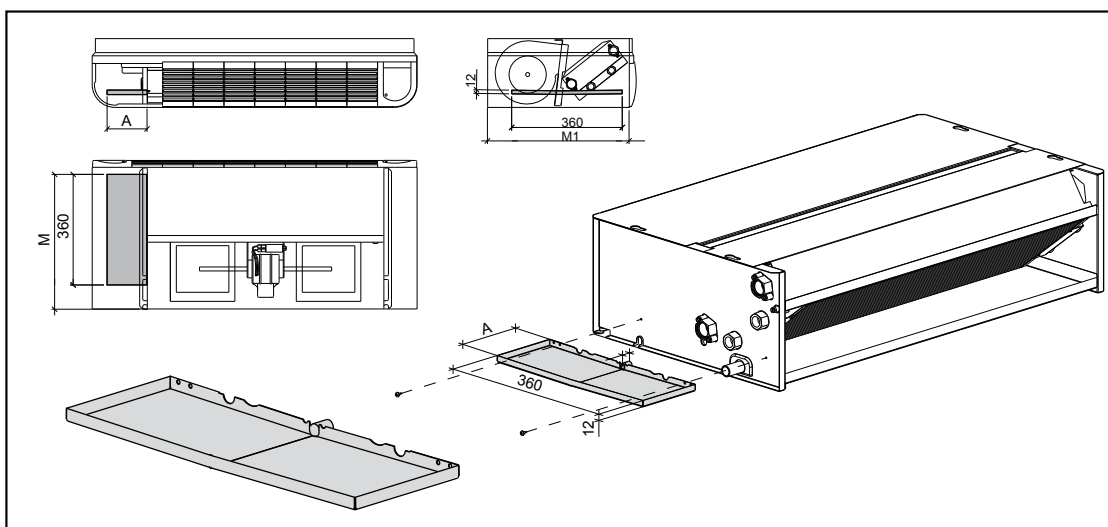
It is suitable for vertically mounted fan coils.



COMFAIR	HC	10	20	30	40	50	60	70	80	90	100	110	120
A	mm	187	187	187	187	187	187	187	187	187	246	246	246
B	mm	102	102	102	102	102	102	102	102	102	130	130	130
X	mm	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	126	126	126
Y	mm	51	51	51	51	51	51	51	51	51	65	65	65

HORIZONTAL VERSION (INSULATED)

It is suitable for vertically mounted fan coils.



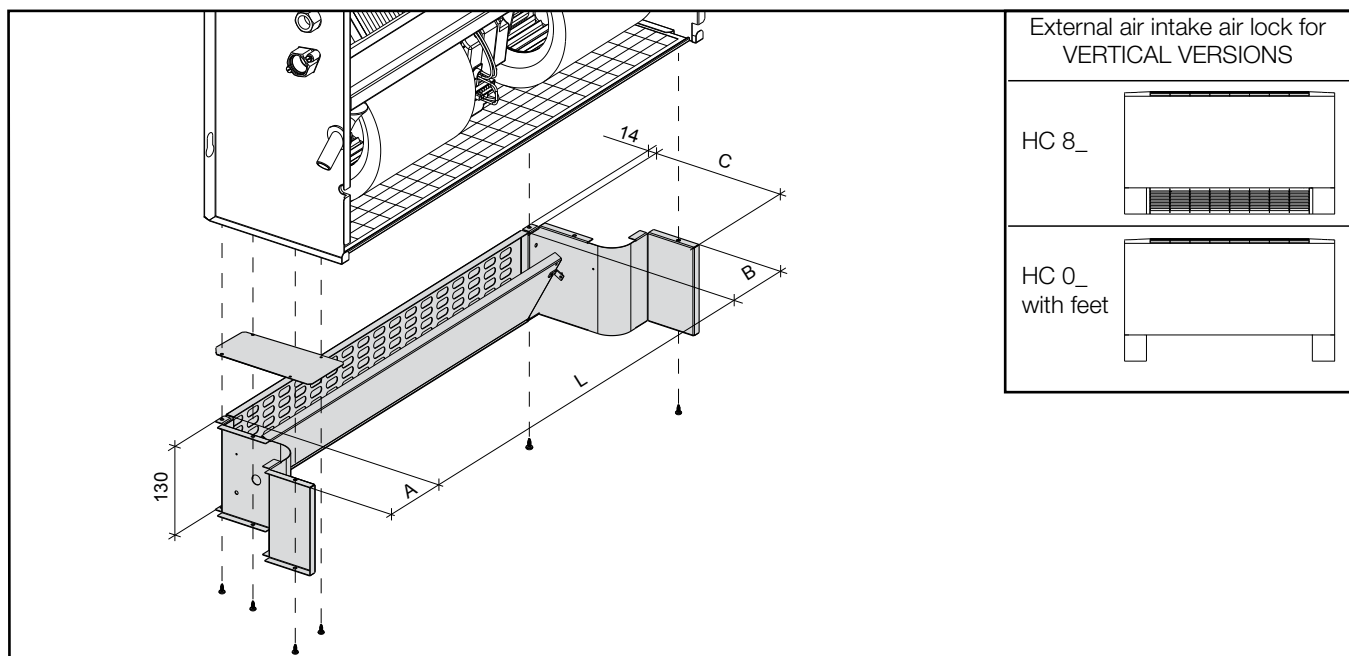
COMFAIR	HC	10	20	30	40	50	60	70	80	90	100	110	120
A	mm	130	130	130	130	130	130	160	160	160	160	160	160
M	mm	480	480	480	480	480	480	585	585	585	602	602	602
M1	mm	460	460	460	460	460	460	565	565	565	585	585	585

FRESH AIR LOUVER

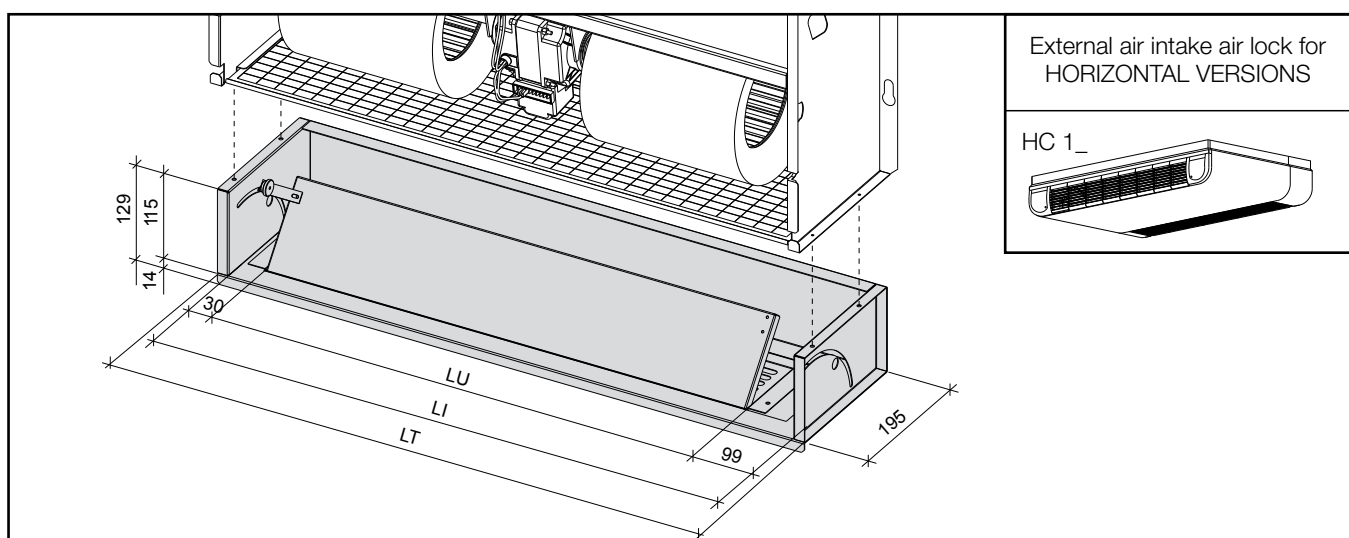
To ensure sufficient air in the rooms, a continuous change of air is necessary. This is done by introducing a percentage of air from outdoors. The external air intake lock is used for this purpose. It is installed at the bottom of the fan coil on the intake line. It may be installed on both the wall-mounted vertical and the ceiling-mounted horizontal versions. For correct installation, the fan coil must have a pair of feet or intake plinths. The air lock is made in galvanised sheet steel metal and may be provided with manual control (placed in line with the same) or with electric servo-control.

AIR FLOW:

Internal: 78% - External: 22% - Total: 100%



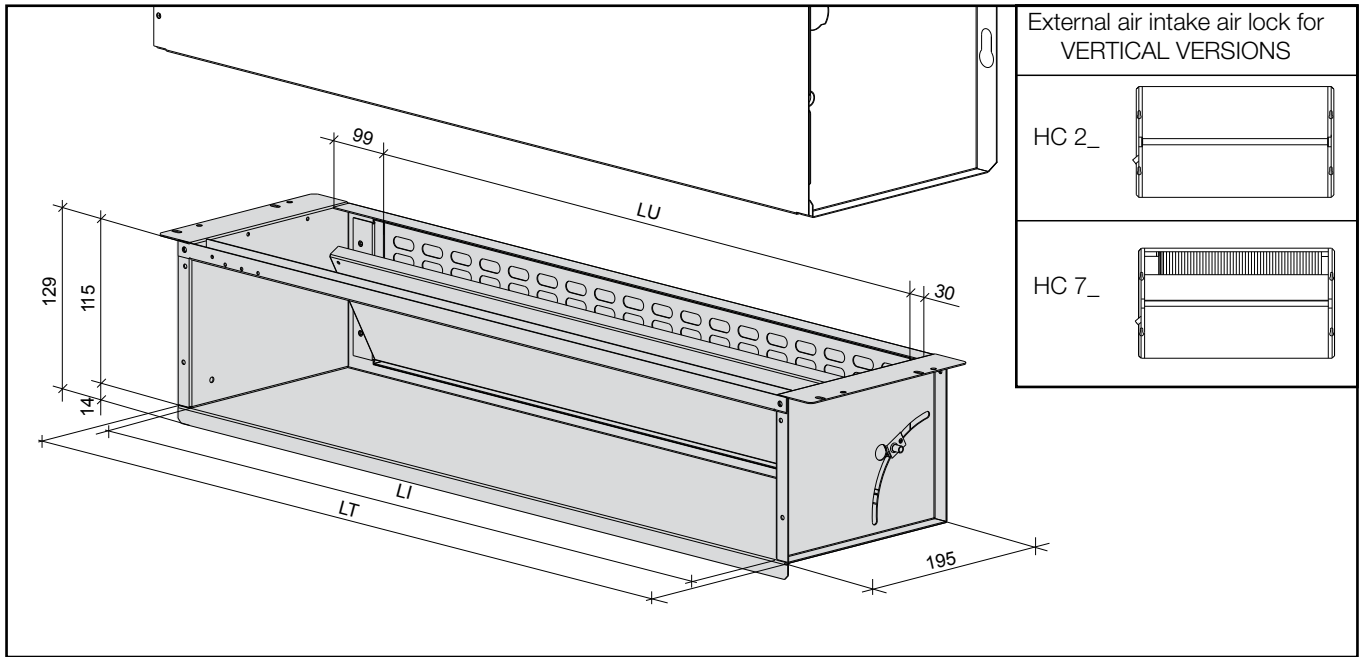
COMFAIR	HC	10	20	30	40	50	60	70	80	90	100	110	120
		18	28	38	48	58	68	78	88	98	108	118	128
L	mm	255	455	655	655	855	855	855	1055	1055	1180	1480	1480
A	mm	105	105	105	105	105	105	105	105	105	140	140	140
B	mm	105	105	105	105	105	105	105	105	105	140	140	140
C	mm	200	200	200	200	200	200	200	200	200	230	230	230



COMFAIR	HC	11	21	31	41	51	61	71	81	91	101	111	121
LU	mm	253	453	653	653	853	853	853	1053	1053	*	*	*
LI	mm	367	567	767	767	967	967	967	1167	1167	*	*	*
LT	mm	397	597	797	797	997	997	997	1197	1197	*	*	*

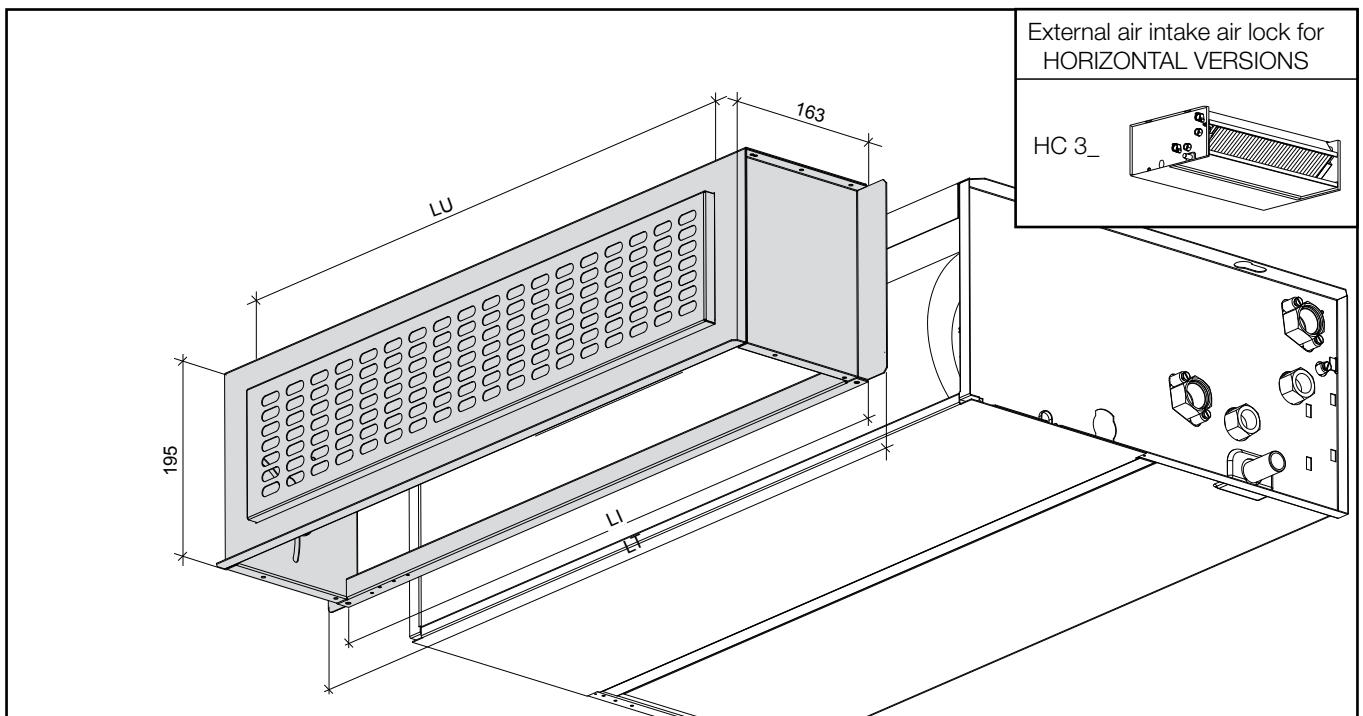
Not available for models HC 101 to HC 121

EXTERNAL AIR INTAKE AIR LOCK



COMFAIR	HC	12	22	32	42	52	62	72	82	92	102	112	122
		17	27	37	47	57	67	77	87	97	107	117	127
LU	mm	255	455	655	655	855	855	855	1055	1055	*	*	*
LI	mm	313	513	713	713	913	913	913	1113	1113	*	*	*
LT	mm	397	597	797	797	997	997	997	1197	1197	*	*	*

Not available for models HC 102 to HC 122 and HC 107 to HC 127

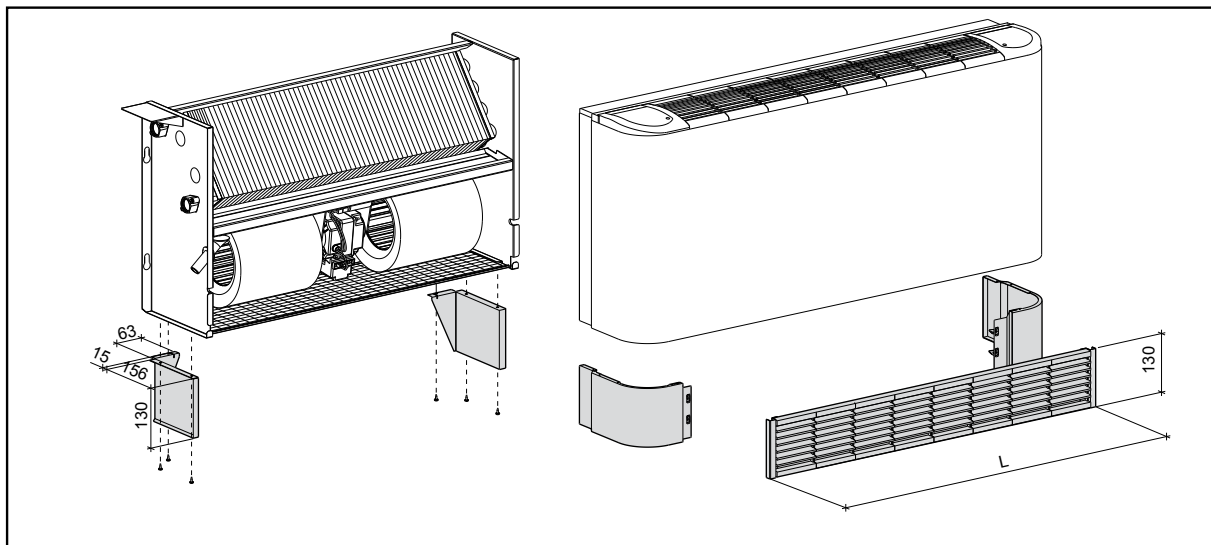


COMFAIR	HC	13	23	33	43	53	63	73	83	93	103	113	123
LU	mm	255	455	655	655	855	855	855	1055	1055	*	*	*
LI	mm	313	513	713	713	913	913	913	1113	1113	*	*	*
LT	mm	397	597	797	797	997	997	997	1197	1197	*	*	*

Not available for models HC 103 to HC 123

AIR INTAKE PLINTH

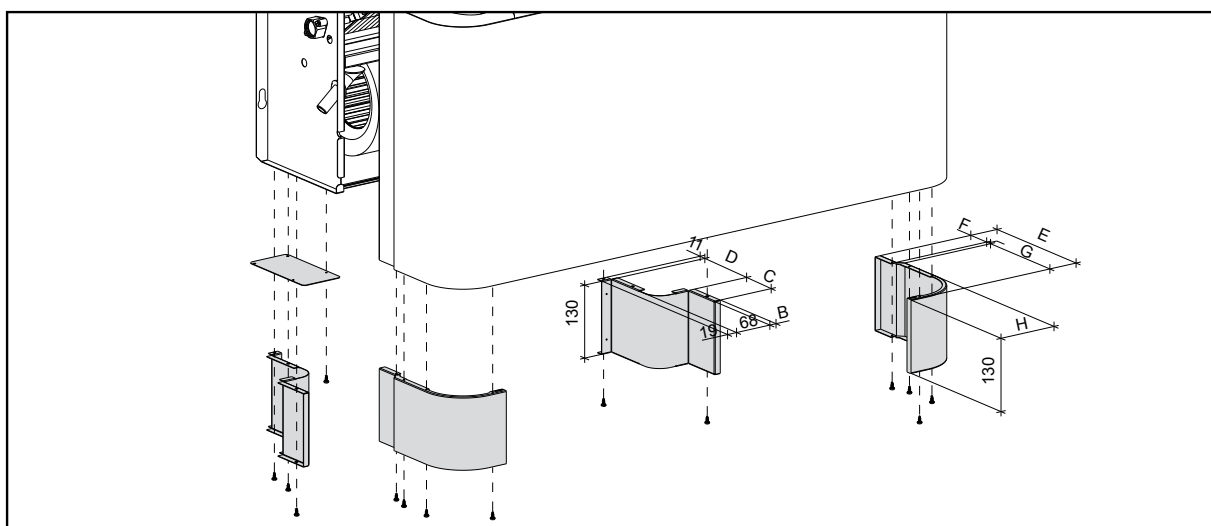
This is used together with the pair of feet to conceal the lower part of the appliance. The air intake grille and filter is integrated into the plinth, which may also be used in the ceiling-mounted versions.



COMFAIR	HC	10	20	30	40	50	60	70	80	90	100	110	120
L	mm	330	530	730	730	930	930	930	1130	1130	1435	1735	1735

PAIR OF ENAMELLED FEET

Pair of feet in pre-enamelled sheet metal designed to support the fan coil for floor-standing installation.

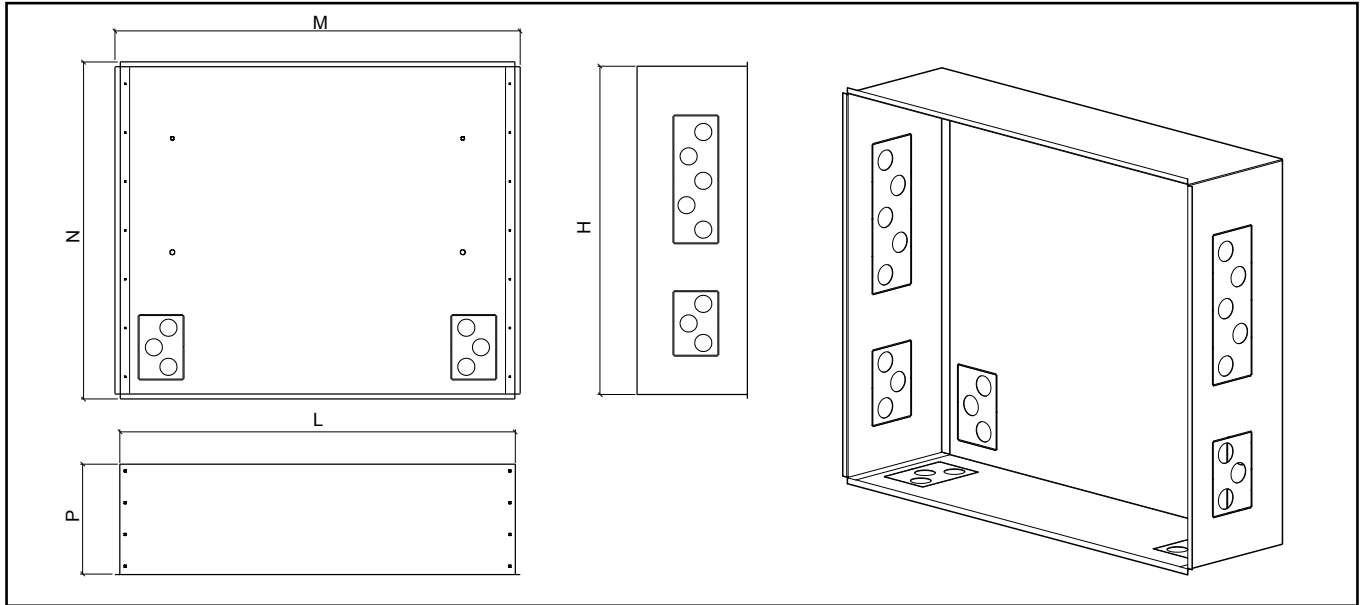


COMFAIR	HC	10	20	30	40	50	60	70	80	90	100	110	120
A	mm	68	68	68	68	68	68	68	68	68	105	105	105
B	mm	10	10	10	10	10	10	10	10	10	14	14	14
C	mm	75	75	75	75	75	75	75	75	75	100	100	100
D	mm	125	125	125	125	125	125	125	125	125	129	129	129
E	mm	225	225	225	225	225	225	225	225	225	256	256	256
F*	mm	45	45	45	45	45	45	45	45	45	*	*	*
G*	mm	170	170	170	170	170	170	170	170	170	*	*	*
H	mm	110	110	110	110	110	110	110	110	110	112	112	112

N.B: On the models HC 100 to HC 120, the fold on the cabinet is foreseen!

SPECIAL STEEL BOX FOR HC7_

The gavanized sheet metal box is used to ease the installation of the recessed fan coil version 7 (frontal air supply) inside the niche.

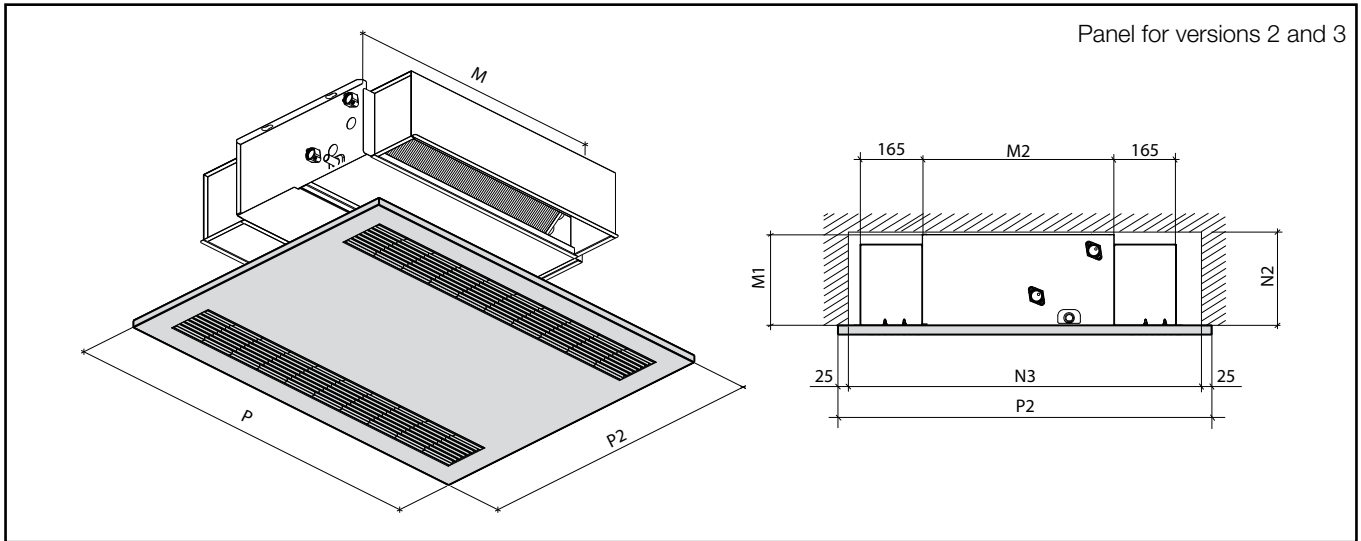
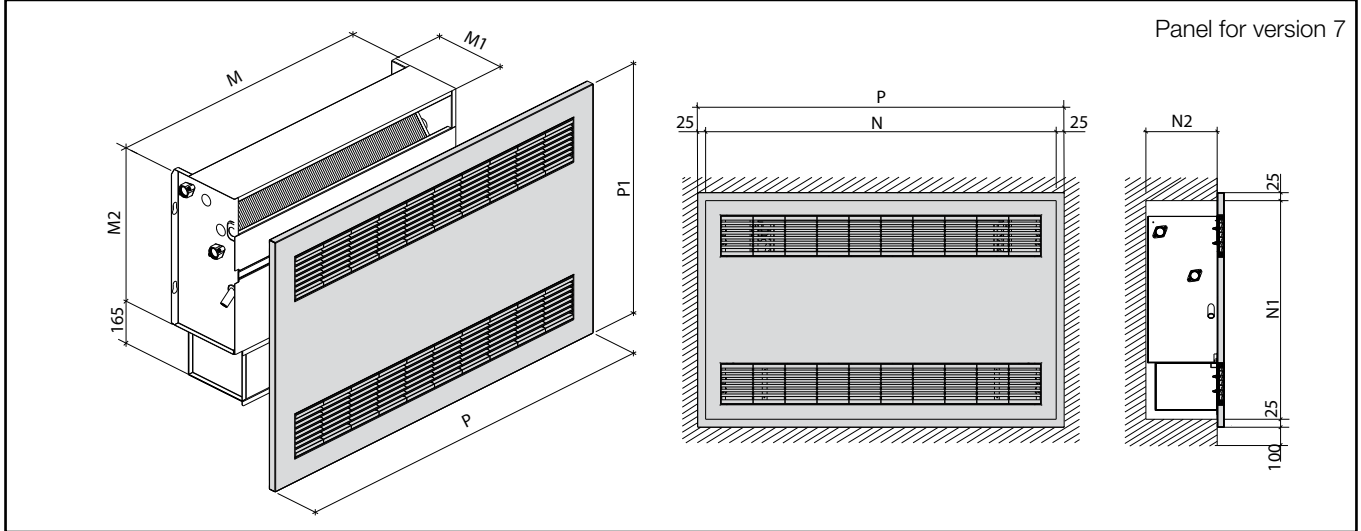


COMFAIR	HC	17	27	37	47	57	67	77	87	97	107	117	127
L	mm	610	810	1010	1010	1210	1210	1210	1410	1410	*	*	*
H	mm	675	675	675	675	675	675	780	780	780	*	*	*
P	mm	225	225	225	225	225	225	225	225	225	*	*	*
M	mm	630	830	1030	1030	1230	1230	1230	1430	1430	*	*	*
N	mm	690	690	690	690	690	690	795	795	795	*	*	*

* Not available for models HC 107 to HC 127 and 2/3 versions

PRE-ENAMELLED WHITE SHEET METAL PANEL

Built-in fan coils (wall or ceiling mounted) should be concealed for aesthetic and safety purposes. The sheet metal panel does this by fully closing off the recess housing the appliance. The panel is made in pre-enamelled white sheet metal. It is fixed directly onto the fan coil with hidden self-tapping screws. The air intake grille (with filter) and outlet louvres are inserted in the panel. By turning the outlet louvres the air flow may be directed upwards or downwards. There are two types of panels for each size of fan coil: version 7 (fan coil with front outlet) and version 2 and 3 (fan coil with vertical or horizontal outlet complete with 90° elbow).



