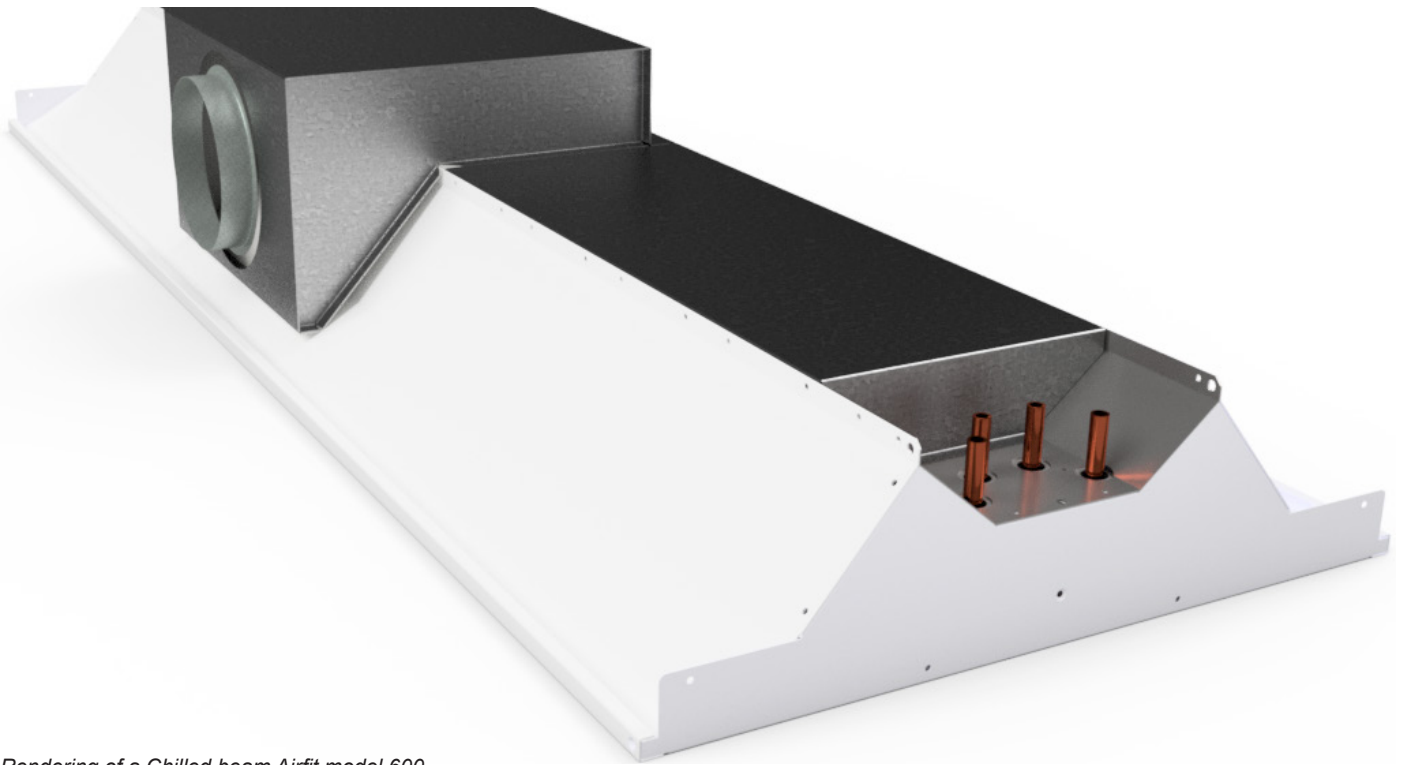




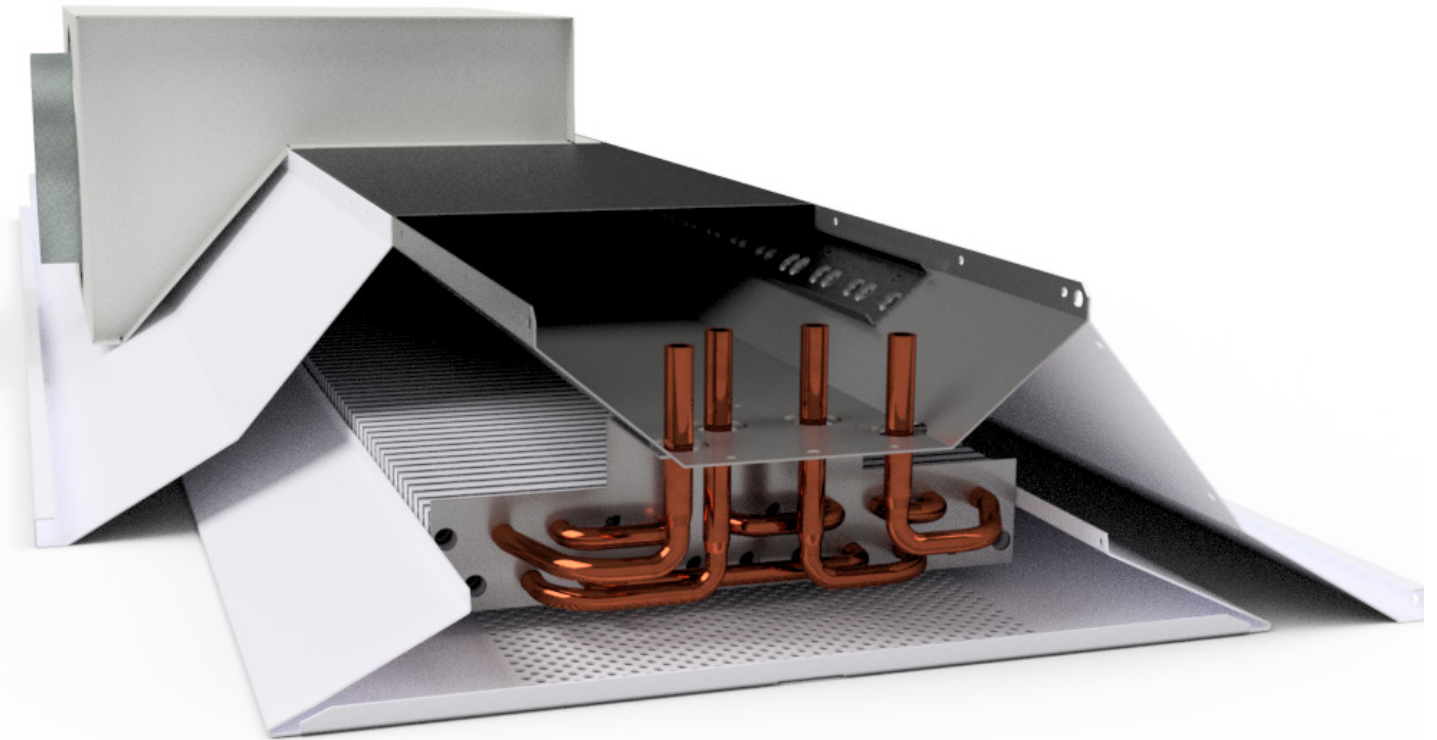
CHILLED BEAM SYSTEMS

AIR-FIT® TYPE





Rendering of a Chilled beam Airfit model 600



Cross section rendering of a Chilled beam Airfit model 600

Composition type designation:

A	3	O	4	1	7	9	4	-	2	9	5	O	O	B	B	B	O
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

Position	Code	Description
1 + 2	A3	Product AIR-FIT®
3	O 1	Type Standard Non standard, specify separately
4	4 1	Finish RAL 9010, 70% gloss grade (standard) Non standard, specify separately
5 + 6 + 7 + 8		Length Actual front length in mm (according to customer specifications)
9		<i>Hyphen between length and width</i>
10 + 11 + 12	...	Width Standard width in mm (according to customer specifications)
13	L/R O	Connection Waterside connection (left / right) Top connection (plenum box type B)
14	O 1	Options Standard Special options, specify separately
15	S B V 1	Plenum box Plenum box with side connection Plenum box with top connection Side connection on plenum box with reduced height (model 300 only) Special plenum box
16	A B C D 1	Coil configuration 2-Pipe configuration 4-Pipe configuration High capacity, 2-pipe configuration (model 600 only) High capacity, 4-pipe configuration (model 600 only) Special configuration
17	A B C D E F G H 1 O	Nozzle plate Nozzle type 1, not adjustable Nozzle type 2, not adjustable Nozzle type 3, not adjustable Nozzle type 4, not adjustable Nozzle type 5, not adjustable Nozzle type 6, not adjustable Nozzle type 2 or 3, adjustable Nozzle type 4 or 5, adjustable Special nozzle type (according to drawing) Not applicable (without nozzles)
18	O B C D E	Nozzle position in case of an adjustable nozzle type Not adjustable Position 2 (with nozzle plate G only, nozzle type 2) Position 3 (with nozzle plate G only, nozzle type 3) Position 4 (with nozzle plate H only, nozzle type 4) Position 5 (with nozzle plate H only, nozzle type 5)

Connections (top view):

Connection O = plenum box type B



Connection L = water left side



Connection R = water right side



Technical data

Features AIR-FIT® chilled beams

High capacity

The active chilled beam has a high cooling and heating capacity and is suitable to ventilate, cool and heat (commercial) buildings. Model 600 can be supplied with a different coil type, suitable for high capacity solutions (additional cost).

Compact in size

A chilled beam with a size of only 1800 x 300 mm, 10 m² office space is supplied with sufficient ventilated air, cooling and heating. In addition, the active chilled beam is relatively light weight and needs minimum installation space.

Simplicity in mounting

With a width of 295 or 595 mm, the active chilled beam can be easily integrated into suspended ceilings with exposed T or bolt-slot systems for intermediate mounting.

Low noise

The efficiently shaped nozzles create (at minimal primary air pressure) a maximum induction at a minimum sound level.

Low maintenance

The active chilled beam has no filter, no fan or any other moving parts, therefore maintenance is limited to cleaning the heat exchanger occasionally. The heat exchanger can be accessed simply by removing the bottom panel, which is equipped with a safety catch.

Controls

The active chilled beam can be controlled in many different ways. We can provide a solution for every (integrated) application. For support please contact us.

Ceiling location

The active chilled beam will supply air into the room through two opposite slots. In office applications the unit can be located in the middle of the room, either perpendicular or parallel to the facade.

Flexibility

The active chilled beam is available in different lengths. This makes it possible to select the necessary capacity for every installation.

Plenum box variety

The standard active chilled beam is supplied with a top or side connection.

