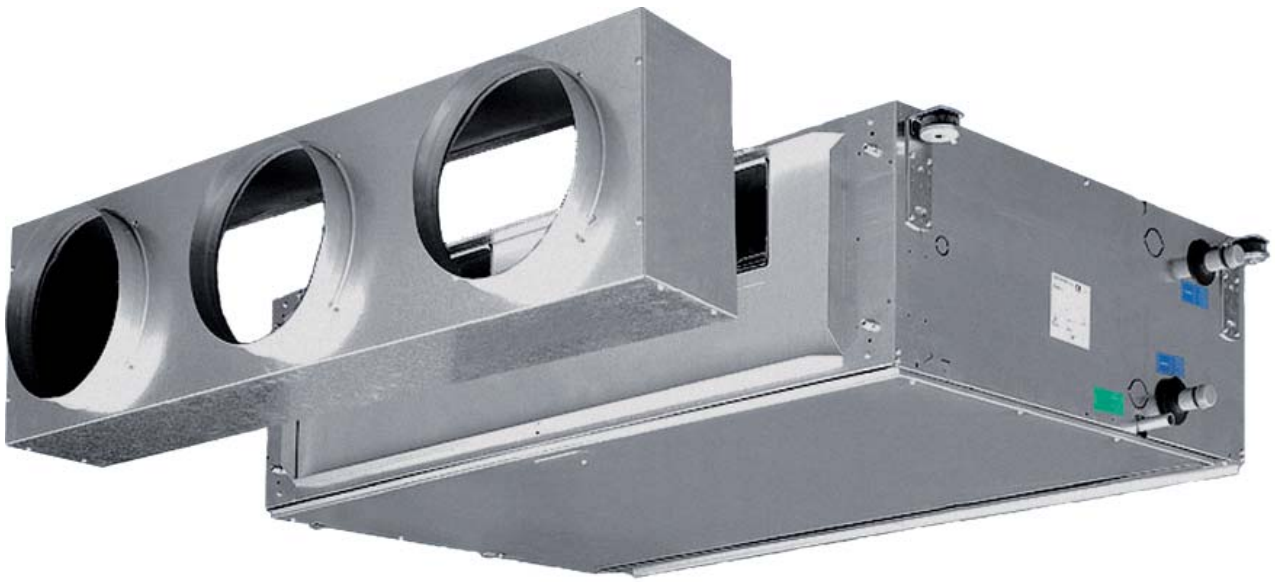
B-Line Blower Coil

BFS

Cooling capacity 4.2-33 kW
Heating capacity 5.8-61 kW
2-pipe and 4-pipe configurations



UNT-PRC024B-GB

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Introduction

Following many years of experience heating and air conditioning, we have developed the B-line fan coils range for concealed installation and connection to a duct system.

Sizes 1-5 supply a consistent air flow with static pressure up to 160 Pa to fit most conditions, with the combination of either 3 or 4 row heat exchangers and 2 or 4 pipe configurations with additional heat exchanger.

Sizes 6–7 supply a consistent air flow with static pressure up to 425 Pa to fit most conditions, with the combination of either 4 or 6 row heating coils and 2 or 4 pipe configurations with 2 row additional heating coil.

Unit description

CASING

It is made with galvanized steel insulated with polyolefin (PO) foam (class M1).

FAN ASSEMBLY Sizes 1-5

Consists of quiet centrifugal fans in galvanized steel with two impellers and a directly driven single phase, five speed motor, 230V 50Hz, with capacitor, insulation class B. The fan assembly has 5 speeds.

FAN ASSEMBLY Sizes 6-7

Consists of quiet centrifugal fans with two impellers and a directly driven single phase, three speed motor, 230V 50Hz, with external rotor, capacitor, insulation class B. The fan assembly has 3 speeds.

COIL

It is manufactured from drawn copper tube and the aluminium fins are mechanically bonded onto the tube by an expansion process.

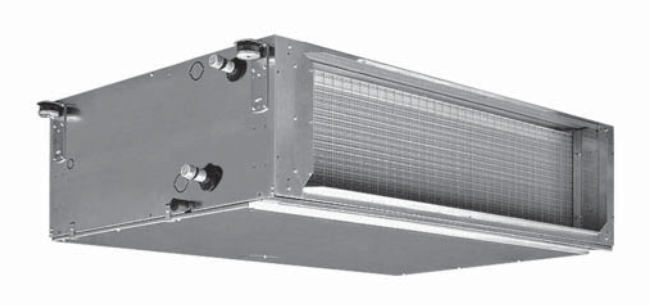
Sizes 1-5 are available with the combination of either 3 or 4 row coils with the possibility to add a 1 or 2 row coil (3+1, 4+1, 3+2, 4+2 versions for 4 pipe systems).

Sizes 6-7 are available with the combination of either 4 or 6 row coils with the possibility to add a 2 row coil (4+2, 6+2 versions for 4 pipe systems).

The connections are on the left hand side looking from the air inlet of the unit (see picture and drawing at page 4).

On request the connections can be moved to the other side.

The heat exchanger is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.



FILTER

The filter is made of polypropylene cellular fabric regenerating filter.

The filter frame of galvanized steel is inserted into sliding guides fastened to the internal structure for easy insertion and removal of the filter.

CONDENSATE COLLECTION TRAY

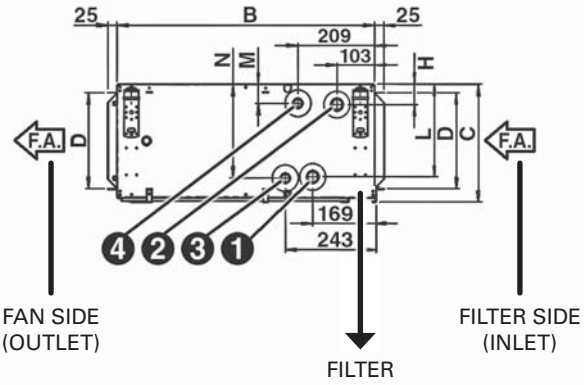
It is made from galvanized steel insulated with polyolefin (PO) foam (class M1).

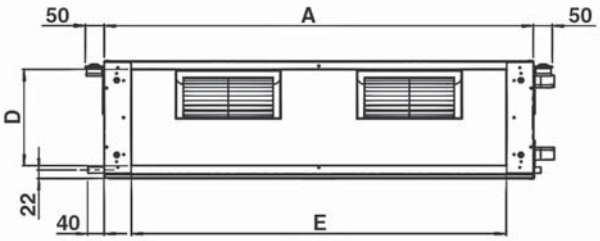
ERP DIRECTIVE

All units are compliant with ERP 2015 Regulation (EU) No. 327/2011.

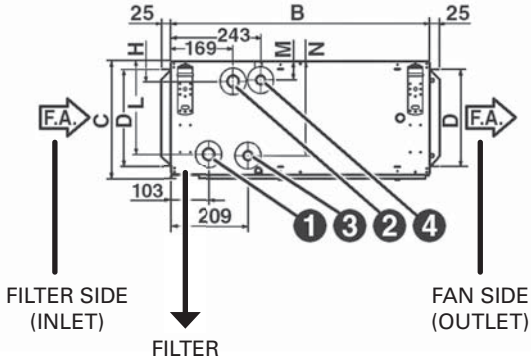
Dimensions and weights

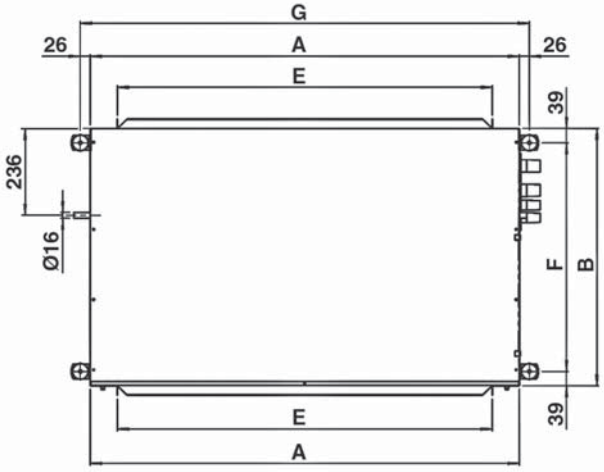
Left connections (standard)



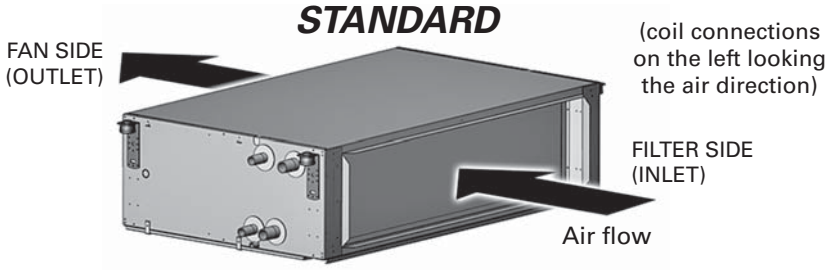


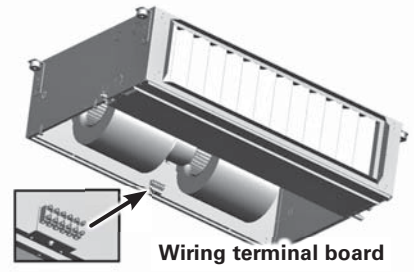
Right connections (on request)





STANDARD



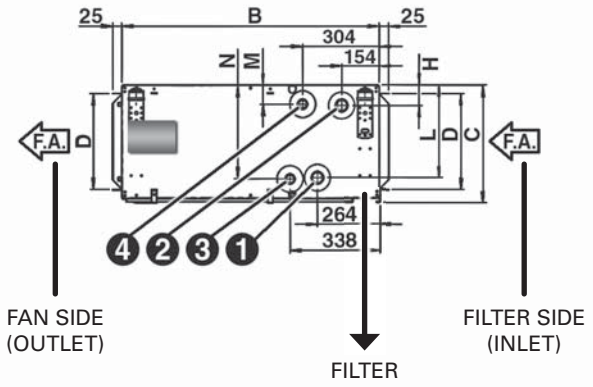


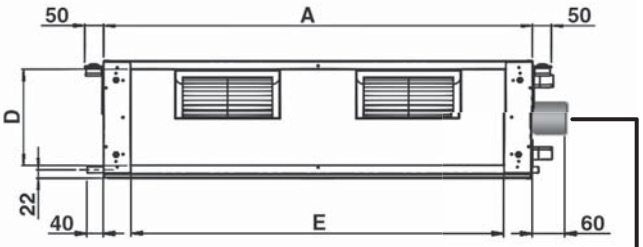
Model	Dimensions (mm)											Coil			
												Main		Additional	
	A	B	C	D	E	F	G	H	L	M	N	① IN	② OUT	③ IN	④ OUT
BFS-1	1133	698	310	255	991	620	1185	54	245	50	249	3/4"	3/4"	3/4"	3/4"
BFS-2	1133	698	310	255	991	620	1185	54	245	50	249	1"	1"	3/4"	3/4"
BFS-3	1133	698	360	305	991	620	1185	54	295	50	299	1"	1"	3/4"	3/4"
BFS-4	1445	853	360	293	1302	775	1497	58	291	54	295	1 1/4"	1 1/4"	1"	1"
BFS-5	1445	853	435	368	1302	775	1497	58	367	54	370	1 1/4"	1 1/4"	1"	1"

Model	Weight without packaging (kg)						Weight with packaging (kg)						Water content (l)			
	3R	3+1R	3+2R	4R	4+1R	4+2R	3R	3+1R	3+2R	4R	4+1R	4+2R	3R	4R	1R	2R
BFS-1	45	48	50	47	50	51	48	51	53	50	53	54	2,0	2,6	0,9	1,5
BFS-2	46	50	52	48	51	53	49	53	55	51	54	56	2,9	3,7	1,1	1,8
BFS-3	54	58	60	56	60	62	57	61	63	59	63	65	3,5	4,6	1,4	2,4
BFS-4	75	80	83	78	83	86	79	84	87	82	87	90	4,7	6,0	2,0	3,2
BFS-5	85	90	94	88	94	98	89	94	98	92	98	102	5,7	7,1	2,7	4,1

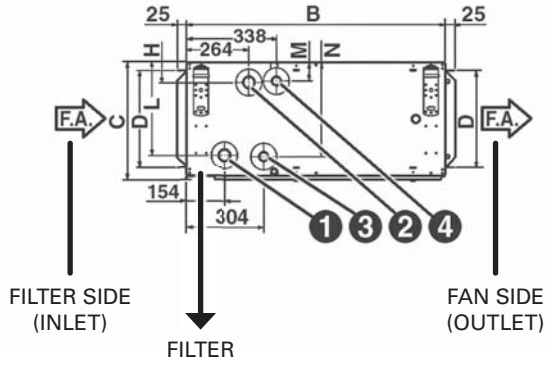
Dimensions and weights

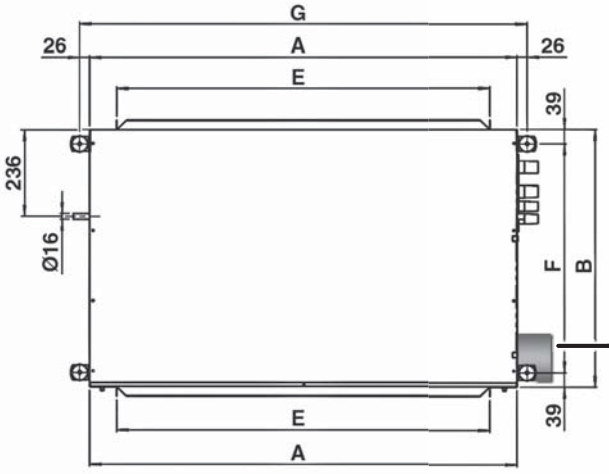
Left connections (standard)

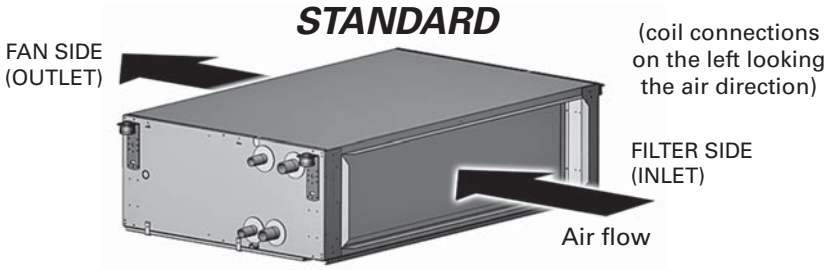


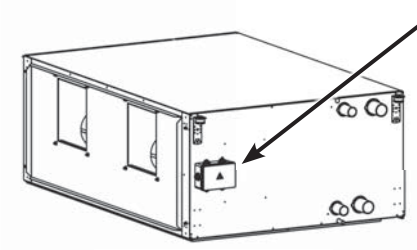


Right connections (on request)









Wiring terminal board

Model	Dimensions (mm)											Coil			
												Main		Additional	
	A	B	C	D	E	F	G	H	L	M	N	① IN	② OUT	③ IN	④ OUT
BFS-6	1535	1100	488	421	1393	1022	1587	59	416	55	421	1 1/4"	1 1/4"	1"	1"
BFS-7	1535	1100	588	521	1393	1022	1587	59	516	55	521	1 1/4"	1 1/4"	1"	1"

Model	Weight without packaging (kg)				Weight with packaging (kg)				Water content (l)		
	4R	4+2R	6R	6+2R	4R	4+2R	6R	6+2R	4R	6R	2R
BFS-6	124	134	130	140	127	137	133	143	7,6	11,1	4,1
BFS-7	140	152	148	160	143	155	151	163	9,7	13,8	5,5

Operating limits

Water circuit	Maximum water pressure: 1000 kPa (10 bars)	MIN. entering water temperature: +5°C MAX. entering water temperature: +80°C
Air flow	Suitable relative humidity 15-75%	MIN. entering air temperature: +6°C MAX. entering air temperature: +40°C MAX. leaving air temperature: +50°C
Electrical data	Single phase 230V 50Hz	

Fan motor maximum absorbed power

Model		BFS-1	BFS-2	BFS-3	BFS-4	BFS-5
230/1 50Hz	W	240	412	523	765	885
	A	1,09	1,91	2,45	3,62	4,01

Model		BFS-6	BFS-7
230/1 50Hz	W	1437	2817
	A	6,38	12,40

General data

Size 1-5
2 pipe units

The following standard rating conditions are used:

COOLING (summer mode)

Entering air temperature +27°C d.b. +19°C w.b.
Water temperature +7°C E.W.T. +12°C L.W.T.

HEATING (winter mode)

Entering air temperature +20°C
Entering water temperature +50°C
Water flow rate as for the cooling conditions

Model		BFS-2P-14			BFS-2P-24			BFS-2P-34			BFS-2P-44			BFS-2P-54		
Speed		1	3	5	1	3	5	1	3	5	1	3	5	1	3	5
Air flow	m^3/h	790	1125	1410	840	1410	1825	1710	2075	2440	2070	2580	3020	2740	3280	3850
Available pressure	Pa	25	50	75	15	50	80	30	50	70	35	50	67	35	50	70
Cooling total capacity	kW	4,28	5,36	6,11	5,16	7,24	8,44	9,06	10,18	11,18	11,33	12,98	14,23	15,04	16,81	18,52
Cooling sensible capacity	kW	3,36	4,41	5,22	3,83	5,71	6,90	7,02	8,10	9,12	8,69	10,25	11,49	11,71	13,42	15,13
Heating	kW	5,80	7,55	8,86	6,58	9,79	11,78	12,04	13,87	15,54	14,92	17,55	19,64	19,39	22,12	24,79
Dp Cooling	kPa	5,1	7,6	9,6	6,9	12,7	16,8	16,0	19,8	23,4	13,9	17,7	20,9	13,3	16,2	19,3
Dp Heating	kPa	4,1	6,2	7,9	5,6	10,3	13,6	13,1	16,2	19,1	11,2	14,5	17,0	10,8	13,2	15,7
Fan	W	115	154	191	170	230	285	350	420	470	445	550	630	500	617	760
Sound power level outlet	dB(A)	51	59	64	50	62	67	61	65	69	63	68	70	66	70	73
Sound power level inlet + radiated	dB(A)	52	60	65	51	63	68	62	66	70	64	69	71	67	71	74
Sound pressure level outlet (*)	dB(A)	42	50	55	41	53	58	52	56	60	54	59	61	57	61	64
Sound pressure level inlet + radiated (*)	dB(A)	43	51	56	42	54	59	53	57	61	55	60	62	58	62	65

Size 1-5
4 pipe units

The following standard rating conditions are used:

COOLING (summer mode)

Entering air temperature +27°C d.b. +19°C w.b.
Water temperature +7°C E.W.T. +12°C L.W.T.

HEATING (winter mode)

Entering air temperature +20°C
Water temperature +70°C E.W.T. +60°C L.W.T.

Model		BFS-4P-141			BFS-4P-241			BFS-4P-341			BFS-2P-441			BFS-4P-541		
Speed		1	3	5	1	3	5	1	3	5	1	3	5	1	3	5
Air flow	m^3/h	770	1090	1350	840	1390	1775	1680	2045	2390	2055	2545	2960	2700	3245	3800
Available pressure	Pa	25	50	75	15	50	80	30	50	70	35	50	67	35	50	70
Cooling total capacity	kW	4,21	5,26	5,97	5,16	7,18	8,30	8,95	10,09	11,04	11,29	12,88	14,08	14,24	15,92	17,48
Cooling sensible capacity	kW	3,29	4,31	5,06	3,83	5,65	6,76	6,93	8,02	8,97	8,65	10,15	11,33	11,11	12,74	14,31
Heating	kW	3,96	4,87	5,47	4,63	6,28	7,16	7,62	8,47	9,20	9,83	11,07	12,00	12,67	14,00	15,28
Dp Cooling	kPa	4,9	7,3	9,2	6,9	12,5	16,3	15,7	19,4	22,9	13,8	17,4	20,5	12,0	14,7	17,4
Dp Heating	kPa	11,7	17,0	21,0	14,5	25,2	31,9	15,9	19,3	22,3	27,6	34,1	39,5	26,0	31,1	36,3
Fan	W	115	155	185	170	225	275	345	415	460	440	540	615	495	610	750
Sound power level outlet	dB(A)	51	59	64	50	62	67	61	65	69	63	68	70	66	70	73
Sound power level inlet + radiated	dB(A)	52	60	65	51	63	68	62	66	70	64	69	71	67	71	74
Sound pressure level outlet (*)	dB(A)	42	50	55	41	53	58	52	56	60	54	59	61	57	61	64
Sound pressure level inlet + radiated (*)	dB(A)	43	51	56	42	54	59	53	57	61	55	60	62	58	62	65

(*) =The sound pressure levels are 9 dB(A) lower than the sound power levels and apply to the reverberant field of a 100 m^3 room and a reverberation time of 0.5 sec.

Size 1-5
2 pipe units

The following standard rating conditions are used:

COOLING (summer mode)

Entering air temperature +27°C d.b. +19°C w.b.
Water temperature +7°C E.W.T. +12°C L.W.T.
AVAILABLE PRESSURE: 0 Pa

HEATING (winter mode)

Entering air temperature +20°C
Water temperature +60°C E.W.T. +50°C L.W.T.