COMFAIR	HC	10	20	30	40	50	60	70	80	90	100	110	120
N	mm	700	900	1100	1100	1300	1300	1300	1500	1500	*	*	*
N1	mm	685	685	685	685	685	685	790	790	790	*	*	*
N2	mm	225	225	225	225	225	225	225	225	225	*	*	*
N3	mm	845	845	845	845	845	845	950	950	950	*	*	*
P	mm	750	950	1150	1150	1350	1350	1350	1550	1550	*	*	*
P1	mm	735	735	735	735	735	735	840	840	840	*	*	*
P2	mm	895	895	895	895	895	895	1000	1000	1000	*	*	*
M	mm	420	620	820	820	1020	1020	1020	1220	1220	1380	1680	1680
M1	mm	220	220	220	220	220	220	220	220	220	256	256	256
M2	mm	460	460	460	460	460	460	565	565	565	585	585	585

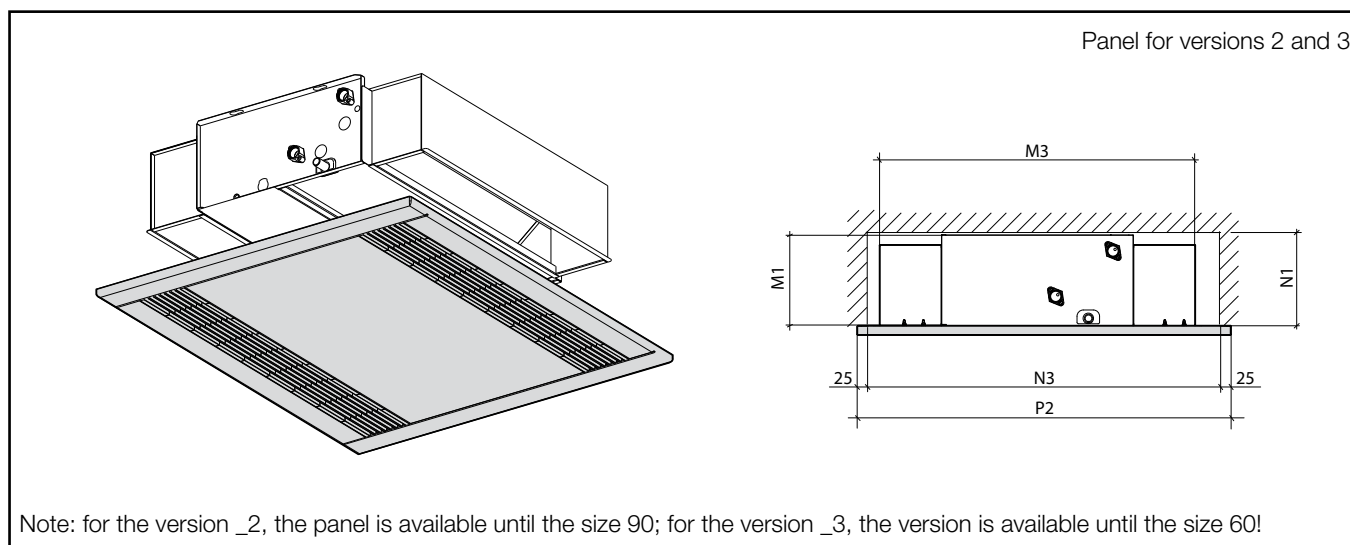
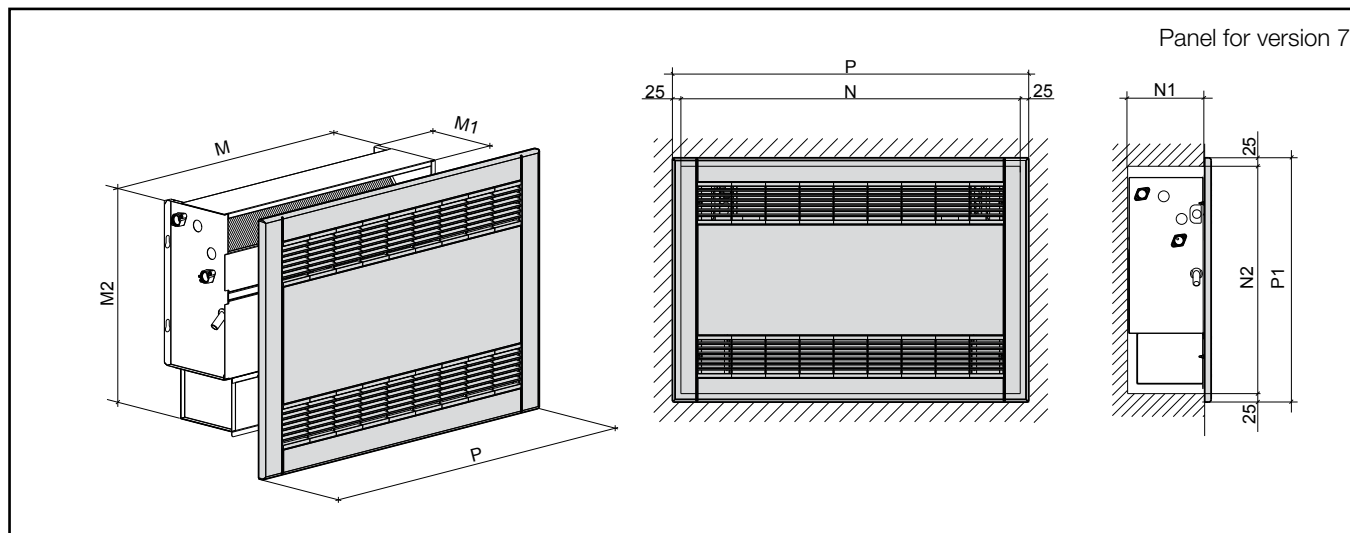
* On request



N, ..., N3 = **MINIMUM** recess size
 P, ..., P2 = Panel length
 M, ..., M2 = Fan coil size

PRE-ENAMELLED WHITE SHEET METAL PANEL

An elegant white lacquered wood panel for installation in environments where the design is particularly important. The wood panel allows the fan coil to be fully concealed by closing off the recess in which it is installed. It is fixed directly onto the fan coil by hidden self-tapping screws. The air intake grille (with filter) and outlet louvres are inserted in the panel. By turning the outlet louvres the airflow may be directed upwards or downwards. The panels are only available for version 7 (fan coil with front outlet).



COMFAIR	HC	12	22	32	42	52	62	72	82	92	102	112	122
		13	23	33	43	53	63	-	-	-	-	-	-
N	mm	600	800	1000	1000	1200	1200	1200	1400	1400	*	*	*
N1	mm	227	227	227	227	227	227	227	227	227	*	*	*
N2	mm	570	670	670	670	670	670	775	775	775	*	*	*
N3	mm	830	830	830	830	830	830	935	935	935	*	*	*
P	mm	650	850	1050	1050	1250	1250	1250	1450	1450	*	*	*
P1	mm	720	720	720	720	720	720	825	825	825	*	*	*
P2	mm	880	880	880	880	880	880	985	985	985	*	*	*
M	mm	420	620	820	820	1020	1020	1020	1220	1220	*	*	*
M1	mm	220	220	220	220	220	220	220	220	220	*	*	*
M2	mm	625	625	625	625	625	625	730	730	730	*	*	*
M3	mm	790	790	790	790	790	790	985	895	895	-	-	-

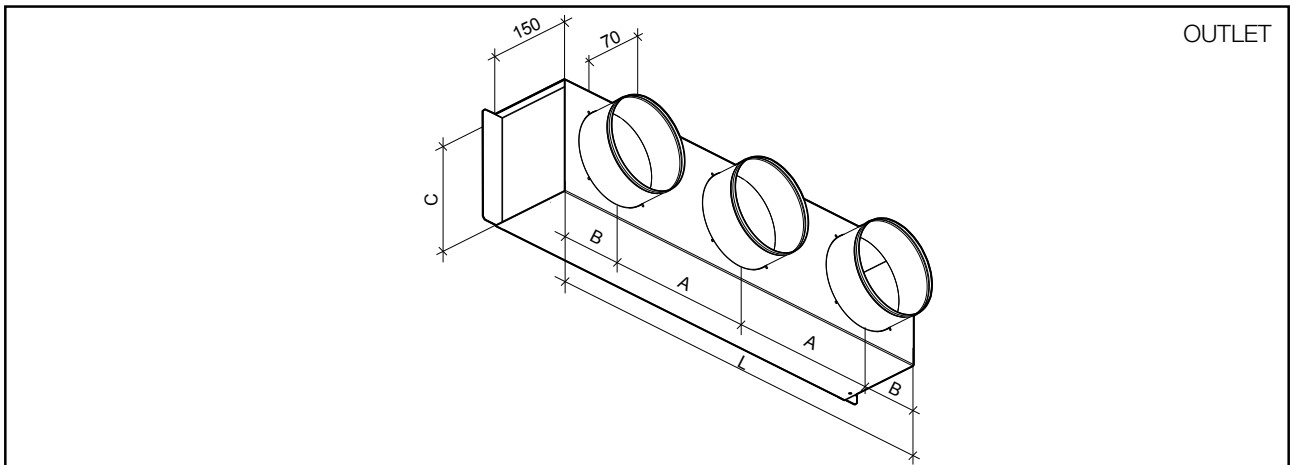


N, ..., N3 = **MINIMUM** recess size; P, ..., P2 = Panel length; M, ..., M3 = Fan coil size

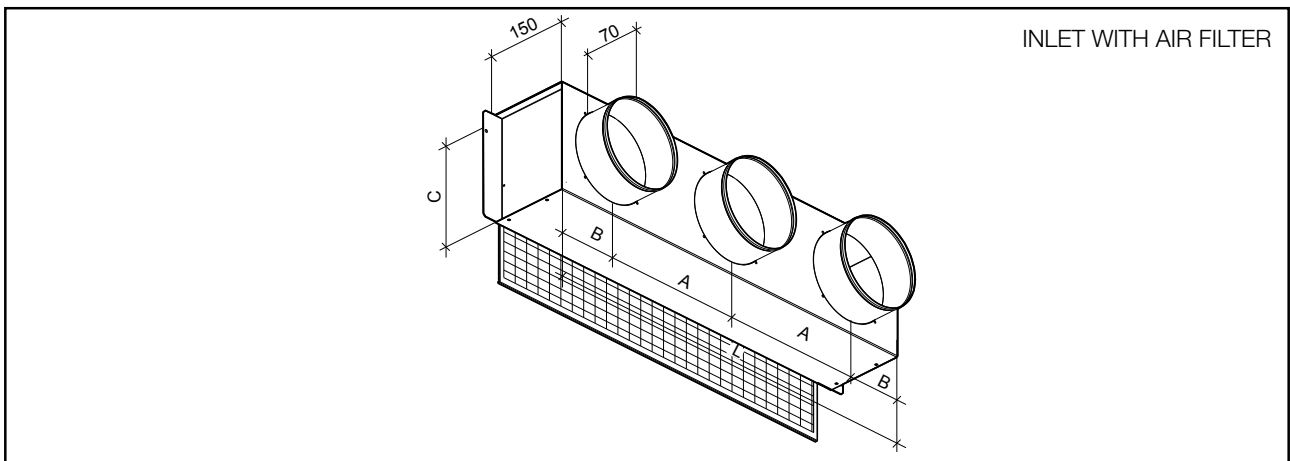
* On request

OUTLET UNIONS AND INLET UNIONS (WITH AIR FILTER) WITH CIRCULAR FITTINGS

The painted, galvanised sheet metal plenum with circular fittings is used to convey the air with vertical or horizontal built-in fan coil installation. The air filter may be easily drawn out for inspection or cleaning.

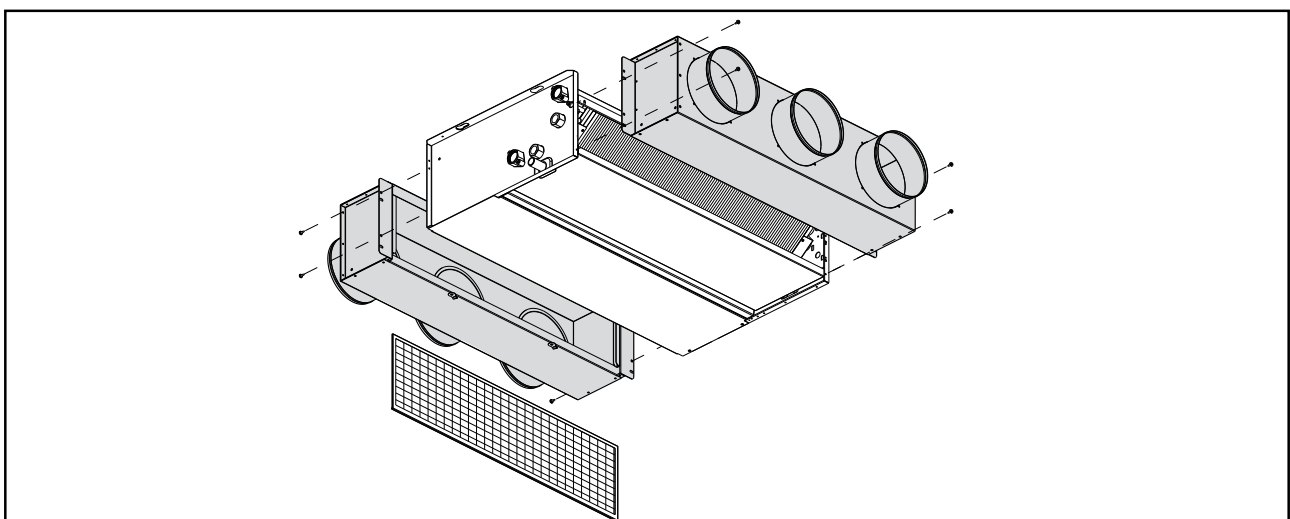


OUTLET



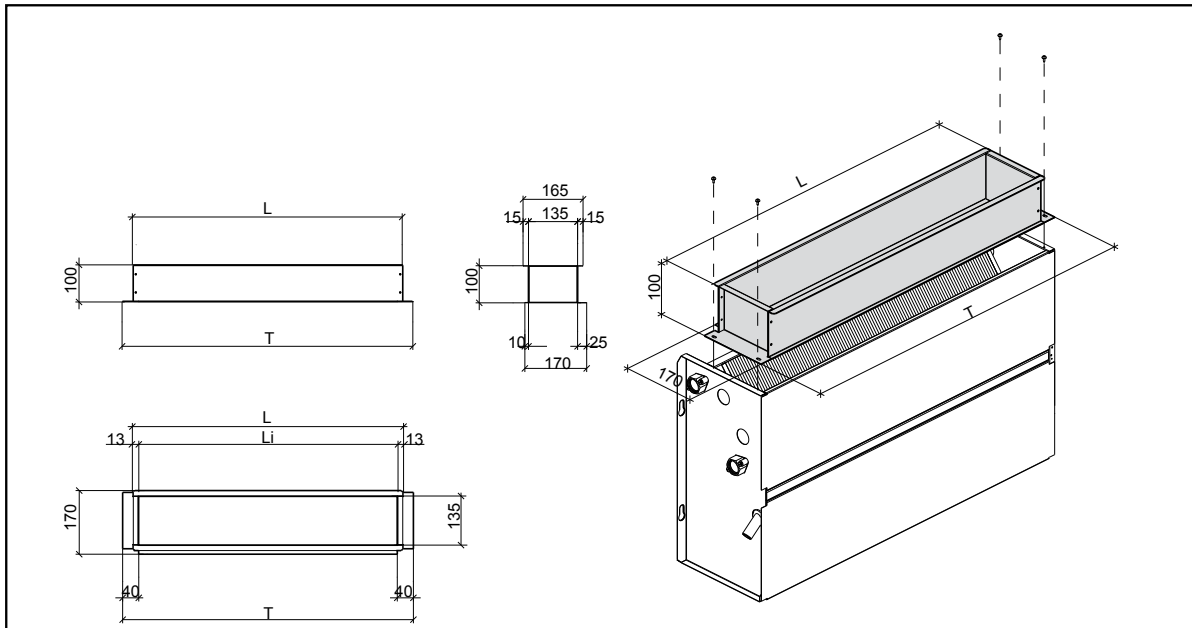
INLET WITH AIR FILTER

COMFAIR	HC	10	20	30	40	50	60	70	80	90	100	110	120
A	mm	-	327	263,5	263,5	242,5	242,5	242,5	309	309	350	324,3	324,3
B	mm	171,5	108	108	108	108	108	108	108	108	157,5	164	164
L	mm	343	543	743	743	943	943	943	1143	1143	1365	1665	1665
C	mm	195	195	195	195	195	195	195	195	195	240	240	240
N. x Ø	mm	1xØ160	2xØ160	3xØ160	3xØ160	4xØ160	4xØ160	4xØ160	4xØ160	4xØ160	4xØ200	5xØ200	5xØ200



STRAIGHT OUTLET FITTING

In galvanised sheet metal, it is used to convey air with vertical or horizontal built-in fan coil installation.

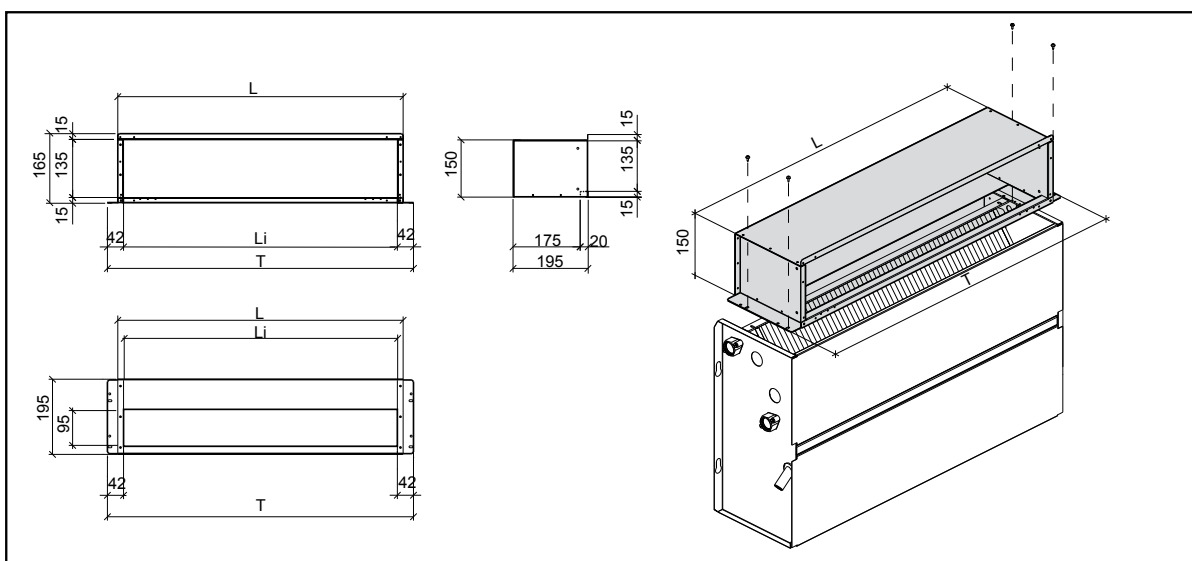


COMFAIR	HC	10	20	30	40	50	60	70	80	90	100	110	120
L	mm	343	543	743	743	943	943	943	1143	1143	*	*	*
Li (inside Ø)	mm	317	517	717	717	917	917	917	1117	1117	*	*	*
T	mm	397	597	797	797	997	997	997	1197	1197	*	*	*

* On request

90° OUTLET ELBOW

In galvanised sheet metal, it is used to convey air with vertical or horizontal built-in fan coil installation.

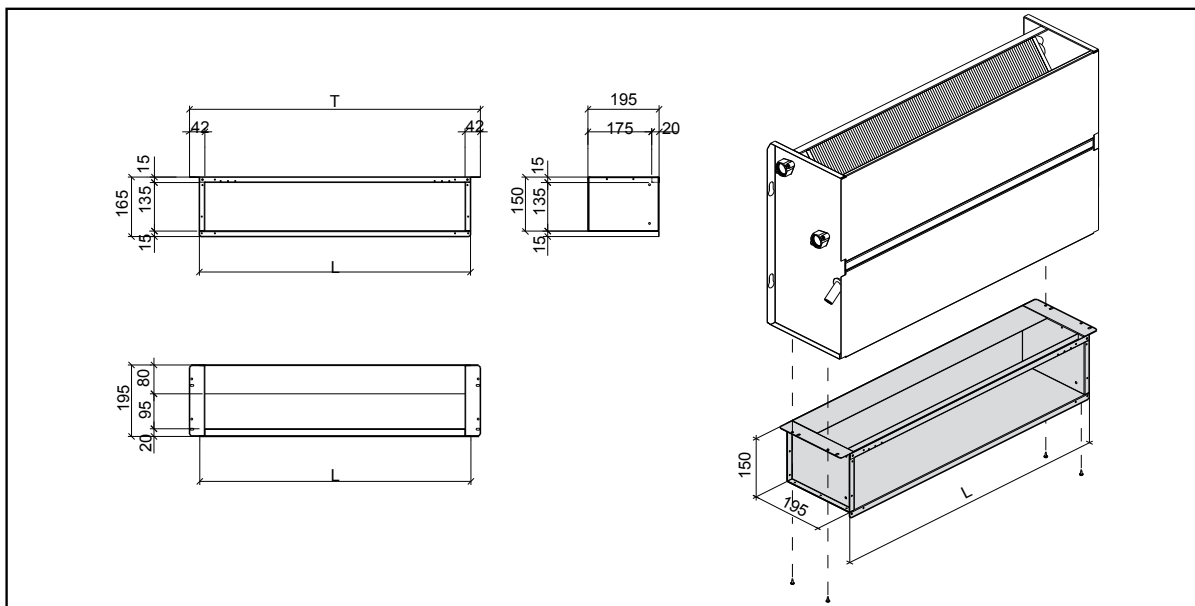


COMFAIR	HC	10	20	30	40	50	60	70	80	90	100	110	120
L	mm	343	543	743	743	943	943	943	1143	1143	*	*	*
Li (inside Ø)	mm	313	513	713	713	913	913	913	1113	1113	*	*	*
T	mm	397	597	797	797	997	997	997	1197	1197	*	*	*

* On request

INTAKE ELBOW

In galvanised sheet metal, it is used to convey air with vertical or horizontal built-in fan coil installation.

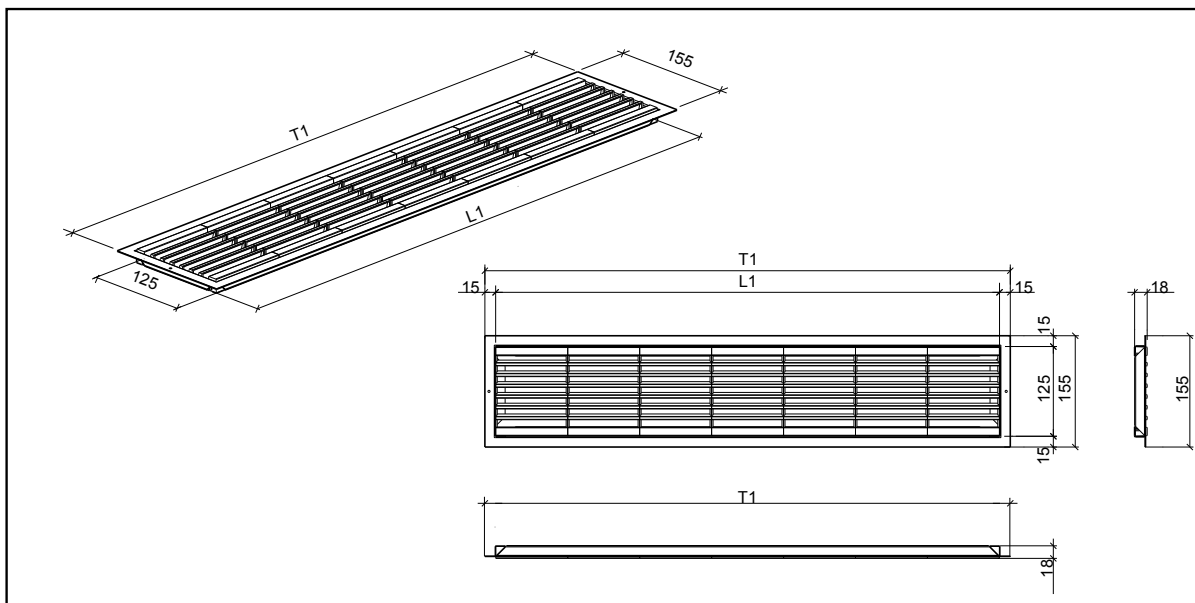


COMFAIR	HC	10	20	30	40	50	60	70	80	90	100	110	120
L	mm	343	543	743	743	943	943	943	1143	1143	*	*	*
Li (inside Ø)	mm	313	513	713	713	913	913	913	1113	1113	*	*	*
T	mm	397	597	797	797	997	997	997	1197	1197	*	*	*

* On request

OUTLET LOUVRES AND INTAKE GRILLE (WITH AIR FILTER)

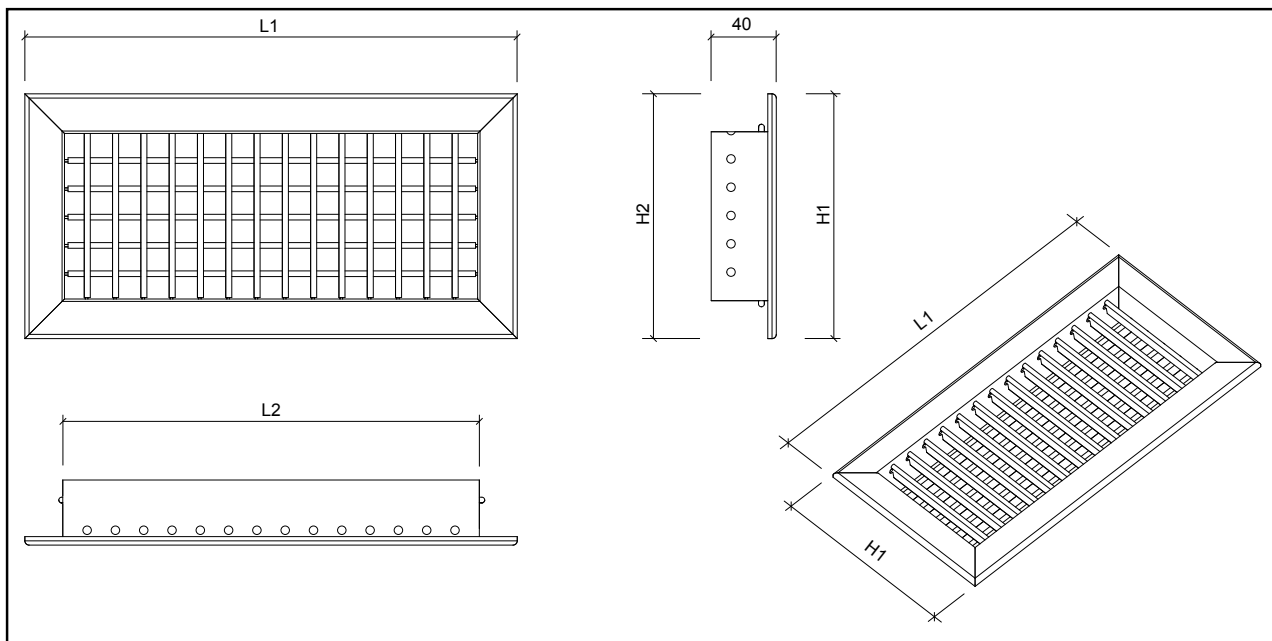
In high-strength enamelled sheet metal, they are complete with fixed louvres in thermosplastic material for the distribution/intake of air.



