

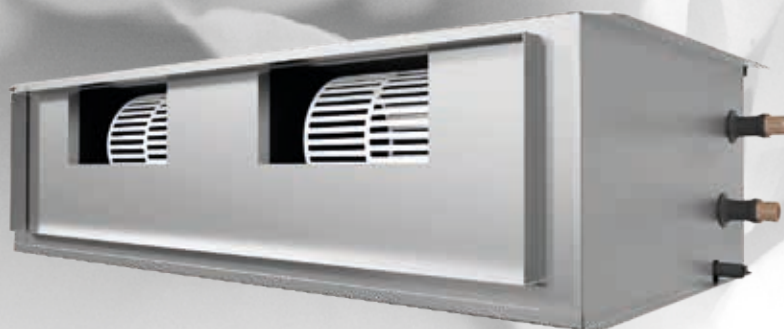


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# SOFFIO

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DUCTABLE  
UNIT  
70PA



SOMETHING DIFFERENT

GB



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# SOFFIO

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## DUCTABLE UNIT 70PA

The units of the "SOFFIO" series are ideal for small centralized air conditioning systems where air distribution in the environment takes place through special ducts. The new range has heights from 300 to 375 mm and has been developed with quality components, with an eye to ease of installation, accessibility and maintenance by the end installer. The high head fans are sized to provide 70 Pa of pressure at the rated flow. SOFFIO is available in versions with single or double panel, horizontal or vertical with AC and EC motor. A wide range of accessories is available with the base units.

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### LOW-NOISE

AGAINST INDUCED VIBRATIONS. SOUND-ABSORBING INSULATING MATERIAL TH. 10 MM, CLASS HF1 ACCORDING TO THE UL94 STANDARD (SELF-EXTINGUISHING AND NON-DRIPPING). HIGH THICKNESS GALVANISED SHEET PANELS. 1.00-1.50 mm.

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### ADVANCED CONTROL

ENABLES TO MANAGE MASTER/SLAVE COMBINATIONS OF UP TO 24 UNITS AND TO USE WALL MOUNTED OR REMOTE CONTROLS.

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### EASY MAINTENANCE

THE FILTER IS REMOVABLE FROM THE BOTTOM OR FROM THE SIDES, WITHOUT ANY TOOLS. THE INTERNAL COMPONENTS AND ELECTRICAL AND ELECTRONIC DEVICES ARE EASILY ACCESSIBLE AND IT IS NOT NECESSARY TO DISCONNECT THE DUCTING.

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### EXCHANGER WITH EXTRA HIGH EFFICIENCY

THE EXCHANGERS ARE OF THE CU/AL 3/8" DIAMETER TYPE WITH HIGHLY EFFICIENT CORRUGATED ALUMINIUM FINS AND EASILY ACCESSIBLE AIR VENT VALVES. NOMINAL PRESSURE PN8. THE SOFFIO SERIES ALSO WORKS WITH R410A DIRECT EXPANSION COILS.

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### FLEXIBILITY

POSSIBILITY OF CHANGING THE HYDRAULIC CONNECTIONS SIDE ON SITE.

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### BMS COMPATIBLE

POSSIBILITY OF CONTROLLING UP TO 240 UNITS WITHOUT DATA LOGGER WITH TOP3 AND SP3 AND MODBUS PROTOCOL.

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### ENERGY SAVING

THE EC MOTOR ALLOWS THE SPEED OF THE FAN UNIT TO BE ACCURATELY MODULATED AND LIMITS THE ENERGY INPUT TO THE ACTUAL WORKLOAD REQUIRED, WITHOUT UNNECESSARY WASTE.



COOLING

2.8/17.1<sub>kw</sub>



HEATING

3.2/20.4<sub>kw</sub>



AIR FLOW

500-4090<sub>m<sup>3</sup>/h</sub>



CONSUMPTION REDUCED UP TO

20%



## SOLUTIONS FOR COMPLETE AIR TREATMENT

THE SOFFIO SERIES WITH ITS 70PA HEAD IS IDEALLY SUITABLE FOR MEDIUM-LARGE ENVIRONMENTS SUCH AS OFFICE BUILDINGS, STORES, PRACTICES, CLINICS. FOR LARGER-SURFACE INSTALLATIONS, THE 150 PA SOFFIO HP VERSION IS AVAILABLE. WIDE RANGE OF ACCESSORIES SUPPLIED WITH THE MACHINE.

