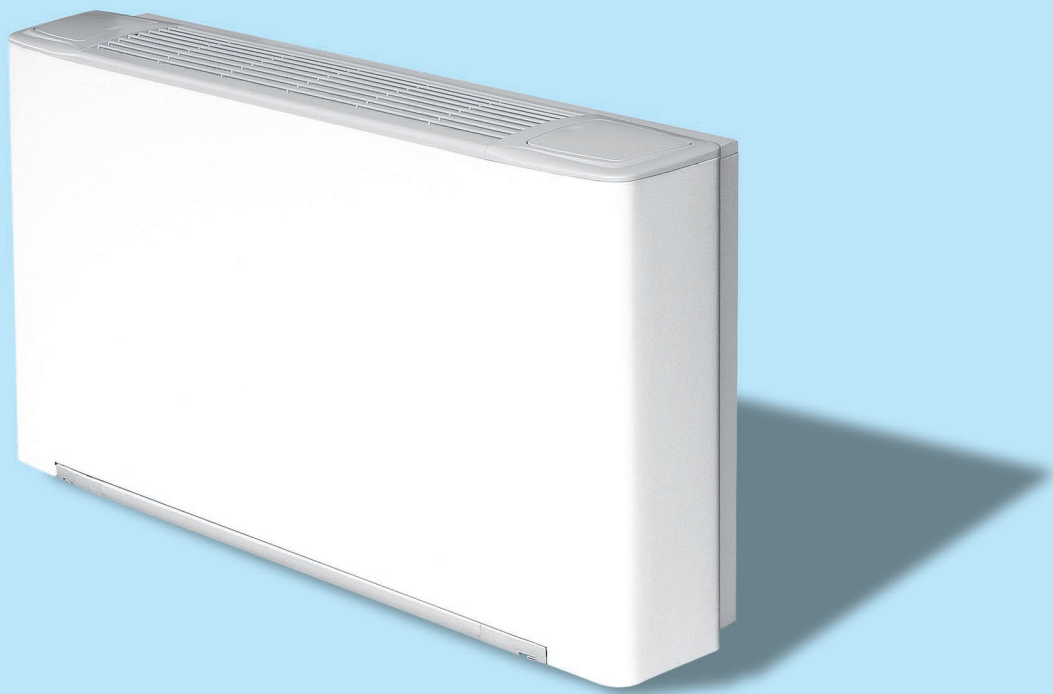


SEC 10 Fan Coil

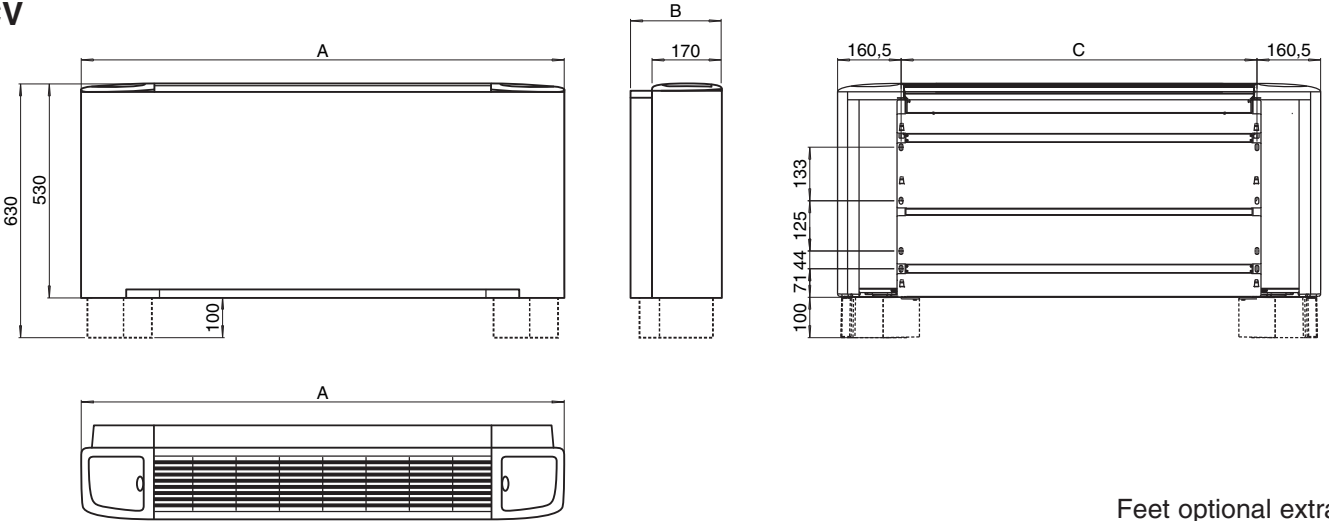


# **SEC 10 Fan Coil Units**

# SEC 10 version

## Dimensions, Weight, Water content

CV



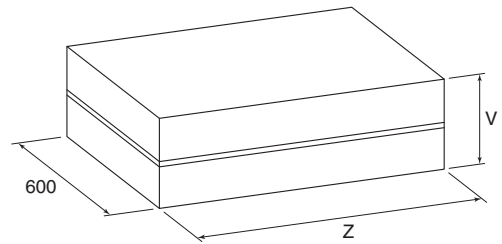
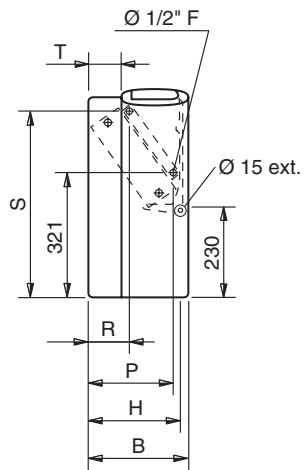
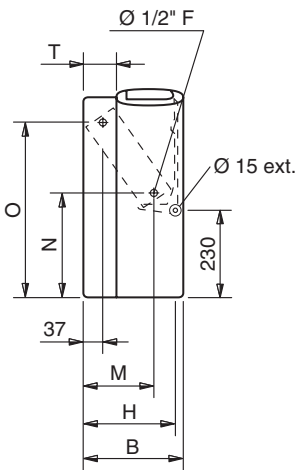
Feet optional extra

### COIL CONNECTIONS

### PACKAGING

4 row coils

Heating additional coil (1 row)



### Dimensions (mm)

### Weight (kg)

### Water content (litres)

MODEL	SEC 10
A	1850
B	255
C	1529
H	235
M	170
N	270
O	450
P	210
R	110
S	465
T	85
V	290
Z	1895

MODEL	SEC 10	
	Weight with packaging	Weight without packaging
Rows 4	68	63
Rows 4+1	80	75

MODEL	SEC 10
Rows 4	4,2
Rows +1	0,9

## SEC 10 version

### Technical features

#### SEC UNITS WITH 4 ROW COIL

**2 pipe units.** The following standard rating conditions are used:

#### COOLING

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

#### HEATING

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

<b>MODEL</b>		<b>SEC 10.4-2T</b>				
Speed		1	2	3	4	5
			MIN	MED	MAX	
Air flow	m <sup>3</sup> /h	1150	1400	1700	1900	2100
Cooling total emission	kW	7,12	8,31	9,63	10,45	11,23
Cooling sensible emission	kW	5,42	6,40	7,52	8,23	8,92
Heating	kW	9,05	10,65	12,51	13,68	14,85
Dp Cooling	kPa	7,5	9,8	12,7	14,7	16,7
Dp Heating	kPa	6,1	8,1	10,5	11,9	13,8
Fan	W	184	212	243	268	300
Sound power	Lw dB(A)	53	58	62	65	68
Sound pressure (*)	Lp dB(A)	44	49	53	56	59