BFS units with 3 row coil

Model		BFS-2P-13					BFS-2P-23					BFS-2P-33				
Speed		1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Air flow	m^3/h	995	1140	1340	1640	1925	855	1165	1550	2060	2510	1815	2080	2300	2590	2790
Cooling total capacity	kW	4,19	4,53	4,95	5,53	6,02	4,50	5,44	6,41	7,50	8,31	7,82	8,43	8,91	9,51	9,89
Cooling sensible capacity	kW	3,55	3,93	4,41	5,11	5,73	3,47	4,36	5,36	6,56	7,53	6,41	7,05	7,57	8,24	8,68
Heating	kW	7,91	8,71	9,73	11,13	12,33	7,75	9,74	11,92	14,45	16,44	14,27	15,69	16,80	18,19	19,10
Dp Cooling	kPa	7,0	8,1	9,6	11,6	13,7	8,7	12,4	16,9	22,5	27,4	18,7	21,5	23,8	26,8	28,8
Dp Heating	kPa	4,8	5,8	7,1	9,1	11,0	5,1	7,8	11,4	16,4	20,9	12,3	14,6	16,6	19,3	21,1
Fan	W	136	154	175	210	240	180	225	273	334	412	390	430	470	509	523
Sound power Lw	dB(A)	49	52	56	60	63	47	53	59	64	68	60	62	64	66	68
Sound pressure (*)	dB(A)	40	43	47	51	54	38	44	50	55	59	51	53	55	57	59

Model		BFS-2P-43					BFS-2P-53				
Speed		1	2	3	4	5	1	2	3	4	5
Air flow	m^3/h	2265	2585	2855	3130	3400	2905	3275	3540	3975	4400
Cooling total capacity	kW	10,08	10,86	11,48	12,07	12,62	13,21	14,13	14,77	15,77	16,67
Cooling sensible capacity	kW	8,16	8,96	9,61	10,26	10,87	10,85	11,84	12,53	13,63	14,67
Heating	kW	18,06	19,82	21,21	22,56	23,85	23,64	25,71	27,14	29,35	31,42
Dp Cooling	kPa	18,0	21,0	23,0	26,0	28,0	17,2	19,6	21,2	23,9	26,5
Dp Heating	kPa	9,0	11,0	12,0	14,0	15,0	10,9	12,7	14,1	16,3	18,4
Fan	W	453	516	563	615	703	541	622	703	782	885
Sound power Lw	dB(A)	63	65	67	69	72	66	69	71	73	75
Sound pressure (*)	dB(A)	54	56	58	60	63	57	60	62	64	66

BFS units with 4 row coil

Model		BFS-2P-14					BFS-2P-24					BFS-2P-34				
Speed		1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Air flow	m^3/h	940	1115	1315	1575	1835	855	1160	1535	2005	2360	1795	2060	2265	2550	2745
Cooling total capacity	kW	4,80	5,33	5,88	6,53	7,07	5,22	6,40	7,63	8,92	9,77	9,32	10,13	10,70	11,46	11,95
Cooling sensible capacity	kW	3,85	4,38	4,96	5,67	6,33	3,88	4,92	6,08	7,40	8,33	7,28	8,06	8,63	9,41	9,92
Heating	kW	8,76	9,95	11,22	12,77	14,20	8,77	11,13	13,76	16,69	18,71	16,43	18,20	19,50	21,22	22,36
Dp Cooling	kPa	6,0	7,3	8,8	10,6	12,4	6,7	9,8	13,5	18,1	21,4	16,3	19,0	21,0	23,9	25,8
Dp Heating	kPa	3,9	4,9	6,1	7,8	9,5	3,7	5,8	8,6	12,3	15,2	9,9	12,0	13,7	16,1	17,7
Fan	W	130	151	173	204	232	180	222	268	322	380	380	426	464	505	520
Sound power Lw	dB(A)	49	52	56	60	63	47	53	59	64	68	60	62	64	66	68
Sound pressure (*)	dB(A)	40	43	47	51	54	38	44	50	55	59	51	53	55	57	59

Model		BFS-2P-44					BFS-2P-54				
Speed		1	2	3	4	5	1	2	3	4	5
Air flow	m^3/h	2245	2560	2820	3085	3340	2885	3240	3505	3920	4330
Cooling total capacity	kW	11,92	12,91	13,67	14,42	15,07	15,53	16,68	17,49	18,71	19,80
Cooling sensible capacity	kW	9,24	10,18	10,93	11,68	12,36	12,17	13,29	14,10	15,34	16,50
Heating	kW	20,86	23,02	24,69	26,36	27,91	27,08	29,56	31,31	33,96	36,49
Dp Cooling	kPa	15,0	17,0	19,0	21,0	23,0	13,5	15,4	16,8	19,0	21,2
Dp Heating	kPa	9,0	11,0	12,0	14,0	15,0	8,0	9,5	10,6	12,3	14,0
Fan	W	447	508	551	606	684	536	612	689	766	868
Sound power Lw	dB(A)	63	65	67	69	72	66	69	71	73	75
Sound pressure (*)	dB(A)	54	56	58	60	63	57	60	62	64	66

(*) = The sound pressure levels are 9 dB(A) lower than the sound power levels and apply to the reverberant field of a 100 m^3 room and a reverberation time of 0.5 sec.

General data

Size 1-5
4 pipe units

The following standard rating conditions are used:

COOLING (summer mode)

Entering air temperature +27°C d.b. +19°C w.b.
Water temperature +7°C E.W.T. +12°C L.W.T.
AVAILABLE PRESSURE: 0 Pa

HEATING (winter mode)

Entering air temperature +20°C
Water temperature +70°C E.W.T. +60°C L.W.T.

BFS units with 3+1 row coil

Model		BFS-4P-131					BFS-4P-231					BFS-4P-331				
Speed		1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Air flow	m^3/h	940	1115	1315	1575	1835	855	1160	1535	2005	2360	1795	2060	2265	2550	2745
Cooling total capacity	kW	4,05	4,47	4,91	5,41	5,88	4,50	5,42	6,38	7,39	8,04	7,76	8,38	8,84	9,43	9,82
Cooling sensible capacity	kW	3,41	3,86	4,36	4,96	5,54	3,47	4,35	5,32	6,43	7,21	6,35	7,01	7,50	8,15	8,59
Heating	kW	4,58	5,04	5,51	6,07	6,58	4,78	5,79	6,76	7,78	8,44	8,07	8,69	9,12	9,71	10,08
Dp Cooling	kPa	6,6	7,9	9,4	11,3	13,2	8,7	12,4	16,8	22,0	25,8	18,4	21,2	23,5	26,4	28,4
Dp Heating	kPa	13,7	16,4	19,2	23,0	26,5	15,9	22,4	29,8	38,6	44,8	18,4	21,0	23,0	25,7	27,5
Fan	W	130	151	173	204	232	180	222	268	322	380	380	426	464	505	520
Sound power Lw	dB(A)	49	52	56	60	63	47	53	59	64	68	60	62	64	66	68
Sound pressure (*)	dB(A)	40	43	47	51	54	38	44	50	55	59	51	53	55	57	59

Model		BFS-4P-431					BFS-4P-531				
Speed		1	2	3	4	5	1	2	3	4	5
Air flow	m^3/h	2245	2560	2820	3085	3340	2885	3240	3505	3920	4330
Cooling total capacity	kW	10,02	10,80	11,39	11,97	12,49	13,15	14,07	14,70	15,64	16,50
Cooling sensible capacity	kW	8,10	8,90	9,52	10,15	10,73	10,79	11,76	12,44	13,49	14,48
Heating	kW	10,54	11,32	11,93	12,50	13,04	13,42	14,30	14,92	15,85	16,73
Dp Cooling	kPa	18,0	21,0	23,0	25,0	28,0	17,1	19,3	21,0	23,5	26,1
Dp Heating	kPa	32,0	37,0	41,0	44,0	48,0	30,0	33,6	36,4	40,6	44,6
Fan	W	447	508	551	606	684	536	612	689	766	868
Sound power Lw	dB(A)	63	65	67	69	72	66	69	71	73	75
Sound pressure (*)	dB(A)	54	56	58	60	63	57	60	62	64	66

BFS units with 4+1 row coil

Model		BFS-4P-141					BFS-4P-241					BFS-4P-341				
Speed		1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Air flow	m^3/h	910	1090	1290	1530	1775	850	1155	1520	1965	2285	1780	2040	2235	2510	2700
Cooling total capacity	kW	4,70	5,26	5,82	6,42	6,98	5,20	6,39	7,58	8,81	9,59	9,27	10,07	10,63	11,35	11,84
Cooling sensible capacity	kW	3,75	4,31	4,89	5,55	6,19	3,87	4,91	6,04	7,29	8,13	7,23	8,00	8,56	9,30	9,81
Heating	kW	4,49	4,98	5,46	5,99	6,47	4,76	5,76	6,73	7,71	8,30	8,03	8,64	9,07	9,64	9,99
Dp Cooling	kPa	5,8	7,1	8,6	10,3	12,0	6,6	9,7	13,4	17,7	20,7	16,1	18,8	20,7	23,5	25,4
Dp Heating	kPa	15,3	18,4	21,8	25,7	29,6	15,7	22,3	29,6	37,7	43,5	18,2	20,8	22,7	25,3	27,1
Fan	W	127	149	170	199	226	176	218	262	314	365	375	422	458	499	515
Sound power Lw	dB(A)	49	52	56	60	63	47	53	59	64	68	60	62	64	66	68
Sound pressure (*)	dB(A)	40	43	47	51	54	38	44	50	55	59	51	53	55	57	59

Model		BFS-4P-441					BFS-4P-541				
Speed		1	2	3	4	5	1	2	3	4	5
Air flow	m^3/h	2225	2535	2790	3055	3295	2865	3210	3475	3875	4265
Cooling total capacity	kW	11,86	12,84	13,58	14,34	14,96	15,46	16,59	17,41	18,58	19,65
Cooling sensible capacity	kW	9,18	10,11	10,85	11,60	12,25	12,11	13,20	14,01	15,20	16,33
Heating	kW	10,50	11,27	11,86	12,44	12,95	13,37	14,25	14,85	15,77	16,58
Dp Cooling	kPa	14,0	17,0	19,0	21,0	22,0	13,4	15,2	16,7	18,8	20,9
Dp Heating	kPa	32,0	37,0	40,0	44,0	47,0	29,7	33,3	36,1	40,2	44,1
Fan	W	440	500	542	599	670	530	604	678	754	851
Sound power Lw	dB(A)	63	65	67	69	72	66	69	71	73	75
Sound pressure (*)	dB(A)	54	56	58	60	63	57	60	62	64	66

(*) = The sound pressure levels are 9 dB(A) lower than the sound power levels and apply to the reverberant field of a 100 m^3 room and a reverberation time of 0.5 sec.

Size 1-5
4 pipe units

The following standard rating conditions are used:

COOLING (summer mode)

Entering air temperature +27°C d.b. +19°C w.b.
Water temperature +7°C E.W.T. +12°C L.W.T.
AVAILABLE PRESSURE: 0 Pa

HEATING (winter mode)

Entering air temperature +20°C
Water temperature +70°C E.W.T. +60°C L.W.T.

BFS units with 4+2 row coil

Model		BFS-4P-142					BFS-4P-242					BFS-4P-342				
Speed		1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Air flow	m^3/h	4,58	1055	1260	1470	1695	845	1145	1505	1910	2190	1765	2010	2195	2455	2645
Cooling total capacity	kW	3,64	5,15	5,73	6,27	6,82	5,18	6,36	7,54	8,66	9,37	9,23	9,98	10,51	11,22	11,71
Cooling sensible capacity	kW	8,56	4,20	4,80	5,39	5,99	3,85	4,88	5,99	7,14	7,89	7,19	7,91	8,44	9,16	9,66
Heating	kW	5,5	9,72	10,92	12,06	13,17	9,14	11,35	13,67	15,95	17,37	16,19	17,63	18,66	20,02	20,98
Dp Cooling	kPa	13,2	6,8	8,3	9,9	11,4	6,6	9,6	13,2	17,2	19,8	16,0	18,4	20,3	22,9	24,8
Dp Heating	kPa	124	16,7	20,8	24,8	29,3	12,3	18,4	26,1	34,6	40,6	18,0	21,2	23,5	26,8	29,2
Fan	W	49	145	168	193	218	173	212	257	302	347	369	414	449	489	507
Sound power Lw	dB(A)	40	52	56	60	63	47	53	59	64	68	60	62	64	66	68
Sound pressure (*)	dB(A)	40	43	47	51	54	38	44	50	55	59	51	53	55	57	59

Model		BFS-4P-442					BFS-4P-542				
Speed		1	2	3	4	5	1	2	3	4	5
Air flow	m^3/h	2205	2500	2745	3005	3230	2825	3165	3430	3810	4170
Cooling total capacity	kW	11,79	12,73	13,45	14,19	14,79	15,35	16,46	17,28	18,38	19,38
Cooling sensible capacity	kW	9,12	10,08	10,71	11,45	12,07	11,99	13,07	13,88	15,01	16,05
Heating	kW	20,93	22,77	24,21	25,66	26,87	26,37	28,46	29,97	32,07	33,94
Dp Cooling	kPa	14,3	16,5	18,3	20,2	21,8	13,2	15,0	16,4	18,5	20,4
Dp Heating	kPa	27,2	31,8	35,6	39,6	43,3	27,4	31,6	34,8	39,4	43,7
Fan	W	434	489	528	587	650	521	593	662	737	828
Sound power Lw	dB(A)	63	65	67	69	72	66	69	71	73	75
Sound pressure (*)	dB(A)	54	56	58	60	63	57	60	62	64	66

(*) = The sound pressure levels are 9 dB(A) lower than the sound power levels and apply to the reverberant field of a 100 m^3 room and a reverberation time of 0.5 sec.

General data

Size 6-7
2 pipe units

The following standard rating conditions are used:

COOLING (summer mode)

Entering air temperature +27°C d.b. +19°C w.b.
Water temperature +7°C E.W.T. +12°C L.W.T.

HEATING (winter mode)

Entering air temperature +20°C
Water temperature +60°C E.W.T. +50°C L.W.T.

BFS units with 4 and 6 row coil

AVAILABLE PRESSURE: 0 Pa

Model		BFS-2P-64			BFS-2P-66			BFS-2P-74			BFS-2P-76		
Speed		1	2	3	1	2	3	1	2	3	1	2	3
Air flow	m³/h	2200	3580	5200	2190	3570	5170	3960	5210	7480	3960	5210	7435
Cooling total capacity	kW	14,55	20,22	25,38	16,99	24,4	31,3	23,17	27,52	34,04	27,81	33,59	42,28
Cooling sensible capacity	kW	10,71	15,58	20,42	11,96	17,83	23,73	17,76	21,63	27,96	20,16	24,99	32,70
Dp Cooling	kPa	9,0	16,4	24,6	11,6	22,2	34,8	14,6	19,8	29,1	18,6	26,1	39,5
Heating	kW	23,77	35,01	46,21	26,09	39,57	53,27	39,61	48,83	63,38	44,57	55,84	73,68
Dp Heating	kPa	4,9	9,9	16,3	5,7	12,1	20,6	8,6	12,5	20,0	9,9	14,8	24,4
Fan	W	718	943	1437	715	933	1407	1717	1970	2817	1717	1970	2764
Sound power Lw	dB(A)	61	69	76	61	69	76	68	74	81	68	74	81
Sound pressure (*)	dB(A)	52	60	67	52	60	67	59	65	72	59	65	72

AVAILABLE PRESSURE: 150 Pa

Model		BFS-2P-64			BFS-2P-66			BFS-2P-74			BFS-2P-76		
Speed		1	2	3	1	2	3	1	2	3	1	2	3
Air flow	m³/h	1880	3385	4800	1860	3350	4740	3925	5070	7100	3920	5050	7030
Cooling total capacity	kW	12,99	19,51	24,19	14,92	23,35	29,59	23,06	27,09	33,09	27,59	32,91	40,83
Cooling sensible capacity	kW	9,45	14,94	19,28	10,4	16,96	22,22	17,57	21,22	26,99	19,99	24,4	31,37
Dp Cooling	kPa	7,4	15,3	22,6	9,2	20,5	31,4	14,4	19,3	27,6	18,3	25,1	37,1
Heating	kW	20,86	33,52	43,6	22,58	37,53	49,77	39,34	47,85	61,14	44,2	54,45	70,64
Dp Heating	kPa	3,9	9,1	14,7	4,4	11,0	18,2	8,5	12,1	18,8	9,7	14,2	22,6
Fan	W	574	778	1304	565	759	1314	1518	1758	2460	1499	1737	2410
Sound power Lw	dB(A)	63	71	77	63	71	77	71	75	81	71	75	81
Sound pressure (*)	dB(A)	54	62	68	54	62	68	62	66	72	62	66	72

Size 6-7
4 pipe units

The following standard rating conditions are used:

COOLING (summer mode)

Entering air temperature +27°C d.b. +19°C w.b.
Water temperature +7°C E.W.T. +12°C L.W.T.

HEATING (winter mode)

Entering air temperature +20°C
Water temperature +70°C E.W.T. +60°C L.W.T.

BFS units with 4+2 and 6+2 row coil

AVAILABLE PRESSURE: 0 Pa

Model		BFS-4P-642			BFS-4P-662			BFS-4P-742			BFS-4P-762		
Speed		1	2	3	1	2	3	1	2	3	1	2	3
Air flow	m^3/h	2190	3570	5150	2180	3570	5125	3960	5210	7410	3960	5210	7355
Cooling total capacity	kW	14,51	20,17	25,2	16,92	24,4	31,12	23,17	27,52	33,9	27,81	33,59	41,96
Cooling sensible capacity	kW	10,68	15,54	20,26	11,91	17,83	23,57	17,67	21,63	27,8	20,16	24,99	32,41
Dp Cooling	kPa	9,0	16,3	24,3	11,5	22,2	34,4	14,6	19,8	28,9	18,6	26,1	38,9
Heating	kW	22,28	31,16	39,42	22,21	31,16	39,27	35,74	42,78	53,25	35,74	42,78	52,98
Dp Heating	kPa	14,7	27,0	41,2	14,7	27,0	40,9	24,1	33,3	49,3	24,1	33,3	48,9
Fan	W	715	933	1390	712	933	1371	1717	1970	2737	1717	1970	2679
Sound power Lw	dB(A)	61	69	76	61	69	76	68	74	81	68	74	81
Sound pressure (*)	dB(A)	52	60	67	52	60	67	59	65	72	59	65	72

AVAILABLE PRESSURE: 150 Pa

Model		BFS-4P-642			BFS-4P-662			BFS-4P-742			BFS-4P-762		
Speed		1	2	3	1	2	3	1	2	3	1	2	3
Air flow	m^3/h	1860	3330	4680	1850	3300	4600	3920	5040	6980	3910	5000	6900
Cooling total capacity	kW	12,89	19,31	23,85	14,87	23,09	28,98	23,03	26,98	32,74	27,55	32,67	40,36
Cooling sensible capacity	kW	9,37	14,77	18,95	10,36	16,75	21,71	17,55	21,12	26,66	19,95	24,2	30,94
Dp Cooling	kPa	7,3	15,0	22,0	9,1	20,1	30,3	14,4	19,1	27,1	18,3	24,8	36,3
Heating	kW	19,81	29,78	37,13	19,73	29,59	36,76	35,5	41,88	51,31	35,41	41,68	50,95
Dp Heating	kPa	11,9	24,9	37,0	11,8	24,6	36,3	23,8	32,0	46,1	23,7	31,7	45,5
Fan	W	565	750	1327	775	1046	1455	1499	1727	2376	1468	1687	2325
Sound power Lw	dB(A)	63	71	77	63	71	77	71	75	81	71	75	81
Sound pressure (*)	dB(A)	54	62	68	54	62	68	62	66	72	62	66	72

(*) = The sound pressure levels are 9 dB(A) lower than the sound power levels and apply to the reverberant field of a 100 m^3 room and a reverberation time of 0.5 sec.

Performance data - cooling

Cooling capacity of 3 row coil

Entering air temperature: 27°C – R. H.: 50% – **Available pressure: 0 Pa**

Mod.	Speed		Qv	WT: 7/12 °C				WT: 8/13 °C				WT: 10/15 °C				WT: 12/17 °C			
				Pc	Ps	Qw	Dp(c)	Pc	Ps	Qw	Dp(c)	Pc	Ps	Qw	Dp(c)	Pc	Ps	Qw	Dp(c)
			m³/h	kW	kW	l/h	kPa	kW	kW	l/h	kPa	kW	kW	l/h	kPa	kW	kW	l/h	kPa
BFS-2P-13	5	MAX	1925	6,52	5,47	1122	15,4	5,77	5,32	992	12,7	4,64	4,54	797	8,3	3,66	3,59	630	5,2
	4		1640	5,90	4,84	1015	13,3	5,31	4,76	914	10,9	4,24	4,15	729	7,0	3,33	3,26	572	4,4
	3	MED	1340	5,32	4,22	914	10,9	4,76	4,11	819	8,9	3,77	3,70	649	5,7	2,94	2,88	505	3,5
	2		1140	4,87	3,77	837	9,3	4,36	3,66	749	7,5	3,44	3,37	591	4,8	2,65	2,60	457	2,9
	1	MIN	995	4,51	3,43	776	8,1	4,03	3,32	694	6,5	3,16	3,10	544	4,1	2,43	2,38	418	2,5
BFS-2P-23	5	MAX	2510	8,89	7,13	1529	30,9	7,99	7,01	1374	25,3	6,42	6,29	1104	16,6	5,07	4,96	871	10,5
	4		2060	8,02	6,23	1379	25,6	7,22	6,11	1241	20,9	5,75	5,64	990	13,5	4,51	4,42	775	8,4
	3	MED	1550	6,90	5,15	1187	19,3	6,19	5,00	1064	15,7	4,88	4,74	840	10,0	3,78	3,70	650	6,1
	2		1165	5,88	4,23	1011	14,3	5,25	4,07	902	11,6	4,11	3,80	707	7,2	3,14	3,08	541	4,3
	1	MIN	855	4,87	3,40	837	10,1	4,35	3,25	748	8,1	3,37	2,97	580	5,0	2,56	2,50	440	2,9
BFS-2P-33	5	MAX	2790	10,56	8,23	1816	32,6	9,51	8,09	1636	26,7	7,61	7,46	1309	17,4	5,98	5,86	1029	10,9
	4		2590	10,16	7,83	1748	30,5	9,15	7,68	1573	24,9	7,29	7,15	1254	16,1	5,72	5,60	983	10,0
	3	MED	2300	9,56	7,24	1644	27,1	8,59	7,07	1477	22,1	6,82	6,68	1172	14,2	5,32	5,21	915	8,7
	2		2080	9,06	6,76	1558	24,6	8,14	6,59	1400	19,9	6,43	6,26	1107	12,7	5,00	4,90	859	7,8
	1	MIN	1815	8,41	6,18	1447	21,3	7,53	5,98	1295	17,3	5,94	5,64	1021	11,0	4,59	4,50	789	6,6
BFS-2P-43	5	MAX	3400	13,60	10,43	2340	32,2	12,24	10,23	2105	26,3	9,76	9,57	1679	17,1	7,65	7,50	1316	10,6
	4		3130	13,03	9,87	2240	29,7	11,71	9,65	2014	24,3	9,31	9,12	1601	15,6	7,27	7,13	1251	9,6
	3	MED	2855	12,21	9,10	2100	26,4	10,97	8,87	1887	21,5	8,68	8,43	1493	13,7	6,75	6,61	1161	8,4
	2		2585	11,58	8,53	1991	23,9	10,38	8,28	1786	19,4	8,20	7,83	1410	12,3	6,35	6,22	1092	7,5
	1	MIN	2265	10,68	7,74	1837	20,5	9,56	7,46	1645	16,6	7,52	7,00	1293	10,5	5,79	5,67	995	6,3
BFS-2P-53	5	MAX	4400	17,85	14,02	3070	30,0	16,02	13,66	2755	24,6	12,75	12,50	2193	15,8	9,97	9,77	1715	9,8
	4		3975	16,90	13,07	2907	27,2	15,17	12,71	2609	22,2	12,04	11,80	2071	14,2	9,37	9,19	1612	8,7
	3	MED	3540	15,88	12,06	2731	24,2	14,24	11,70	2449	19,7	11,25	11,02	1934	12,6	8,71	8,53	1498	7,6
	2		3275	15,22	11,43	2617	22,4	13,64	11,06	2345	18,2	10,75	10,38	1849	11,5	8,29	8,13	1427	6,9
	1	MIN	2905	14,23	10,51	2447	19,7	12,73	10,14	2189	16,0	10,01	9,46	1721	10,1	7,68	7,53	1321	6,0

