

Data Book

A_HWD2_102_904_201506_EN



a-HWD2 102 - 902

5,87-21,9 kW

High head ducted type terminal



(The photo of the unit is indicative and may vary depending on the model)

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This company participates in the Eurovent Certification Programme.
The products are listed in the Directory of certified products.
Eurovent certification applied to units with cooling capacity up to 1500 kW
for air cooled water chillers and water cooled liquid chillers.

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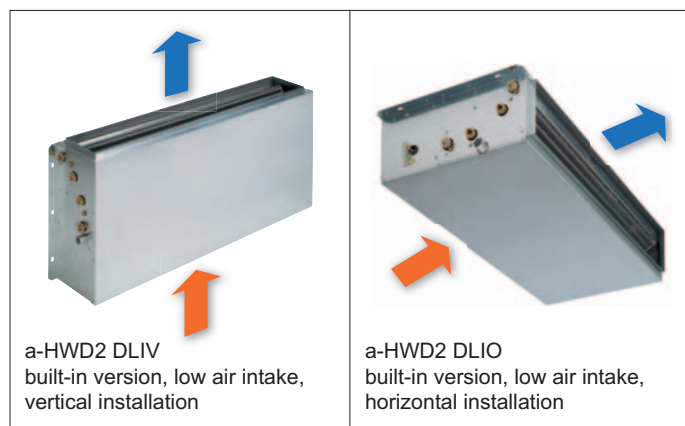
All work must be performed, components selected and materials used professionally and in complete accordance with the legislation in force in material in the country concerned, and considering the operating conditions and intended uses of the system, by qualified personnel.

The data contained in this publication may be changed without prior notice.

1. RANGE

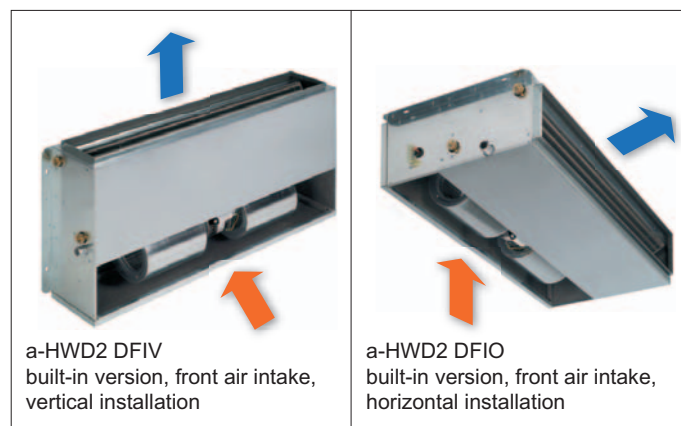
a-HWD2 DLIV / DLIO

Built-in version, low air intake



a-HWD2 DFIV / DFIO

Built-in version, front air intake



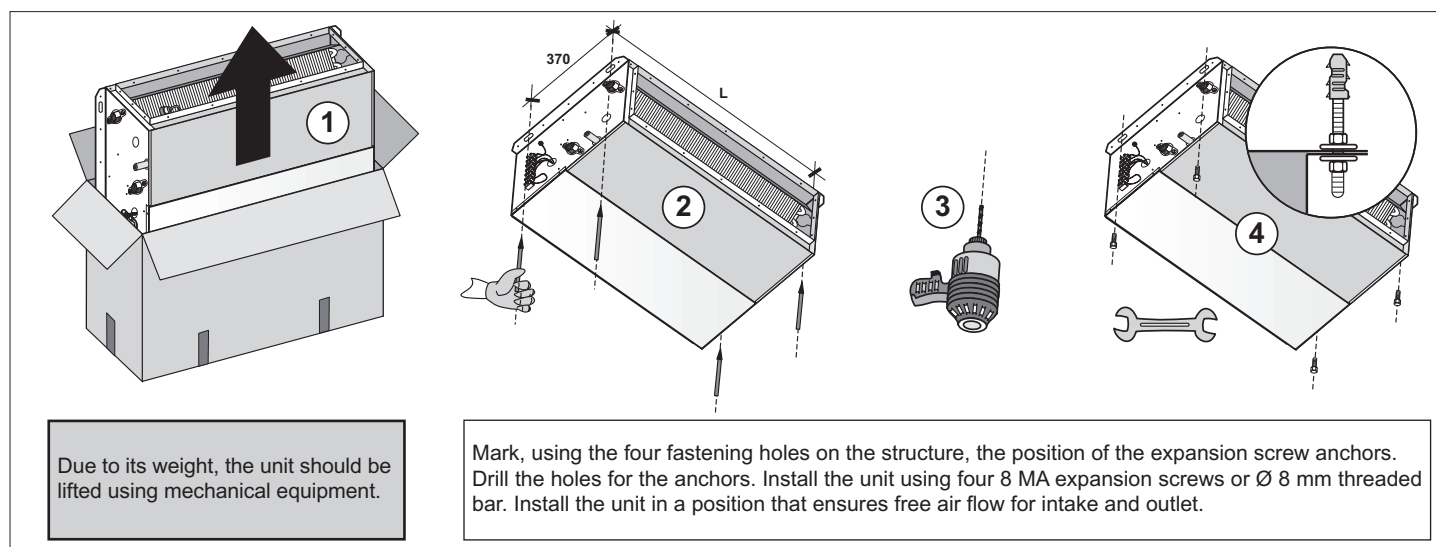
POSITIONING THE UNIT

The unit must be installed in a position that allows routine and unscheduled maintenance to be carried out easily!

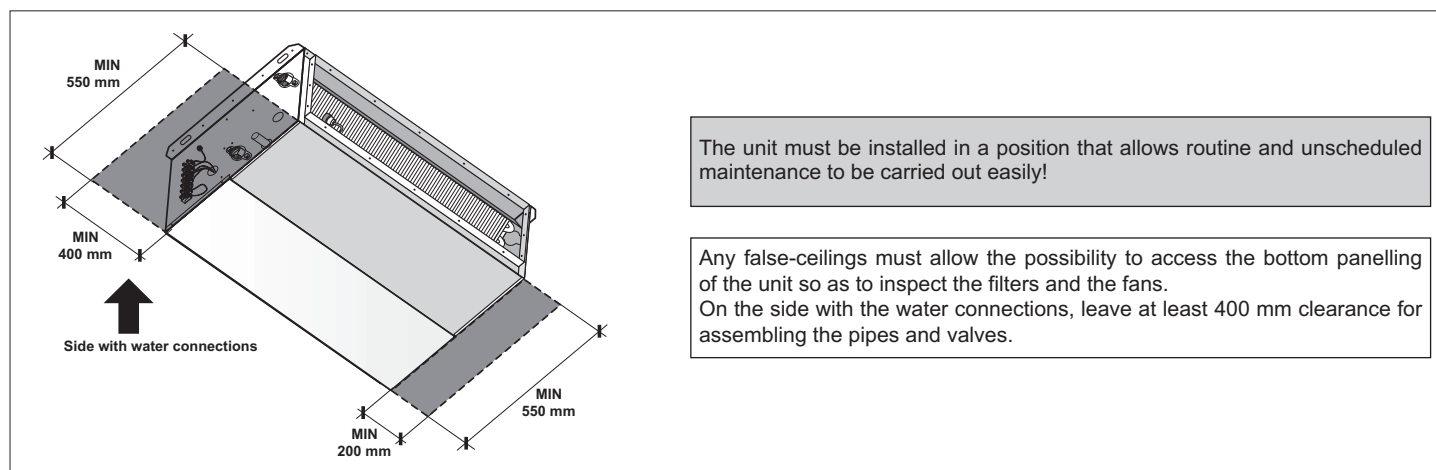
The installer **MUST** ensure that the unit is covered by appropriate panelling (false-ceilings, partitions, closing panels, etc.) which act as **FIXED PROTECTION** for the unit. The protective panelling **MUST** be secured using systems that require tools to be opened (e.g. screws), so as to prevent users from accessing

hazardous parts (98/37/EEC) such as sharp edges and corners, electrical parts, moving fans, etc.

The panelling must be able to be removed (using tools!) so as to provide **TOTAL ACCESS** to the unit, avoiding the risk of needing to break/damage structures and masking (plaster-board, false-ceilings, etc.) in the event of unscheduled maintenance and/or replacement of the unit.



CLEARANCE FOR MAINTENANCE



2. GENERAL DESCRIPTION

The a-HWD2 units are designed for ducted installation. Combined with the numerous accessories available, these units are used to develop high-performance room air distribution and temperature-humidity control systems.

a-HWD2 DLIV

built-in version, low air intake, vertical installation

a-HWD2 DLIO

built-in version, low air intake, horizontal installation

a-HWD2 DFIV

built-in version, front air intake, vertical installation

a-HWD2 DFIO

built-in version, front air intake, horizontal installation

Cooling capacity from 6 to 24 kW. Standard water fittings reversible on site.

9 sizes with high pressure centrifugal fans for 2-pipe systems.

6 sizes with high pressure centrifugal fans for the 4-pipe systems.

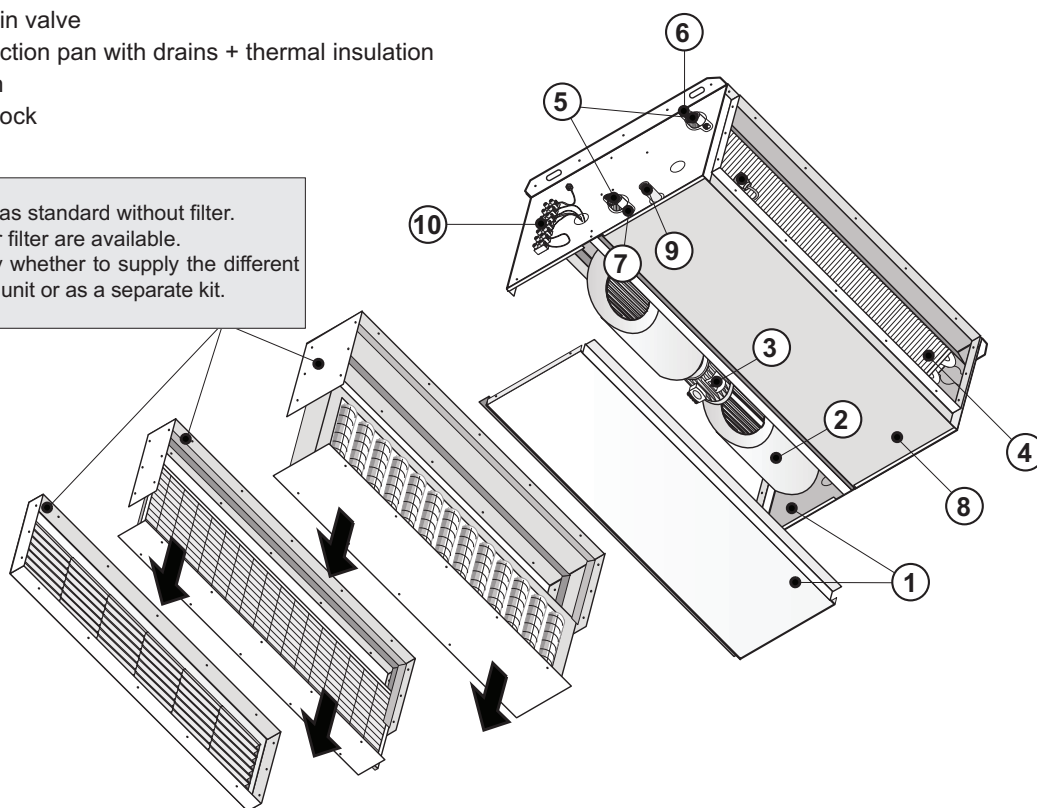
Structure completely made from very thick galvanised sheet metal, with class M1 thermal-acoustic insulation on the inside.

Controllers available in wall-mounted versions PSW, MTW, ATW or EKW and IK with HB board on the unit.

SPB kit required for use with the controllers. (see the SPB kit table on p. 29)

- 1 Load-bearing structure made from thick galvanised sheet metal, with holes for wall/ceiling mounting + thermal insulation and soundproofing on the inside (class M1)
- 2 Centrifugal fan with double-sided intake (forward curved blades)
- 3 5-speed electric motor, 230V-1Ph-50Hz, coupled directly to the fan (3 speeds factory-wired)
- 4 Heat exchanger coil (1 coil for 2-pipe units)
- 5 Coil IN/OUT water connections
- 6 Manual air vent valve
- 7 Manual water drain valve
- 8 Condensate collection pan with drains + thermal insulation
- 9 Condensate drain
- 10 Wiring terminal block

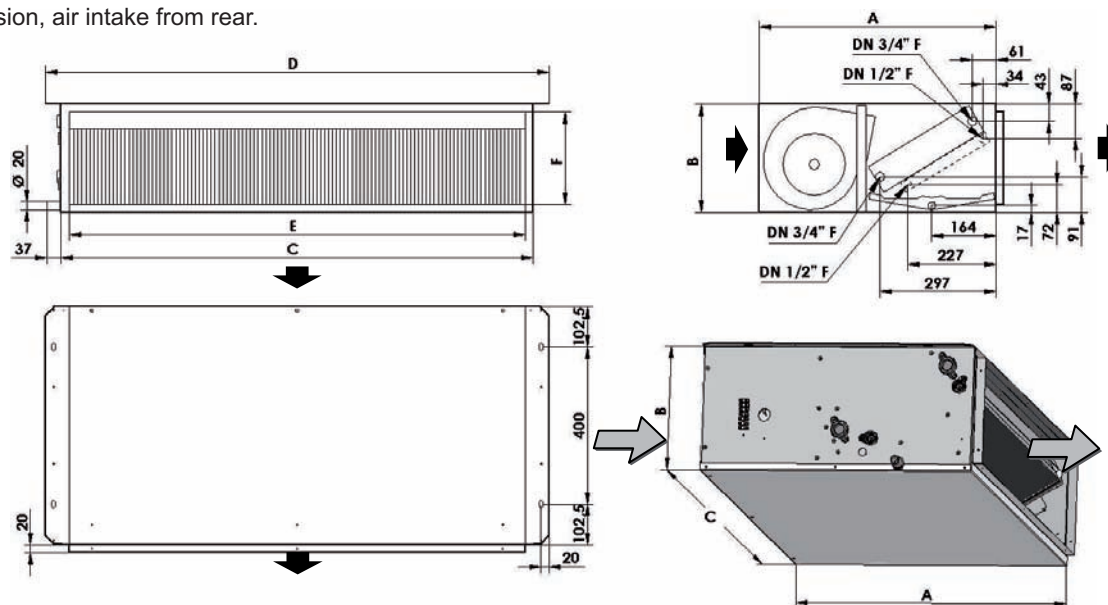
The units are supplied as standard without filter. Different versions of air filter are available. When ordering, specify whether to supply the different filter assembled on the unit or as a separate kit.



Dimensions

HWD2 DLIO

Horizontal version, air intake from rear.

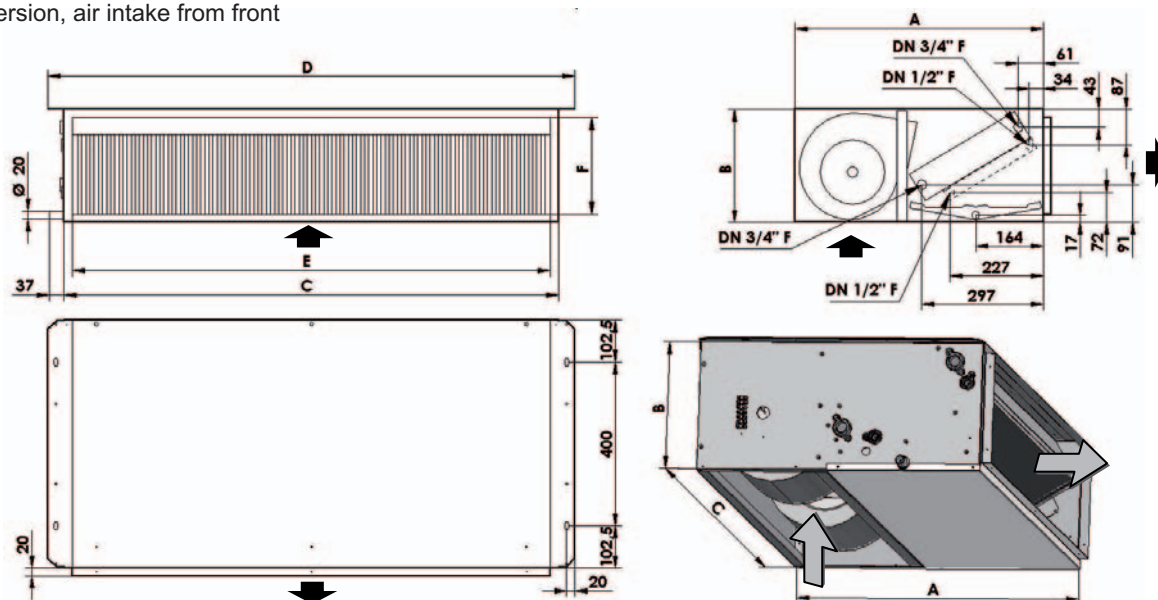


HWD2 DLIO	2-pipe		102	202	302	402	502	602	702	802	902
	4-pipe		104	204	/	404	504	/	704	804	/
Main dimensions	A	mm	605	605	605	605	605	605	605	605	605
	B	mm	275	275	275	275	275	275	275	275	275
	C	mm	800	800	800	1.200	1.200	1.200	1.600	1.600	1.600
	D	mm	880	880	880	1.280	1.280	1.280	1.680	1.680	1.680
Intake/outlet opening	E	mm	760	760	760	1.160	1.160	1.160	1.560	1.560	1.560
	F	mm	235	235	235	235	235	235	235	235	235
Net weight	2-pipe	Kg	37	38	40	52	54	57	68	70	73
	4-pipe	Kg	39	40	/	55	57	/	72	74	/

(1) BAYONET duct connectors: Male outlet opening; female intake opening

HWD2 DFIO

Horizontal version, air intake from front



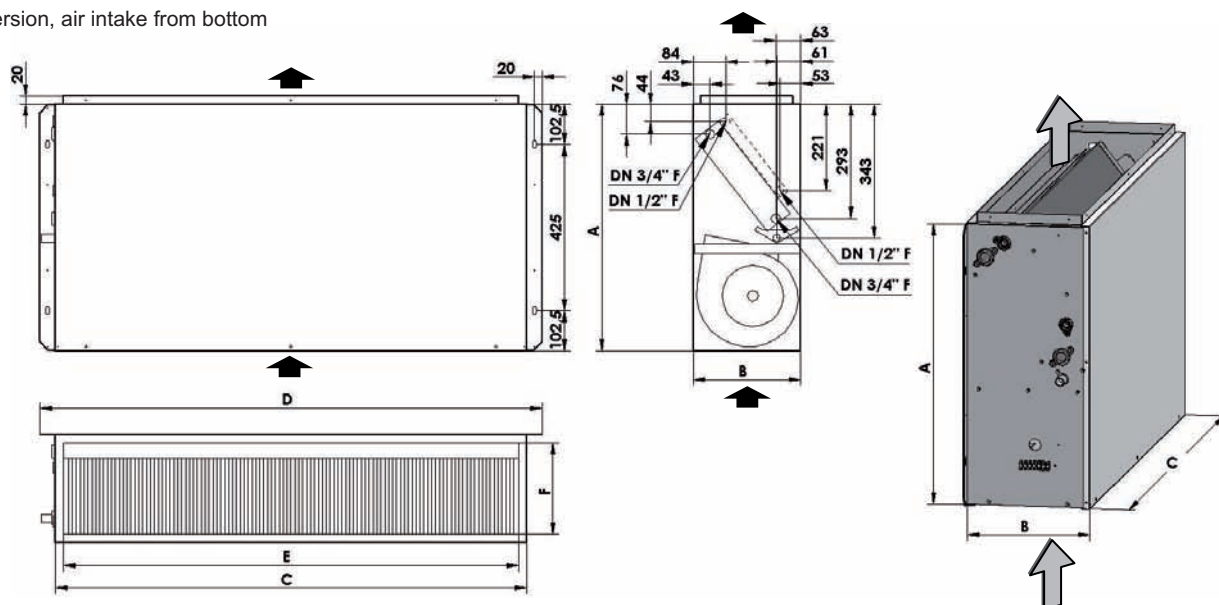
HWD2 DFIO	2-pipe		102	202	302	402	502	602	702	802	902
	4-pipe		104	204	/	404	504	/	704	804	/
Main dimensions	A	mm	605	605	605	605	605	605	605	605	605
	B	mm	275	275	275	275	275	275	275	275	275
	C	mm	800	800	800	1.200	1.200	1.200	1.600	1.600	1.600
	D	mm	880	880	880	1.280	1.280	1.280	1.680	1.680	1.680
Intake/outlet opening	E	mm	760	760	760	1.160	1.160	1.160	1.560	1.560	1.560
	F	mm	235	235	235	235	235	235	235	235	235
Net weight	2-pipe	Kg	37	38	40	52	54	57	68	70	73
	4-pipe	Kg	39	40	/	55	57	/	72	74	/

(1) BAYONET duct connectors: Male outlet opening; female intake opening

Dimensions

HWD2 DLIV

Vertical version, air intake from bottom

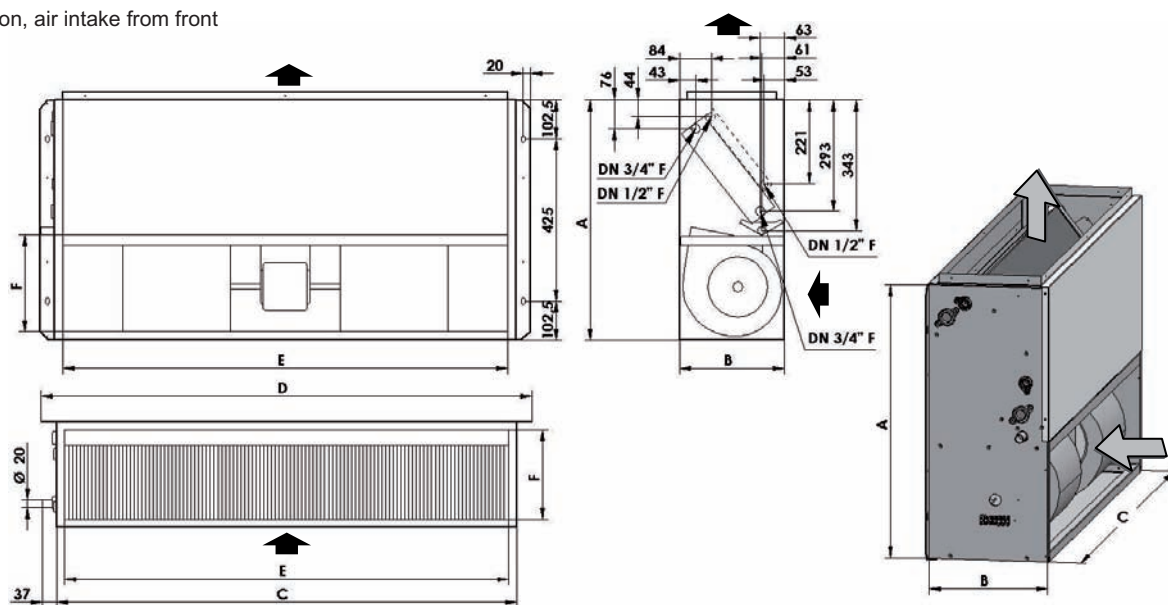


HWD2 DLIV	2-pipe		102	202	302	402	502	602	702	802	902
	4-pipe		104	204	/	404	504	/	704	804	/
Main dimensions	A	mm	630	630	630	630	630	630	630	630	630
	B	mm	275	275	275	275	275	275	275	275	275
	C	mm	800	800	800	1.200	1.200	1.200	1.600	1.600	1.600
	D	mm	880	880	880	1.280	1.280	1.280	1.680	1.680	1.680
Intake/outlet opening	E	mm	760	760	760	1.160	1.160	1.160	1.560	1.560	1.560
	F	mm	235	235	235	235	235	235	235	235	235
Net weight	2-pipe	Kg	37	38	40	52	54	57	68	70	73
	4-pipe	Kg	39	40	/	55	57	/	72	74	/

(1) BAYONET duct connectors: Male outlet opening; female intake opening

HWD2 DFIV

Vertical version, air intake from front



HWD2 DFIV	2-pipe		102	202	302	402	502	602	702	802	902
	4-pipe		104	204	/	404	504	/	704	804	/
Main dimensions	A	mm	630	630	630	630	630	630	630	630	630
	B	mm	275	275	275	275	275	275	275	275	275
	C	mm	800	800	800	1.200	1.200	1.200	1.600	1.600	1.600
	D	mm	880	880	880	1.280	1.280	1.280	1.680	1.680	1.680
Intake/outlet opening	E	mm	760	760	760	1.160	1.160	1.160	1.560	1.560	1.560
	F	mm	235	235	235	235	235	235	235	235	235
Net weight	2-pipe	Kg	37	38	40	52	54	57	68	70	73
	4-pipe	Kg	39	40	/	55	57	/	72	74	/

(1) BAYONET duct connectors: Male outlet opening; female intake opening

3. ACCESSORIES COMPATIBILITY

Description	a-HWD2			
	DLIO	DFIO	DLIV	DFIV
TERMINAL BLOCK INSIDE IP55 BOX HWD2	V	V	V	V
DUCTABLE FLAT FILTER SECTION	V	V	V	V
DUCTABLE CORRUGATED FILTER SECT.	V	V	V	V
FLAT FILTER SECT. WITH FRAME DLIV/DLIO	V		V	
FLAT FILTER SECT. WITH FRAME DFIV/DFIO		V		V
CORRUGATED FILTER SECT. WITH FRAME DLIV/DLIO	V		V	
CORRUGATED FILTER SECT. WITH FRAME DFIV/DFIO		V		V
POCKET FILTER SECT. WITH FRAME DLIV/DLIO	V		V	
POCKET FILTER SECT. WITH FRAME DFIV/DFIO		V		V
2-WAY VALVE, MAIN 3/4+FITT HWD2 102 ON/OFF-PWM	V	V	V	V
2-WAY VALVE, SUPP 3/4+FITT HWD2 102 ON/OFF-PWM	V	V	V	V
3-WAY VALVE, MAIN 3/4+FITT HWD2 102 ON/OFF-PWM	V	V	V	V
3-WAY VALVE, SUPP 3/4+FITT HWD2 102 ON/OFF-PWM	V	V	V	V
2-WAY VALVE, MAIN 3/4+FITT HWD2 102 3P	V	V	V	V
2-WAY VALVE, SUPP 3/4+FITT HWD2 102 3P	V	V	V	V
3-WAY VALVE, MAIN 3/4+FITT HWD2 102 3P	V	V	V	V
3-WAY VALVE, SUPP 3/4+FITT HWD2 102 3P	V	V	V	V
2-WAY VALVE, MAIN 3/4+FITT HWD2 102 MOD. 0-10	V	V	V	V
2-WAY VALVE, SUPP 3/4+FITT HWD2 102 MOD. 0-10	V	V	V	V
3-WAY VALVE, MAIN 3/4+FITT HWD2 102 MOD. 0-10	V	V	V	V
3-WAY VALVE, SUPP 3/4+FITT HWD2 102 MOD. 0-10	V	V	V	V
3-WAY VALVE KV10+FITT MAIN COIL HWD2 7-9 ON/OFF-PWM	V	V	V	V
3-WAY VALVE KV10+FITT SUPP COIL HWD2 7-9 ON/OFF-PWM	V	V	V	V
MAIN COIL CONNECTOR KIT 3-way HWD2	V	V	V	V
SUPP. COIL CONNECTOR KIT 3-way HWD2	V	V	V	V
MAIN COIL CONNECTOR KIT 2-way HWD2	V	V	V	V
SUPP. COIL CONNECTOR KIT 2-way HWD2	V	V	V	V
VERTICAL COND. COLL. PAN ABS HWD2			V	V
HORIZ. COND. COLL. PAN METAL+INS HWD2	V	V		
HORIZONTAL COND. DRAIN PUMP + ALARM CONT	V	V		
VERTICAL COND. DRAIN PUMP + ALARM CONT			V	V
MANUAL DAMPER SECTION 0-100% OPENING	V	V	V	V
MANUAL DAMPER SECTION 0-33% 100-67% OPENING	V	V	V	V
CLOSED SECTION W/ 2 MANUAL DAMPERS HWD2	V	V	V	V
230V SERVO MOTOR FOR DAMPER	V	V	V	V
MANUAL DAMPER CONTROL	V	V	V	V
MOTORISED DAMPER SECTION 0-100%	V	V	V	V
MOTORISED DAMPER SECTION 0-33% 100-67%	V	V	V	V
CLOSED SECTION W/ 2 MOTORISED DAMPERS	V	V	V	V
SUPPLEMENTARY 1-ROW COIL KIT	V	V	V	V
1R HEATING COIL SECTION	V	V	V	V
2R HEATING COIL SECTION	V	V	V	V
230 V HEATER SECTION	V	V	V	V
400 V HEATER SECTION	V	V	V	V
STRAIGHT INTAKE SECTION	V	V	V	V
STRAIGHT SUPPLY SECTION	V	V	V	V
90° SUPPLY SECTION HWD2 102-302	V	V	V	V
90° INTAKE SECTION HWD2 102-302			V	V
SECTION W/ PAN FOR FITTING HUMIDIFIER ON SUPPLY	V	V		
SECTION W/ PAN FOR FITTING HUMIDIFIER ON INTAKE	V	V		
VIBRATION-ISOLATING JOINT ON SUPPLY	V	V	V	V
VIBRATION-ISOLATING JOINT ON INTAKE	V	V	V	V

3. ACCESSORIES COMPATIBILITY

Description	a-HWD2			
	DLIO	DFIO	DLIV	DFIV
SECTION WITH CIRCULAR FITTINGS ON SUPPLY	V	V	V	V
SECTION WITH CIRCULAR FITTINGS ON INTAKE	V	V	V	V
SILENCER SECTION ON SUPPLY	V	V	V	V
SILENCER SECTION ON INTAKE	V	V	V	V
3/4" connector kit	V	V	V	V
1/2" connector kit	V	V	V	V
0-10 VDC VALVE EXPANSION KIT	V	V	V	V
3-P VALVE EXPANSION KIT	V	V	V	V
HB POWER KIT BOARD	V	V	V	V
RS485 EXPANSION KIT	V	V	V	V
SPB BOARD KIT	V	V	V	V
BUS ADAPTER KIT	V	V	V	V
BITICINO GATEWAY KIT	V	V	V	V
CLIMAVENETA PSW REMOTE CONTROL KIT	V	V	V	V
CLIMAVENETA MTW REMOTE CONTROL KIT	V	V	V	V
CLTA ATW MODBUS REMOTE CONTROL KIT	V	V	V	V
CLTA EKW REMOTE CONTROL KIT	V	V	V	V
CLIMAVENETA iK CONTROL KIT	V	V	V	V
(i)HB NTR IR RECEIVER KIT	V	V	V	V

4. UNIT DESCRIPTION

a-HWD2 DLIO, DLIV

Structure

Load-bearing structure made from very thick, corrosion resistant and weatherproof galvanised sheet metal, with thermal and acoustic insulation on the inside (class M1).