#### SEC UNITS WITH 1 ROW ADDITIONAL COIL

**4 pipe units.** The following standard rating conditions are used:

#### COOLING

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

#### HEATING

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

<b>MODEL</b>		<b>SEC 10.4-4T</b>				
Speed		1	2	3	4	5
			MIN	MED	MAX	
Air flow	m <sup>3</sup> /h	1150	1400	1700	1900	2100
Cooling total emission	kW	7,12	8,31	9,63	10,45	11,23
Cooling sensible emission	kW	5,42	6,40	7,52	8,23	8,92
Heating	kW	6,62	7,58	8,63	9,09	9,69
Dp Cooling	kPa	7,5	9,8	12,7	14,7	16,7
Dp Heating	kPa	19,3	24,5	30,8	33,7	37,7
Fan	W	184	212	243	268	300
Sound power	Lw dB(A)	53	58	62	65	68
Sound pressure (*)	Lp dB(A)	44	49	53	56	59

MIN-MED-MAX = Standard connected speeds.

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

### Operation limits

Highest water inlet temperature..... + 85 °C  
Lowest water inlet temperature..... + 5 °C  
*for entering water temperatures below + 5°C,  
contact the technical department*  
Highest working pressure..... 1000 kPa (10 bars)

### Water flow limits (l/h)

<b>Rows</b>	<b>4</b>	<b>+1</b>
Lowest	400	100
Highest	3300	750

### Motor electrical data (max. absorption)

<b>MODEL</b>		<b>SEC 10</b>
230/1	W	300
50Hz	A	1,34

Cooling emission of 4 row coil

Entering air temperature: 27°C – R.H.: 50%

MODEL	Speed	WT: 7/12 °C					WT: 8/13 °C				WT: 10/15 °C				WT: 12/17 °C			
		Qv	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
SEC 10.4	V	2100	12,11	8,86	2083	19,0	10,81	8,34	1859	15,5	8,08	7,29	1390	9,2	6,41	6,41	1103	6,0
	IV MAX	1900	11,26	8,18	1937	16,8	10,06	7,70	1730	13,7	7,54	6,73	1297	8,1	5,91	5,91	1017	5,2
	III MED	1700	10,37	7,48	1784	14,5	9,28	7,04	1596	11,8	6,97	6,15	1199	7,1	5,40	5,40	929	4,4
	II MIN	1400	8,95	6,38	1539	11,2	8,01	6,00	1378	9,1	6,04	5,23	1039	5,5	4,60	4,60	791	3,4
	I	1150	7,67	5,41	1319	8,5	6,88	5,08	1183	7,0	5,20	4,43	894	4,2	3,92	3,92	674	2,5

Entering air temperature: 26°C – R.H.: 50%

MODEL	Speed	WT: 7/12 °C					WT: 8/13 °C				WT: 10/15 °C				WT: 12/17 °C			
		Qv	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
SEC 10.4	V	2100	10,77	8,36	1852	15,5	9,47	7,84	1629	12,3	6,97	6,97	1199	7,1	5,85	5,85	1006	5,1
	IV MAX	1900	10,02	7,71	1723	13,6	8,82	7,23	1517	10,8	6,43	6,43	1106	6,1	5,40	5,40	929	4,4
	III MED	1700	9,23	7,05	1588	11,8	8,13	6,60	1398	9,4	5,76	5,69	991	5,1	4,93	4,93	848	3,8
	II MIN	1400	7,97	6,01	1371	9,1	7,03	5,63	1209	7,3	5,01	4,84	862	3,9	4,20	4,20	722	2,9
	I	1150	6,83	5,09	1175	7,0	6,04	4,76	1039	5,6	4,33	4,10	745	3,1	3,59	3,59	617	2,2

Entering air temperature: 25°C – R.H.: 50%

MODEL	Speed	WT: 7/12 °C					WT: 8/13 °C				WT: 10/15 °C				WT: 12/17 °C			
		Qv	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
SEC 10.4	V	2100	9,46	7,85	1627	12,3	8,16	7,32	1404	9,4	6,41	6,41	1103	6,1	5,28	5,28	908	4,3
	IV MAX	1900	8,80	7,24	1514	10,9	7,60	6,75	1307	8,3	5,92	5,92	1018	5,3	4,88	4,88	839	3,7
	III MED	1700	8,12	6,62	1397	9,4	7,01	6,17	1206	7,2	5,41	5,41	931	4,5	4,46	4,46	767	3,2
	II MIN	1400	7,01	5,64	1206	7,3	6,07	5,25	1044	5,6	4,61	4,61	793	3,4	3,80	3,80	654	2,4
	I	1150	6,02	4,78	1035	5,6	5,22	4,44	898	4,3	3,39	3,93	583	2,6	3,25	3,25	559	1,8