AIR-FIT® model 300

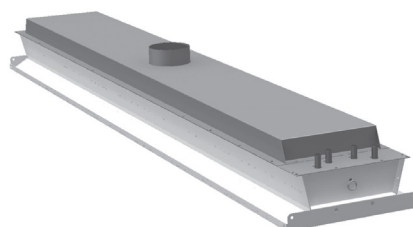


Finish

- RAL 9010, 70% gloss grade (standard)
- A different finish available on request

Plenum box

- Galvanised sheet steel
- Airside connection(s) top or side
- Uninsulated (standard) or insulated (optional)



AIR-FIT® model 600

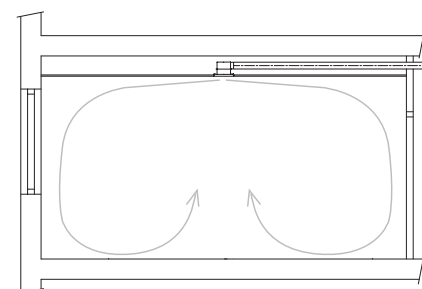
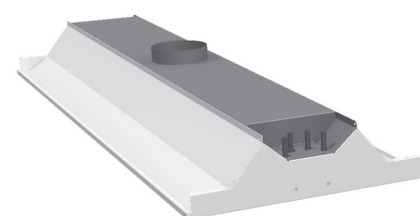


Maintenance

- Removable front panel which is equipped with a safety catch

Heat exchanger

- Waterside connection R/L (see page...)
- 2-pipe or 4-pipe system
- Standard or high capacity
- Tubes: copper
- Fins: aluminium
- Pressure tested: 15 bar
- Blackened coils (optional)

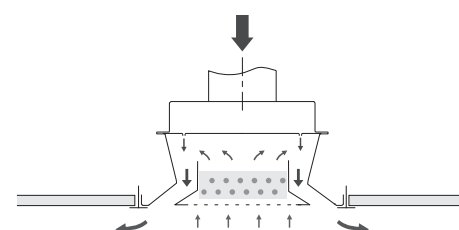
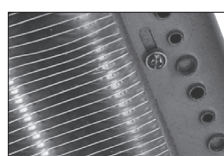


Air distribution AIR-FIT®

Adjustable nozzle types

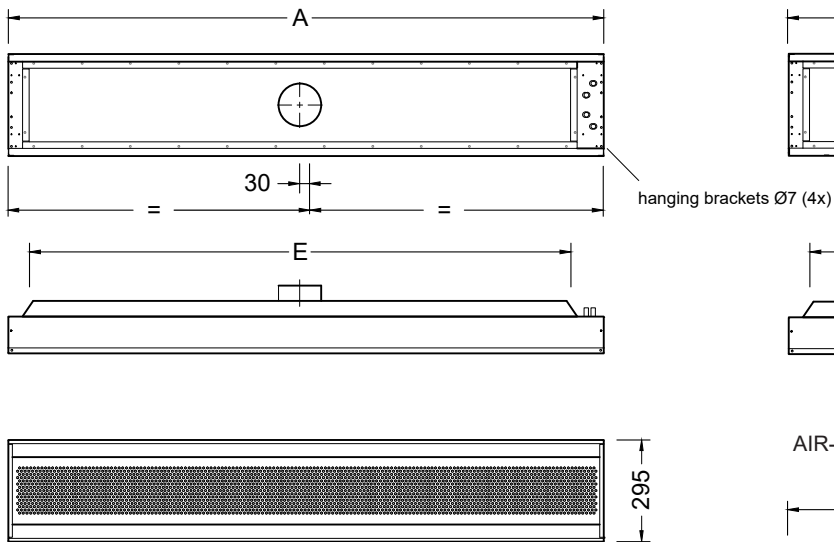
The active chilled beam is standard equipped with a fixed nozzle position for the required fresh air discharge. Optionally an adjustable nozzle bar is available. In this case adjusting the nozzles after mounting is possible.

Available options are: adjustable between nozzle size 2 and 3 or 4 and 5. Air connection of largest nozzle size will be provided.

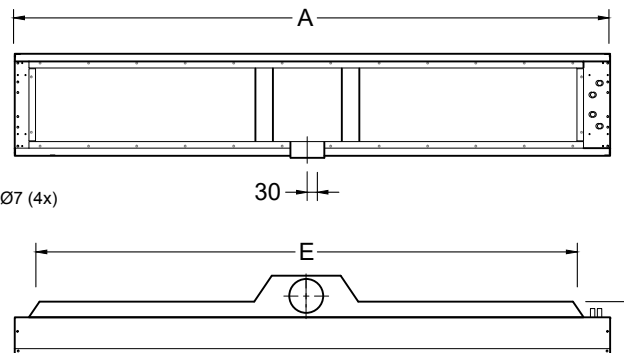


Operating principle of the AIR-FIT®

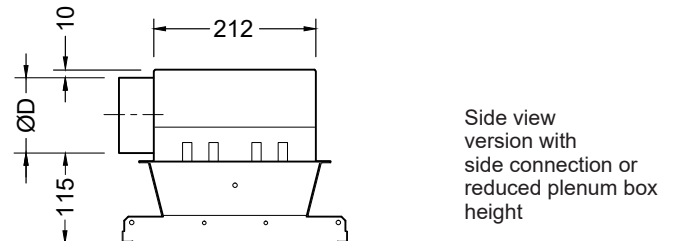
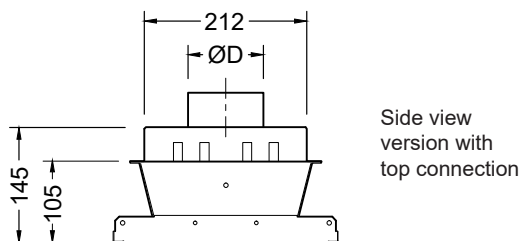
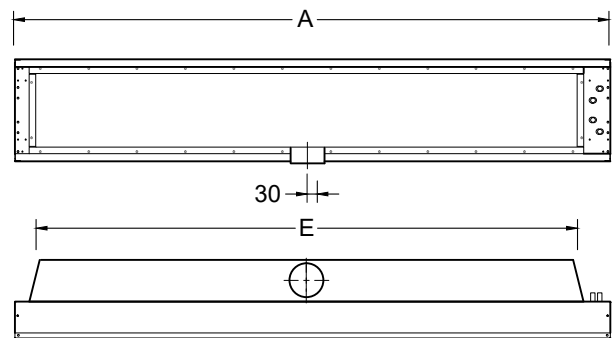
AIR-FIT® with top connection (standard)



AIR-FIT® with reduced plenum box height (optional)



AIR-FIT® with side connection (optional)



Dimensions AIR-FIT® 300

Model	600	1200	1500	1800	2400	3000
A (standard)	594	1194	1494	1794	2394	2994
A (minimum)	594	1118	1418	1718	2318	2918
D ⁵	Ø 98	Ø 98 - Ø 123	Ø 98 - Ø 158	Ø 98 - Ø 158	Ø 123 - Ø 198	Ø 123 - Ø 198
E	480	1000	1300	1600	2200	2800
Weight (kg) ³	7,5	14,0	17,0	20,5	27,0	34,0

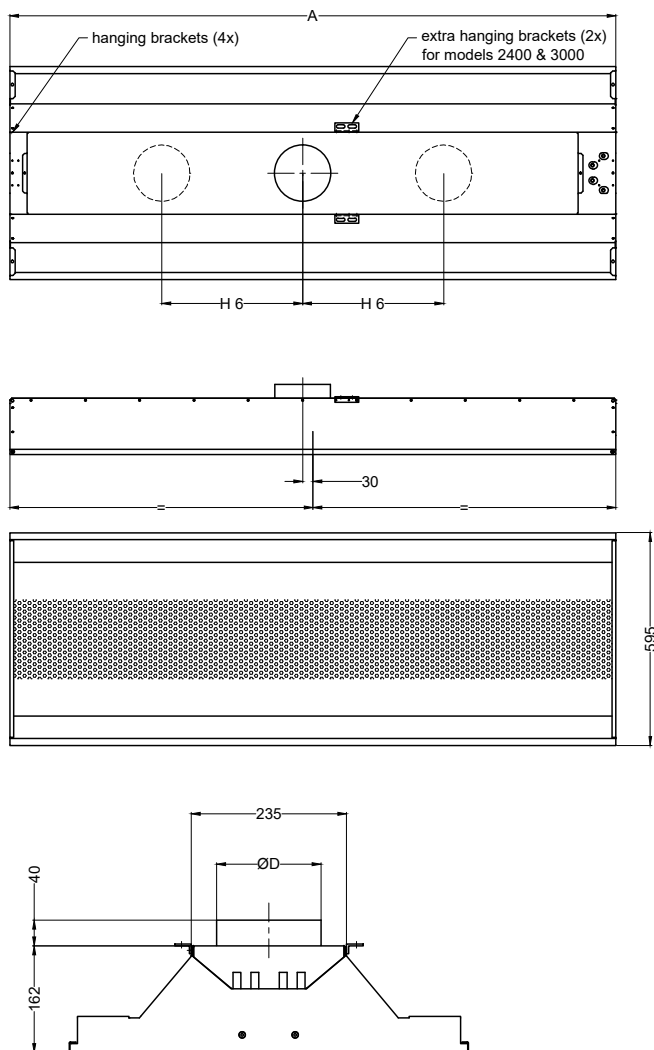
Notes dimensional data:

- Measurement in mm.
- Weight in kg including the water contents based on a unit with side connection, standard 4-pipe coil and adjustable nozzle.
- The length of the active chilled beam depends on the ceiling type (please consult your ceiling supplier for the exact measurements). The exact length needs to be specified when ordering.
- The diameter of the inlet depends on the nozzle type (see table page 25).