Removable self-supporting panels with holes (slots) for fastening to wall/ceiling directly on the cover casing.

Perforations and holes provided to configure the unit as desired, to install the required accessories and for placement of the water connections on the left or right, making the unit fully reversible in the site of installation.

Assembly with self-tapping screws for quick and easy inspection/maintenance.

Compact dimensions, small space occupied.

Available in versions for vertical or horizontal installation.

Condensate collection pan

Double-sloped condensate collection pan to ensure perfect condensate drainage, fitted with drain (on the same side as the water connections as standard) plus thermal insulation on outside (class M1).

Auxiliary horizontal pan versions made from galvanised sheet metal with insulation, auxiliary vertical pan versions made from ABS.

Heat exchange coil

High-efficiency heat exchanger coil made from copper pipe and aluminium fins.

Coil fittings with anti-twist system, manual air vent valves, manual water drain valves.

Fittings on right as standard (looking at the same direction of air flow), on left upon request; can also be reversed on site.

One coil for 2-pipe systems, and two coils for 4-pipe systems.

Coils tested at a pressure of 30 bars, suitable for operation with water up to a maximum pressure of 15 bars.

The coils are suitable for operation with hot water, chilled water, superheated water, cold water and water-glycol mixtures.

Fan unit

Fan unit comprising 1, 2, or 3 centrifugal fans with double-sided intake, forward curved plastic blades, coupled directly to the electric motor.

Assembly on elastic supports and shock absorbers.

Five-speed electric motor, IP42 protection.

Three speeds are factory wired.

Air filter

The standard units are supplied without filters so as to allow customers to choose between the vast range of filters available as accessories, including flat filters, ductable air filter sections, corrugated air filters and pocket air filters.

G2 filter rating flat filters

G3 filter rating corrugated air filters

G5 filter rating pocket air filters

Air intake from rear.

a-HWD2 DFIO, DFIV

Structure

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G2 filter rating flat filters

G3 filter rating corrugated air filters

G5 filter rating pocket air filters

Air intake from front.

5. OPERATING RANGE

Power supply (unit)	230 V $\pm$ 15% / 1 Ph / 50 Hz (Max 265 V ; Min 195 V)
Power supply (remote controls)	230 V $\pm$ 15% / 1 Ph / 50 Hz (Max 265 V ; Min 195 V)
Power supply (230 V electric heaters)	230 V $\pm$ 15% / 1 Ph / 50 Hz (Max 265 V ; Min 195 V)
Power supply (400 V electric heaters)	400 V $\pm$ 15% / 3 Ph / 50 Hz (Max 460 V ; Min 340 V)
Operating temperature (inside air)	- 10 °C to + 50 °C
Operating humidity (inside air)	10 % to 90 % RH – RH (non-condensing)
Maximum water inlet temperature	160 °C (superheated water)
Operation with steam	NO (steam coil upon request)
Maximum operating pressure (water)	15 Bar
Ethylene glycol (maximum percentage by weight)	80 %

SPEEDS CONNECTED AS STANDARD IN FACTORY

Model	102	202	302	402	502	602	702	802	902
MAX speed	V2	V1	V1	V2	V1	V1	V1	V1	V1
MED speed	V3	V2	V2	V3	V2	V2	V3	V2	V2
MIN speed	V5	V4	V4	V5	V4	V4	V5	V4	V4

- The standard combinations configured by Climaveneta are: V1-V2-V4

- Model 102: the standard combinations configured by Climaveneta are: V2-V3-V5

- Model 402: the standard combinations configured by Climaveneta are: V2-V3-V5

- Model 702: standard combinations configured by Climaveneta are: V1-V3-V5

Upon request, any combination of three speeds different from standard can be wired, to be specified when placing the order.

6. TECHNICAL DATA SHEET

a-HWD2 / DLIV-DFIV			102	202	302	402	502	602	702	802	902
ELECTRICAL DATA											
Power supply	V/ph/Hz		230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50
Max absorbed power	W		270	270	270	570	570	570	840	840	840
2 PIPES SYSTEM CONFIGURATION											
NOMINAL SPEED (ESP = 0)											
Air flow	m³/h		1450	1420	1400	2700	2650	2600	4150	4070	4000
Total capacity in cooling mode	(1) kW		6,88	7,31	9,22	11,6	12,4	16,4	17,0	20,0	24,0
Sensible capacity in cooling mode	(1) kW		6,09	6,46	6,80	10,4	11,1	12,0	14,1	16,1	18,1
Total capacity in heating mode	(2) kW		8,61	9,13	10,8	14,5	15,5	19,5	22,6	26,6	30,0
MAX SPEED											
ESP External Static Pressure	Pa		66	59	59	76	64	61	63	56	56
Air flow	m³/h		1190	1260	1240	2000	2200	2180	3690	3660	3640
Total capacity in cooling mode	(1) kW		6,00	6,70	8,45	9,36	10,8	14,4	15,4	18,2	21,9
Sensible capacity in cooling mode	(1) kW		5,09	5,87	6,17	8,12	9,53	10,4	12,6	14,5	16,4
Max water flow	(1) m³/h		1,03	1,15	1,45	1,61	1,86	2,48	2,65	3,14	3,77
Max pressure drop	(1) kPa		29,1	32,9	33,9	20,1	25,1	27,8	32,2	33,2	35,2
Total capacity in heating mode	(2) kW		7,43	8,36	9,81	11,6	13,5	17,0	20,4	24,2	27,3
Water flow in heating	(2) m³/h		1,03	1,15	1,46	1,61	1,86	2,50	2,64	3,14	3,76
Pressure drop in heating	(2) kPa		29,2	32,7	34,1	20,1	25,0	28,2	32,1	33,1	35,0
Noise Pressure	(3) dB(A)		50	51	52	53	54	55	54	54	55
Noise Power	(4) dB(A)		61	62	63	64	65	66	65	65	66
MED SPEED											
ESP External Static Pressure	Pa		50	50	50	50	50	50	50	50	50
Air flow	m³/h		1040	1160	1145	1620	1980	1960	3220	3380	3330
Total capacity in cooling mode	(1) kW		5,66	6,35	7,96	8,17	10,0	13,4	14,2	17,5	21,0
Sensible capacity in cooling mode	(1) kW		4,74	5,38	5,78	6,94	8,69	9,57	11,5	13,9	15,6
Max water flow	(1) m³/h		0,97	1,09	1,37	1,41	1,73	2,30	2,44	3,01	3,61
Max pressure drop	(1) kPa		25,9	29,5	30,1	15,2	21,5	24,0	27,2	30,5	32,2
Total capacity in heating mode	(2) kW		6,95	7,87	9,22	10,0	12,4	15,8	18,5	23,0	26,0
Water flow in heating	(2) m³/h		0,97	1,10	1,37	1,40	1,73	2,31	2,46	2,98	3,62
Pressure drop in heating	(2) kPa		25,5	29,7	30,1	15,0	21,6	24,1	27,7	29,9	32,4
Noise Pressure	(3) dB(A)		47	49	50	49	51	52	51	53	54
Noise Power	(4) dB(A)		58	60	61	60	62	63	62	64	65
MIN SPEED											
ESP External Static Pressure	Pa		24	26	29	18	20	21	27	35	36
Air flow	m³/h		720	840	835	960	1280	1270	2400	2830	2800
Total capacity in cooling mode	(1) kW		4,36	5,25	6,54	5,52	7,34	9,82	11,4	15,3	18,6
Sensible capacity in cooling mode	(1) kW		3,57	4,35	4,65	4,49	6,11	6,83	9,05	12,0	13,6
Max water flow	(1) m³/h		0,75	0,90	1,13	0,95	1,26	1,69	1,96	2,64	3,19
Max pressure drop	(1) kPa		15,3	20,1	20,2	6,9	11,4	12,8	17,6	23,3	25,2
Total capacity in heating mode	(2) kW		5,27	6,39	7,44	6,67	8,94	11,3	14,6	19,9	22,6
Water flow in heating	(2) m³/h		0,75	0,90	1,12	0,95	1,26	1,70	1,94	2,64	3,19
Pressure drop in heating	(2) kPa		15,4	20,0	20,0	7,0	11,4	13,0	17,2	23,3	25,1
Noise Pressure	(3) dB(A)		37	42	44	38	43	45	39	47	48
Noise Power	(4) dB(A)		48	53	55	49	54	56	50	58	59
SIZE AND WEIGHT											
A	(5) mm		880	880	880	1280	1280	1280	1680	1680	1680
B	(5) mm		630	630	630	630	630	630	630	630	630
H	(5) mm		275	275	275	275	275	275	275	275	275
Operating weight	(5) kg		37	38	40	52	54	57	68	70	73

Notes:

1 Room temperature 27 °C d.b./19 °C w.b.; Chilled water (in/out) 7/12 °C.

2 Room temperature 20 °C d.b.; Hot water (in/out) 50/°C (with identical flow note1).

3 Sound pressure level in free field on a reflective surface, 1 m from fan front and 1 m from the ground. Non-binding value obtained from sound power level.

4 Sound power on the basis of measurements made in compliance with ISO 3741 and Eurovent 8/2.

5 Unit in standard configuration/execution, without optional accessories.

Note: the sound pressure and power data are referred to intake side

6. TECHNICAL DATA SHEET

a-HWD2 / DLIO-DFIO			102	202	302	402	502	602	702	802	902
ELECTRICAL DATA											
Power supply	V/ph/Hz		230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50
Max absorbed power	W		270	270	270	570	570	570	840	840	840
2 PIPES SYSTEM CONFIGURATION											
NOMINAL SPEED (ESP = 0)											
Air flow	m³/h		1450	1420	1400	2700	2650	2600	4150	4070	4000
Total capacity in cooling mode	(1) kW		6,88	7,31	9,22	11,6	12,4	16,4	17,0	20,0	24,0
Sensible capacity in cooling mode	(1) kW		6,09	6,46	6,80	10,4	11,1	12,0	14,1	16,1	18,1
Total capacity in heating mode	(2) kW		8,61	9,13	10,8	14,5	15,5	19,5	22,6	26,6	30,0
MAX SPEED											
ESP External Static Pressure	Pa		66	59	59	76	64	61	63	56	56
Air flow	m³/h		1190	1260	1240	2000	2200	2180	3690	3660	3640
Total capacity in cooling mode	(1) kW		6,00	6,70	8,45	9,36	10,8	14,4	15,4	18,2	21,9
Sensible capacity in cooling mode	(1) kW		5,09	5,87	6,17	8,12	9,53	10,4	12,6	14,5	16,4
Max water flow	(1) m³/h		1,03	1,15	1,45	1,61	1,86	2,48	2,65	3,14	3,77
Max pressure drop	(1) kPa		29,1	32,9	33,9	20,1	25,1	27,8	32,2	33,2	35,2
Total capacity in heating mode	(2) kW		7,43	8,36	9,81	11,6	13,5	17,0	20,4	24,2	27,3
Water flow in heating	(2) m³/h		1,03	1,15	1,46	1,61	1,86	2,50	2,64	3,14	3,76
Pressure drop in heating	(2) kPa		29,2	32,7	34,1	20,1	25,0	28,2	32,1	33,1	35,0
Noise Pressure	(3) dB(A)		50	51	52	53	54	55	54	54	55
Noise Power	(4) dB(A)		61	62	63	64	65	66	65	65	66
MED SPEED											
ESP External Static Pressure	Pa		50	50	50	50	50	50	50	50	50
Air flow	m³/h		1040	1160	1145	1620	1980	1960	3220	3380	3330
Total capacity in cooling mode	(1) kW		5,66	6,35	7,96	8,17	10,0	13,4	14,2	17,5	21,0
Sensible capacity in cooling mode	(1) kW		4,74	5,38	5,78	6,94	8,69	9,57	11,5	13,9	15,6
Max water flow	(1) m³/h		0,97	1,09	1,37	1,41	1,73	2,30	2,44	3,01	3,61
Max pressure drop	(1) kPa		25,9	29,5	30,1	15,2	21,5	24,0	27,2	30,5	32,2
Total capacity in heating mode	(2) kW		6,95	7,87	9,22	10,0	12,4	15,8	18,5	23,0	26,0
Water flow in heating	(2) m³/h		0,97	1,10	1,37	1,40	1,73	2,31	2,46	2,98	3,62
Pressure drop in heating	(2) kPa		25,5	29,7	30,1	15,0	21,6	24,1	27,7	29,9	32,4
Noise Pressure	(3) dB(A)		47	49	50	49	51	52	51	53	54
Noise Power	(4) dB(A)		58	60	61	60	62	63	62	64	65
MIN SPEED											
ESP External Static Pressure	Pa		24	26	29	18	20	21	27	35	36
Air flow	m³/h		720	840	835	960	1280	1270	2400	2830	2800
Total capacity in cooling mode	(1) kW		4,36	5,25	6,54	5,52	7,34	9,82	11,4	15,3	18,6
Sensible capacity in cooling mode	(1) kW		3,57	4,35	4,65	4,49	6,11	6,83	9,05	12,0	13,6
Max water flow	(1) m³/h		0,75	0,90	1,13	0,95	1,26	1,69	1,96	2,64	3,19
Max pressure drop	(1) kPa		15,3	20,1	20,2	6,9	11,4	12,8	17,6	23,3	25,2
Total capacity in heating mode	(2) kW		5,27	6,39	7,44	6,67	8,94	11,3	14,6	19,9	22,6
Water flow in heating	(2) m³/h		0,75	0,90	1,12	0,95	1,26	1,70	1,94	2,64	3,19
Pressure drop in heating	(2) kPa		15,4	20,0	20,0	7,0	11,4	13,0	17,2	23,3	25,1
Noise Pressure	(3) dB(A)		37	42	44	38	43	45	39	47	48
Noise Power	(4) dB(A)		48	53	55	49	54	56	50	58	59
SIZE AND WEIGHT											
A	(5) mm		880	880	880	1280	1280	1280	1680	1680	1680
B	(5) mm		605	605	605	605	605	605	605	605	605
H	(5) mm		275	275	275	275	275	275	275	275	275
Operating weight	(5) kg		37	38	40	52	54	57	68	70	73

Notes:

1 Room temperature 27 °C d.b./19 °C w.b.; Chilled water (in/out) 7/12 °C.

2 Room temperature 20 °C d.b.; Hot water (in/out) 50/°C (with identical flow note1).

3 Sound pressure level in free field on a reflective surface, 1 m from fan front and 1 m from the ground. Non-binding value obtained from sound power level.

4 Sound power on the basis of measurements made in compliance with ISO 3741 and Eurovent 8/2.

5 Unit in standard configuration/execution, without optional accessories.

Note: the sound pressure and power data are referred to intake side

6. TECHNICAL DATA SHEET

a-HWD2 / DLIV-DFIV			104	204	404	504	704	804
ELECTRICAL DATA								
Power supply	V/ph/Hz		230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50
Max absorbed power	W		270	270	570	570	840	840
4 PIPES SYSTEM CONFIGURATION								
NOMINAL SPEED (ESP = 0)								
Air flow	m³/h		1410	1380	2620	2570	4030	3950
Total capacity in cooling mode	(1) kW		6,74	7,15	11,4	12,1	16,6	19,6
Sensible capacity in cooling mode	(1) kW		5,94	6,31	10,2	10,8	13,8	15,7
Total capacity in heating mode	(2) kW		6,87	6,87	12,0	11,6	17,9	17,7
MAX SPEED								
ESP External Static Pressure	Pa		66	59	76	64	63	56
Air flow	m³/h		1150	1220	1940	2130	3620	3610
Total capacity in cooling mode	(1) kW		5,87	6,56	9,15	10,6	15,2	18,1
Sensible capacity in cooling mode	(1) kW		4,96	5,73	7,92	9,30	12,5	14,4
Max water flow	(1) m³/h		1,01	1,13	1,58	1,82	2,61	3,11
Max pressure drop	(1) kPa		27,8	31,5	19,2	24,0	31,3	32,5
Total capacity in heating mode	(2) kW		5,89	6,40	9,53	10,6	16,3	16,3
Water flow in heating	(2) m³/h		0,52	0,56	0,84	0,93	1,42	1,42
Pressure drop in heating	(2) kPa		13,5	15,8	15,6	19,0	42,9	42,9
Noise Pressure	(3) dB(A)		50	51	53	54	54	54
Noise Power	(4) dB(A)		61	62	64	65	65	65
MED SPEED								
ESP External Static Pressure	Pa		50	50	50	50	50	50
Air flow	m³/h		1010	1130	1570	1920	3130	3280
Total capacity in cooling mode	(1) kW		5,53	6,21	7,99	9,80	13,8	17,1
Sensible capacity in cooling mode	(1) kW		4,63	5,25	6,77	8,48	11,3	13,5
Max water flow	(1) m³/h		0,95	1,07	1,38	1,69	2,38	2,95
Max pressure drop	(1) kPa		24,7	28,2	14,6	20,6	26,0	29,2
Total capacity in heating mode	(2) kW		5,31	6,00	8,13	9,64	14,8	15,4
Water flow in heating	(2) m³/h		0,47	0,53	0,71	0,85	1,29	1,35
Pressure drop in heating	(2) kPa		11,1	14,0	11,5	15,9	35,9	38,6
Noise Pressure	(3) dB(A)		47	49	49	51	51	53
Noise Power	(4) dB(A)		58	60	60	62	62	64
MIN SPEED								
ESP External Static Pressure	Pa		24	26	18	20	27	35
Air flow	m³/h		700	810	930	1240	2330	2750
Total capacity in cooling mode	(1) kW		4,27	5,13	5,40	7,18	11,1	15,0
Sensible capacity in cooling mode	(1) kW		3,48	4,25	4,38	5,96	8,83	11,7
Max water flow	(1) m³/h		0,74	0,88	0,93	1,24	1,92	2,58
Max pressure drop	(1) kPa		14,6	19,2	6,6	10,9	16,8	22,3
Total capacity in heating mode	(2) kW		4,05	4,71	5,48	6,85	11,8	13,4
Water flow in heating	(2) m³/h		0,36	0,41	0,48	0,60	1,03	1,17
Pressure drop in heating	(2) kPa		6,7	8,9	5,4	8,3	23,5	29,8
Noise Pressure	(3) dB(A)		37	42	38	43	39	47
Noise Power	(4) dB(A)		48	53	49	54	50	58
SIZE AND WEIGHT								
A	(5) mm		880	880	1280	1280	1680	1680
B	(5) mm		630	630	630	630	630	630
H	(5) mm		275	275	275	275	275	275
Operating weight	(5) kg		39	40	55	57	72	74

Notes:

1 Room temperature 27 °C d.b./19°C w.b., Chilled water (in/out) 7/12 °C.

2 Room temperature 20 °C d.b., hot water (in/out) 70/60 °C.

3 Sound pressure level in free field on a reflective surface, 1 m from fan front and 1 m from the ground. Non-binding value obtained from sound power level.

4 Sound power on the basis of measurements made in compliance with ISO 3741 and Eurovent 8/2.

5 Unit in standard configuration/execution, without optional accessories.

Note: the sound pressure and power data are referred to intake side

6. TECHNICAL DATA SHEET

a-HWD2 / DLIO-DFIO			104	204	404	504	704	804
ELECTRICAL DATA								
Power supply	V/ph/Hz		230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50
Max absorbed power	W		270	270	570	570	840	840
4 PIPES SYSTEM CONFIGURATION								
NOMINAL SPEED (ESP = 0)								
Air flow	m³/h		1410	1380	2620	2570	4030	3950
Total capacity in cooling mode	(1) kW		6,74	7,15	11,4	12,1	16,6	19,6
Sensible capacity in cooling mode	(1) kW		5,94	6,31	10,2	10,8	13,8	15,7
Total capacity in heating mode	(2) kW		6,87	6,87	12,0	11,6	17,9	17,7
MAX SPEED								
ESP External Static Pressure	Pa		66	59	76	64	63	56
Air flow	m³/h		1150	1220	1940	2130	3620	3610
Total capacity in cooling mode	(1) kW		5,87	6,56	9,15	10,6	15,2	18,1
Sensible capacity in cooling mode	(1) kW		4,96	5,73	7,92	9,30	12,5	14,4
Max water flow	(1) m³/h		1,01	1,13	1,58	1,82	2,61	3,11
Max pressure drop	(1) kPa		27,8	31,5	19,2	24,0	31,3	32,5
Total capacity in heating mode	(2) kW		5,89	6,40	9,53	10,6	16,3	16,3
Water flow in heating	(2) m³/h		0,52	0,56	0,84	0,93	1,42	1,42
Pressure drop in heating	(2) kPa		13,5	15,8	15,6	19,0	42,9	42,9
Noise Pressure	(3) dB(A)		50	51	53	54	54	54
Noise Power	(4) dB(A)		61	62	64	65	65	65
MED SPEED								
ESP External Static Pressure	Pa		50	50	50	50	50	50
Air flow	m³/h		1010	1130	1570	1920	3130	3280
Total capacity in cooling mode	(1) kW		5,53	6,21	7,99	9,80	13,8	17,1
Sensible capacity in cooling mode	(1) kW		4,63	5,25	6,77	8,48	11,3	13,5
Max water flow	(1) m³/h		0,95	1,07	1,38	1,69	2,38	2,95
Max pressure drop	(1) kPa		24,7	28,2	14,6	20,6	26,0	29,2
Total capacity in heating mode	(2) kW		5,31	6,00	8,13	9,64	14,8	15,4
Water flow in heating	(2) m³/h		0,47	0,53	0,71	0,85	1,29	1,35
Pressure drop in heating	(2) kPa		11,1	14,0	11,5	15,9	35,9	38,6
Noise Pressure	(3) dB(A)		47	49	49	51	51	53
Noise Power	(4) dB(A)		58	60	60	62	62	64
MIN SPEED								
ESP External Static Pressure	Pa		24	26	18	20	27	35
Air flow	m³/h		700	810	930	1240	2330	2750
Total capacity in cooling mode	(1) kW		4,27	5,13	5,40	7,18	11,1	15,0
Sensible capacity in cooling mode	(1) kW		3,48	4,25	4,38	5,96	8,83	11,7
Max water flow	(1) m³/h		0,74	0,88	0,93	1,24	1,92	2,58
Max pressure drop	(1) kPa		14,6	19,2	6,6	10,9	16,8	22,3
Total capacity in heating mode	(2) kW		4,05	4,71	5,48	6,85	11,8	13,4
Water flow in heating	(2) m³/h		0,36	0,41	0,48	0,60	1,03	1,17
Pressure drop in heating	(2) kPa		6,7	8,9	5,4	8,3	23,5	29,8
Noise Pressure	(3) dB(A)		37	42	38	43	39	47
Noise Power	(4) dB(A)		48	53	49	54	50	58
SIZE AND WEIGHT								
A	(5) mm		880	880	1280	1280	1680	1680
B	(5) mm		605	605	605	605	630	605
H	(5) mm		275	275	275	275	275	275
Operating weight	(5) kg		39	40	55	57	72	74

Notes:

1 Room temperature 27 °C d.b./19°C w.b., Chilled water (in/out) 7/12 °C.

2 Room temperature 20 °C d.b., hot water (in/out) 70/60 °C.

3 Sound pressure level in free field on a reflective surface, 1 m from fan front and 1 m from the ground. Non-binding value obtained from sound power level.

4 Sound power on the basis of measurements made in compliance with ISO 3741 and Eurovent 8/2.

5 Unit in standard configuration/execution, without optional accessories.

Note: the sound pressure and power data are referred to intake side

7. FAN PERFORMANCES

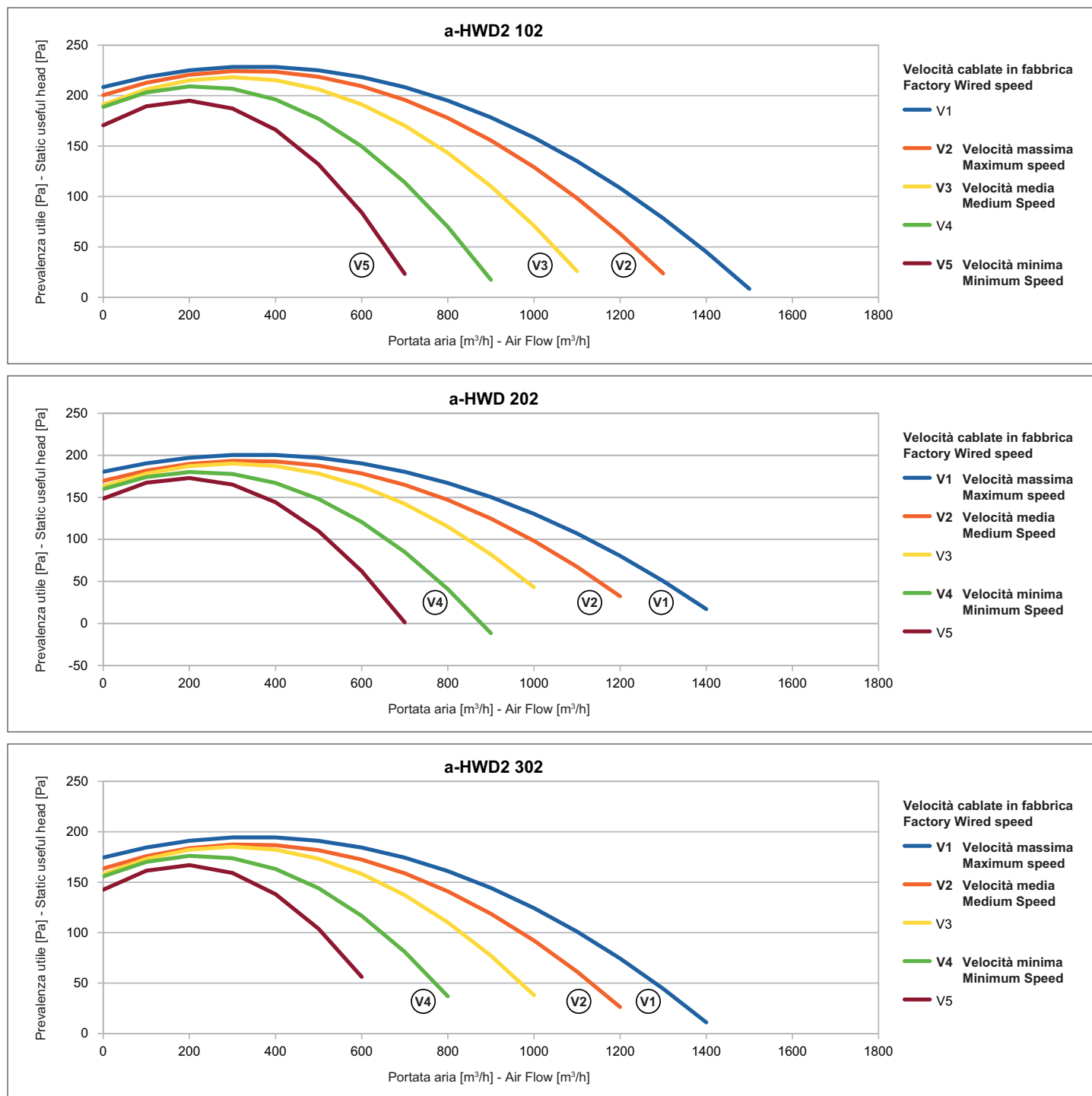
a-HWD2 is designed to assure high pressure also with pressure drops due to complex ducts.