LEGEND

- WT = Water temperature
- Pc = Cooling total emission
- Ps = Cooling sensible emission
- Ph = Emission
- 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 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

Heating emission of 4 row coil

Entering air temperature: 20°C

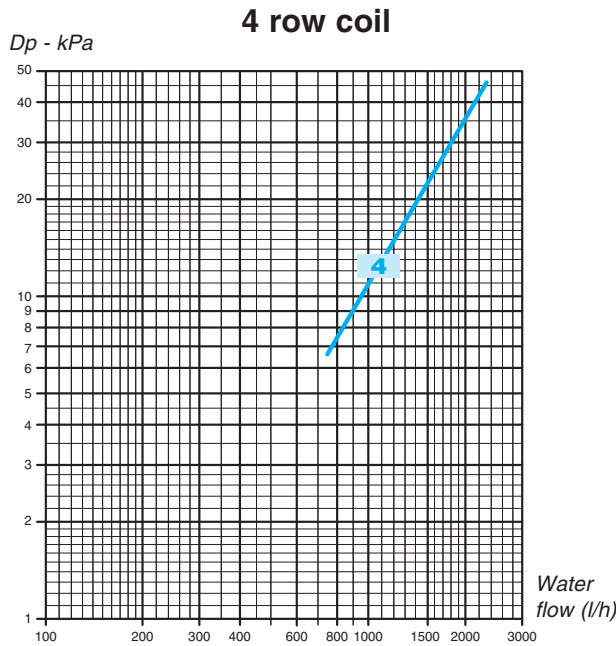
MODEL	Speed	WT: 70/60 °C				WT: 60/50 °C			WT: 50/40 °C			WT: 50/45 °C			WT: 45/40 °C		
		Qv	Ph	Qw	Dp(c)	Ph	Qw	Dp(c)	Ph	Qw	Dp(c)	Ph	Qw	Dp(c)	Ph	Qw	Dp(c)
		m³/h	kW	l/h	kPa	kW	l/h	kPa	kW	l/h	kPa	kW	l/h	kPa	kW	l/h	kPa
SEC 10.4	V	2100	25,37	2182	16,1	19,42	1670	10,3	13,46	1158	5,6	15,49	2664	24,2	12,55	2159	17,0
	IV MAX	1900	23,37	2010	13,9	17,89	1539	9,0	12,41	1067	4,9	14,27	2454	20,9	11,56	1988	14,7
	III MED	1700	21,30	1832	11,8	16,32	1404	7,6	11,33	974	4,1	13,01	2238	17,8	10,54	1813	12,5
	II MIN	1400	18,07	1554	8,8	13,86	1192	5,7	9,64	829	3,1	11,04	1899	13,3	8,95	1539	9,4
	I	1150	15,33	1318	6,6	11,77	1012	4,3	8,20	705	2,3	9,37	1612	10,0	7,60	1307	7,0