Cooling capacity of 3 row coil

Entering air temperature: 26°C – R. H.: 50% – **Available pressure: 0 Pa**

Mod.	Speed		Qv	WT: 7/12 °C				WT: 8/13 °C				WT: 10/15 °C				WT: 12/17 °C			
				Pc	Ps	Qw	Dp(c)	Pc	Ps	Qw	Dp(c)	Pc	Ps	Qw	Dp(c)	Pc	Ps	Qw	Dp(c)
			m³/h	kW	kW	l/h	kPa	kW	kW	l/h	kPa	kW	kW	l/h	kPa	kW	kW	l/h	kPa
BFS-2P-13	5	MAX	1925	5,74	5,30	988	12,6	5,17	5,07	889	10,3	4,13	4,04	710	6,7	3,59	3,52	617	5,0
	4		1640	5,29	4,73	909	10,8	4,74	4,64	815	8,8	3,76	3,69	647	5,6	3,25	3,19	559	4,2
	3	MED	1340	4,74	4,10	816	8,9	4,23	4,00	728	7,1	3,34	3,27	574	4,5	2,80	2,74	481	3,2
	2		1140	4,33	3,65	744	7,5	3,86	3,55	665	6,0	3,02	2,96	520	3,8	2,41	2,37	415	2,5
	1	MIN	995	4,01	3,31	691	6,5	3,56	3,20	613	5,2	2,78	2,73	479	3,2	2,13	2,09	367	2,0
BFS-2P-23	5	MAX	2510	7,97	6,99	1370	25,3	7,16	6,88	1232	20,6	5,72	5,60	984	13,3	4,66	4,56	801	9,1
	4		2060	7,18	6,09	1234	20,8	6,43	5,96	1106	16,9	5,10	5,00	877	10,8	3,98	3,90	684	6,6
	3	MED	1550	6,15	4,99	1057	15,6	5,48	4,85	943	12,6	4,30	4,22	740	7,9	3,32	3,25	570	4,7
	2		1165	5,22	4,07	898	11,5	4,65	3,92	799	9,2	3,60	3,53	620	5,7	2,74	2,69	472	3,3
	1	MIN	855	4,32	3,24	743	8,1	3,83	3,10	659	6,4	2,95	2,84	507	3,9	2,21	2,17	381	2,2
BFS-2P-33	5	MAX	2790	9,47	8,06	1629	26,7	8,49	7,91	1461	21,7	6,76	6,63	1163	13,9	5,28	5,18	909	8,5
	4		2590	9,11	7,66	1566	24,8	8,16	7,49	1403	20,1	6,47	6,34	1113	12,8	5,05	4,94	868	7,8
	3	MED	2300	8,55	7,05	1470	22,1	7,65	6,88	1316	17,8	6,03	5,91	1038	11,3	4,68	4,59	805	6,8
	2		2080	8,09	6,57	1391	19,9	7,23	6,40	1244	16,0	5,68	5,56	977	10,1	4,39	4,30	755	6,0
	1	MIN	1815	7,50	5,97	1290	17,3	6,69	5,79	1151	13,9	5,23	5,12	899	8,6	4,02	3,94	691	5,1
BFS-2P-43	5	MAX	3400	12,18	10,20	2094	26,3	10,91	9,98	1877	21,3	8,67	8,49	1491	13,6	6,75	6,62	1161	8,3
	4		3130	11,66	9,63	2005	24,2	10,44	9,41	1796	19,6	8,25	8,08	1419	12,4	6,41	6,28	1102	7,5
	3	MED	2855	10,91	8,85	1877	21,4	9,76	8,62	1678	17,2	7,67	7,52	1319	10,9	5,93	5,81	1020	6,5
	2		2585	10,34	8,27	1779	19,3	9,23	8,03	1588	15,6	7,23	7,09	1244	9,7	5,57	5,46	958	5,8
	1	MIN	2265	9,51	7,45	1636	16,6	8,48	7,20	1458	13,3	6,61	6,48	1137	8,2	5,06	4,95	869	4,8
BFS-2P-53	5	MAX	4400	15,96	13,63	2744	24,5	14,29	13,29	2458	19,8	11,30	11,08	1944	12,6	8,79	8,62	1512	8,0
	4		3975	15,12	12,69	2601	22,2	13,52	12,34	2326	17,9	10,64	10,43	1831	11,3	8,23	8,07	1416	6,8
	3	MED	3540	14,18	11,68	2439	19,7	12,64	11,31	2175	15,8	9,92	9,72	1706	9,9	7,64	7,49	1315	5,9
	2		3275	13,58	11,05	2336	18,1	12,09	10,67	2080	14,6	9,47	9,28	1628	9,1	7,27	7,12	1250	5,4
	1	MIN	2905	12,68	10,13	2181	15,9	11,30	9,77	1944	12,8	8,79	8,61	1512	7,9	6,71	6,58	1155	4,6

Cooling capacity of 3 row coil

Entering air temperature: 25°C – R. H.: 50% – **Available pressure: 0 Pa**

Mod.	Speed		Qv	WT: 7/12 °C				WT: 8/13 °C				WT: 10/15 °C				WT: 12/17 °C			
			m³/h	Pc kW	Ps kW	Qw l/h	Dp(c) kPa	Pc kW	Ps kW	Qw l/h	Dp(c) kPa	Pc kW	Ps kW	Qw l/h	Dp(c) kPa	Pc kW	Ps kW	Qw l/h	Dp(c) kPa
BFS-2P-13	5	MAX	1925	5,15	5,05	886	10,3	4,62	4,53	795	8,3	3,67	3,60	632	5,3	3,22	3,16	554	4,1
	4		1640	4,72	4,62	813	8,8	4,22	4,14	726	7,1	3,34	3,27	574	4,5	2,92	2,86	502	3,4
	3	MED	1340	4,23	3,98	727	7,1	3,76	3,69	647	5,7	2,95	2,89	507	3,5	2,57	2,52	442	2,7
	2		1140	3,85	3,54	663	6,0	3,42	3,35	588	4,8	2,66	2,61	458	2,9	2,31	2,27	398	2,2
	1	MIN	995	3,56	3,19	612	5,2	3,15	3,09	542	4,1	2,44	2,39	420	2,5	2,12	2,07	364	1,9
BFS-2P-23	5	MAX	2510	7,14	6,84	1228	20,6	6,40	6,27	1101	16,7	5,08	4,98	874	10,7	4,43	4,34	761	8,2
	4		2060	6,42	5,94	1104	16,9	5,73	5,62	986	13,6	4,51	4,42	776	8,6	3,92	3,84	674	6,5
	3	MED	1550	5,47	4,83	941	12,6	4,86	4,69	836	10,0	3,79	3,71	652	6,2	3,26	3,19	560	4,6
	2		1165	4,62	3,91	795	9,2	4,09	3,77	704	7,3	3,15	3,09	543	4,4	2,68	2,63	462	3,2
	1	MIN	855	3,82	3,10	656	6,4	3,36	2,96	579	5,1	2,56	2,51	441	3,0	2,09	2,04	359	2,0
BFS-2P-33	5	MAX	2790	8,48	7,88	1458	21,7	7,58	7,42	1303	17,5	5,99	5,87	1030	11,1	5,20	5,09	894	8,4
	4		2590	8,14	7,47	1399	20,1	7,27	7,12	1250	16,2	5,73	5,62	986	10,2	4,96	4,86	853	7,7
	3	MED	2300	7,61	6,85	1310	17,8	6,79	6,66	1168	14,3	5,33	5,22	917	8,9	4,60	4,50	790	6,6
	2		2080	7,20	6,38	1239	16,0	6,41	6,20	1103	12,8	5,01	4,91	862	7,9	4,31	4,22	741	5,9
	1	MIN	1815	6,66	5,77	1146	13,9	5,92	5,60	1018	11,1	4,60	4,51	791	6,8	3,93	3,85	677	4,9
BFS-2P-43	5	MAX	3400	10,89	9,95	1872	21,3	9,73	9,54	1674	17,2	7,68	7,52	1320	10,8	6,63	6,50	1141	8,1
	4		3130	10,39	9,37	1788	19,5	9,28	9,09	1596	15,7	7,30	7,15	1255	9,8	6,28	6,16	1081	7,4
	3	MED	2855	9,70	8,58	1669	17,2	8,64	8,35	1486	13,8	6,77	6,63	1164	8,5	5,81	5,69	999	6,3
	2		2585	9,19	8,00	1581	15,6	8,17	7,76	1405	12,4	6,37	6,24	1096	7,6	5,45	5,34	937	5,6
	1	MIN	2265	8,44	7,18	1451	13,3	7,49	6,94	1288	10,5	5,80	5,68	997	6,4	4,93	4,83	848	4,6
BFS-2P-53	5	MAX	4400	14,26	13,24	2453	19,8	12,73	12,47	2189	15,9	10,00	9,80	1721	10,0	8,77	8,60	1509	7,7
	4		3975	13,46	12,28	2316	17,8	12,00	11,76	2064	14,3	9,40	9,21	1616	8,9	8,22	8,06	1414	6,8
	3	MED	3540	12,64	11,29	2174	15,8	11,21	10,93	1929	12,6	8,74	8,57	1503	7,8	7,63	7,47	1312	5,9
	2		3275	12,06	10,65	2074	14,6	10,70	10,29	1841	11,6	8,33	8,16	1432	7,1	7,24	7,10	1246	5,3
	1	MIN	2905	11,25	9,74	1935	12,8	9,96	9,38	1713	10,1	7,71	7,56	1326	6,1	6,68	6,55	1149	4,6

Correction factors for different R.H.

R.H.	WT:	7/12°C	8/13°C	10/15°C	12/17°C
48 %	Pc	0,95	0,94	1,00	1,00
	Ps	1,00	1,00	1,00	1,00
46 %	Pc	0,90	0,88	1,00	1,00
	Ps	1,00	1,00	1,00	1,00

Legend

WT = Water temperature
Pc = Cooling total capacity
Ps = Cooling sensible capacity
Qw = Water flow
Dp(c) = Water pressure drop
Speed = Fan speed
MAX = High speed
MED = Medium speed
MIN = Low speed
Qv = Air flow

Performance data - cooling

Cooling capacity of 4 row coil

Entering air temperature: 27°C – R. H.: 50% – **Available pressure: 0 Pa**

Mod.	Speed		Qv	WT: 7/12 °C				WT: 8/13 °C				WT: 10/15 °C				WT: 12/17 °C			
				Pc	Ps	Qw	Dp(c)	Pc	Ps	Qw	Dp(c)	Pc	Ps	Qw	Dp(c)	Pc	Ps	Qw	Dp(c)
			m³/h	kW	kW	l/h	kPa	kW	kW	l/h	kPa	kW	kW	l/h	kPa	kW	kW	l/h	kPa
BFS-2P-14	5	MAX	1835	7,64	6,10	1313	14,1	6,84	5,92	1177	11,4	5,40	5,29	928	7,3	4,18	4,10	720	4,5
	4		1575	7,03	5,48	1209	12,1	6,28	5,29	1080	9,8	4,94	4,84	849	6,2	3,81	3,73	655	3,7
	3	MED	1315	6,35	4,82	1092	10,1	5,66	4,63	974	8,1	4,43	4,31	762	5,1	3,39	3,32	583	3,0
	2		1115	5,78	4,28	994	8,4	5,15	4,10	885	6,8	4,00	3,77	687	4,2	3,04	2,98	523	2,5
	1	MIN	940	5,20	3,78	895	7,0	4,64	3,60	798	5,6	3,59	3,29	617	3,4	2,71	2,65	466	2,0
BFS-2P-24	5	MAX	2360	10,49	8,01	1804	24,5	9,41	7,77	1619	19,9	7,44	7,29	1279	12,7	5,76	5,64	991	7,7
	4		2005	9,61	7,16	1652	20,8	8,60	6,91	1479	16,8	6,76	6,46	1163	10,6	5,20	5,10	895	6,4
	3	MED	1535	8,25	5,94	1419	15,6	7,37	5,69	1267	12,6	5,75	5,24	989	7,8	4,38	4,29	753	4,6
	2		1160	6,95	4,85	1195	11,4	6,20	4,61	1067	9,1	4,81	4,19	827	5,6	3,62	3,55	622	3,2
	1	MIN	855	5,68	3,85	977	7,8	5,06	3,64	871	6,3	3,90	3,26	672	3,8	2,92	2,86	502	2,2
BFS-2P-34	5	MAX	2745	12,86	9,58	2213	29,5	11,53	9,27	1982	24,0	9,09	8,70	1564	15,2	7,02	6,88	1207	9,2
	4		2550	12,35	9,11	2124	27,4	11,06	8,79	1902	22,3	8,71	8,22	1497	14,0	6,71	6,57	1153	8,4
	3	MED	2265	11,57	8,39	1990	24,2	10,34	8,07	1778	19,6	8,11	7,50	1396	12,3	6,22	6,10	1070	7,3
	2		2060	10,95	7,85	1883	21,9	9,79	7,54	1685	17,7	7,65	6,96	1316	11,1	5,85	5,73	1006	6,5
	1	MIN	1795	10,10	7,13	1737	18,8	9,03	6,82	1553	15,2	7,03	6,25	1210	9,4	5,34	5,23	918	5,5
BFS-2P-44	5	MAX	3340	16,41	12,11	2823	26,5	14,70	11,70	2529	21,4	11,57	10,94	1990	13,6	8,91	8,73	1533	8,1
	4		3085	15,69	11,46	2699	24,3	14,05	11,04	2416	19,7	11,03	10,29	1898	12,4	8,47	8,30	1457	7,4
	3	MED	2820	14,67	10,55	2523	21,5	13,13	10,14	2258	17,3	10,27	9,38	1766	10,8	7,85	7,69	1350	6,4
	2		2560	13,86	9,85	2383	19,3	12,39	9,44	2132	15,6	9,67	8,69	1664	9,7	7,36	7,22	1266	5,7
	1	MIN	2245	12,72	8,89	2187	16,4	11,35	8,48	1952	13,2	8,82	7,74	1518	8,2	6,69	6,56	1151	4,8
BFS-2P-54	5	MAX	4330	21,34	16,03	3671	24,4	19,12	15,43	3288	19,7	15,01	14,33	2581	12,4	11,53	11,30	1984	7,4
	4		3920	20,19	14,95	3473	22,0	18,06	14,34	3106	17,8	14,14	13,26	2433	11,1	10,82	10,61	1861	6,6
	3	MED	3505	18,94	13,80	3258	19,5	16,92	13,20	2911	15,7	13,20	12,12	2270	9,8	10,06	9,86	1730	5,8
	2		3240	18,06	13,03	3106	17,8	16,13	12,44	2775	14,4	12,58	11,39	2164	9,0	9,54	9,35	1641	5,2
	1	MIN	2885	16,85	11,99	2899	15,7	15,03	11,40	2585	12,6	11,71	10,39	2014	7,8	8,83	8,66	1519	4,5

Cooling capacity of 4 row coil

Entering air temperature: 26°C – R. H.: 50% – **Available pressure: 0 Pa**

Mod.	Speed		Qv	WT: 7/12 °C				WT: 8/13 °C				WT: 10/15 °C				WT: 12/17 °C			
				Pc	Ps	Qw	Dp(c)	Pc	Ps	Qw	Dp(c)	Pc	Ps	Qw	Dp(c)	Pc	Ps	Qw	Dp(c)
			m³/h	kW	kW	l/h	kPa	kW	kW	l/h	kPa	kW	kW	l/h	kPa	kW	kW	l/h	kPa
BFS-2P-14	5	MAX	1835	6,80	5,90	1170	11,4	6,07	5,73	1044	9,2	4,76	4,67	819	5,8	4,06	3,98	699	4,3
	4		1575	6,27	5,29	1078	9,8	5,56	5,10	957	7,8	4,34	4,25	747	4,9	3,53	3,46	608	3,3
	3	MED	1315	5,64	4,63	970	8,1	5,01	4,45	861	6,5	3,88	3,81	668	4,0	3,00	2,94	516	2,5
	2		1115	5,12	4,10	881	6,7	4,54	3,92	781	5,4	3,50	3,43	601	3,3	2,64	2,59	455	1,9
	1	MIN	940	4,61	3,60	793	5,6	4,08	3,43	701	4,4	3,13	3,06	538	2,6	2,35	2,30	404	1,5
BFS-2P-24	5	MAX	2360	9,38	7,76	1613	19,9	8,36	7,52	1438	16,0	6,57	6,43	1129	10,0	5,06	4,96	870	6,0
	4		2005	8,55	6,90	1471	16,8	7,62	6,66	1311	13,4	5,94	5,82	1022	8,3	4,55	4,46	782	4,9
	3	MED	1535	7,33	5,69	1261	12,5	6,51	5,45	1120	10,0	5,03	4,93	865	6,1	3,81	3,73	655	3,5
	2		1160	6,17	4,62	1061	9,1	5,46	4,39	939	7,2	4,18	3,99	720	4,3	3,13	3,07	539	2,4
	1	MIN	855	5,03	3,65	866	6,2	4,45	3,45	766	4,9	3,39	3,09	583	2,9	2,51	2,46	431	1,6
BFS-2P-34	5	MAX	2745	11,47	9,26	1973	24,0	10,22	8,95	1759	19,3	8,01	7,85	1377	12,0	6,15	6,03	1058	7,1
	4		2550	11,01	8,79	1895	22,2	9,82	8,48	1688	17,8	7,66	7,51	1318	11,0	5,87	5,75	1009	6,5
	3	MED	2265	10,29	8,07	1770	19,5	9,16	7,76	1576	15,7	7,12	6,98	1224	9,6	5,42	5,31	932	5,6
	2		2060	9,74	7,54	1676	17,6	8,66	7,23	1490	14,1	6,70	6,57	1153	8,6	5,09	4,99	875	5,0
	1	MIN	1795	8,97	6,82	1543	15,1	7,97	6,52	1371	12,1	6,14	5,98	1057	7,3	4,64	4,55	798	4,2
BFS-2P-44	5	MAX	3340	14,62	11,68	2514	21,3	13,04	11,28	2243	17,1	10,17	9,96	1749	10,6	7,79	7,63	1339	6,3
	4		3085	13,97	11,03	2403	19,6	12,43	10,62	2138	15,7	9,68	9,49	1665	9,7	7,39	7,24	1271	5,7
	3	MED	2820	13,06	10,13	2246	17,3	11,61	9,73	1996	13,8	9,00	8,82	1548	8,5	6,84	6,70	1176	4,9
	2		2560	12,31	9,43	2118	15,5	10,94	9,03	1881	12,4	8,45	8,28	1454	7,5	6,40	6,27	1100	4,3
	1	MIN	2245	11,29	8,49	1942	13,2	10,01	8,09	1722	10,5	7,70	7,40	1325	6,3	5,79	5,68	997	3,6
BFS-2P-54	5	MAX	4330	19,04	15,42	3275	19,7	16,94	14,83	2913	15,8	13,19	12,93	2269	9,7	10,08	9,88	1733	5,7
	4		3920	17,97	14,33	3090	17,7	15,99	13,75	2750	14,1	12,41	12,16	2135	8,7	9,43	9,25	1623	5,0
	3	MED	3505	16,83	13,19	2894	15,6	14,95	12,62	2571	12,5	11,55	11,32	1987	7,6	8,75	8,58	1506	4,4
	2		3240	16,06	12,45	2763	14,3	14,26	11,89	2453	11,4	11,00	10,78	1892	6,9	8,29	8,13	1426	4,0
	1	MIN	2885	14,95	11,41	2572	12,6	13,25	10,86	2280	10,0	10,18	9,89	1752	6,0	7,65	7,50	1316	3,4

Cooling capacity of 4 row coil

Entering air temperature: 25°C – R. H.: 50% – **Available pressure: 0 Pa**

Mod.	Speed		Qv	WT: 7/12 °C				WT: 8/13 °C				WT: 10/15 °C				WT: 12/17 °C			
			m³/h	Pc kW	Ps kW	Qw l/h	Dp(c) kPa	Pc kW	Ps kW	Qw l/h	Dp(c) kPa	Pc kW	Ps kW	Qw l/h	Dp(c) kPa	Pc kW	Ps kW	Qw l/h	Dp(c) kPa
BFS-2P-14	5	MAX	1835	6,05	5,70	1040	9,2	5,38	5,27	925	7,4	4,20	4,12	722	4,5	3,72	3,64	639	3,5
	4		1575	5,54	5,08	953	7,9	4,92	4,82	846	6,2	3,82	3,74	656	3,8	3,36	3,30	579	2,9
	3	MED	1315	4,99	4,44	859	6,4	4,41	4,27	759	5,1	3,40	3,33	585	3,1	2,98	2,92	512	2,3
	2		1115	4,52	3,91	777	5,4	3,99	3,75	686	4,2	3,05	2,99	525	2,5	2,66	2,61	457	1,9
	1	MIN	940	4,07	3,43	699	4,4	3,57	3,27	614	3,4	2,72	2,67	468	2,0	2,36	2,31	405	1,5
BFS-2P-24	5	MAX	2360	8,34	7,50	1434	15,9	7,41	7,26	1275	12,8	5,78	5,67	994	7,8	5,05	4,95	869	6,0
	4		2005	7,60	6,64	1306	13,4	6,74	6,41	1159	10,7	5,22	5,11	898	6,5	4,53	4,44	779	4,8
	3	MED	1535	6,48	5,44	1115	10,0	5,73	5,21	985	7,9	4,39	4,30	755	4,7	3,77	3,69	648	3,4
	2		1160	5,44	4,39	935	7,2	4,79	4,18	824	5,7	3,63	3,56	625	3,3	2,98	2,92	512	2,2
	1	MIN	855	4,43	3,45	762	4,9	3,89	3,26	669	3,8	2,93	2,87	504	2,2	2,23	2,18	383	1,3
BFS-2P-34	5	MAX	2745	10,20	8,93	1755	19,3	9,05	8,63	1557	15,3	7,05	6,90	1212	9,4	6,11	5,98	1050	7,0
	4		2550	9,77	8,45	1680	17,8	8,68	8,16	1493	14,1	6,73	6,59	1157	8,6	5,81	5,70	1000	6,4
	3	MED	2265	9,12	7,74	1568	15,6	8,08	7,45	1390	12,4	6,23	6,11	1072	7,5	5,36	5,25	922	5,5
	2		2060	8,63	7,22	1484	14,1	7,63	6,93	1312	11,1	5,87	5,75	1010	6,7	5,02	4,92	863	4,8
	1	MIN	1795	7,94	6,51	1366	12,0	7,00	6,22	1204	9,5	5,36	5,25	922	5,6	4,44	4,35	764	3,9
BFS-2P-44	5	MAX	3340	12,99	11,25	2234	17,1	11,53	10,86	1983	13,6	8,94	8,76	1537	8,3	7,72	7,57	1329	6,2
	4		3085	12,41	10,61	2134	15,7	10,98	10,21	1889	12,5	8,49	8,32	1460	7,6	7,32	7,17	1259	5,6
	3	MED	2820	11,56	9,71	1988	13,8	10,22	9,32	1759	10,9	7,87	7,71	1353	6,5	6,74	6,61	1160	4,8
	2		2560	10,89	9,02	1874	12,4	9,63	8,64	1656	9,7	7,38	7,23	1269	5,8	6,23	6,11	1072	4,1
	1	MIN	2245	9,98	8,09	1716	10,5	8,79	7,71	1512	8,2	6,71	6,57	1153	4,9	5,44	5,33	936	3,2
BFS-2P-54	5	MAX	4330	16,88	14,79	2903	15,8	14,97	14,24	2576	12,5	11,58	11,35	1991	7,6	10,17	9,97	1750	5,8
	4		3920	15,91	13,72	2737	14,2	14,11	13,17	2426	11,2	10,86	10,65	1869	6,7	9,50	9,31	1634	5,1
	3	MED	3505	14,89	12,60	2561	12,5	13,17	12,06	2265	9,9	10,09	9,89	1736	5,9	8,79	8,61	1512	4,4
	2		3240	14,21	11,87	2443	11,4	12,53	11,34	2156	9,0	9,58	9,39	1648	5,3	8,32	8,15	1430	3,9
	1	MIN	2885	13,20	10,85	2271	10,0	11,65	10,34	2003	7,8	8,87	8,69	1525	4,6	7,58	7,43	1304	3,3

Correction factors for different R.H.