They come with six different fan speeds. A particular care has been reserved to the configurations of the three fan speeds cabled by the manufacturer.

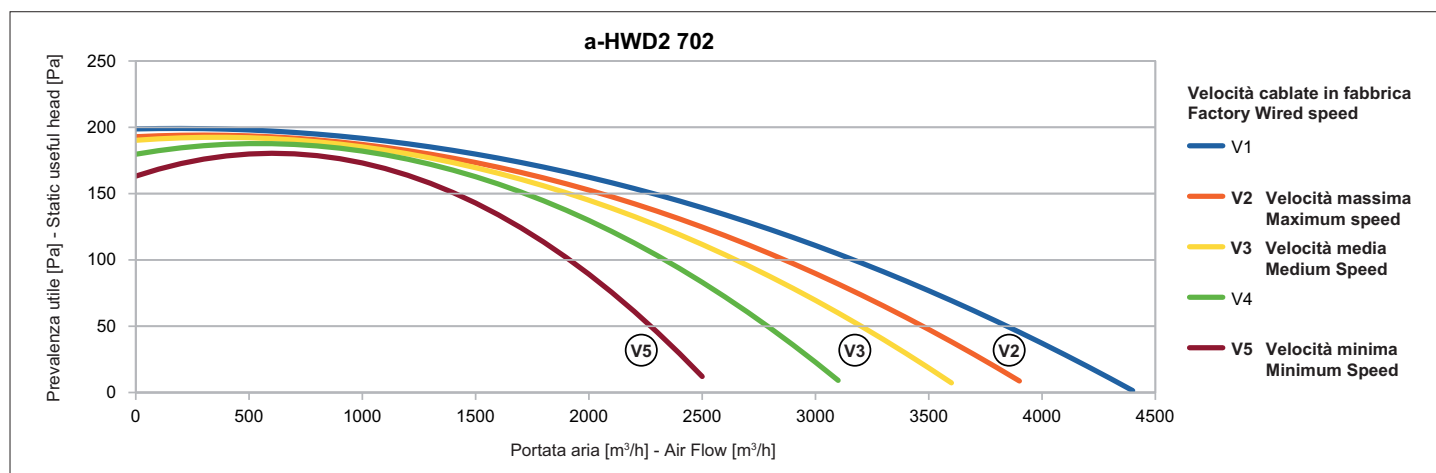
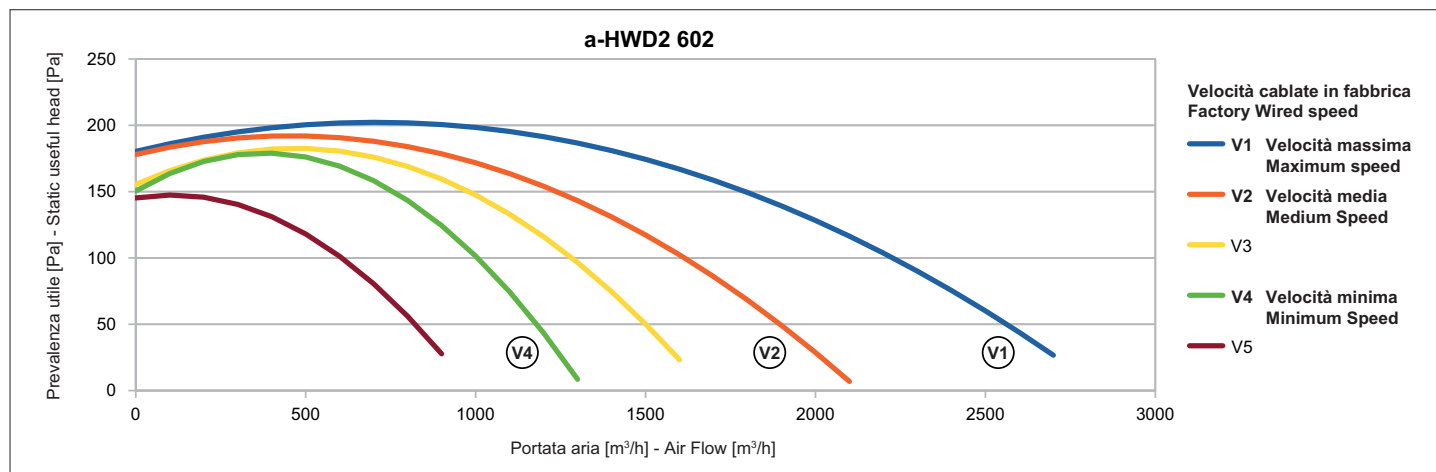
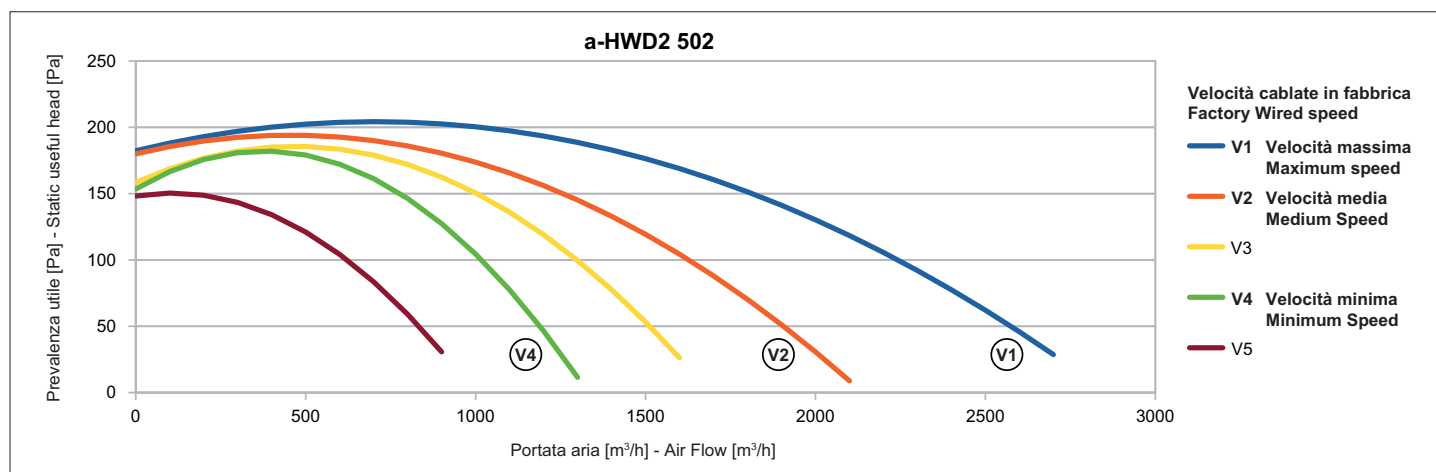
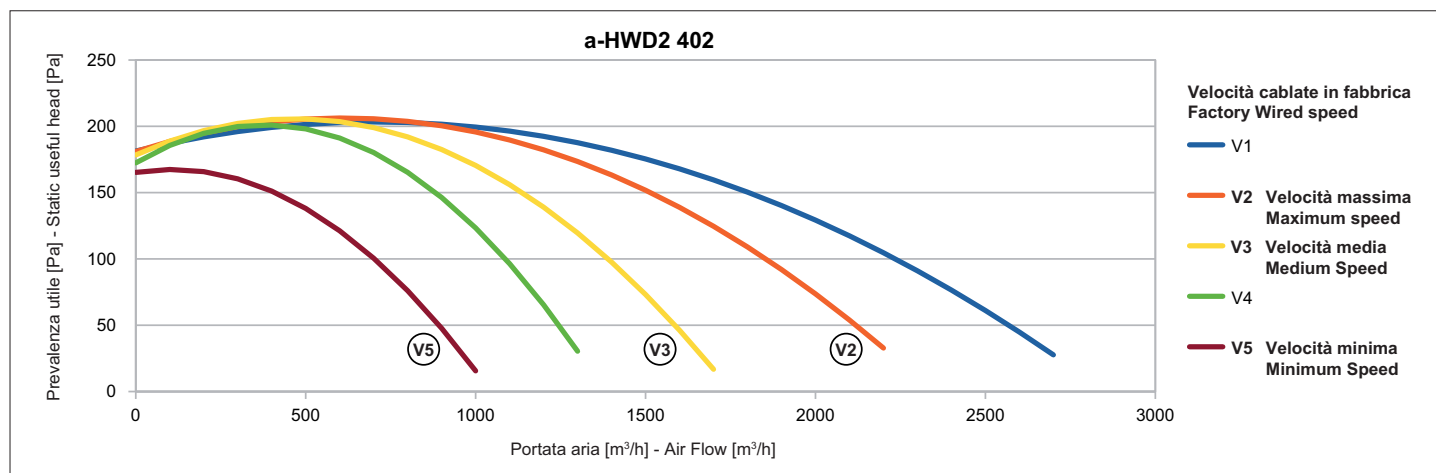
The other three fan speeds can be cabled on site.

The graphs on the following pages show the useful head or working pressures in relation to the air flow and the fan speed.

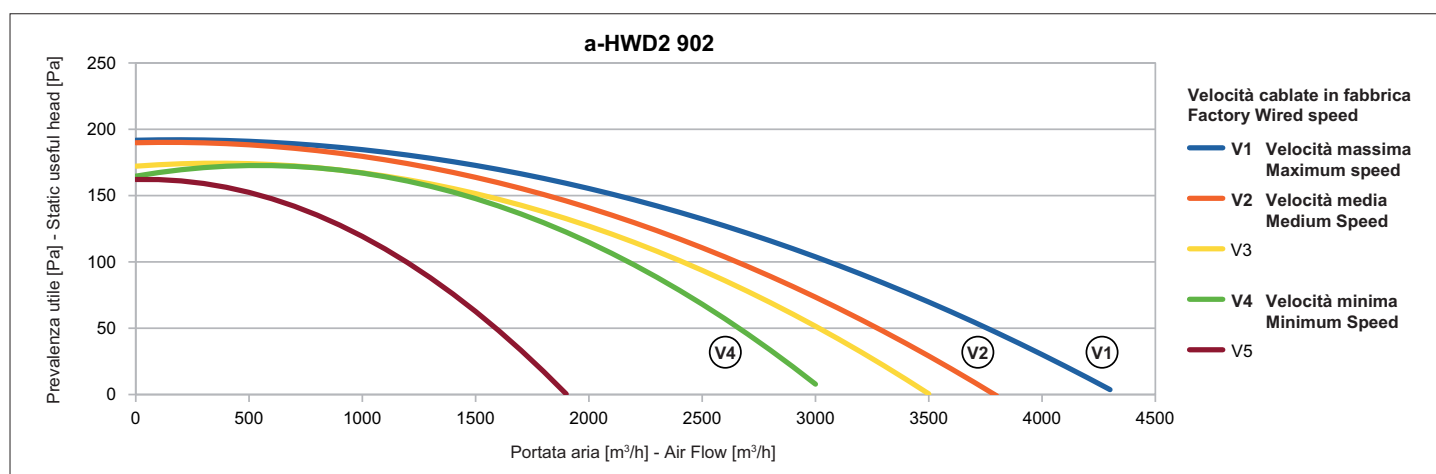
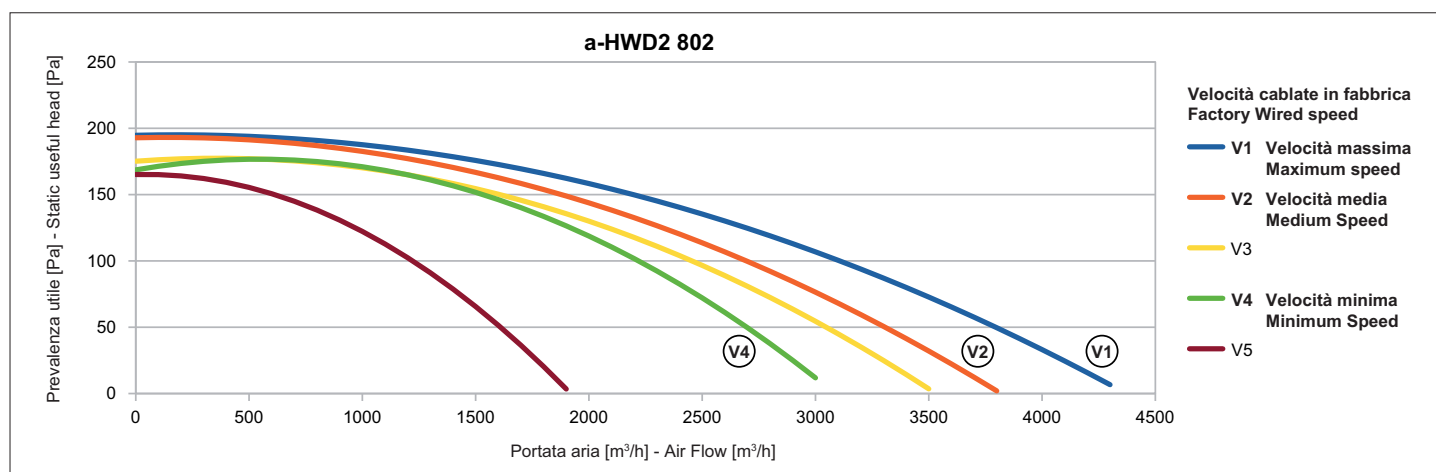
a-HWD2 2-pipe



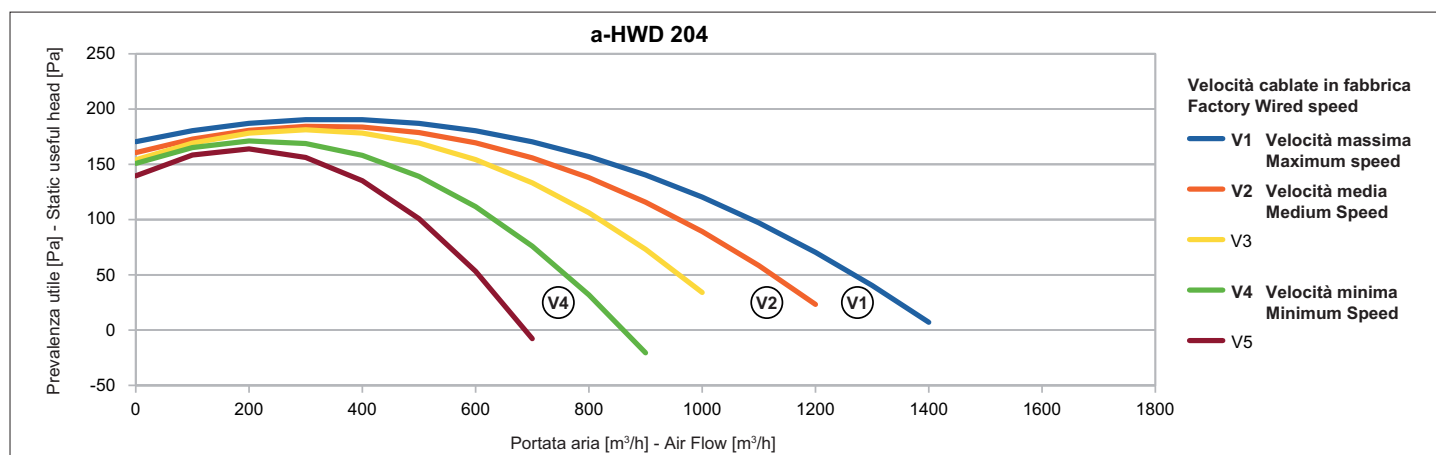
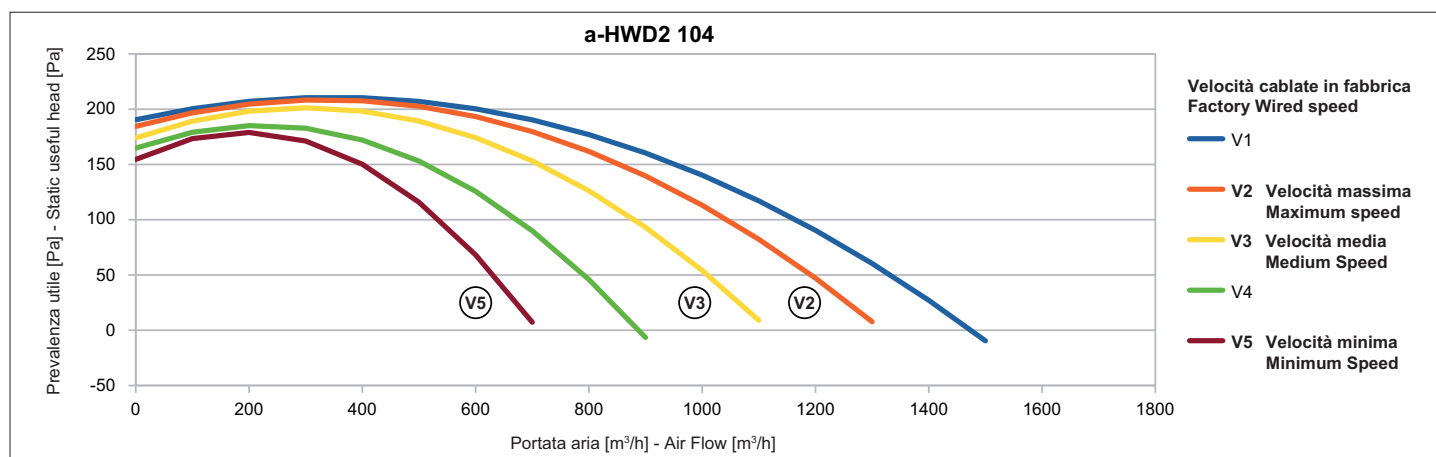
7. FAN PERFORMANCES



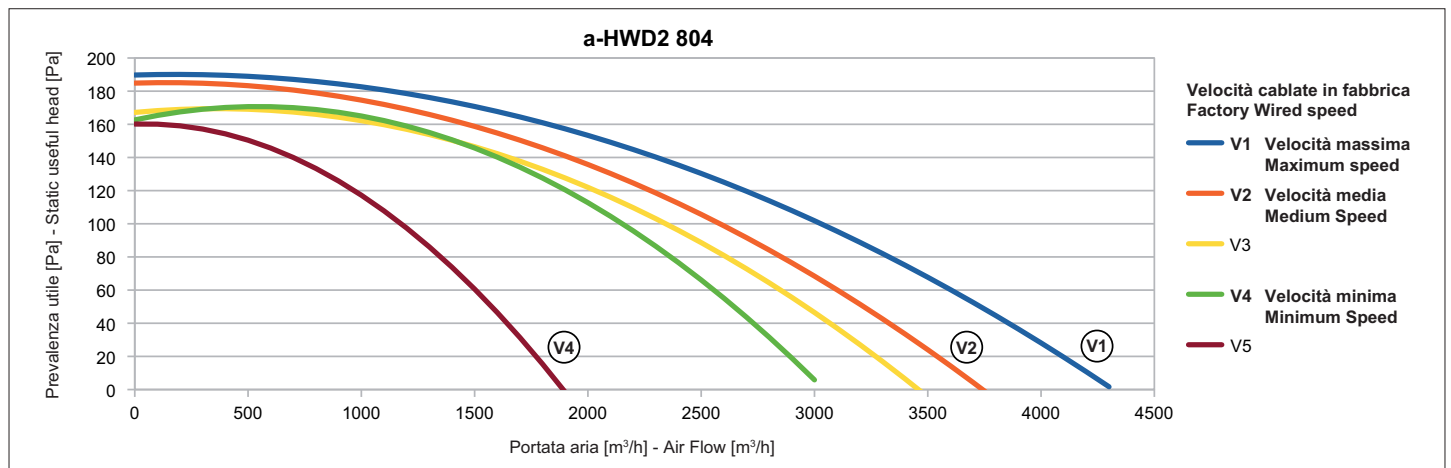
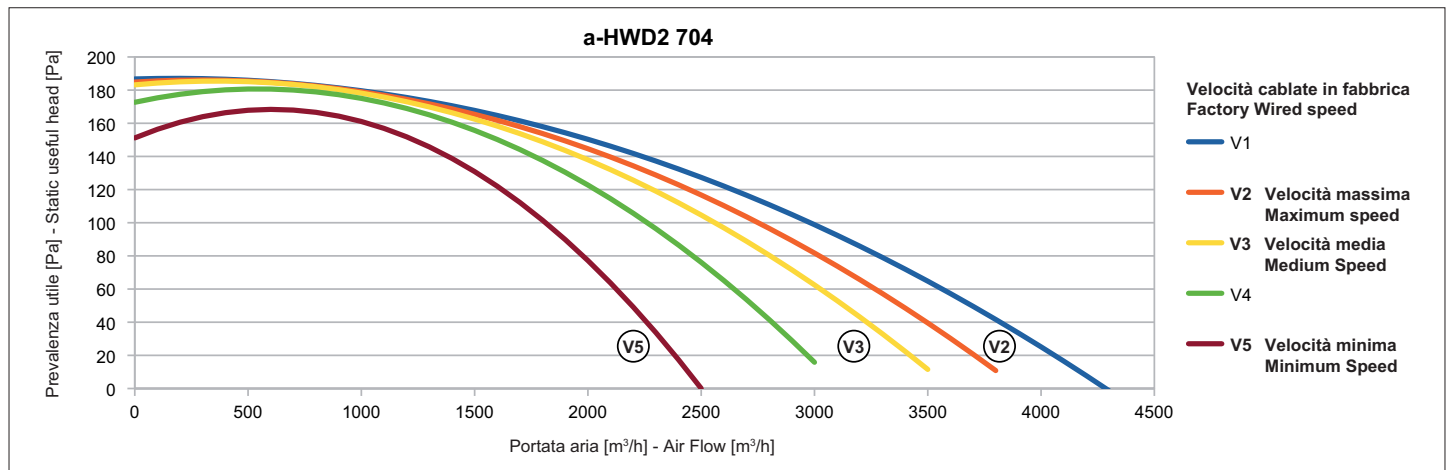
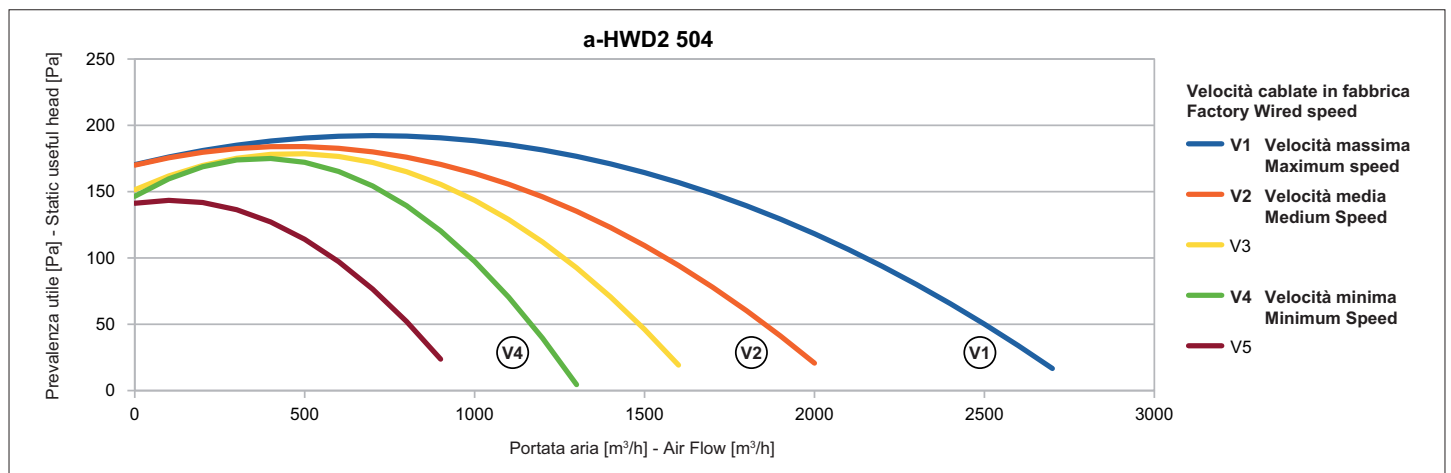
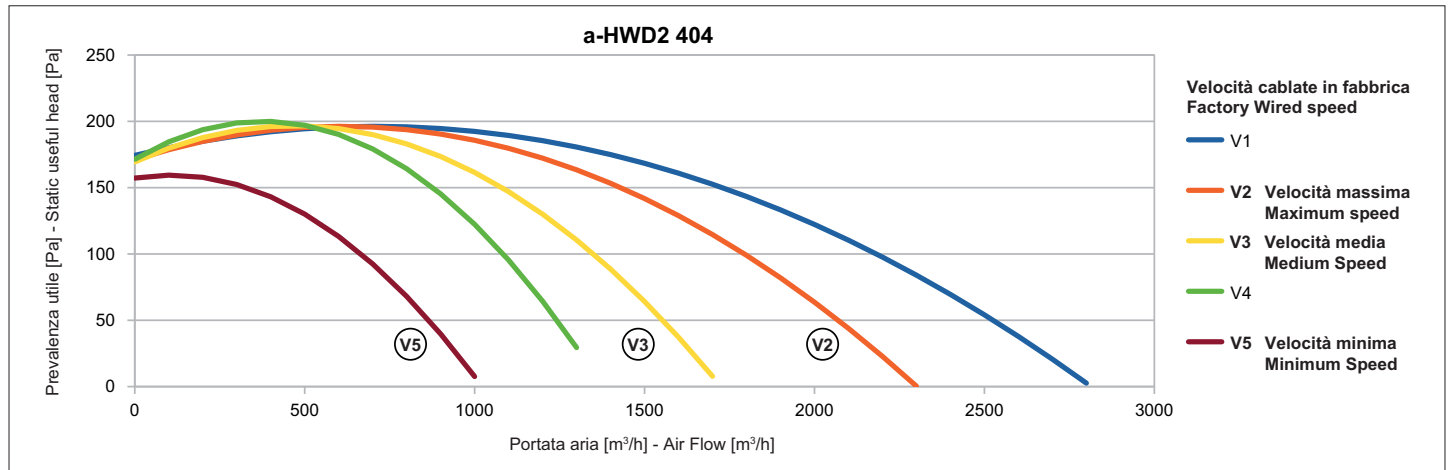
7. FAN PERFORMANCES