Chilled beam systems AIR-FIT®

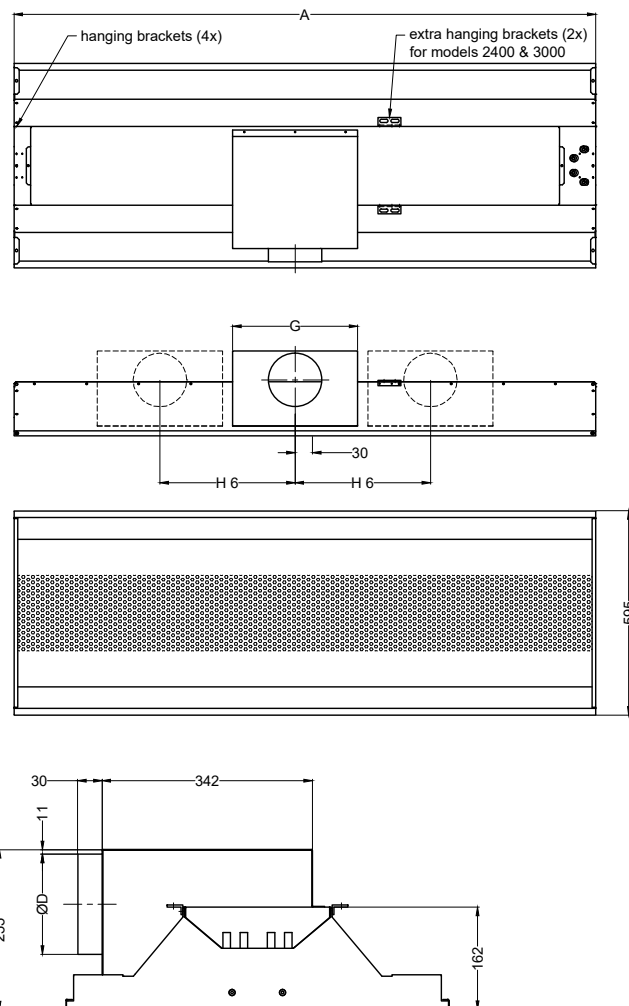
Dimensions model 600

AIR-FIT® with top connection (standard)



Side view
Version with top connection

AIR-FIT® with side connection (optional)



Side view
Version with side connection

Dimensions AIR-FIT® 600

Model	600	1200	1500	1800	2400	3000
A (standaard)	594	1194	1494	1794	2394	2994
A (minimaal)	594	1118	1418	1718	2318	2918
D ⁵	Ø 98	Ø 98 - Ø 158	Ø 98 - Ø 198	Ø 123 - Ø 198	Ø 123 - 2 x Ø 160	Ø 123 - 2 x Ø 198
G	370	370	370	370	370 - 2 x 370	370 - 2 x 370
H	nvt	nvt	nvt	nvt	nvt - 540 ⁶	nvt - 690 ⁶
Massa (kg) ³	12,5	23,5	28,0	33,5	45,0	55,0

Notes dimensional data:

1. Measurement in mm.
2. Weight in kg including the water contents based on a unit with side connection, standard 4-pipe coil and adjustable nozzle.
3. The length of the active chilled beam depends on the ceiling type (please consult your ceiling supplier for the exact measurements). The exact length needs to be specified when ordering.
4. The diameter of the inlet depends on the nozzle type (see selection tables).
5. Models 2400 and 3000 are equipped with one or two airside connections, the exact number depends on the chosen nozzle type (see table on page 25).

The data mentioned in this document can be used as an indication.

For an exact selection we refer to the selection software which is available at our website www.beamadvisor.nl.

Given:

Office space (L x W x H)	=	5.4 x 3.6 x 2.7 m
Required active chilled beam type	=	1800 x 300 mm, 2x
Fresh air supply (2-way ventilation) q_1	=	106 m³/h, 53 m³/h per active chilled beam
Required cooling capacity at 25 °C room temperature (T_{room}), 55% RV P_{tot}	=	1000 W (500 W / unit)
Required heating capacity at 20 °C room temperature (T_{room}) P_{tot}	=	1000 W (500 W / unit)
Temperature cooling water $T_{w,in}$	=	16 °C
Temperature heating water $T_{w,in}$	=	40 °C
Temperature air supply, summer T_1	=	17 °C
Temperature air supply, winter T_1	=	17 °C

Solution:

For the selection the tables on page 11 (cooling) and 14 (heating) are used, belonging to model 1800 x 300.

Please select the exact nozzle first. Each nozzle type as stated in the table has got a minimum (q_{min}) and a maximum (q_{max}) air quantity.

By interpolation an indication for the intermediate value can be obtained.

Nozzle type	Selection from the table, based upon an acceptable static pressure, sound power level and throw.	2
Static pressure, airsided	<i>Calculation:</i> $\Delta p = (q_1 / q_{max})^2 \Delta p_{max} = (53 / 85)^2 \cdot 200 = 78 \text{ Pa}$	78 Pa
Throw	<i>Interpolating throw data</i> Throw per m³/h (W_{m3}) for nozzle 2: $W_{m3} = (W_{max} - W_{min}) / (q_{max} - q_{min}) = (3,7 - 1,7) / (85 - 45) = 0,05 \text{ m}^3/\text{h}$ Throw at 53 m³/h = $1,7 + (53-45) \cdot 0,05 = 2,3 \text{ m}$ Note: in winter situations the throw is of no importance because heated air will not cause any draft.	2,3 m
Sound power level	<i>Interpolating sound power level data</i> Sound power level per m³/h ($L_{w,m3}$) for nozzle 2: $L_{w,m3} = (L_{w,max} - L_{w,min}) / (q_{max} - q_{min}) = (39 - 22) / (85 - 45) = 0,43 \text{ dB/m}^3/\text{h}$ Sound power level at 53 m³/h = $21 + (53-45) \cdot 0,43 = 24 \text{ dB(A)}$	24 dB(A)
Summer situation:		
Cooling capacity fresh air	<i>Please use the calculation help as stated beneath the table:</i> $P_L = 0,335 \cdot q_1 \cdot (T_{ruimte} - T_1) = 0,335 \cdot 53 \cdot (25-16) = 160 \text{ W}$	160 W
Required cooling capacity water	$P_w = P_{tot} - P_L = 500 - 160 = 340 \text{ W}$	340 W
Watersided power level	<i>Interpolating coil data</i> Power level per m³/h ($P_{L,m3}$) at $\Delta T=10\text{K}$ and q_w 170 l/h: $P_{L,m3} = (P_{w,max} - P_{w,min}) / (q_{max} - q_{min}) = (540 - 375) / (85 - 45) = 4,1 \text{ W/m}^3/\text{h}$ Power level at 53 m³/h = $375 + (53-45) \cdot 4,1 = 408 \text{ W}$ $\Delta T=9\text{K}$ leads to approximately 12% reduction (see calculation help as stated beneath the table) $P_{w,9} = 408 / 1,12 = 364 \text{ W}$	364 W
Water quantity	See table	170 l/h
Pressure loss, watersided	See table	10,5 kPa
ΔT_w (water out - water in)	$\Delta T = P_w / (q_w \cdot 1,16) = 364 / (170 \cdot 1,16)$	1,85 K
Winter situation:		
Heating capacity fresh air	$P_L = 0,335 \cdot q_1 \cdot (T_{air} - T_{room}) = 0,335 \cdot 53 \cdot (17-20) = -53 \text{ W}$	-53 W
Required capacity water	$P_w = P_{tot} - P_L = 500 - (-53) = 553 \text{ W}$	553 W
Watersided power level	<i>Interpolating coil data</i> Power level per m³/h at $\Delta T=20\text{K}$ and q_w 50 l/h: $P_{L,m3} = (P_{w,max} - P_{w,min}) / (q_{max} - q_{min}) = (670 - 540) / (85 - 45) = 3,3 \text{ W/m}^3/\text{h}$ Power level at 53 m³/h = $540 + (53-45) \cdot 3,3 = 566 \text{ W}$	566 W
Water quantity	See table	50 l/h
Pressure loss, watersided	See table	0,8 kPa
ΔT_w (water in - water out)	$\Delta T = P_w / (q_w \cdot 1,16) = 566 / (50 \cdot 1,16) = 9,8$	9,8 K

Calculation help:

Cooling capacity air $P_L = 0,335 \cdot (T_{room} - T_{air}) \cdot q_1$

Temperature difference between water in and out $(T_{water,out} - T_{water,in}) = P_w / (1,16 \cdot q_w)$

Cooling capacity of the temperature difference $(T_{room} - T_{water,in})$ which leads to an extra capacity of 12% per degree.

If several units are connected together, this will lead to an extended throw of 10%.

Chilled beam systems AIR-FIT®

Quick selection model 300, cooling

AIR-FIT® model 300 - nominal length = 600 mm

AIR	Nozzle		1		2		3		4		5		6	
	Ø D	mm	98		98		98		98		98		98	
	q ₁	m ³ /h	8	14	12	22	20	40	25	50	30	60	40	75
		l/s	2	4	3	6	6	11	7	14	8	17	11	21
	p _{st}	Pa	65	200	55	185	50	190	50	190	50	195	55	195
	L _{wA}	dB(A)	--	32	--	32	--	37	--	43	21	44	24	42
		NC	--	27	--	27	--	32	--	38	--	39	--	37
	L _{pA}	dB(A)	--	22	--	22	--	27	--	33	--	34	--	32
		NC	--	--	--	--	--	22	--	28	--	29	--	27
	W	m	0,7	1,8	1,1	2,4	1,8	3,2	1,9	3,4	2,2	3,6	2,6	3,9
WATER	P _{L,7K}	W	20	35	30	50	45	95	60	115	70	140	95	175
	P _{L,10K}	W	25	45	40	75	65	135	85	170	100	200	135	250
	q _w [l/h]	135												
	Δp _w [kPa]	3,2												
	P _{w,7K}	W	55	90	65	105	80	135	80	135	85	140	100	150
	P _{w,10K}	W	85	135	95	155	120	200	120	200	125	210	145	220
	q _w [l/h]	270												
	Δp _w [kPa]	10,5												
	P _{w,7K}	W	65	100	70	115	90	150	90	150	95	155	110	165
	P _{w,10K}	W	90	145	105	170	130	220	130	220	140	235	160	250

AIR-FIT® model 300 - nominal length = 1200 mm

AIR	Nozzle		1		2		3		4		5		6	
	Ø D	mm	98		98		98		123		123		123	
	q ₁	m ³ /h	16	32	25	50	45	90	55	105	65	120	85	145
		l/s	4	9	7	14	13	25	15	29	18	33	24	40
	p _{st}	Pa	55	215	50	205	50	205	50	175	50	165	50	150
	L _{wA}	dB(A)	--	37	--	37	25	45	24	45	26	45	30	45
		NC	--	32	--	32	20	40	--	40	21	40	25	40
	L _{pA}	dB(A)	--	27	--	27	--	35	--	35	--	35	20	35
		NC	--	22	--	22	--	30	--	30	--	30	--	30
	W	m	0,7	2,6	1,4	3,3	2,5	4,4	2,6	4,4	2,9	4,6	3,4	4,9
WATER	P _{L,7K}	W	40	75	60	115	105	210	130	245	150	280	200	340
	P _{L,10K}	W	55	105	85	170	150	300	185	350	220	400	285	485
	q _w [l/h]	105												
	Δp _w [kPa]	3,3												
	P _{w,7K}	W	120	195	140	220	175	250	175	245	180	250	200	255
	P _{w,10K}	W	175	290	205	325	260	380	260	370	270	370	295	380
	q _w [l/h]	210												
	Δp _w [kPa]	10,6												
	P _{w,7K}	W	125	210	145	245	190	305	185	290	195	295	220	310
	P _{w,10K}	W	180	310	215	355	280	440	275	420	285	430	320	445

Notes:

1. Explanation of the symbols used and selection parameters is available on page 23.
2. Sound pressure levels include 10 dB/Oct. room absorption.
3. Sound power / pressure levels less than NC 20 are indicated by "--".