# VERSIONS: VERTICAL AND HORIZONTAL

The ductable unit of the SOFFIO series has a wide range of optional accessories: filters, plenums, flanges and hydraulic accessories. (See the accessories section of the technical manual.)

The SOFFIO units are available in the following versions: single panel and double panel, with traditional three-speed motor (AC) and with low consumption motor (EC).



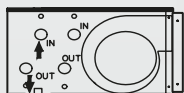
**VC**  
VERTICAL  
FRONT INTAKE  
(ON REQUEST)



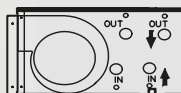
**VD**  
VERTICAL INTAKE  
IN LINE WITH THE DELIVERY  
(STANDARD)

# CONNECTORS FOR COIL

LEFT-HAND



RIGHT-HAND



The arrows indicate the IN and OUT ends of the main coil.



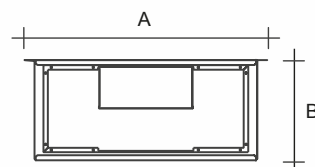
**HC**  
HORIZONTAL INTAKE  
IN LINE WITH THE DELIVERY  
(STANDARD)

# DIMENSIONAL DWGS

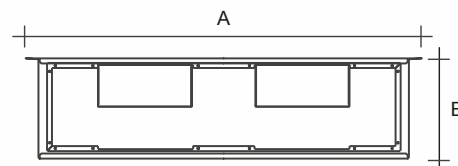
## SINGLE PANEL

SIZE	A	B	C	WEIGHT 3 ROWS	WEIGHT + COIL 1 ROW	WEIGHT + COIL 2 ROWS
<b>21</b>	738	300	550	38	2	4
<b>31</b>	1178	300	550	54	3	6
<b>38</b>	1178	300	550	55	3	6
<b>41</b>	1728	375	650	90	4	8
<b>81</b>	1728	375	650	94	4	8

A = length mm  
B = height mm  
C = depth mm



SOFFIO 21



SOFFIO 31 - 38 - 41 - 81

## MODEL IDENTIFICATION

S	31	HC	SP	4	RX*	EC
MODEL	SIZE	VERSION	PANEL	ROWS	CONNECTION SIDE	MOTOR

SP - SINGLE PANEL / DP - DOUBLE PANEL  
RX - RIGHT-HAND / LX - LEFT-HAND  
FRONT, AIR DELIVERY

\* STANDARD CONNECTION ON THE RIGHT



# SOFFIO AC



## AC MOTOR

### 2-PIPE SYSTEM WITH 3-ROW COIL

		21			31			38			41			81		
		min	med	max	min	med	max	min	med	max	min	med	max	min	med	max
SPEED (E)																
Air flow rate (E)	m <sup>3</sup> /h	500	750	850	1350	1500	1580	1600	1850	2000	2400	2740	3075	3000	3550	3950
Head (E)	Pa	23	50	65	41	50	56	38	50	59	37	50	62	37	50	70

#### COOLING - air 27°C dry bulb, 19°C wet bulb - water inlet 7°C, outlet 12°C

Total capacity (E)	kW	2.81	3.63	3.92	6.69	7.13	7.35	7.40	8.06	8.41	12.38	13.52	14.46	14.26	15.70	16.72
Sensitive capacity (E)	kW	2.25	3.02	3.29	5.50	5.93	6.15	6.20	6.85	7.20	10.12	11.12	11.99	11.87	13.30	14.32
Water flow rate	l/h	483	625	674	1150	1226	1264	1274	1385	1447	2134	2317	2484	2452	2701	2866
Δp (water) (E)	kPa	9.9	15.6	17.8	17.0	19.0	20.0	20.3	23.5	25.4	18.9	21.8	24.8	24.9	31.1	37.1