a-HWD2 4-tube

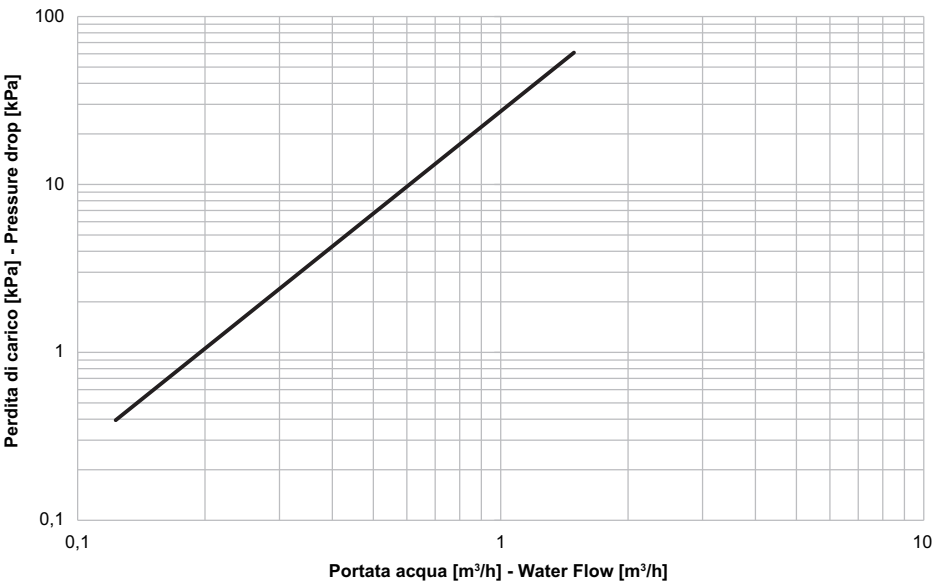


7. FAN PERFORMANCES

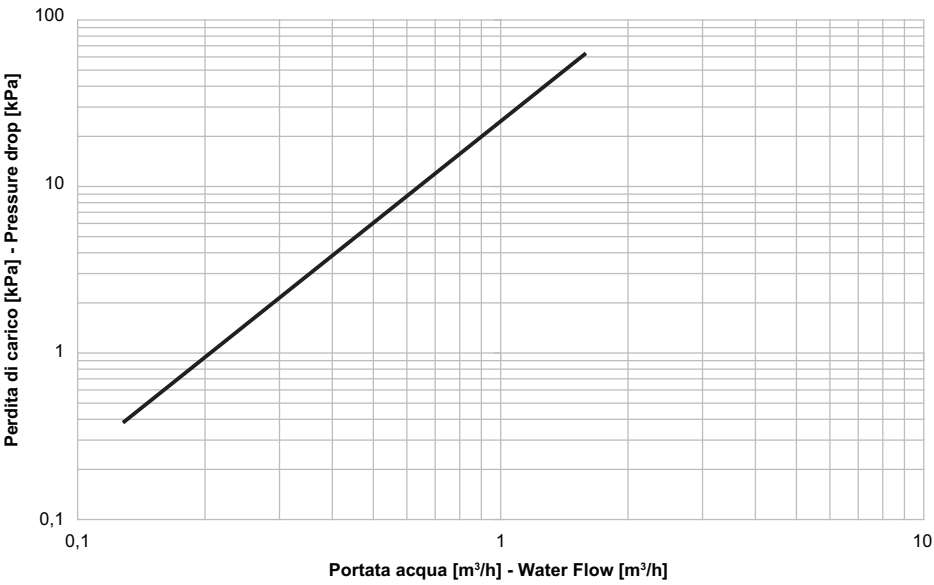


8. PRESSURE DROP

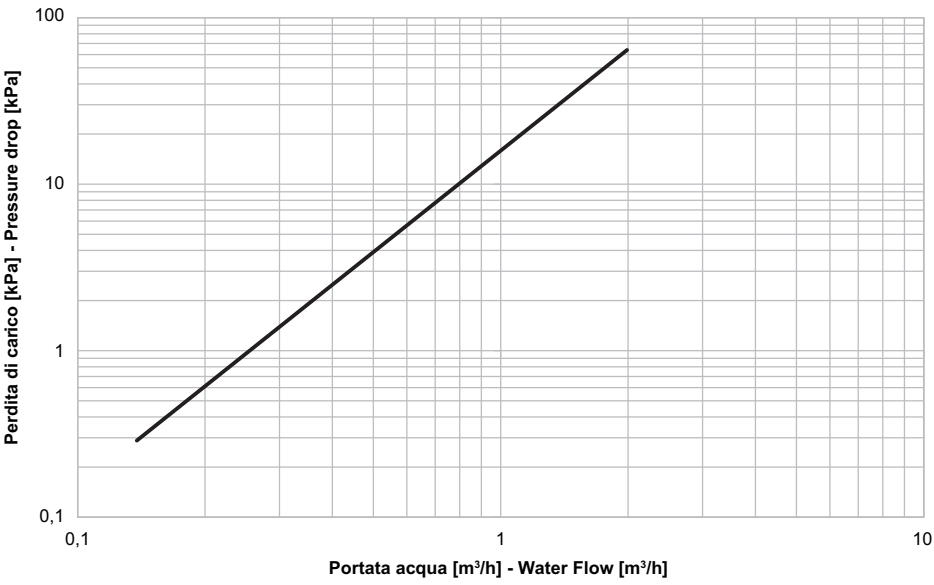
MAIN COIL
COOLING
HEATING
a-HWD2 102



MAIN COIL
COOLING
HEATING
a-HWD2 202

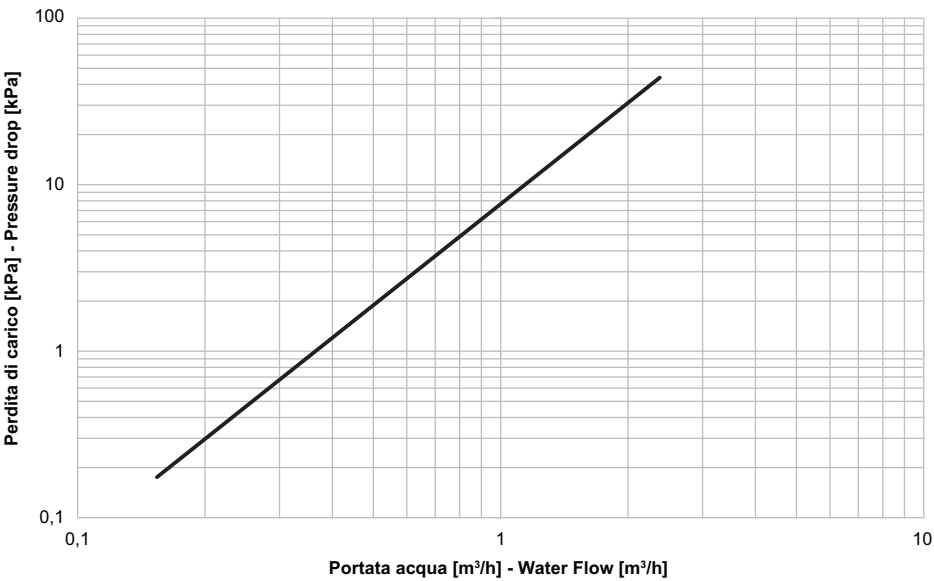


MAIN COIL
COOLING
HEATING
a-HWD2 302

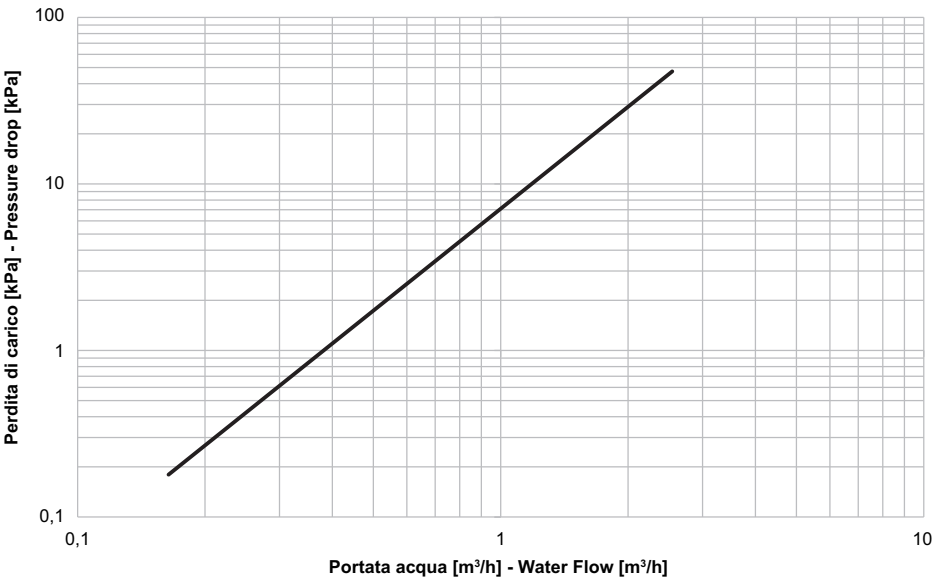


8. PRESSURE DROP

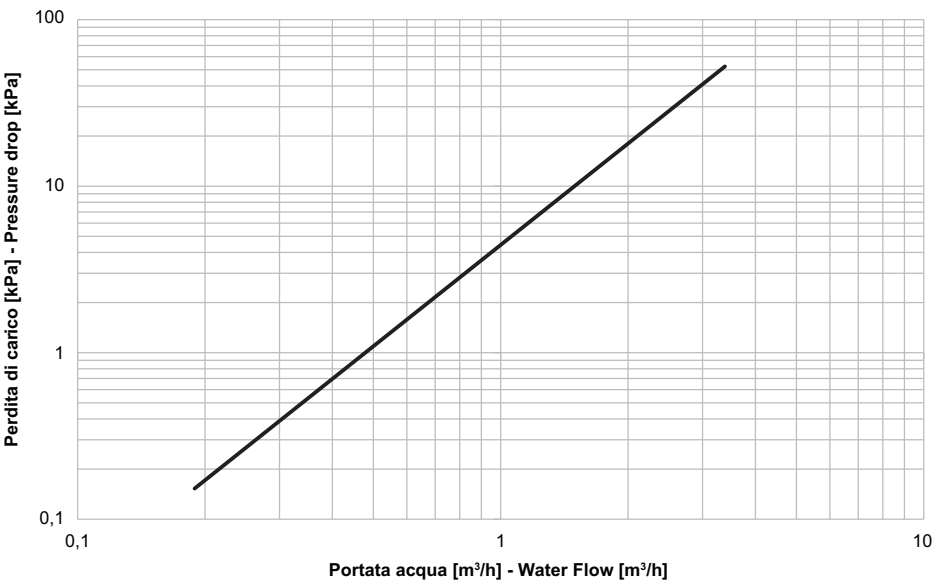
MAIN COIL
COOLING
HEATING
a-HWD2 402



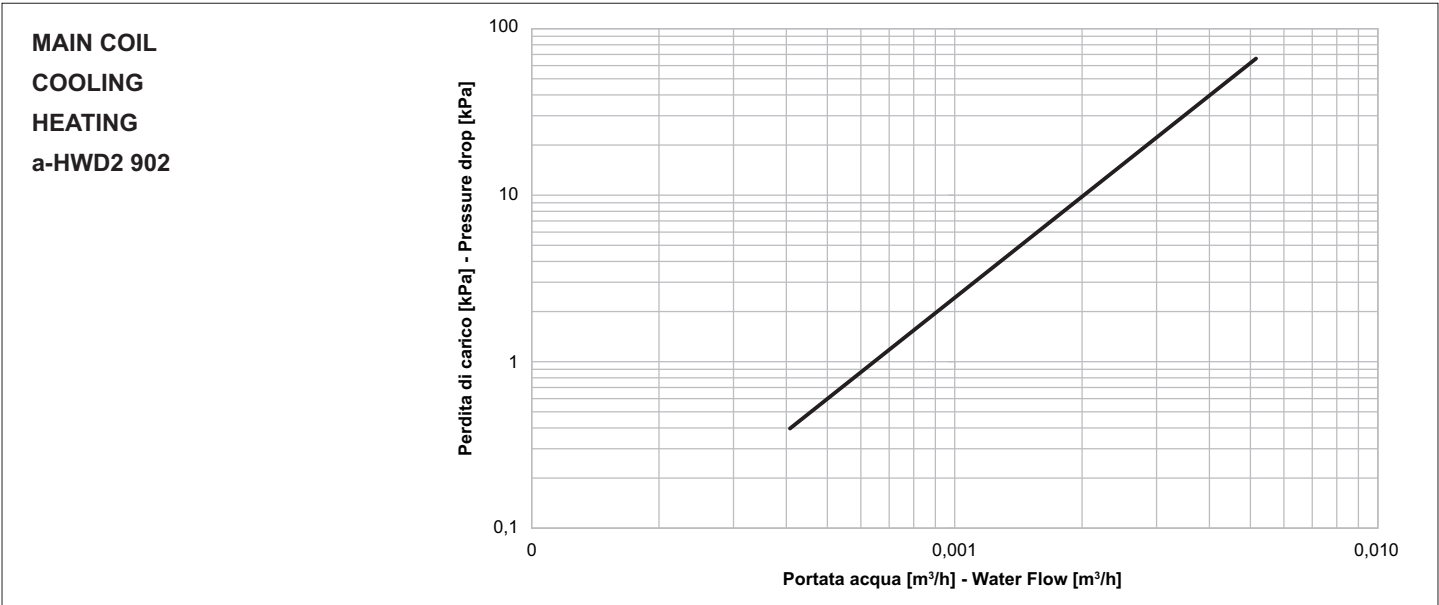
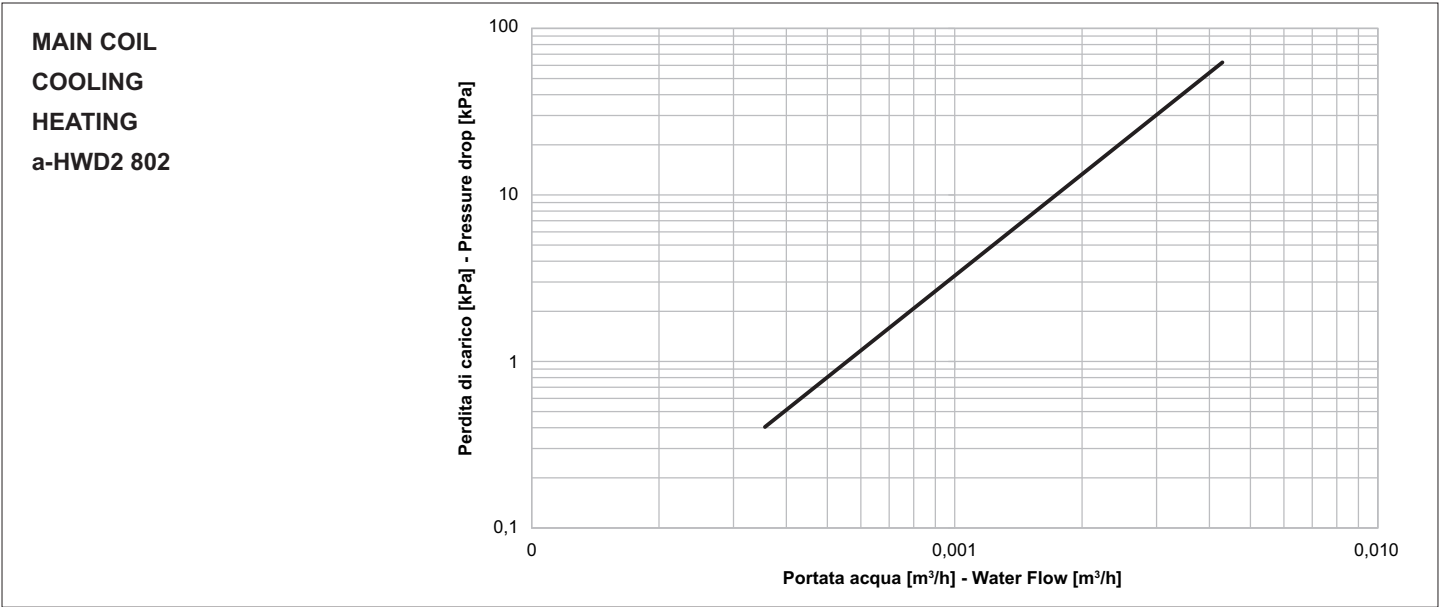
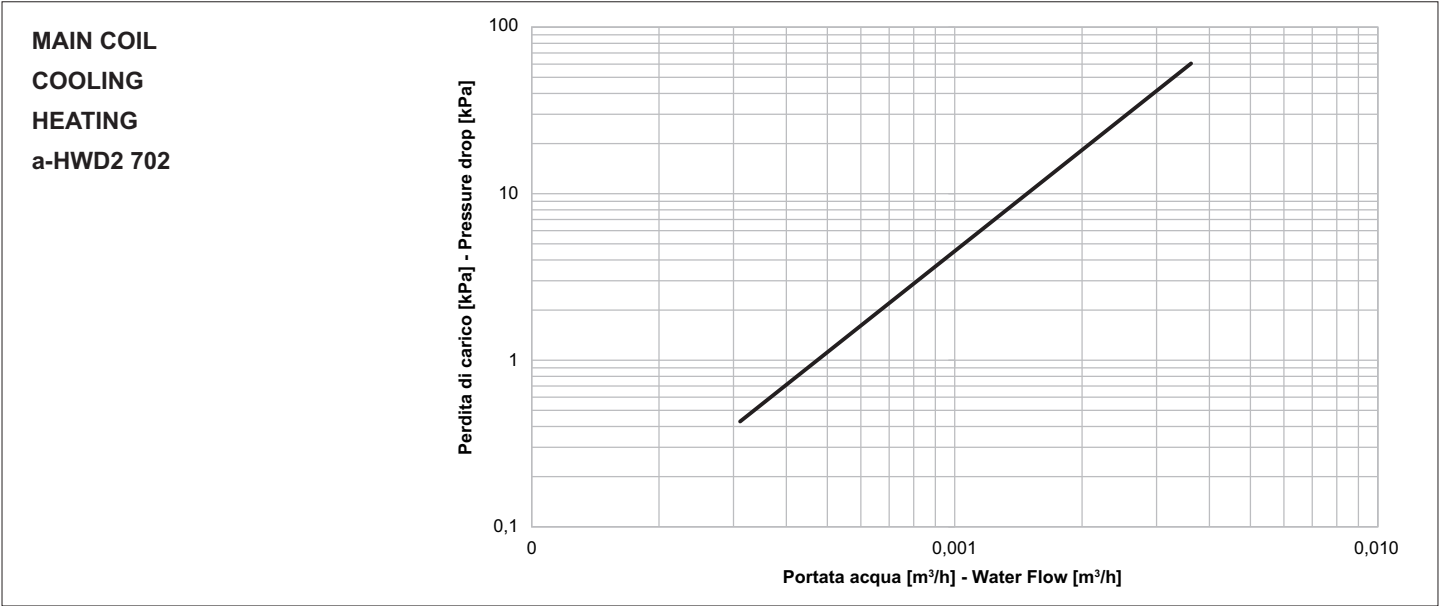
MAIN COIL
COOLING
HEATING
a-HWD2 502



MAIN COIL
COOLING
HEATING
a-HWD2 602

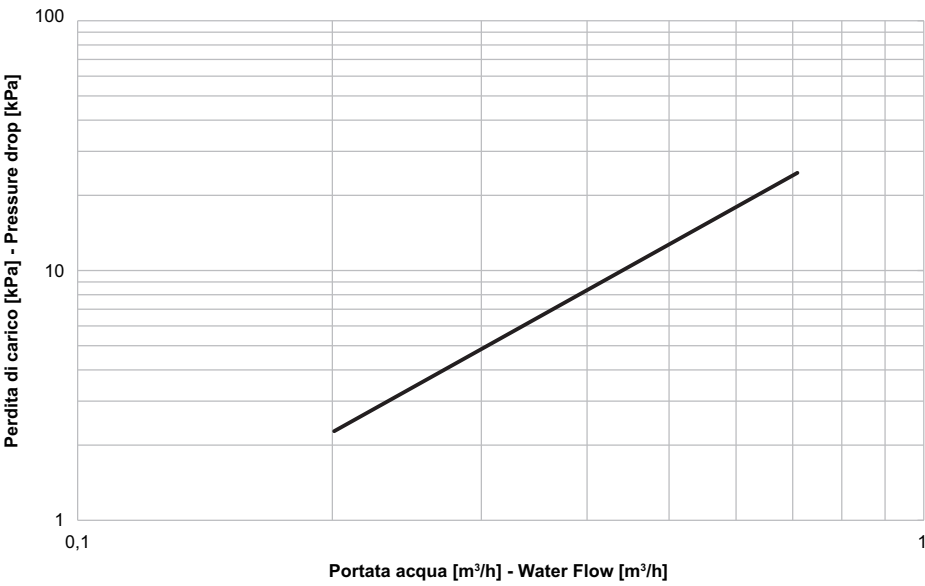


8. PRESSURE DROP

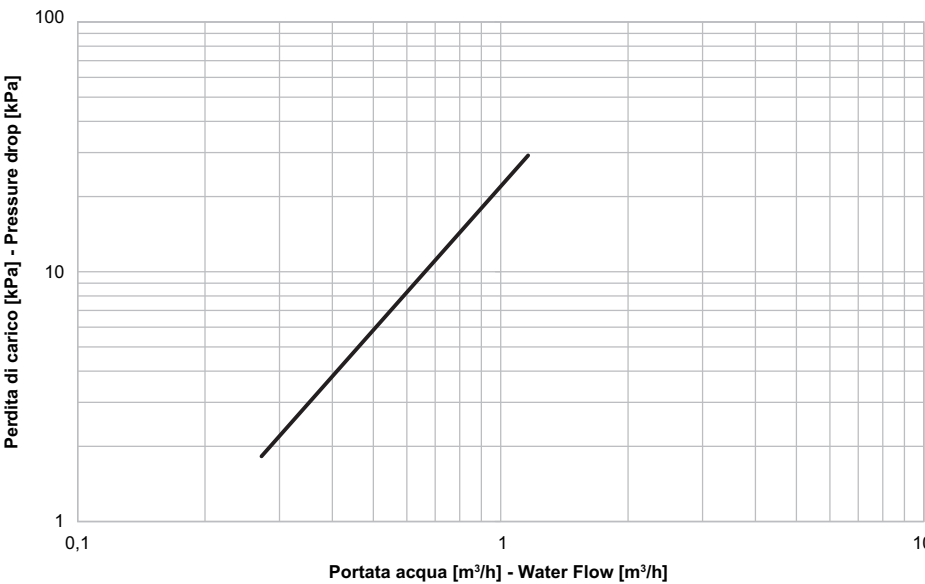


8. PRESSURE DROP

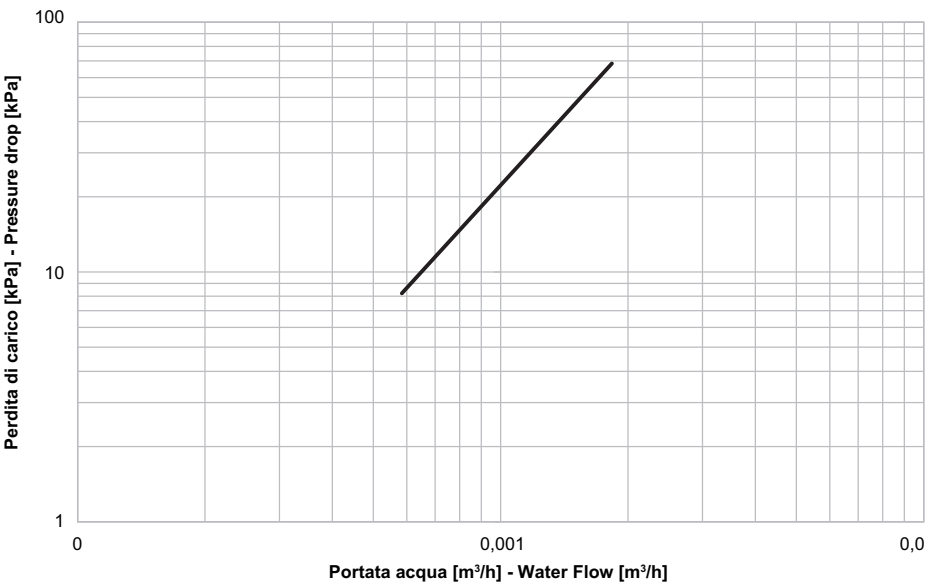
ADDITIONAL COIL
HEATING
a-HWD2 104-204



ADDITIONAL COIL
HEATING
a-HWD2 404-504



ADDITIONAL COIL
HEATING
a-HWD2 704-804



9. SOUND POWER LEVEL

Sound power Lw (IR) on intake side		a-HWD2								
		102/104	202/204	302	402/404	502/504	602	702/704	802/804	902
Lw Min	dB(A)	48	53	55	49	54	56	50	58	59
Lw Med	dB(A)	58	60	61	60	62	63	62	64	65
Lw Max	dB(A)	61	62	63	64	65	65	65	65	66

Sound power based on measurements performed in accordance with Eurovent 8/2

Octave band sound spectrum on intake side									
SOUND POWER [dB] on intake side									
a-HWD2 102-104	125	250	500	1000	2000	4000	8000	[dB(A)]	
Min	43,9	45,4	44,7	42,1	41,8	31,1	25,0	48	
Med	53,5	55,2	54,2	52,2	50,9	46,4	40,9	58	
Max	56,7	58,2	56,7	56,6	53,3	52,2	45,9	61	
a-HWD2 202-204	125	250	500	1000	2000	4000	8000	[dB(A)]	
Min	50,3	50,7	50,4	47,1	47,4	39,6	33,6	53	
Med	55,7	57,2	55,7	55,6	52,3	51,2	44,9	60	
Max	56,4	58,6	55,2	58,8	53,1	53,2	47,0	62	
a-HWD2 302	125	250	500	1000	2000	4000	8000	[dB(A)]	
Min	52,3	52,7	52,4	49,1	49,4	41,6	35,6	55	
Med	56,7	58,2	56,7	56,6	53,3	52,2	45,9	61	
Max	57,4	59,6	56,2	59,8	54,1	54,2	48,0	63	
a-HWD2 402-404	125	250	500	1000	2000	4000	8000	[dB(A)]	
Min	55,2	50,9	47,8	42,9	38,8	30,0	25,9	49	
Med	61,5	62,3	62,0	56,5	54,4	50,0	43,9	60	
Max	64,4	65,2	63,6	60,93	57,92	56,11	51,3	64	
a-HWD2 502-504	125	250	500	1000	2000	4000	8000	[dB(A)]	
Min	56,5	54,6	52,4	47,4	45,5	38,0	30,3	54	
Med	62,4	63,2	61,6	58,9	55,9	54,1	49,3	62	
Max	63,6	65,6	63,2	62,38	58,59	57,73	53,3	65	
a-HWD2 602	125	250	500	1000	2000	4000	8000	[dB(A)]	
Min	58,5	56,6	54,4	49,4	47,5	40,0	32,3	56	
Med	63,4	64,2	62,6	59,9	56,9	55,1	50,3	63	
Max	63,6	65,6	63,2	62,38	58,59	57,73	53,3	65	
a-HWD2 702-704	125	250	500	1000	2000	4000	8000	[dB(A)]	
Min	49,6	49,9	49,3	44,6	41,8	36,5	30,2	50	
Med	58,7	60,9	59,6	56,6	53,0	51,2	45,7	62	
Max	62,1	63,8	60,9	60,0	55,7	54,6	49,5	65	
a-HWD2 802-804	125	250	500	1000	2000	4000	8000	[dB(A)]	
Min	55,2	57,0	56,3	52,0	48,8	45,7	40,0	58	
Med	60,4	63,0	60,3	58,8	54,6	53,5	48,2	64	
Max	62,1	63,8	60,9	60,0	55,7	54,6	49,5	65	
a-HWD2 902	125	250	500	1000	2000	4000	8000	[dB(A)]	
Min	56,2	58,0	57,3	53,0	49,8	46,7	41,0	59	
Med	61,4	64,0	61,3	59,8	55,6	54,5	49,2	65	
Max	63,1	64,8	61,9	61,0	56,7	55,6	50,5	66	

9. SOUND POWER LEVEL

Sound power Lw (OD) on supply side		a-HWD2								
		102/104	202/204	302	402/404	502/504	602	702/704	802/804	902
Lw Min	dB(A)	47	51	52	44	48	52	46	54	55
Lw Med	dB(A)	57	58	59	57	58	59	59	61	62
Lw Max	dB(A)	60	61	61	60	61	62	62	62	63