Please use the selection software on www.beamadvisor.com for a more extensive selection

AIR-FIT® model 300 - nominal length = 1500 mm

AIR	Nozzle		1		2		3		4		5		6	
	Ø D	mm	98		98		123		123		158		158	
	q _i	m ³ /h	22	44	35	70	60	120	75	130	90	160	115	200
		l/s	6	12	10	19	17	33	21	36	25	44	32	56
	p _{st}	Pa	55	220	55	210	50	190	50	145	50	155	50	155
	L _{WA}	dB(A)	--	38	21	40	24	43	28	45	27	45	29	45
		NC	--	33	--	35	--	38	23	40	22	40	24	40
	L _{PA}	dB(A)	--	28	--	30	--	33	--	35	--	35	--	35
		NC	--	23	--	25	--	28	--	30	--	30	--	30
	W	m	0,7	2,7	1,5	3,5	2,6	4,6	2,8	4,4	3,1	4,8	3,6	5,2

WATER	q _w [l/h]	95												
	Δp _w [kPa]	3,3												
	P _{W,7K}	W	160	245	185	275	220	320	220	295	230	310	250	335
	P _{W,10K}	W	235	365	275	410	330	460	330	435	345	455	370	475
	q _w [l/h]	190												
	Δp _w [kPa]	10,8												
	P _{W,7K}	W	170	280	200	315	245	390	245	350	260	375	280	410
	P _{W,10K}	W	255	410	300	465	365	550	365	505	385	535	415	570

AIR-FIT® model 300 - nominal length = 1800 mm

AIR	Nozzle		1		2		3		4		5		6	
	Ø D	mm	98		123		123		158		158		158	
	q _i	m ³ /h	27	55	45	85	75	140	95	165	110	185	140	210
		l/s	8	15	13	24	21	39	26	46	31	51	39	58
	p _{st}	Pa	55	220	55	200	50	170	50	150	50	135	50	110
	L _{WA}	dB(A)	--	39	22	39	27	45	27	45	29	45	33	45
		NC	--	34	--	34	22	40	22	40	24	40	28	40
	L _{PA}	dB(A)	--	29	--	29	--	35	--	35	--	35	23	35
		NC	--	24	--	24	--	30	--	30	--	30	--	30
	W	m	0,8	2,9	1,7	3,7	2,7	4,6	3,0	4,7	3,2	4,8	3,7	5,0

WATER	q _w [l/h]	85												
	Δp _w [kPa]	3,2												
	P _{W,7K}	W	190	280	225	300	255	325	260	320	265	320	280	320
	P _{W,10K}	W	280	420	335	450	385	475	390	470	395	470	420	475
	q _w [l/h]	170												
	Δp _w [kPa]	10,5												
	P _{W,7K}	W	205	330	250	375	295	450	300	430	305	435	330	435
	P _{W,10K}	W	305	490	365	540	435	625	440	605	450	605	485	610

Notes:

1. Explanation of the symbols used and selection parameters is available on page 23.
2. Sound pressure levels include 10 dB/Oct. room absorption.
3. Sound power / pressure levels less than NC 20 are indicated by "--".

Please use the selection software on www.beamadvisor.com for a more extensive selection

Chilled beam systems AIR-FIT®

Quick selection model 300, cooling

AIR-FIT® model 300 - nominal length = 2400 mm

AIR	Nozzle		1		2		3		4		5		6	
	Ø D	mm	123		123		158		158		198		198	
	q ₁	m ³ /h	38	75	60	120	105	195	130	200	160	240	200	260
		l/s	11	21	17	33	29	54	36	56	44	67	56	72
	p _{st}	Pa	55	215	50	205	50	170	50	115	50	120	50	85
	L _{WA}	dB(A)	21	40	23	43	27	45	32	45	32	45	36	45
		NC	--	35	--	38	22	40	27	40	27	40	31	40
	L _{PA}	dB(A)	--	30	--	33	--	35	22	35	22	35	26	35
		NC	--	25	--	28	--	30	--	30	--	30	21	30
	W	m	0,8	3,0	1,7	3,9	2,9	4,8	3,0	4,4	3,5	4,8	4,0	4,8
WATER	P _{L,7K}	W	90	175	140	280	245	455	305	470	375	565	470	610
	P _{L,10K}	W	125	250	200	400	350	655	435	670	535	805	670	870
	q _w [l/h]	180	290 460		340 530		415 635		415 545		440 575		470 560	
	Δp _w [kPa]	3,2												
	P _{W,7K}	W												
	P _{W,10K}	W	420 655		490 730		600 820		595 745		630 775		665 760	
	q _w [l/h]	360												
	Δp _w [kPa]	10,4												
	P _{W,7K}	W	315	525	370	620	465	755	465	640	500	680	540	660
	P _{W,10K}	W	455	740	535	850	665	985	660	870	710	915	760	890

AIR-FIT® model 300 - nominal length = 3000 mm

AIR	Nozzle		1		2		3		4		5		6	
	Ø D	mm	123		158		158		198		198		198	
	q ₁	m ³ /h	50	100	80	155	140	210	170	250	200	260	260	270
		l/s	14	28	22	43	39	58	47	69	56	72	72	75
	p _{st}	Pa	55	225	55	205	50	115	50	105	50	80	50	55
	L _{WA}	dB(A)	23	42	24	43	33	45	33	45	37	45	44	45
		NC	--	37	--	38	28	40	28	40	32	40	39	40
	L _{PA}	dB(A)	--	32	--	33	23	35	23	35	27	35	34	35
		NC	--	27	--	28	--	30	--	30	22	30	29	30
	W	m	0,9	3,1	1,8	3,9	3,0	4,3	3,1	4,4	3,4	4,3	4,0	4,2
WATER	P _{L,7K}	W	115	235	190	365	330	490	400	585	470	610	610	635
	P _{L,10K}	W	170	335	270	520	470	705	570	840	670	870	870	905
	q _w [l/h]	165	365 585		430 665		525 690		515 665		535 635		590 605	
	Δp _w [kPa]	3,4												
	P _{W,7K}	W												
	P _{W,10K}	W	520 790		605 860		730 880		720 865		740 840		795 810	
	q _w [l/h]	330												
	Δp _w [kPa]	10,9												
	P _{W,7K}	W	400	675	475	780	600	820	585	785	610	745	680	700
	P _{W,10K}	W	570	910	670	1015	825	1050	810	1020	840	985	915	940

Notes:

1. Explanation of the symbols used and selection parameters is available on page 23.
2. Sound pressure levels include 10 dB/Oct. room absorption.
3. Sound power / pressure levels less than NC 20 are indicated by "--".

Please use the selection software on www.beamadvisor.com for a more extensive selection

AIR-FIT® model 300 - nominal length = 600 mm

AIR	Nozzle		1		2		3		4		5		6	
	Ø D	mm	98		98		98		98		98		98	
	q _t	m ³ /h	8	14	12	22	20	40	25	50	30	60	40	75
		l/s	2	4	3	6	6	11	7	14	8	17	11	21
	P _{st}	Pa	65	200	55	185	50	190	50	190	50	195	55	195
	L _{WA}	dB(A)	--	32	--	32	--	37	--	43	21	44	24	42
		NC	--	27	--	27	--	32	--	38	--	39	--	37
	L _{PA}	dB(A)	--	22	--	22	--	27	--	33	--	34	--	32
		NC	--	--	--	--	--	22	--	28	--	29	--	27
	P _{L,-3K}	W	-10	-15	-10	-20	-20	-40	-25	-50	-30	-60	-40	-75
	P _{L,-2K}	W	-5	-10	-10	-15	-15	-25	-15	-35	-20	-40	-25	-50

WATER	q _w [l/h]	50												
	Δp _w [kPa]	0,4												
	P _{W,20K}	W	160	230	180	250	210	300	210	300	220	310	240	320
	P _{W,35K}	W	280	410	310	460	380	540	380	540	400	560	440	590
	q _w [l/h]	100												
	Δp _w [kPa]	1,2												
	P _{W,20K}	W	170	260	190	290	240	350	240	350	250	360	280	380
	P _{W,35K}	W	290	450	340	510	410	620	410	620	440	640	490	670

AIR-FIT® model 300 - nominal length = 1200 mm

AIR	Nozzle		1		2		3		4		5		6	
	Ø D	mm	98		98		98		123		123		123	
	q _t	m ³ /h	16	32	25	50	45	90	55	105	65	120	85	145
		l/s	4	9	7	14	13	25	15	29	18	33	24	40
	P _{st}	Pa	55	215	50	205	50	205	50	175	50	165	50	150
	L _{WA}	dB(A)	--	37	--	37	25	45	24	45	26	45	30	45
		NC	--	32	--	32	20	40	--	40	21	40	25	40
	L _{PA}	dB(A)	--	27	--	27	--	35	--	35	--	35	20	35
		NC	--	22	--	22	--	30	--	30	--	30	--	30
	P _{L,-3K}	W	-15	-30	-25	-50	-45	-90	-55	-105	-65	-120	-85	-145
	P _{L,-2K}	W	-10	-20	-15	-35	-30	-60	-35	-70	-45	-80	-55	-95

WATER	q _w [l/h]	50												
	Δp _w [kPa]	0,5												
	P _{W,20K}	W	310	440	350	480	410	540	410	530	420	530	450	540
	P _{W,35K}	W	540	800	610	870	740	1000	730	980	750	990	810	1010
	q _w [l/h]	100												
	Δp _w [kPa]	1,8												
	P _{W,20K}	W	330	520	380	570	480	670	470	650	490	660	530	680
	P _{W,35K}	W	560	920	660	1020	840	1200	830	1170	860	1180	940	1220

Notes:

1. Explanation of the symbols used and selection parameters is available on page 23.
2. Sound pressure levels include 10 dB/Oct. room absorption.
3. Sound power / pressure levels less than NC 20 are indicated by "--".