R.H.	WT:	7/12°C	8/13°C	10/15°C	12/17°C
48 %	Pc	0,95	0,94	1,00	1,00
	Ps	1,00	1,00	1,00	1,00
46 %	Pc	0,90	0,88	1,00	1,00
	Ps	1,00	1,00	1,00	1,00

Legend

WT = Water temperature
Pc = Cooling total capacity
Ps = Cooling sensible capacity
Qw = Water flow
Dp(c) = Water pressure drop
Speed = Fan speed
MAX = High speed
MED = Medium speed
MIN = Low speed
Qv = Air flow

Performance data - cooling

Cooling capacity of 4 row coil

Entering air temperature: 27°C – R. H.: 50% – **Available pressure: 0 Pa**

Mod.	Speed		Qv	WT: 7/12 °C				WT: 8/13 °C				WT: 10/15 °C				WT: 12/17 °C			
				Pc	Ps	Qw	Dp(c)	Pc	Ps	Qw	Dp(c)	Pc	Ps	Qw	Dp(c)	Pc	Ps	Qw	Dp(c)
			m³/h	kW	kW	l/h	kPa	kW	kW	l/h	kPa	kW	kW	l/h	kPa	kW	kW	l/h	kPa
BFS-2P-64	3	MAX	5200	27,34	20,66	4702	28,1	24,47	19,80	4208	22,9	19,14	18,22	3292	14,6	14,66	14,66	2521	9,0
	2	MED	3580	21,84	15,72	3757	18,8	19,51	14,93	3355	15,3	15,15	13,49	2605	9,6	11,43	11,43	1966	5,7
	1	MIN	2200	15,74	10,80	2707	10,4	14,06	10,16	2418	8,5	10,86	9,00	1868	5,3	8,07	8,04	1387	3,1
BFS-2P-74	3	MAX	7480	36,63	28,38	6300	33,2	32,78	27,28	5638	27,1	25,78	25,34	4434	17,4	19,87	19,87	3418	10,8
	2	MED	5210	29,70	21,85	5108	22,8	26,55	20,83	4566	18,5	20,71	19,00	3561	11,7	15,70	15,70	2700	7,1
	1	MIN	3960	25,08	17,85	4314	16,8	22,39	16,90	3852	13,6	17,34	15,20	2982	8,5	13,05	13,05	2244	5,1

Cooling capacity of 4 row coil

Entering air temperature: 26°C – R. H.: 50% – **Available pressure: 0 Pa**

Mod.	Speed		Qv	WT: 7/12 °C				WT: 8/13 °C				WT: 10/15 °C				WT: 12/17 °C			
				Pc	Ps	Qw	Dp(c)	Pc	Ps	Qw	Dp(c)	Pc	Ps	Qw	Dp(c)	Pc	Ps	Qw	Dp(c)
			m³/h	kW	kW	l/h	kPa	kW	kW	l/h	kPa	kW	kW	l/h	kPa	kW	kW	l/h	kPa
BFS-2P-64	3	MAX	5200	24,32	19,77	4183	22,8	21,66	18,95	3725	18,4	16,79	16,79	2887	11,5	12,78	12,78	2197	7,0
	2	MED	3580	19,42	14,95	3339	15,2	17,20	14,18	2959	12,2	13,19	12,83	2269	7,5	9,88	9,88	1700	4,4
	1	MIN	2200	13,97	10,19	2403	8,4	12,36	9,57	2126	6,7	9,39	8,49	1616	4,1	6,91	6,91	1189	2,3
BFS-2P-74	3	MAX	7480	32,65	27,26	5616	27,0	29,10	26,22	5005	21,8	22,71	22,71	3906	13,8	17,39	17,39	2991	8,5
	2	MED	5210	26,41	20,83	4542	18,4	23,47	19,87	4037	14,8	18,09	18,09	3111	9,2	13,63	13,63	2344	5,5
	1	MIN	3960	22,26	16,92	3830	13,5	19,73	16,03	3394	10,9	15,10	14,44	2597	6,6	11,26	11,26	1936	3,9

Cooling capacity of 4 row coil

Entering air temperature: 25°C – R. H.: 50% – **Available pressure: 0 Pa**

Mod.	Speed		Qv	WT: 7/12 °C				WT: 8/13 °C				WT: 10/15 °C				WT: 12/17 °C			
				Pc	Ps	Qw	Dp(c)	Pc	Ps	Qw	Dp(c)	Pc	Ps	Qw	Dp(c)	Pc	Ps	Qw	Dp(c)
			m³/h	kW	kW	l/h	kPa	kW	kW	l/h	kPa	kW	kW	l/h	kPa	kW	kW	l/h	kPa
BFS-2P-64	3	MAX	5200	21,58	18,92	3711	18,4	19,10	18,12	3285	14,7	14,70	14,70	2529	9,1	12,96	12,96	2230	7,2
	2	MED	3580	17,13	14,18	2947	12,1	15,09	13,45	2595	9,6	11,48	11,48	1974	5,8	9,54	9,54	1640	4,1
	1	MIN	2200	12,30	9,59	2116	6,7	10,81	9,01	1859	5,3	8,09	8,00	1392	3,1	5,99	5,99	1031	1,8
BFS-2P-74	3	MAX	7480	29,02	26,17	4992	21,8	25,74	25,16	4427	17,5	19,95	19,95	3431	11,0	17,70	17,70	3044	8,8
	2	MED	5210	23,37	19,84	4020	14,8	20,63	18,92	3549	11,8	15,76	15,76	2711	7,2	13,75	13,75	2365	5,6
	1	MIN	3960	19,63	16,02	3376	10,8	17,29	15,18	2974	8,6	13,09	13,09	2252	5,1	10,61	10,61	1824	3,5

Correction factors for different R.H.

R.H.	WT:	7/12°C	8/13°C	10/15°C	12/17°C
48 %	Pc	0,95	0,94	1,00	1,00
	Ps	1,00	1,00	1,00	1,00
46 %	Pc	0,90	0,88	1,00	1,00
	Ps	1,00	1,00	1,00	1,00

Legend

WT = Water temperature
Pc = Cooling total capacity
Ps = Cooling sensible capacity
Qw = Water flow
Dp(c) = Water pressure drop
Speed = Fan speed
MAX = High speed
MED = Medium speed
MIN = Low speed
Qv = Air flow

Performance data - cooling

Cooling capacity of 6 row coil

Entering air temperature: 27°C – R. H.: 50% – **Available pressure: 0 Pa**

Mod.	Speed		Qv	WT: 7/12 °C				WT: 8/13 °C				WT: 10/15 °C				WT: 12/17 °C			
				Pc	Ps	Qw	Dp(c)	Pc	Ps	Qw	Dp(c)	Pc	Ps	Qw	Dp(c)	Pc	Ps	Qw	Dp(c)
			m³/h	kW	kW	l/h	kPa	kW	kW	l/h	kPa	kW	kW	l/h	kPa	kW	kW	l/h	kPa
BFS-2P-66	3	MAX	5170	33,72	23,82	5799	39,7	30,21	22,56	5196	32,5	23,54	20,26	4049	20,5	17,76	17,76	3055	12,2
	2	MED	3570	26,33	17,92	4529	25,5	23,62	16,87	4063	20,8	18,35	14,93	3157	13,1	13,68	13,29	2354	7,7
	1	MIN	2190	18,29	12,03	3146	13,2	16,47	11,28	2833	10,9	12,82	9,84	2204	6,9	9,47	8,60	1628	3,9
BFS-2P-76	3	MAX	7435	45,41	32,78	7811	44,9	40,68	31,16	6998	36,7	31,79	28,21	5468	23,3	24,13	24,13	4151	14,1
	2	MED	5210	36,21	25,10	6228	29,9	32,43	23,68	5579	24,4	25,24	21,11	4341	15,4	18,91	18,91	3252	9,1
	1	MIN	3960	29,97	20,26	5156	21,3	26,89	19,05	4625	17,4	20,88	16,79	3591	10,9	15,53	14,90	2672	6,4

Cooling capacity of 6 row coil

Entering air temperature: 26°C – R. H.: 50% – **Available pressure: 0 Pa**

Mod.	Speed		Qv	WT: 7/12 °C				WT: 8/13 °C				WT: 10/15 °C				WT: 12/17 °C			
				Pc	Ps	Qw	Dp(c)	Pc	Ps	Qw	Dp(c)	Pc	Ps	Qw	Dp(c)	Pc	Ps	Qw	Dp(c)
			m³/h	kW	kW	l/h	kPa	kW	kW	l/h	kPa	kW	kW	l/h	kPa	kW	kW	l/h	kPa
BFS-2P-66	3	MAX	5170	30,04	22,60	5167	32,3	26,67	21,37	4587	25,9	20,53	19,22	3530	16,0	15,34	15,34	2639	9,4
	2	MED	3570	23,47	16,92	4037	20,7	20,84	15,90	3585	16,6	15,92	14,06	2739	10,2	11,74	11,74	2019	5,8
	1	MIN	2190	16,35	11,32	2812	10,8	14,55	10,57	2503	8,7	11,07	9,20	1905	5,3	8,06	8,06	1386	3,0
BFS-2P-76	3	MAX	7435	40,52	31,21	6969	36,6	36,00	29,63	6192	29,4	27,82	26,86	4785	18,3	20,93	20,93	3601	10,9
	2	MED	5210	32,24	23,74	5545	24,2	28,64	22,38	4926	19,5	21,91	19,94	3769	11,9	16,28	16,28	2800	6,9
	1	MIN	3960	26,70	19,10	4592	17,3	23,71	17,92	4077	13,9	18,09	15,80	3112	8,4	13,30	13,30	2287	4,8

Cooling capacity of 6 row coil

Entering air temperature: 25°C – R. H.: 50% – **Available pressure: 0 Pa**

Mod.	Speed		Qv	WT: 7/12 °C				WT: 8/13 °C				WT: 10/15 °C				WT: 12/17 °C			
				Pc	Ps	Qw	Dp(c)	Pc	Ps	Qw	Dp(c)	Pc	Ps	Qw	Dp(c)	Pc	Ps	Qw	Dp(c)
			m³/h	kW	kW	l/h	kPa	kW	kW	l/h	kPa	kW	kW	l/h	kPa	kW	kW	l/h	kPa
BFS-2P-66	3	MAX	5170	26,56	21,38	4568	25,9	23,44	20,24	4032	20,6	17,82	17,82	3065	12,4	13,35	13,35	2296	7,3
	2	MED	3570	20,73	15,93	3566	16,6	18,25	14,95	3139	13,1	13,74	13,25	2363	7,8	10,05	10,05	1729	4,4
	1	MIN	2190	14,47	10,61	2489	8,7	12,74	9,89	2192	6,9	9,51	8,61	1636	4,0	6,85	6,85	1179	2,2
BFS-2P-76	3	MAX	7435	35,88	29,64	6172	29,4	31,72	28,16	5455	23,4	24,23	24,23	4168	14,3	19,15	19,15	3294	9,3
	2	MED	5210	28,52	22,41	4905	19,4	25,12	21,11	4320	15,4	19,00	18,86	3267	9,2	13,99	13,99	2406	5,3
	1	MIN	3960	23,61	17,97	4061	13,8	20,77	16,84	3573	10,9	15,60	14,87	2684	6,5	11,38	11,38	1957	3,6

Correction factors for different R.H.

R.H.	WT:	7/12°C	8/13°C	10/15°C	12/17°C
48%	Pc	0,95	0,94	1,00	1,00
	Ps	1,00	1,00	1,00	1,00
46%	Pc	0,90	0,88	1,00	1,00
	Ps	1,00	1,00	1,00	1,00

Legend

WT = Water temperature
Pc = Cooling total capacity
Ps = Cooling sensible capacity
Qw = Water flow
Dp(c) = Water pressure drop
Speed = Fan speed
MAX = High speed
MED = Medium speed
MIN = Low speed
Qv = Air flow

Performance data - heating

Heating capacity of 3 row coil

Entering air temperature: 20°C – **Available pressure: 0 Pa**

Mod.	Speed		Qv	WT: 70/60 °C			WT: 60/50 °C			WT: 55/45 °C			WT: 50/40 °C			WT: 50/45 °C			WT: 45/40 °C		
				Ph	Qw	Dp(c)	Ph	Qw	Dp(c)	Ph	Qw	Dp(c)	Ph	Qw	Dp(c)	Ph	Qw	Dp(c)	Ph	Qw	Dp(c)
			m³/h	kW	l/h	kPa	kW	l/h	kPa	kW	l/h	kPa	kW	l/h	kPa	kW	l/h	kPa	kW	l/h	kPa
BFS-2P-13	5	MAX	1925	16,22	1395	17,7	12,33	1060	11,0	10,39	894	8,2	8,44	726	5,7	9,89	1701	27,2	7,98	1372	18,6
	4		1640	14,61	1257	14,6	11,13	957	9,1	9,38	807	6,8	7,64	657	4,7	8,90	1532	22,4	7,18	1236	15,4
	3	MED	1340	12,74	1096	11,3	9,73	836	7,1	8,21	706	5,3	6,69	575	3,7	7,76	1335	17,4	6,27	1079	11,9
	2		1140	11,39	980	9,2	8,71	749	5,8	7,36	633	4,3	6,00	516	3,0	6,94	1193	14,1	5,61	965	9,7
	1	MIN	995	10,34	889	7,7	7,91	681	4,8	6,70	576	3,6	5,48	471	2,5	6,30	1083	11,8	5,09	876	8,1
BFS-2P-23	5	MAX	2510	21,50	1849	33,1	16,44	1414	20,9	13,91	1196	15,6	11,37	978	10,9	13,10	2253	50,6	10,60	1824	34,9
	4		2060	18,86	1622	26,0	14,45	1243	16,4	12,24	1053	12,3	10,02	862	8,6	11,50	1978	39,8	9,31	1602	27,5
	3	MED	1550	15,51	1334	18,1	11,92	1025	11,4	10,11	870	8,6	8,30	714	6,0	9,45	1625	27,7	7,67	1319	19,2
	2		1165	12,65	1088	12,4	9,74	838	7,8	8,28	712	5,9	6,81	585	4,1	7,70	1324	18,9	6,25	1075	13,1
	1	MIN	855	10,04	863	8,0	7,75	666	5,1	6,60	568	3,9	5,45	468	2,7	6,10	1050	12,3	4,97	854	8,6
BFS-2P-33	5	MAX	2790	24,90	2142	33,3	19,10	1642	21,1	16,18	1392	15,8	13,27	1141	11,1	15,19	2612	51,2	12,31	2118	35,4
	4		2590	23,71	2039	30,4	18,19	1564	19,3	15,41	1325	14,4	12,63	1087	10,1	14,46	2487	46,7	11,71	2014	32,3
	3	MED	2300	21,89	1882	26,2	16,80	1445	16,6	14,24	1225	12,4	11,68	1005	8,7	13,34	2294	40,1	10,81	1860	27,8
	2		2080	20,41	1755	23,1	15,69	1349	14,6	13,31	1144	11,0	10,93	940	7,7	12,43	2138	35,4	10,08	1735	24,5
	1	MIN	1815	18,55	1596	19,3	14,27	1227	12,3	12,12	1042	9,2	9,97	857	6,5	11,29	1942	29,6	9,17	1578	20,5
BFS-2P-43	5	MAX	3400	31,44	2704	25,0	24,09	2072	15,8	20,41	1755	11,8	16,69	1436	8,3	19,16	3295	38,4	15,51	2668	26,5
	4		3130	29,75	2558	22,6	22,80	1960	14,3	19,29	1659	10,7	15,82	1360	7,5	18,11	3115	34,6	14,68	2525	23,9
	3	MED	2855	27,34	2351	19,3	20,99	1805	12,2	17,78	1529	9,1	14,58	1254	6,4	16,65	2864	29,6	13,51	2324	20,5
	2		2585	25,56	2198	17,0	19,61	1687	10,8	16,64	1431	8,1	13,66	1174	5,7	15,56	2677	26,1	12,61	2170	18,1
	1	MIN	2265	23,03	1981	14,1	17,70	1522	8,9	15,03	1293	6,7	12,35	1062	4,7	14,01	2410	21,5	11,37	1956	14,9
BFS-2P-53	5	MAX	4400	41,01	3527	29,2	31,42	2702	18,4	26,61	2288	13,8	21,79	1874	9,7	24,97	4295	44,7	20,23	3480	31,0
	4		3975	38,28	3292	25,7	29,35	2524	16,3	24,88	2140	12,2	20,39	1753	8,5	23,30	4008	39,4	18,88	3248	27,2
	3	MED	3540	35,31	3037	22,2	27,14	2334	14,1	23,01	1979	10,5	18,87	1623	7,4	21,50	3698	34,0	17,45	3002	23,5
	2		3275	33,45	2877	20,1	25,71	2211	12,7	21,82	1876	9,5	17,89	1539	6,7	20,38	3505	30,7	16,52	2842	21,3
	1	MIN	2905	30,72	2642	17,1	23,64	2033	10,9	20,07	1726	8,1	16,49	1418	5,7	18,70	3217	26,2	15,18	2611	18,2

Heating capacity of 4 row coil

Entering air temperature: 20°C – **Available pressure: 0 Pa**

Mod.	Speed		Qv	WT: 70/60 °C			WT: 60/50 °C			WT: 55/45 °C			WT: 50/40 °C			WT: 50/45 °C			WT: 45/40 °C		
				Ph	Qw	Dp(c)	Ph	Qw	Dp(c)	Ph	Qw	Dp(c)	Ph	Qw	Dp(c)	Ph	Qw	Dp(c)	Ph	Qw	Dp(c)
			m³/h	kW	l/h	kPa	kW	l/h	kPa	kW	l/h	kPa	kW	l/h	kPa	kW	l/h	kPa	kW	l/h	kPa
BFS-2P-13	5	MAX	1835	18,58	1598	15,2	14,20	1221	9,5	11,99	1031	7,1	9,77	840	4,9	11,32	1947	23,3	9,15	1574	16,0
	4		1575	16,69	1436	12,5	12,77	1098	7,8	10,80	929	5,8	8,82	759	4,0	10,16	1747	19,1	8,22	1413	13,1
	3	MED	1315	14,65	1260	9,8	11,22	965	6,1	9,51	818	4,6	7,78	669	3,2	8,91	1532	15,0	7,22	1241	10,3
	2		1115	12,95	1114	7,8	9,95	856	4,9	8,44	726	3,7	6,92	595	2,6	7,88	1356	11,9	6,39	1099	8,2
	1	MIN	940	11,38	979	6,1	8,76	753	3,9	7,44	640	2,9	6,11	525	2,0	6,91	1189	9,4	5,61	966	6,5
BFS-2P-23	5	MAX	2360	24,38	2096	24,1	18,71	1609	15,2	15,88	1366	11,4	13,02	1120	8,0	14,83	2552	36,9	12,03	2070	25,6
	4		2005	21,71	1867	19,4	16,69	1435	12,3	14,17	1219	9,2	11,65	1002	6,5	13,20	2271	29,8	10,72	1845	20,6
	3	MED	1535	17,83	1534	13,5	13,76	1183	8,6	11,71	1007	6,4	9,64	829	4,5	10,84	1865	20,7	8,82	1517	14,3
	2		1160	14,41	1239	9,1	11,13	957	5,8	9,49	816	4,3	7,84	674	3,1	8,75	1505	13,9	7,13	1226	9,6
	1	MIN	855	11,29	971	5,8	8,77	754	3,7	7,48	644	2,8	6,20	533	2,0	6,85	1178	8,8	5,60	963	6,1
BFS-2P-33	5	MAX	2745	29,05	2498	27,9	22,36	1923	17,7	19,00	1634	13,2	15,62	1343	9,4	17,67	3040	42,7	14,37	2471	29,5
	4		2550	27,57	2371	25,3	21,22	1825	16,1	18,04	1552	12,0	14,85	1277	8,5	16,77	2884	38,7	13,63	2344	26,8
	3	MED	2265	25,29	2175	21,5	19,50	1677	13,7	16,60	1427	10,3	13,67	1176	7,2	15,39	2646	32,9	12,51	2151	22,8
	2		2060	23,59	2029	18,9	18,20	1565	12,0	15,50	1333	9,0	12,78	1099	6,4	14,34	2466	28,9	11,67	2007	20,1
	1	MIN	1795	21,26	1829	15,6	16,43	1413	9,9	14,00	1204	7,5	11,56	994	5,3	12,93	2223	23,8	10,53	1811	16,6
BFS-2P-43	5	MAX	3340	36,65	3152	24,3	28,23	2428	15,4	24,00	2064	11,6	19,75	1699	8,2	22,29	3834	37,3	18,13	3119	25,8
	4		3085	34,62	2977	21,8	26,67	2293	13,9	22,68	1951	10,4	18,67	1606	7,3	21,05	3620	33,5	17,12	2944	23,2
	3	MED	2820	31,74	2729	18,6	24,49	2106	11,8	20,84	1792	8,9	17,16	1476	6,3	19,29	3318	28,5	15,70	2700	19,7
	2		2560	29,50	2537	16,2	22,77	1958	10,4	19,40	1669	7,8	16,01	1377	5,5	17,92	3083	24,9	14,60	2512	17,3
	1	MIN	2245	26,42	2272	13,2	20,45	1759	8,4	17,43	1499	6,4	14,39	1238	4,5	16,06	2762	20,3	13,09	2251	14,1
BFS-2P-53	5	MAX	4330	47,39	4075	22,1	36,49	3138	14,0	30,98	2665	10,5	25,45	2189	7,4	28,84	4960	33,9	23,43	4029	23,5
	4		3920	44,12	3794	19,4	33,96	2921	12,3	28,86	2482	9,2	23,73	2041	6,5	26,82	4613	29,7	21,80	3750	20,5
	3	MED	3505	40,60	3492	16,6	31,31	2692	10,6	26,63	2290	7,9	21,91	1884	5,6	24,69	4246	25,4	20,07	3452	17,6
	2		3240	38,28	3292	14,9	29,56	2542	9,5	25,16	2163	7,1	20,72	1782	5,0	23,27	4002	22,8	18,94	3257	15,8
	1	MIN	2885	35,08	3017	12,6	27,08	2329	8,0	23,06	1983	6,0	19,03	1637	4,2	21,30	3664	19,3	17,35	2984	13,4

Legend

WT = Water temperature
Ph = Capacity
Qw = Water flow
Dp(c) = Water pressure drop
Qv = Air flow
Speed = Fan speed
MAX = High speed
MED = Medium speed
MIN = Low speed