COMFAIR	HC	10	20	30	40	50	60	70	80	90	100	110	120
L1	mm	300	500	700	700	900	900	900	1100	1100	*	*	*
T1	mm	330	530	730	730	930	930	930	1130	1130	*	*	*

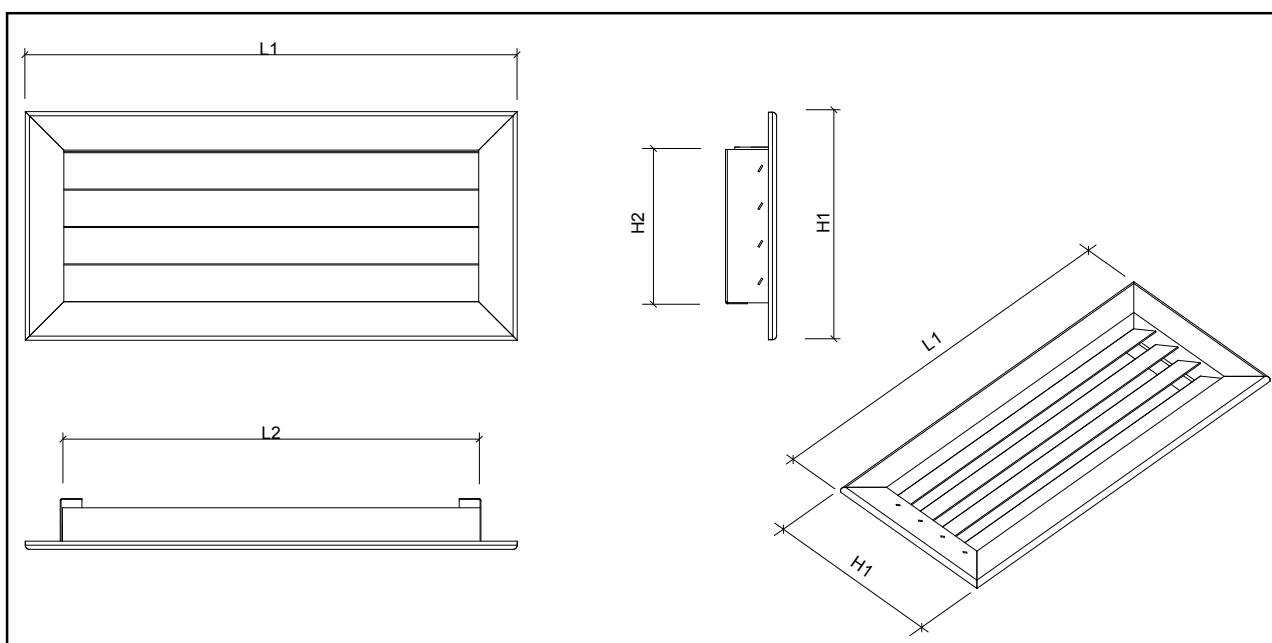
* On request

ALUMINIUM ADJUSTABLE SUPPLY AIR GRILL (WITHOUT FILTER)



COMFAIR	HC	10	20	30	40	50	60	70	80	90	100	110	120
L1	mm	348	548	748	748	948	948	948	1148	1148	1376	1676	1676
H1	mm	173	173	173	173	173	173	173	173	173	173	181	181
L2	mm	295	495	695	695	895	895	895	1095	1095	1320	1620	1620
H2	mm	120	120	120	120	120	120	120	120	120	120	128	128

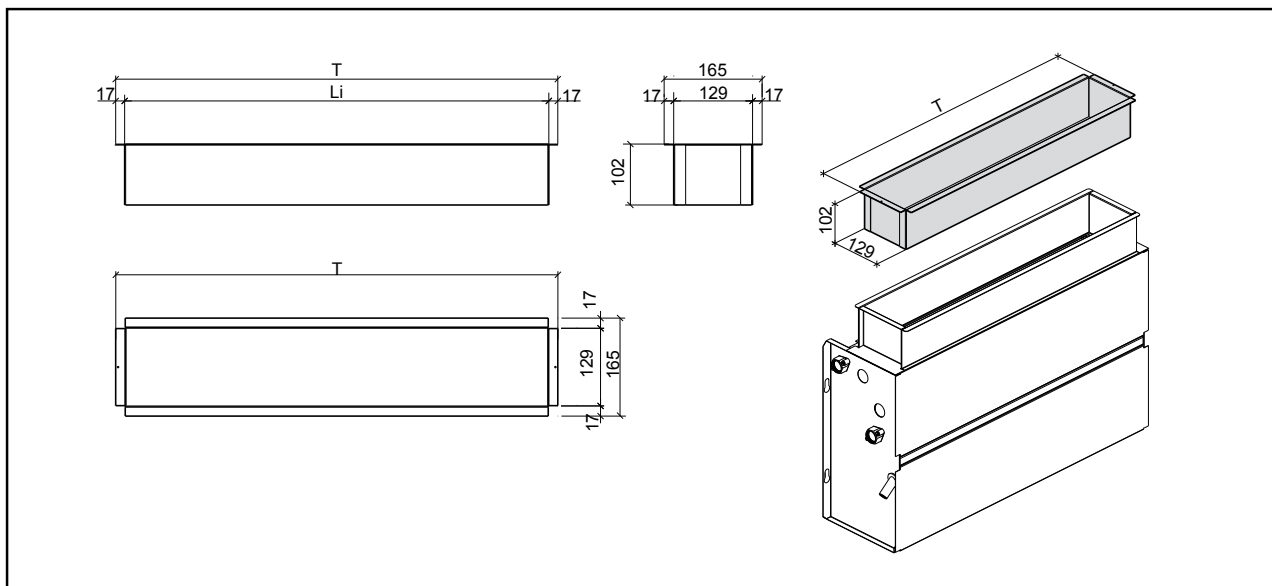
ALUMINIUM FIX INTAKE AIR GRILL WITH AIR FILTER



COMFAIR	HC	10	20	30	40	50	60	70	80	90	100	110	120
L1	mm	355	555	755	755	955	955	955	1155	1155	1374	1674	1674
H1	mm	165	165	165	165	165	165	165	165	165	179	179	179
L2	mm	303	503	703	703	903	903	903	1103	1103	1322	1622	1622
H2	mm	112	112	112	112	112	112	112	112	112	126	126	126

TELESCOPIC EXTENSION FOR STRAIGHT FITTINGS AND ELBOWS

In galvanised sheet metal, it is used as suport for the straight fittings or elbows both on the air intake and outlet.



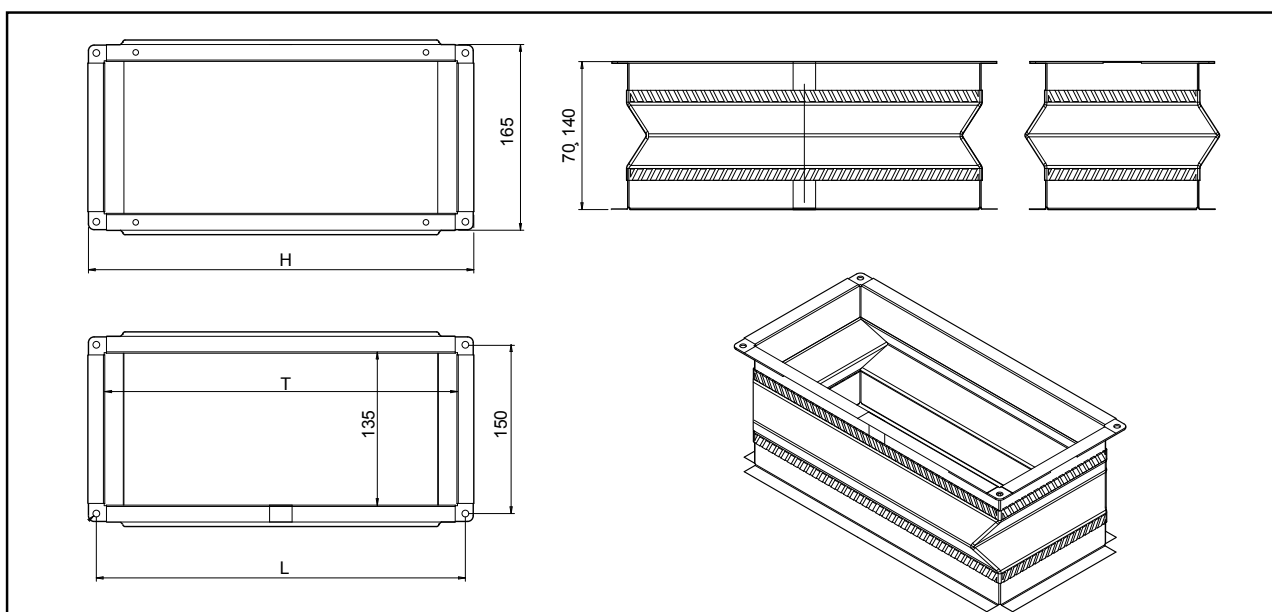
COMFAIR	HC	10	20	30	40	50	60	70	80	90	100	110	120
Li (inside Ø)	mm	307	507	707	707	907	907	907	1107	1107	*	*	*
T	mm	340	540	740	740	940	940	940	1140	1140	*	*	*

* On request

ANTI-VIBRATION JOINT

Made of galvanized steel with double silicon fabric (for high temperatures).

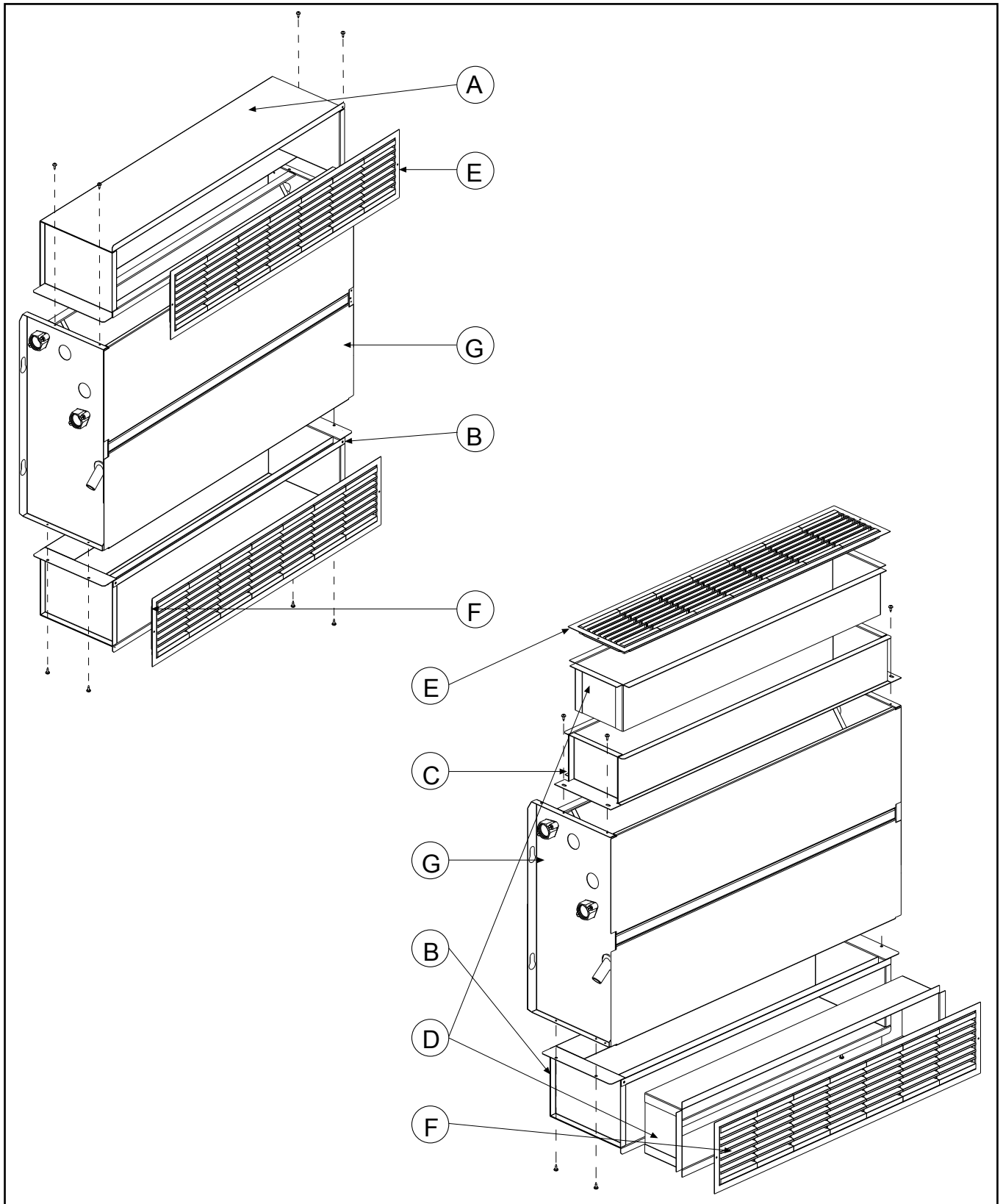
It is suitable to connect fancoils to straight and 90° plenums in order to reduce noise and / or vibrations



COMFAIR	HC	10	20	30	40	50	60	70	80	90	100	110	120
L	mm	328	528	728	728	928	928	928	1128	1128	*	*	*
T	mm	342	542	742	742	942	942	942	1142	1142	*	*	*
H	mm	313	513	713	713	913	913	913	1113	1113	*	*	*

* On request

EXAMPLE OF USE OF FITTINGS AND GRILLES/LOUVRES

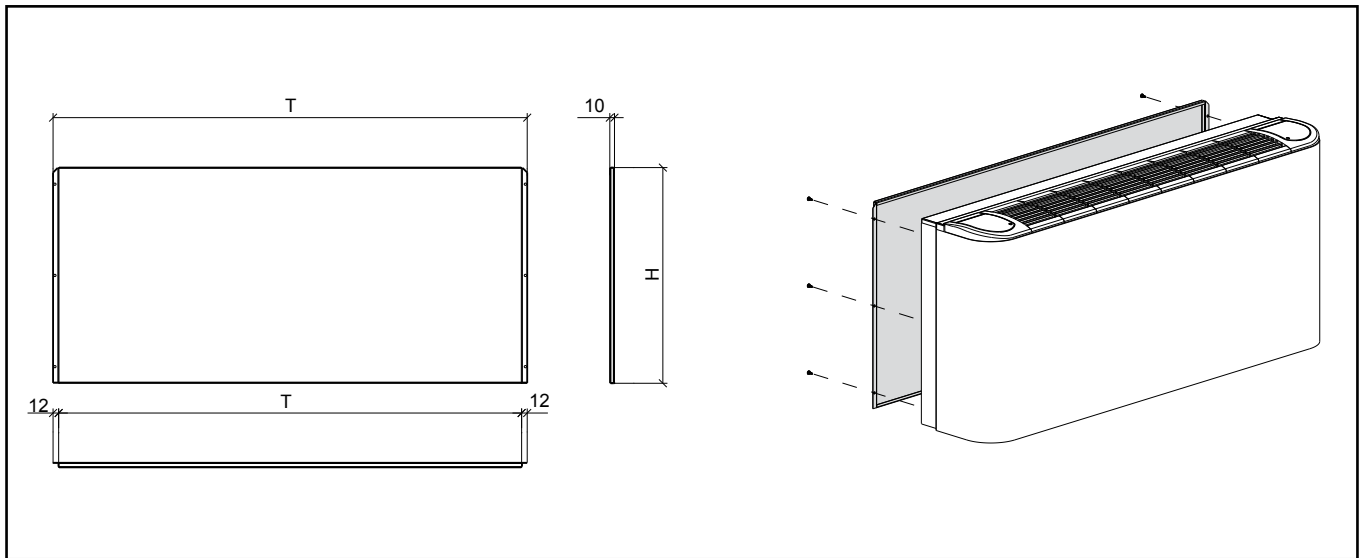


- A:** Elbow on outlet
- B:** Elbow on intake
- C:** Straight fitting on outlet
- D:** Telescopic extension for straight fittings and elbow

- E:** Outlet louvres (without air filter)
- F:** intake grille (with air filter)
- G:** Fan coil

ENAMELLED REAR PANEL (FOR STANDARD CABINET)

Painted sheet metal for closing the rear part of the fan coil when exposed (for standard housing)

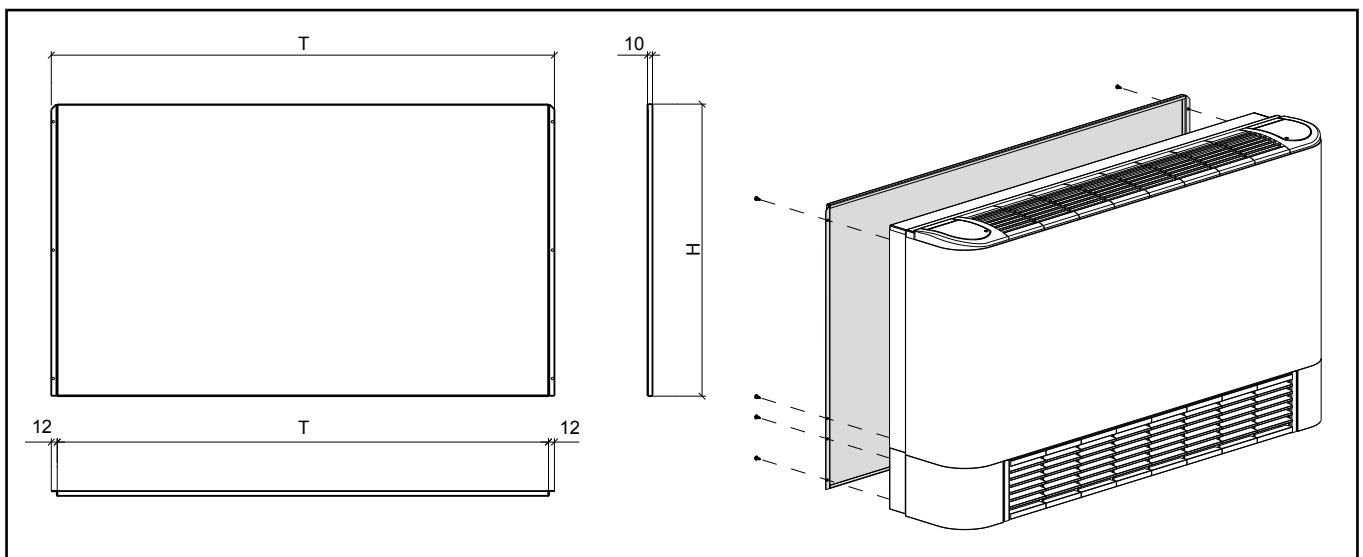


COMFAIR	HC	10	20	30	40	50	60	70	80	90	100	110	120
T	mm	637	837	1037	1037	1237	1237	1237	1437	1437	*	*	*
L	mm	613	813	1013	1013	1213	1213	1213	1413	1413	*	*	*
H	mm	480	480	480	480	480	480	485	485	485	*	*	*

* On request

ENAMELLED REAR PANEL (FOR HOUSING WITH PLINTH)

Painted sheet metal for closing the rear part of the fan coil when exposed (for housing with plinth)

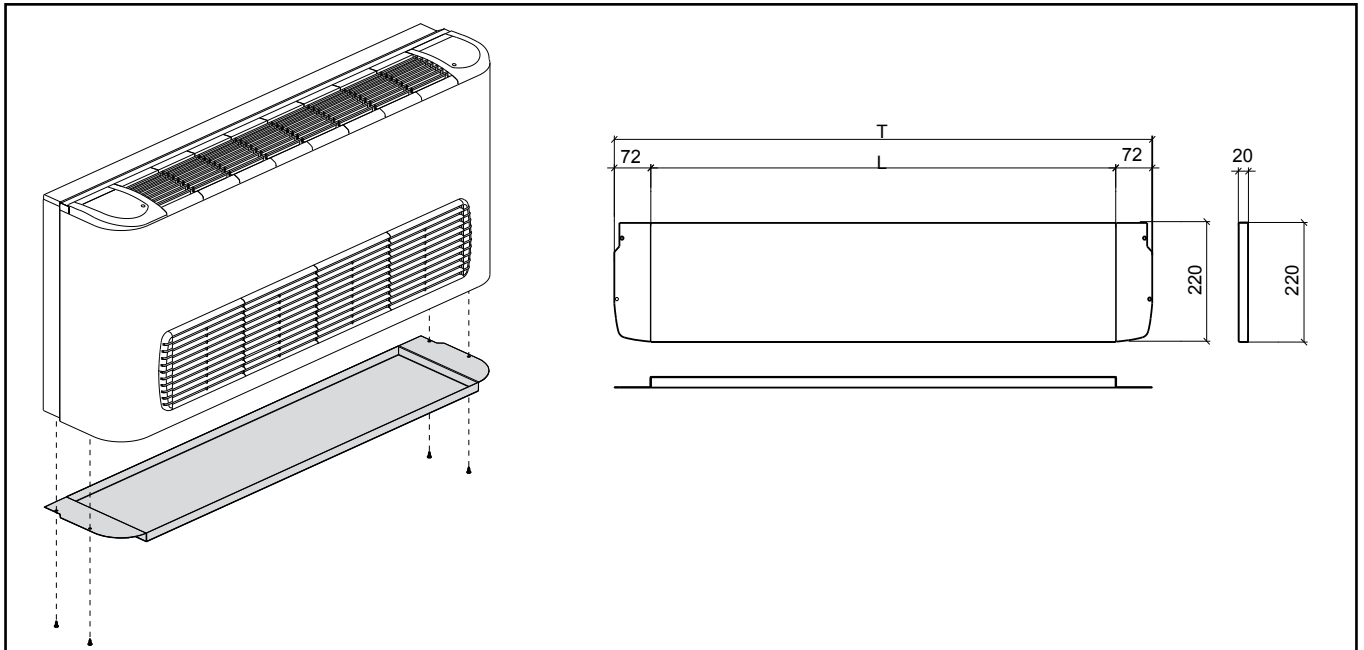


COMFAIR	HC	10	20	30	40	50	60	70	80	90	100	110	120
T	mm	637	837	1037	1037	1237	1237	1237	1437	1437	*	*	*
L	mm	613	813	1013	1013	1213	1213	1213	1413	1413	*	*	*
H	mm	601	601	601	601	601	601	706	706	706	*	*	*

* On request

BOTTOM PANEL WITHOUT GRILLE

Painted sheet metal for closing the bottom part of the fan coil when exposed (for versions with front intake)

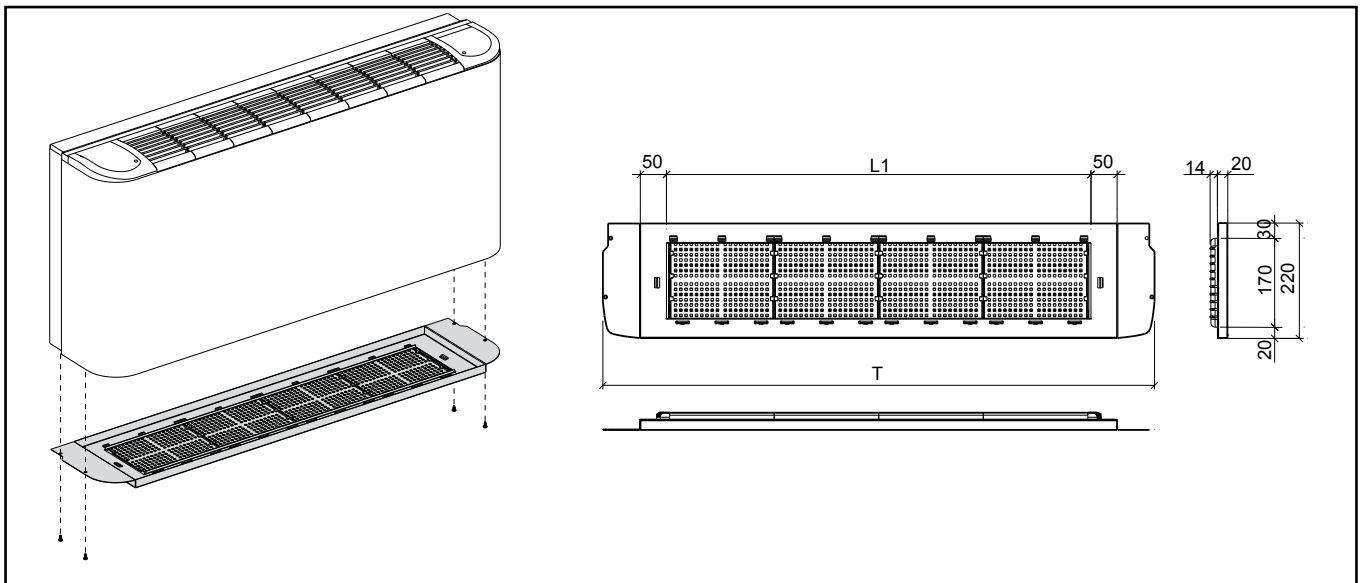


COMFAIR	HC	10	20	30	40	50	60	70	80	90	100	110	120
T	mm	655	855	1055	1055	1255	1255	1255	1455	1455	*	*	*
L	mm	512	712	912	912	1112	1112	1112	1312	1312	*	*	*

* On request

BOTTOM PANEL WITH GRILLE AND FILTER

Painted sheet metal for closing the bottom part of the fan coil when exposed (for versions with bottom intake)

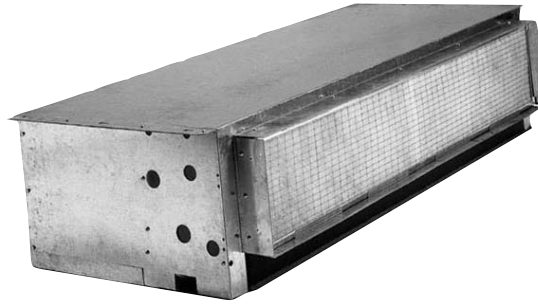


COMFAIR	HC	10	20	30	40	50	60	70	80	90	100	110	120
T	mm	655	855	1055	1055	1255	1255	1255	1455	1455	*	*	*
L	mm	412	612	812	812	1012	1012	1012	1212	1212	*	*	*

* On request

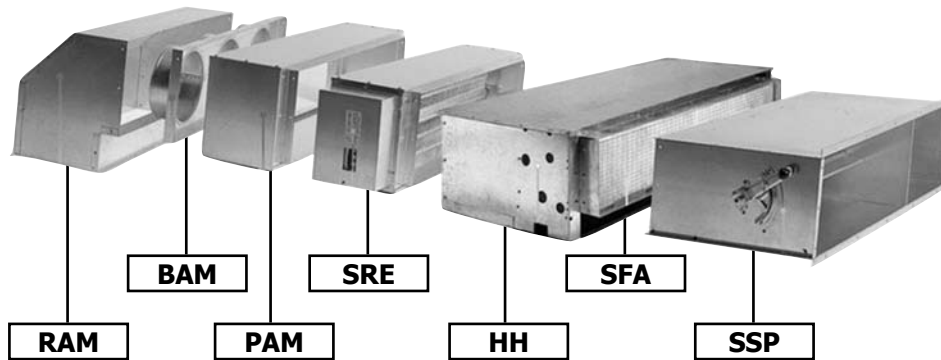
HIGH PRESSURE FAN COIL UNITS - HH

Comfair HH fan coil units are designed to operate against higher external static pressures (from 105 to 260 Pa), and are available in 7 sizes.



All standard units can be supplied with a complete range of factory or site fitted accessories, allowing a multitude of configurations for all typical applications, for example :

- auxiliary condensate drain pan (UTC)
- air Filter section (SFA)
- auxiliary Coil
- fresh air inlet damper (SSP)
- electric heater (SRE)
- inlet, supply and exhaust air plenums (PAM, RAM et BAM)



FAN SECTION

Composed of one or two double inlet centrifugal fans with aluminium blades, mounted in horizontal position and statically and dynamically balanced. The electric motor is fitted with overload protection and has three speeds. It is constructed to comply with all relevant International standards, with a capacitor permanently in circuit. Motors are connected directly to the fan shafts and are located on anti-vibration mounts to ensure particularly quiet operation.

CHASSIS

The chassis is manufactured from thick (1mm) galvanised sheet steel.

COILS

Water Heat exchangers are copper tubes with aluminium fins, bonded to the tubes by a mechanical expansion process. Coil connections are of female type antitorsion and headers are fitted with easily accessible air-vents.



CONTROL PANEL

Comfair HH fan coil units must be controlled from a separate remote controller. A large selection of controllers with varying levels of function is available to satisfy most requests. Options delivered separately : Ambient Thermostats (TA), Minimum water temperature thermostat (TC), Remote (wall mounted) controllers (CD1, CD2/X1, ...).

AIR FILTER

Simple to remove, it comprises a metal frame containing a washable acrylic filter media (filtration efficiency EU 2).

MANUAL FRESH AIR INLET DAMPER

Produced from Alu-Zinc sheet metal, it allows the introduction of fresh air up to a maximum of 30% of the total air volume.

**ELECTRIC HEATER**

Electric heater elements meet all of the relevant International safety standards and are fitted as standard with a safety cut-out thermostat and automatic reset. Heater elements are factory fitted with all electrical wiring and are connected to the control panel via a contactor.

AUXILIARY COIL

In order to offer the best solutions for 4 pipe applications, a supplementary 1 row coil can be ordered factory fitted.

INLET, SUPPLY AND EXHAUST AIR PLENUMS

Plenums are constructed from galvanised sheet steel allow for easy connection to ductwork.