Please use the selection software on www.beamadvisor.com for a more extensive selection

Chilled beam systems AIR-FIT®

Quick selection model 300, heating

AIR-FIT® model 300 - nominal length = 1500 mm

AIR	Nozzle		1		2		3		4		5		6	
	Ø D	mm	98		98		123		123		158		158	
	q ₁	m ³ /h	22	44	35	70	60	120	75	130	90	160	115	200
		l/s	6	12	10	19	17	33	21	36	25	44	32	56
	p _{st}	Pa	55	220	55	210	50	190	50	145	50	155	50	155
	L _{WA}	dB(A)	--	38	21	40	24	43	28	45	27	45	29	45
		NC	--	33	--	35	--	38	23	40	22	40	24	40
	L _{PA}	dB(A)	--	28	--	30	--	33	--	35	--	35	--	35
		NC	--	23	--	25	--	28	--	30	--	30	--	30
	P _{L,-3K}	W	-20	-45	-35	-70	-60	-120	-75	-130	-90	-160	-115	-200
	P _{L,-2K}	W	-15	-30	-25	-45	-40	-80	-50	-85	-60	-105	-75	-135

WATER	q _w [l/h]	50												
	Δp _w [kPa]	0,7												
	P _{W,20K}	W	400	540	440	580	500	640	500	610	510	630	540	650
	P _{W,35K}	W	710	980	790	1060	910	1180	910	1120	940	1160	990	1210
	q _w [l/h]	100												
	Δp _w [kPa]	2,1												
	P _{W,20K}	W	440	660	510	740	600	830	600	780	630	820	670	850
	P _{W,35K}	W	760	1180	890	1310	1070	1490	1070	1400	1120	1460	1190	1520

AIR-FIT® model 300 - nominal length = 1800 mm

AIR	Nozzle		1		2		3		4		5		6	
	Ø D	mm	98		123		123		158		158		158	
	q ₁	m ³ /h	27	55	45	85	75	140	95	165	110	185	140	210
		l/s	8	15	13	24	21	39	26	46	31	51	39	58
	p _{st}	Pa	55	220	55	200	50	170	50	150	50	135	50	110
	L _{WA}	dB(A)	--	39	22	39	27	45	27	45	29	45	33	45
		NC	--	34	--	34	22	40	22	40	24	40	28	40
	L _{PA}	dB(A)	--	29	--	29	--	35	--	35	--	35	23	35
		NC	--	24	--	24	--	30	--	30	--	30	--	30
	P _{L,-3K}	W	-25	-55	-45	-85	-75	-140	-95	-165	-110	-185	-140	-210
	P _{L,-2K}	W	-20	-35	-30	-55	-50	-95	-65	-110	-75	-125	-95	-140

WATER	q _w [l/h]	50												
	Δp _w [kPa]	0,8												
	P _{W,20K}	W	490	630	540	670	590	720	600	710	600	710	630	710
	P _{W,35K}	W	840	1130	950	1210	1060	1320	1060	1290	1080	1290	1130	1300
	q _w [l/h]	100												
	Δp _w [kPa]	2,5												
	P _{W,20K}	W	520	800	620	870	730	960	730	940	750	940	790	950
	P _{W,35K}	W	920	1420	1100	1550	1290	1730	1300	1690	1330	1690	1410	1700

Notes:

1. Explanation of the symbols used and selection parameters is available on page 23.
2. Sound pressure levels include 10 dB/Oct. room absorption.
3. Sound power / pressure levels less than NC 20 are indicated by "--".

Please use the selection software on www.beamadvisor.com for a more extensive selection

AIR-FIT® model 300 - nominal length = 2400 mm

AIR	Nozzle		1		2		3		4		5		6	
	Ø D	mm	123		123		158		158		198		198	
	q ₁	m ³ /h	38	75	60	120	105	195	130	200	160	240	200	260
		l/s	11	21	17	33	29	54	36	56	44	67	56	72
	p _{st}	Pa	55	215	50	205	50	170	50	115	50	120	50	85
	L _{WA}	dB(A)	21	40	23	43	27	45	32	45	32	45	36	45
		NC	--	35	--	38	22	40	27	40	27	40	31	40
	L _{PA}	dB(A)	--	30	--	33	--	35	22	35	22	35	26	35
		NC	--	25	--	28	--	30	--	30	--	30	21	30
	P _{L,-3K}	W	-40	-75	-60	-120	-105	-195	-130	-200	-160	-240	-200	-260
	P _{L,-2K}	W	-25	-50	-40	-80	-70	-130	-85	-135	-105	-160	-135	-175

WATER	q _w [l/h]	50												
	Δp _w [kPa]	1,0												
	P _{W,20K}	W	640	790	690	840	760	900	760	850	780	870	800	860
	P _{W,35K}	W	1060	1410	1170	1520	1330	1640	1320	1540	1370	1580	1430	1560
	q _w [l/h]	100												
	Δp _w [kPa]	3,3												
	P _{W,20K}	W	620	930	720	1030	860	1140	860	1050	900	1090	950	1070
	P _{W,35K}	W	1230	1830	1410	2030	1690	2240	1680	2070	1770	2130	1870	2100

AIR-FIT® model 300 - nominal length = 3000 mm

AIR	Nozzle		1		2		3		4		5		6	
	Ø D	mm	123		158		158		198		198		198	
	q ₁	m ³ /h	50	100	80	155	140	210	170	250	200	260	260	270
		l/s	14	28	22	43	39	58	47	69	56	72	72	75
	p _{st}	Pa	55	225	55	205	50	115	50	105	50	80	50	55
	L _{WA}	dB(A)	23	42	24	43	33	45	33	45	37	45	44	45
		NC	--	37	--	38	28	40	28	40	32	40	39	40
	L _{PA}	dB(A)	--	32	--	33	23	35	23	35	27	35	34	35
		NC	--	27	--	28	--	30	--	30	22	30	29	30
	P _{L,-3K}	W	-50	-100	-80	-155	-140	-210	-170	-250	-200	-260	-260	-270
	P _{L,-2K}	W	-35	-65	-55	-105	-95	-140	-115	-170	-135	-175	-175	-180

WATER	q _w [l/h]	50												
	Δp _w [kPa]	1,2												
	P _{W,20K}	W	760	900	800	940	870	950	860	940	880	930	910	910
	P _{W,35K}	W	1370	1630	1450	1700	1570	1720	1560	1700	1580	1680	1630	1650
	q _w [l/h]	100												
	Δp _w [kPa]	4,0												
	P _{W,20K}	W	930	1250	1030	1340	1170	1360	1160	1340	1190	1310	1250	1270
	P _{W,35K}	W	1660	2220	1840	2370	2090	2420	2070	2380	2110	2320	2230	2260

Notes:

1. Explanation of the symbols used and selection parameters is available on page 23.
2. Sound pressure levels include 10 dB/Oct. room absorption.
3. Sound power / pressure levels less than NC 20 are indicated by "--".

Please use the selection software on www.beamadvisor.com for a more extensive selection

Chilled beam systems AIR-FIT®

Quick selection model 600, cooling

AIR-FIT® model 600 - nominal length = 600 mm

AIR	Nozzle		1		2		3		4		5		6	
	Ø D	mm	98		98		98		98		98		98	
	q ₁	m ³ /h	9	18	15	30	24	48	32	62	38	73	45	75
	p _{st}	Pa	49	198	51	202	51	203	52	195	51	189	51	142
	L _{wA}	dB(A)	--	25	--	29	--	34	22	41	26	45	31	45
	L _{pA}	dB(A)	--	--	--	--	--	24	--	31	--	35	21	35
	W	m	0,9	1,6	1,1	1,9	1,3	2,5	1,6	2,8	1,7	3,1	1,9	3,0
	P _{L,7K}	W	21	42	35	70	56	113	75	145	89	171	106	176
	P _{L,10K}	W	30	60	50	101	80	161	107	208	127	245	151	251

WATER Coil configuration A or B	q _w [l/h]	120												
	Δp _w [kPa]	3,4												
	P _{w,7K}	W	75	136	89	158	106	183	120	197	128	207	137	199
	P _{w,10K}	W	108	195	128	228	153	264	172	284	185	299	197	287
	q _w [l/h]	240												
	Δp _w [kPa]	11,1												
	P _{w,7K}	W	80	146	95	171	114	200	129	216	138	229	148	219
	P _{w,10K}	W	114	210	137	246	163	287	185	312	199	329	212	315

WATER Coil configuration type C or D	q _w [l/h]	240												
	Δp _w [kPa]	3,3												
	P _{w,7K}	W	89	163	106	191	127	223	143	242	154	255	165	244
	P _{w,10K}	W	128	235	153	276	182	322	206	349	222	369	237	353
	q _w [l/h]	480												
	Δp _w [kPa]	10,8												
	P _{w,7K}	W	93	172	111	203	133	239	151	261	162	276	174	264
	P _{w,10K}	W	133	247	159	292	191	343	216	374	233	397	250	379

Notes:

1. Explanation of the symbols used and selection parameters is available on page 23.
2. AIR-FIT® model 600 can be engineered with the standard coil (type A or B) or with a coil suitable for high capacities (type C or D).
3. Sound pressure levels include 10 dB/Oct. room absorption.
4. Sound power / pressure levels less than NC 20 are indicated by "--".