Heating capacity of 1 row additional coil

Entering air temperature: 20°C – **Available pressure: 0 Pa**

Mod.	Speed		Qv	WT: 80/70 °C			WT: 75/65 °C			WT: 70/60 °C			WT: 65/55 °C			WT: 60/50 °C			WT: 55/45 °C		
				Ph	Qw	Dp(c)	Ph	Qw	Dp(c)	Ph	Qw	Dp(c)	Ph	Qw	Dp(c)	Ph	Qw	Dp(c)	Ph	Qw	Dp(c)
			m³/h	kW	l/h	kPa	kW	l/h	kPa	kW	l/h	kPa	kW	l/h	kPa	kW	l/h	kPa	kW	l/h	kPa
BFS-1	5	MAX	1775	8,05	692	42,7	7,26	624	36,0	6,47	556	29,6	5,67	488	23,8	4,89	420	18,4	4,10	352	13,6
	4		1530	7,44	640	37,1	6,71	577	31,2	5,99	515	25,7	5,25	452	20,7	4,52	389	16,0	3,80	326	11,8
	3	MED	1290	6,78	583	31,3	6,12	527	26,4	5,46	470	21,8	4,80	412	17,5	4,13	355	13,6	3,47	298	10,0
	2		1090	6,18	532	26,4	5,59	480	22,3	4,98	428	18,4	4,38	377	14,8	3,77	324	11,5	3,17	272	8,5
	1	MIN	910	5,57	479	21,9	5,03	433	18,5	4,49	387	15,3	3,95	340	12,2	3,40	293	9,5	2,86	246	7,1
BFS-2	5	MAX	2285	10,33	888	62,2	9,32	802	52,6	8,30	714	43,5	7,31	628	35,0	6,30	542	27,2	5,30	456	20,1
	4		1965	9,56	822	54,2	8,64	743	45,7	7,71	663	37,7	6,78	583	30,5	5,84	502	23,7	4,91	423	17,6
	3	MED	1520	8,35	718	42,4	7,53	648	35,8	6,73	579	29,6	5,91	509	23,8	5,11	439	18,6	4,30	370	13,8
	2		1155	7,14	614	31,9	6,45	555	27,0	5,76	495	22,3	5,07	436	18,0	4,39	377	14,0	3,69	318	10,4
	1	MIN	850	5,90	507	22,5	5,33	458	19,1	4,76	410	15,7	4,20	361	12,7	3,63	312	9,9	3,06	263	7,4
BFS-3	5	MAX	2700	12,44	1070	39,0	11,21	964	32,9	9,99	859	27,1	8,77	754	21,7	7,55	649	16,8	6,33	544	12,4
	4		2510	11,98	1031	36,4	10,80	929	30,7	9,64	829	25,3	8,45	727	20,3	7,28	626	15,7	6,10	524	11,6
	3	MED	2235	11,28	970	32,7	10,17	874	27,6	9,07	780	22,7	7,96	685	18,2	6,86	590	14,1	5,75	494	10,4
	2		2040	10,74	924	29,9	9,68	833	25,2	8,64	743	20,8	7,59	653	16,7	6,53	562	13,0	5,48	472	9,6
	1	MIN	1780	9,97	857	26,2	9,00	774	22,0	8,03	691	18,2	7,06	607	14,6	6,07	522	11,3	5,10	439	8,4
BFS-4	5	MAX	3295	16,17	1391	68,3	14,61	1256	57,9	13,03	1121	47,8	11,48	988	38,6	9,92	853	30,1	8,36	719	22,4
	4		3055	15,52	1335	63,5	14,02	1206	53,7	12,52	1077	44,5	11,04	949	35,8	9,53	819	27,9	8,03	691	20,8
	3	MED	2790	14,59	1255	57,0	13,20	1135	48,2	11,80	1015	39,9	10,37	892	32,1	8,97	771	25,1	7,56	650	18,7
	2		2535	13,86	1192	51,8	12,52	1077	43,8	11,20	963	36,3	9,86	848	29,2	8,52	732	22,8	7,18	617	17,0
	1	MIN	2225	12,82	1102	44,9	11,57	995	37,9	10,34	890	31,5	9,12	784	25,3	7,88	677	19,8	6,65	572	14,8
BFS-5	5	MAX	4265	20,57	1769	63,1	18,57	1597	53,2	16,58	1426	44,1	14,61	1257	35,6	12,62	1086	27,7	10,63	914	20,6
	4		3875	19,53	1680	57,5	17,66	1519	48,6	15,77	1356	40,2	13,88	1193	32,4	12,00	1032	25,3	10,10	869	18,8
	3	MED	3475	18,40	1583	51,6	16,65	1432	43,6	14,85	1277	36,1	13,09	1125	29,2	11,31	973	22,7	9,54	820	16,9
	2		3210	17,63	1516	47,6	15,93	1370	40,2	14,25	1225	33,3	12,54	1078	26,9	10,85	933	20,9	9,14	786	15,6
	1	MIN	2865	16,56	1424	42,4	14,97	1287	35,9	13,37	1150	29,7	11,78	1013	24,0	10,19	876	18,7	8,59	739	13,9

Heating capacity of 2 row additional coil

Entering air temperature: 20°C – **Available pressure: 0 Pa**

Mod.	Speed		Qv	WT: 65/55 °C			WT: 60/50 °C			WT: 55/45 °C			WT: 50/40 °C			WT: 45/40 °C			WT: 45/35 °C		
				Ph	Qw	Dp(c)	Ph	Qw	Dp(c)	Ph	Qw	Dp(c)	Ph	Qw	Dp(c)	Ph	Qw	Dp(c)	Ph	Qw	Dp(c)
			m³/h	kW	l/h	kPa	kW	l/h	kPa	kW	l/h	kPa	kW	l/h	kPa	kW	l/h	kPa	kW	l/h	kPa
BFS-1	5	MAX	1695	11,59	997	20,4	10,00	860	15,9	8,41	723	11,7	6,82	586	8,1	6,47	1112	26,7	5,22	449	5,0
	4		1470	10,60	912	17,3	9,17	788	13,4	7,72	664	9,9	6,26	538	6,9	5,92	1018	22,6	4,80	413	4,3
	3	MED	1260	9,62	827	14,4	8,31	715	11,2	7,00	602	8,3	5,69	490	5,8	5,37	924	18,9	4,37	376	3,6
	2		1055	8,57	737	11,6	7,41	637	9,1	6,25	538	6,7	5,09	438	4,7	4,78	822	15,2	3,92	337	2,9
	1	MIN	875	7,55	649	9,2	6,53	562	7,2	5,52	474	5,3	4,50	387	3,7	4,21	724	12,1	3,47	299	2,3
BFS-2	5	MAX	2190	15,33	1318	32,8	13,27	1141	25,5	11,21	964	19,0	9,14	786	13,3	8,57	1474	43,0	7,07	608	8,4
	4		1910	14,07	1210	28,0	12,18	1048	21,8	10,31	887	16,3	8,41	724	11,4	7,87	1353	36,6	6,52	561	7,2
	3	MED	1505	12,07	1038	21,0	10,47	900	16,5	8,87	763	12,3	7,25	623	8,6	6,74	1160	27,5	5,63	484	5,4
	2		1145	10,03	862	15,0	8,71	749	11,7	7,38	635	8,7	6,05	521	6,1	5,60	964	19,6	4,72	406	3,9
	1	MIN	845	8,09	695	10,0	7,03	605	7,8	5,97	513	5,9	4,91	422	4,1	4,51	776	13,1	3,84	330	2,6
BFS-3	5	MAX	2645	18,47	1589	20,0	15,97	1373	15,5	13,46	1157	11,6	10,94	941	8,0	10,33	1777	26,2	8,40	722	5,0
	4		2455	17,64	1517	18,4	15,24	1311	14,3	12,86	1106	10,6	10,44	898	7,4	9,85	1694	24,0	8,04	691	4,6
	3	MED	2195	16,43	1413	16,1	14,22	1223	12,5	11,99	1031	9,3	9,76	839	6,5	9,18	1580	21,1	7,51	646	4,0
	2		2010	15,54	1336	14,5	13,44	1156	11,3	11,33	975	8,4	9,24	795	5,8	8,67	1492	19,0	7,12	613	3,7
	1	MIN	1765	14,27	1227	12,4	12,35	1062	9,7	10,44	898	7,2	8,51	731	5,0	7,96	1370	16,2	6,57	565	3,1
BFS-4	5	MAX	3230	23,95	2060	35,6	20,75	1785	27,8	17,57	1511	20,8	14,37	1236	14,5	13,40	2305	46,6	11,17	960	9,2
	4		3005	22,83	1963	32,5	19,79	1702	25,4	16,76	1441	19,0	13,72	1180	13,3	12,77	2196	42,6	10,66	917	8,5
	3	MED	2745	21,25	1827	28,4	18,46	1587	22,3	15,62	1343	16,7	12,80	1101	11,7	11,88	2044	37,4	9,95	856	7,4
	2		2500	19,95	1716	25,3	17,33	1490	19,8	14,69	1264	14,8	12,04	1035	10,4	11,17	1920	33,3	9,38	807	6,6
	1	MIN	2205	18,19	1565	21,3	15,80	1359	16,7	13,41	1153	12,5	11,01	947	8,8	10,17	1749	28,0	8,57	737	5,6
BFS-5	5	MAX	4170	29,93	2574	30,4	25,94	2231	23,7	21,94	1886	17,7	17,90	1539	12,4	16,73	2877	39,9	13,85	1192	7,8
	4		3810	28,30	2434	27,4	24,51	2107	21,3	20,74	1784	15,9	16,93	1456	11,2	15,82	2720	35,8	13,13	1129	7,1
	3	MED	3430	26,44	2274	24,2	22,94	1973	18,9	19,42	1670	14,1	15,87	1365	9,8	14,79	2543	31,6	12,31	1059	6,2
	2		3165	25,10	2158	21,9	21,77	1872	17,2	18,43	1585	12,8	15,08	1297	9,0	14,03	2414	28,7	11,71	1007	5,7
	1	MIN	2825	23,30	2004	19,1	20,21	1738	14,9	17,13	1473	11,2	14,02	1205	7,8	13,02	2240	25,0	10,90	938	5,0

Legend

WT = Water temperature
Ph = Capacity
Qw = Water flow
Dp(c) = Water pressure drop
Qv = Air flow
Speed = Fan speed
MAX = High speed
MED = Medium speed
MIN = Low speed

Performance data - heating

Heating capacity of 4 row coil

Entering air temperature: 20°C – **Available pressure: 0 Pa**

Mod.	Speed		Qv	WT: 70/60 °C			WT: 60/50 °C			WT: 55/45 °C			WT: 50/40 °C			WT: 50/45 °C			WT: 45/40 °C		
				Ph	Qw	Dp(c)	Ph	Qw	Dp(c)	Ph	Qw	Dp(c)	Ph	Qw	Dp(c)	Ph	Qw	Dp(c)	Ph	Qw	Dp(c)
			m³/h	kW	l/h	kPa	kW	l/h	kPa	kW	l/h	kPa	kW	l/h	kPa	kW	l/h	kPa	kW	l/h	kPa
BFS-2P-64	3	MAX	5200	59,94	5155	25,1	46,21	3974	16,3	39,30	3380	12,4	32,35	2782	8,9	36,45	6269	38,0	29,65	5100	26,7
	2	MED	3580	45,23	3890	15,1	35,01	3011	9,9	29,85	2567	7,5	24,67	2122	5,5	27,45	4722	22,8	22,38	3849	16,1
	1	MIN	2200	30,54	2626	7,5	23,77	2044	4,9	20,35	1750	3,8	16,91	1455	2,8	18,51	3183	11,2	15,14	2605	8,0
BFS-2P-74	3	MAX	7480	82,35	7082	31,0	63,38	5450	20,0	53,87	4632	15,2	44,26	3806	10,9	50,07	8613	46,9	40,68	6998	32,9
	2	MED	5210	63,22	5436	19,3	48,83	4199	12,5	41,59	3577	9,6	34,31	2951	6,9	38,39	6603	29,1	31,29	5381	20,5
	1	MIN	3960	51,13	4398	13,2	39,61	3406	8,6	33,82	2908	6,6	27,99	2407	4,8	31,03	5337	19,8	25,31	4353	14,0

Heating capacity of 6 row coil

Entering air temperature: 20°C – **Available pressure: 0 Pa**

Mod.	Speed		Qv	WT: 70/60 °C			WT: 60/50 °C			WT: 55/45 °C			WT: 50/40 °C			WT: 50/45 °C			WT: 45/40 °C		
				Ph	Qw	Dp(c)	Ph	Qw	Dp(c)	Ph	Qw	Dp(c)	Ph	Qw	Dp(c)	Ph	Qw	Dp(c)	Ph	Qw	Dp(c)
			m³/h	kW	l/h	kPa	kW	l/h	kPa	kW	l/h	kPa	kW	l/h	kPa	kW	l/h	kPa	kW	l/h	kPa
BFS-2P-66	3	MAX	5170	68,46	5887	31,3	53,27	4581	20,6	45,60	3922	15,9	37,92	3261	11,6	41,53	7143	47,1	33,97	5843	33,4
	2	MED	3570	50,67	4357	18,2	39,57	3403	12,1	33,99	2923	9,3	28,36	2439	6,9	30,66	5274	27,3	25,16	4327	19,5
	1	MIN	2190	33,22	2857	8,5	26,09	2243	5,7	22,49	1934	4,4	18,86	1622	3,3	20,07	3452	12,7	16,53	2843	9,1
BFS-2P-76	3	MAX	7435	94,91	8162	37,2	73,68	6337	24,4	63,02	5420	18,7	52,30	4498	13,6	57,60	9908	56,0	47,09	8099	39,7
	2	MED	5210	71,64	6161	22,4	55,84	4802	14,8	47,87	4117	11,4	39,85	3427	8,4	43,42	7468	33,7	35,56	6117	24,0
	1	MIN	3960	57,01	4903	14,9	44,57	3833	9,9	38,30	3293	7,6	31,99	2751	5,6	34,50	5934	22,3	28,33	4873	15,9

Heating capacity of 2 row additional coil

Entering air temperature: 20°C – **Available pressure: 0 Pa**

Mod.	Speed		Qv	WT: 70/60 °C			WT: 60/50 °C			WT: 55/45 °C			WT: 50/40 °C		
				Ph	Qw	Dp(c)	Ph	Qw	Dp(c)	Ph	Qw	Dp(c)	Ph	Qw	Dp(c)
			m³/h	kW	l/h	kPa	kW	l/h	kPa	kW	l/h	kPa	kW	l/h	kPa
BFS-4P-642	3	MAX	5125	34,75	2989	33,4	30,15	2593	26,3	25,49	2192	19,8	20,84	1792	14,0
	2	MED	3570	27,55	2369	22,0	23,90	2055	17,3	20,26	1742	13,1	16,59	1427	9,3
	1	MIN	2180	19,71	1695	12,0	17,13	1473	9,5	14,56	1252	7,2	11,98	1030	5,2
BFS-4P-742	3	MAX	7355	46,94	4037	40,0	40,66	3496	31,4	34,38	2957	23,6	28,05	2412	16,7
	2	MED	5210	37,78	3249	27,0	32,76	2817	21,3	27,74	2385	16,0	22,70	1952	11,4
	1	MIN	3960	31,58	2716	19,6	27,39	2356	15,4	23,24	1999	11,7	19,06	1639	8,3

Mod.	Speed		Qv	WT: 50/45 °C			WT: 45/40 °C			WT: 45/35 °C		
				Ph	Qw	Dp(c)	Ph	Qw	Dp(c)	Ph	Qw	Dp(c)
			m³/h	kW	l/h	kPa	kW	l/h	kPa	kW	l/h	kPa
BFS-4P-662	3	MAX	5125	24,03	4133	62,5	19,46	3346	43,6	16,16	1390	9,0
	2	MED	3570	19,01	3270	41,0	15,41	2650	28,6	12,92	1111	6,0
	1	MIN	2180	13,56	2332	22,3	11,01	1894	15,6	9,37	806	3,4
BFS-4P-762	3	MAX	7355	32,46	5583	74,9	26,26	4517	52,1	21,70	1866	10,7
	2	MED	5210	26,11	4490	50,6	21,11	3632	35,2	17,63	1516	7,4
	1	MIN	3960	21,77	3745	36,5	17,64	3034	25,4	14,85	1277	5,4

Legend

WT = Water temperature
Ph = Capacity
Qw = Water flow
Dp(c) = Water pressure drop
Speed = Fan speed
MAX = High speed
MED = Medium speed
MIN = Low speed
Qv = Air flow

Correction factors tables

Air flow (m^3/h) depending on speed and requested available pressure with 4 row coil

Mod.	Speed		Available pressure (Pa)										
			0	20	40	60	80	100	120	140	160	180	200
BFS-1	5	MAX	1835	1745	1640	1530	1400	1225	995	–	–	–	–
	4		1575	1480	1390	1290	1175	1020	815	–	–	–	–
	3	MED	1315	1250	1175	1075	940	795	–	–	–	–	–
	2		1115	1025	940	840	740	625	–	–	–	–	–
	1	MIN	940	825	730	645	560	–	–	–	–	–	–
BFS-2	5	MAX	2360	2240	2120	2000	1860	1700	1480	1150	–	–	–
	4		2005	1920	1835	1735	1620	1480	1275	–	–	–	–
	3	MED	1535	1495	1445	1380	1300	1190	1010	–	–	–	–
	2		1160	1150	1135	1105	1065	1015	925	–	–	–	–
	1	MIN	855	835	815	790	755	700	–	–	–	–	–
BFS-3	5	MAX	2745	2670	2590	2500	2390	2270	2135	1980	1800	1620	–
	4		2550	2470	2380	2280	2175	2045	1900	1750	1595	1425	–
	3	MED	2265	2200	2120	2040	1945	1840	1720	1590	1440	1280	–
	2		2060	2005	1945	1875	1790	1695	1575	1445	1300	–	–
	1	MIN	1795	1745	1690	1625	1545	1460	1355	1235	1105	–	–
BFS-4	5	MAX	3340	3250	3150	3040	2900	2760	2610	2440	2225	2000	1780
	4		3085	3005	2920	2820	2700	2575	2405	2225	2025	1800	–
	3	MED	2820	2740	2650	2550	2440	2300	2150	1970	1765	1575	–
	2		2560	2480	2400	2305	2200	2050	1905	1745	1575	–	–
	1	MIN	2245	2175	2100	2020	1925	1800	1670	1525	1400	–	–
BFS-5	5	MAX	4330	4330	4205	4075	3935	3785	3630	3450	3250	3005	2705
	4		3920	3820	3715	3595	3465	3315	3145	2940	2680	2350	–
	3	MED	3505	3425	3340	3245	3130	3000	2845	2650	2400	2080	–
	2		3240	3140	3040	2930	2810	2675	2530	2350	2130	1850	–
	1	MIN	2885	2805	2715	2610	2495	2350	2175	1965	1710	–	–

Power absorption (Watt) depending on air flow and available pressure

Mod.	Speed		Available pressure (Pa)										
			0	20	40	60	80	100	120	140	160	180	200
BFS-1	5	MAX	231	223	213	202	190	174	154	–	–	–	–
	4		204	194	184	174	162	148	130	–	–	–	–
	3	MED	173	167	159	150	137	124	–	–	–	–	–
	2		151	142	134	125	116	106	–	–	–	–	–
	1	MIN	130	118	109	102	95	–	–	–	–	–	–
BFS-2	5	MAX	380	356	333	312	288	263	232	193	–	–	–
	4		323	304	284	263	240	217	191	–	–	–	–
	3	MED	268	254	239	222	204	184	158	–	–	–	–
	2		221	215	206	191	177	165	151	–	–	–	–
	1	MIN	179	167	158	148	137	126	–	–	–	–	–
BFS-3	5	MAX	519	510	498	481	460	438	415	393	372	352	–
	4		505	492	473	450	427	400	376	357	340	323	–
	3	MED	464	450	431	411	389	368	349	332	317	301	–
	2		426	413	398	381	362	344	326	310	295	–	–
	1	MIN	380	362	345	330	316	305	294	283	270	–	–
BFS-4	5	MAX	684	657	627	597	562	532	504	476	447	419	393
	4		606	587	566	541	512	485	453	427	402	378	–
	3	MED	551	527	503	481	459	436	413	389	362	338	–
	2		508	482	460	437	415	389	369	349	329	–	–
	1	MIN	447	425	405	387	368	348	331	314	299	–	–
BFS-5	5	MAX	867	867	836	806	777	747	719	688	657	622	583
	4		766	739	713	686	659	630	601	569	533	492	–
	3	MED	689	660	634	607	580	554	528	501	471	435	–
	2		612	587	563	540	517	493	470	444	416	384	–
	1	MIN	536	516	496	475	454	431	406	380	353	–	–

Correction factors tables

Correction factors for Total cooling capacity

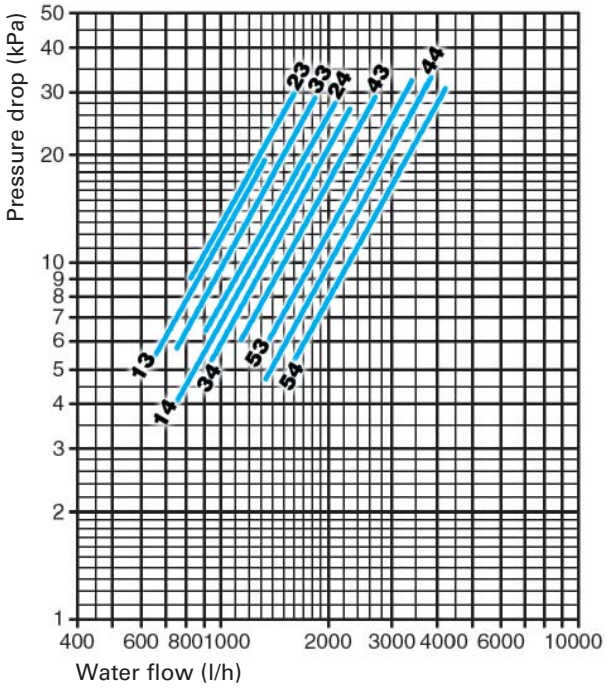
Mod.	Speed		Available pressure (Pa)										
			0	20	40	60	80	100	120	140	160	180	200
BFS-1	5	MAX	1,00	0,97	0,94	0,91	0,86	0,79	0,70	–	–	–	–
	4		1,00	0,97	0,94	0,90	0,85	0,78	0,67	–	–	–	–
	3	MED	1,00	0,97	0,94	0,90	0,83	0,75	–	–	–	–	–
	2		1,00	0,96	0,91	0,86	0,79	0,71	–	–	–	–	–
	1	MIN	1,00	0,93	0,87	0,81	0,74	–	–	–	–	–	–
BFS-2	5	MAX	1,00	0,97	0,94	0,92	0,88	0,83	0,76	0,12	–	–	–
	4		1,00	0,98	0,95	0,93	0,89	0,85	0,77	–	–	–	–
	3	MED	1,00	0,98	0,97	0,95	0,92	0,87	0,79	–	–	–	–
	2		1,00	0,99	0,99	0,97	0,96	0,93	0,88	–	–	–	–
	1	MIN	1,00	0,99	0,97	0,96	0,94	0,90	–	–	–	–	–
BFS-3	5	MAX	1,00	0,98	0,97	0,95	0,93	0,90	0,87	0,83	0,79	0,74	–
	4		1,00	0,98	0,96	0,94	0,92	0,89	0,85	0,81	0,76	0,71	–
	3	MED	1,00	0,98	0,97	0,95	0,92	0,89	0,86	0,82	0,77	0,71	–
	2		1,00	0,98	0,97	0,95	0,93	0,90	0,86	0,82	0,77	–	–
	1	MIN	1,00	0,98	0,97	0,95	0,92	0,89	0,86	0,81	0,76	–	–
BFS-4	5	MAX	1,00	0,98	0,97	0,95	0,93	0,90	0,87	0,84	0,79	0,74	0,69
	4		1,00	0,98	0,97	0,95	0,93	0,91	0,87	0,83	0,79	0,73	–
	3	MED	1,00	0,98	0,97	0,95	0,93	0,90	0,86	0,82	0,76	0,71	–
	2		1,00	0,98	0,97	0,95	0,92	0,89	0,85	0,81	0,76	–	–
	1	MIN	1,00	0,98	0,97	0,95	0,92	0,89	0,85	0,80	0,76	–	–
BFS-5	5	MAX	1,00	1,00	0,98	0,97	0,95	0,93	0,91	0,88	0,85	0,81	0,76
	4		1,00	0,99	0,97	0,96	0,94	0,91	0,89	0,85	0,81	0,74	–
	3	MED	1,00	0,99	0,97	0,96	0,94	0,92	0,89	0,86	0,81	0,74	–
	2		1,00	0,98	0,97	0,95	0,93	0,90	0,87	0,84	0,79	0,72	–
	1	MIN	1,00	0,98	0,97	0,95	0,93	0,90	0,86	0,80	0,74	–	–