Heating emission of 1 row additional coil

Entering air temperature: 20°C

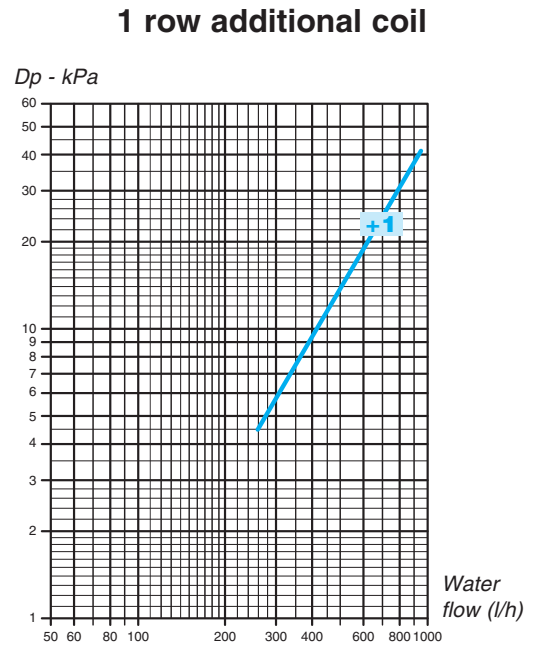
MODEL	Speed	WT: 80/70 °C				WT: 75/65 °C			WT: 70/60 °C			WT: 65/55 °C			WT: 60/50 °C			WT: 55/45 °C		
		Qv	Ph	Qw	Dp(c)	Ph	Qw	Dp(c)	Ph	Qw	Dp(c)	Ph	Qw	Dp(c)	Ph	Qw	Dp(c)	Ph	Qw	Dp(c)
		m³/h	kW	l/h	kPa	kW	l/h	kPa	kW	l/h	kPa	kW	l/h	kPa	kW	l/h	kPa	kW	l/h	kPa
SEC 10	V	2100	12,03	1035	53,6	10,85	933	45,4	9,69	833	37,7	8,52	733	30,5	7,35	632	23,9	6,19	532	18,0
	IV MAX	1900	11,29	971	47,9	10,19	876	40,6	9,09	782	33,7	8,00	688	27,3	6,91	594	21,4	5,81	500	16,1
	III MED	1700	10,71	921	43,7	9,67	832	37,0	8,63	742	30,8	7,59	653	24,9	6,55	563	19,6	5,52	475	14,7
	II MIN	1400	9,40	808	34,7	8,49	730	29,4	7,58	652	24,5	6,67	574	19,8	5,76	495	15,6	4,85	417	11,7
	I	1150	8,21	706	27,3	7,41	637	23,2	6,62	569	19,3	5,82	501	15,6	5,03	433	12,3	4,24	365	9,2

Water pressure drop



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



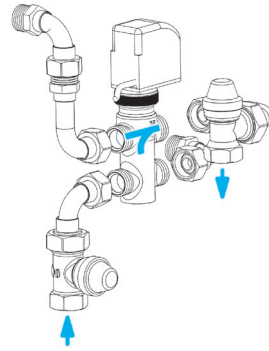
The water pressure drop figures refer to a mean water temperature of **65°C**; for different temperatures, multiply the pressure drop figures by the correction factors **K**.

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

## Accessories for SEC 10

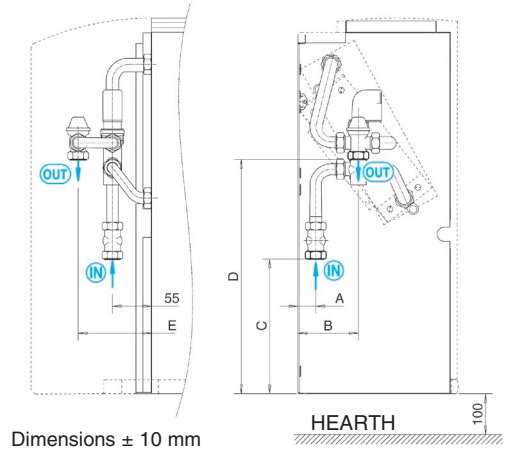
### VBP main coil 3 way valve

Control valve kit:  
3 way valve, ON-OFF,  
with electric motor and mounting kit  
with micrometric lockshield valve.