AIR-FIT® model 600 - nominal length = 1200 mm

AIR	Nozzle		1		2		3		4		5		6	
	Ø D	mm	98		123		158		158		158		158	
	q ₁	m ³ /h	22	43	35	70	56	112	75	150	90	180	105	190
	p _{st}	Pa	52	199	49	195	49	196	51	203	51	204	49	161
	L _{WA}	dB(A)	--	32	--	35	--	35	--	42	23	45	27	45
	L _{PA}	dB(A)	--	22	--	25	--	25	--	32	--	35	--	35
	W	m	1,1	1,8	1,2	2,2	1,5	2,8	1,8	3,4	2,0	3,8	2,2	3,7
	P _{L,7K}	W	52	101	82	164	131	263	176	352	211	422	246	446
	P _{L,10K}	W	74	144	117	235	188	375	251	503	302	603	352	637
WATER Coil configuration A or B	q _w [l/h]	90												
	Δp _w [kPa]	3,3												
	P _{w,7K}	W	183	284	204	309	235	336	257	353	272	365	282	361
	P _{w,10K}	W	265	412	296	448	340	483	374	503	395	513	410	510
	q _w [l/h]	180												
	Δp _w [kPa]	10,6												
	P _{w,7K}	W	197	322	222	358	258	402	287	435	306	458	320	449
	P _{w,10K}	W	284	464	320	515	372	575	413	618	441	647	460	636
WATER Coil configuration type C or D	q _w [l/h]	180												
	Δp _w [kPa]	3,3												
	P _{w,7K}	W	210	341	236	379	274	426	304	463	324	490	338	480
	P _{w,10K}	W	303	493	341	549	396	614	440	663	469	698	490	685
	q _w [l/h]	360												
	Δp _w [kPa]	10,6												
	P _{w,7K}	W	236	400	267	453	314	521	351	578	378	620	396	604
	P _{w,10K}	W	338	573	383	647	450	740	504	814	541	867	568	848

Notes:

1. Explanation of the symbols used and selection parameters is available on page 23.
2. AIR-FIT® model 600 can be engineered with the standard coil (type A or B) or with a coil suitable for high capacities (type C or D).
3. Sound pressure levels include 10 dB/Oct. room absorption.
4. Sound power / pressure levels less than NC 20 are indicated by "--".

Chilled beam systems AIR-FIT®

Quick selection model 600, cooling

AIR-FIT® model 600 - nominal length = 1500 mm

AIR	Nozzle		1		2		3		4		5		6	
	Ø D	mm	98		123		158		158		198		198	
	q ₁	m ³ /h	30	60	48	96	77	154	100	185	120	235	145	250
	p _{st}	Pa	52	206	49	196	49	198	48	165	48	186	50	149
	L _{WA}	dB(A)	--	39	24	41	--	40	26	45	25	45	30	45
	L _{PA}	dB(A)	--	29	--	31	--	30	--	35	--	35	--	35
	W	m	1,1	1,9	1,3	2,3	1,6	2,9	1,8	3,2	2,0	3,7	2,3	3,7
	P _{L,7K}	W	70	141	113	225	181	361	235	434	281	551	340	586
	P _{L,10K}	W	101	201	161	322	258	516	335	620	402	787	486	838
WATER Coil configuration A or B	q _w [l/h]	80												
	Δp _w [kPa]	3,3												
	P _{W,7K}	W	237	349	263	373	296	410	315	419	330	465	346	455
	P _{W,10K}	W	344	502	381	530	429	563	456	570	477	601	498	594
	q _w [l/h]	160												
	Δp _w [kPa]	10,6												
	P _{W,7K}	W	267	425	299	464	344	522	372	534	395	592	419	580
	P _{W,10K}	W	383	606	430	658	494	727	533	740	565	801	598	789
WATER Coil configuration type C or D	q _w [l/h]	160												
	Δp _w [kPa]	3,4												
	P _{W,7K}	W	275	430	308	469	352	529	379	542	401	609	425	595
	P _{W,10K}	W	399	624	446	678	511	754	550	770	582	846	616	830
	q _w [l/h]	320												
	Δp _w [kPa]	10,9												
	P _{W,7K}	W	312	518	352	576	410	665	445	684	476	777	510	758
	P _{W,10K}	W	448	740	506	817	588	931	638	955	682	1065	729	1043

Notes:

1. Explanation of the symbols used and selection parameters is available on page 23.
2. AIR-FIT® model 600 can be engineered with the standard coil (type A or B) or with a coil suitable for high capacities (type C or D).
3. Sound pressure levels include 10 dB/Oct. room absorption.
4. Sound power / pressure levels less than NC 20 are indicated by "--".

AIR-FIT® model 600 - nominal length = 1800 mm

AIR	Nozzle		1		2		3		4		5		6	
	Ø D	mm	123		158		158		198		198		198	
	q ₁	m ³ /h	40	75	60	120	100	190	130	240	155	250	180	250
	p _{st}	Pa	57	200	48	190	52	187	50	172	50	130	48	92
	L _{WA}	dB(A)	20	36	--	35	25	45	27	45	32	45	35	45
	L _{PA}	dB(A)	--	26	--	25	--	35	--	35	22	35	25	35
	W	m	1,0	2,4	1,3	3,1	1,9	4,2	2,4	4,8	2,7	4,7	3,0	4,4
	P _{L,7K}	W	94	176	141	281	235	446	305	563	363	586	422	586
	P _{L,10K}	W	134	251	201	402	335	637	436	804	519	838	603	838
WATER Coil configuration A or B	q _w [l/h]	75												
	Δp _w [kPa]	3,4												
	P _{W,7K}	W	267	372	283	392	326	413	345	423	359	418	368	408
	P _{W,10K}	W	387	544	411	574	474	604	503	617	524	610	538	598
	q _w [l/h]	150												
	Δp _w [kPa]	11,0												
	P _{W,7K}	W	330	496	353	538	416	589	448	614	472	601	488	577
	P _{W,10K}	W	475	715	508	774	599	844	645	876	680	860	704	827
WATER Coil configuration type C or D	q _w [l/h]	150												
	Δp _w [kPa]	3,4												
	P _{W,7K}	W	339	513	362	557	428	610	462	635	487	622	505	597
	P _{W,10K}	W	487	738	521	800	616	874	664	907	701	890	726	856
	q _w [l/h]	300												
	Δp _w [kPa]	11,1												
	P _{W,7K}	W	396	636	427	706	514	796	561	841	598	818	624	774
	P _{W,10K}	W	565	901	608	996	732	1115	797	1172	848	1142	884	1086

Notes:

1. Explanation of the symbols used and selection parameters is available on page 23.
2. AIR-FIT® model 600 can be engineered with the standard coil (type A or B) or with a coil suitable for high capacities (type C or D).
3. Sound pressure levels include 10 dB/Oct. room absorption.
4. Sound power / pressure levels less than NC 20 are indicated by "--".

Chilled beam systems AIR-FIT®

Quick selection model 600, cooling

AIR-FIT® model 600 - nominal length = 2400 mm

AIR	Nozzle		1		2		3		4		5		6	
	Ø D	mm	123		158		198		2x 158		2x 158		2x 158	
	q ₁	m ³ /h	50	100	85	170	135	250	180	320	210	340	250	340
	p _{st}	Pa	48	191	51	205	51	174	52	164	49	130	50	92
	L _{WA}	dB(A)	25	42	21	42	28	45	27	45	30	45	35	45
	L _{PA}	dB(A)	--	32	--	32	--	35	--	35	20	35	25	35
	W	m	0,9	2,5	1,4	3,5	2,0	4,3	2,6	5,1	2,9	5,1	3,3	4,7
	P _{L,7K}	W	117	235	199	399	317	586	422	750	492	797	586	797
	P _{L,10K}	W	168	335	285	570	452	838	603	1072	704	1139	838	1139
WATER Coil configuration A or B	q _w [l/h]	125												
	Δp _w [kPa]	3,2												
	P _{w,7K}	W	419	581	478	599	527	598	558	591	570	593	583	598
	P _{w,10K}	W	609	873	699	923	776	940	829	950	851	948	877	939
	q _w [l/h]	250												
	Δp _w [kPa]	10,5												
	P _{w,7K}	W	480	756	562	843	639	890	698	932	726	921	761	885
	P _{w,10K}	W	687	1076	803	1194	913	1255	995	1308	1034	1295	1083	1249
WATER Coil configuration type C or D	q _w [l/h]	220												
	Δp _w [kPa]	3,4												
	P _{w,7K}	W	470	735	548	825	622	878	678	930	705	916	740	872
	P _{w,10K}	W	675	1064	789	1198	897	1277	980	1355	1020	1335	1071	1268
	q _w [l/h]	440												
	Δp _w [kPa]	10,9												
	P _{w,7K}	W	519	877	616	1021	714	1110	793	1198	833	1175	885	1100
	P _{w,10K}	W	737	1230	873	1419	1008	1532	1116	1642	1170	1613	1240	1519

Notes:

1. Explanation of the symbols used and selection parameters is available on page 23.
2. AIR-FIT® model 600 can be engineered with the standard coil (type A or B) or with a coil suitable for high capacities (type C or D).
3. Sound pressure levels include 10 dB/Oct. room absorption.
4. Sound power / pressure levels less than NC 20 are indicated by "--".

Please use the selection software on www.beamadvisor.com for a more extensive selection

AIR-FIT® model 600 - nominal length = 3000 mm

AIR	Nozzle		1		2		3		4		5		6	
	Ø D	mm	158		198		2x 158		2x 198		2x 198		2x 198	
	q ₁	m ³ /h	67	134	110	220	180	340	230	420	280	440	330	450
	p _{st}	Pa	50	200	50	200	52	187	49	165	51	126	50	94
	L _{WA}	dB(A)	--	37	22	42	26	45	27	45	32	45	36	45
	L _{PA}	dB(A)	--	27	--	32	--	35	--	35	22	35	26	35
	W	m	1,0	2,8	1,5	3,7	2,2	4,8	2,7	5,4	3,2	5,4	3,6	5,1
	P _{L,7K}	W	157	314	258	516	422	797	539	985	657	1032	774	1055
	P _{L,10K}	W	224	449	369	737	603	1139	771	1407	938	1474	1106	1508
WATER Coil configuration A or B	q _w [l/h]	110												
	Δp _w [kPa]	3,2												
	P _{w,7K}	W	482	584	524	581	563	580	575	586	582	582	584	579
	P _{w,10K}	W	710	927	779	969	854	1030	882	1072	910	1046	927	1011
	q _w [l/h]	220												
	Δp _w [kPa]	10,6												
	P _{w,7K}	W	596	901	673	993	770	1100	814	1155	865	1121	900	1071
	P _{w,10K}	W	851	1268	958	1383	1093	1511	1153	1575	1220	1535	1266	1477
WATER Coil configuration type C or D	q _w [l/h]	200												
	Δp _w [kPa]	3,4												
	P _{w,7K}	W	578	863	649	955	739	1072	781	1136	828	1096	861	1039
	P _{w,10K}	W	838	1292	946	1457	1086	1671	1153	1787	1232	1715	1290	1611
	q _w [l/h]	400												
	Δp _w [kPa]	11,1												
	P _{w,7K}	W	663	1110	762	1275	899	1470	967	1567	1048	1508	1107	1418
	P _{w,10K}	W	937	1533	1073	1741	1258	1979	1348	2096	1454	2024	1530	1916

Notes:

1. Explanation of the symbols used and selection parameters is available on page 23.
2. AIR-FIT® model 600 can be engineered with the standard coil (type A or B) or with a coil suitable for high capacities (type C or D).
3. Sound pressure levels include 10 dB/Oct. room absorption.
4. Sound power / pressure levels less than NC 20 are indicated by "--".