Correction factors for Sensible cooling capacity and Heating capacity

Mod.	Speed		Available pressure (Pa)										
			0	20	40	60	80	100	120	140	160	180	200
BFS-1	5	MAX	1,00	0,96	0,92	0,88	0,82	0,75	0,64	–	–	–	–
	4		1,00	0,96	0,92	0,87	0,81	0,73	0,61	–	–	–	–
	3	MED	1,00	0,96	0,92	0,87	0,79	0,69	–	–	–	–	–
	2		1,00	0,94	0,89	0,82	0,74	0,65	–	–	–	–	–
	1	MIN	1,00	0,91	0,83	0,76	0,68	–	–	–	–	–	–
BFS-2	5	MAX	1,00	0,96	0,93	0,89	0,84	0,79	0,71	0,07	–	–	–
	4		1,00	0,97	0,94	0,90	0,86	0,80	0,72	–	–	–	–
	3	MED	1,00	0,98	0,96	0,93	0,89	0,83	0,74	–	–	–	–
	2		1,00	0,99	0,98	0,97	0,94	0,91	0,85	–	–	–	–
	1	MIN	1,00	0,98	0,97	0,95	0,92	0,87	–	–	–	–	–
BFS-3	5	MAX	1,00	0,98	0,96	0,94	0,91	0,87	0,84	0,79	0,74	0,68	–
	4		1,00	0,98	0,95	0,92	0,89	0,85	0,81	0,76	0,71	0,65	–
	3	MED	1,00	0,98	0,95	0,93	0,90	0,86	0,82	0,77	0,72	0,66	–
	2		1,00	0,98	0,96	0,94	0,91	0,87	0,83	0,77	0,71	–	–
	1	MIN	1,00	0,98	0,96	0,93	0,90	0,86	0,82	0,76	0,70	–	–
BFS-4	5	MAX	1,00	0,98	0,96	0,94	0,91	0,87	0,84	0,80	0,74	0,69	0,63
	4		1,00	0,98	0,96	0,94	0,91	0,88	0,84	0,79	0,74	0,67	–
	3	MED	1,00	0,98	0,96	0,93	0,90	0,87	0,82	0,77	0,71	0,65	–
	2		1,00	0,98	0,96	0,93	0,90	0,85	0,81	0,76	0,70	–	–
	1	MIN	1,00	0,98	0,95	0,93	0,90	0,85	0,81	0,76	0,71	–	–
BFS-5	5	MAX	1,00	1,00	0,98	0,96	0,93	0,91	0,88	0,85	0,81	0,77	0,71
	4		1,00	0,98	0,96	0,94	0,92	0,89	0,85	0,81	0,76	0,69	–
	3	MED	1,00	0,98	0,97	0,95	0,92	0,90	0,86	0,82	0,76	0,68	–
	2		1,00	0,98	0,96	0,93	0,90	0,87	0,84	0,79	0,74	0,66	–
	1	MIN	1,00	0,98	0,96	0,93	0,90	0,86	0,82	0,76	0,68	–	–

Water side pressure drop

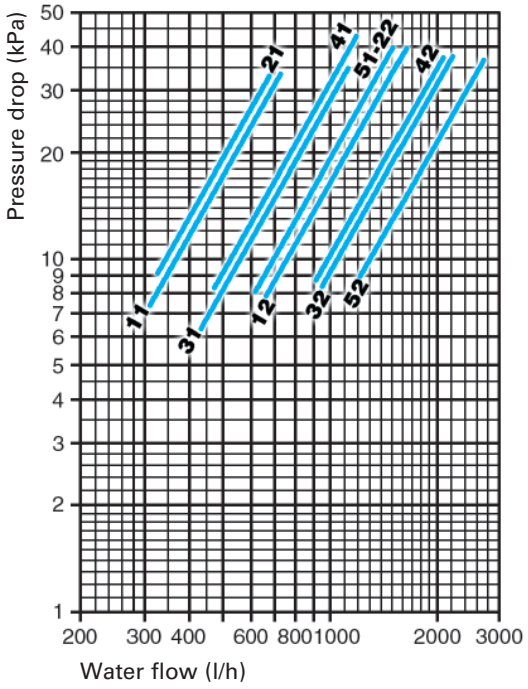
2 pipe units



The water pressure drop figures refer to a mean water temperature of **10°C**; for different temperatures, multiply the pressure drop figures by the correction factors **K**.

°C	20	30	40	50	60	70	80
K	0,94	0,90	0,86	0,82	0,78	0,74	0,70

4 pipe units (heating coil pressure drop)

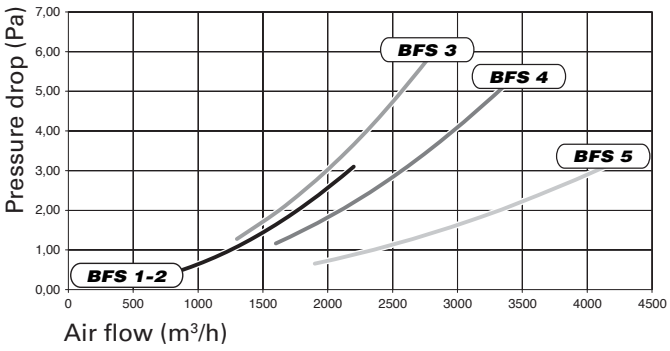


The water pressure drop figures refer to a mean water temperature of **65°C**; for different temperatures, multiply the pressure drop figures by the correction factors **K**.

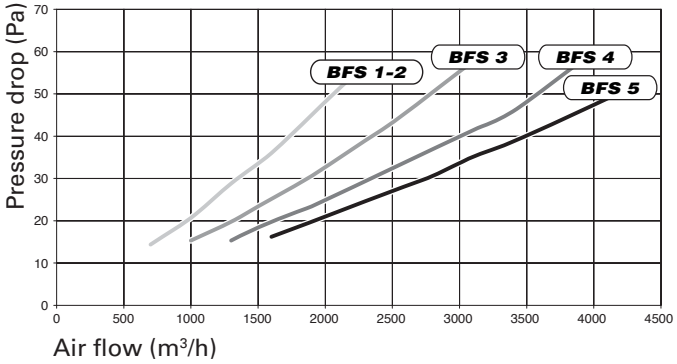
°C	40	50	60	70	80
K	1,14	1,08	1,02	0,96	0,90

Accessory air side pressure drop

Spigot plenum pressure drop

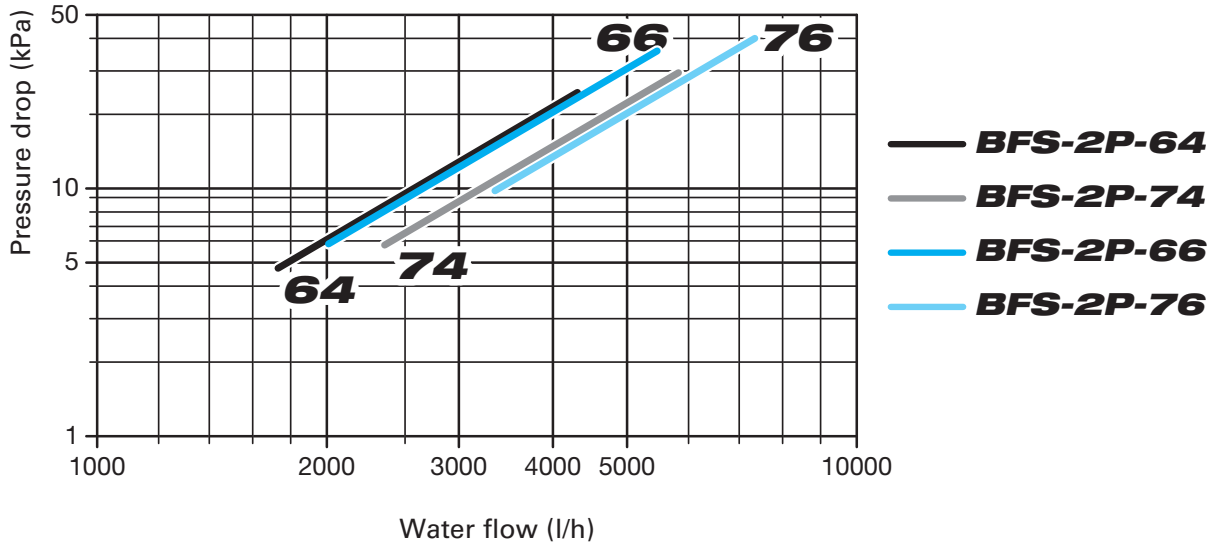


48 mm G3 filter pressure drop



Water side pressure drop

2 pipe units

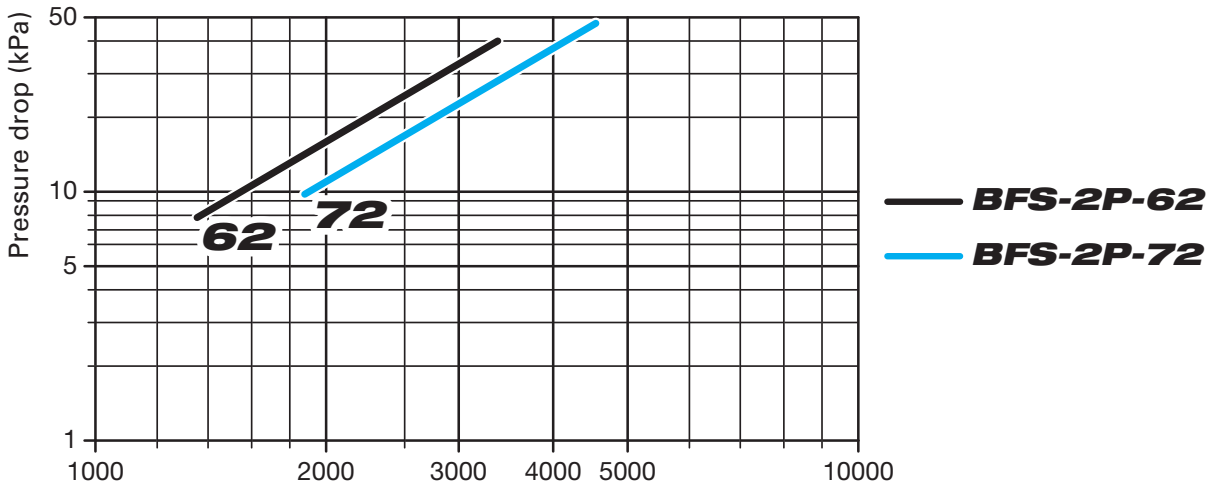


The water pressure drop figures refer to a mean water temperature of ***10°C;*** for different temperatures, multiply the pressure drop figures by the correction factors ***K.***

°C	20	30	40	50	60	70	80
K	0,94	0,90	0,86	0,82	0,78	0,74	0,70

4 pipe units

(heating coil pressure drop)

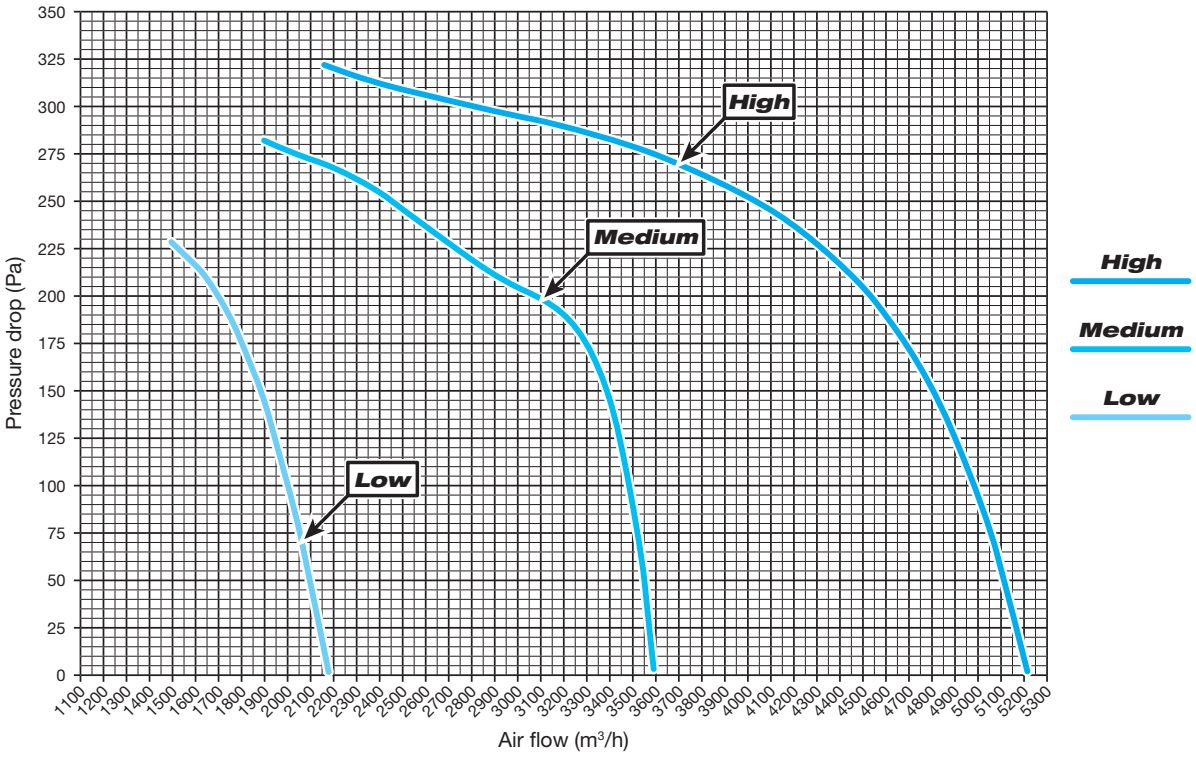


The water pressure drop figures refer to a mean water temperature of ***65°C;*** for different temperatures, multiply the pressure drop figures by the correction factors ***K.***

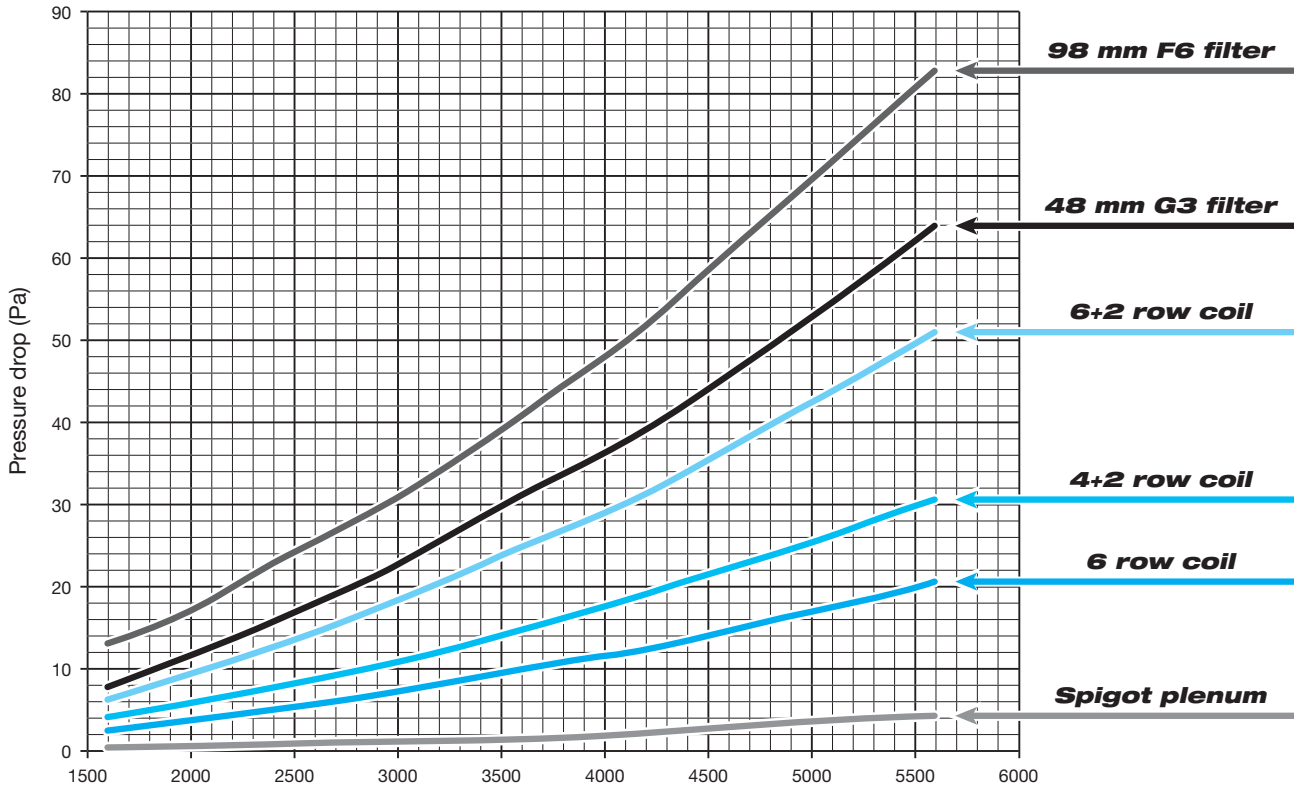
°C	40	50	60	70	80
K	1,14	1,08	1,02	0,96	0,90

Available pressure / Pressure drop

Available pressure for *BFS-2P-64 (with 4 row coil)*

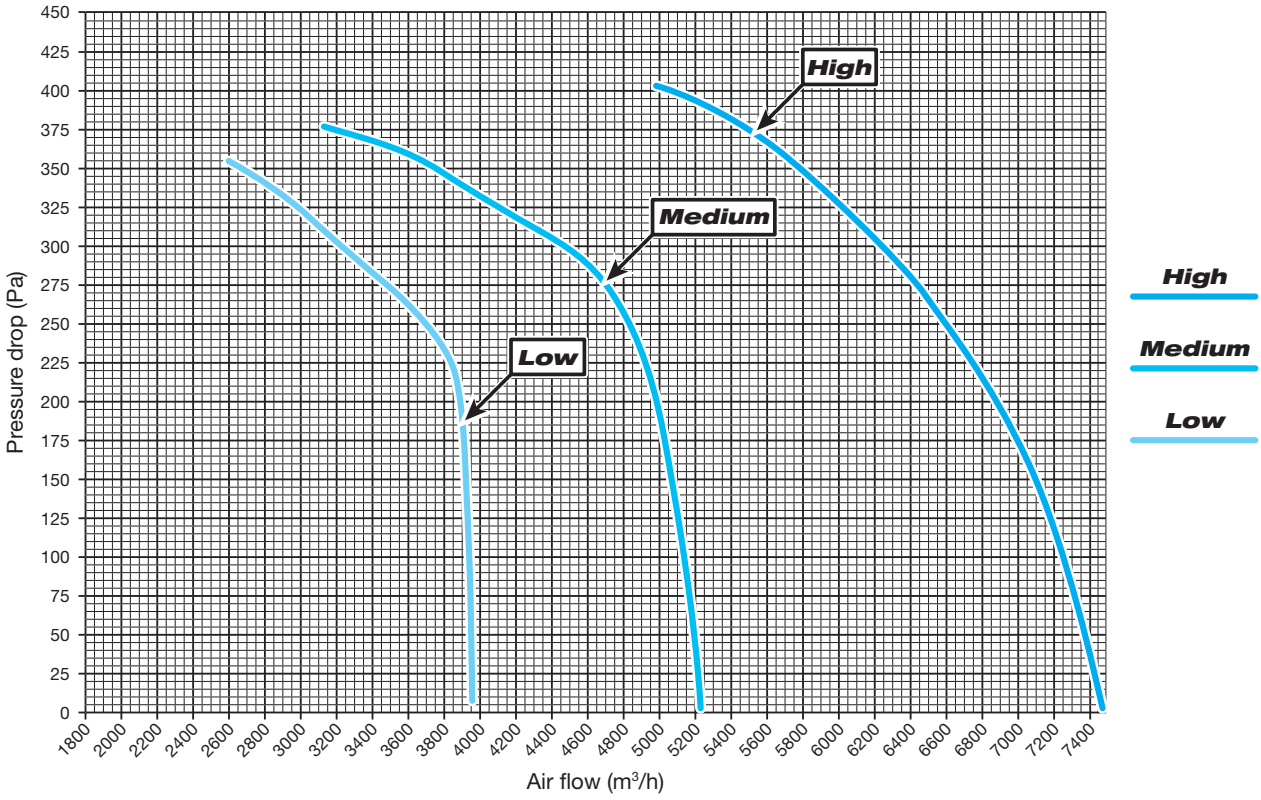


Pressure drop for *BFS-6* (Dp)

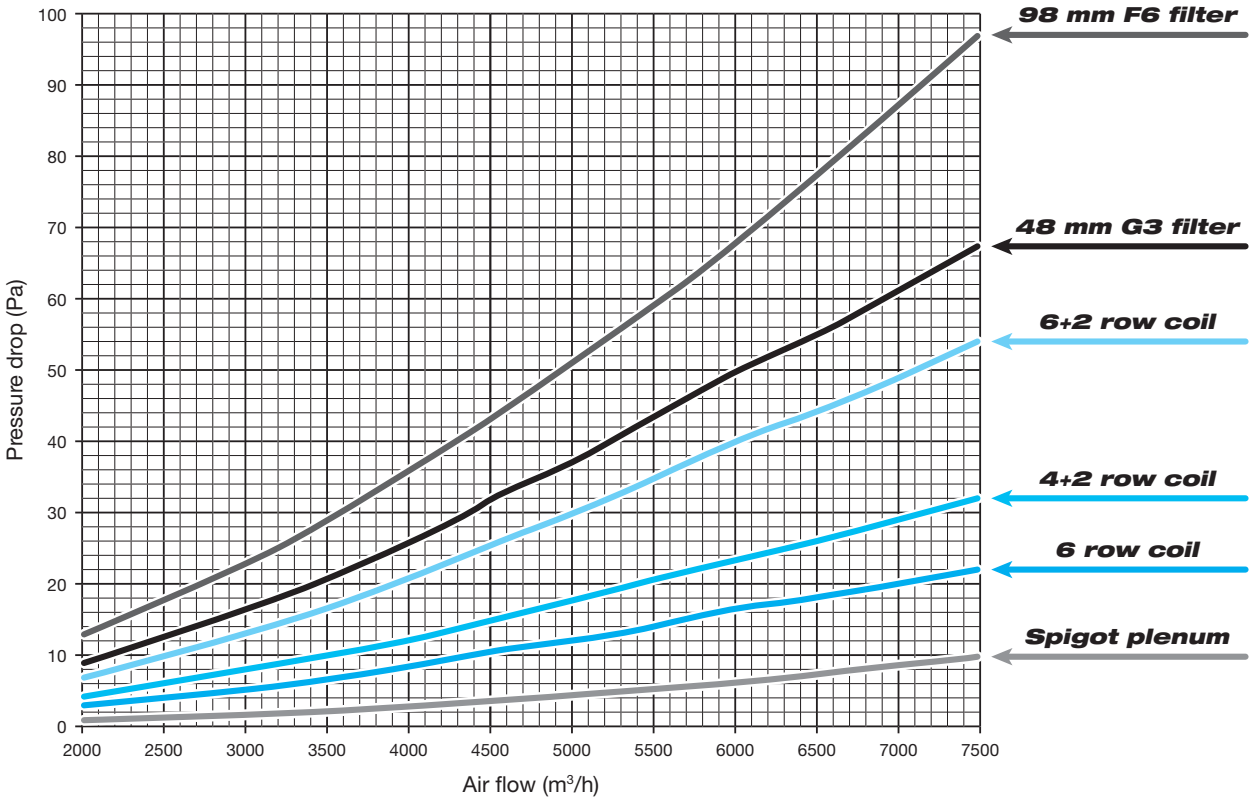


Available pressure / Pressure drop

Available pressure for *BFS-2P-74 (with 4 row coil)*

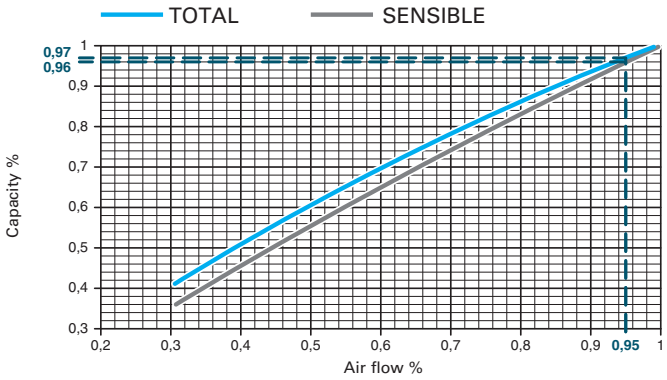


Pressure drop for *BFS-7* (Dp)



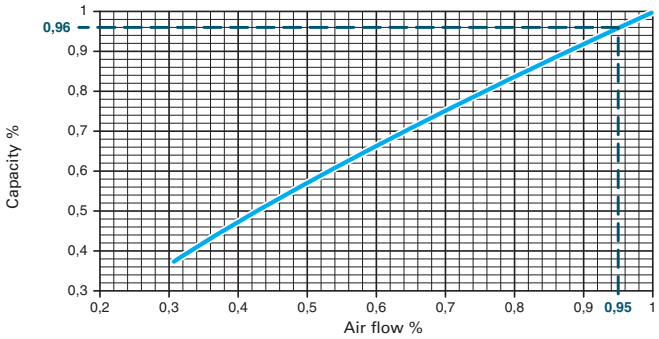
Correction diagrams

Diagram 1 – Cooling capacities



Correction diagram of cooling capacity depending on air flow

Diagram 2 – Heating capacity



Correction diagram of heating capacity depending on air flow

Example of calculation of the capacity at different speeds and air pressure drops

Model: BFS-4P-662

Installation characteristics:

Summer mode:

Air temperature:	+ 25°C d.b.	R.H. 50%
Water temperature:	+ 8°C E.W.T.	+ 13°C L.W.T.