Sound power based on measurements performed in accordance with Eurovent 8/2

Octave band sound spectrum on supply side								
SOUND POWER [dB] on supply side								
a-HWD2 102-104	125	250	500	1000	2000	4000	8000	[dB(A)]
Min	42,9	44,4	43,7	41,1	40,8	30,1	24,0	47
Med	52,5	54,2	53,2	51,2	49,9	45,4	39,9	57
Max	55,7	57,2	55,7	55,6	52,3	51,2	44,9	60
a-HWD2 202-204	125	250	500	1000	2000	4000	8000	[dB(A)]
Min	48,3	48,7	48,4	45,1	45,4	37,6	31,6	51
Med	53,7	55,2	53,7	53,6	50,3	49,2	42,9	58
Max	55,4	57,6	54,2	57,8	52,1	52,2	46,0	61
a-HWD2 302	125	250	500	1000	2000	4000	8000	[dB(A)]
Min	49,3	49,7	49,4	46,1	46,4	38,6	32,6	52
Med	54,7	56,2	54,7	54,6	51,3	50,2	43,9	59
Max	55,4	57,6	54,2	57,8	52,1	52,2	46,0	61
a-HWD2 402-404	125	250	500	1000	2000	4000	8000	[dB(A)]
Min	50,2	45,9	42,8	37,9	33,8	25,0	20,9	44
Med	58,5	59,3	59,0	53,5	51,4	47,0	40,9	57
Max	60,4	61,2	59,6	56,93	53,92	52,11	47,3	60
a-HWD2 502-504	125	250	500	1000	2000	4000	8000	[dB(A)]
Min	51,0	49,1	46,9	41,9	40,0	32,5	24,8	48
Med	58,7	59,5	57,9	55,2	52,2	50,4	45,6	58
Max	59,5	61,5	59,1	58,28	54,49	53,63	49,2	61
a-HWD2 602	125	250	500	1000	2000	4000	8000	[dB(A)]
Min	54,5	52,6	50,4	45,4	43,5	36,0	28,3	52
Med	59,4	60,2	58,6	55,9	52,9	51,1	46,3	59
Max	60,6	62,6	60,2	59,38	55,59	54,73	50,3	62
a-HWD2 702-704	125	250	500	1000	2000	4000	8000	[dB(A)]
Min	45,6	45,9	45,3	40,6	37,8	32,5	26,2	46
Med	55,7	57,9	56,6	53,6	50,0	48,2	42,7	59
Max	59,1	60,8	57,9	57,0	52,7	51,6	46,5	62
a-HWD2 802-804	125	250	500	1000	2000	4000	8000	[dB(A)]
Min	51,2	53,0	52,3	48,0	44,8	41,7	36,0	54
Med	57,4	60,0	57,3	55,8	51,6	50,5	45,2	61
Max	59,1	60,8	57,9	57,0	52,7	51,6	46,5	62
a-HWD2 902	125	250	500	1000	2000	4000	8000	[dB(A)]
Min	52,2	54,0	53,3	49,0	45,8	42,7	37,0	55
Med	58,4	61,0	58,3	56,8	52,6	51,5	46,2	62
Max	60,1	61,8	58,9	58,0	53,7	52,6	47,5	63

10. SOUND PRESSURE LEVEL

Sound pressure Lp (IR) on intake side		a-HWD2								
		102/104	202/204	302	402/404	502/504	602	702/704	802/804	902
Lw Min	dB(A)	37	42	44	38	43	45	39	47	48
Lw Med	dB(A)	47	49	50	49	51	52	51	53	54
Lw Max	dB(A)	50	51	52	53	54	54	54	54	55

Sound pressure levels in semi-anechoic chamber at 1 m from front of fan and 1 m above the ground

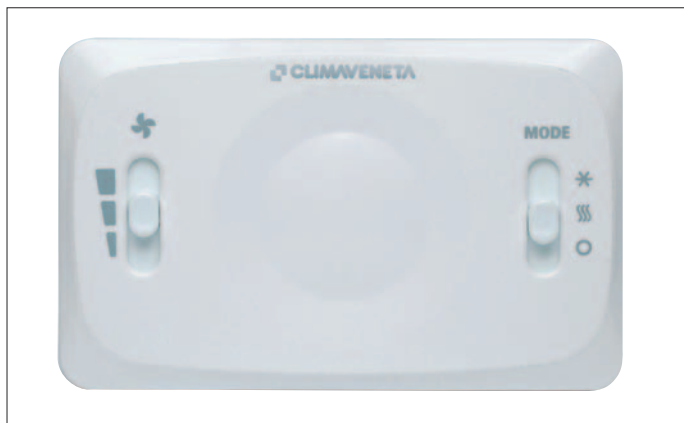
Sound pressure Lw (OD) on supply side		a-HWD2								
		102/104	202/204	302	402/404	502/504	602	702/704	802/804	902
Lw Min	dB(A)	36	40	41	33	37	41	35	43	44
Lw Med	dB(A)	46	47	48	46	47	48	48	50	51
Lw Max	dB(A)	49	50	50	49	50	51	51	51	52

Sound pressure levels in semi-anechoic chamber at 1 m from front of fan and 1 m above the ground

11. REMOTE CONTROLS

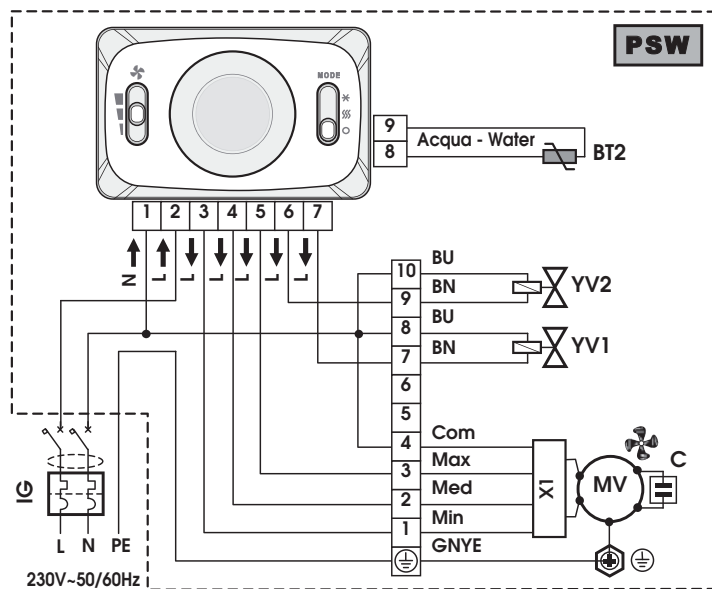
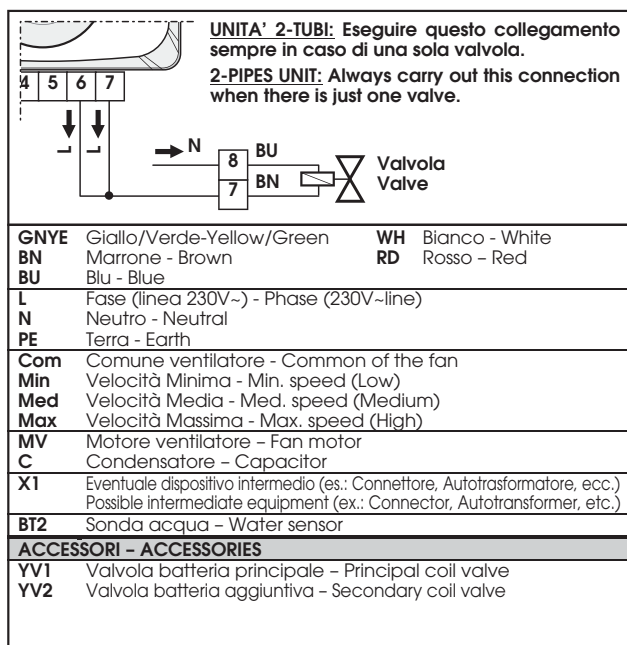
PSW wall-mounted control

The PSW control is used to regulate the airflow (3 speeds), select the summer/winter mode of operation and switch the fan-coil on/off and hot start function by minimum thermostat kit.



Function selector	
Cooling	✱
Heating	☺
Off	○
Fan selector	
Maximum fan speed	☼
Medium fan speed	☼
Minimum fan speed	☼

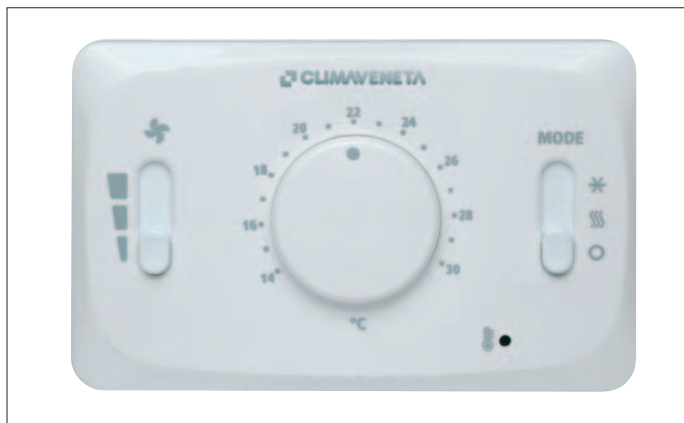
Electrical connections



11. REMOTE CONTROLS

MTW wall-mounted control

The MTW control is used to regulate the air (3 speeds), the temperature through electronic thermostat, to select the summer/winter mode of operation and to switch the fan-coil on/off.



Temperature selector

Adjust the temperature as required by turning the temperature selector from +14°C to 30°C.

Led



Blue Led: indicates fan-coil thermostat call

Function selector

MODE

Cooling



Heating



Off



Fan selector



Maximum fan speed



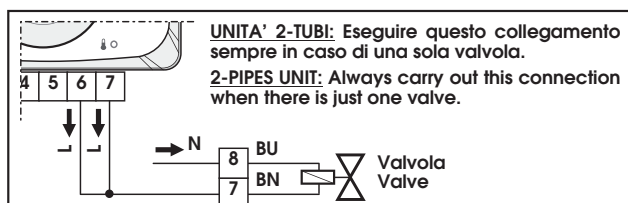
Medium fan speed



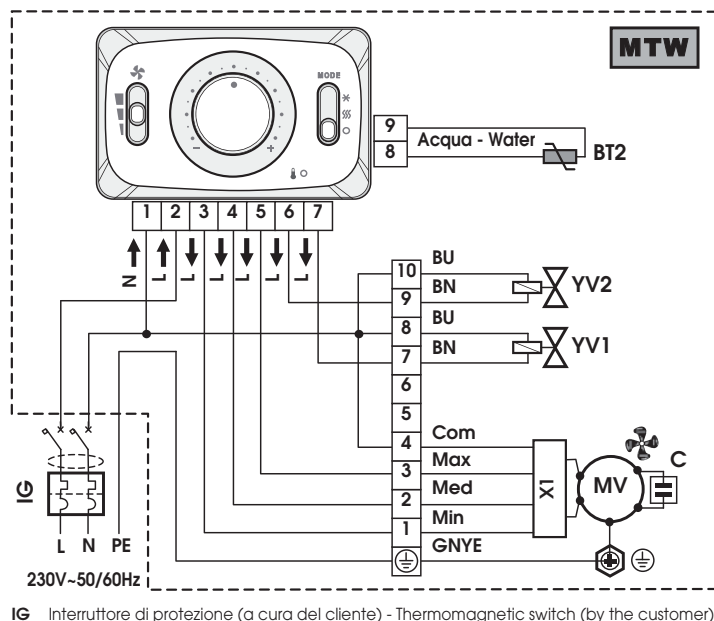
Minimum fan speed



Electrical connections



GNYE	Giallo/Verde-Yellow/Green	WH	Bianco - White
BN	Marrone - Brown	RD	Rosso - Red
BU	Blu - Blue		
L	Fase (linea 230V~) - Phase (230V~line)		
N	Neutro - Neutral		
PE	Terra - Earth		
Com	Comune ventilatore - Common of the fan		
Min	Velocità Minima - Min. speed (Low)		
Med	Velocità Media - Med. speed (Medium)		
Max	Velocità Massima - Max. speed (High)		
MV	Motore ventilatore - Fan motor		
C	Condensatore - Capacitor		
X1	Eventuale dispositivo intermedio (es.: Connettore, Autotrasformatore, ecc.) Possible intermediate equipment (ex.: Connector, Autotransformer, etc.)		
BT2	Sonda acqua - Water sensor		
ACCESSORI - ACCESSORIES			
YV1	Valvola batteria principale - Principal coil valve		
YV2	Valvola batteria aggiuntiva - Secondary coil valve		



11. REMOTE CONTROLS

ATW wall-mounted control

The ATW control is used to regulate the air (3 speeds + auto), the temperature through electronic thermostat, to select the summer / winter / auto mode of operation and to switch the fan-coil on / off.



Temperature selector

Adjust the temperature as required by turning the temperature selector from +14°C to 30°C.

Function selector

MODE

Select the mode of operation pushing the **MODE** button.

Mode led

Cooling



Heating



Automatic setting

AUTO

Speed button



Select the fan speed pushing the  button.

The repeated pressure of fan button determines speed required.

Maximum fan speed



Medium fan speed

Minimum fan speed

Automatic fan speed

AUTO

OFF: press the button MODE changing modes till all leds are turned off. (HEAT --> COOL --> AUTO --> OFF)

Led

Blue LED: Heating / Cooling plus regulator call
Blue LED blinking: Hot start / Too Cool function active



Blue LED: operation in Cooling mode



Blue LED: operation in Heating mode



Blue LED: automatic cooling / heating mode selection

AUTO

Electrical connections

Collegamento con accessorio Resistenza elettrica
Connection with accessory Electrical heater

Power Min = BK-RD
Power Max = WH-RD

Termostati Sicurezza:

- TS1 riarmo automatico
- TS2 riarmo manuale

Safety Thermostats:

- TS1 automatic reset
- TS2 manual reset

Obbligatorio: Quando presente la res. elettr., proteggere la linea alimentazione 230V~50/60Hz del Relè tramite adeguato interruttore magnetotermico, a cura del cliente. **Compulsory:** When electrical heater is installed, protect the 230V~50/60Hz feeding line of the Relay with appropriate thermomagnetic switch, by the customer.

GNVE	Giallo/Verde - Yellow/Green	WH	Bianco - White
BN	Marrone - Brown	RD	Rosso - Red
BU	Blu - Blue	BK	Nero - Black
L	Fase (linea 230V~) - Phase (230V~line)		
N	Neutro - Neutral		
PE	Terra - Earth		
Com	Comune ventilatore - Common of the fan		
Min	Velocità Minima - Min. speed (Low)		
Med	Velocità Media - Med. speed (Medium)		
Max	Velocità Massima - Max. speed (High)		
MV	Motore ventilatore - Fan motor		
C	Condensatore - Capacitor		
X1	Eventuale dispositivo intermedio (es.: Connettore/Autotrasf./ecc.) Possible intermediate equipment (ex.: Connector/Autotransf./etc.)		
BT2	Sonda acqua - Water sensor		

ACCESSORI - ACCESSORIES

YV1 Valvola batteria principale - Principal coil valve
YV2 Valvola batteria aggiuntiva - Secondary coil valve

Kit GATEWAY

Kit BUS-ADAPTER

ATW

IG Interruttore di protezione (a cura del cliente) - Thermomagnetic switch (by the customer)
SA1 Contatto multifunzionale (a cura del cliente) - Multifunctional contact (by the customer)

11. REMOTE CONTROLS

SPB INTERFACE

EACH CONTROL PANEL CAN ONLY MANAGE ONE UNIT

To connect Climaveneta remote controls to the unit, see the table below, listing the interface board (SPB kit) to be used, according to unit size.

SIZES	Remote controls				SPB
HWD2	PSW	MTW	ATW	EKW/IK - HB board	
102/104	OK	OK	1 SPB kit required per unit	OK	OK
202/204	OK	OK	1 SPB kit required per unit	OK	OK
302	OK	OK	1 SPB kit required per unit	OK	OK
402/404	OK	OK	1 SPB kit required per unit	OK	OK
502/504	OK	OK	1 SPB kit required per unit	OK	OK
602	OK	OK	1 SPB kit required per unit	OK	OK
702/704	1 SPB kit required per unit	1 SPB kit required per unit	1 SPB kit required per unit	1 SPB kit required per unit	OK
802/804	1 SPB kit required per unit	1 SPB kit required per unit	1 SPB kit required per unit	1 SPB kit required per unit	OK
902	1 SPB kit required per unit	1 SPB kit required per unit	1 SPB kit required per unit	1 SPB kit required per unit	OK

Description	Code
SPB kit	5549058200
PSW remote control	5549049200
MTW remote control	5549049600
ATW remote control	5549050000

Electrical connections unit with kit SPB

Obbligatorio: Quando presente la res. elettr., proteggere la linea alimentazione 230V~50/60Hz del Relè (morsetti 11-12) tramite adeguato interruttore magnetotermico, a cura del cliente.
Compulsory: When electrical heater is installed, protect the 230V~50/60Hz feeding line of the Relay (terminals 11-12) with appropriate thermomagnetic switch, by the customer.

Collegamento con accessorio RESISTENZA ELETTRICA
Connection with accessory ELECTRICAL HEATER

Termostati Sicurezza - Safety Thermostats:

- TS1 riarmo automatico - automatic reset
- TS2 riarmo manuale - manual reset

GNYE Giallo/Verde-Yellow/Green	WH Bianco - White
BN Marrone - Brown	RD Rosso - Red
BU Blu - Blue	BK Nero - Black

L Fase (linea 230V~) - Phase (230V~line)
N Neutro - Neutral
PE Terra - Earth

Com Comune ventilatore - Common of the fan
Min Velocità Minima - Min. speed (Low)
Med Velocità Media - Med. speed (Medium)
Max Velocità Massima - Max. speed (High)

MV Motore ventilatore - Fan motor
C Condensatore - Capacitor

X1 Eventuale dispositivo intermedio (es.: Connettore, Autotrasformatore, ecc.) - Possible intermediate equipment (ex.: Connector, Autotransformer, etc.)

SPB Scheda di interfaccia (Powerbox)
 Interface board (Powerbox)

ACCESSORI - ACCESSORIES

YV1 Valvola batteria principale - Principal coil valve
YV2 Valvola batteria aggiuntiva - Secondary coil valve

A CURA DEL CLIENTE - BY THE CUSTOMER

CR Comando remoto - Remote control
IG Interruttore di protezione - Thermomagnetic switch

Note: Standard solo morsetti N,L,PE,1,2,3 (morsetti 4...12 presenti solo se installati i relativi accessori)
 Standard only terminals N,L,PE,1,2,3 (terminals 4...12 exist if related accessories are installed)

Obbligatorio: Quando presente la res. elettr., proteggere la linea alimentazione 230V~50/60Hz del Relè (morsetti 11-12) tramite adeguato interruttore magnetotermico, a cura del cliente.
Compulsory: When electrical heater is installed, protect the 230V~50/60Hz feeding line of the Relay (terminals 11-12) with appropriate thermomagnetic switch, by the customer.



Termostati Sicurezza - Safety Thermostats:

- **TS1** riarmo automatico - automatic reset
- **TS2** riarmo manuale - manual reset

GNYE	Giallo/Verde-Yellow/Green	WH	Bianco - White
BN	Marrone - Brown	RD	Rosso - Red
BU	Blu - Blue	BK	Nero - Black

Com	Comune ventilatore - Common of the fan
Min	Velocità Minima - Min. speed (Low)
Med	Velocità Media - Med. speed (Medium)
Max	Velocità Massima - Max. speed (High)

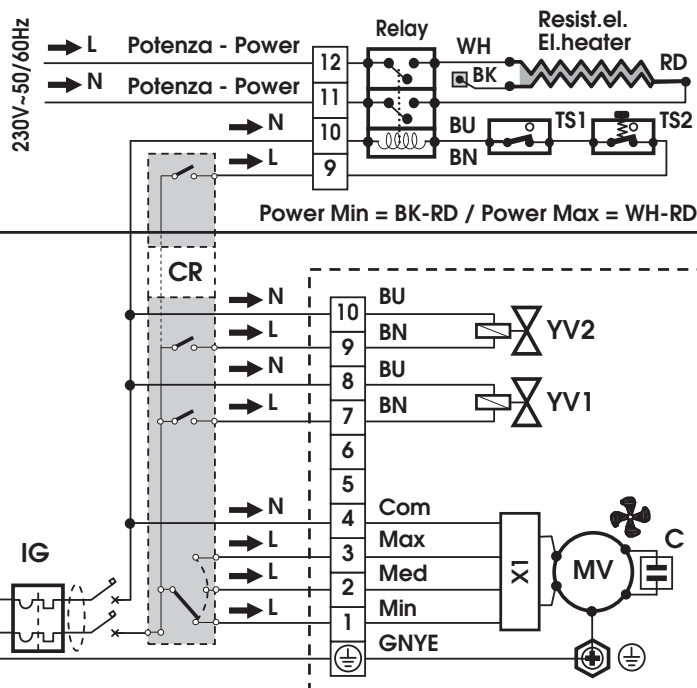
X1	Eventuale dispositivo intermedio (es.: Connettore, Autotrasformatore, ecc.) - Possible intermediate equipment (ex.: Connector, Autotransformer, etc.)
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ACCESSORI - ACCESSORIES

YV1	Valvola batteria principale – Principal coil valve
YV2	Valvola batteria aggiuntiva – Secondary coil valve

A CURA DEL CLIENTE - BY THE CUSTOMER

CR	Comando remoto - Remote control
IG	Interruttore di protezione - Thermomagnetic switch



Note: Standard solo morsetti PE,1,2,3,4 (morsetti 5....12 presenti solo se installati i relativi accessori)
Standard only terminals PE,1,2,3,4 (terminals 5...12 exist if related accessories are installed)

12. ACCESSORIES

Main coil 2-way valve unit 3/4"

Kit with copper fittings and electromechanical actuator (ON-OFF) 230V, PWM, 0-10V and suitable for 2-pipe systems. This kit may be used to stop the flow of water of the main coil in the fan coils. The electromechanical actuator is NC.

Additional coil 2-way valve unit kit

Kit with copper fittings and electromechanical actuator (ON-OFF) 230V, PWM, 0-10V and suitable for 4-pipe systems. This kit may be used to stop the flow of water of the additional coil in the fan coils. The electromechanical actuator is NC.

Main coil 3-way valve unit with by-pass way (4 idraulic connections) 3/4" kit

Kit with copper fittings and electromechanical actuator (ON-OFF) 230V, PWM, 0-10V and suitable for 2-pipe systems. This kit may be used to divert the flow of water of the main coil in the fan coils. The electromechanical actuator is NC.

Additional coil 3-way valve unit kit

Kit with copper fittings and electromechanical actuator (ON-OFF) 230V, PWM, 0-10V and suitable for 4-pipe systems. This kit may be used to divert the flow of water of the additional coil in the fan coils. The electromechanical actuator is NC.

Water circuit kits

Water circuit kits complete with copper pipes and 2 ball valves, only available as accessories, not fitted on the unit.

Hot water coil kit

The additional hot water 1 row is installed on top of the main coil in the four-pipe systems. Using the controls with the additional coil valve kit, the additional coil may be regulated by selecting the suitable mode of operation.

Supply plenum section (straight)

Made from galvanised sheet metal, this carries the air to the ducting on built-in horizontal and vertical installations.

Supply plenum section (90°)

Made from galvanised sheet metal, this carries the air to the ducting at 90° from the direction of fan coil outlet flow. Suitable for built-in horizontal and vertical installations.

Supply plenum section with circular ducting

Made from galvanised sheet metal, this carries the air to the circular ducting on built-in horizontal and vertical installations.

Straight intake plenum section

Made from galvanised sheet metal, this carries the intake air from the ducting on built-in horizontal and vertical installations.

90° intake plenum section

Made from galvanised sheet metal, this carries the intake air from the ducting at 90° from the direction of fan coil outlet flow. Suitable for built-in horizontal and vertical installations. Not suitable for versions with air intake from the front, DFIO / DFIV.

Horizontal Fan Coil auxiliary tray

Made in thermoplastic material, this tray collects the condensate that forms during summer operation. The kit is suitable for horizontal fan coil installations.

Vertical Fan Coil auxiliary tray

Made from insulated galvanised sheet metal, this pan collects the condensate that forms during cooling operation.

Interface SPB kit

The SPB interface kit is used for multiple connection of hydronic terminal units, which may be managed with a single control. For correct installation, install an SPB interface on every terminal unit.

Hose kit

The hose kit is a manifold coupling for connecting the fan coil to the main water system.

Manual control for dampers

Motorised control for dampers

Motor that automatically adjusts the position of the outside air intake damper.

Section with manual air damper, 0-33% - 100-67% closing

Section fitted with two internal blades, coupled together at an angle of 90°: one blade is the same height as the section (and therefore guarantees total opening/closing of 1/3 "L" of the section); the other is half of the height of the section (and therefore guarantees total opening or simple closing of the remaining 2/3 "L" of the section). An intermediate baffle between the two blades divides the section into two parts: one part (1/3 "L") for connection to an outside air duct (air change), and the other part (2/3 "L") for connection an inside air duct (recirculation).

Rotating the centre pin, the two blades turn in synch (when one opens, the other closes, and vice-versa), allowing the air-conditioning unit flow-rate to be adjusted from 100% inside air (corresponding to 0% outside air) to 67% inside air (corresponding to the 33% outside air)

It can also be used in "reverse" mode, therefore with the opposite percentages of inside/outside air.

- Simple and effective solution for fitting the system with adjustable outside air intake (outside air 0-33% of total air flow).
 - Essential accessory for environments where air change requirements are specified by legislation.
 - The most simple and economical solution when quick adjustment and mixture of the inside/outside air streams is required.
- The damper can be ordered also on the version with motor regulation.

Section with manual air damper, 0-100% closing

Section fitted with one internal blade (same height as the section) that, when turning, allows the air-conditioning unit flow-rate to be adjusted (either all inside air, or all outside air) from 100% (total opening) to 0% (total closing).

- Useful for precise calibration of air flow-rate on AC units (with asynchronous motor, i.e. not modulating fans).
- Excellent for units operating on outside air only.
- The most simple and economical solution when quick adjustment of air-conditioning unit flow-rate is required.

The damper can be ordered also on the version with motor regulation.

Supplementary heating section with 230 V electric heaters.

Supplementary heating section with 400 V electric heaters.

Labyrinth silencer section on supply/intake.

Condensate drain pump for units with horizontal/vertical installation.

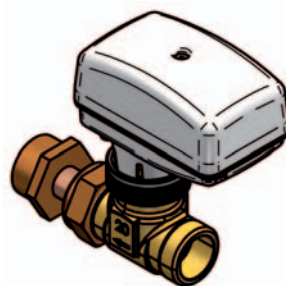
12. ACCESSORIES

MODULATING 2 WAY KIT VALVE 0-10V AND 3 POINTS, 3/4", FOR MAIN AND ADDITIONAL COIL

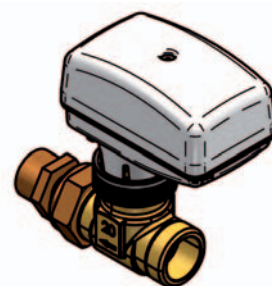
The 2-way valve kits for the main or supplementary coil are used to divert the flow of water to the corresponding coil on the hydronic units.