Chilled beam systems AIR-FIT®

Quick selection model 600, heating

AIR-FIT® model 600 - nominal length = 600 mm

AIR	Nozzle		1		2		3		4		5		6	
	Ø D	mm	98		98		98		98		98		98	
	q ₁	m ³ /h	9	18	15	30	24	48	32	62	38	73	45	75
		l/s	3	5	4	8	7	13	9	17	11	20	13	21
	p _{st}	Pa	50	200	50	200	50	205	50	195	50	190	50	140
	L _{WA}	dB(A)	--	25	--	29	--	34	22	41	26	45	31	45
		NC	--	20	--	24	--	29	--	36	21	40	26	40
	L _{PA}	dB(A)	--	--	--	--	--	24	--	31	--	35	21	35
		NC	--	--	--	--	--	--	--	26	--	30	--	30
	P _{L,-3K}	W	-10	-20	-15	-30	-25	-50	-30	-60	-40	-75	-45	-75
	P _{L,-2K}	W	-5	-10	-10	-20	-15	-30	-20	-40	-25	-50	-30	-50

WATER Coil type A, B, C of D	q _w [l/h]	50												
	Δp _w [kPa]	0,4												
	P _{W,20K}	W	240	330	260	350	290	380	310	390	320	410	330	400
	P _{W,35K}	W	410	600	460	660	520	710	560	740	580	760	600	750
	q _w [l/h]	100												
	Δp _w [kPa]	1,2												
	P _{W,20K}	W	220	380	270	430	310	480	350	500	370	520	390	510
	P _{W,35K}	W	380	690	470	770	560	860	620	910	660	940	690	920

AIR-FIT® model 600 - nominal length = 1200 mm

AIR	Nozzle		1		2		3		4		5		6	
	Ø D	mm	98		123		158		158		158		158	
	q ₁	m ³ /h	22	43	35	70	56	112	75	150	90	180	105	190
	p _{st}	Pa	52	199	49	195	49	196	51	203	51	204	49	161
	L _{WA}	dB(A)	--	32	--	35	--	35	--	42	23	45	27	45
	L _{PA}	dB(A)	--	22	--	25	--	25	--	32	--	35	--	35
	W	m	1,1	1,8	1,2	2,2	1,5	2,8	1,8	3,4	2,0	3,8	2,2	3,7
	P _{L,7K}	W	52	101	82	164	131	263	176	352	211	422	246	446
	P _{L,10K}	W	74	144	117	235	188	375	251	503	302	603	352	637

WATER Coil configuration A or B	q _w [l/h]	90												
	Δp _w [kPa]	3,3												
	P _{W,7K}	W	183	284	204	309	235	336	257	353	272	365	282	361
	P _{W,10K}	W	265	412	296	448	340	483	374	503	395	513	410	510
	q _w [l/h]	180												
	Δp _w [kPa]	10,6												
	P _{W,7K}	W	197	322	222	358	258	402	287	435	306	458	320	449
	P _{W,10K}	W	284	464	320	515	372	575	413	618	441	647	460	636

WATER Coil configuration type C or D	q _w [l/h]	180												
	Δp _w [kPa]	3,3												
	P _{W,7K}	W	210	341	236	379	274	426	304	463	324	490	338	480
	P _{W,10K}	W	303	493	341	549	396	614	440	663	469	698	490	685
	q _w [l/h]	360												
	Δp _w [kPa]	10,6												
	P _{W,7K}	W	236	400	267	453	314	521	351	578	378	620	396	604
	P _{W,10K}	W	338	573	383	647	450	740	504	814	541	867	568	848

Notes:

1. Explanation of the symbols used and selection parameters is available on page 23.
2. Sound pressure levels include 10 dB/Oct. room absorption.
3. Sound power / pressure levels less than NC 20 are indicated by "--".

Please use the selection software on www.beamadvisor.com for a more extensive selection

AIR-FIT® model 600 - nominal length = 1500 mm

AIR	Nozzle		1		2		3		4		5		6	
	Ø D	mm	98		123		158		158		198		198	
	q ₁	m ³ /h	30	60	48	96	77	154	100	185	120	235	145	250
		l/s	8	17	13	27	21	43	28	51	33	65	40	69
	p _{st}	Pa	50	205	50	195	50	200	50	165	50	185	50	150
	L _{WA}	dB(A)	--	39	24	41	--	40	26	45	25	45	30	45
		NC	--	34	--	36	--	35	21	40	20	40	25	40
	L _{PA}	dB(A)	--	29	--	31	--	30	--	35	--	35	--	35
		NC	--	24	--	26	--	25	--	30	--	30	--	30
	P _{L,-3K}	W	-30	-60	-50	-95	-75	-155	-100	-185	-120	-235	-145	-250
	P _{L,-2K}	W	-20	-40	-30	-65	-50	-105	-65	-125	-80	-155	-95	-170

WATER Coil type A, B, C of D	q _w [l/h]	50												
	Δp _w [kPa]	0,7												
	P _{W,20K}	W	570	700	600	730	640	770	660	770	680	800	700	800
	P _{W,35K}	W	1020	1280	1070	1330	1150	1410	1190	1430	1230	1480	1270	1470
	q _w [l/h]	100												
	Δp _w [kPa]	2,2												
	P _{W,20K}	W	650	940	720	1010	800	1090	850	1110	890	1170	930	1160
	P _{W,35K}	W	1190	1700	1310	1810	1460	1960	1540	1990	1610	2100	1680	2080

AIR-FIT® model 600 - nominal length = 1800 mm

AIR	Nozzle		1		2		3		4		5		6	
	Ø D	mm	125		160		160		200		200		200	
	q ₁	m ³ /h	40	75	60	120	100	190	130	240	155	250	180	250
		l/s	11	21	17	33	28	53	36	67	43	69	50	69
	p _{st}	Pa	55	200	50	190	50	185	50	170	50	130	50	90
	L _{WA}	dB(A)	20	36	--	35	25	45	27	45	32	45	35	45
		NC	--	31	--	30	20	40	22	40	27	40	30	40
	L _{PA}	dB(A)	--	26	--	25	--	35	--	35	22	35	25	35
		NC	--	21	--	20	--	30	--	30	--	30	20	30
	P _{L,-3K}	W	-40	-75	-60	-120	-100	-190	-130	-240	-155	-250	-180	-250
	P _{L,-2K}	W	-25	-50	-40	-80	-65	-125	-85	-160	-105	-170	-120	-170

WATER Coil type A, B, C of D	q _w [l/h]	50												
	Δp _w [kPa]	0,8												
	P _{W,20K}	W	710	830	730	860	780	890	800	910	810	900	820	890
	P _{W,35K}	W	1230	1470	1260	1540	1360	1610	1400	1640	1440	1630	1460	1590
	q _w [l/h]	100												
	Δp _w [kPa]	2,5												
	P _{W,20K}	W	830	1110	870	1180	980	1260	1030	1300	1070	1280	1100	1240
	P _{W,35K}	W	1460	1980	1530	2110	1730	2260	1830	2330	1900	2300	1950	2220

Notes:

1. Explanation of the symbols used and selection parameters is available on page 23.
2. Sound pressure levels include 10 dB/Oct. room absorption.
3. Sound power / pressure levels less than NC 20 are indicated by "--".

Please use the selection software on www.beamadvisor.com for a more extensive selection

Chilled beam systems AIR-FIT®

Quick selection model 600, heating

AIR-FIT® model 600 - nominal length = 2400 mm

AIR	Nozzle		1		2		3		4		5		6	
	Ø D	mm	123		158		198		2x 158		2x 158		2x 158	
	q _i	m ³ /h	50	100	85	170	135	250	180	320	210	340	250	340
		l/s	14	28	24	47	38	69	50	89	58	94	69	94
	p _{st}	Pa	50	190	50	205	50	175	50	165	50	130	50	90
	L _{wA}	dB(A)	25	42	21	42	28	45	27	45	30	45	35	45
		NC	20	37	--	37	23	40	22	40	25	40	30	40
	L _{pA}	dB(A)	--	32	--	32	--	35	--	35	20	35	25	35
		NC	--	27	--	27	--	30	--	30	--	30	20	30
	P _{L,-3K}	W	-50	-100	-85	-170	-135	-250	-180	-320	-210	-340	-250	-340
	P _{L,-2K}	W	-35	-65	-55	-115	-90	-170	-120	-215	-140	-230	-170	-230
WATER Coil type A, B, C of D	q _w [l/h]	50												
	Δp _w [kPa]	1,0												
	P _{W,20K}	W	760	910	810	960	850	990	880	1010	900	1010	920	990
	P _{W,35K}	W	1390	1650	1470	1740	1540	1780	1600	1820	1630	1810	1660	1780
	q _w [l/h]	100												
	Δp _w [kPa]	3,3												
	P _{W,20K}	W	1000	1340	1100	1450	1200	1510	1270	1560	1310	1550	1350	1500
	P _{W,35K}	W	1770	2390	1960	2580	2140	2680	2260	2780	2320	2750	2400	2670

AIR-FIT® model 600 - nominal length = 3000 mm

AIR	Nozzle		1		2		3		4		5		6	
	Ø D	mm	158		198		2x 158		2x 198		2x 198		2x 198	
	q _i	m ³ /h	67	134	110	220	180	340	230	420	280	440	330	450
		l/s	19	37	31	61	50	94	64	117	78	122	92	125
	p _{st}	Pa	50	200	50	200	50	185	50	165	50	125	50	95
	L _{wA}	dB(A)	--	37	22	42	26	45	27	45	32	45	36	45
		NC	--	32	--	37	21	40	22	40	27	40	31	40
	L _{pA}	dB(A)	--	27	--	32	--	35	--	35	22	35	26	35
		NC	--	22	--	27	--	30	--	30	--	30	21	30
	P _{L,-3K}	W	-65	-135	-110	-220	-180	-340	-230	-420	-280	-440	-330	-450
	P _{L,-2K}	W	-45	-90	-75	-145	-120	-230	-155	-280	-190	-295	-220	-300
WATER Coil type A, B, C of D	q _w [l/h]	50												
	Δp _w [kPa]	1,2												
	P _{W,20K}	W	880	1030	920	1070	970	1110	990	1120	1020	1120	1030	1100
	P _{W,35K}	W	1550	1850	1630	1930	1720	2000	1770	2030	1820	2010	1850	1980
	q _w [l/h]	100												
	Δp _w [kPa]	4,0												
	P _{W,20K}	W	1190	1560	1290	1660	1410	1750	1460	1780	1520	1760	1560	1730
	P _{W,35K}	W	2110	2790	2290	2970	2510	3130	2610	3190	2710	3160	2790	3090

Notes:

1. Explanation of the symbols used and selection parameters is available on page 23.
2. Sound pressure levels include 10 dB/Oct. room absorption.
3. Sound power / pressure levels less than NC 20 are indicated by "--".