A	B	C	D	E
50	120	185	290	105

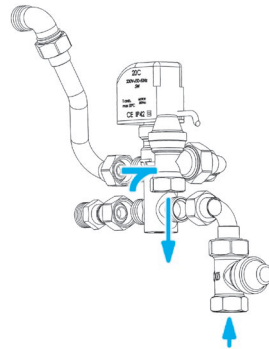
CODE		VALVE			MICROMETRIC LOCKSHIELD VALVE		
FITTED	NOT FITTED	DN	(Ø)	Kvs	DN	(Ø)	Kvs
9069202H	9069200H	20	3,4"	4	20	3/4" F	3,5



Dimensions ± 10 mm

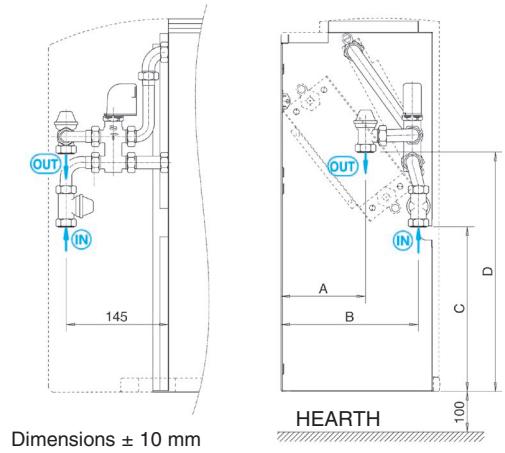
### VBA additional coil 3 way valve

Control valve kit:  
3 way valve, ON-OFF,  
with electric motor and mounting kit  
with micrometric lockshield valve.



A	B	C	D
135	200	235	330

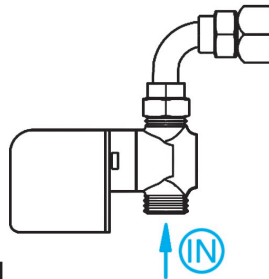
CODE		VALVE			MICROMETRIC LOCKSHIELD VALVE		
FITTED	NOT FITTED	DN	(Ø)	Kvs	DN	(Ø)	Kvs
9060472H	9060475H	15	1/2"	1,6	15	1/2" F	2



Dimensions ± 10 mm

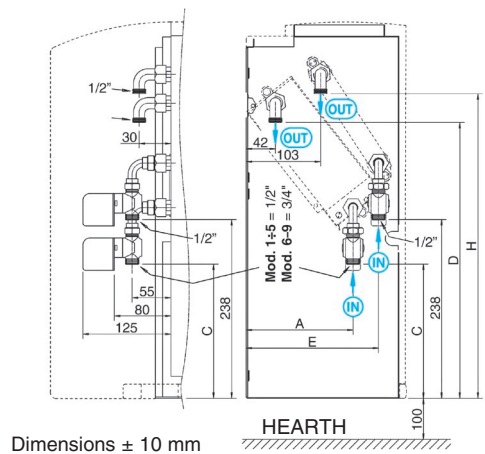
### V2 2 way valve for main and additional coil

Control valve kit: 2 way valve, ON-OFF,  
with electric motor and mounting kit.

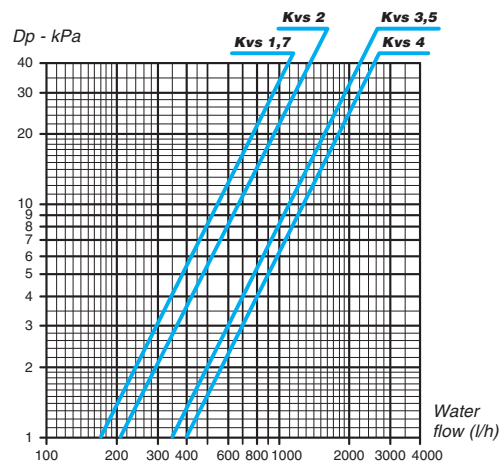


A	C	D	E	H
176	175	422	210	440

CODE				VALVE		
Main		Additional		DN	(Ø)	Kvs
FITTED	NOT FITTED	FITTED	NOT FITTED	DN	(Ø)	Kvs
9069203H	9069201H	-	-	25	1"	4
-	-	9060476H	9060478H	15	1/2"	1,7