The 0-10 V or 3-position modulating valve kits can be managed directly by Climaveneta controllers; the (i)-HB power board is required with the 0-10 V valve expansion module

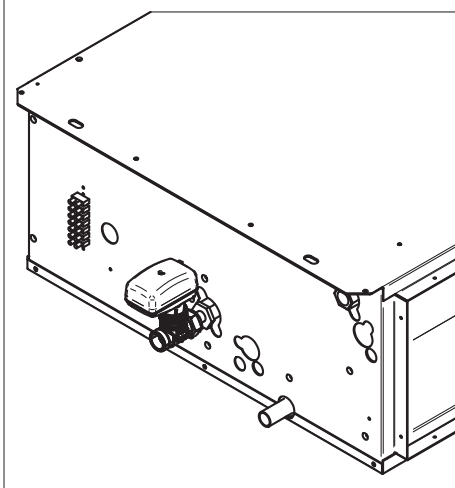
MAIN COIL



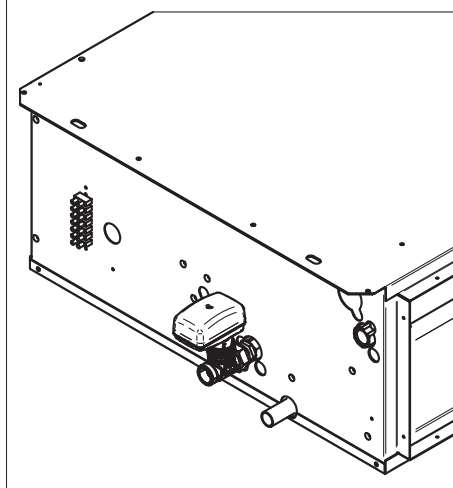
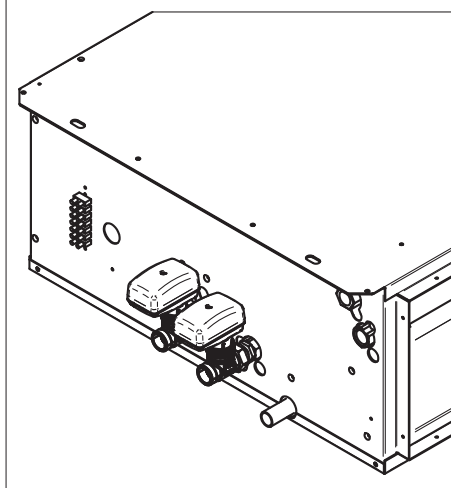
ADDITIONAL COIL



2 WAYS MAIN COIL KIT VALVE



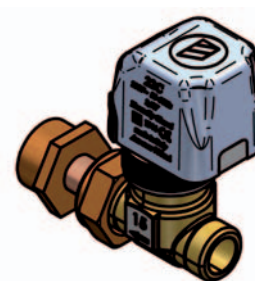
2 WAY ADDITIONAL COIL KIT VALVE

2 WAY MAIN AND ADDITIONAL COIL KIT VALVE
(MODULANTING ACTUATOR 0-10V)

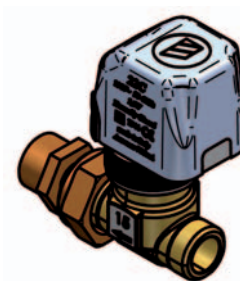
MAIN AND ADDITIONAL COIL VALVE KIT - 2 WAY (ON/OFF - PWM)

The valve kit is used to divert the flow of water to the main or/and supplementary coil on hydronic units with centrifugal fan.

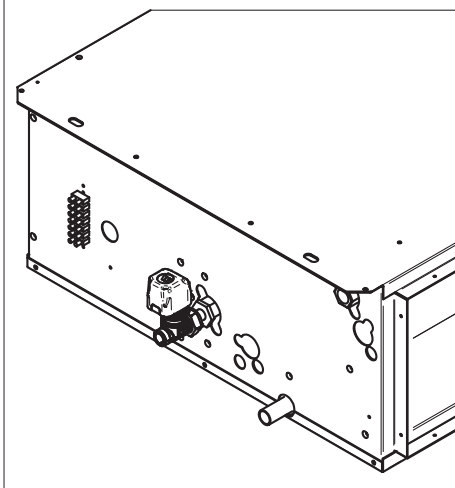
MAIN COIL



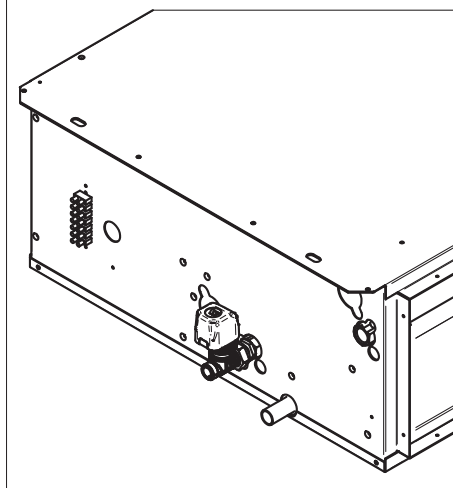
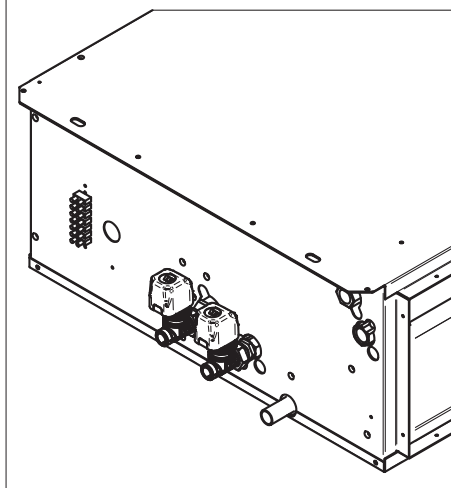
ADDITIONAL COIL



2 WAYS MAIN COIL KIT VALVE



2 WAY ADDITIONAL COIL KIT VALVE

2 WAY MAIN AND ADDITIONAL COIL KIT VALVE
(ON-OFF - PWM)

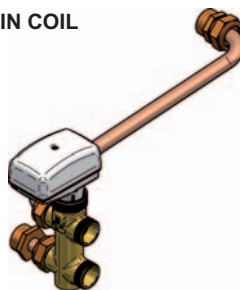
12. ACCESSORIES

VALVE KIT MODULANTING 0-10V AND 3 POINTS - 3 WAYS - 3/4" FITTINGS

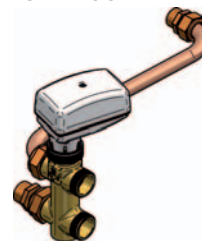
The 3-way valve kits for the main or supplementary coil are used to divert the flow of water to the corresponding coil on the hydronic units.

The 0-10 V or 3-position modulating valve kits can be managed directly by Climaveneta controllers; the (i)-HB power board is required with the 0-10 V valve expansion module.

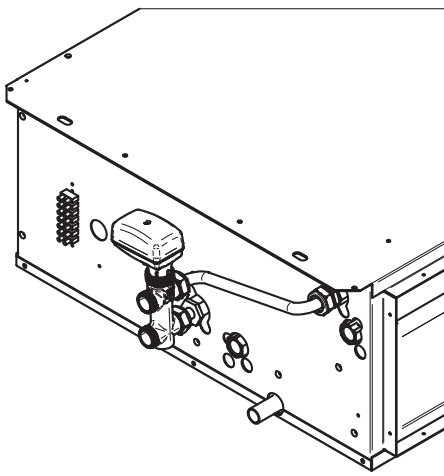
MAIN COIL



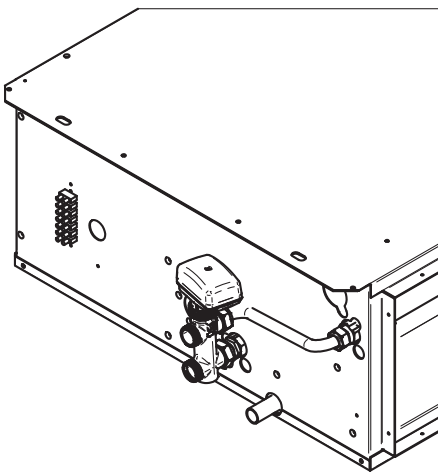
ADDITIONAL COIL



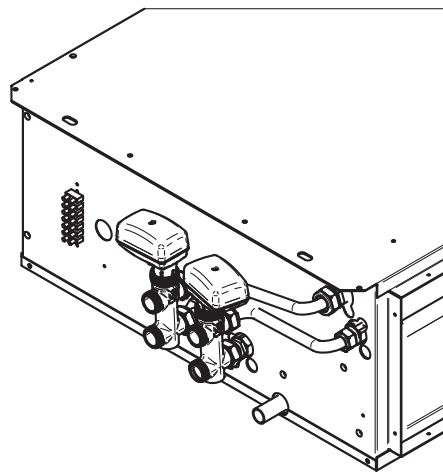
3 WAYS MAIN COIL KIT VALVE
(MODULATING ACTUATOR 0-10 V AND 3P)



3 WAYS ADDITIONAL COIL KIT VALVE
(MODULATING ACTUATOR 0-10 V AND 3P)



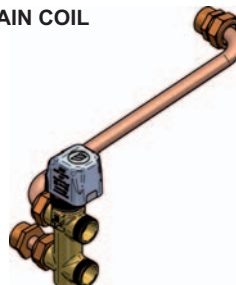
3 WAYS MAIN + ADDITIONAL COIL KIT VALVE
(MODULATING ACTUATOR 0-10 V AND 3P)



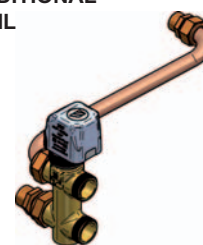
MAIN AND ADDITIONAL COIL VALVE KIT - 3 WAY - 3/4" FITTINGS (ON/OFF - PWM)

This valve kit allows the main and/or additional coil water flow to be diverted for unit with centrifugal fan.

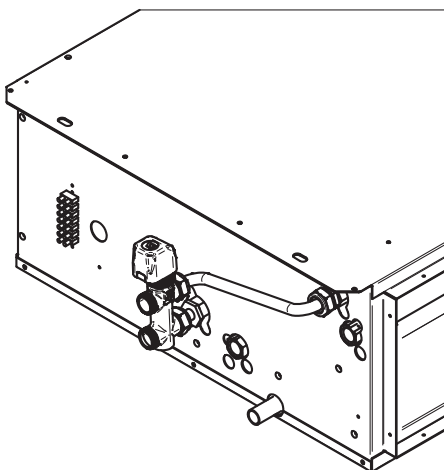
MAIN COIL



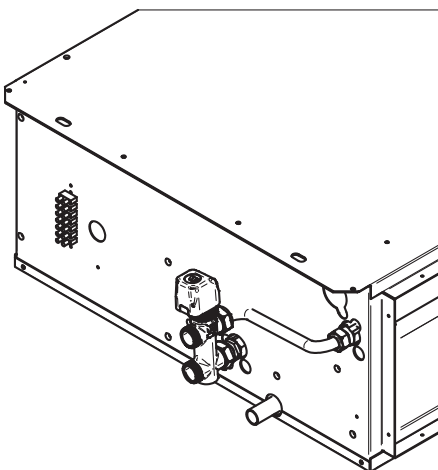
ADDITIONAL COIL



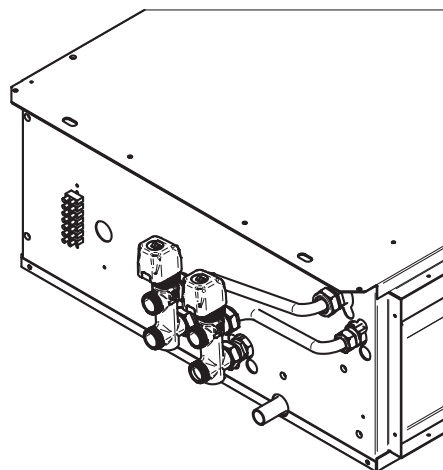
3 WAYS MAIN COIL KIT VALVE



3 WAY ADDITIONAL COIL KIT VALVE



3 WAYS MAIN AND ADDITIONAL COIL KIT VALVE WITH BY PASS
(ON/OFF - PWM)



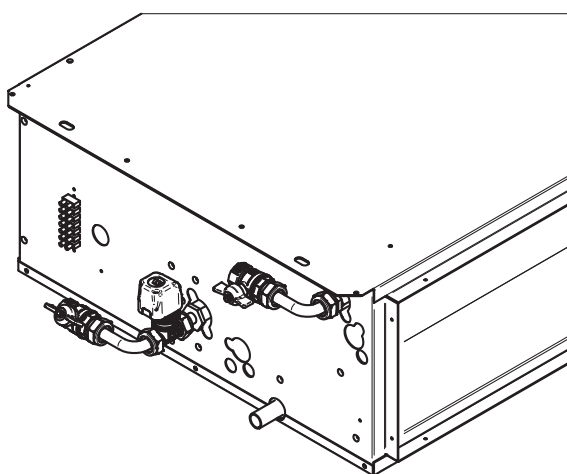
12. ACCESSORIES

WATER KIT 2-WAYS VALVE 3/4" FITTING FOR MAIN AND ADDITIONAL COIL

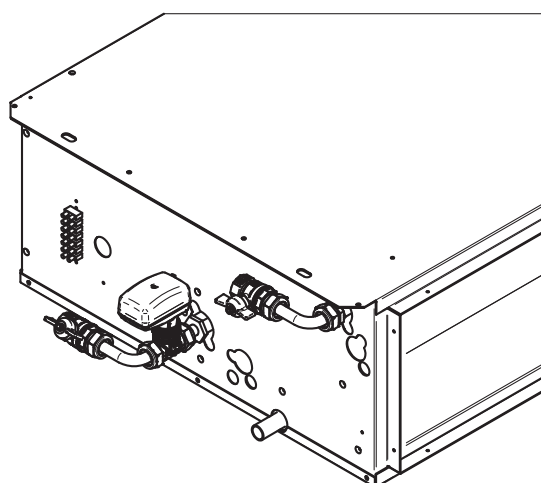
MAIN COIL

ADDITIONAL
COIL

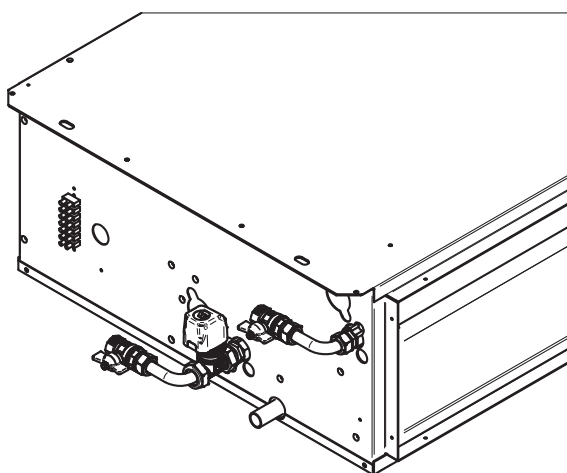
WATER KIT 2-WAYS VALVE FOR MAIN COIL
(ACTUATOR ON-OFF_PWM)



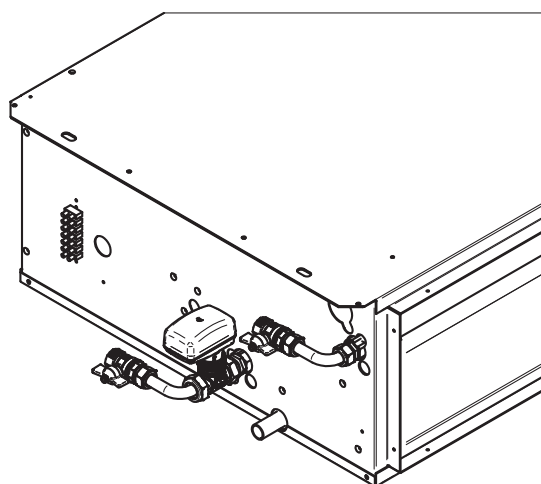
WATER KIT 2-WAYS VALVE FOR MAIN COIL
(MODULATING ACTUATOR 0-10V)



WATER KIT 2-WAYS VALVE FOR ADDITIONAL COIL
(ACTUATOR ON-OFF_PWM)



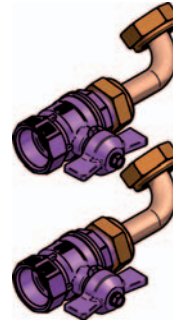
WATER KIT 2-WAYS VALVE FOR ADDITIONAL COIL
(MODULATING ACTUATOR 0-10V)



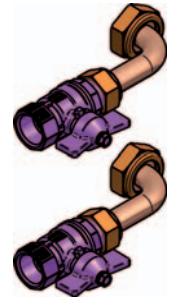
12. ACCESSORIES

WATER KIT 3-WAYS VALVE 3/4" FITTING FOR MAIN COIL AND ADDITIONAL COIL

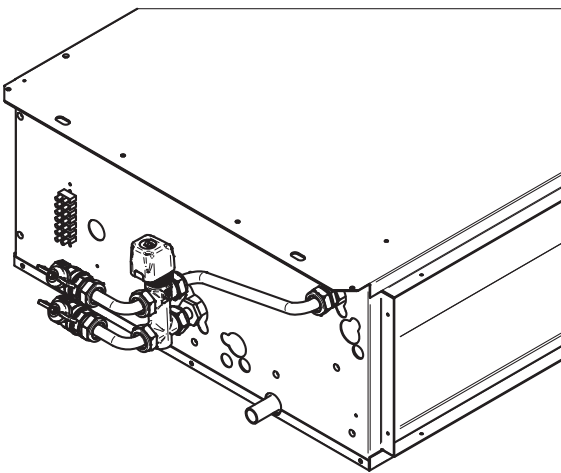
MAIN COIL



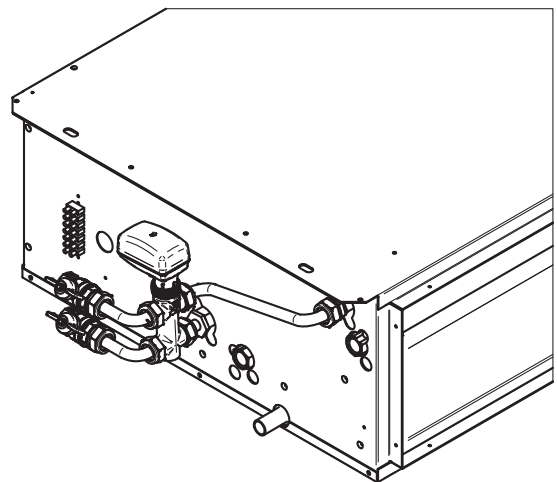
ADDITIONAL COIL



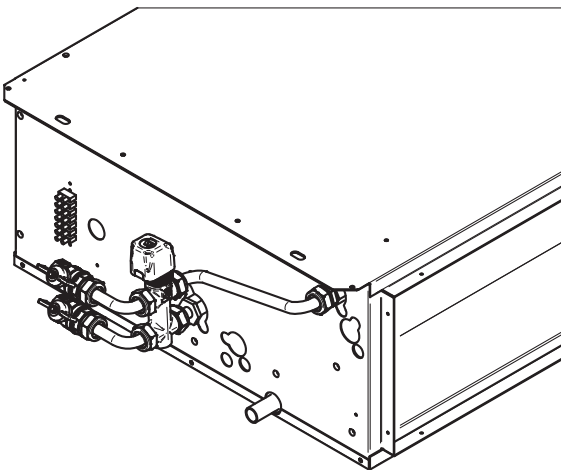
WATER KIT 3-WAYS VALVE FOR MAIN COIL
(ACTUATOR ON-OFF_PWM)



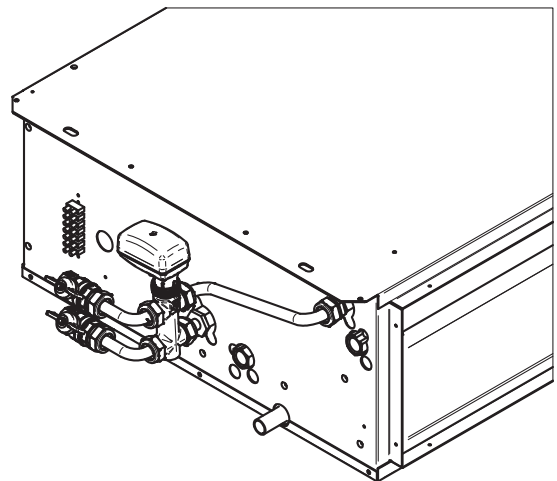
WATER KIT 3-WAYS VALVE FOR MAIN COIL
(MODULATING ACTUATOR 0-10V)



WATER KIT 3-WAYS VALVE FOR ADDITIONAL COIL
(ACTUATOR ON-OFF_PWM)



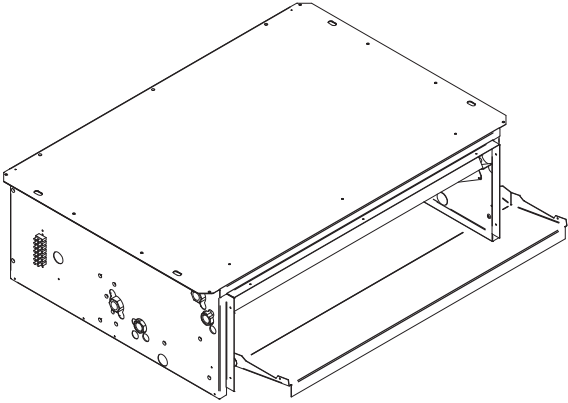
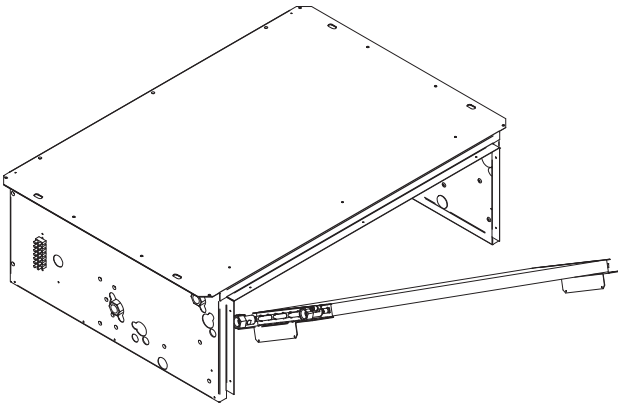
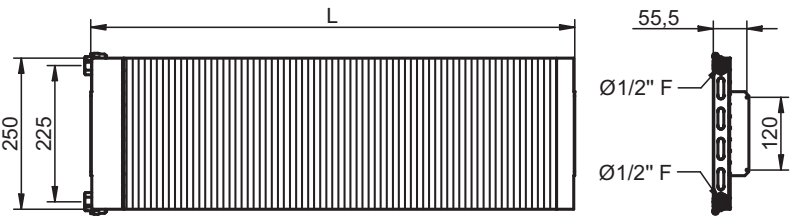
WATER KIT 3-WAYS VALVE FOR ADDITIONAL COIL
(MODULATING ACTUATOR 0-10V)



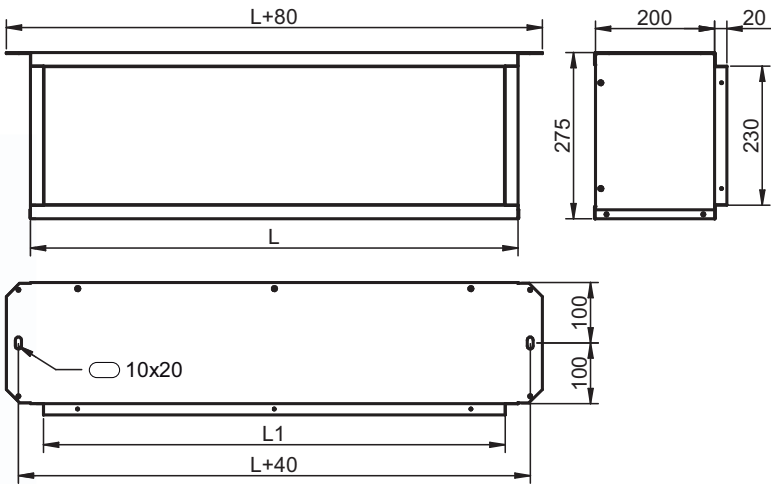
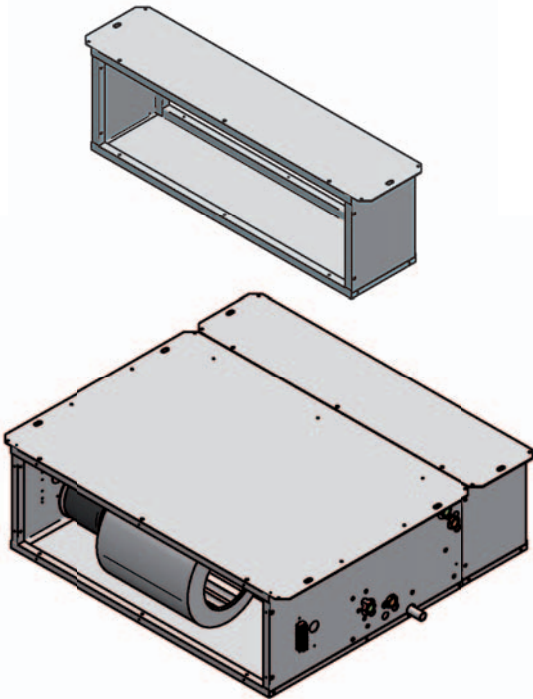
12. ACCESSORIES

SUPPLEMENTARY 1 ROW COIL

Size	L (mm)
102-202-302	800
402-502-602	1200
702-802-902	1600



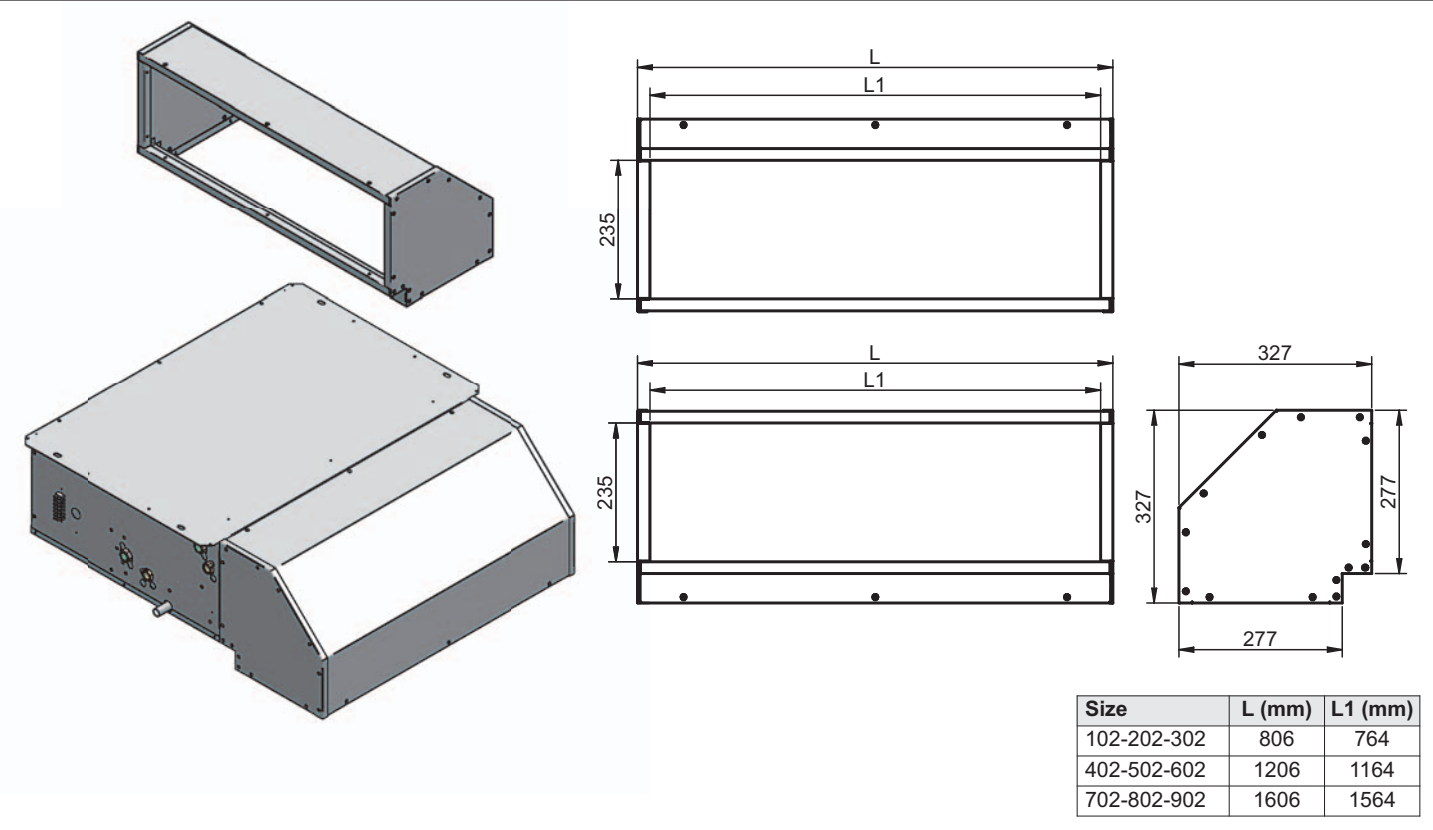
STRAIGHT SECTION FOR AIR DELIVERY



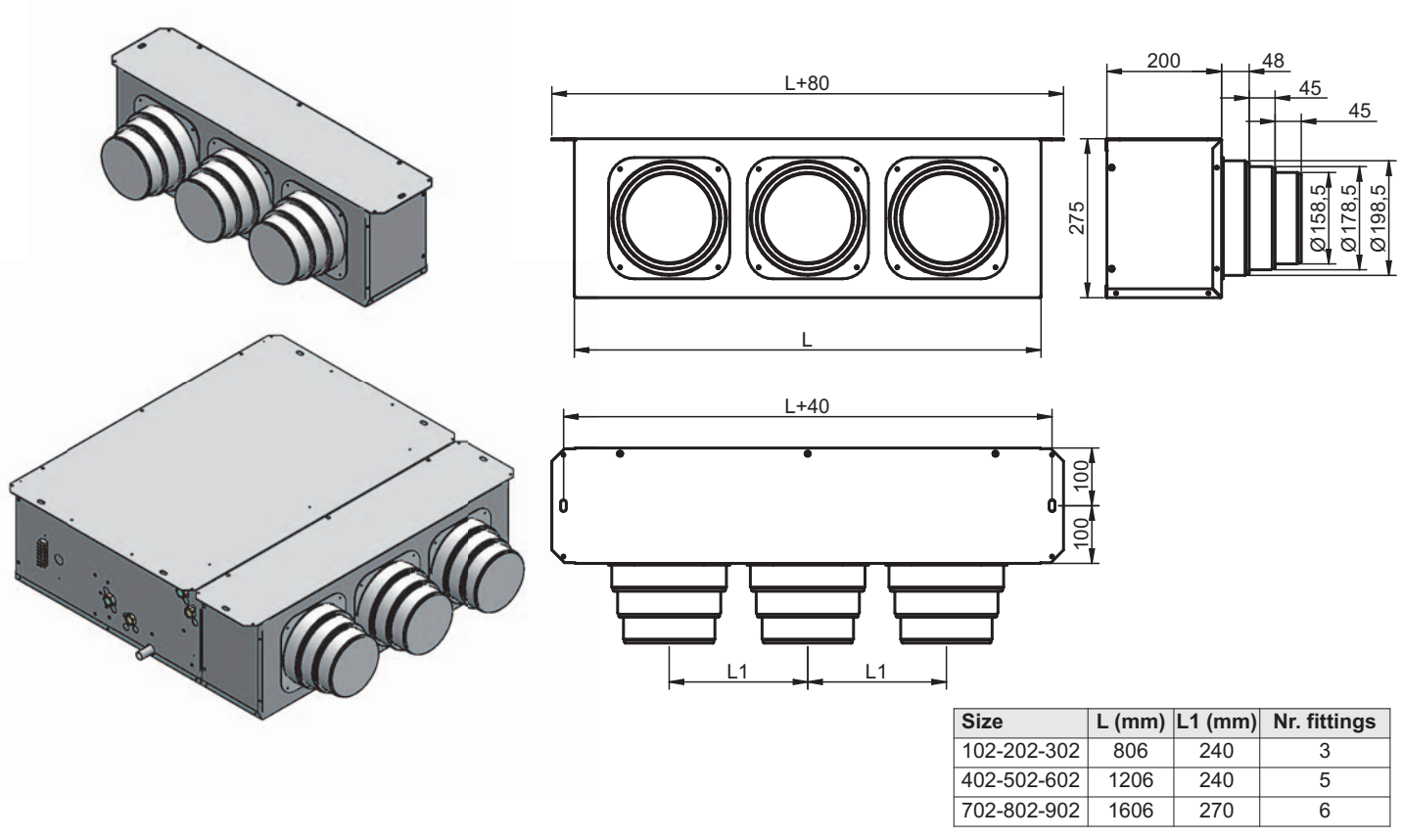
Size	L (mm)	L1 (mm)
102-202-302	806	763
402-502-602	1206	1163
702-802-902	1606	1563