Please use the selection software on www.beamadvisor.com for a more extensive selection

Used symbols

ØD	Air inlet diameter plenum	mm
q ₁	Primary air flow	m³/h - l/s
p _{st}	Static pressure plenum	Pa
L _{WA}	Sound power level	dB(A)
L _{PA}	Sound pressure level	dB(A)
W	Throw	m
q _w	Water flow	l/h
Δp _w	Waterside pressure drop of the coil	kPa
P _{L,7K}	Air cooling capacity at a temperature difference of 7K (T _{room} - T ₁ = 7K)	W
P _{L,10K}	Air cooling capacity at a temperature difference of 10K (T _{room} - T ₁ = 10K)	W
P _{W,7K}	Water cooling capacity at a temperature difference of 7K (T _{room} - T _{water,in} = 7K)	W
P _{W,10K}	Water cooling capacity at a temperature difference of 10K (T _{room} - T _{water,in} = 10K)	W

Parameters quick selection

Discharge pattern	2-sided	
Room height	2,7 - 3,0	m
L _{PA} maximum	35 / 30	dB(A) / NC
Room attenuation L _{PA} values	10	dB / Oct
p _{st} maximum	50 - 200	Pa
Δp _w maximum	11	kPa

Model 300 - top connection, side connection or reduced height with side connection

ØD	Nozzle bar configuration							
Length	A	B	C	D	E	F	G	H
600	98	98	98	98	98	98	98	98
1200	98	98	98	123	123	123	98	123
1500	98	98	123	123	158	158	123	158
1800	98	123	123	158	158	158	123	158
2400	123	123	158	158	198	198	158	198
3000	123	158	158	198	198	198	158	198

Model 600 - top connection or side connection

ØD	Nozzle bar configuration							
Length	A	B	C	D	E	F	G	H
600	98	98	98	98	98	98	98	98
1200	98	123	158	158	158	158	158	158
1500	98	123	158	158	198	198	158	198
1800	123	158	158	198	198	198	158	198
2400	123	158	198	2 x 158	2 x 158	2 x 158	198	2 x 158
3000	158	198	2 x 158	2 x 198	2 x 198	2 x 198	2 x 158	2 x 198

Installation

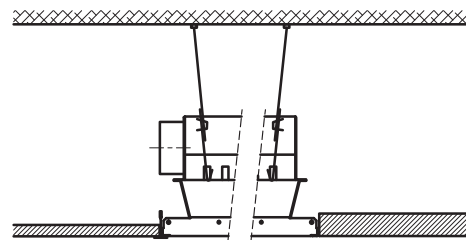
The unit has 7 mm diameter hanging brackets for easy installation. These can be used to connect the unit to the ceiling construction.

The width (295 or 595 mm) is suitable for T-bar ceilings with 300 or 600 mm centre to centre dimensions. Ensure dimensions in other type ceilings are adapted.

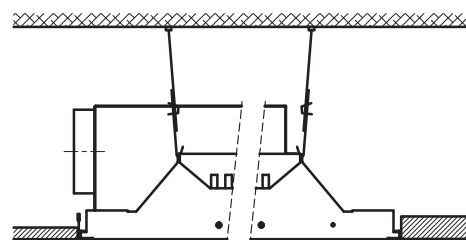
Extra care shall be taken on the airside and waterside connections (top, left or right side). The installation method should be suitable for the weight of the unit.

Remark:

Please note that all controls must be accessible at all time. During installation this must be taken in consideration. Furthermore, all units must be installed in a clean, dust free and dry environment.



Installation method model 300



Installation method model 600

Adjustable nozzle types

When an active chilled beam AIR-FIT® is selected, a standard fixed nozzle type is required.

Optionally an adjustable unit with two nozzle types can be chosen. The required nozzle type is set ex works. By using an adjustable sliding plate, the nozzle type can be altered subsequently.

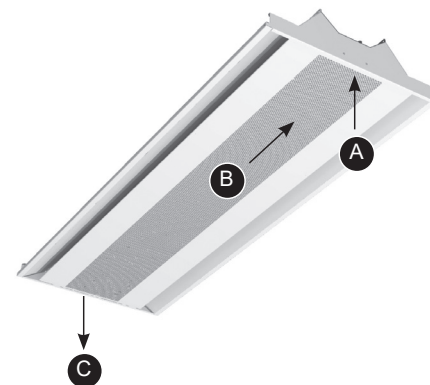


Adjustable nozzle types

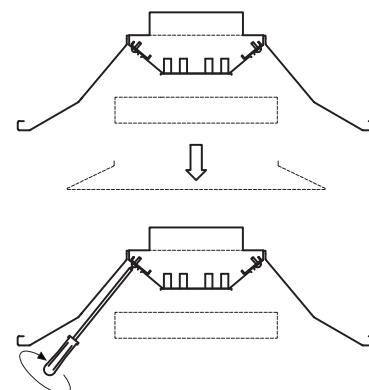
Adjusting nozzle types

The only tool needed to adjust the nozzle type is a Philips head (cross-slotted) screwdriver.

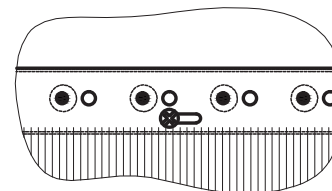
Step 1: Remove the front panel (A, B, C):



Step 2: Unscrew all screws from the sliding plate (1 full turn):



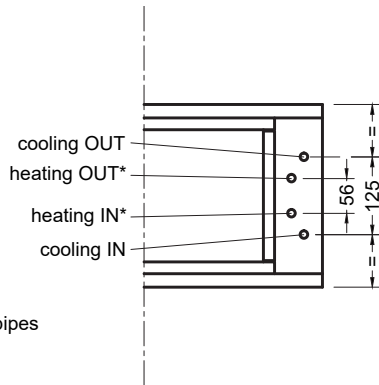
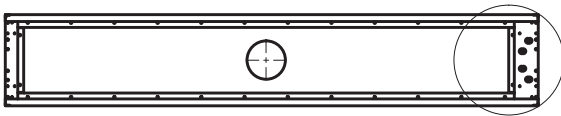
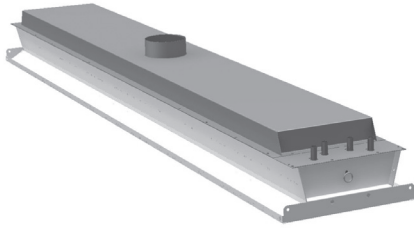
Step 3: Move the sliding plate into the desired position.



Step 4: Tighten all screws (hand tight).

Step 5: Replace the front panel.

MODEL 300



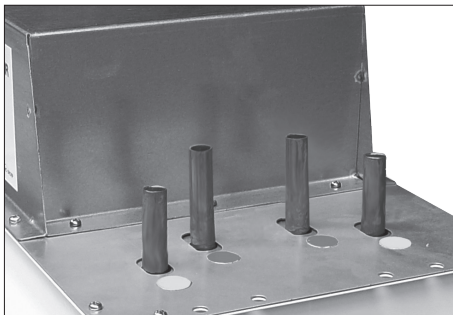
* only 4-pipes

Dimensional data connections

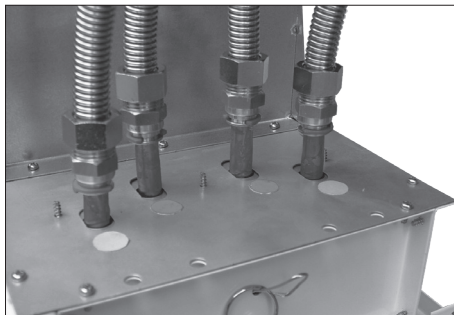
Width	300 / 600	
Model	600 - 1800	2400 - 3000
Ød _{cold}	12	15
Ød _{hot}	12	

Note:

1. The tolerance on the diameter copper connection of the copper heating/cooling coil is $\pm 0,15$ mm.

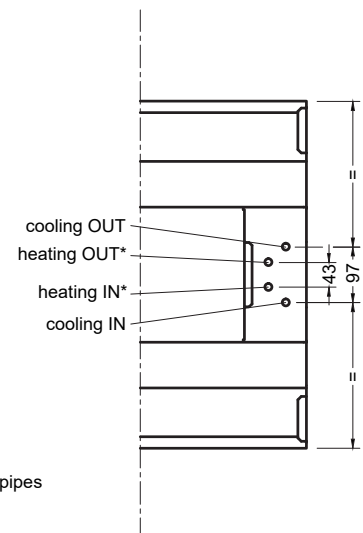
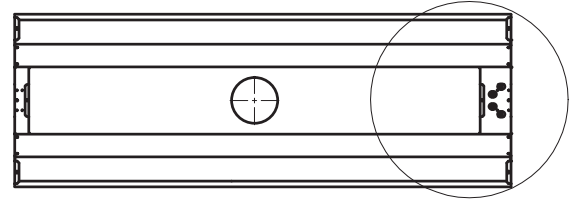
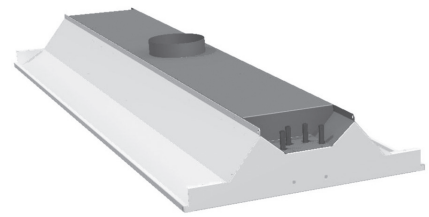


Example of the copper connections of the reheate coil, model 300. The copper tube connection has a minimum length of 40 mm.



Optionally:
Flexible hoses (diffuse leakproof till 80 °C), with stainless steel sleeve. The hose is on both sides equipped with a quick-release connection with securing clip.

MODEL 600



* only 4-pipes

Note:

The copper tubing needs to be free of any damage and completely circular for a leak proof connection. When installing please take in to consideration that the material will shrink and expand.



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