#### HEATING - air 20 °C - water inlet 45 °C, outlet 40 °C

Capacity (E)	kW	3.18	4.29	4.69	7.79	8.40	8.72	8.80	9.72	10.25	14.28	15.70	17.11	16.81	18.86	20.41
Water flow rate	l/h	552	742	811	1348	1454	1507	1522	1682	1773	2475	2724	2956	2907	3267	3524
Δp (water) (E)	kPa	9.51	16.1	18.8	17.1	19.5	20.8	21.1	25.2	27.7	18.8	22.1	25.6	25.9	33.6	41.6

#### MOTOR ELECTRIC POWER DRAW

Power draw (E)	W	100	140	165	175	195	230	243	275	308	411	486	540	680	750	920
Max power draw	A	0.8			1.3			1.6			2.5			4.5		

#### SOUND DATA

Return + radiated sound power (E)	dB(A)	42	52	56	59	62	63	57	60	62	61	64	67	64	69	72
Delivery sound power (E)	dB(A)	48	59	63	61	64	66	63	66	68	64	68	71	68	73	76
Return + radiated sound pressure (**)	dB(A)	33	43	47	50	53	54	48	51	53	52	55	58	55	60	63
Delivery sound pressure (**)	dB(A)	39	50	54	52	55	57	54	57	59	55	59	62	59	64	67

## AC MOTOR

### 4-PIPE SYSTEM WITH 3-ROW COIL AND AUXILIARY 1 ROW COIL

		21			31			38			41			81		
		min	med	max	min	med	max	min	med	max	min	med	max	min	med	max
SPEED (E)																
Air flow rate (E)	m <sup>3</sup> /h	500	750	850	1350	1500	1580	1600	1850	2000	2400	2740	3075	3000	3550	3950
Head (E)	Pa	23	50	65	41	50	56	38	50	59	37	50	62	37	50	70

#### COOLING - air 27°C dry bulb, 19°C wet bulb - water inlet 7°C, outlet 12°C

Total capacity (E)	kW	2.81	3.63	3.92	6.69	7.13	7.35	7.40	8.06	8.41	12.38	13.52	14.46	14.26	15.70	16.72
Sensitive capacity (E)	kW	2.25	3.02	3.29	5.50	5.93	6.15	6.20	6.85	7.20	10.12	11.12	11.99	11.87	13.30	14.32
Water flow rate	l/h	483	625	674	1150	1226	1264	1274	1385	1447	2134	2317	2484	2452	2701	2866
Δp (water) (E)	kPa	9.9	15.6	17.8	17.0	19.0	20.0	20.3	23.5	25.4	18.9	21.8	24.8	24.9	31.1	37.1

#### HEATING - air 20 °C - water inlet 65°C, outlet 55°C

Capacity (E)	kW	2.63	3.32	3.58	6.23	6.52	6.73	6.77	7.37	7.71	11.77	12.54	13.41	13.18	14.61	15.50
Water flow rate	l/h	229	290	312	543	569	586	591	642	671	1025	1090	1167	1154	1271	1351
Δp (water) (E)	kPa	1.9	2.8	3.2	4.3	4.6	4.9	4.9	5.7	6.2	5.8	6.5	7.3	7.1	8.5	9.6

#### MOTOR ELECTRIC POWER DRAW

Power draw (E)	W	100	140	165	175	195	230	243	275	308	411	486	540	680	750	920
Max power draw	A	0.8			1.3			1.6			2.5			4.5		

#### SOUND DATA

Return + radiated sound power (E)	dB(A)	42	52	56	59	62	63	57	60	62	61	64	67	64	69	72
Delivery sound power (E)	dB(A)	48	59	63	61	64	66	63	66	68	64	68	71	68	73	76
Return + radiated sound pressure (**)	dB(A)	33	43	47	50	53	54	48	51	53	52	55	58	55	60	63
Delivery sound pressure (**)	dB(A)	39	50	54	52	55	57	54	57	59	55	59	62	59	64	67

(E) = EUROVENT certified performance

(\*) = size 81 is not part of any EUROVENT certification program

(\*\*) = the sound pressure levels are lower than power levels by 9 dB(A) for a 100 m<sup>3</sup> space and a reverberation time of 0.5 sec.

The human hearing is more perceivable to frequencies above 2000 Hz while the sound data here declared include all the band middle frequencies. For more details, refer to the technical manual.