All data are at Eurovent conditions.
<http://www.eurovent-certification.com/>

PROGRAM: FC-2-H

COMFAIR		HH	10	20	30	40	50
Sensible cooling capacity	kW	Min	3,11	4,02	5,63	6,11	7,23
		Med	3,46	5,02	6,93	7,88	9,44
		Max	3,63	5,64	7,36	8,63	11
Total cooling capacity	kW	Min	3,82	5,16	7,21	7,79	8,91
		Med	4,2	6,35	8,66	9,81	11,3
		Max	4,4	7,05	9,2	10,6	13,1
Heating capacity	kW	Min	4,3	6,13	8,66	9,23	11,2
		Med	4,75	7,62	10,5	11,8	14,5
		Max	4,98	8,51	11,2	12,8	16,9
Water pressure drops in cooling	kPa	Min	18,1	19,3	20,8	17,2	16,6
		Med	21,9	29,2	30	27,3	26,9
		Max	24	35,9	33,8	31,9	35,9
Water pressure drops in heating	kPa	Min	16,7	17	17,7	15,1	15,4
		Med	20,2	25,7	25,6	23,9	24,9
		Max	22,2	31,7	28,9	27,9	33,2
Fan electrical power	kW	Min	0,11	0,15	0,3	0,31	0,28
		Med	0,12	0,19	0,32	0,34	0,41
		Max	0,16	0,24	0,32	0,34	0,58
Voltage	V/Ph/Hz	-	230/1/50				
Sound power level	dB(A)	Min	63	53	61	58	62
		Med	67	62	68	65	69
		Max	68	66	70	69	74

PROGRAM: FC-4-H

COMFAIR		HH	10	20	30	40	50
Sensible cooling capacity	kW	Min	2,66	4,02	5,4	5,76	6,89
		Med	2,93	5	6,66	7,44	9,02
		Max	3,1	5,63	7,07	8,04	10,6
Total cooling capacity	kW	Min	3,13	5,12	6,51	7,03	8,31
		Med	3,44	6,3	7,82	8,86	10,6
		Max	3,6	7	8,3	9,57	12,3
Heating capacity	kW	Min	3,61	5,04	7,5	8,23	9,3
		Med	3,98	6,27	8,73	9,93	12
		Max	4,18	7	9,17	10,6	14
Water pressure drops in cooling	kPa	Min	12	14,4	17,7	13,9	14,2
		Med	14,5	21,8	25,2	21,8	23
		Max	15,9	26,8	28	25	30,8
Water pressure drops in heating	kPa	Min	20	11,9	25,3	13,3	15
		Med	24,3	18,4	33,8	19,3	24,9
		Max	26,8	22,9	37	21,7	33,8
Fan electrical power	kW	Min	0,11	0,14	0,3	0,31	0,28
		Med	0,12	0,17	0,32	0,34	0,41
		Max	0,16	0,22	0,32	0,34	0,58
Voltage	V/Ph/Hz	-	230/1/50				
Sound power level	dB(A)	Min	63	53	61	59	61
		Med	67	62	68	66	68
		Max	69	66	70	70	73

2 PIPES SYSTEM

COMFAIR	HH	10	20	30	40	50	60	70
Total cooling capacity ⁽¹⁾	W	3640	7050	9200	10600	13100	27800	50600
	Frig/h	3130	6063	7912	9116	11266	23908	43516
Sensible cooling capacity ⁽¹⁾	W	2870	5640	7360	8630	11000	21100	39500
	Frig/h	2,468	4,85	6,33	7,422	9,46	18,146	33,97
Heating capacity ⁽³⁾	W	4972	8512	11210	12800	16818	32430	60111
	kcal/h	4276	7320	9641	11008	14464	27890	51696
Water flow ^{(1) (3)}	l/h	626	1213	1582	1823	2253	4782	8703
	l/s	0,174	0,337	0,441	0,506	0,626	1,328	2,418
Water pressure drops in cooling ⁽¹⁾	kPa	24	35,9	33,8	31,9	35,9	34	40
	mWG.	2,4	3,7	3,4	3,3	3,7	3,5	4,1
Water pressure drops in heating ⁽³⁾	kPa	22,2	31,7	28,9	27,9	33,2	24	30
	mWG.	2,3	3,2	2,9	2,8	3,4	2,4	3,1
Heating capacity ⁽²⁾	W	8400	14300	18850	21520	28490	54240	100810
	kcal/h	7224	12298	16211	18507	24502	46647	86698
Water flow ⁽²⁾	l/h	722	1230	1621	1850	2450	4664	8670
	l/s	0,201	0,342	0,45	0,514	0,681	1,296	2,408
Water pressure drops in heating ⁽²⁾	kPa	18,3	29,6	27,5	26,1	35,6	20,7	27
	mWG.	1,9	3	2,8	2,7	3,6	2,1	2,8
Electrical heater heating capacity ⁽⁴⁾	W	3000	6000		9000		12000	18000
	kcal/h	2586	5172		7759		10345	15517
Electrical heater power input ⁽⁴⁾	A	4,56	9,12		13,67		18,23	27,35
Electrical heater heating capacity ⁽⁵⁾	W	4500	9000		12000		18000	24000
	kcal/h	3879	7759		10345		15517	20690
Electrical heater input current ⁽⁵⁾	A	6,84	13,67		18,23		27,35	36,46
Air flow ⁽⁶⁾	m ³ /h	837	1423	1951	2131	3002	4678	9250
	m ³ /s	0,233	0,395	0,542	0,592	0,834	1,299	2,569
Fan speed ⁽⁶⁾	rpm	1360	1360	1200	1207	1382	806	822
Sound power level ⁽⁷⁾	dB(A)	68	66	70	69	75	78	81
Motor electrical power ⁽⁸⁾	W	160	240	320	340	580	1320	2600
Motor electrical input ⁽⁸⁾	A	0,72	0,97	1,43	1,51	2,58	5,86	11,54
Electrical supply	V/Ph/Hz	230/1/50						

Above mentioned technical data are calculated at the following operating conditions:

- Maximum fan speed
- Standard unit without ducts (fancoil operating without external back pressure)

- (1) Cooling: entering water temperature 7°C, leaving water temperature 12°C, entering air temperature 27°C W.B.; 19°C D.B.
- (2) Heating: entering water temperature 50°C, same water flow as in cooling, entering air temperature 20°C
- (3) Heating: entering water temperature 70°C, leaving water temperature 60°C, entering air temperature 20°C
- (4) Electric heaters section SRE - B: electric heaters capacities, lower speed cabling (SRE - B supplied as accessory only)
- (5) Electric heaters section SRE - A: electric heaters capacities, high speed cabling (SRE - A supplied as accessory only)
- (6) Air flow and fan speed: fancoil performances with cleaned filter
- (7) Sound power level: sound power measured following ISO 23741
- (8) Electrical data referred to the maximum available speed

2 PIPES SYSTEM

CORRECTION COEFFICIENT FOR DIFFERENT AVAILABLE SPEEDS

COMFAIR	HH	10	20	30	40	50	60	70
Total cooling capacity	1	0,84 min	0,74 min	0,79 min	0,74 min	0,68 min	0,77 min	0,78 min
	2	0,95 med	0,90 med	0,94 med	0,93 med	0,87 med	0,89 med	0,90 med
	3	0,98	0,96	1,00 max	1,00 max	1,00 max	1,00 max	1,00 max
	4	1,00 max	1,00 max	-	-	-	-	-
Sensible cooling capacity	1	0,86 min	0,71 min	0,77 min	0,71 min	0,65 min	0,75 min	0,76 min
	2	0,95 med	0,89 med	0,94 med	0,91 med	0,85 med	0,88 med	0,89 med
	3	0,98	0,95	1,00 max	1,00 max	1,00 max	1,00 max	1,00 max
	4	1,00 max	1,00 max	-	-	-	-	-
Heating capacity	1	0,86 min	0,72 min	0,77 min	0,72 min	0,67 min	0,75 min	0,77 min
	2	0,95 med	0,90 med	0,94 med	0,92 med	0,86 med	0,88 med	0,89 med
	3	0,98	0,96	1,00 max	1,00 max	1,00 max	1,00 max	1,00 max
	4	1,00 max	1,00 max	-	-	-	-	-
Air flow	1	0,81 min	0,63 min	0,69 min	0,63 min	0,56 min	0,69 min	0,70 min
	2	0,93 med	0,85 med	0,91 med	0,89 med	0,80 med	0,84 med	0,85 med
	3	0,97	0,94	1,00 max	1,00 max	1,00 max	1,00 max	1,00 max
	4	1,00 max	1,00 max	-	-	-	-	-

Data indicated as min., med., max. concern the 3 standard speeds set at the factory. Upon customer request other 3 speeds among the 6 speeds available can be connected.

NOTE: The symbol (-) means that for HH30 to HH70, only 3 fan speeds are available. For HH10 and HH20, upon customer request other 3 speeds among the 4 available speeds can be connected.

4 PIPES SYSTEM

COMFAIR	HH	10	20	30	40	50	60	70
Total cooling capacity ⁽¹⁾	W	3600	7000	8300	9570	12300	24950	45550
	Frig/h	3096	6020	7138	8230	10578	21457	39173
Sensible cooling capacity ⁽¹⁾	W	3100	5630	7070	8040	10600	20150	37750
	Frig/h	2666	4842	6080	6914	9116	17329	32465
Heating capacity ⁽²⁾	W	4180	7000	9170	10600	14000	38800	70150
	kcal/h	3595	6020	7886	9116	12040	33368	60330
Water flow in cooling ⁽¹⁾	l/h	619	1205	1428	1646	2116	4291	7835
	l/s	0,172	0,335	0,397	0,457	0,588	1,192	2,176
Water flow in heating ⁽²⁾	l/h	360	602	789	912	1204	3337	6033
	l/s	0,1	0,167	0,219	0,253	0,334	0,927	1,676
Water pressure drops in cooling ⁽¹⁾	kPa	15,9	26,8	28	25	30,8	27	32
	mWG.	1,6	2,7	2,9	2,5	3,1	2,8	3,3
Water pressure drops in heating ⁽²⁾	kPa	26,8	22,9	37	21,7	33,8	33	36
	mWG.	2,7	2,3	3,8	2,2	3,4	3,4	3,7
Heating capacity ⁽³⁾	W	2557	4275	5593	6441	8547	23730	42898
	kcal/h	2204	3686	4822	5553	7368	20457	36981
Water flow ⁽³⁾	l/h	446	746	976	1124	1492	4141	7486
	l/s	0,124	0,207	0,271	0,312	0,414	1,15	2,079
Water pressure drops in heating ⁽³⁾	kPa	46	39	62	36	58	56	62
	mWG.	4,7	4	6,3	3,7	5,9	5,8	6,3
Air flow ⁽⁴⁾	m ³ /h	795	1352	1853	2024	2852	4444	8788
	m ³ /s	0,221	0,376	0,515	0,562	0,792	1,234	2,441
Fan speed ⁽⁴⁾	rpm	1365	1365	1205	1214	1387	810	832
Sound power level ⁽⁵⁾	dB(A)	69	66	70	70	73	78	81
Motor electrical power ⁽⁶⁾	W	162	218	322	340	582	1320	2600
Motor electrical input ⁽⁶⁾	A	0,72	0,97	1,43	1,51	2,58	5,86	11,54
Electrical supply	V/Ph/Hz	230/1/50						

Above mentioned technical data are calculated at the following operating conditions:

- Maximum fan speed
- Standard unit without ducts (fancoil operating without external back pressure)

(1) Cooling: entering water temperature 7°C, leaving water temperature 12°C, entering air temperature 27°C W.B.; 19°C D.B.

(2) Heating: entering water temperature 70°C, leaving water temperature 60°C, entering air temperature 20°C

(3) Heating: entering water temperature 50°C, same water flow as in cooling, entering air temperature 20°C

(4) Air flow and fan speed: fancoil performances with cleaned filter

(5) Sound power level: sound power measured following ISO 23741

(6) Electrical data referred to the maximum available speed

CORRECTION COEFFICIENT FOR DIFFERENT AVAILABLE SPEEDS

COMFAIR	HH	10	20	30	40	50	60	70
Total cooling capacity	1	0,87 min	0,73 min	0,78 min	0,73 min	0,68 min	0,76 min	0,78 min
	2	0,96 med	0,90 med	0,94 med	0,93 med	0,86 med	0,89 med	0,90 med
	3	0,98	0,96	1,00 max	1,00 max	1,00 max	1,00 max	1,00 max
	4	1,00 max	1,00 max	-	-	-	-	-
Sensible cooling capacity	1	0,86 min	0,71 min	0,76 min	0,72 min	0,65 min	0,74 min	0,76 min
	2	0,94 med	0,89 med	0,94 med	0,93 med	0,85 med	0,87 med	0,89 med
	3	0,98	0,96	1,00 max	1,00 max	1,00 max	1,00 max	1,00 max
	4	1,00 max	1,00 max	-	-	-	-	-
Heating capacity	1	0,89 min	0,77 min	0,82 min	0,78 min	0,73 min	0,78 min	0,80 min
	2	0,96 med	0,92 med	0,95 med	0,94 med	0,89 med	0,90 med	0,91 med
	3	0,98	0,97	1,00 max	1,00 max	1,00 max	1,00 max	1,00 max
	4	1,00 max	1,00 max	-	-	-	-	-
Air flow	1	0,81 min	0,63 min	0,69 min	0,63 min	0,56 min	0,69 min	0,70 min
	2	0,93 med	0,85 med	0,91 med	0,89 med	0,80 med	0,84 med	0,85 med
	3	0,97	0,94	1,00 max	1,00 max	1,00 max	1,00 max	1,00 max
	4	1,00 max	1,00 max	-	-	-	-	-

Data indicated as min., med., max. concern the 3 standard speeds set at the factory. Upon customer request other 3 speeds among the 6 speeds available can be connected.

NOTE: The symbol (-) means that for HH30 to HH70, only 3 fan speeds are available. For HH10 and HH20, upon customer request other 3 speeds among the 4 available speeds can be connected.

Maximum entering water temperature: 70°C
 Minimum entering water temperature: +4°C
 Maximum working pressure: 8 Bar

Maximum entering air temperature: 40°C
 Minimum entering air temperature: +4°C

WATER FLOW AND PRESSURE DROP LIMITS, 3R COIL (HH10 TO HH50) AND 4R COIL (HH60 AND HH70)

COMFAIR	HH	10	20	30	40	50	60	70
Minimal water flow	l/h	175	225	275	325	375	825	1400
Minimal water pressure drop	kPa	1,3	1,1	1	1	1	1	1
Maximal water flow	l/h	1300	1850	2275	2700	3150	6900	11575
maximal water pressure drop	kPa	70,8	71,9	70	69,9	70,1	70,4	70,3

Data given for medium water temperature at 9,5°C

WATER FLOW AND PRESSURE DROP LIMITS, 1 ROW COIL (HH10 TO HH50) AND 2R COIL (HH60 AND HH70)

COMFAIR	HH	10	20	30	40	50	60	70
Minimal water flow	l/h	75	125	150	200	225	600	1025
Minimal water pressure drop	kPa	1,2	1	1,3	1	1,2	1,1	1
Maximal water flow	l/h	575	1050	1100	1650	1725	4900	8450
maximal water pressure drop	kPa	68,5	69,7	70	69,2	69,6	70,7	70,2

Data given for medium water temperature at 65°C

3 WAYS VALVE

Using of 2 or 3 ways valves is compulsory when the unit is used for cooling to avoid condensate in the external structure (bearing structure and cabinet). As alternative install a regulating system to stop coil water entering when the fan is off.

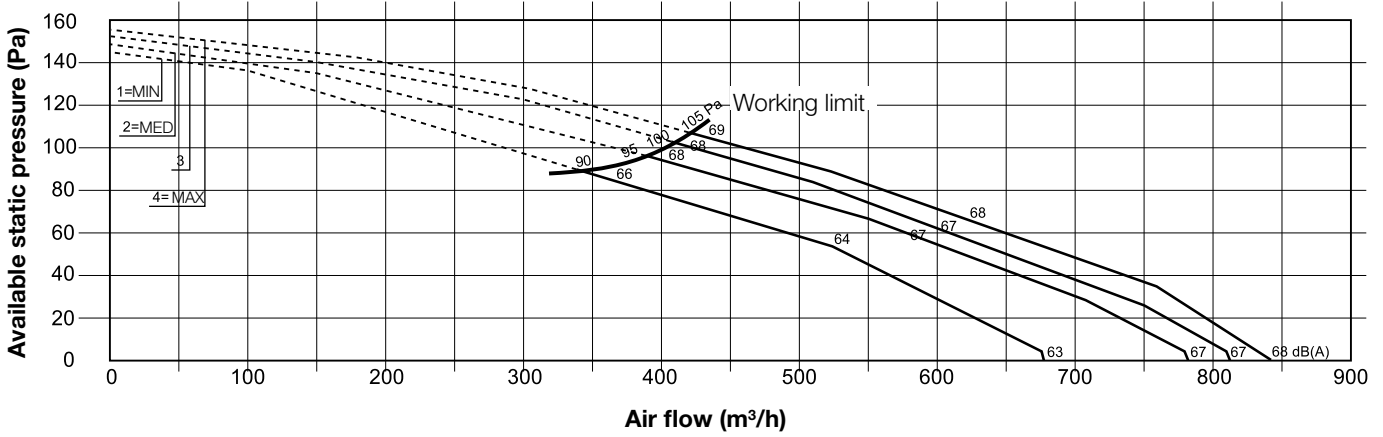
MAXIMUM FAN STATIC PRESSURE

When the units is connected with ducts fan air flow is reduced due to the ducting pressure drops. With very high pressure drops fancoil air flow becomes too low and electric motor which is connected to the fan can be damaged. For this reason we recommend static pressures lower than the maximum limit static pressures indicated in the schedule.
 NOTE: When the fancoil is operating with the maximum operating indicated static pressure value, air flow is half in comparison with the unit without ducts at the same working speed. Definitely the static pressure limit corresponds to the back pressure able to half fancoil air flow (as a consequence the fancoil unit performances like heating & cooling capacity, will be reduced of about 50%).

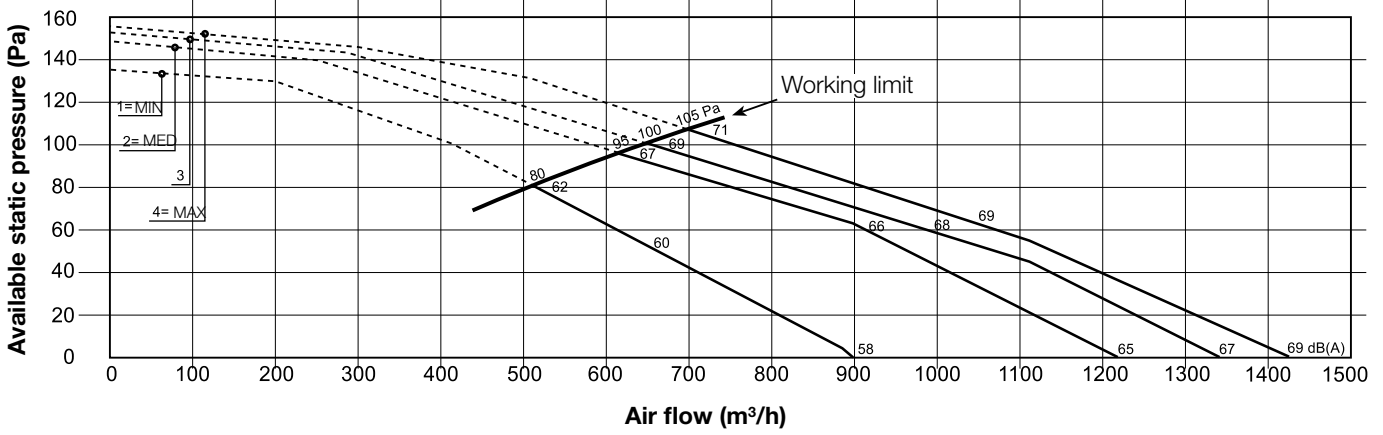
COMFAIR		HH	10	20	30	40	50	60	70
2 pipes system	1	Pa	90 min	80 min	115 min	105 min	135 min	220 min	220 min
	2	Pa	95 med	95 med	130 med	130 med	180 med	240 med	240 med
	3	Pa	100	100	135 max	135 max	205 max	260 max	260 max
	4	Pa	105 max	105 max	-	-	-	-	-
4 pipes system	1	Pa	75 min	70 min	95 min	90 min	110 min	180 min	180 min
	2	Pa	85 med	80 med	115 med	115 med	155 med	210 med	210 med
	3	Pa	90	85	120 max	120 max	180 max	220 max	220 max
	4	Pa	95 max	90 max	-	-	-	-	-

Data indicated as min., med., max. concern the 3 standard speeds set at the factory. Upon customer request other 3 speeds among the 6 speeds available can be connected.
 NOTE: The symbol (-) means that for HH30 to HH70, only 3 fan speeds are available. For HH10 and HH20, upon customer request other 3 speeds among the 4 available speeds can be connected.

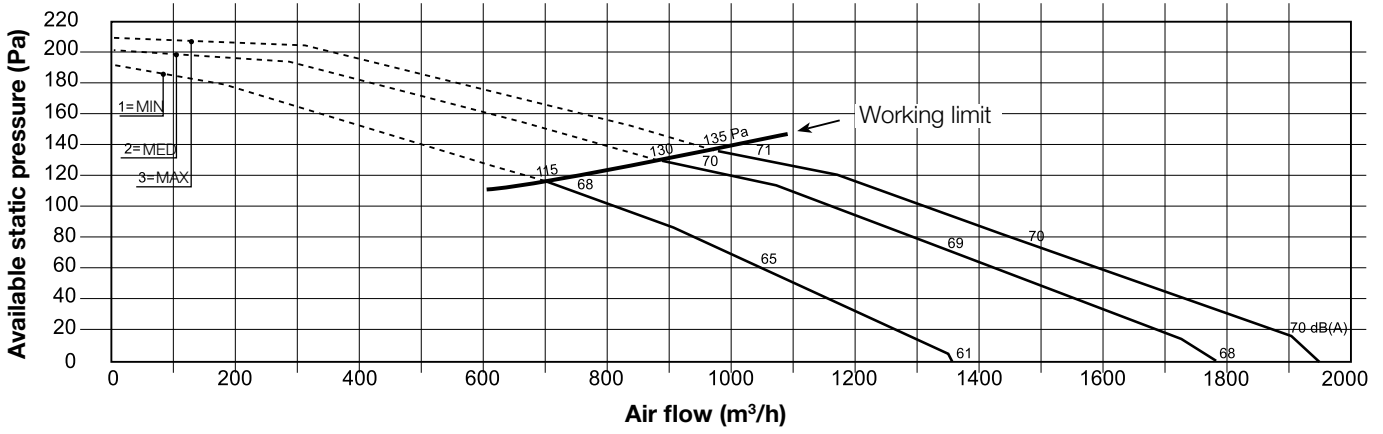
HH10 - 2 PIPES SYSTEM (3 ROW COIL DATA)



HH20 - 2 PIPES SYSTEM (3 ROW COIL DATA)

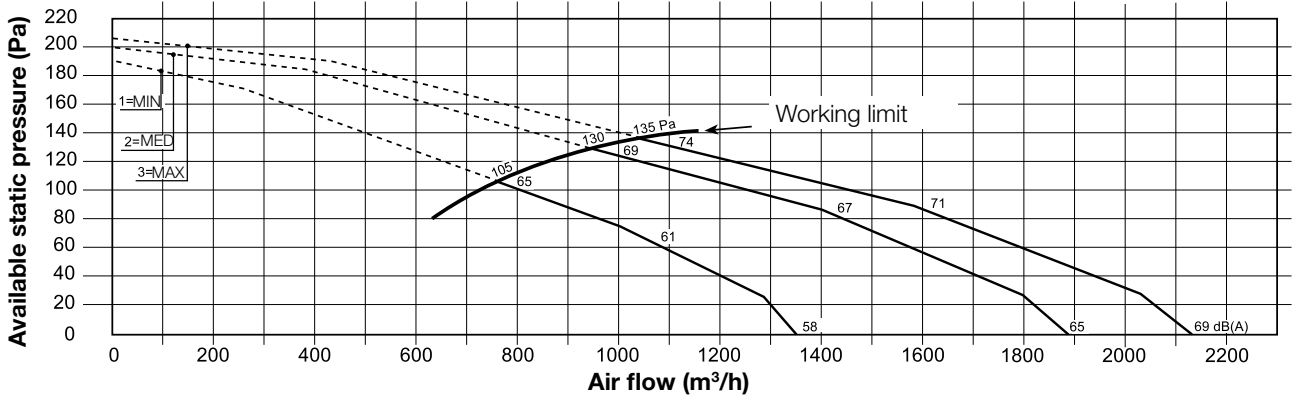


HH30 - 2 PIPES SYSTEM (3 ROW COIL DATA)

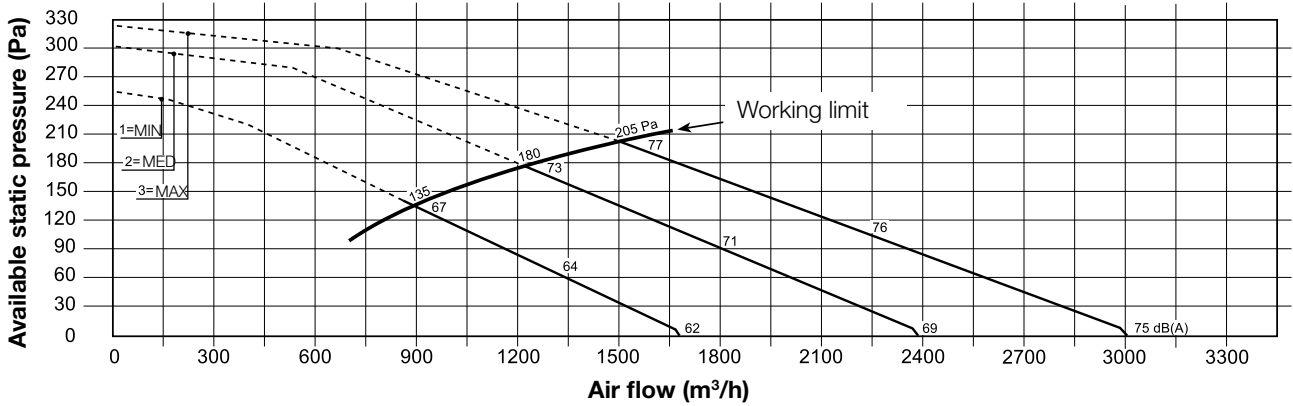


Data indicated as min., med., max. concern the 3 standard speeds set at the factory. Upon customer request other 3 speeds among the 6 speeds available can be connected.

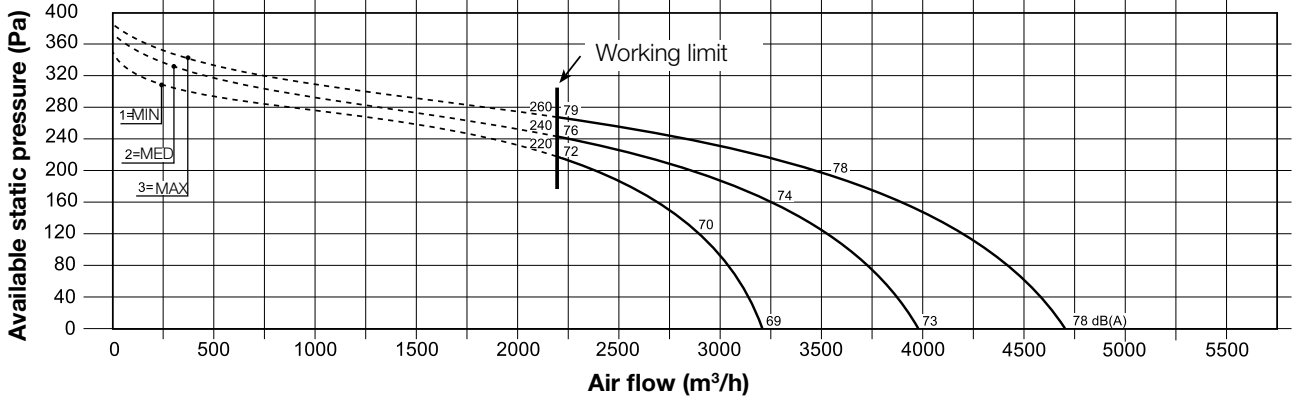
HH40 - 2 PIPES SYSTEM (3 ROW COIL DATA)



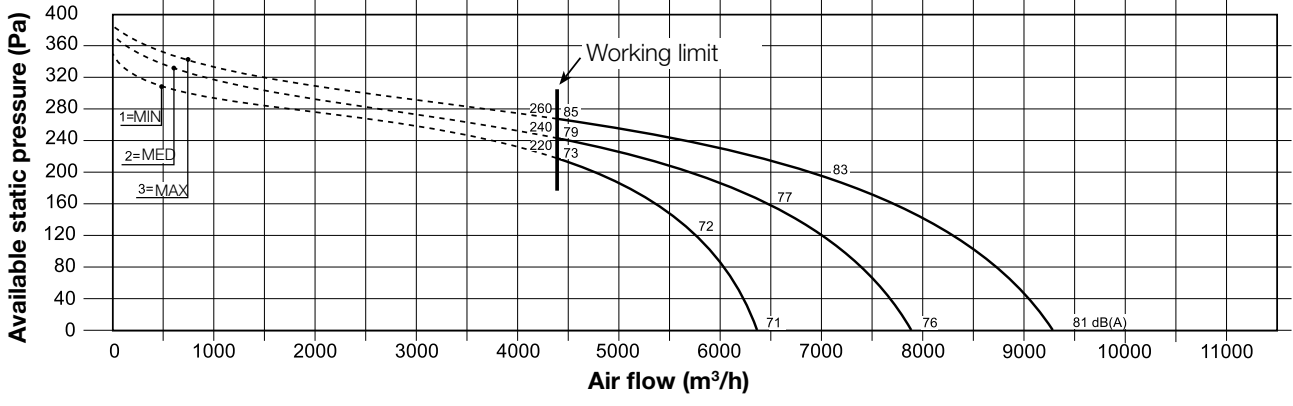
HH50 - 2 PIPES SYSTEM (3 ROW COIL DATA)



HH60 - 2 PIPES SYSTEM (3 ROW COIL DATA)

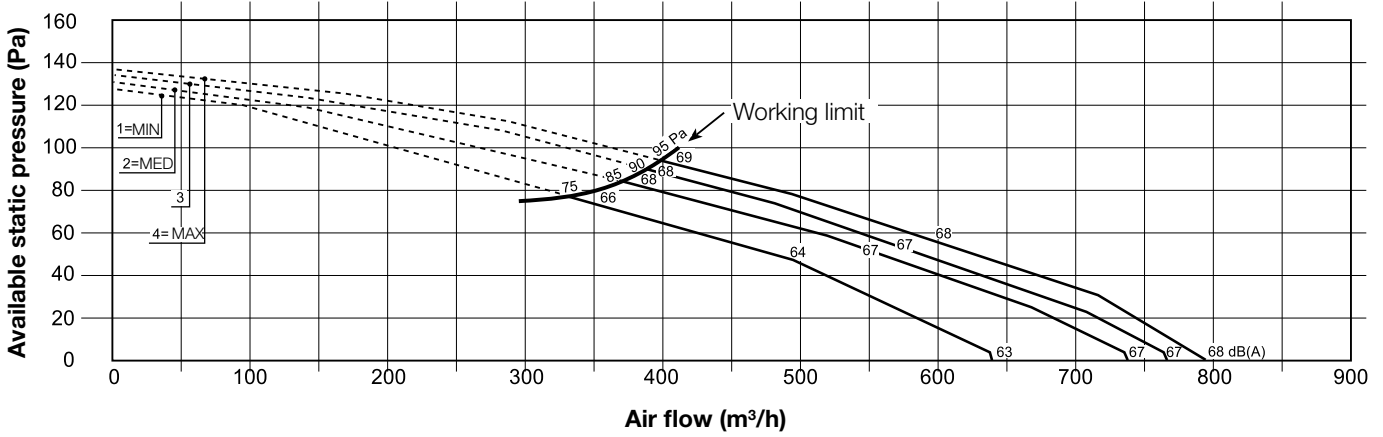


HH70 - 2 PIPES SYSTEM (3 ROW COIL DATA)

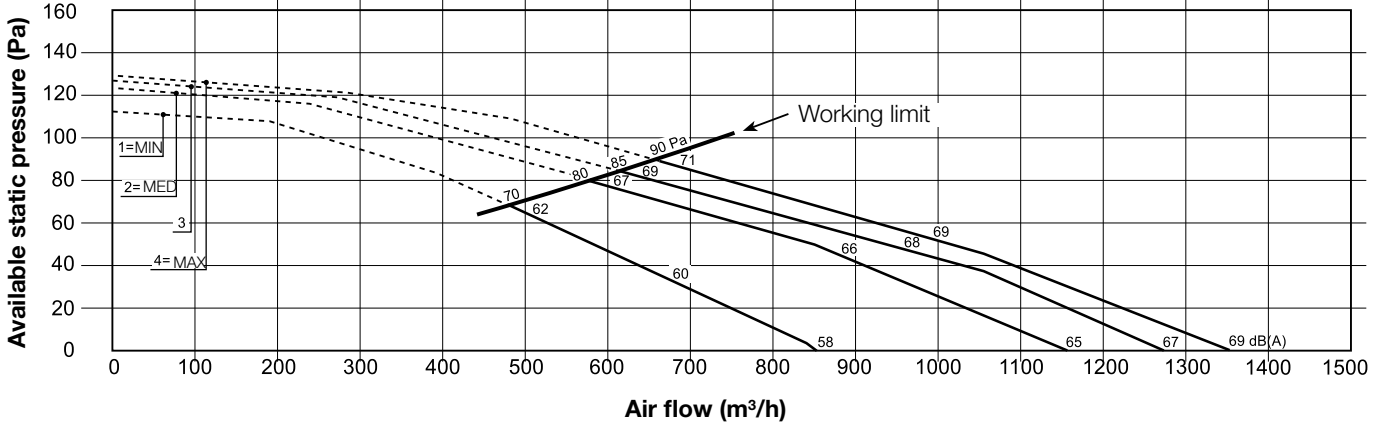


Data indicated as min., med., max. concern the 3 standard speeds set at the factory. Upon customer request other 3 speeds among the 6 speeds available can be connected.

