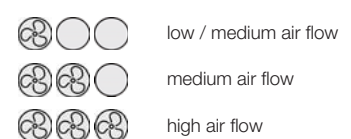


DOUBLE SKIN SELF-SUPPORTING UNITS



Bini Cima double skin self-supporting units are the optimal solution for **limited space**, mainly used for **installation in the false ceiling**.

Thanks to the **double skin construction** (23 mm soundabsorbing rock wool insulation with 20 kg/m³) the unit can handle **high static pressure drops** with reduced noise values.



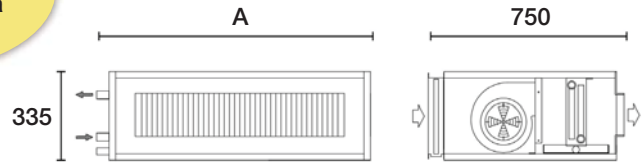
DOUBLE SKIN SELF-SUPPORTING UNITS

FH-DS, FH-DS-EC



- 25 mm standard panel with rock wool (20 kg/m³)
- rear intake and horizontal discharge
- easily removable G2 (MERV 2-4) filter
- 2 or 4 pipe systems
- coil with 3 or 3+1 rows
- drain pan insulated 5 mm
- auxiliary drain pan insulated 5 mm (on request)
- AC-motor (FH-DS) and EC-motor (FH-DS-EC)

FH-DS 50 Pa
FH-DS-EC 90 Pa



Size (data - ESP 0 Pa)	FH-DS	025	035	050	070	090
Nominal airflow ⁽⁰⁾	m ³ /h	450	505	900	1160	1360
Total cooling capacity ⁽¹⁾	kW	2,89	3,78	6,55	5,64	10,29
Sensible cooling capacity ⁽¹⁾	kW	2,02	2,48	4,20	5,58	6,57
Heating capacity ⁽²⁾	kW	3,68	4,43	7,62	10,04	11,81
Heating capacity ⁽³⁾	kW	6,25	7,44	12,73	16,79	19,72
Sound Power Level Lw ⁽⁴⁾	dB(A)	42,4	44,7	44,1	48,4	47,9
Width "A"	mm	600	800	1000	1400	1600

FH-DS-EC	025	035	050	070	090
m ³ /h	530	570	785	1065	1415
kW	2,32	3,26	4,74	6,44	8,62
kW	1,84	2,25	3,16	4,34	5,63
kW	3,21	4,23	5,88	8,08	10,57
kW	5,62	7,19	9,91	13,78	17,84
dB(A)	49,9	50,4	48,5	51,9	52,8
mm	600	800	1000	1400	1600

⁽⁰⁾ 3R (10T) - Maximum speed
⁽¹⁾ Air: 27° C, 50 % - Water in: 7 / 12° C
⁽²⁾ Air: 20° C - Water in 50° C same water flow as cooling
⁽³⁾ Air: 20° C - Water in 70 / 60° C
⁽⁴⁾ Lw: octave band center frequency

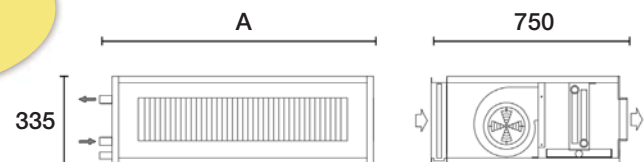
⁽⁰⁾ 3R (10T) - Voltage 10 Vdc
⁽¹⁾ Air: 27° C, 50 % - Water in: 7 / 12° C
⁽²⁾ Air: 20° C - Water in 50° C same water flow as cooling
⁽³⁾ Air: 20° C - Water in 70 / 60° C
⁽⁴⁾ Lw: Octave band center frequency

CK-DS, CE-DS



- 25 mm standard panel with rock wool (20 kg/m³)
- rear intake and horizontal discharge
- easily removable G3 (MERV 5) filter
- 2 or 4 pipe systems
- coil with 3, 4 or 3+1 rows
- drain pan insulated 5 mm
- auxiliary drain pan insulated 5 mm (on request)
- AC-motor (CK-DS) and EC-motor (CE-DS)

CK-DS 150 Pa
CE-DS 120 Pa



Size (data - ESP 0 Pa)	CK-DS	09	11	17	20	23	32
Nominal airflow ⁽⁰⁾	m ³ /h	830	990	1680	1850	2490	2825
Total cooling capacity ⁽¹⁾	kW	5,59	7,17	11,55	13,24	17,38	21,48
Sensible cooling capacity ⁽¹⁾	kW	3,68	4,72	7,54	8,59	12,23	13,75
Heating capacity ⁽²⁾	kW	6,82	8,50	13,83	15,63	20,63	24,62
Heating capacity ⁽³⁾	kW	11,47	14,23	23,22	26,17	34,58	41,11
Sound Power Level Lw ⁽⁴⁾	dB(A)	46,0	46,2	50,4	50,7	53,2	54,7
Width "A"	mm	600	800	1000	1200	1400	1800