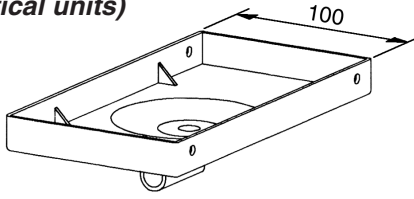
Dimensions ± 10 mm



## Accessories for SEC 10

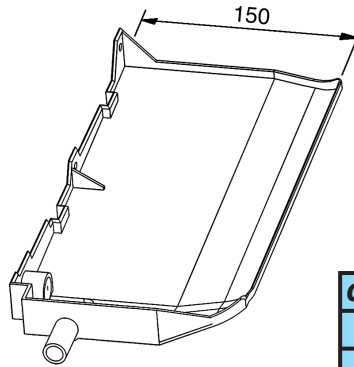
### Extension condensate collection tray to cover valve assembly

**BSV**  
(for vertical units)



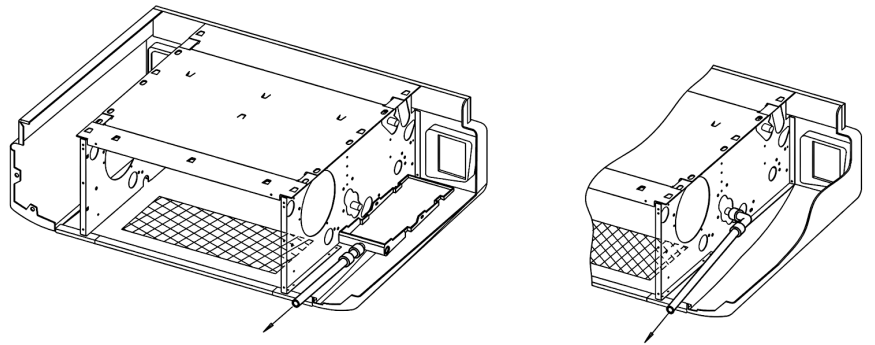
<b>CODE</b>	6060400
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**BSO**  
(for horizontal units)



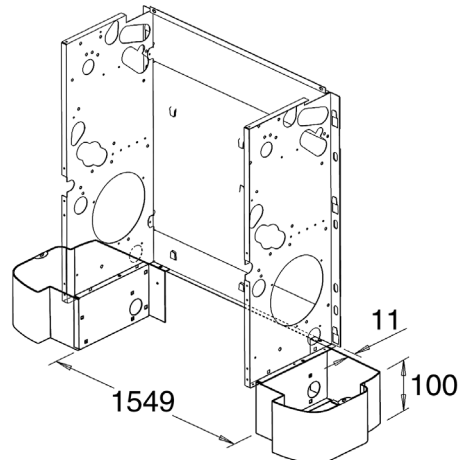
<b>CONNECTION SIDE</b>	LEFT	RIGHT
<b>TYPE</b>	BSO-SX	BSO-DX
<b>CODE</b>	6060402	6060403

### SCR plastic condensate drain pipe with fast connection (allows correct condensate drain)



<b>CODE</b>	6060420
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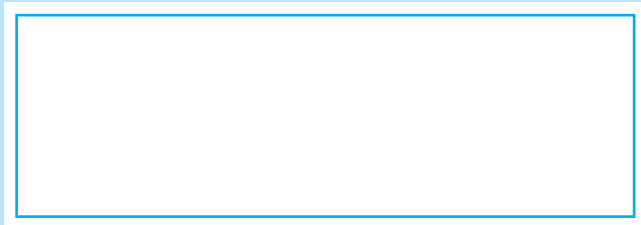
### PAP feet



<b>CODE</b>	9060151
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*FOR INFORMATIONS ABOUT ELECTRICAL CONTROLS,  
PLEASE REFER TO THE DOCUMENTATION OF THE **SEC FAN COIL UNITS.***

The descriptions and illustrations provided in this publication are not binding: we reserve the right, whilst maintaining the essential characteristics of the types described and illustrated, to make, at any time, without the requirement to promptly update this piece of literature, any changes that it considers useful for the purpose of improvement or for any other manufacturing or commercial requirements.



**SEC 10 - 11/10**  
Cod. A4760184 B/1/10