12. ACCESSORIES

90° SECTION KIT FOR AIR DELIVERY

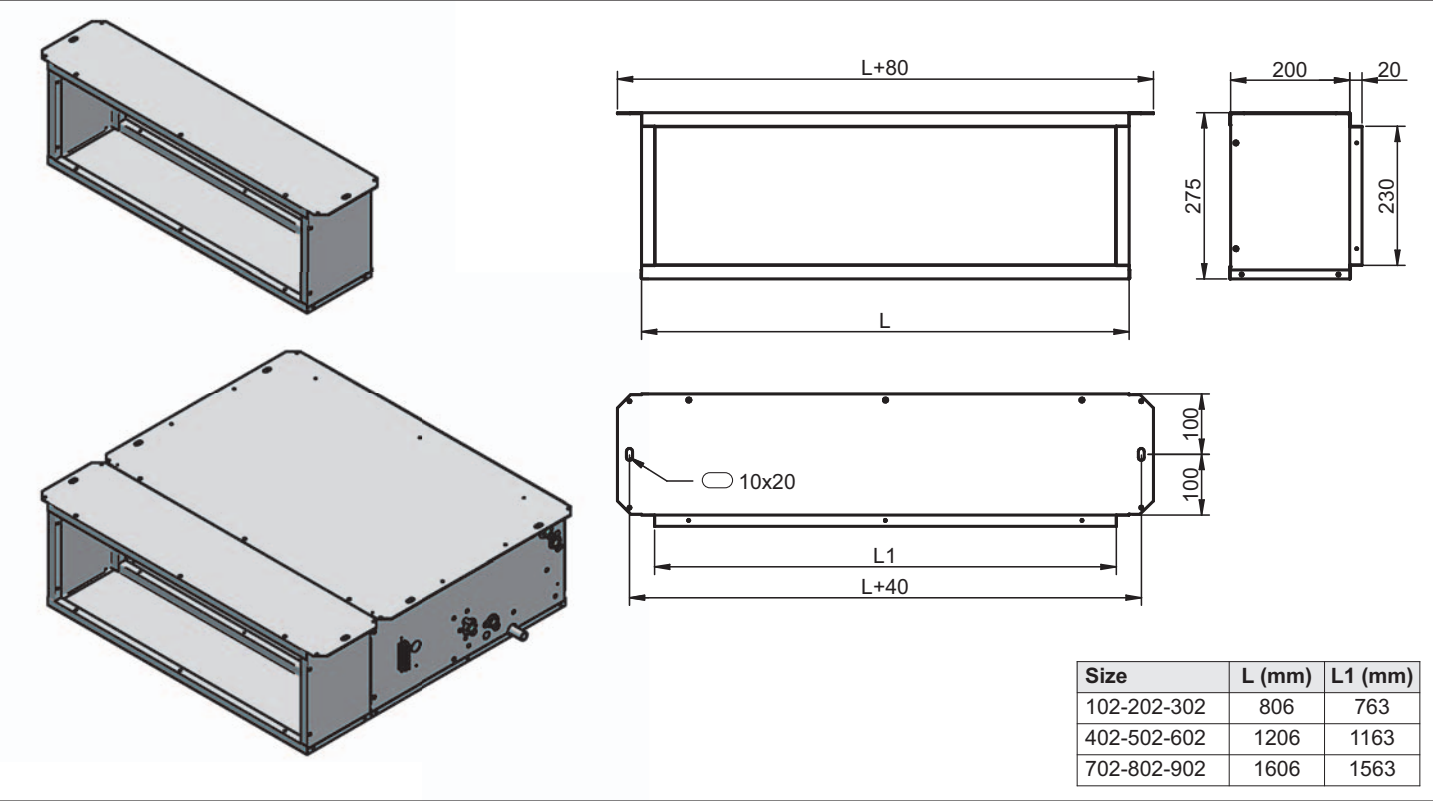


SUPPLY SECTION WITH PLASTIC CIRCULAR FITTINGS

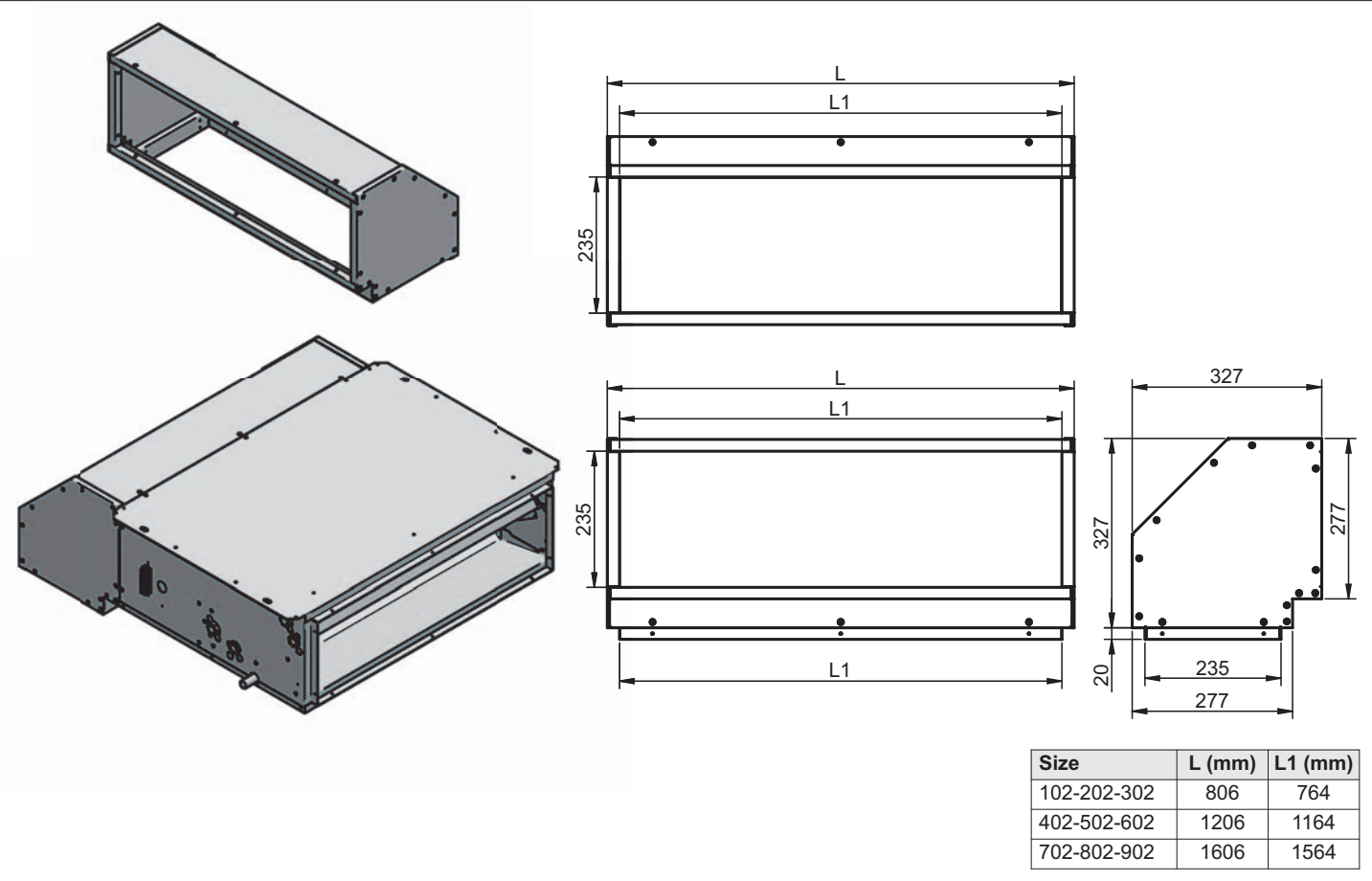


12. ACCESSORIES

90° SECTION FOR AIR INTAKE



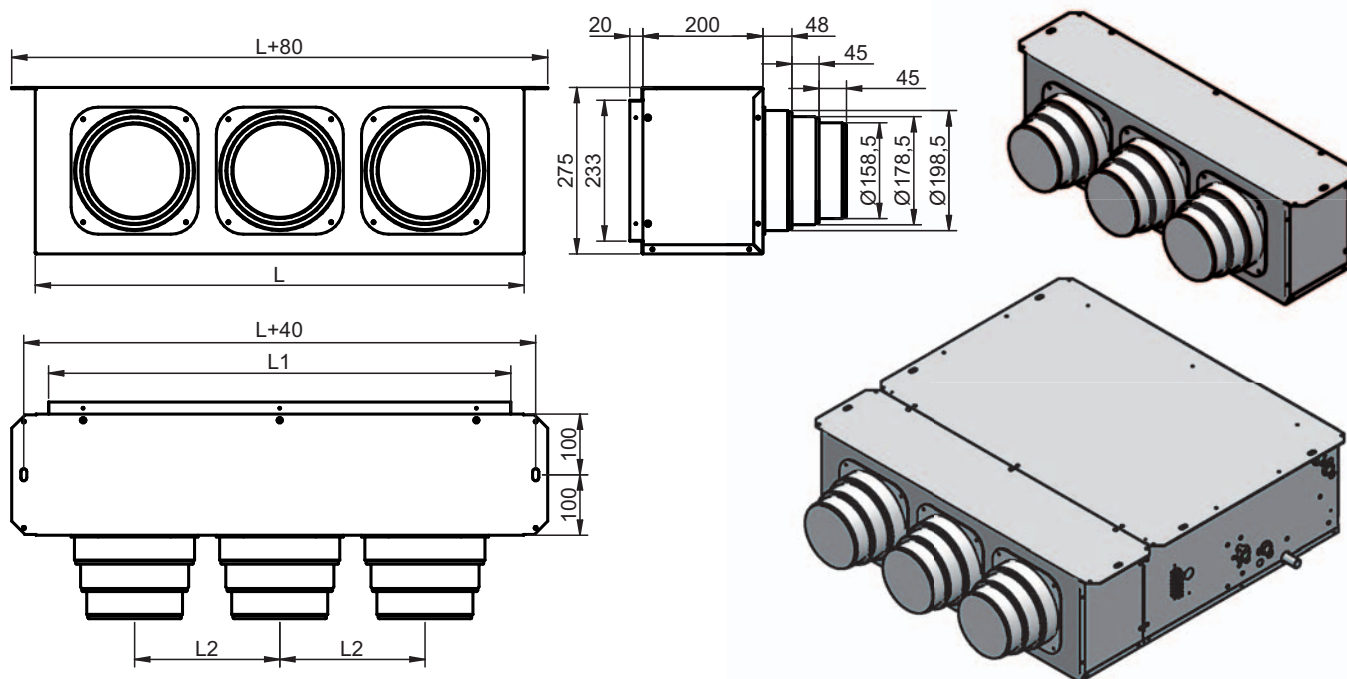
90° SECTION FOR AIR INTAKE



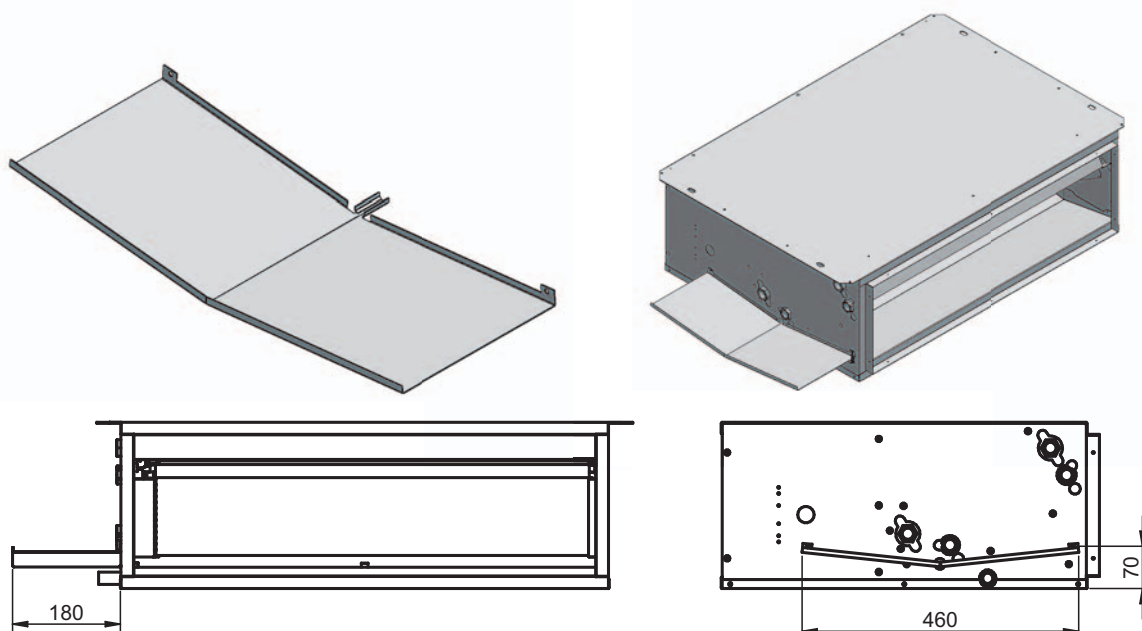
12. ACCESSORIES

INTAKE SECTION WITH PLASTIC CIRCULAR FITTINGS

Size	L (mm)	L1 (mm)	L2 (mm)	Nr. fittings
102-202-302	806	763	240	3
402-502-602	1206	1163	240	5
702-802-902	1606	1563	270	6

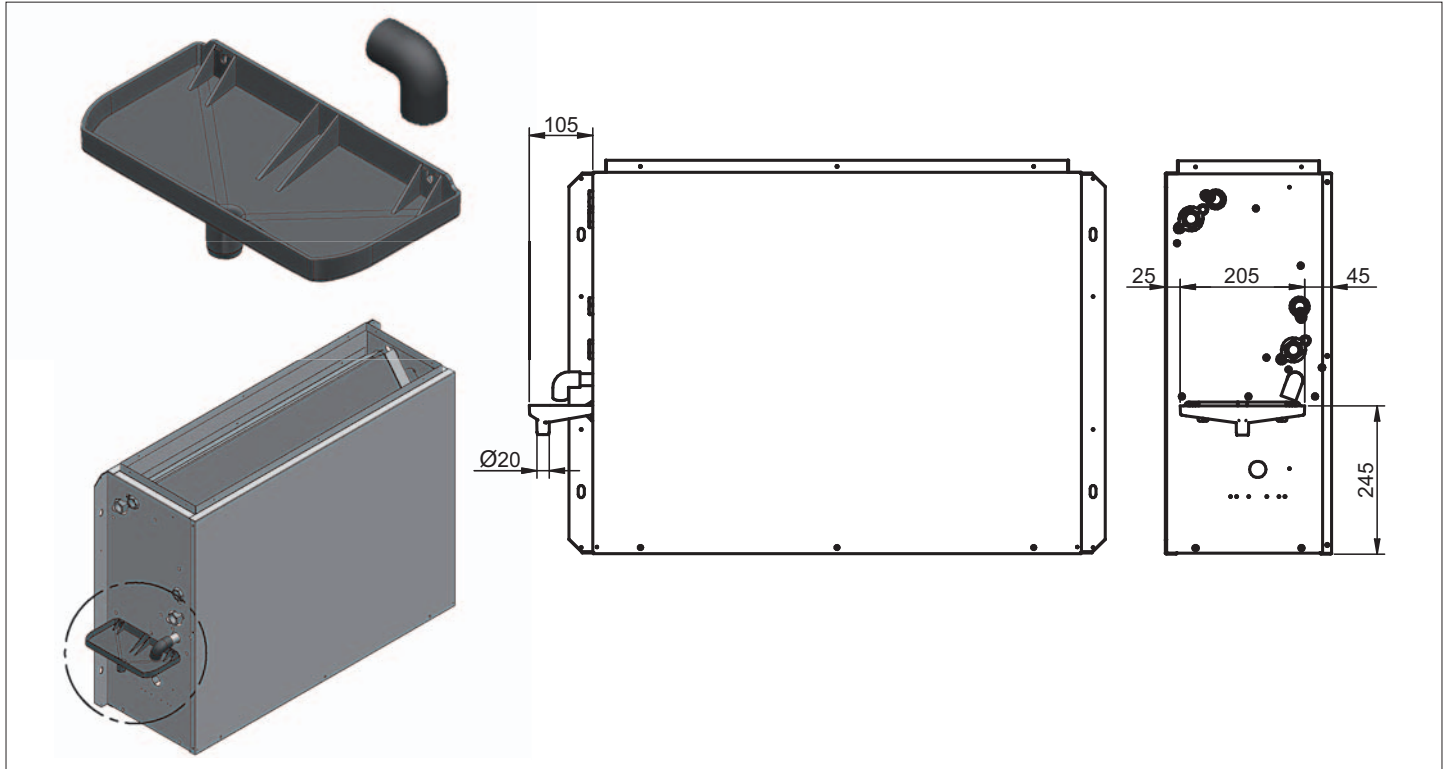


HORIZONTAL CONDENSATE COLLECTION PAN, METAL + ABS INSULATION

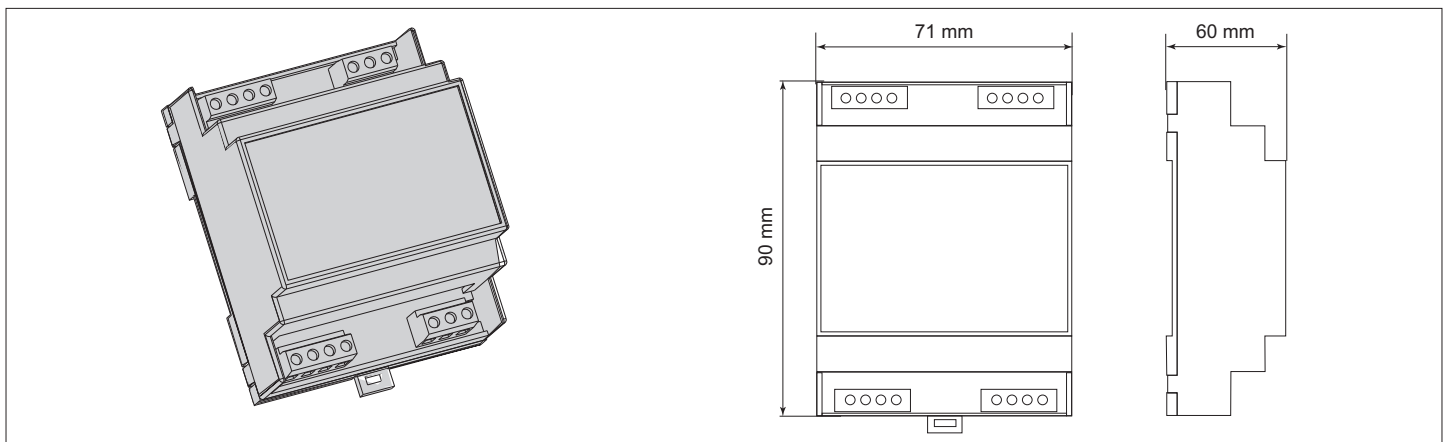


12. ACCESSORIES

VERTICAL CONDENSATE COLLECTION PAN, ABS



SPB INTERFACE KIT

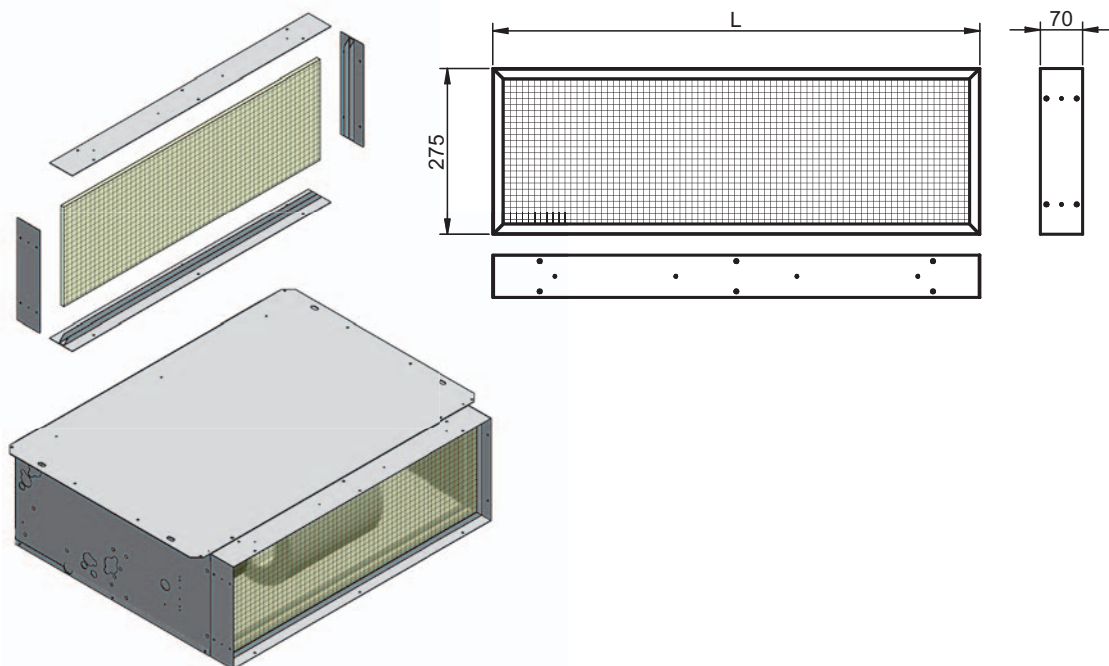


12. ACCESSORIES

DUCTABLE FLAT AIR FILTER SECTION, REMOVABLE FROM ANY DIRECTION

Ductable flat air filter section, with frame in 4 parts and filter removable from any direction.