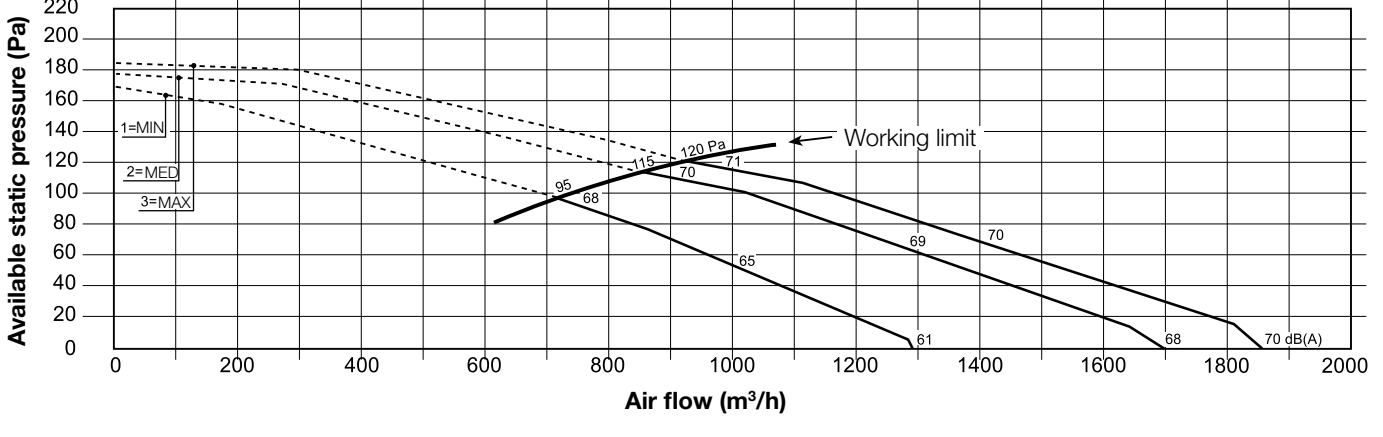
HH10 - 4 PIPES SYSTEM (3 ROW + 1 ROW COIL DATA)



HH20 - 4 PIPES SYSTEM (3 ROW + 1 ROW COIL DATA)

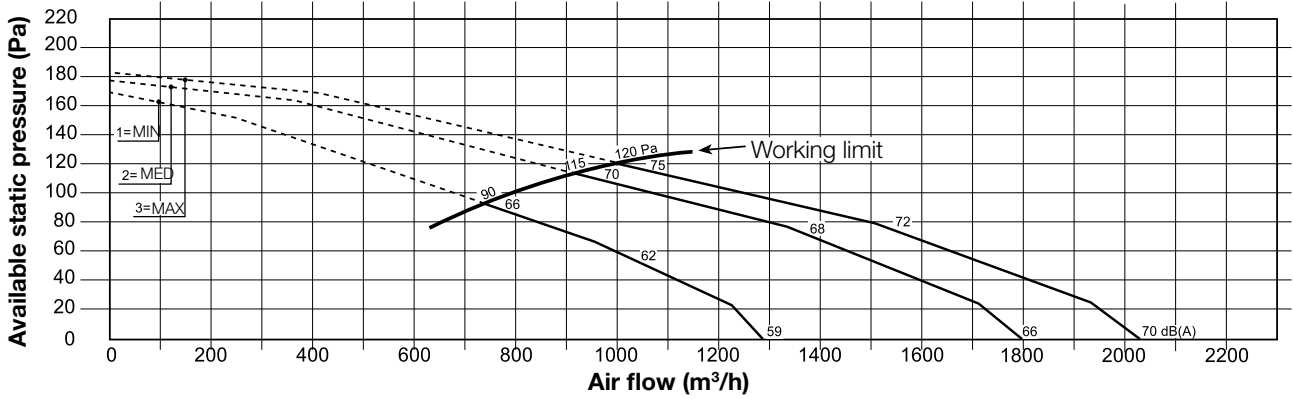


HH30 - 4 PIPES SYSTEM (3 ROW + 1 ROW COIL DATA)

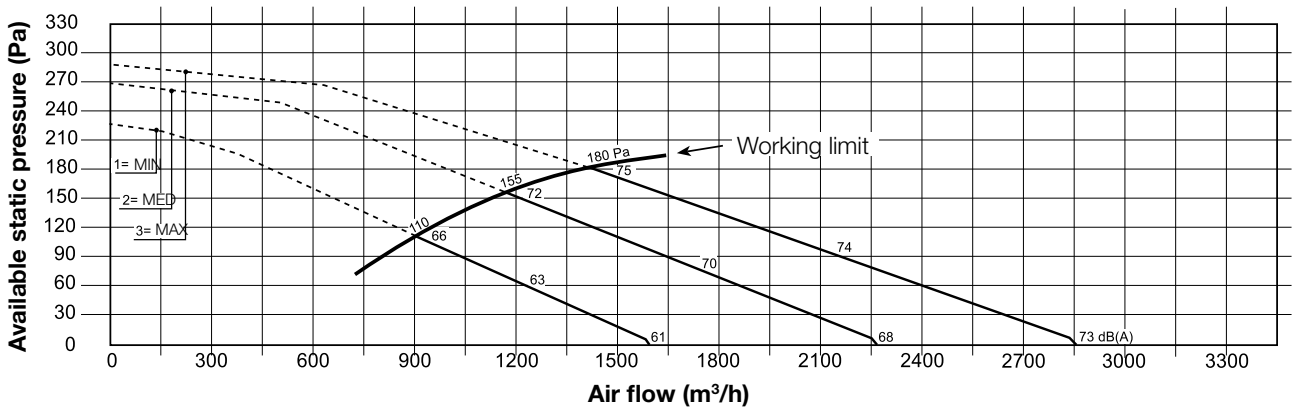


Data indicated as min., med., max. concern the 3 standard speeds set at the factory. Upon customer request other 3 speeds among the 6 speeds available can be connected.

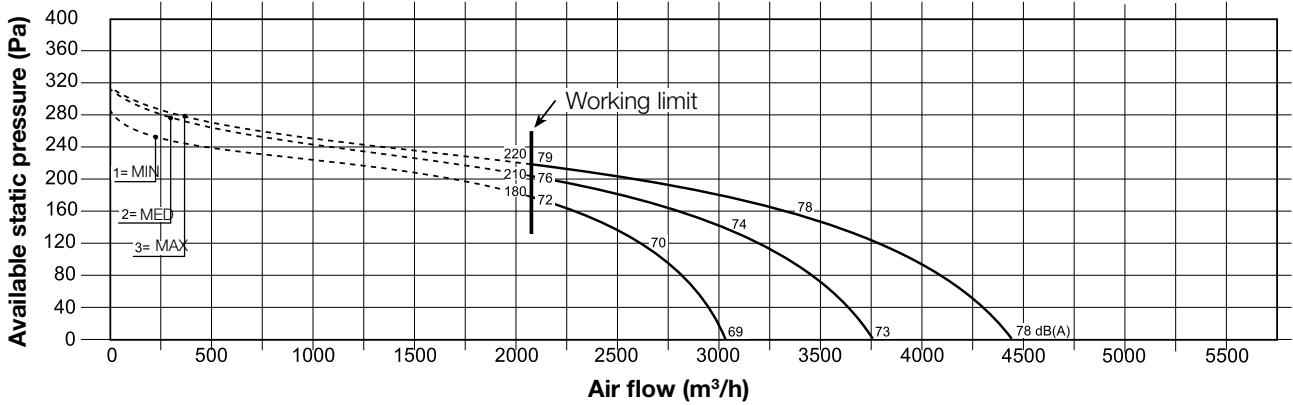
HH40 - 4 PIPES SYSTEM (3 ROW + 1 ROW COIL DATA)



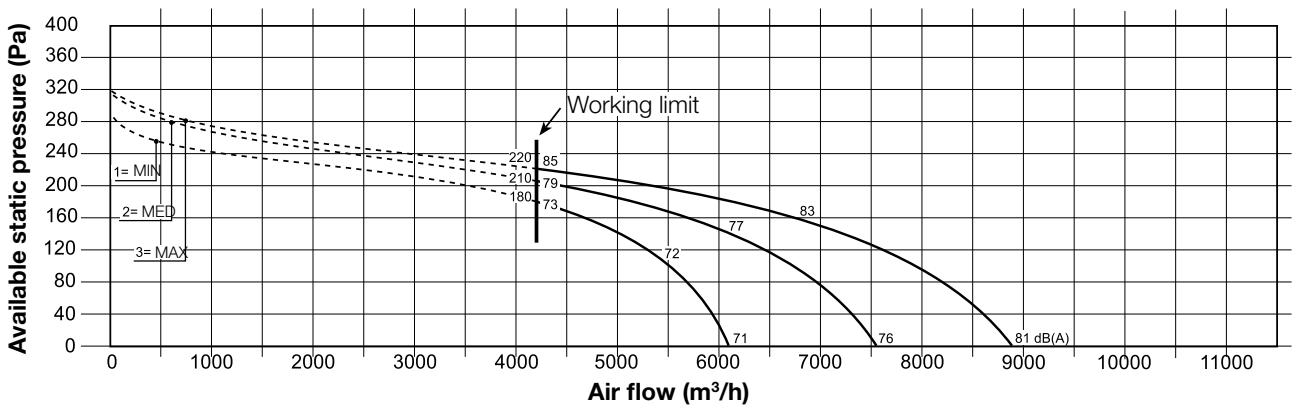
HH50 - 4 PIPES SYSTEM (3 ROW + 1 ROW COIL DATA)



HH60 - 4 PIPES SYSTEM (3 ROW + 1 ROW COIL DATA)



HH70 - 4 PIPES SYSTEM (3 ROW + 1 ROW COIL DATA)



Data indicated as min., med., max. concern the 3 standard speeds set at the factory. Upon customer request other 3 speeds among the 6 speeds available can be connected.

2 PIPES SYSTEM

COMFAIR	Speeds	Std electric wiring (*)	Frequency spectrum - Ref. octave band (Hz)							Total sound power (dB(A))
			125	250	500	1000	2000	4000	8000	
HH10	1	Min	68,1	60,6	59,3	57,9	54,9	52,3	45,9	63
	2	Med	71,4	64,5	62,8	62	59	57	51,5	67
	3		71,4	65,4	63,3	62,5	59,6	57,6	52,6	67,5
	4	Max	71,9	65,7	63,7	62,9	60,1	58,2	53,4	68
HH20	1	Min	57,2	51,4	50,9	47,6	44,8	39,5	32	53
	2	Med	65,2	60	58,7	56,9	54,1	51,3	45,3	62
	3		66,9	61,7	60,1	58,9	56,1	53,8	48,6	64
	4	Max	68,4	63,9	61,8	60,6	58,2	56,2	51,4	66
HH30	1	Min	61,9	57,6	58,7	55,9	53	49,6	42,7	61
	2	Med	67,6	64,2	64,8	64	60,4	52	54	68
	3	Max	68,3	65,6	63,8	66,2	62,1	60,9	56,6	70
HH40	1	Min	67,5	53,5	54,2	51,9	49,6	46	38,6	58
	2	Med	68,3	59,7	61	59,8	57,2	56,2	51,4	65
	3	Max	69,2	63,3	64,1	64,3	61	60,5	56,7	69
HH50	1	Min	63,7	57,8	58,4	58	54,8	48,2	39,1	62
	2	Med	70,4	64,7	63,6	64,2	62,6	59,3	52,2	69
	3	Max	75,6	71,2	68,8	69,6	68,7	66,5	61,1	75
HH60	1	Min	71,3	66,3	68,8	63,4	58,1	54,1	41,6	69
	2	Med	73,8	69	72,7	67,7	62,5	59	48	73
	3	Max	74	73,6	77,3	73,1	68,1	64,8	54,7	78
HH70	1	Min	67,3	67,8	70,6	65,8	61	56,8	44,7	71
	2	Med	75,9	72	75,1	71,2	66,3	62,9	51,9	76
	3	Max	73,7	76,9	79,3	76,7	71,9	68,7	58,9	81

4 PIPES SYSTEM

COMFAIR	Speeds	Std electric wiring (*)	Frequency spectrum - Ref. octave band (Hz)							Total sound power (dB(A))
			125	250	500	1000	2000	4000	8000	
HH10	1	Min	68,1	60,6	59,3	57,9	54,9	52,3	45,9	63
	2	Med	71,4	64,5	62,8	62	59	57	51,5	67
	3		71,9	65,9	63,8	63	60,1	58,1	53,1	68
	4	Max	72,9	66,7	64,7	63,9	61,1	59,2	53,4	69
HH20	1	Min	57,2	51,4	50,9	47,6	44,8	39,5	32	53
	2	Med	65,2	60	58,7	56,9	54,1	51,3	45,3	62
	3		66,9	61,7	60,1	58,9	56,1	53,8	48,6	64
	4	Max	68,4	63,9	61,8	60,9	58,2	56,2	51,4	66
HH30	1	Min	61,9	57,6	58,7	55,9	53	49,6	42,7	61
	2	Med	67,6	64,2	64,8	64	60,4	52	54	68
	3	Max	68,3	65,6	63,8	66,2	62,1	60,9	56,6	70
HH40	1	Min	68,5	54,5	55,2	52,9	50,6	47	39,6	59
	2	Med	69,3	60,7	62	60,8	58,2	57,2	52,4	66
	3	Max	70,2	64,3	65,1	65,3	62	61,5	57,7	70
HH50	1	Min	62,7	56,8	57,4	57	53,8	47,2	38,1	61
	2	Med	69,4	63,7	62,6	63,2	61,6	58,3	51,2	68
	3	Max	73,6	69,2	66,8	67,6	66,7	64,5	59,1	73
HH60	1	Min	71,3	66,3	68,8	63,4	58,1	54,1	41,6	69
	2	Med	73,8	69	72,7	67,7	62,5	59	48	73
	3	Max	74	73,6	77,3	73,1	68,1	64,8	54,7	78
HH70	1	Min	67,3	67,8	70,6	65,8	61	56,8	44,7	71
	2	Med	75,9	72	75,1	71,2	66,3	62,9	51,9	76
	3	Max	73,7	76,9	79,3	76,7	71,9	68,7	58,9	81

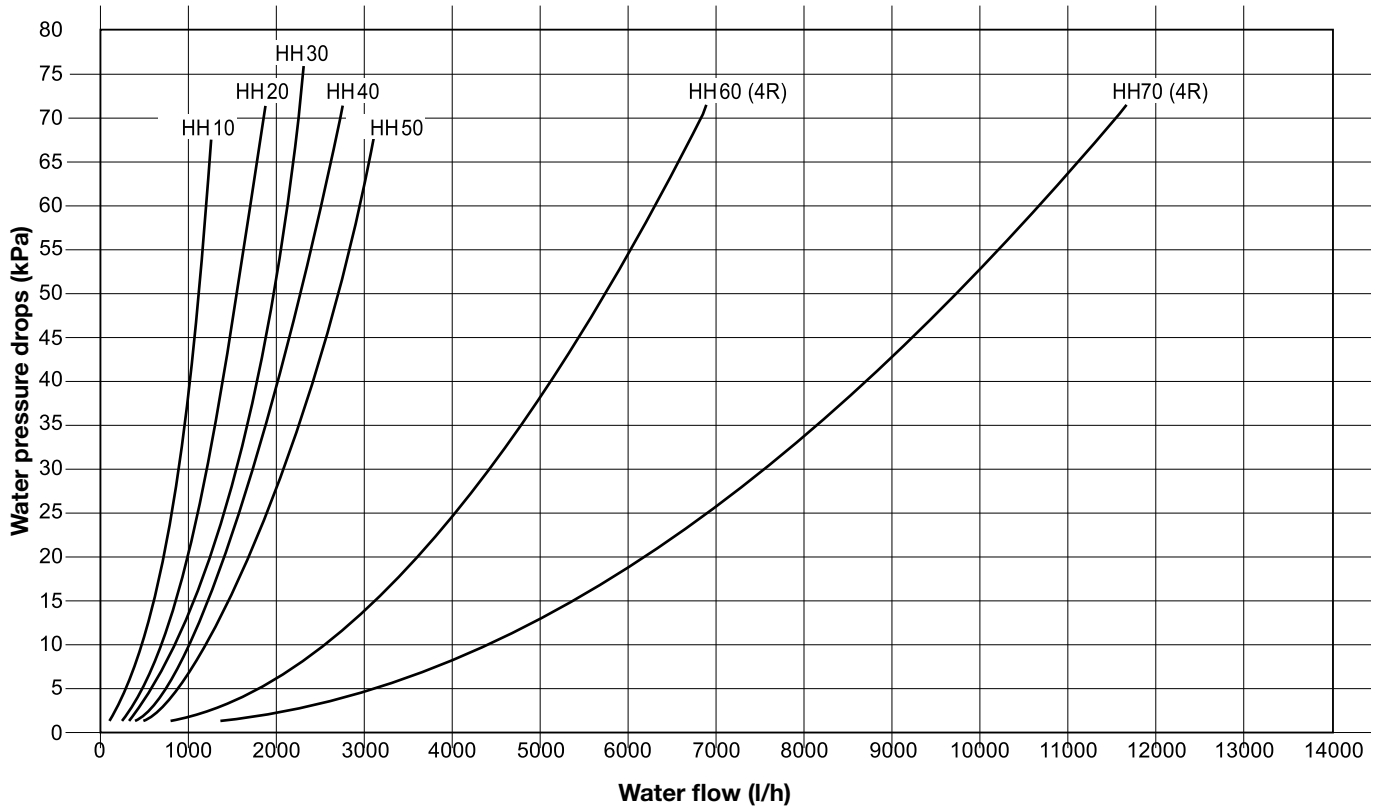
Data indicated as min., med., max. concern the 3 standard speeds set at the factory. Upon customer request other 3 speeds among the 6 speeds available can be connected.

AIR PRESSURE DROPS FOR THE MAIN ACCESSORIES - HH

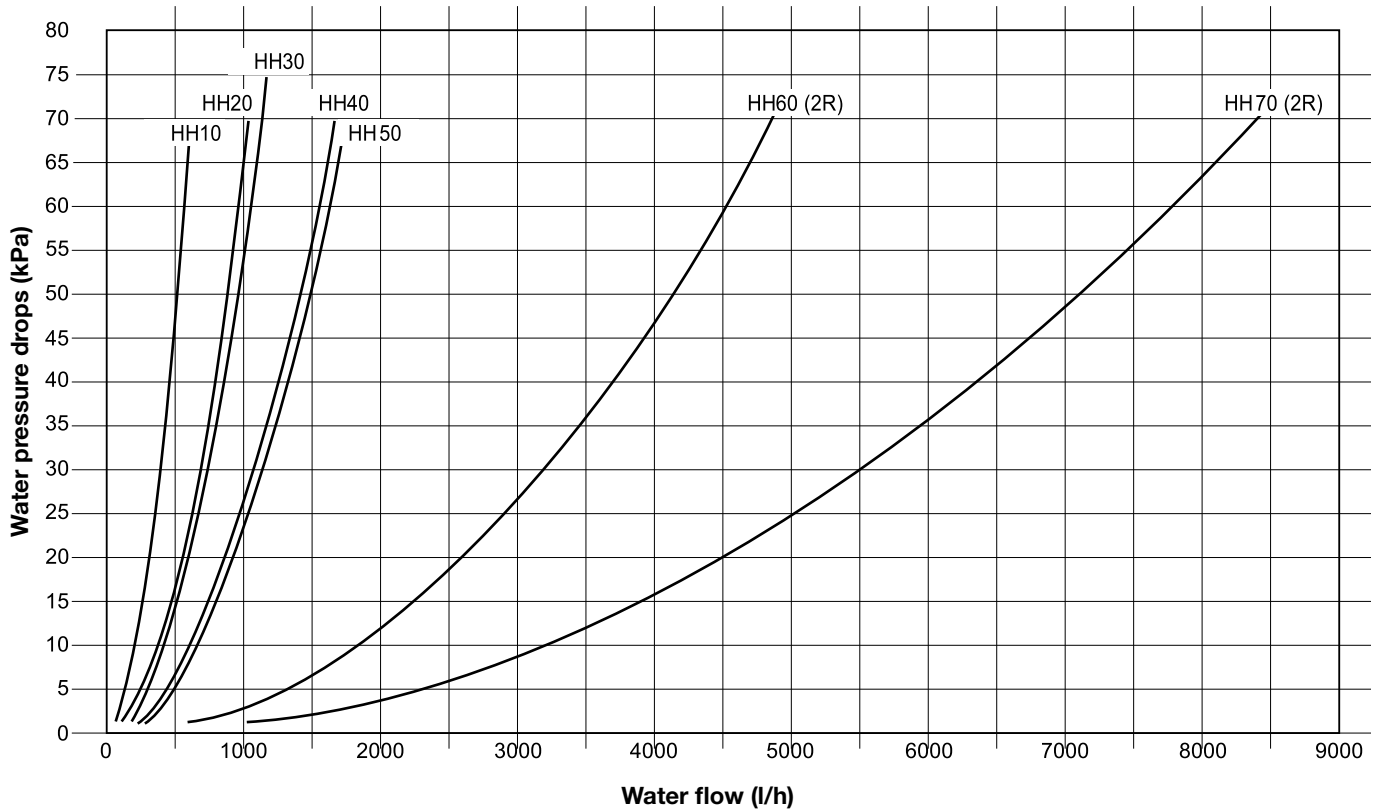


Air flow dB(A)	Description of the accessories							
	Fresh air lower section (SSP) With completely open fresh air Lower position	Fresh air lower section (SSP) With completely closed fresh air Lower position	Straight intake/ Supply plenum (PAM)	90° intake/supply plenum (RAM)	Intake/Supply section with spigot section (BAM)	Heating section with electrical heater (SRE)	Standard air filter in medium stemming condition	Standard air filter in limit stemming condition CLEANING IS NECESSARY
COMFAIR HH10								
837	8,7	7,5	1,2	2,8	5,3	50,6	55,1	110
800	7,9	6,9	1,1	2,5	4,8	46,2	50,4	101
700	6,1	5,3	0,8	1,9	3,7	35,4	38,5	77,1
600	4,5	3,9	0,6	1,4	2,7	26	28,3	56,6
500	3,1	2,7	0,4	1	1,9	18	19,7	39,3
400	2	1,7	0,3	0,6	1,2	11,5	12,6	25,2
330	1,3	1,2	-	0,4	0,8	7,9	8,6	17,1
COMFAIR HH20								
1423	9,3	8,1	1,2	2,9	8,4	52,1	56,7	113
1400	9	7,8	1,2	2,8	8,1	50,4	54,9	110
1200	6,6	5,7	0,9	2,1	6	37	40,3	80,7
1000	4,6	4	0,6	1,4	4,1	25,7	28	56
800	2,9	2,5	0,4	0,9	2,7	16,5	17,9	35,9
600	1,6	1,4	-	0,5	1,5	9,3	10,1	20,2
400	0,7	0,6	-	-	0,7	4,1	4,5	9
COMFAIR HH30								
1951	14,1	12,2	1,6	4,4	15,8	59,5	64,9	130
1800	12	10,4	1,4	3,8	13,5	50,7	55,2	110
1600	9,5	8,2	1,1	3	10,6	40	43,6	87,3
1400	7,2	6,3	0,8	2,3	8,2	30,6	33,4	66,8
1200	5,3	4,6	0,6	1,7	6	22,5	24,5	49,1
1000	3,7	3,2	0,4	1,2	4,2	15,6	17	34,1
800	2,4	2,1	0,3	0,7	2,7	10	10,9	21,8
650	1,6	1,4	-	0,5	1,8	6,6	7,2	14,4
COMFAIR HH40								
2131	10,9	9,5	1,3	3,4	10,7	45,6	49,7	99,4
2000	9,6	8,3	1,2	3	9,4	40,2	43,8	87,6
1800	7,8	6,8	0,9	2,5	7,6	32,5	35,5	70,9
1600	6,1	5,3	0,7	1,9	6	25,7	28	56
1400	4,7	4,1	0,6	1,5	4,6	19,7	21,5	42,9
1200	3,5	3	0,4	1,1	3,4	14,5	15,8	31,5
1000	2,4	2,1	0,3	0,8	2,4	10	10,9	21,9
800	1,5	1,3	-	0,5	1,5	6,4	7	14
650	1	0,9	-	0,3	1	4,2	4,6	9,2
COMFAIR HH50								
3002	15,4	13,4	1,6	4,4	21,8	57	62,1	124
2600	11,6	10,1	1,2	3,3	16,4	42,7	46,6	93,1
2200	8,3	7,2	0,9	2,4	11,7	30,6	33,3	66,7
1800	5,5	4,8	0,6	1,6	7,8	20,5	22,3	44,6
1400	3,4	2,9	0,3	1	4,7	12,4	13,5	27
1000	1,7	1,5	-	0,5	2,4	6,3	6,9	13,8
800	1,1	1	-	0,3	1,5	4	4,4	8,8
COMFAIR HH60								
4678	8,5	7,4	0,9	2,5	13,7	27,6	30,1	60,1
4500	7,9	6,8	0,9	2,3	12,7	25,5	27,8	55,6
4000	6,2	5,4	0,7	1,8	10	20,2	22	43,9
3500	4,8	4,1	0,5	1,4	7,7	15,4	16,8	33,6
3000	3,5	3	0,4	1	5,6	11,3	12,4	24,7
2500	2,4	2,1	0,3	0,7	3,9	7,9	8,6	17,2
2000	1,6	1,4	-	0,5	2,5	5	5,5	11
1600	1	0,9	-	0,3	1,6	3,2	3,5	7
COMFAIR HH70								
9250	13,7	11,9	1,4	4	12,4	43,8	47,8	95,5
9000	12,9	11,2	1,3	3,8	11,7	41,5	45,2	90,4
8200	10,7	9,3	1,1	3,1	9,7	34,4	37,5	75,1
7400	8,7	7,6	0,9	2,5	7,9	28	30,6	61,1
6600	6,9	6	0,7	2	6,3	22,3	24,3	48,6
5800	5,4	4,7	0,6	1,6	4,9	17,2	18,8	37,5
5000	4	3,5	0,4	1,2	3,6	12,8	14	27,9
4200	2,8	2,4	0,3	0,8	2,6	9	9,8	19,7
3400	1,8	1,6	-	0,5	1,7	5,9	6,5	12,9
3200	1,6	1,4	-	0,5	1,5	5,2	5,7	11,4

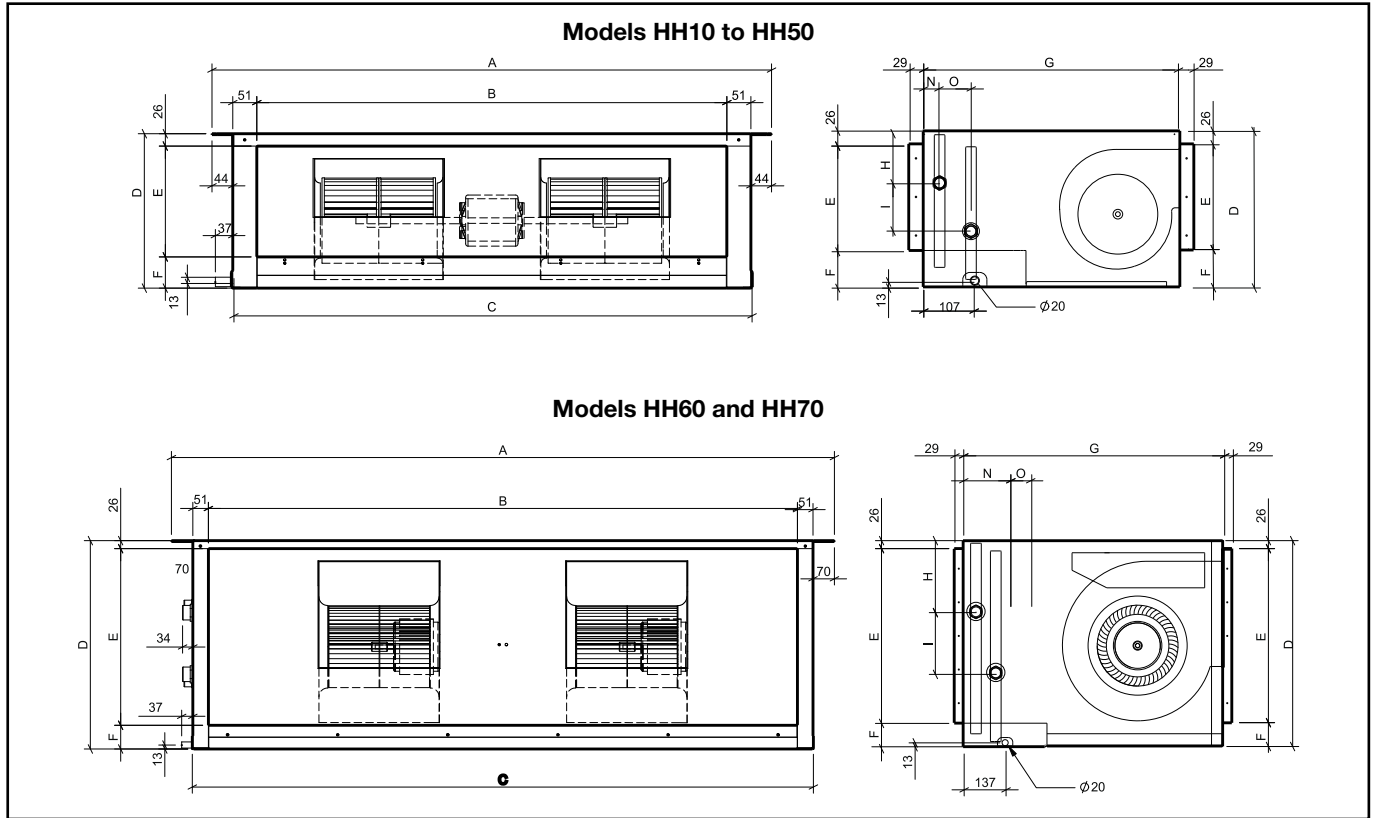
STANDARD COIL (Ref. water medium temperature 9,5°C)