CE-DS	09	11	17	20M	23	32M
m ³ /h	948	1238	1422	1718	2595	3012
kW	5,03	6,91	8,71	10,67	15,33	18,35
kW	3,51	4,77	5,80	7,05	10,12	12,14
kW	6,60	8,96	10,77	13,11	18,99	22,60
kW	11,31	15,26	18,17	22,12	32,07	38,15
dB(A)	52,8	53,7	56,1	53,3	58,1	54,7
mm	600	800	1000	1200	1400	1800

⁽⁰⁾ 4R (10T) - Maximum speed
⁽¹⁾ Air: 27° C, 50 % - Water in: 7 / 12° C
⁽²⁾ Air: 20° C - Water in 50° C same water flow as cooling
⁽³⁾ Air: 20° C - Water in 70 / 60° C
⁽⁴⁾ Lw: octave band center frequency

⁽⁰⁾ 4R (10T) - Voltage 10 Vdc
⁽¹⁾ Air: 27° C, 50 % - Water in: 7 / 12° C
⁽²⁾ Air: 20° C - Water in 50° C same water flow as cooling
⁽³⁾ Air: 20° C - Water in 70 / 60° C
⁽⁴⁾ Lw: octave band center frequency

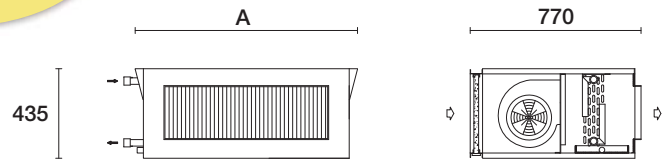
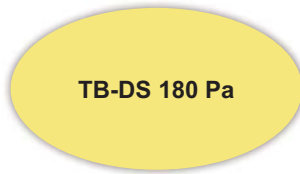
DOUBLE SKIN SELF-SUPPORTING UNITS

TB-DS



horizontal

- rear intake and horizontal discharge
- easily removable G3 (MERV 5) filter
- 2 or 4 pipe systems
- coil with 4, 5, 4+1 or 5+1 rows
- extended drain pan insulated 5 mm
- AC-motor



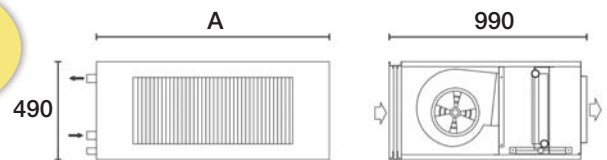
Size (data - ESP 0 Pa)	TB-DS	10	11	22	23	31	32
Nominal airflow ⁽⁰⁾	m ³ /h	1530	1720	2990	3300	4390	4880
Total cooling capacity ⁽¹⁾	kW	10,97	12,02	21,88	23,56	31,50	33,96
Sensible cooling capacity ⁽¹⁾	kW	7,14	7,77	14,08	15,15	20,15	21,82
Heating capacity ⁽²⁾	kW	12,96	14,26	25,52	27,69	36,85	40,14
Heating capacity ⁽³⁾	kW	21,72	23,94	42,68	46,36	61,67	67,29
Sound Power Level Lw ⁽⁴⁾	dB(A)	61,6	61,3	64,5	64,3	65,6	65,3
Width "A"	mm	935	935	1535	1535	1935	1935

⁽⁰⁾ 4R (14T) - Maximum speed
⁽¹⁾ Air: 27° C, 50 % - Water in: 7 / 12° C
⁽²⁾ Air: 20° C - Water in 50° C same water flow as cooling
⁽³⁾ Air: 20° C - Water in 70 / 60° C
⁽⁴⁾ Lw: Octave band center frequency - Lp=Lw-18dB(A)

TO-DS-EC



- 25 mm standard panel with rock wool (20 kg/m³)
- rear intake and horizontal discharge
- easily removable G3 (MERV 5) filter
- 2 or 4 pipe systems
- coil with 4, 5, 4+1 or 5+1 rows
- drain pan insulated 5 mm
- auxiliary drain pan insulated 5 mm (on request)
- EC-motor



Size (data - 0 Pa)	TO-DS-EC	20	25	30	35	50	60
Nominal airflow ⁽⁰⁾	m ³ /h	2500	3060	3745	4180	5225	6870
Total cooling capacity ⁽¹⁾	kW	15,14	18,76	22,98	26,01	31,86	40,12
Sensible cooling capacity ⁽¹⁾	kW	9,74	12,05	14,68	16,59	20,30	25,66
Heating capacity ⁽²⁾	kW	19,49	24,00	29,31	33,01	40,63	51,88
Heating capacity ⁽³⁾	kW	32,94	40,54	49,52	55,66	68,57	87,74
Sound Power Level Lw ⁽⁴⁾	dB(A)	58,9	55,5	59,1	60,1	59,8	63,8
Width "A"	mm	1000	1200	1400	1600	1800	2000