Winter mode:

Air temperature:	+ 20°C	
Water temperature:	+ 60°C E.W.T.	+ 50°C L.W.T.

Requested air flow: 3400 m^3/h

Requested available pressure: 110 Pa

Capacity of BFS-4P-662 working

- at medium speed (speed 2)
- with 0 Pa of available pressure
- with entering air temperature: 25°C

- Air flow: 3570 m^3/h (page 24 - BFS-2P-66)
- Total capacity: 18250 W (page 24 - BFS-2P-66)
- Sensible capacity: 14950 W (page 24 - BFS-2P-66)
- Heating: 23900 W (page 25 - BFS-4P-642/BFS-4P-662)

Calculation of the capacity at requested flow:

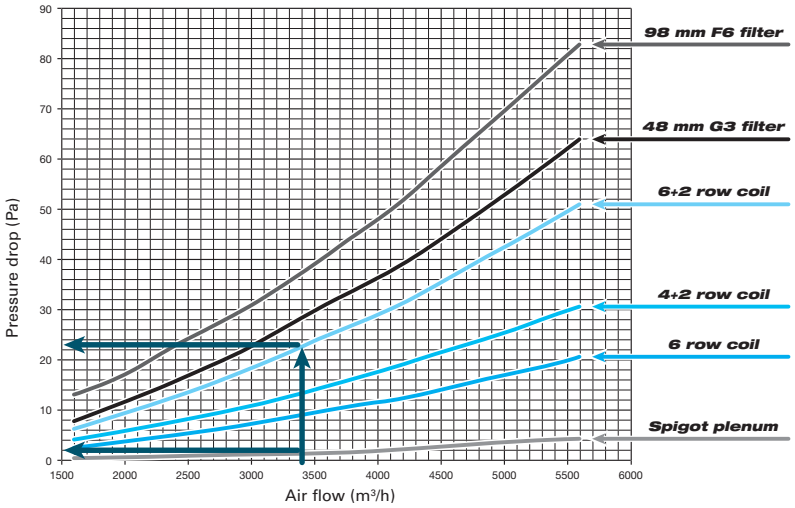
Define the "correction factor" between the requested air flow and the referring air flow (page 26):
Correction factor = 3400/3570 = 0,95

From **Diagrams 1 and 2** define the "**variation in % of the capacity**" using the correction factor calculated above.
- For the **TOTAL capacity = 0,97**
- For the **SENSIBLE capacity = 0,96**
- For the **Heating = 0,96**

The obtained capacity for the unit is:
- **TOTAL capacity = 18250 x 0,97 = 17703 W**
- **SENSIBLE capacity = 14950 x 0,96 = 14352 W**
- **Heating = 23900 x 0,96 = 22944 W**

Correction diagrams

Diagram for BFS-2P-64 "Pressure drop"



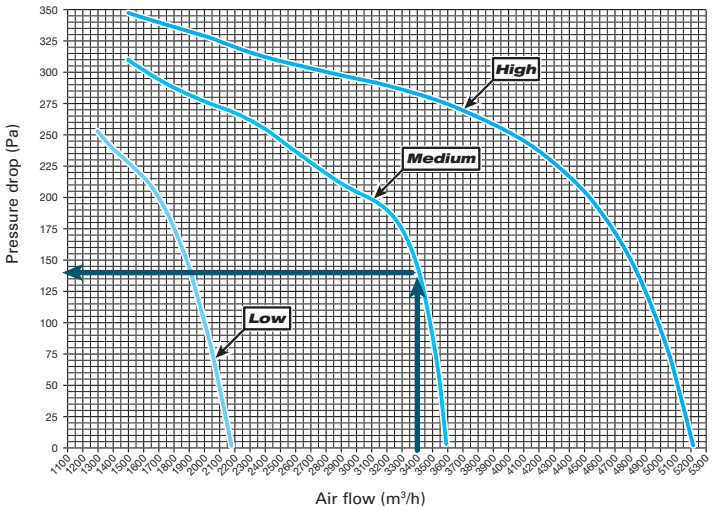
Calculation of the pressure drop:

From the "**Pressure drop**" Diagram of **BFS-2P-64** with 3400 m³/h of air flow, we can find the pressure drop of the unit:
- ΔP air for the coil 6+2 = **22 Pa**
- ΔP air for the spigot plenum = **2 Pa**

The calculation is:
- ΔP total air of BFS = 22+2 = **24 Pa**

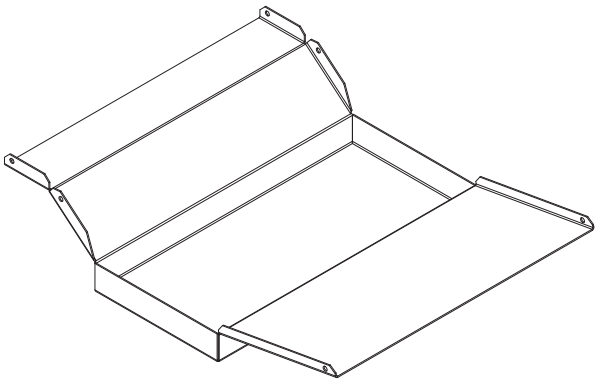
Total pressure drop:
- **Spigot pressure drop + BFS pressure drop = 110 Pa + 24 Pa = 134 Pa**

Diagram for BFS-2P-64 "Available pressure"



From the **"Available pressure" Diagram** of **BFS-2P-64** working at medium speed and with 3400 m³/h of air flow, we can find:
- **Available pressure = 140 Pa = ~ 134 Pa**

BCM External auxiliary condensate collection tray

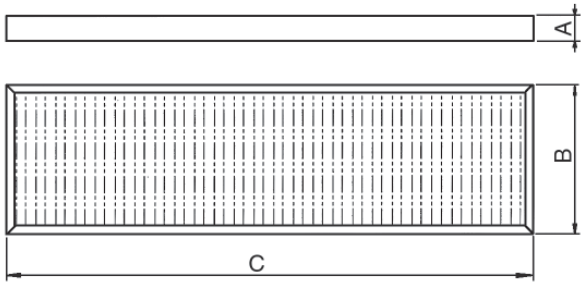


Model	Code
BFS 1-7	9034029

SFM G3 synthetic filter

The filter is a washable synthetic fibre, flame-proof according to Class F1 DIN 53438.
Efficiency of 84%, Eurovent EU3.
The filter is supplied as an accessory and must be fitted on the unit on site in place of the standard filter.

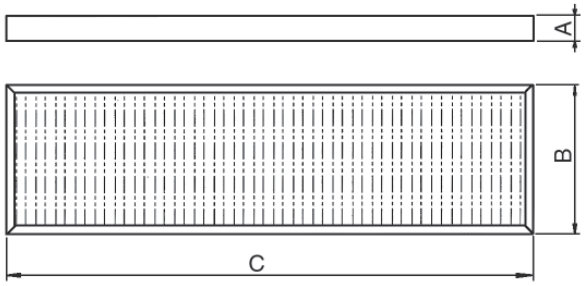
Model	A	B	C	Code
BFS 1	48	285	1000	6034050
BFS 2	48	285	1000	6034050
BFS 3	48	335	988	6034052
BFS 4	48	335	1298	6034053
BFS 5	48	410	1298	6034054
BFS 6	48	460	1385	6034056
BFS 7	48	560	1385	6034057



SFM F6 synthetic filter

High efficiency compact filter in glass microfiber paper, Class F6 in according to EN779.
The filter is supplied as an accessory and must be fitted on the unit on site in place of the standard filter.

Model	A	B	C	Code
BFS 6	98	460	1385	6034197
BFS 7	98	560	1385	6034198

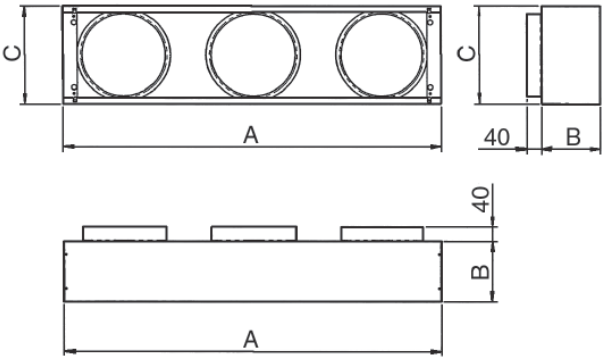


Accessories

PMM Intake/supply spigot plenum

Intake/supply spigot plenum with 3 spigots (Sizes 1-2-3) or 4 spigots (Sizes 4-5-6-7).

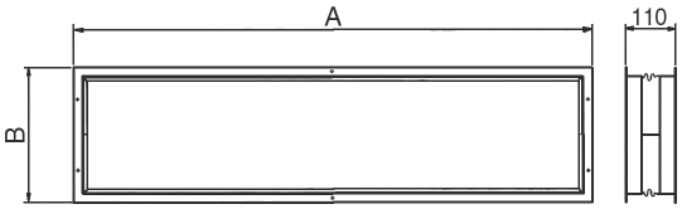
Model	A	B	C	Spigots (N°)	Spigots (Ø)	Code
BFS 1	1133	182	298	3	250	9034200
BFS 2	1133	182	298	3	250	9034200
BFS 3	1133	182	348	3	250	9034220
BFS 4	1445	300	348	4	250	9034230
BFS 5	1445	300	442	4	300	9034240
BFS 6	1535	300	472	4	355	9034280
BFS 7	1535	300	572	4	355	9034290



GAV Antivibrating connection

Intake/supply antivibrating connection, made of two galvanized frames and a PVC flexible connection.

Model	A	B	Code
BFS-1	1138	296	6034200
BFS-2	1138	296	6034200
BFS-3	1138	346	6034201
BFS-4	1450	346	6034202
BFS-5	1450	421	6034203
BFS-6	1540	461	6034204
BFS-7	1540	561	6034205



Identification	Code
REL-1B	9079110

SPEED SWITCH (SLAVE)

- It allows to control up to 8 units with only one centralized wall control (1 speed switch for each unit).
- For controls M-3V, T-TMO and T-REM.

Wall thermostats

Identification	Code
M-3V	9066642

Dimensions: 75x75x30 mm

For Models 1-2 use only the M-3V control code 9066642.
For Models 3-4-5-6 use the M-3V control code 9066642 + REL-1B code 9079110.
For Model 7 use the M-3V control code 9066642 + 2 speed switches REL-1B code 9079110.
- ON-OFF switch and 3 speed switch, without thermostatic control.

Identification	Code
T-TMO	9066630E

Dimensions: 135x86x31 mm

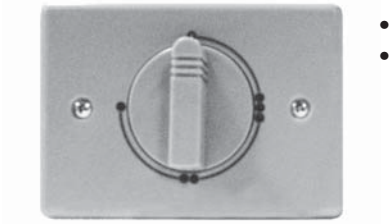
For Models 1-2 use only the T-TMO control code 9066630E.
For Models 3-4-5-6 use the T-TMO control code 9066630E + REL-1B code 9079110.
For Model 7 use the T-TMO control code 9066630E + 2 speed switches REL-1B code 9079110.
- ON-OFF switch and manual 3 speed switch.
- Manual Summer/Winter switch.
- Electronic room thermostat for fan control (ON-OFF).
- Electronic room thermostat for water valve control (ON-OFF).
- It allows to control the low temperature cut-out thermostat (TMM).
- It allows to control the chilled water valve (ON-OFF) and the electric heater (BEM) only in case that hot water is not used in winter.

Identification	Code
T-REM	9066631E

Dimensions: 135x86x31 mm

For Models 1-2 use only the T-REM control code 9066631E.
For Models 3-4-5-6 use the T-REM control code 9066631E + REL-1B code 9079110.
For Model 7 use the T-REM control code 9066631E + 2 speed switches REL-1B code 9079110.
- ON-OFF switch and manual 3 speed switch.
- Electronic room thermostat for fan control (ON-OFF).
- Electronic room thermostat for valve control (ON-OFF).
- Simultaneus thermostatic control of the valves and fan.
- It allows to control the low temperature cut-out thermostat (LTCO).
- It allows to control the chilled water valve (ON-OFF) and the electric heater (BEM) only in case that hot water is not used in winter.
- Energy saving function.

Identification	Code
COM	9053022



- Remote manual speed control.
- Commutator with 4 positions:
  - OFF
  - first speed
  - second speed
  - third speed

Wall thermostats

Wall thermostat accessories

LTCO low temperature cut-out thermostat

To be fitted between the coil fins; when connecting the control, the LTCO probe cable must be separated from the power supply wires.

To be used only with T-REM control and the T-POWER-A power-unit.

It stops the fan when the water temperature is lower than 28°C and it starts the fan when is higher than 33°C.

Identification	Code
LTCO	3021090

TMM low temperature cut-out thermostat

To be installed in contact with the hot water circuit.

To be used only with T-TMO control.

For units working on heating only.

It stops the fan when the water temperature is lower than 30°C and it starts the fan when is higher than 38°C.

Identification	Code
TMM	9053048

Change-Over CH 15-25

Automatic summer/winter switch to be installed in contact with the water circuit.

For 2-tube installations only (not to be used with 2 way valve).

To be used only with T-REM control.

Identification	Code
CH 15-25	9053049

MB version

All the **BFS** units can be supplied with a wide range of controls, which allows managing one single unit or several units by using the Modbus RTU - RS 485. Units can be managed according to the Master/Slave logic (up to 20 units) or by supervisory components. The system consists in a **QCV-MB** board with **IR-MB** included wall control and a series of controls, such as the **TODS** multifunction control and the **NET** supervisory program.

To be used with valves with 3 points – 24 Volt actuator or with ON/OFF 230 V valves

QCV-MB control board

Description	Identification	Code
MB version control board for models 1÷6	QCV-MB-A 1-6	9034140
MB version control board for model 7	QCV-MB-A 7	9034147

The **QCV-MB** electronic board is set to carry out different functions and adjustment modes, in order to meet the installation requirements. These modes are selected by setting the configuration dip switches on the board.

- 2/4 pipe system.
- Fan ON/OFF thermostatic control.
- Valve thermostatic control and continuous ventilation.
- Valve and simultaneous ventilation thermostatic control.
- Fan operation control depending on the coil temperature (cut-out T3 probe fitted), which can be activated only in heating mode or heating and cooling mode.
- Automatic switch of the operating mode by means of T2 water probe (optional) applied on the 2 pipe system.
- Seasonal switch by means of remote contact.
- ON/OFF of the fan coil by means of the remote contact (window or clock contact).
- Electric heater control.

By activating the cut-out T3 probe function, the fan is stopped in winter when the coil temperature is lower than 32°C and started when the temperature reaches 36°C. In summer mode, the fan stops when the temperature inside the coil exceeds 22°C and starts when it drops below 18°C.

The following connections are located on the power board:

- IR-MB wall control.
- RS 485 serial connection to manage several fan coils in Master/Slave configuration or to create a supervisory network.

IR-MB wall control (included with the QCV-MB control board)

Wall control with display that allows controlling one or more units in Master/Slave mode. The control is equipped with internal sensor to detect the room temperature, which can be defined as a priority compared to the return air sensor on the fan coil. The **IR-MB** control features the following functions:

- Switch the appliance ON and OFF.
- Temperature set.
- Modify the set point (when used as a +/- 3° variation of the set point configured from NET supervisory program or TODS).
- Set the fan speed (low, medium, high or autofan).
- Set the operation mode (fan only, cooling, heating; auto for 4 pipe systems with mode selection depending on the air temperature).
- Time setting.
- Weekly ON/OFF program.
- Display and change of the fan coil operation parameters.

Dimensions: 110x72x25 mm

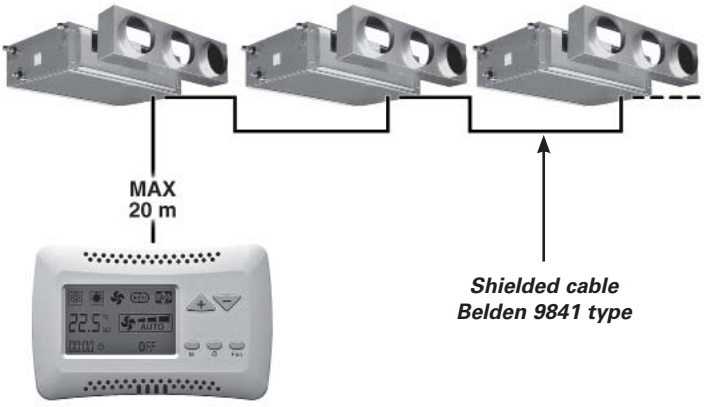
MB version

A group of **BFS** units with **QCV-MB** control board can be connected via a serial link and can consequently be managed at the same time by just one **IR-MB** wall control. Using the special jumper present on the board, one unit must be configured as the master, and all the others as slaves.

With IR-MB wall control

One control for each unit
(Maximum length of the connection cable = 20 m)

One control for more units (20 units max.)
(Maximum total length of the connection cable = 800 m)



T2 accessory for units with QCV-MB control board

Identification	Code
T2	9025310

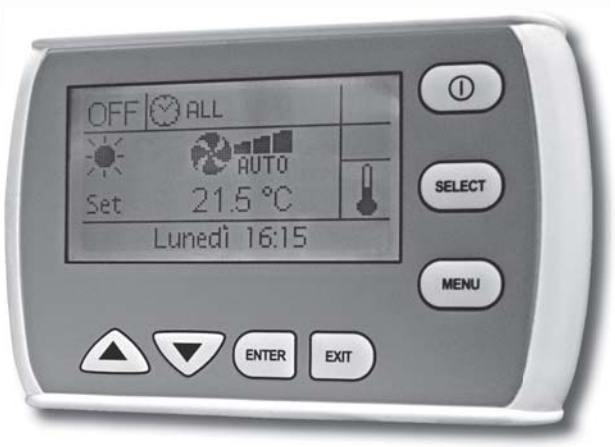
The T2 sensor can be combined with MB boards to be placed on the water supply pipe upstream 3 way valves (not to be used with 2 way valve).

The T2 sensor must be used as described below:

- Change-Over for 2-pipe system for the automatic switch of the operating mode.
  If water temperature is lower than 20°C, cooling mode is set; on the other hand, if water temperature exceeds 30°C, heating mode is set.
- It can be used on units with electric heater and hot water supply. The T2 priority probe activates the electric heater or water valve, depending on the water temperature detected. If water temperature exceeds 34°C, the water valve ON-OFF control is activated; on the other hand, if water temperature is lower than 30°C, the electric heater is activated.

TODS multifunction control panel

Description	Identification	Code
Multifunction control (to be used with QCV-MB control board only)	TODS	3021293



Another option available for the serial communication between the units is the possibility to connect up to 60 **BFS** units in series and manage them with just one wall mounted **TODS** controller. The wall mounted controller can be used to set the operating mode for each individual unit connected, display the operating conditions of each individual unit, and set the ON/OFF time sets for each day of the week (the program can be set for all the units and for a maximum of two groups of units).

If more than 60 units need to be connected, two or more controllers must be used. Each unit must have a MB board. The **TODS** control is used to manage a series of fan coils, up to a maximum of 60 units (the maximum length of the RS 485 connection cable must not exceed 800 m), from one single control point.

The **TODS** control communicates via a serial line with all the units connected, with the possibility of controlling them all together or individually. In fact, the unique address of each individual fan coil means that all the units can be called at the same time, or the individual unit called, to perform the following functions:

- display the current operating mode, the fan speed, the set point;
- display the room temperature measured on the individual unit;
- turn all the units ON and OFF at the same time or alternatively each unit individually;
- change the operating mode (fan only, heating, cooling, automatic changeover);
- change the set point;
- modify the values and operation parameters of the fan speed.

Each function can then be sent to all the units connected, or alternatively to each individual unit.

Different set points or operating modes can be set for each individual unit.

The **TODS** panel can also be used for the time management of the units over the week. Four ON times and four OFF times can be set on the units for each day of the week. A different Temperature set that will be considered as Operation set for all connected appliances, can be set for each event. If the Temperature set is not entered for the individual event, it must be set during programming for each individual unit or for the entire network.

The TODS panel cannot be used
together with the NET management program (see next page).

Note: set the configuration Dip Switches of each fan coil as illustrated in the remote control use manual, based on the required solutions.

Note: the RS 485 network's overall length must not exceed 700/800 metres.