AUXILIARY COIL (Ref. water medium temperature 65°C)

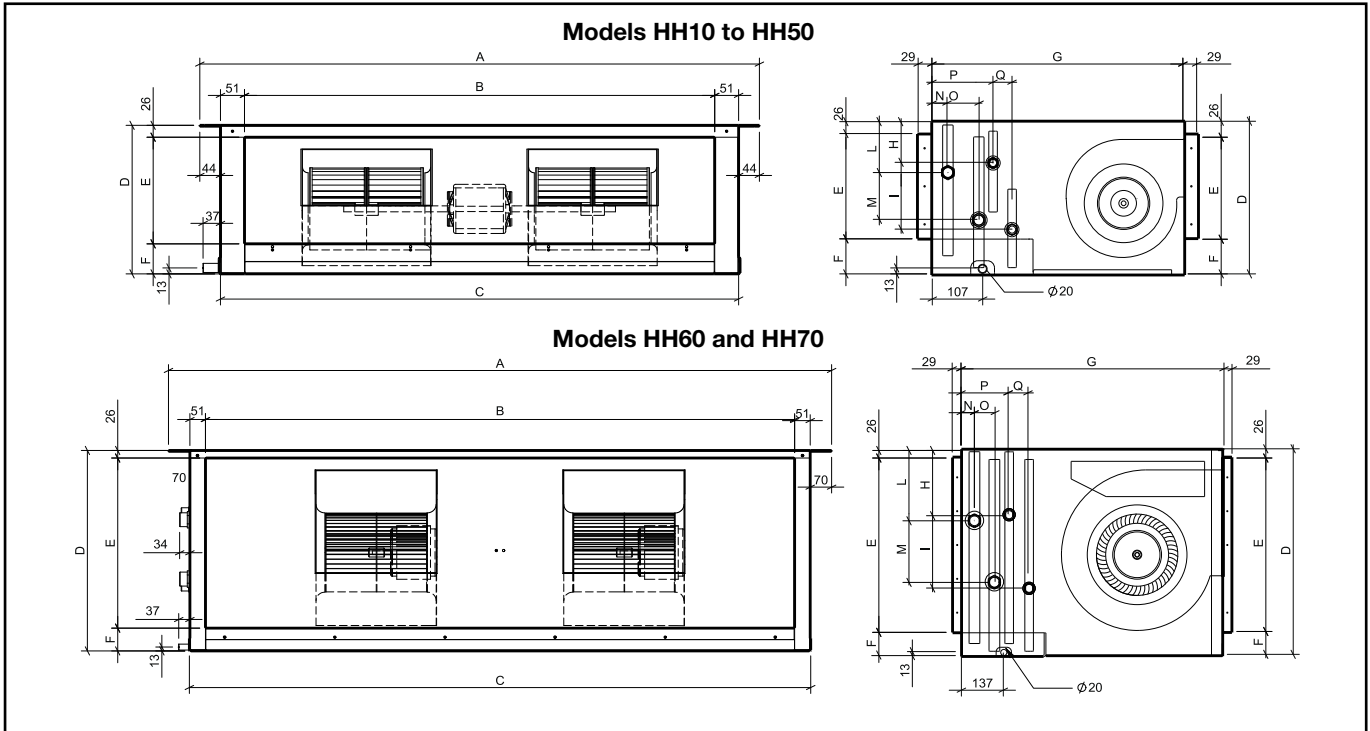


GENERAL DIMENSIONS - 2 PIPES SYSTEM



COMFAIR		HH	10	20	30	40	50	60	70	
Fans motor number		nr	1-1	2-1	2-1	2-1	2-1	1-1	2-2	
Coil used for both cooling and heating	Rows number	nr	3						4	
	Finned pack length	mm	523	873	973	1213		1900		
	Number of pipes per row	nr	11	12	14	26				
	Fin spacing	mm	2,1							
	Number of feeding circuits	nr	3	4	5	6	8	16	26	
	Shape	mmxmm	25x22							
	Finned pack depth	mm	66						88	
	Frontal surface	m ²	0,144	0,240	0,292	0,364	0,425	0,788	1,235	
	Total surface of fins	m ²	8,128	13,567	16,495	20,564	23,991	59,407	93,053	
	Water content	liter	1,36	2,18	2,63	3,25	3,79	9,38	14,44	
	Hydraulic connections (Ø male gas)	Ø	1/2"		3/4"		1"	1"1/4	1"1/2	
Unit general features	A	mm	738	1088	1188	1428	1428	1481	2168	
	B	mm	548	898	998	1238	1238	1239	1926	
	C	mm	650	1000	1100	1340	1340	1341	2028	
	D	mm	300		325		375	675		
	E	mm	232					275	575	
	F	mm	41		65		75			
	G	mm	533						852	
	H	mm	96		107		133	235		
	I	mm	100						200	
	N	mm	35						43	
	O	mm	65							
	Net weight	kg	28	36	41	46	57	117	192	

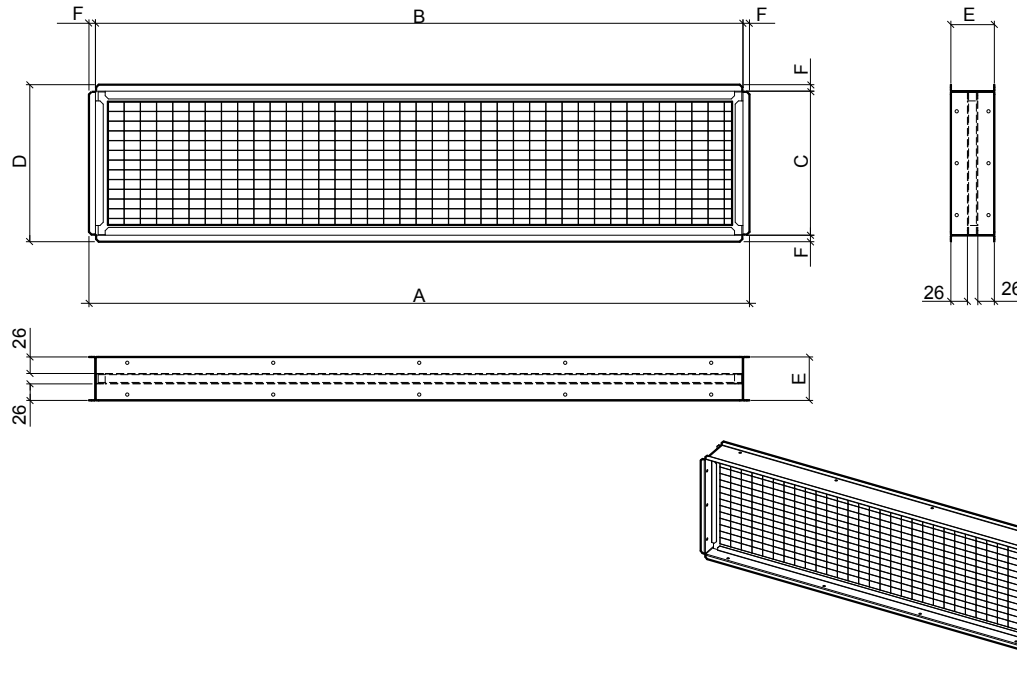
GENERAL DIMENSIONS - 4 PIPES SYSTEM



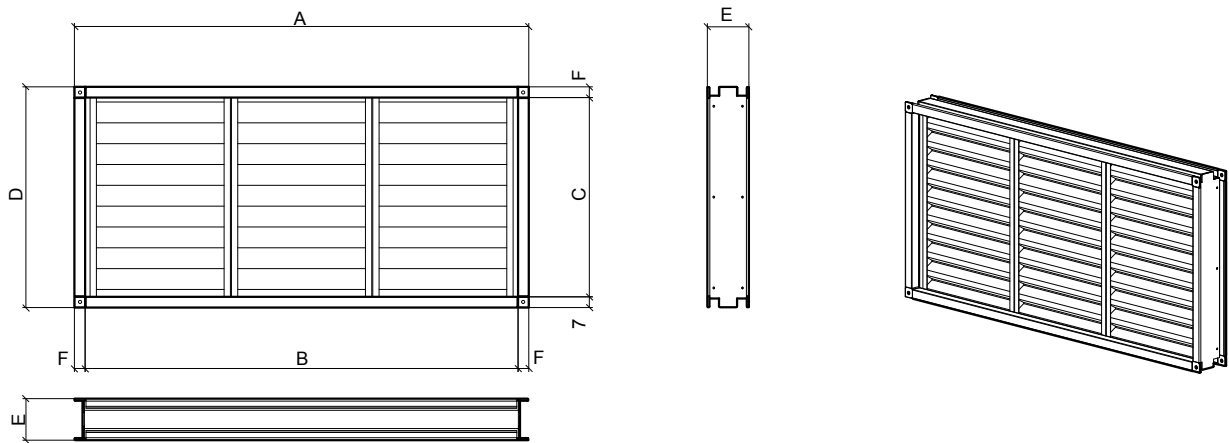
COMFAIR		HH	10	20	30	40	50	60	70	
Fans motor number		nr	1-1	2-1	2-1	2-1	2-1	1-1	2-2	
Coil used for cooling	Rows number	nr	3						4	
	Finned pack length	mm	523	873	973	1213	1213	1213	1900	
	Number of pipes per row	nr	11		12		14	26		
	Fin spacing	mm	2							
	Number of feeding circuits	nr	3	4	5	6	8	16	26	
	Shape	mmxmm	25x22							
	Finned pack depth	mm	66						88	
	Frontal surface	m ²	0,144	0,240	0,292	0,364	0,425	0,788	1,235	
	Total surface of fins	m ²	8,128	13,567	16,495	20,564	23,991	59,407	93,053	
	Water content	liter	1,36	2,18	2,63	3,25	3,79	9,38	14,44	
Hydraulic connections (Ø male gas)	Ø	1/2"		3/4"		1"	1"1/4	1"1/2		
Coil used for heating	Rows number	nr	1						2	
	Finned pack length	mm	523	873	973	1213			1900	
	Number of pipes per row	nr	11		12		14	26		
	Fin spacing	mm	2,1							
	Number of feeding circuits	nr	1	2		3		10	16	
	Shape	mmxmm	25x25							
	Finned pack depth	mm	25							
	Frontal surface	m ²	0,144	0,240	0,292	0,364	0,425	0,788	1,235	
	Total surface of fins	m ²	2,709	4,522	5,498	6,855	7,997	29,704	46,527	
	Water content	liter	0,45	0,73	0,88	1,08	1,26	4,69	7,22	
Hydraulic connections (Ø male gas)	Ø	1/2"				3/4"		1"	1"1/4	
Unit general features	A	mm	738	1088	1188	1428	1428	1481	2168	
	B	mm	548	898	998	1238	1238	1239	1926	
	C	mm	650	1000	1100	1340		1341	2028	
	D	mm	300		325		375	675		
	E	mm	232						275	575
	F	mm	41		65		75			
	G	mm	533						852	
	H	mm	96		107		133	235		
	I	mm	100						200	
	L	mm	75		87		113	213		
	M	mm	140						240	
	N	mm	35						42	
	O	mm	95						114	
	P	mm	35				32		43	
	Q	mm	40						65	
	Net weight	kg	30	38	44	49	61	130	210	

SFA (AIR FILTER SECTION)

SIZES 10 to 50

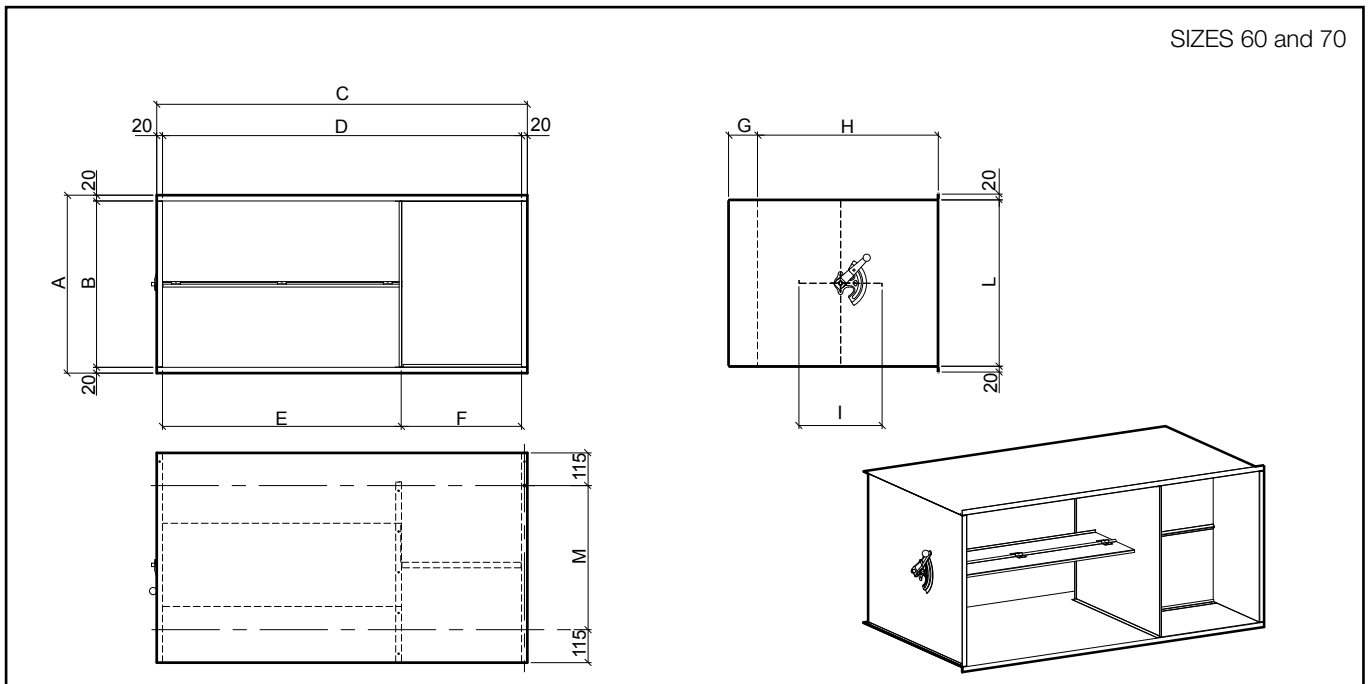
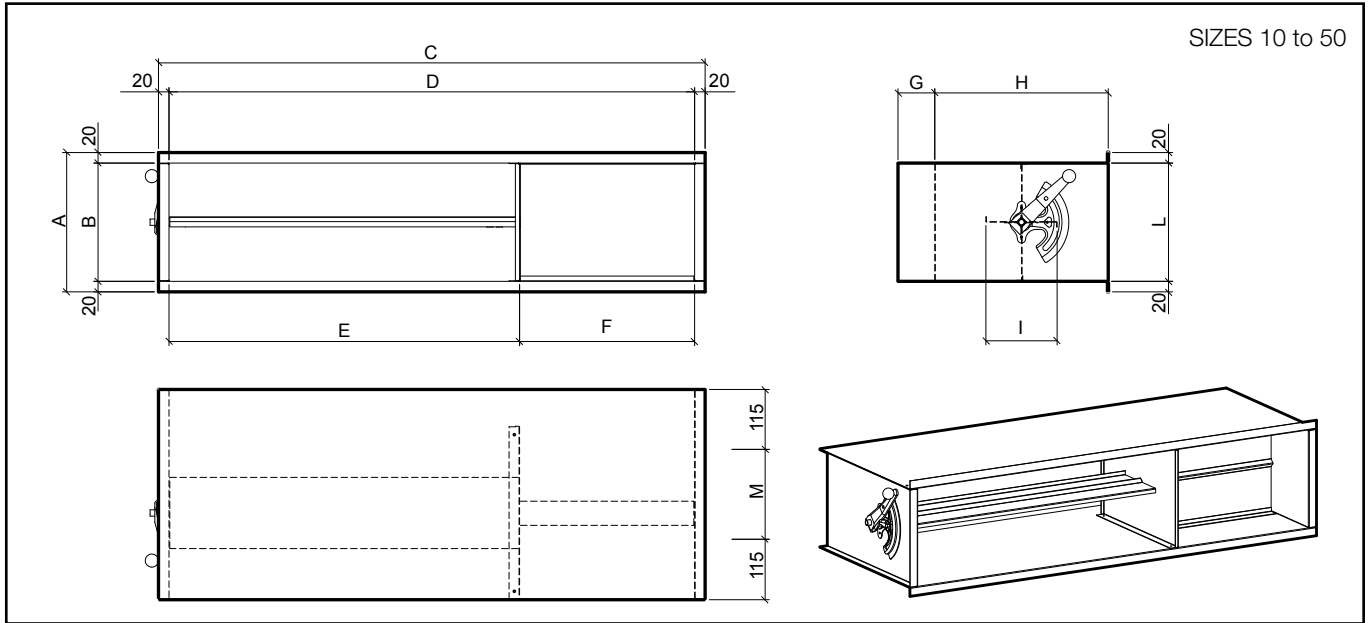


SIZES 60 and 70



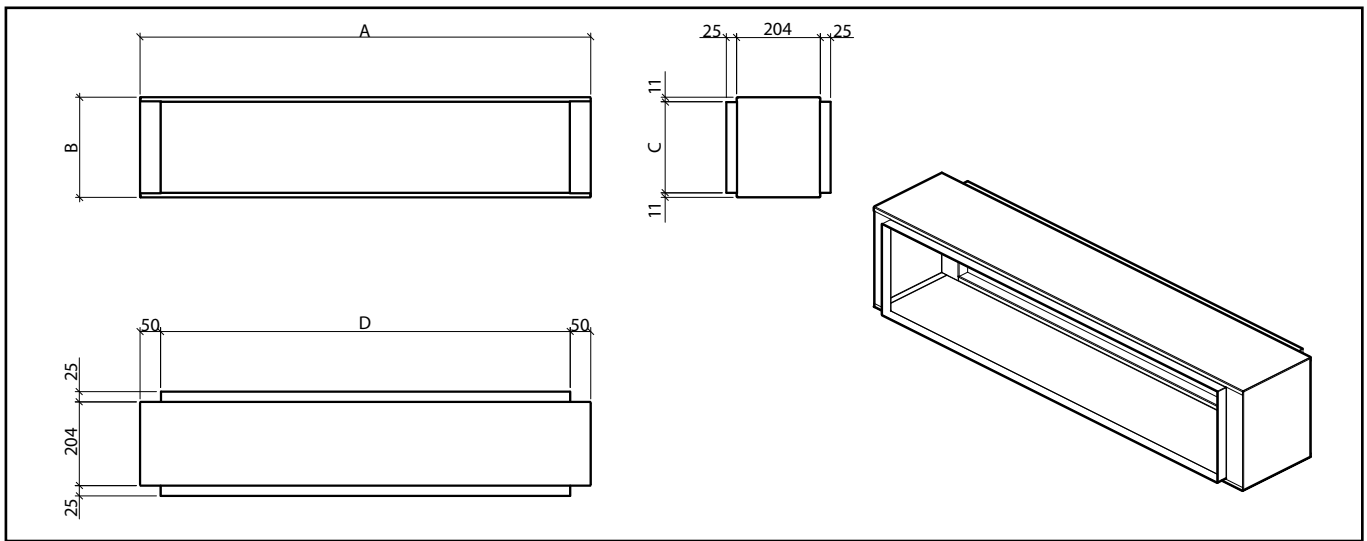
COMFAIR	HH	10	20	30	40	50	60	70
A	mm	566	918	1018	1258	1258	1290	1985
B	mm	546	898	998	1238	1238	1230	1924
C	mm	195	195	222	222	272	568	568
D	mm	215	215	242	242	292	625	625
E	mm	67	67	67	67	67	118	118
F	mm	10	10	10	10	10	31	31

SSP (SECTION WITH FRESH AIR LOUVER - MANUAL)



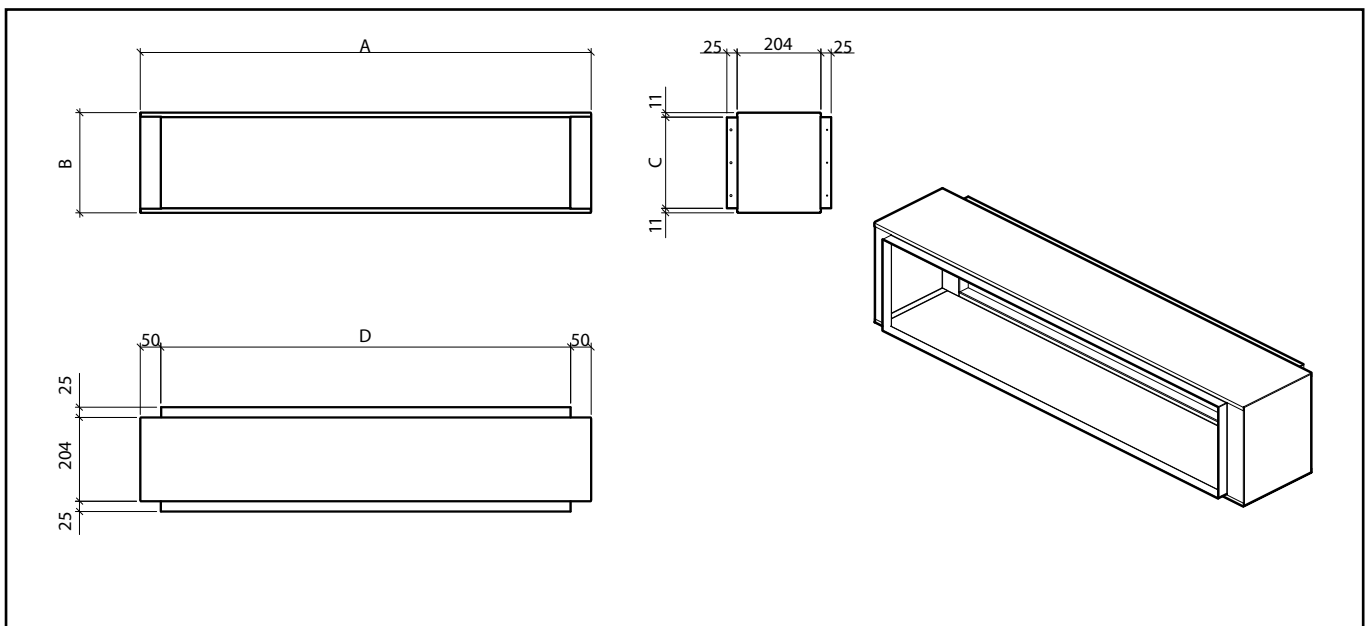
COMFAIR	HH	10	20	30	40	50	60	70
A	mm	240	240	265	265	310	615	725
B	mm	200	200	225	225	270	575	575
C	mm	590	940	1040	1280	1280	1280	1969
D	mm	550	900	1000	1240	1240	1240	1929
E	mm	365	600	665	825	825	825	642
F	mm	185	300	335	415	415	415	1286
G	mm	70	70	70	70	70	100	100
H	mm	330	330	330	330	330	625	625
I	mm	136	136	136	136	136	288	288
L	mm	200	200	225	225	275	575	575
M	mm	170	170	170	170	170	498	498

PAM (STRAIGHT PLENUM: INTAKE)



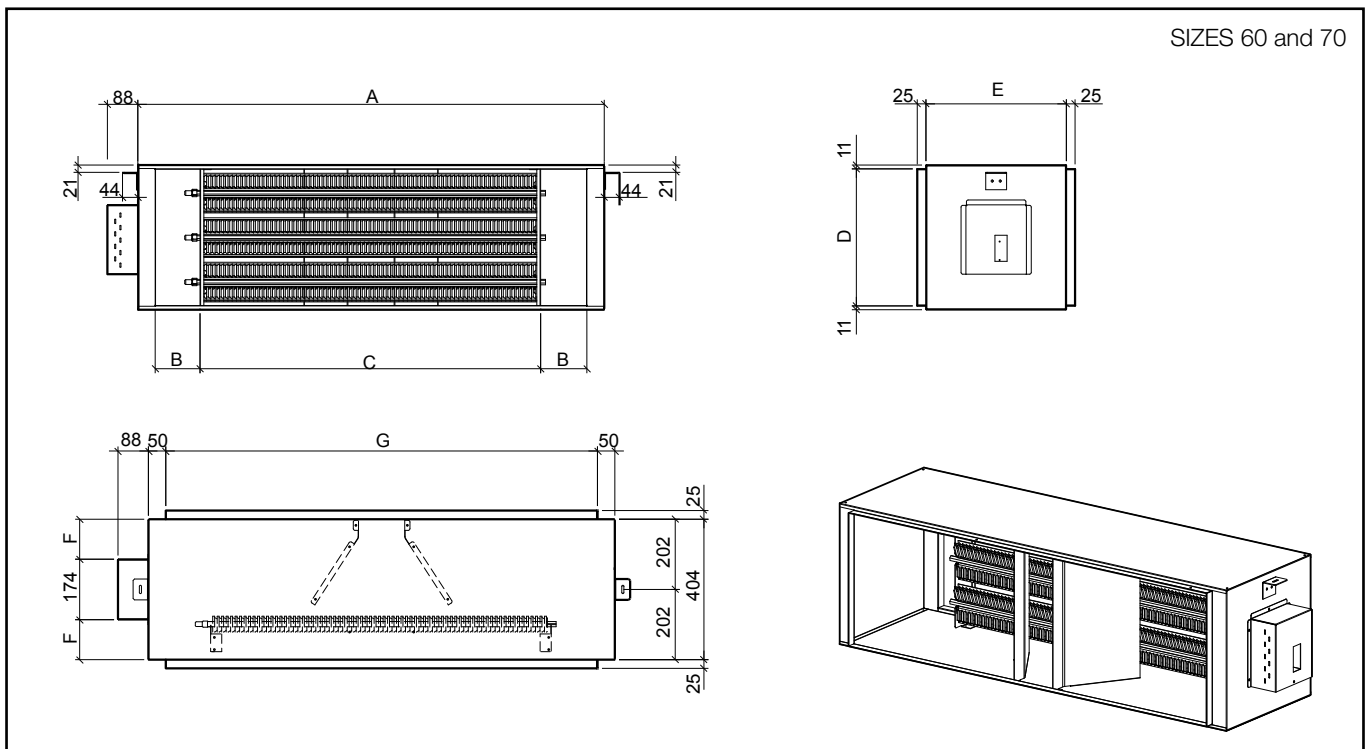
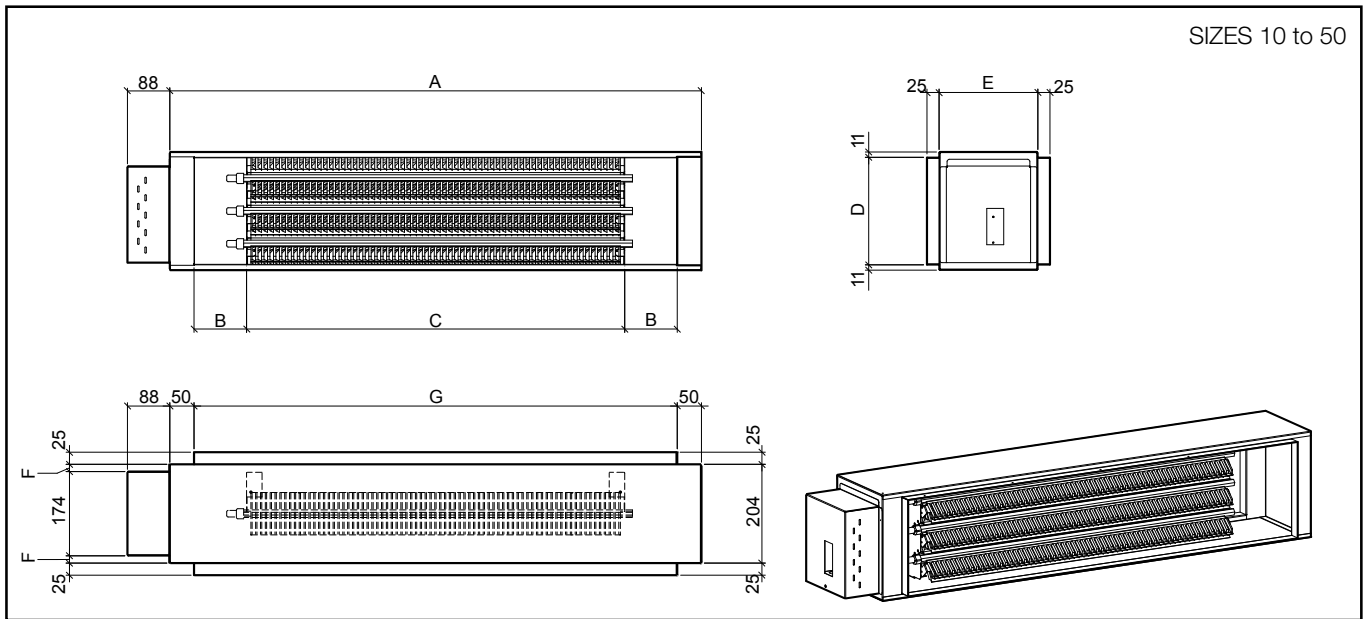
COMFAIR	HH	10	20	30	40	50	60	70
A	mm	648	998	1098	1338	1338	1342	2026
B	mm	219	219	244	244	294	595	595
C	mm	197	197	222	222	272	572	572
D	mm	548	898	998	1238	1238	1242	1926