Note: versions with non Eurovent certified optional coils, please refer to Aertesi selection program or inquire with the company.

# SOFFIO EC



## EC MOTOR

### 2-PIPE SYSTEM WITH 3-ROW COIL

		21			38			81		
SPEED (DRIVE VOLTAGE) (E)	V	3	5	10	5	7	10	5	7	10
Air flow rate (E)	m <sup>3</sup> /h	550	850	950	1210	1550	1780	2970	3550	4090
Head (E)	Pa	20	50	130	30	50	68	35	50	70
<b>COOLING - air 27°C dry bulb, 19°C wet bulb - water inlet 7°C, outlet 12°C</b>										
Total capacity (E)	kW	3.00	3.90	4.20	6.25	7.26	7.91	14.14	15.70	17.06
Sensitive capacity (E)	kW	2.40	3.30	3.60	5.10	6.10	6.70	11.77	13.30	14.61
Water flow rate	l/h	514	674	719	1074	1250	1359	2433	2701	2923
Δp (water) (E)	kPa	11.0	17.8	19.9	15.0	20.3	23.5	23.8	28.7	32.9
<b>HEATING - air 20 °C - water inlet 45 °C, outlet 40 °C</b>										
Capacity (E)	kW	3.40	4.70	5.07	7.20	8.61	9.50	16.68	18.86	20.82
Water flow rate	l/h	592	811	876	1246	1490	1646	2884	3267	3595
Δp (water) (E)	kPa	10.8	18.8	21.5	14.9	21.1	25.2	24.5	30.5	36.1
<b>MOTOR ELECTRIC POWER DRAW</b>										
Power draw (E)	W	26	95	169	80	160	245	312	510	770
Max power draw	A	1.3			1.7			3.8		
<b>SOUND DATA</b>										
Return + radiated sound power (E)	dB(A)	49	58	62	57	62	65	66	71	73
Delivery sound power (E)	dB(A)	53	62	66	59	65	68	70	74	77
Return + radiated sound pressure (**)	dB(A)	40	49	53	48	53	56	57	62	64
Delivery sound pressure (**)	dB(A)	44	53	57	50	56	59	61	65	68

## EC MOTOR

### 4-PIPE SYSTEM WITH 3-ROW COIL AND AUXILIARY 1 ROW COIL

		21			38			81		
SPEED (DRIVE VOLTAGE) (E)	V	3	5	10	5	7	10	5	7	10
Air flow rate (E)	m <sup>3</sup> /h	550	850	950	1210	1550	1780	2970	3550	4090
Head (E)	Pa	20	50	130	30	50	68	35	50	70
<b>COOLING - air 27°C dry bulb, 19°C wet bulb - water inlet 7°C, outlet 12°C</b>										
Total capacity (E)	kW	3.00	3.90	4.20	6.25	7.26	7.91	14.14	15.70	17.06
Sensitive capacity (E)	kW	2.40	3.30	3.60	5.10	6.10	6.70	11.77	13.30	14.61
Water flow rate	l/h	514	674	719	1074	1250	1359	2433	2701	2923
Δp (water) (E)	kPa	11.0	17.8	19.9	15.0	20.3	23.5	23.8	28.7	32.9
<b>HEATING - air 20 °C - water inlet 65°C, outlet 55°C</b>										
Capacity (E)	kW	2.80	3.60	3.80	5.83	6.63	7.21	13.08	14.61	15.81
Water flow rate	l/h	243	312	332	509	578	628	1145	1271	1378
Δp (water) (E)	kPa	2.1	3.2	3.6	3.8	4.9	5.7	7.1	8.5	9.8
<b>MOTOR ELECTRIC POWER DRAW</b>										
Power draw (E)	W	26	95	169	80	160	245	312	510	770
Max power draw	A	1.3			1.7			3.8		
<b>SOUND DATA</b>										
Return + radiated sound power (E)	dB(A)	49	58	62	57	62	65	66	71	73
Delivery sound power (E)	dB(A)	53	62	66	59	65	68	70	74	77
Return + radiated sound pressure (**)	dB(A)	40	49	53	48	53	56	57	62	64
Delivery sound pressure (**)	dB(A)	44	53	57	50	56	59	61	65	68

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