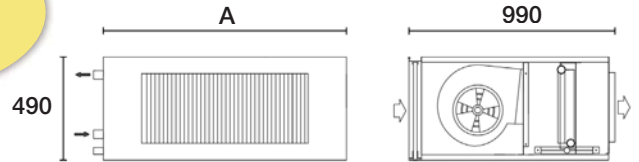
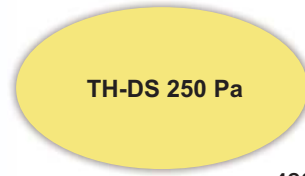
⁽⁰⁾ 4R (16T) - Voltage 10 Vdc
⁽¹⁾ Air: 27° C, 50 % - Water in: 7 / 12° C
⁽²⁾ Air: 20° C - Water in 50° C same water flow as cooling
⁽³⁾ Air: 20° C - Water in 70 / 60° C
⁽⁴⁾ Lw: octave band center frequency

DOUBLE SKIN SELF-SUPPORTING UNITS

TH-DS



- 25 mm standard panel with rock wool (20 kg/m³)
- rear intake and horizontal discharge
- easily removable G3 (MERV 5) filter
- 2 or 4 pipe systems
- coil with 4, 5, 4+1 or 5+1 rows
- drain pan insulated 5 mm
- auxiliary drain pan insulated 5 mm (on request)
- AC-motor
- single skin version TH (on request)



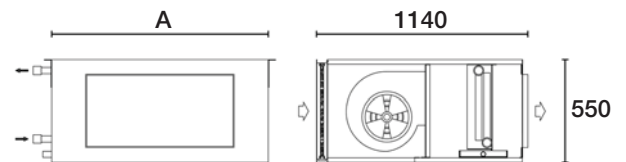
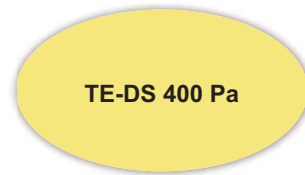
Size	(data - ESP 120 Pa)	TH-DS	20	25	30	35	50	60
Nominal airflow ⁽⁰⁾		m ³ /h	2660	3195	3500	3750	4800	6190
Total cooling capacity ⁽¹⁾		kW	18,71	22,63	25,55	27,83	34,83	43,18
Sensible cooling capacity ⁽¹⁾		kW	12,03	14,60	16,42	17,92	22,40	27,79
Heating capacity ⁽²⁾		kW	22,06	26,68	29,77	32,34	40,67	51,00
Heating capacity ⁽³⁾		kW	36,98	44,68	49,79	54,08	68,02	85,45
Sound power Level Lw ⁽⁴⁾		dB(A)	56,7	59,3	62,5	60,7	59,7	70,2
Width "A"		mm	1000	1200	1400	1600	1800	2000

⁽⁰⁾ 4R (16T) - Maximum speed - ESP 120 Pa
⁽¹⁾ Air: 27° C, 50 % - Water in: 7 / 12° C
⁽²⁾ Air: 20° C - Water in 50° C same water flow as cooling
⁽³⁾ Air: 20° C - Water in 70 / 60° C
⁽⁴⁾ Lw: octave band center frequency

TE-DS



- 25 mm standard panel with rock wool (20 kg/m³)
- rear intake and horizontal discharge
- easily removable G3 (MERV 5) filter
- 2 or 4 pipe systems
- coil with 5, 6, 5+1 or 6+1 rows
- drain pan insulated 5 mm
- auxiliary drain pan insulated 5 mm (on request)
- EC-motor



Size	(data - ESP 200 Pa)	TE-DS	20	30	60
Nominal airflow ⁽⁰⁾		m ³ /h	2826	4645	7647
Total cooling capacity ⁽¹⁾		kW			
Sensible cooling capacity ⁽¹⁾		kW			
Heating capacity ⁽²⁾		kW			
Heating capacity ⁽³⁾		kW	38,13	62,07	101,35
Sound power Level Lw ⁽⁴⁾		dB(A)	75,0	78,4	79,5
Width "A"		mm	1000	1400	2000

⁽⁰⁾ 5R (18T) - Voltage 10 Vdc - ESP 200 Pa
⁽¹⁾ Air: 27° C, 50 % - Water in: 7 / 12° C
⁽²⁾ Air: 20° C - Water in 50° C same water flow as cooling
⁽³⁾ Air: 20° C - Water in 70 / 60° C
⁽⁴⁾ Lw: octave band center frequency