Management system for a network of fan coils

NET program for managing a network of MB fan coils

Description	Identification	Code
Hardware/software supervisory system (to be used with QCV-MB control board only)	NET	9079118

NET is a centralised control system for networks of MB fan coils, based on software that runs on LINUX™ (the program is provided pre-installed on a PC).

The **NET** software offers a practical and economical solution for managing the units, with the simple click of the mouse.

The main characteristics include simplicity of use, an extremely complete and functional weekly program, and the possibility to access the historical operating data for each individual unit connected.

The program can be used to:

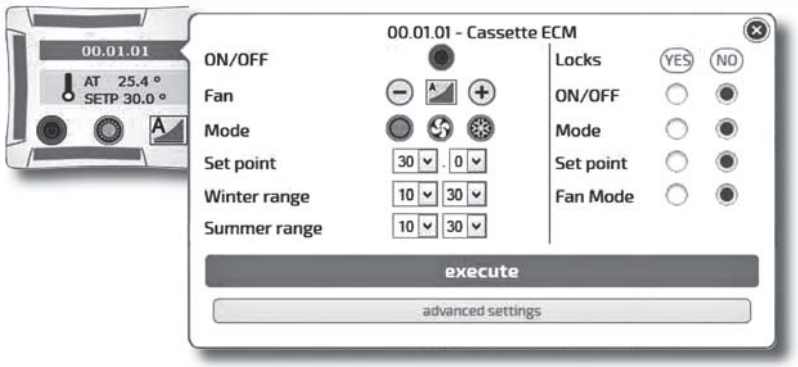
- Create uniform groups (groups of units on individual floors, in offices or rooms).
- Save weekly programs configured for different types of operation (summer, winter, mid seasons, closing periods etc.); these can then be recalled and activated with a simple click of the mouse. Weekly on/off cycles can be set for individual units or groups of units.
- Set the operating conditions for each individual unit or groups of units (operating mode, fan speed, temperature setting).
- Set the set point limits for each individual unit or groups of units.
- Switch each individual unit or groups of units ON or OFF.

The main program screen can display and interact with the entire network of units. An individual unit, a group of units or the entire network can be called so as to make modifications to the operating mode and the set point. The user can then check the operating status of each individual unit, read the room temperature, the coil temperature and the operating status of the condensate drain pump or any alarms.

“MONITORING” Screen

Displaying a unit

The “MONITORING” Screen shows the units that are connected to the network and scanned by the program.

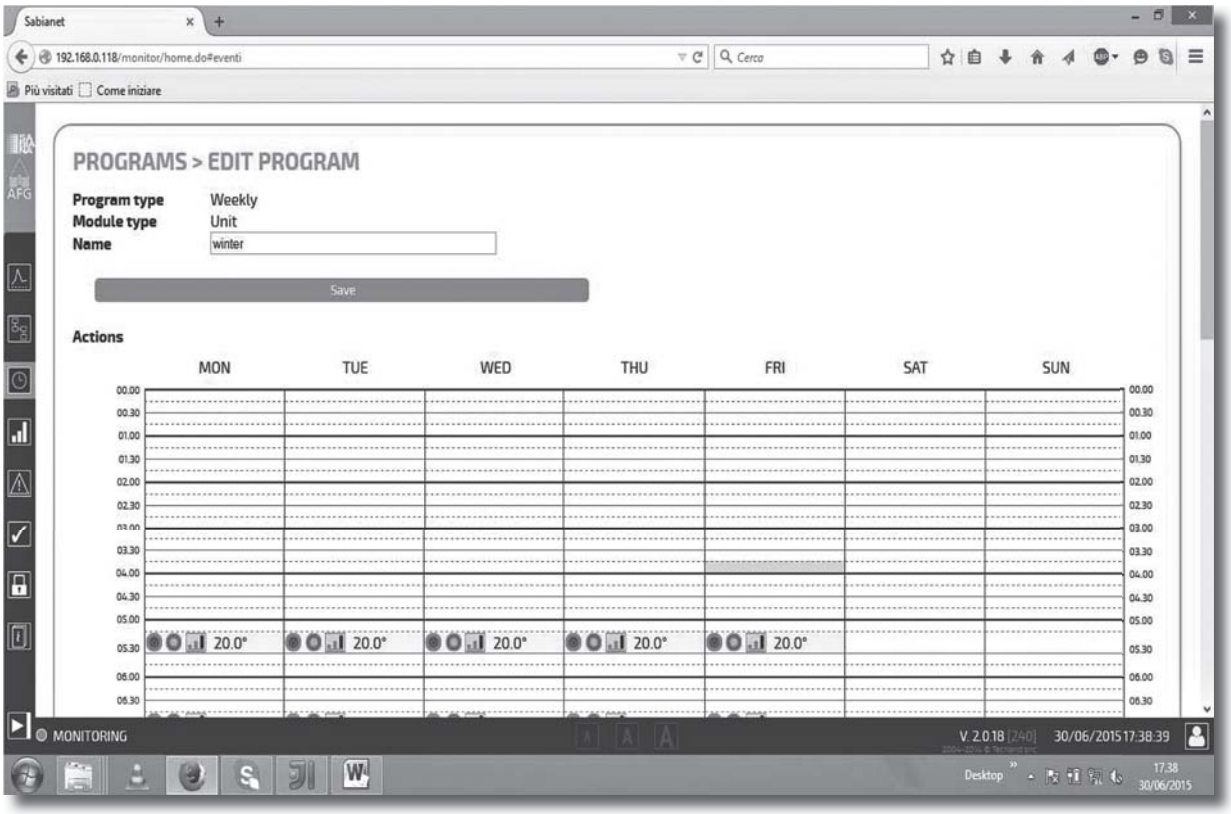


The icon of the terminal unit provides the following information:

- Unit name (**00.01.01**)
- Set temperature (SETP)
- Room temperature (AT)
- Unit status: ON (Green) or OFF (Red)
- Mode: • Summer • Auto • Winter • Fan only
- Fan speed: • Low • High • Medium • AutoFan

The “Weekly Program” can be used to set the unit operating parameters for each day of the week. Up to 20 different weekly programs can be set.

“EVENT MANAGEMENT” Screen

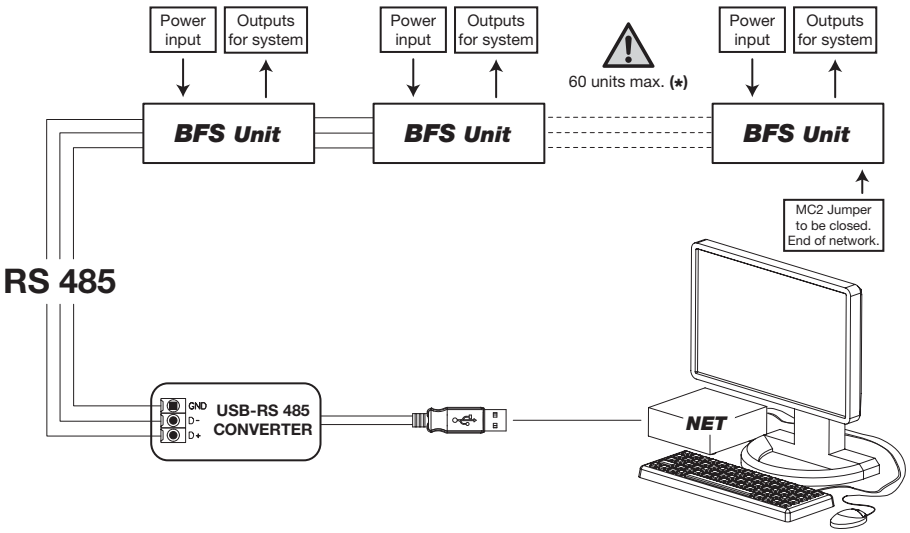


Time bands are available for each day of the week. The time and the type of operation to be performed by the unit can be set for each band. The time and the operating parameters can then be displayed before being sent to the unit and implemented.

Management system for a network of fan coils

PC NET Software

Connection of a **BFS** network with QCV-MB control board.



(*) In the event of more than 60 units, add one or more Router-S (see below).

RS 485 serial connection cable

Shielded cable to be used:

Belden 9841, RS-485, 1x2x24 AWG SFTP, 120 Ohm

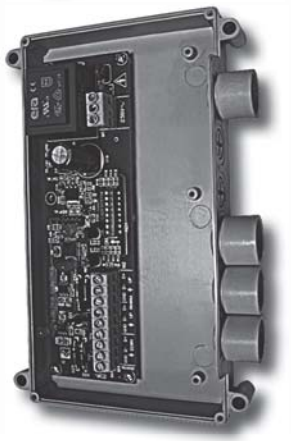
PSM-DI and NET electronic boards

Identification	Code
ROB-A	3021292

ROB-A is a board equipped with 8 relays with potential free contact to control the activation or deactivation of remote electric utilities. Moreover, the board has 8 digital inlets to display the actuators or external consents, such as motor or other. The ROB-A boards can be connected:

- inside a network managed by NET;
- to a TODS panel (one SIOS for each TODS panel).

Identification	Code
Router-A	3021290



The Router-A is an electronic board that:

- allows creating networks with more than 60 units (minimum 2 Router-A are required) or to divide the network (per floor, building, etc.);
- it allows creating a Master/Slave sub-network to be controlled as an indipendent group.

The Router-A can be used only inside a network managed by NET.

The number of Router-A to be used is:
- up to 60 units: no Router-A
- from 61 to 120 units: 2 Router-A
- every 60 subsequent units: 1 additional Router-A

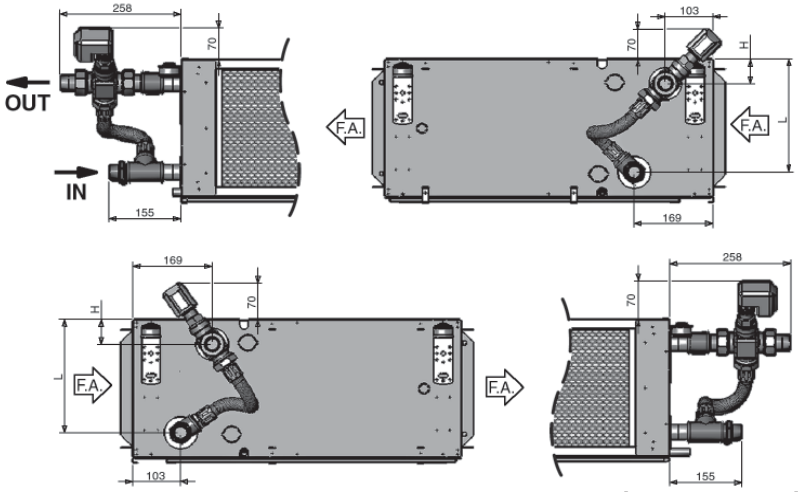
Accessories to be used only with QCV-MB control board

24 V

main coil kit valve

Valve with 3 points - 24 Volt actuator *

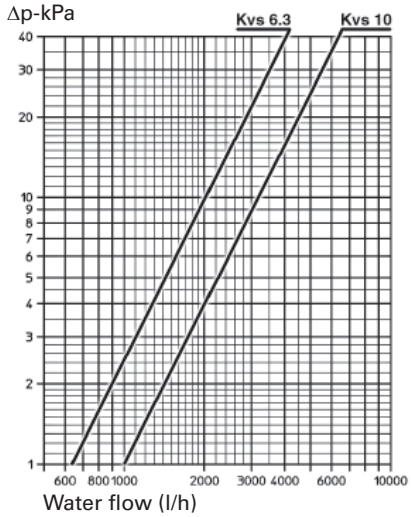
Left connections (standard)



Right connections (on request)

Model	H	L	Valve connections (Ø)	Kvs	Code
BFS - 1	54	245	1”	6,3	9034250
BFS - 2	54	245	1”	6,3	9034251
BFS - 3	54	295	1”	6,3	9034251
BFS - 4	58	291	1”	10	9034252
BFS - 5	58	367	1”	10	9034252
BFS - 6	59	416	1”	10	9034270
BFS - 7	59	516	1”	10	9034272

Model	H	L	Valve connections (Ø)	Kvs	Code
BFS - 1	50	249	1”	6,3	9034253
BFS - 2	50	249	1”	6,3	9034253
BFS - 3	50	299	1”	6,3	9034253
BFS - 4	54	295	1”	10	9034254
BFS - 5	54	370	1”	10	9034254
BFS - 6	55	421	1”	10	9034271
BFS - 7	55	521	1”	10	9034273

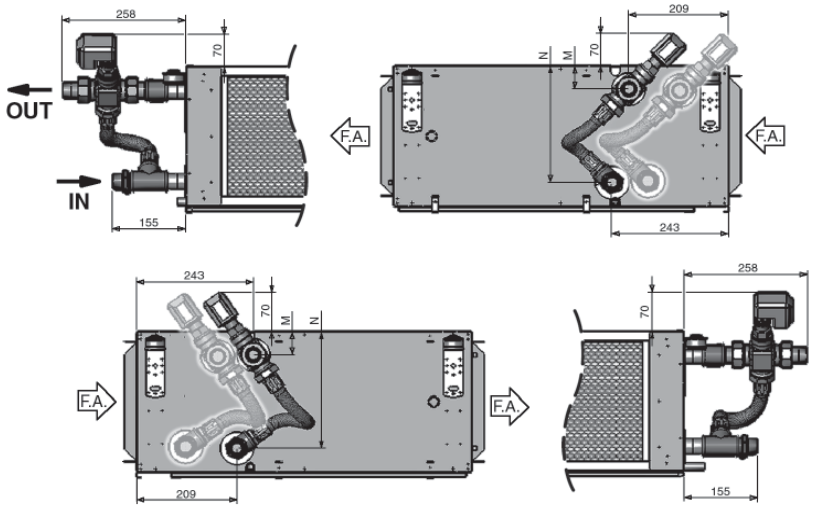


24 V

auxiliary coil kit valve

Valve with 3 points - 24 Volt actuator *

Left connections (standard)



Right connections (on request)

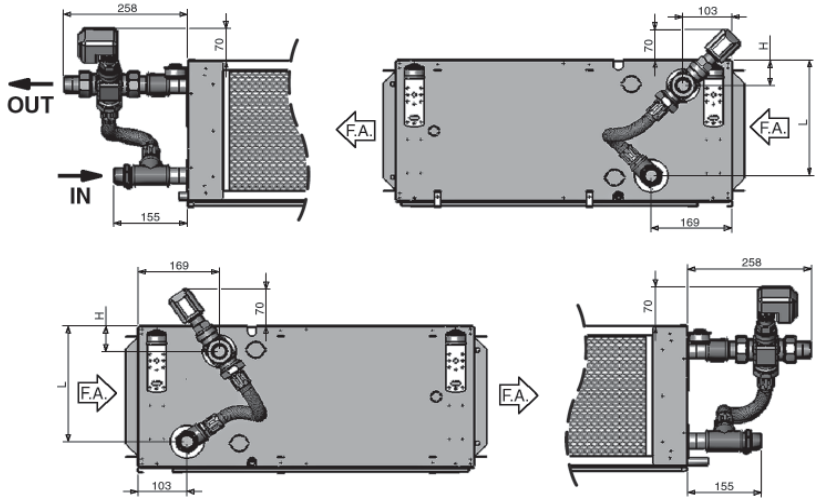
* The valves can’t be used with T-TMO and T-REM controls.

Accessories

Accessories to be used only with ON/OFF 230 V controls (QCV-MB, T-TMO and T-REM)

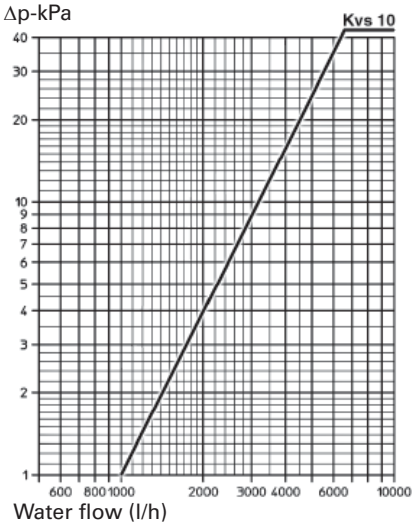
230 V
main coil kit valve
230 V, ON-OFF valve.

Left connections (standard)



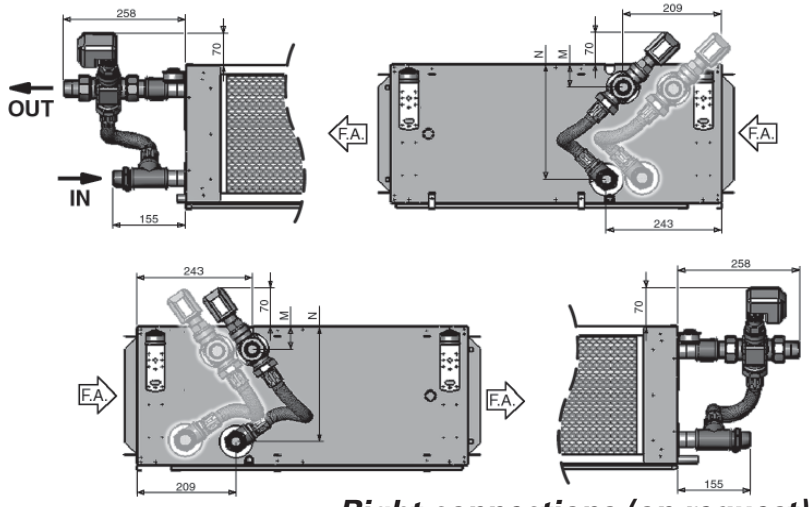
Model	H	L	Valve connections (Ø)	Kvs	Code
BFS - 1	54	245	3/4”	10	9034255
BFS - 2	54	245	1”	10	9034256
BFS - 3	54	295	1”	10	9034256
BFS - 4	58	291	1”	10	9034257
BFS - 5	58	367	1”	10	9034257
BFS - 6	59	416	1”	10	9034259
BFS - 7	59	516	1”	10	9034259

Model	H	L	Valve connections (Ø)	Kvs	Code
BFS - 1	50	249	3/4”	10	9034255
BFS - 2	50	249	3/4”	10	9034255
BFS - 3	50	299	3/4”	10	9034255
BFS - 4	54	295	1”	10	9034256
BFS - 5	54	370	1”	10	9034256
BFS - 6	55	421	1”	10	9034258
BFS - 7	55	521	1”	10	9034258



230 V
auxiliary coil kit valve
230 V, ON-OFF valve.

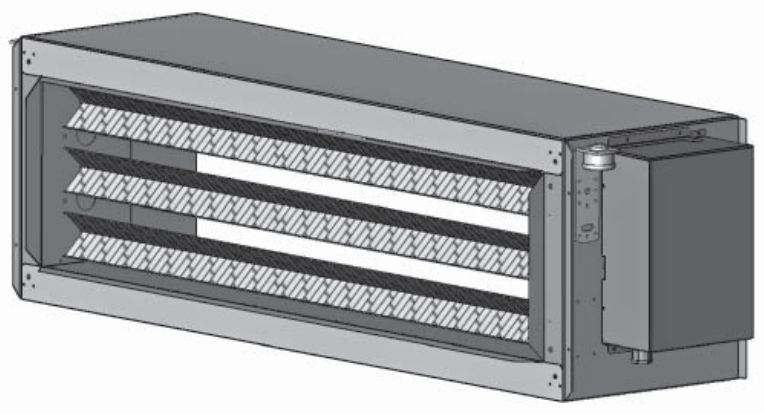
Left connections (standard)

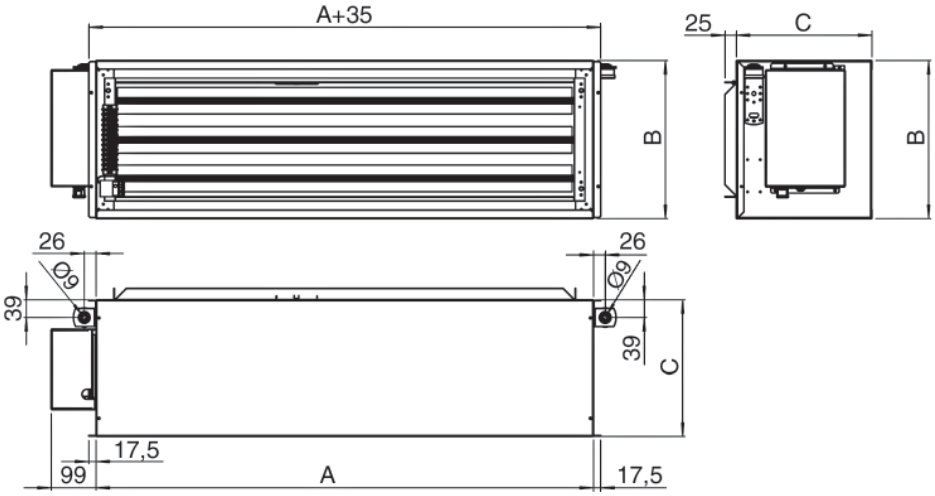


Right connections (on request)

BEM Electric heater

The **BEM** electric coil consists of electric coils and a security thermostat, which are inside a galvanized steel and insulated casing.





Model	A	B	C	WATT	V	Code
BFS - 1	1098	297	300	3000	230	9034201
BFS - 2	1098	297	300	4500	230	9034210
BFS - 1	1098	297	300	3000	400	9034202
BFS - 2	1098	297	300	4500	400	9034211
BFS - 3	1098	347	300	7500	400	9034222
BFS - 4	1410	347	300	7500	400	9034232
BFS - 5	1410	422	300	15000	400	9034242
BFS - 6	1500	472	300	15000	400	9034204
BFS - 7	1500	572	300	15000	400	9034205

Wall thermostats for BEM electric heater

Identification	Code
T-TMO	9066630E

Dimensions: 135x86x31 mm

For Models 1-2 use only the T-TMO control code 9066630E.

For Models 3-4-5-6 use the T-TMO control code 9066630E + REL-1B code 9079110.

For Model 7 use the T-TMO control code 9066630E + 2 speed switches REL-1B code 9079110.

- ON-OFF switch and manual 3 speed switch.
- Manual Summer/Winter switch.
- Electronic room thermostat for fan control (ON-OFF).
- Electronic room thermostat for water valve control (ON-OFF).
- It allows to control the low temperature cut-out thermostat (TMM).
- It allows to control the chilled water valve (ON-OFF) and the electric heater (BEM) only in case that hot water is not used in winter.

Identification	Code
T-REM	9066631E

Dimensions: 135x86x31 mm

For Models 1-2 use only the T-REM control code 9066631E.

For Models 3-4-5-6 use the T-REM control code 9066631E + REL-1B code 9079110.

For Model 7 use the T-REM control code 9066631E + 2 speed switches REL-1B code 9079110.

- ON-OFF switch and manual 3 speed switch.
- Manual, automatic or centralized Summer/Winter switch.
- Electronic room thermostat for fan control (ON-OFF).
- Electronic room thermostat for valve control (ON-OFF).
- Simultaneus thermostatic control of the valves and fan.
- It allows to control the low temperature cut-out thermostat (LTCO).
- It allows to control the chilled water valve (ON-OFF) and the electric heater (BEM) only in case that hot water is not used in winter.
- Energy saving function.

Notes

Notes

Notes

Trane optimizes the performance of homes and buildings around the world. A business of Ingersoll Rand, the leader in creating and sustaining safe, comfortable and energy efficient environments, Trane offers a broad portfolio of advanced controls and HVAC systems, comprehensive building services and parts. For more information visit www.Trane.com

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