PAM (STRAIGHT PLENUM: SUPPLY)



COMFAIR	HH	10	20	30	40	50	60	70
A	mm	648	998	1098	1338	1338	1342	2026
B	mm	219	219	244	244	294	416	416
C	mm	197	197	222	222	272	394	394
D	mm	548	898	998	1238	1238	1242	1926

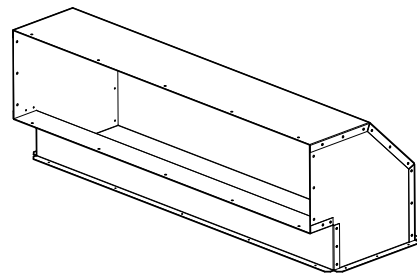
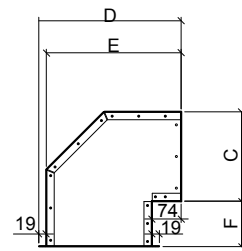
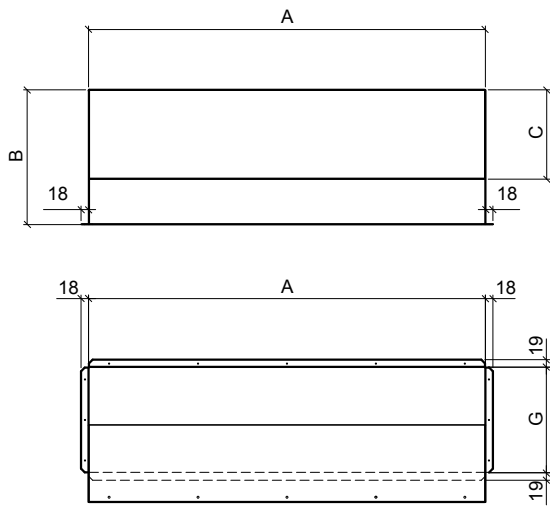
SRE (HEATING SECTION WITH ELECTRIC HEATER - 380V)



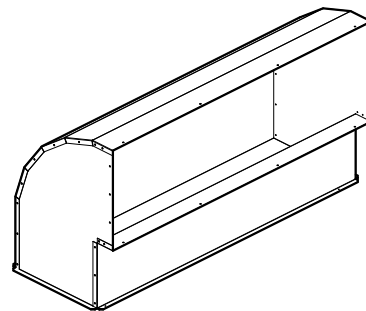
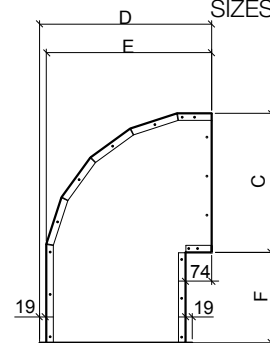
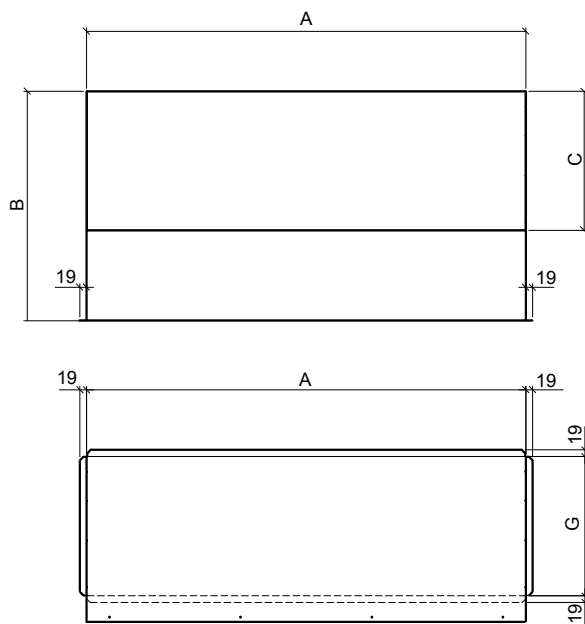
COMFAIR	HH	10	20	30	40	50	60	70
A	mm	648	998	1098	1338	1338	1342	2029
B	mm	84	159	109	128	128	131	*
C	mm	380	580	780	980	980	980	1929
D	mm	197	197	222	222	272	394	394
E	mm	204	204	204	204	204	404	404
F	mm	15	15	15	15	15	115	115
G	mm	548	898	998	1238	1238	1242	1929

RAM (90° PLENUM: SUPPLY)

SIZES 10 to 50

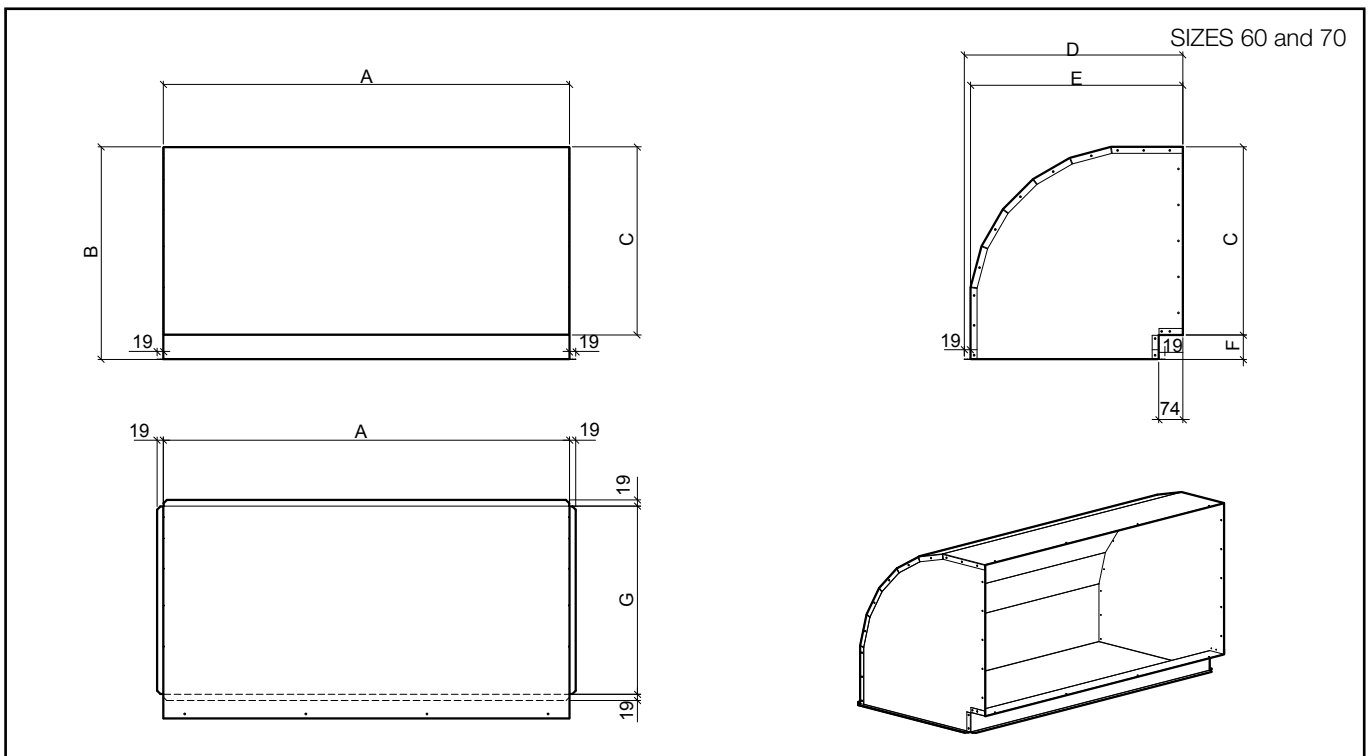
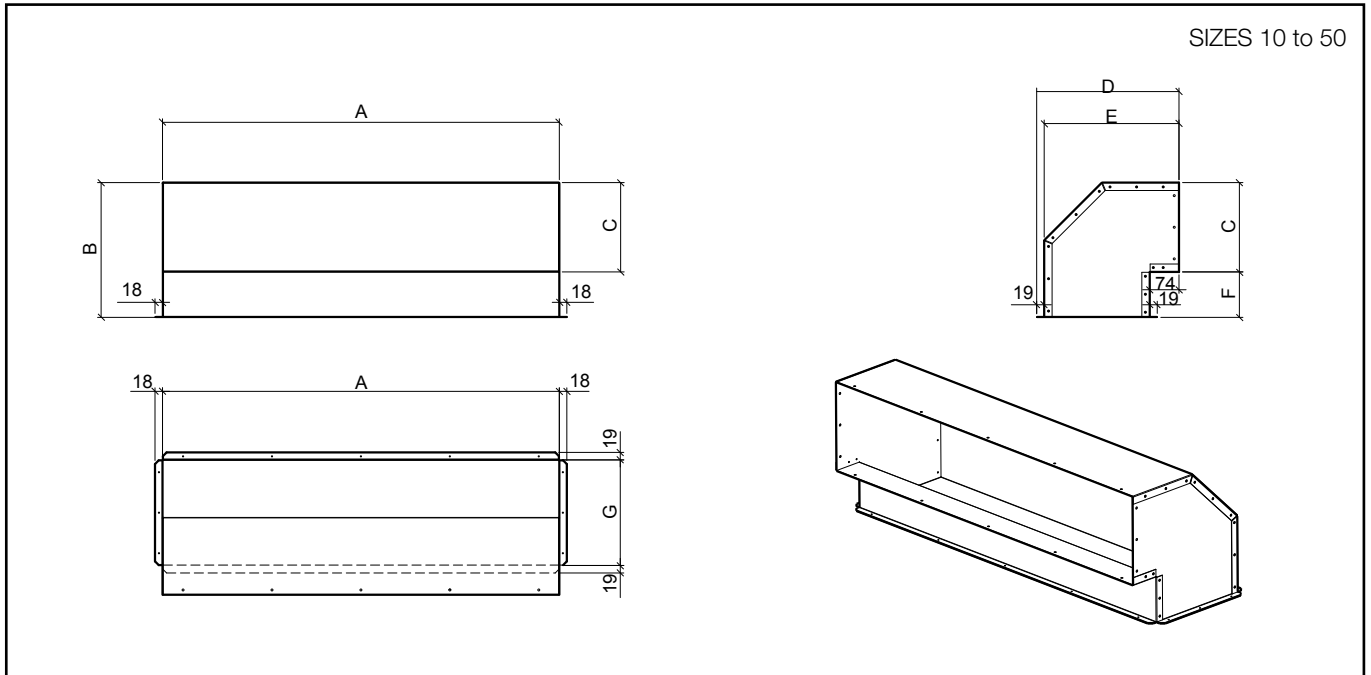


SIZES 60 and 70



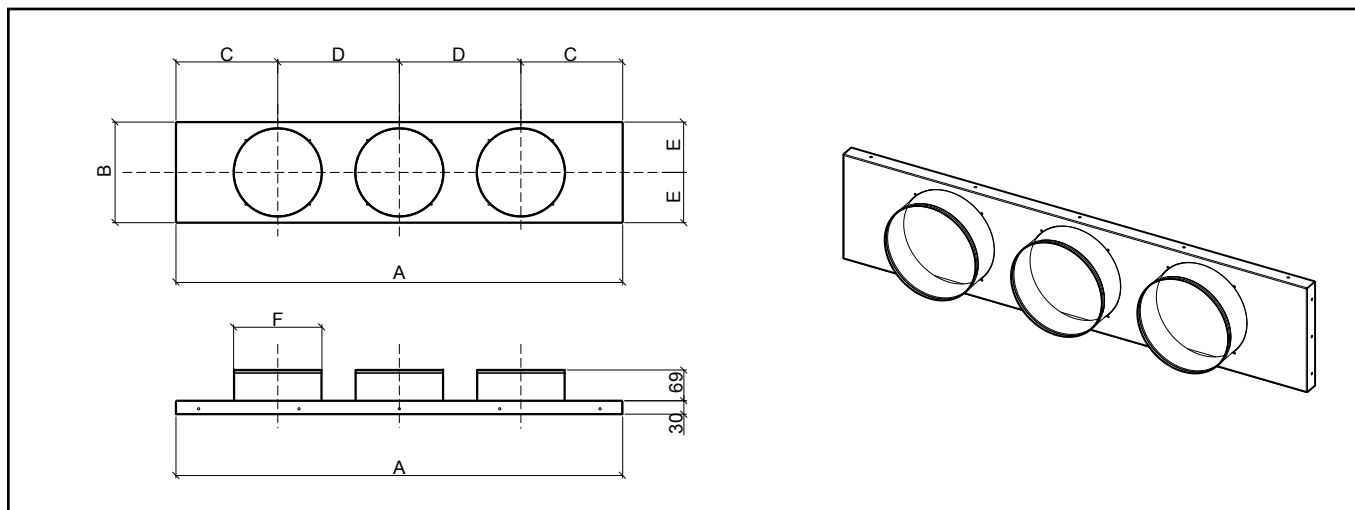
COMFAIR	HH	10	20	30	40	50	60	70
A	mm	552	902	1002	1242	1242	1242	1932
B	mm	315	315	340	340	390	650	650
C	mm	200	200	225	225	275	395	395
D	mm	360	360	360	360	360	490	670
E	mm	340	340	340	340	340	470	650
F	mm	115	115	115	115	115	255	255
G	mm	265	265	265	265	265	395	575

RAM (90° PLENUM: INTAKE)



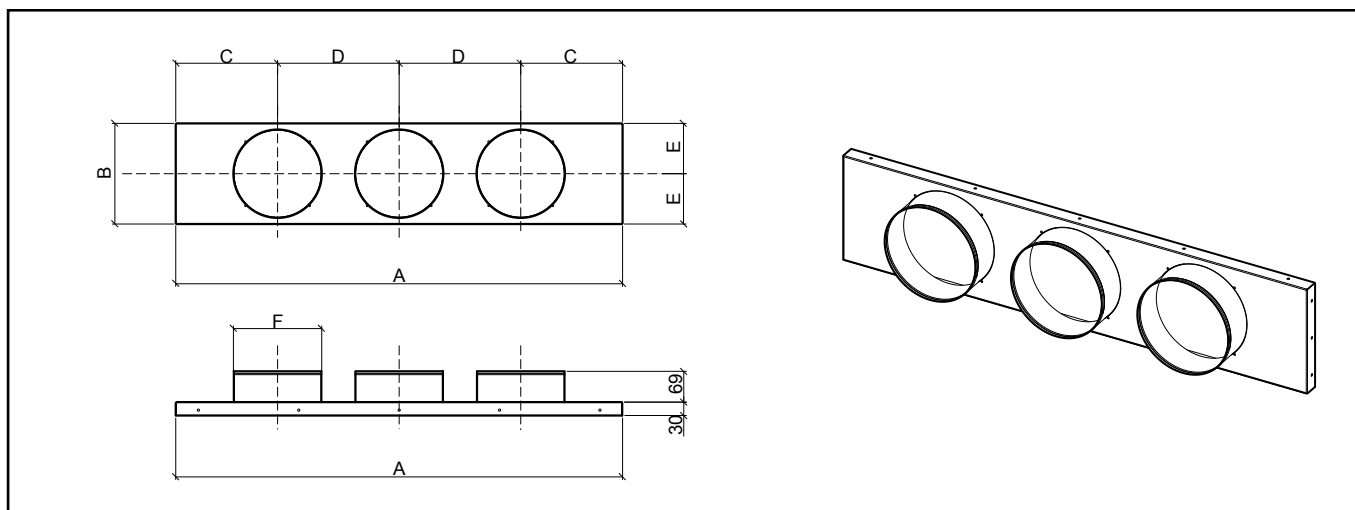
COMFAIR	HH	10	20	30	40	50	60	70
A	mm	552	902	1002	1242	1242	1245	1932
B	mm	315	315	340	340	390	650	650
C	mm	200	200	225	225	275	575	575
D	mm	360	360	360	360	360	670	670
E	mm	340	340	340	340	340	650	650
F	mm	115	115	115	115	115	75	75
G	mm	265	265	265	265	265	575	575

BAM (STRAIGHT: SUPPLY)



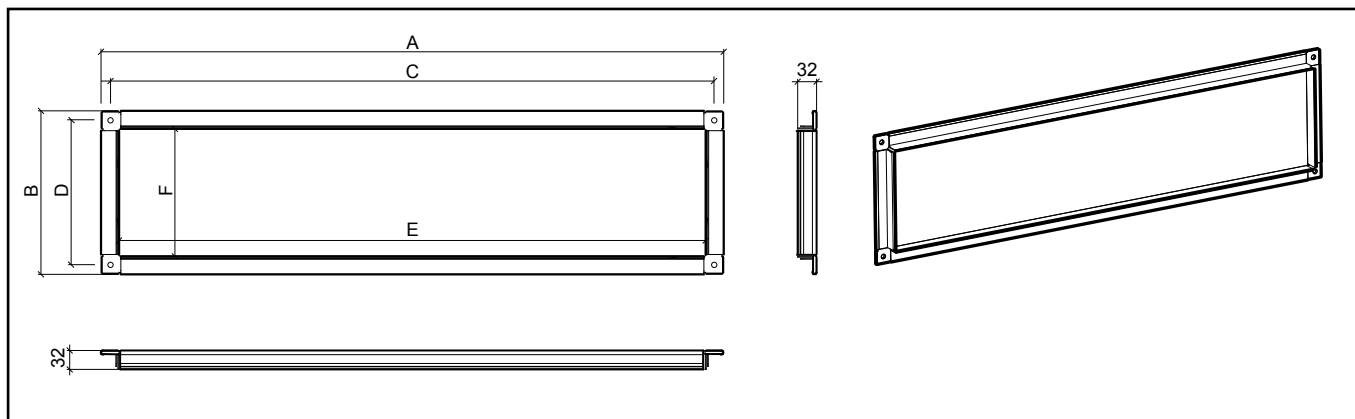
COMFAIR	HH	10	20	30	40	50	60	70
A	mm	550	900	1000	1240	1245	1245	1935
B	mm	200	200	226	226	276	416	416
C	mm	135	181	227	170	135	322,5	244,5
D	mm	280	270	272	300	325	600	482
E	mm	100	100	113	113	138	208	208
F	mm	2xØ200	3xØ200	3xØ200	4xØ200	4xØ200	2xØ400	4xØ400

BAM (STRAIGHT: INTAKE)



COMFAIR	HH	10	20	30	40	50	60	70
A	mm	550	900	1000	1240	1245	1245	1935
B	mm	200	200	226	226	276	576	576
C	mm	135	181	227	170	135	320	242
D	mm	280	270	272	300	325	600	482
E	mm	100	100	113	113	138	288	288
F	mm	2xØ200	3xØ200	3xØ200	4xØ200	4xØ200	2xØ400	4xØ400

FAM (CONNECTION FLANGE)



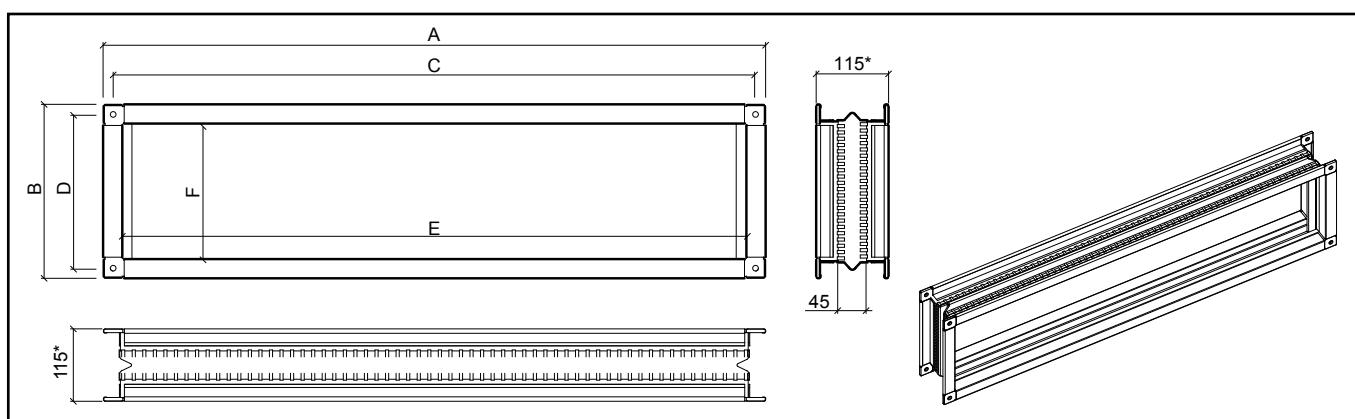
INTAKE

SUPPLY

COMFAIR	HH	10	20	30	40	50	60	70
A	mm	600	952	1052	1292	1292	1290	1985
B	mm	249	249	276	276	326	625	625
C	mm	570	922	1022	1262	1262	1260	1260
D	mm	219	219	246	246	296	595	595
E	mm	539	891	991	1231	1231	1230	1926
F	mm	188	188	215	215	265	565	565

COMFAIR	HH	10	20	30	40	50	60	70
A	mm	600	952	1052	1292	1292	1290	1985
B	mm	249	249	276	276	326	445	445
C	mm	570	922	1022	1262	1262	1260	1260
D	mm	219	219	246	246	296	415	415
E	mm	539	891	991	1231	1231	1230	1926
F	mm	188	188	215	215	265	385	385

GAM (ANTI-VIBRATING JOING)



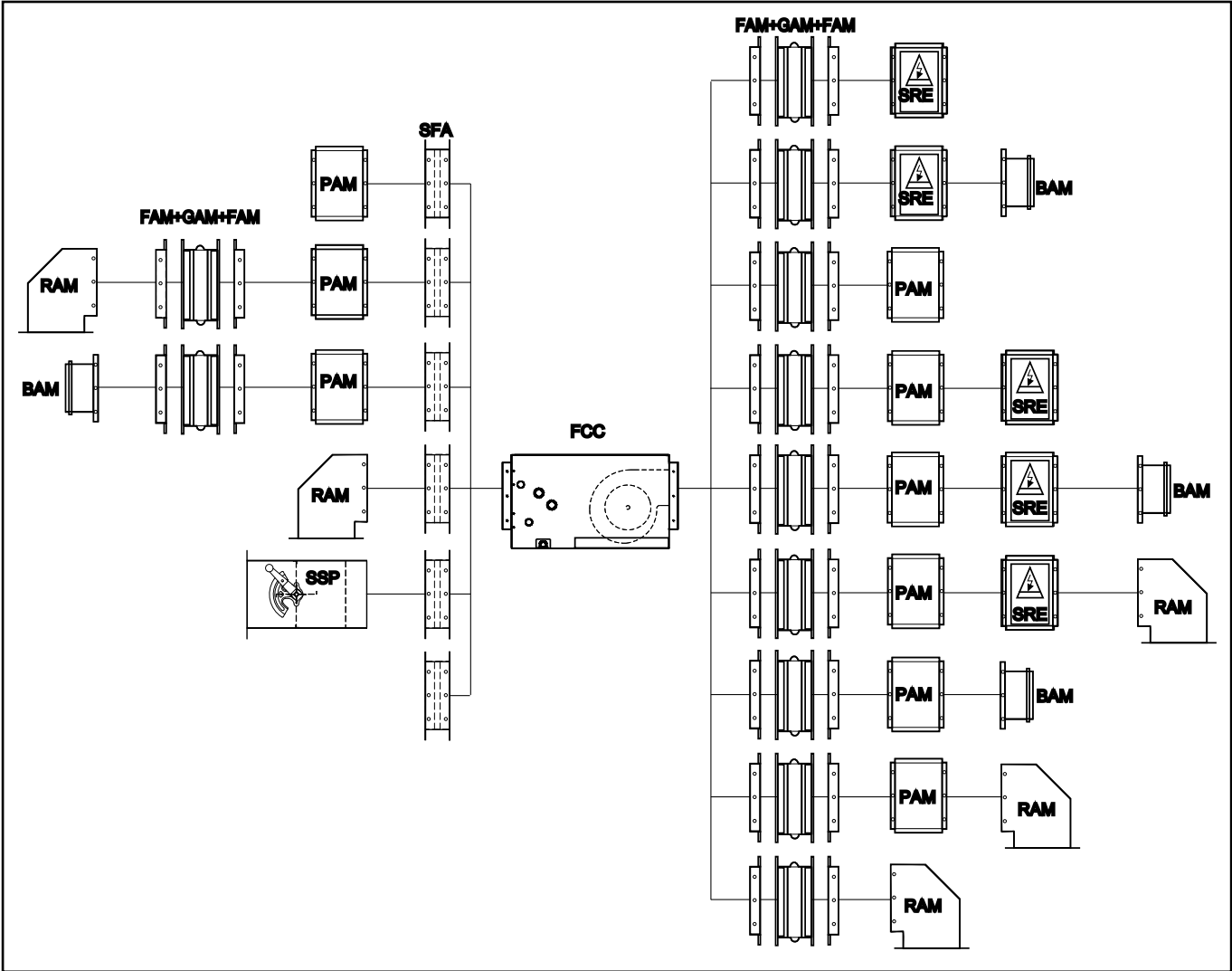
INTAKE

SUPPLY

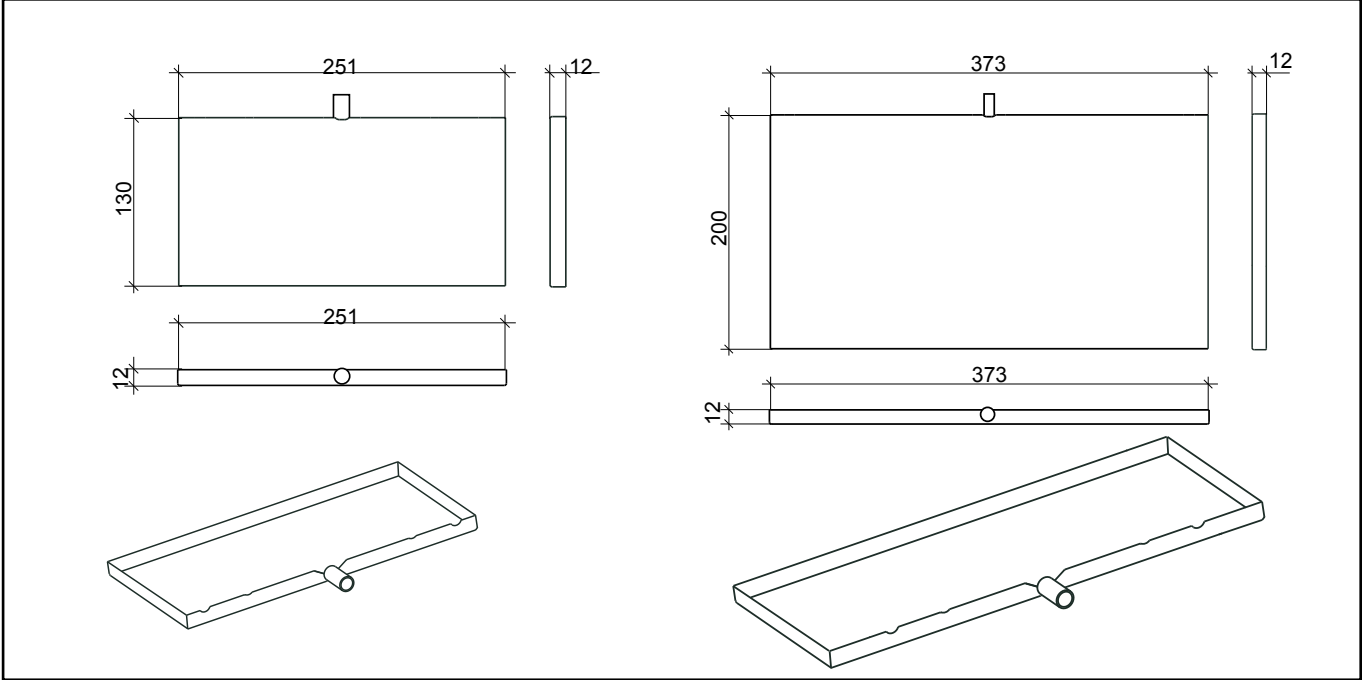
COMFAIR	HH	10	20	30	40	50	60	70
A	mm	600	952	1052	1292	1292	1290	1985
B	mm	249	249	276	276	326	625	625
C	mm	570	922	1022	1262	1262	1260	1260
D	mm	219	219	246	246	296	595	595
E	mm	539	891	991	1231	1231	1230	1926
F	mm	188	188	215	215	265	565	565

COMFAIR	HH	10	20	30	40	50	60	70
A	mm	600	952	1052	1292	1292	1290	1985
B	mm	249	249	276	276	326	445	445
C	mm	570	922	1022	1262	1262	1260	1260
D	mm	219	219	246	246	296	415	415
E	mm	539	891	991	1231	1231	1230	1926
F	mm	188	188	215	215	265	385	385

EXAMPLE OF ACCESSORIES



AUXILIARY DRAIN PAN



CONDENSATE DRAIN PUMP

HH 10 - 50

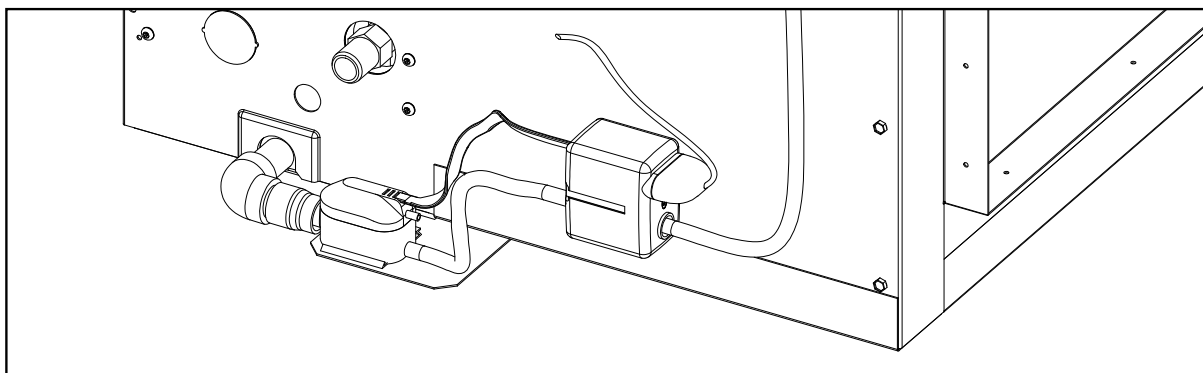
This pump is used to eliminate the condensation that collects in the tray in installations where there is no self-emptying outlet. The pump comes with filter to withhold impurities, float with activation contact, suction pipe, pump body complete with control electronics and overheating protection, wiring.

PUMP

Alarm contact normally closed that automatically cuts off the air conditioning system compressor or valve, thermal protection 90° on the pump coil, electrical connection by plug (delivered with 1 m cable), rubber mounting bracket included, ...

AVANTAGES

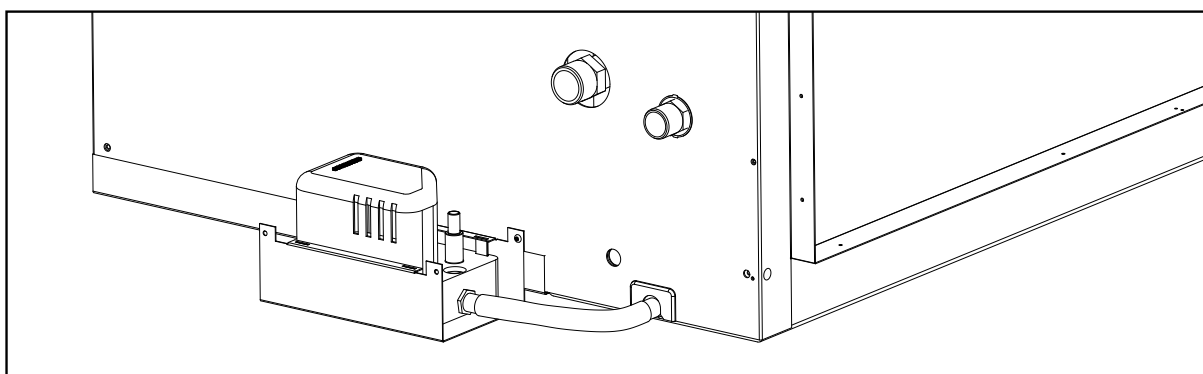
Small size, low noise level.



Main supply	V/Hz - W	230/50 - 18
Max. flow rate	l/h	20
Max. suction head	m	2
Max. discharge head	m	6
Alarm contact		NC 8 A resistive
Thermal protection (overheat)	°C	90
Sound level at 1 m	dB(A)	<34
Pump dimensions (LxIxh)	mm	66 x 44 x 60
Detection unit dimensions (LxIxh)	mm	55 x 38 x 32
Weight (including box)	kg	±0350

HH 60 - 70

This pump is used to eliminate the condensation that collects in the tray in installations where there is no self-emptying outlet.



Main supply	V/Hz - A	230/50 - 10,8
Max. flow rate	l/h	150
Max. suction head	m	5,4
Alarm contact		NC 4 A resistive
Thermal protection (overheat)	°C	110
Sound level	dB(A)	<34
Pump dimensions	mm	195 x 130 x 122

HIGH WALL FAN COIL UNITS - HD

Comfair HD fan coil units are similar in design and use to the widely used DX high-wall mini-split systems. With a maximum width of only 210mm, the casing is manufactured from high quality plastic and is of an aesthetically pleasing design to compliment almost every environment.

«A BREATH OF FRESH AIR»

The fan is of a Tangential type running at low speed to guarantee low noise levels. The concept of air discharge from the unit allows efficient distribution of the treated air for maximum comfort, and simplicity of use. HD units are equipped with a system of automatic horizontal air deflection through an arc of 35° in cooling operation (10° in heating operation), which avoids stratification of the airstreams. When the unit stops, the deflector blades close automatically, which serves not only to protect the internal components against dust but also preserves the neat aesthetic appearance of the unit.



FILTRATION AND AIR QUALITY

The Comfair HD units not only control the temperature of the air but also the air quality in the conditioned space. Each unit is fitted with a filter and an Ioniser which produces negatively charged ions which attracts the positively charged dust particles and neutralises harmful microbes present in the atmosphere. The Ioniser comprises of a small generator, which transmits an intermittent high voltage to carbon fibres situated in the airstream.

COILS

Each unit contains a chilled and hot water coil manufactured from copper tubes with aluminium fins. Water connections are female gas 1/2" and each coil is fitted with an air vent. A water temperature sensor prevents low temperature discharge.

REMOTE CONTROLLER

The infra-red remote controller offers the same functions as a DX split system. It includes an LCD display which indicates the status and set points of the unit. Sixteen buttons allow fast and easy control of the operation of all functions of the unit.



All data are at Eurovent conditions.
<http://www.eurovent-certification.com/>

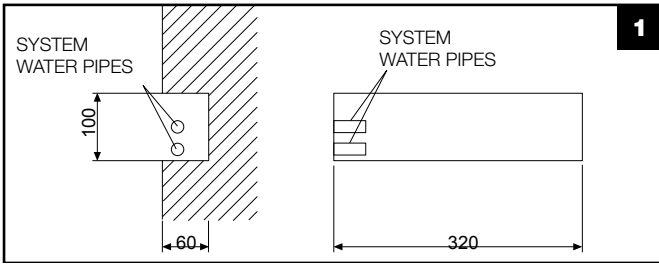
PROGRAM: FC-2-H

COMFAIR		HD	1	2	3
Sensible cooling capacity	kW	Min	1,2	1,55	2,89
		Med	1,45	1,7	3,32
		Max	1,7	1,99	3,44
Total cooling capacity	kW	Min	1,45	1,87	3,71
		Med	1,73	2	4,2
		Max	2,04	2,46	4,42
Heating capacity	kW	Min	1,81	2,21	4,51
		Med	2,22	2,42	5,24
		Max	2,59	3,32	5,64
Water pressure drops in cooling	kPa	Min	9,1	16	48,1
		Med	13	18	61,4
		Max	18	20	68,1
Water pressure drops in heating	kPa	Min	8,4	14	42,2
		Med	12	16	54
		Max	16,7	17	59,8
Fan electrical power	kW	Min	0,02	0,02	0,05
		Med	0,03	0,03	0,05
		Max	0,03	0,03	0,06
Voltage	V/Ph/Hz	-	230/1/50		
Sound power level	dB(A)	Min	49	46	50
		Med	52	50	57
		Max	54	54	61

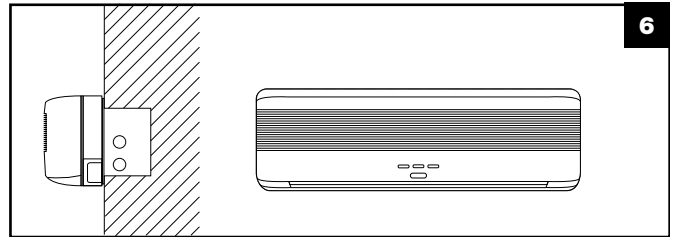
INSTALLATION WITH SIMPLE MOUNTING PLATE

The method of installing the wall-mounted water-filled fan coil of the HD range is shown below. Take into account the following:

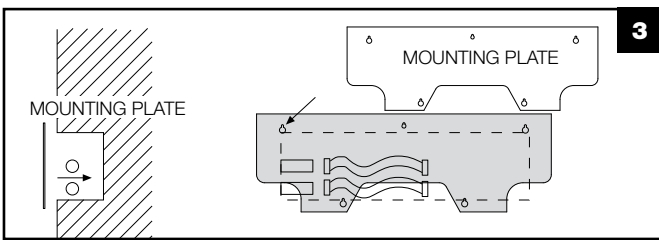
- Looking at the unit from the front, the supply pipes go from right to left.
- The system pipes must come from the left.



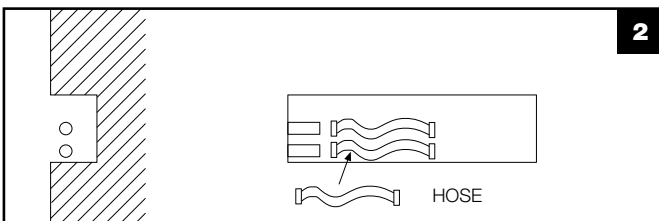
Make sufficient large hole in the wall for the system water pipes to pass through.



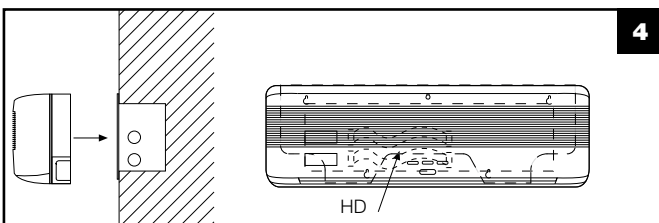
Put the fan coil back to its position of operation



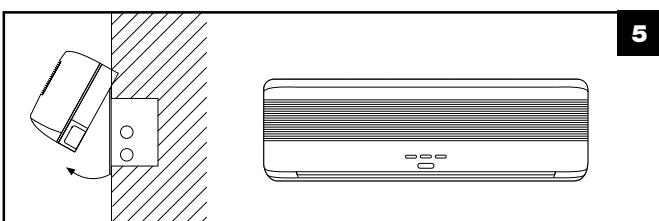
Fix the fan coil mounting plate to the wall.



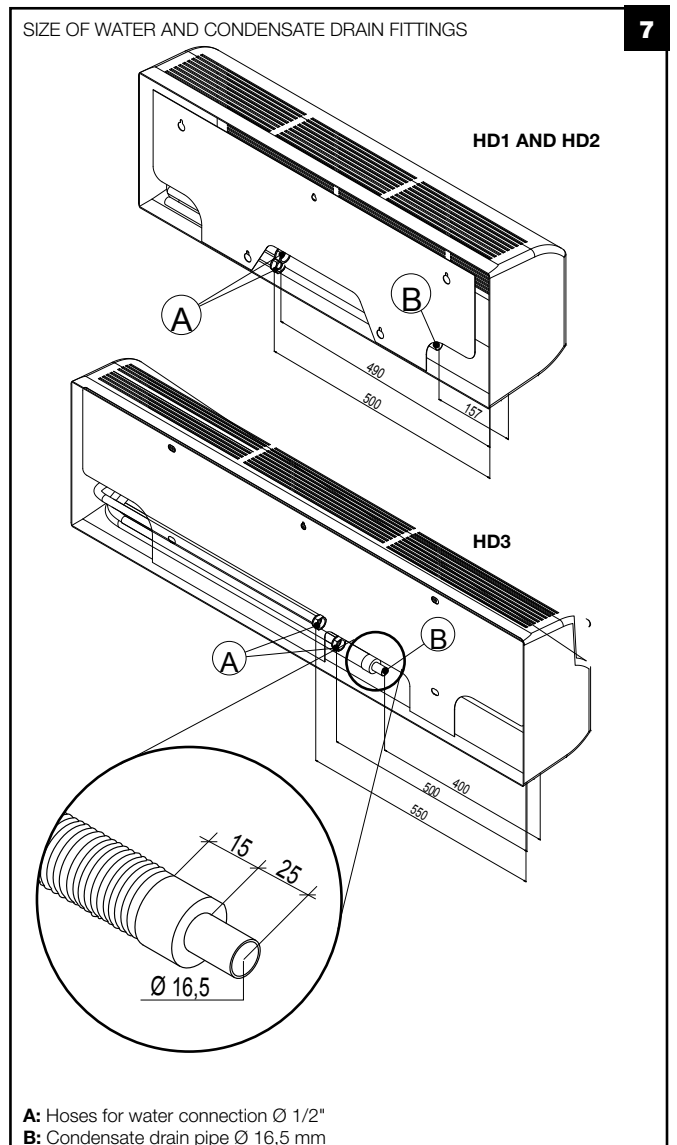
Take two hoses with 1/2" fitting and connect to the systems pipes. These pipes must be lagged.



Anchor the fan coil to the mounting plate

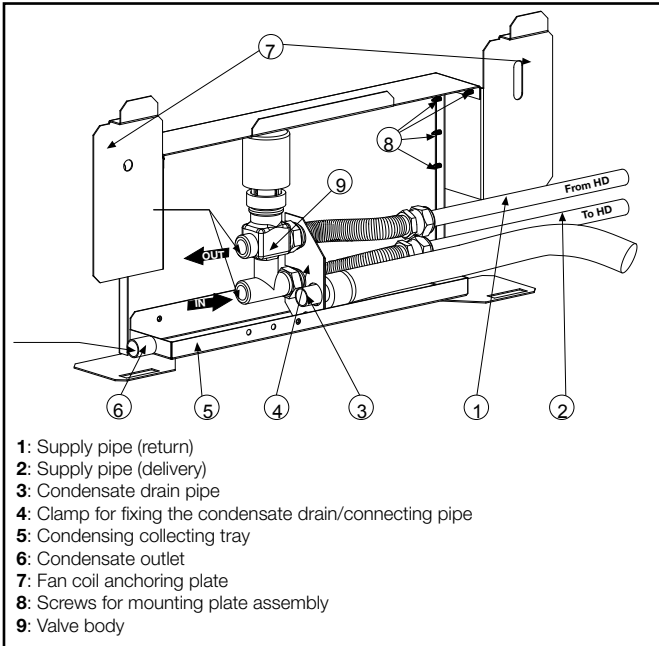


Tilt the fan coil and insert the relative polystyrene foam spacer and then carry out the water connections



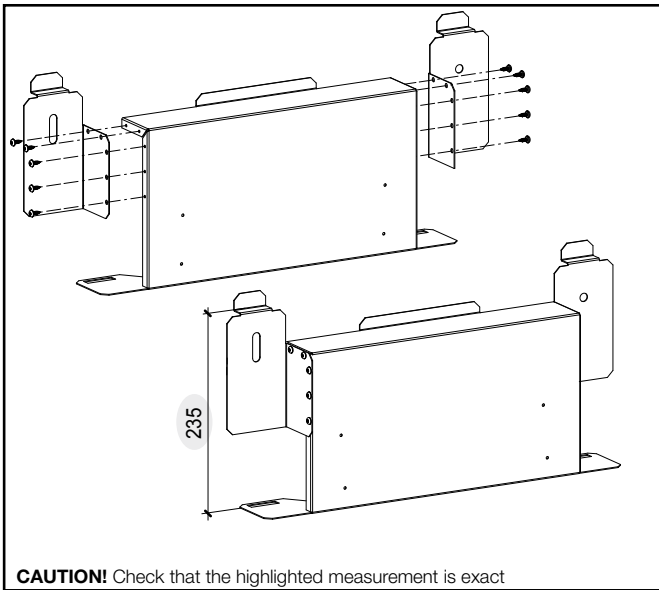
INSTALLATION WITH BUILT-IN VALVES

Important! It is recommended that wall-mounted water-filled fan coils are installed with ON/OFF devices.



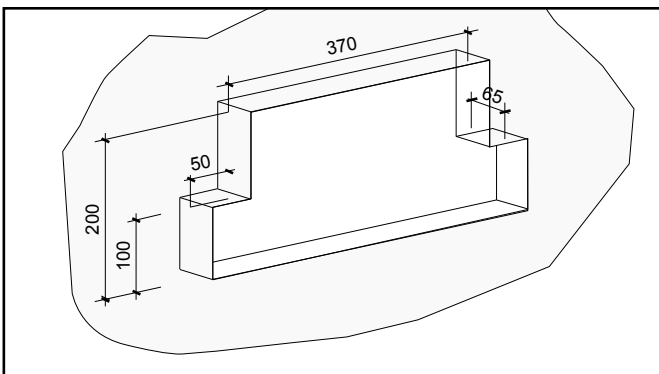
- 1: Supply pipe (return)
- 2: Supply pipe (delivery)
- 3: Condensate drain pipe
- 4: Clamp for fixing the condensate drain/connecting pipe
- 5: Condensing collecting tray
- 6: Condensate outlet
- 7: Fan coil anchoring plate
- 8: Screws for mounting plate assembly
- 9: Valve body

Proceed as shown below to assemble the mounting plate.

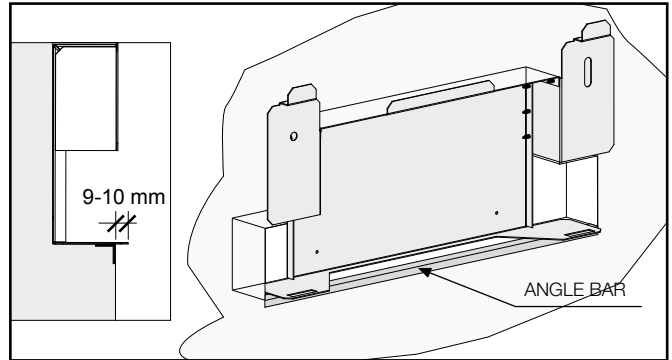


CAUTION! Check that the highlighted measurement is exact

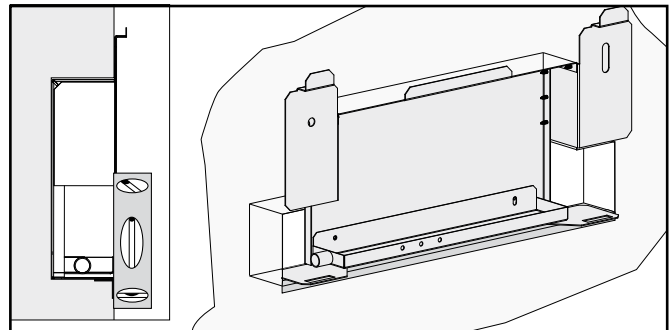
1. Identify the position on the wall where the fan coil is to be installed and create a niche with the dimensions shown below:



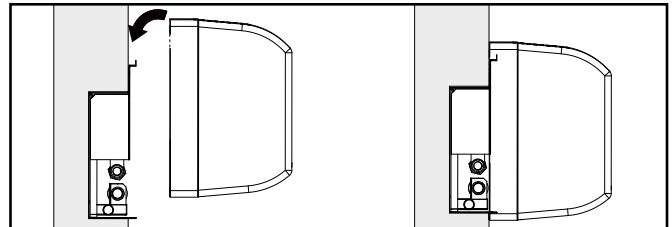
2. Cover the bottom edge of the niche with a steel angle bar (**NOT supplied**). Apply the mounting plate and fix it using four screws and four screw anchors in the relative holes:



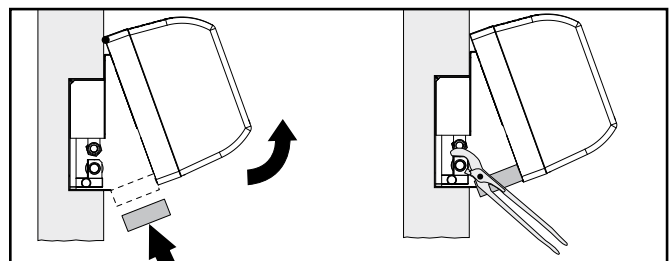
3. Fix the condensate collecting tray by inserting two self-tapping screws into the relative holes. The external surface of the tray must be flush with the wall:



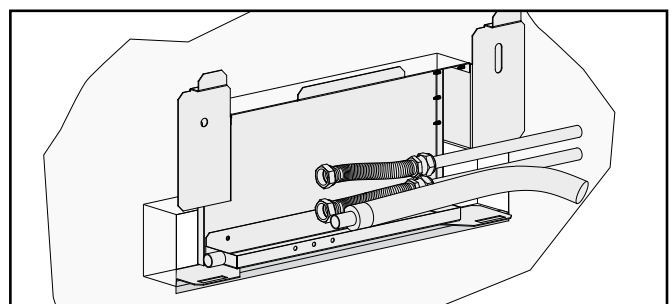
4. Position the fan coil on the mounting plate:



5. Tilt the fan coil and insert the relative polystyrene foam spacer so that the valves can be easily reached and connected to the appliance and to the mains water supply:

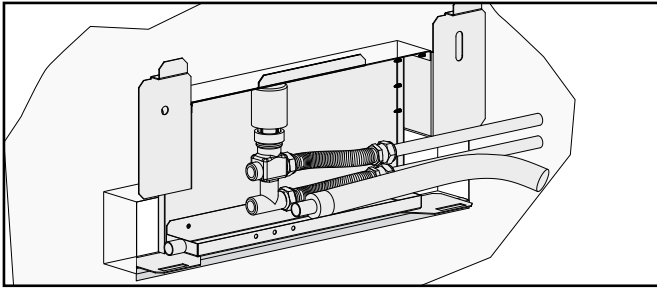


6. Connect the hoses to the fan coil supply pipes and the condensate drain hose:

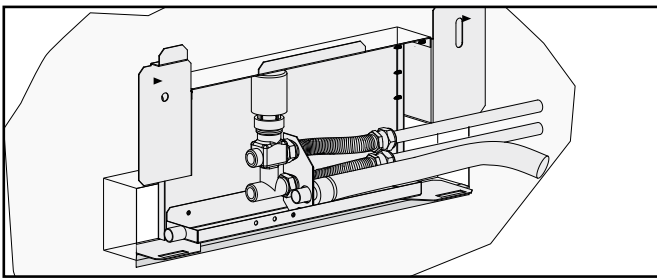


INSTALLATION WITH BUILT-IN VALVES - CONT'D

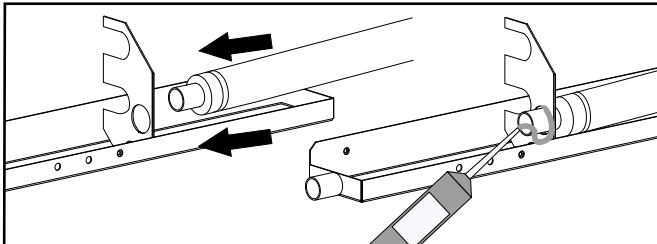
7. Connect the valve to the connecting hoses:



8. Fix the bracket for securing the condensate drain hose and the connecting hoses on the condensate collecting tray:

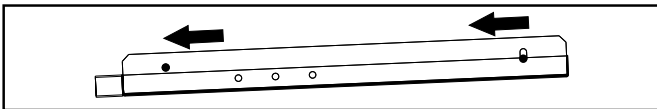


9. Fix the condensate drain hose with silicone:



10. Replace the fan coil in its original position.

CAUTION! The condensate collecting tray must be fixed so that it slopes gently downward towards the condensate drain outlet:



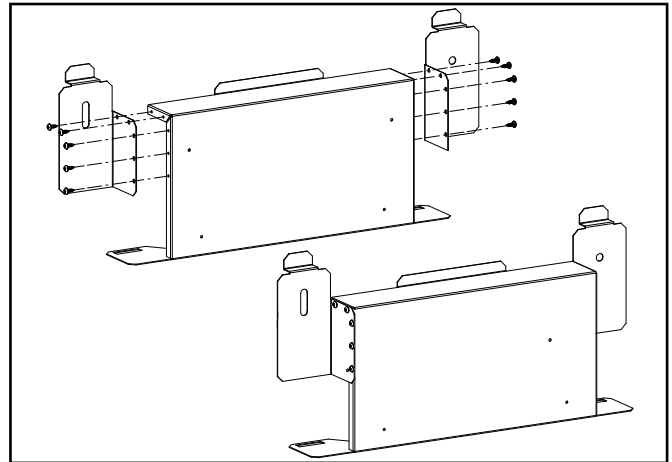
N.B.:

- Do not bend or damage the enclosed mounting plate
- Comply with the highlighted measurements (previous page)
- The base of the enclosed mounting plate must project by 9-10 mm from the wall
- The condensate collecting tray must always be flush with the wall.

INSTALLATION WITH VALVES AND OUTER FRAME

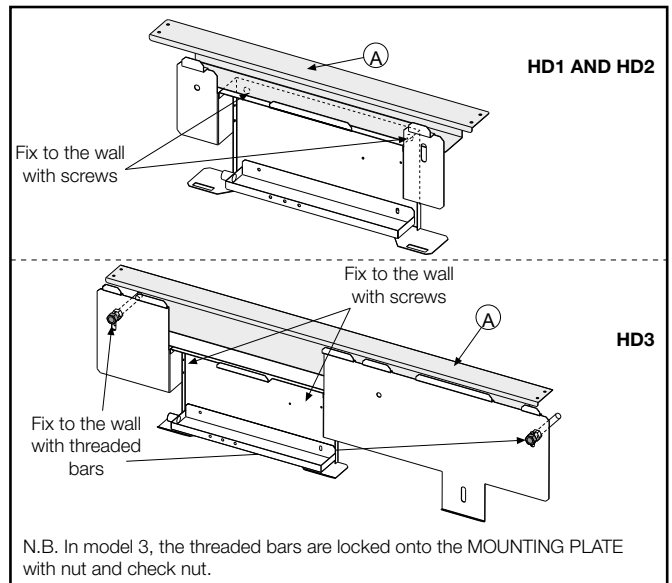
Proceed as shown below to assemble the mounting plate:

IMPORTANT! It is recommended that wall-mounted water-filled fan coils are installed with ON/OFF devices.

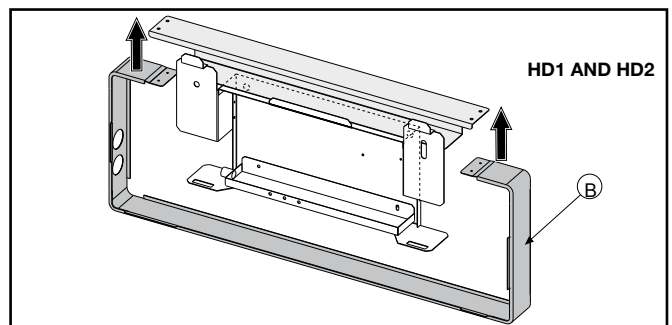


1. Mark the position on the wall where the fan coil is to be installed, then apply the mounting plate and **fix it with two screws and screws anchors in the relative holes.**

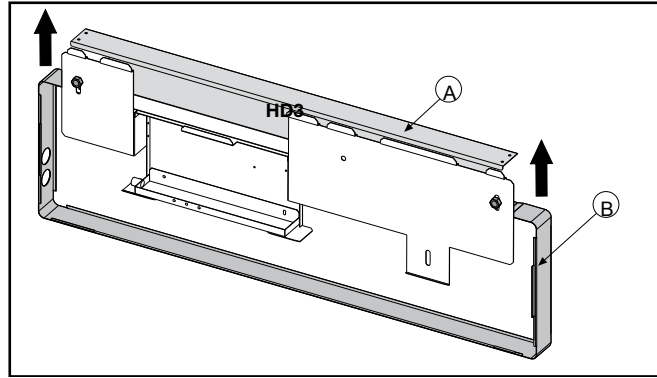
2. Position the cross rail of the frame (A) on top of the mounting plate previously fixed to the wall.



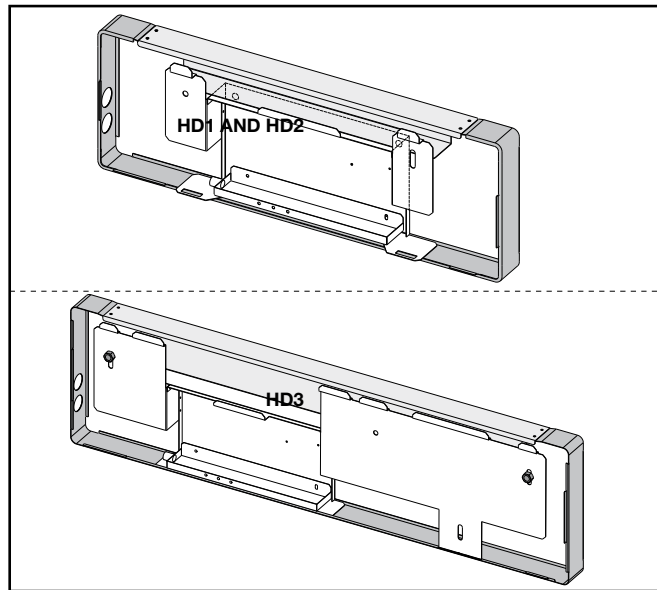
3. Fix the extension (B) to the cross rail with the 4 self-tapping screws provided in the kit:



INSTALLATION WITH VALVES AND OUTER FRAME - CONT'D



4. Final result:



5. Repeat points 4, 5, 6, 7, and 8 of the previous section (Installation with built-in valves)

GENERAL DESCRIPTION



Basic control
Delivered as standard in vertical casing units
On/Off - Heating/Cooling - 3 speeds



TA or TE thermostat
Standard or electronic thermostat
On/Off - Heating/Cooling - 3 speeds
Ambiant temperature knob adjustment



CD2X6
Wall mounted - 3 digits display
On/Off - Heating/Cooling - 3 speeds
Ambiant temperature knob adjustment



RCE 10E
Wall mounted
On/Off - Heating/Cooling - 3 speeds
Ambiant temperature knob adjustment

	Fitted on the unit					Wall mounted	
	Basic	TA	TE	CD2X6	RCE10E	CD2X6	RCE10E
Characteristics							
On/Off	◆	◆	◆	◆	◆	◆	◆
Manual speed control	◆	◆	◆	◆	◆	◆	◆
Automatic fan control				◆	◆	◆	◆
Manual Heating/Cooling control	◆	◆	◆	◆	◆	◆	◆
Automatic Heating/Cooling control				◆	◆	◆	◆
Temperature setting knob		◆	◆	◆	◆	◆	◆
External centralised contact				◆	◆	◆	◆
Windows contact				◆	◆	◆	◆
Digital display				◆		◆	
On/Off valve control	◆	◆	◆	◆	◆	◆	◆
Modulating valve control				◆	◆	◆	◆
Available for							
2 pipes	◆	◆	◆	◆	◆	◆	◆
2 pipes + electrical heater	◆	◆	◆	◆	◆	◆	◆
4 pipes	◆	◆	◆	◆	◆	◆	◆



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