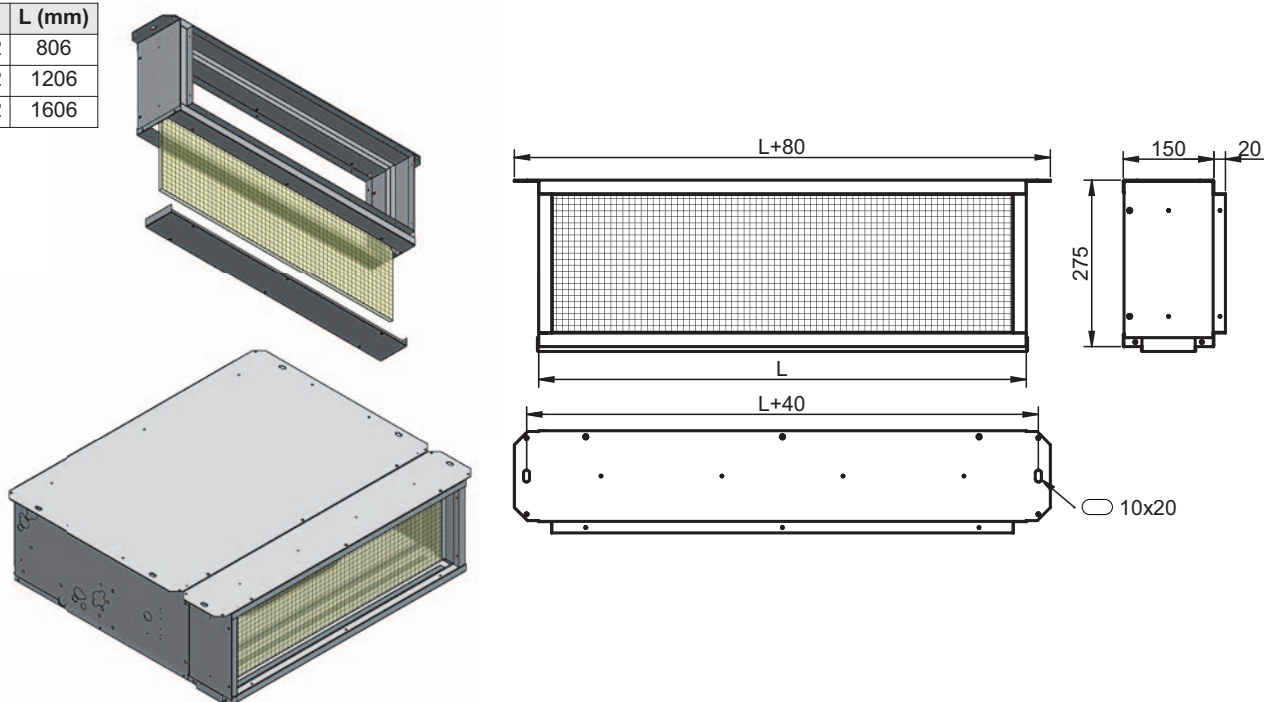
Size	L (mm)
102-202-302	805
402-502-602	1205
702-802-902	1605



a-HWD2	102/104	202/204	302	402/404	502/504	602	702/704	802/804	902
Pressure drop (PA) (clean/dirty filter)	18-42	22-52	20-49	31-75	37-89	34-81	37-88	44-106	40-97

DUCTABLE FLAT AIR FILTER SECTION, WITH FILTER REMOVABLE FROM BELOW

Size	L (mm)
102-202-302	806
402-502-602	1206
702-802-902	1606



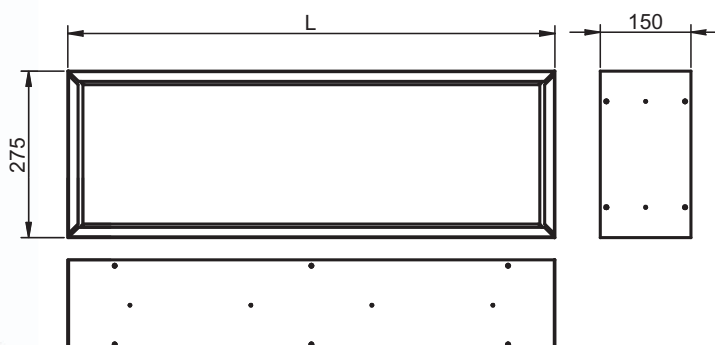
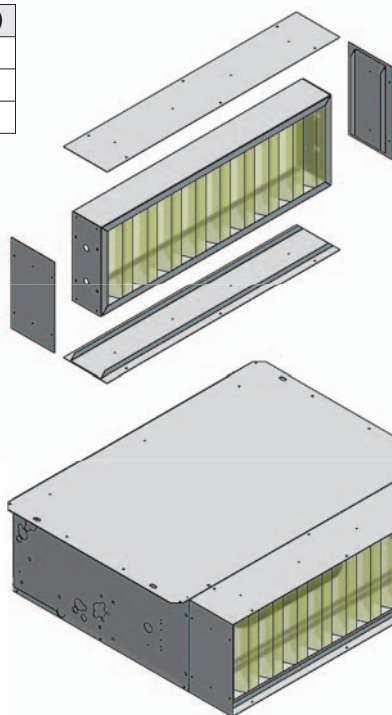
a-HWD2	102/104	202/204	302	402/404	502/504	602	702/704	802/804	902
Pressure drop (PA) (clean/dirty filter)	18-42	22-52	20-49	31-75	37-89	34-81	37-88	44-106	40-97

12. ACCESSORIES

DUCTABLE CORRUGATED AIR FILTER SECTION, WITH FILTER REMOVABLE FROM ANY DIRECTION

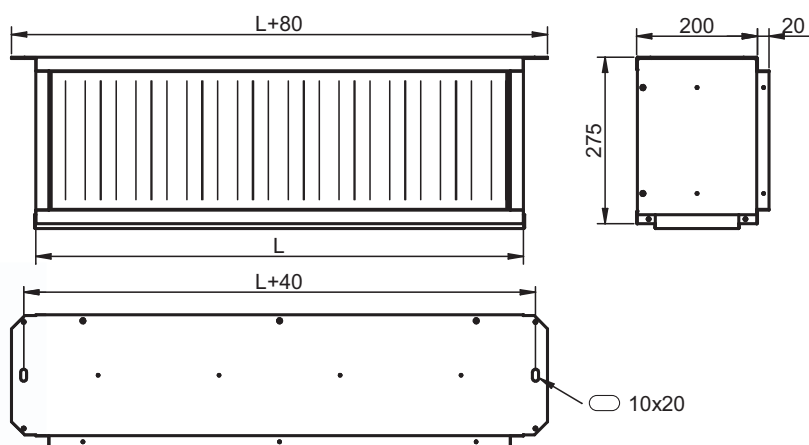
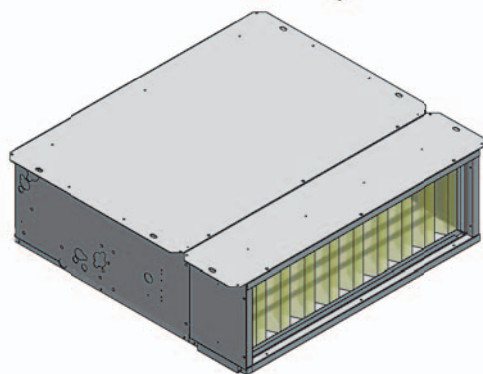
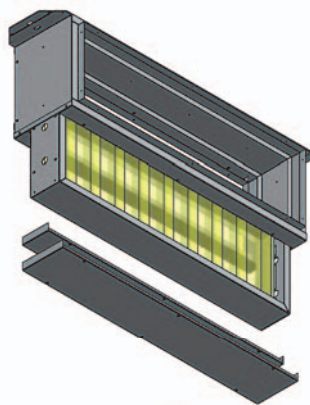
Ductable corrugated air filter section, with frame in 4 parts and filter removable from any direction.

Size	L (mm)
102-202-302	805
402-502-602	1205
702-802-902	1605



a-HWD2	102/104	202/204	302	402/404	502/504	602	702/704	802/804	902
Pressure drop (PA) (clean/dirty filter)	25-45	30-55	28-52	44-80	52-95	47-86	51-94	62-114	57-103

DUCTABLE CORRUGATED AIR FILTER SECTION, WITH FILTER REMOVABLE FROM BELOW



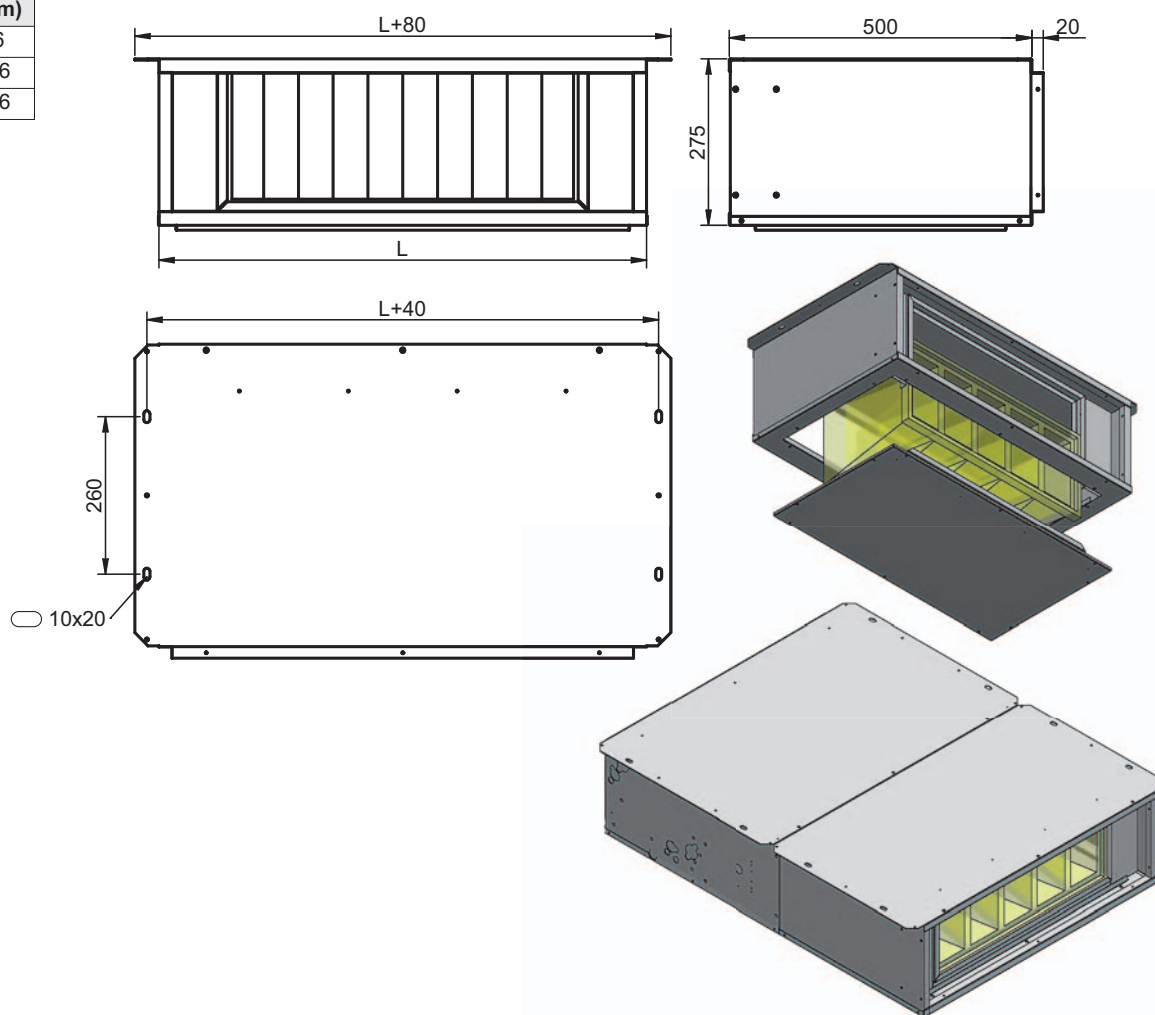
Size	L (mm)
102-202-302	806
402-502-602	1206
702-802-902	1606

a-HWD2	102/104	202/204	302	402/404	502/504	602	702/704	802/804	902
Pressure drop (PA) (clean/dirty filter)	25-45	30-55	28-52	44-80	52-95	47-86	51-94	62-114	57-103

12. ACCESSORIES

DUCTABLE POCKET AIR FILTER SECTION, WITH FILTER REMOVABLE FROM BELOW

Size	L (mm)
102-202-302	806
402-502-602	1206
702-802-902	1606



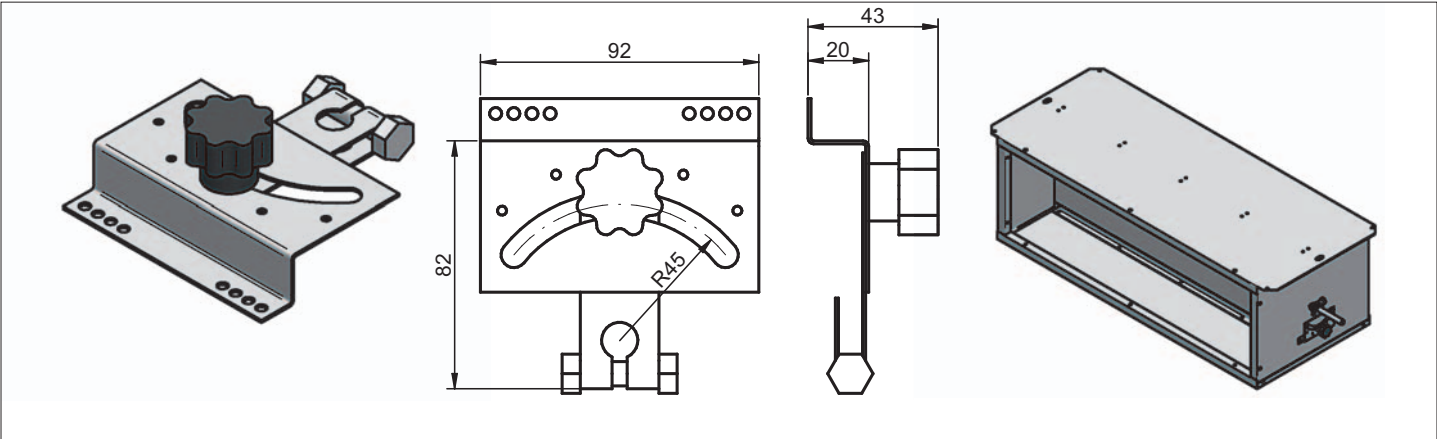
a-HWD2	102/104	202/204	302	402/404	502/504	602	702/704	802/804	902
Pressure drop (PA) (clean/dirty filter)	34-70	42-87	39-81	60-125	72-149	65-135	70-147	85-150	78-150

PRESSURE DROP OF SINGLE, NON-DUCTABLE FLAT FILTER, SUPPLIED AS CONFIGURATION OPTION ONLY

a-HWD2	102/104	202/204	302	402/404	502/504	602	702/704	802/804	902
Pressure drop (PA) (clean/dirty filter)	18-42	22-52	20-49	31-75	37-89	34-81	37-88	44-106	40-97

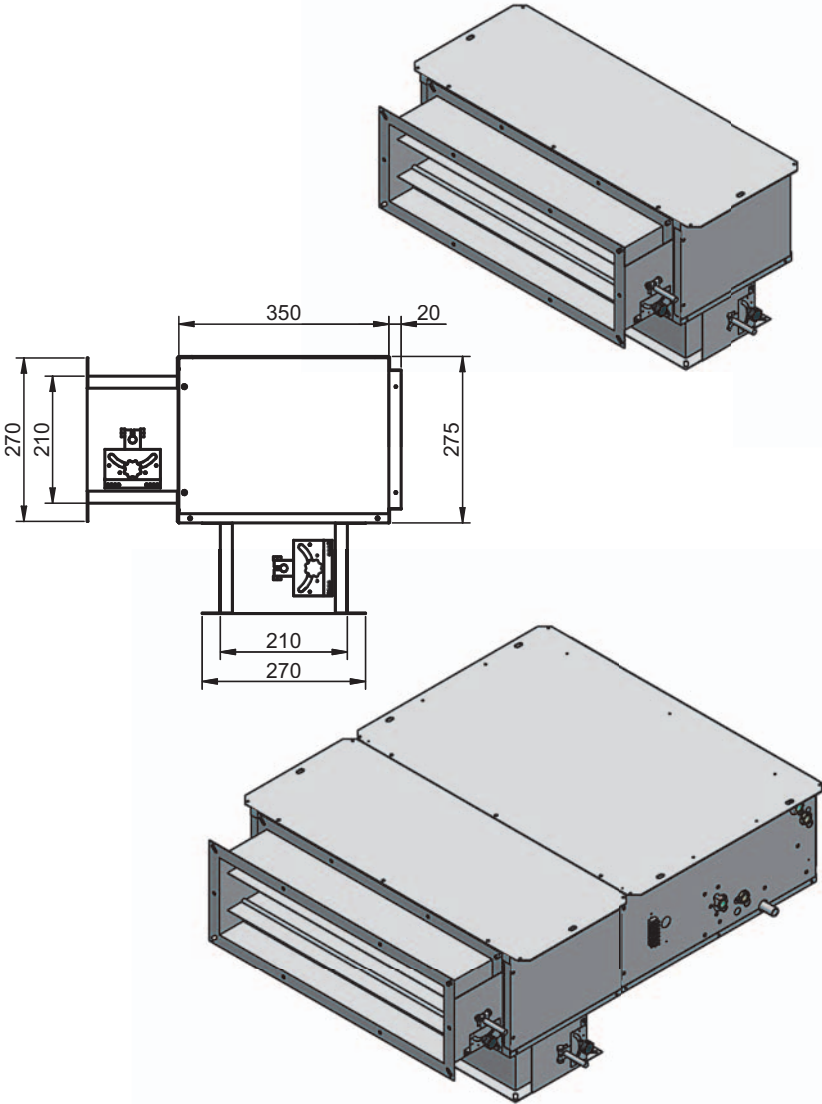
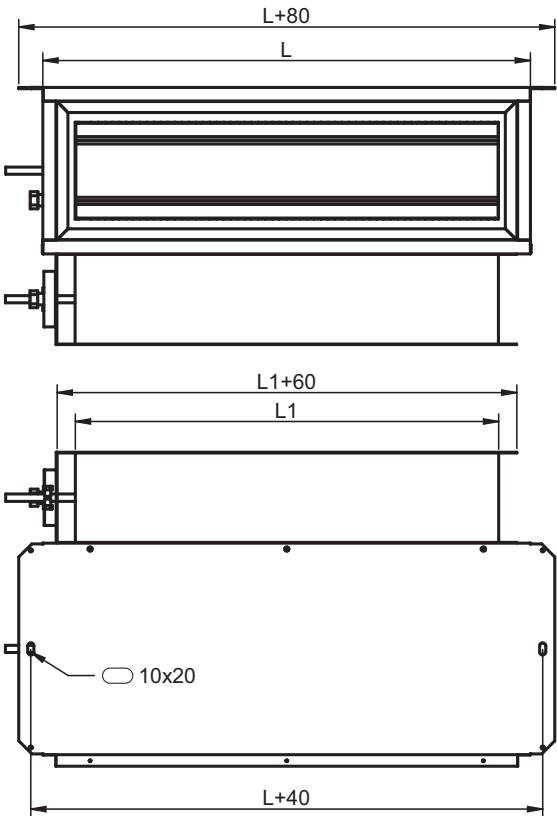
12. ACCESSORIES

MANUAL CONTROL FOR DAMPERS



SECTION WITH TWO AIR DAMPERS, WITH MANUAL CONTROL

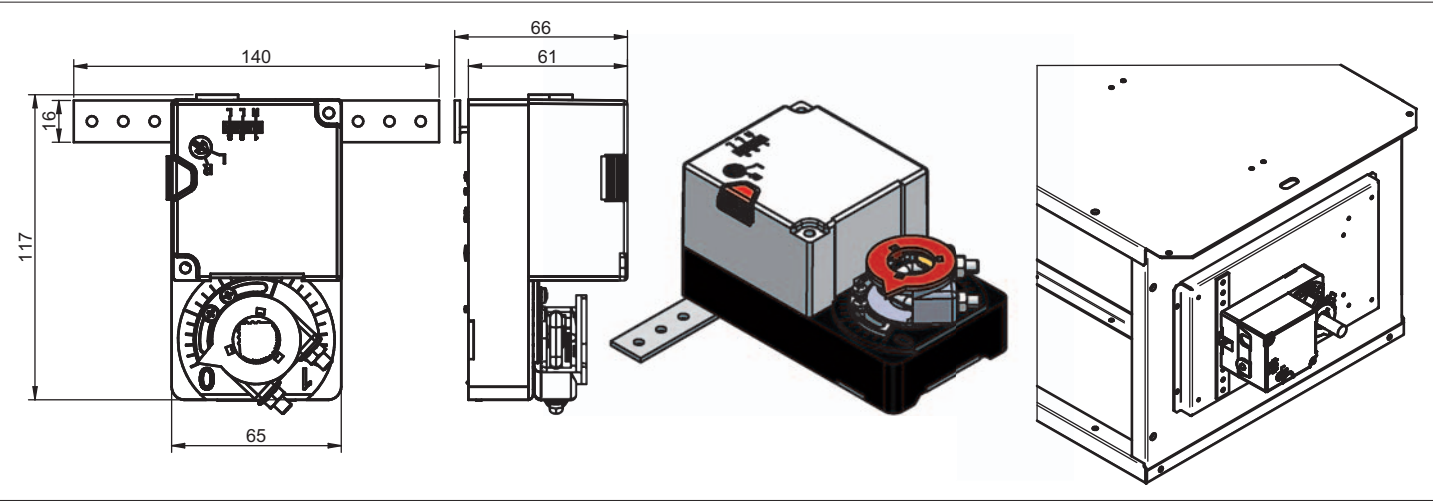
Size	L (mm)	L1 (mm)
102-202-302	806	700
402-502-602	1206	1100
702-802-902	1606	1500



a-HWD2	102/104	202/204	302	402/404	502/504	602	702/704	802/804	902
Air pressure drop (PA)	18	22	20	31	37	34	37	44	40

12. ACCESSORIES

MOTORISED CONTROL FOR DAMPERS



SECTION WITH TWO AIR DAMPERS, WITH MOTORISED CONTROL

Size	L (mm)	L1 (mm)
102-202-302	806	700
402-502-602	1206	1100
702-802-902	1606	1500

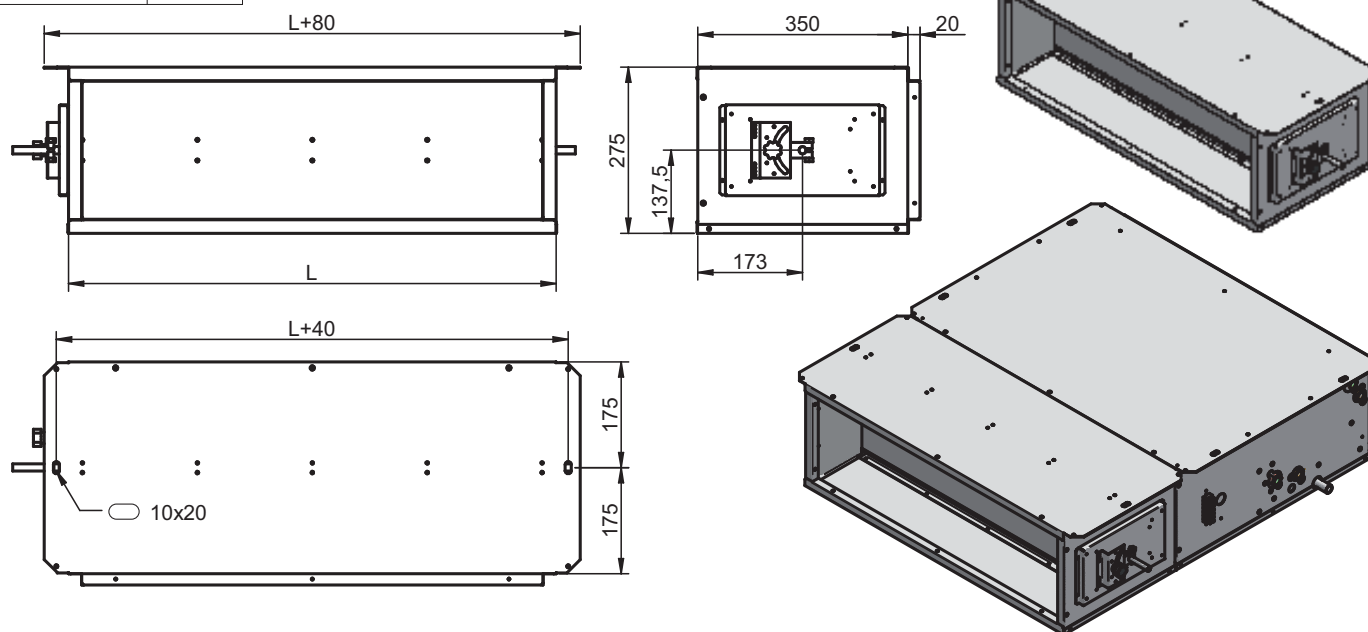
10x20

a-HWD2	102/104	202/204	302	402/404	502/504	602	702/704	802/804	902
Air pressure drop (PA)	18	22	20	31	37	34	37	44	40

12. ACCESSORIES

SECTION WITH MANUAL AIR DAMPER, 0-100% CLOSING

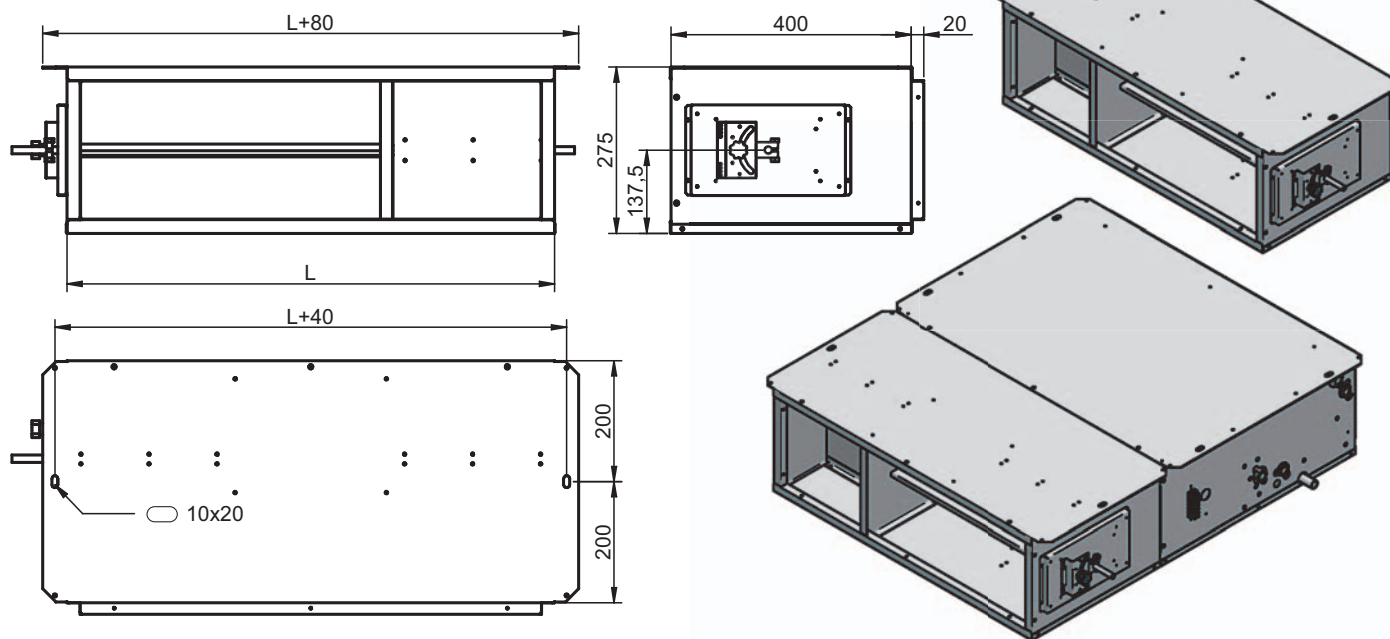
Size	L (mm)
102-202-302	806
402-502-602	1206
702-802-902	1606



a-HWD2	102/104	202/204	302	402/404	502/504	602	702/704	802/804	902
Air pressure drop (PA)	11	13	12	19	22	20	22	27	24

SECTION WITH MANUAL AIR DAMPER, 0-33% - 100-67% CLOSING

Size	L (mm)
102-202-302	806
402-502-602	1206
702-802-902	1606

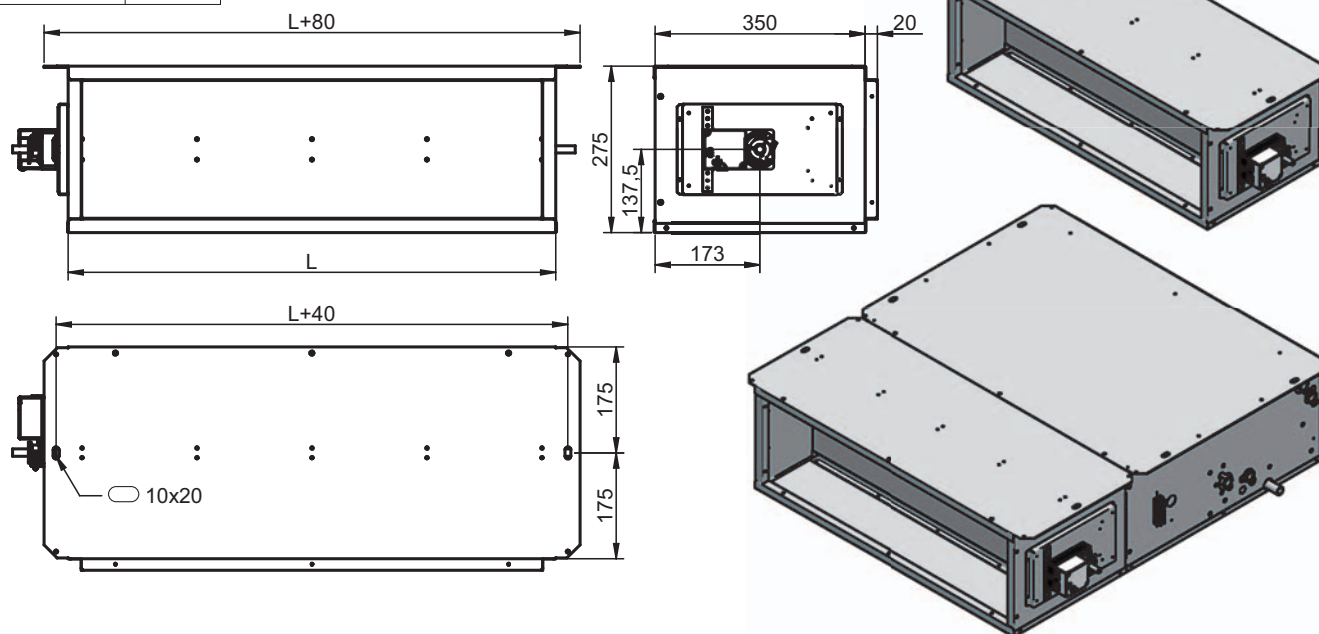


a-HWD2	102/104	202/204	302	402/404	502/504	602	702/704	802/804	902
Air pressure drop (PA)	15	19	18	28	33	30	32	39	36

12. ACCESSORIES

SECTION WITH MOTORISED AIR DAMPER, 0-100% CLOSING

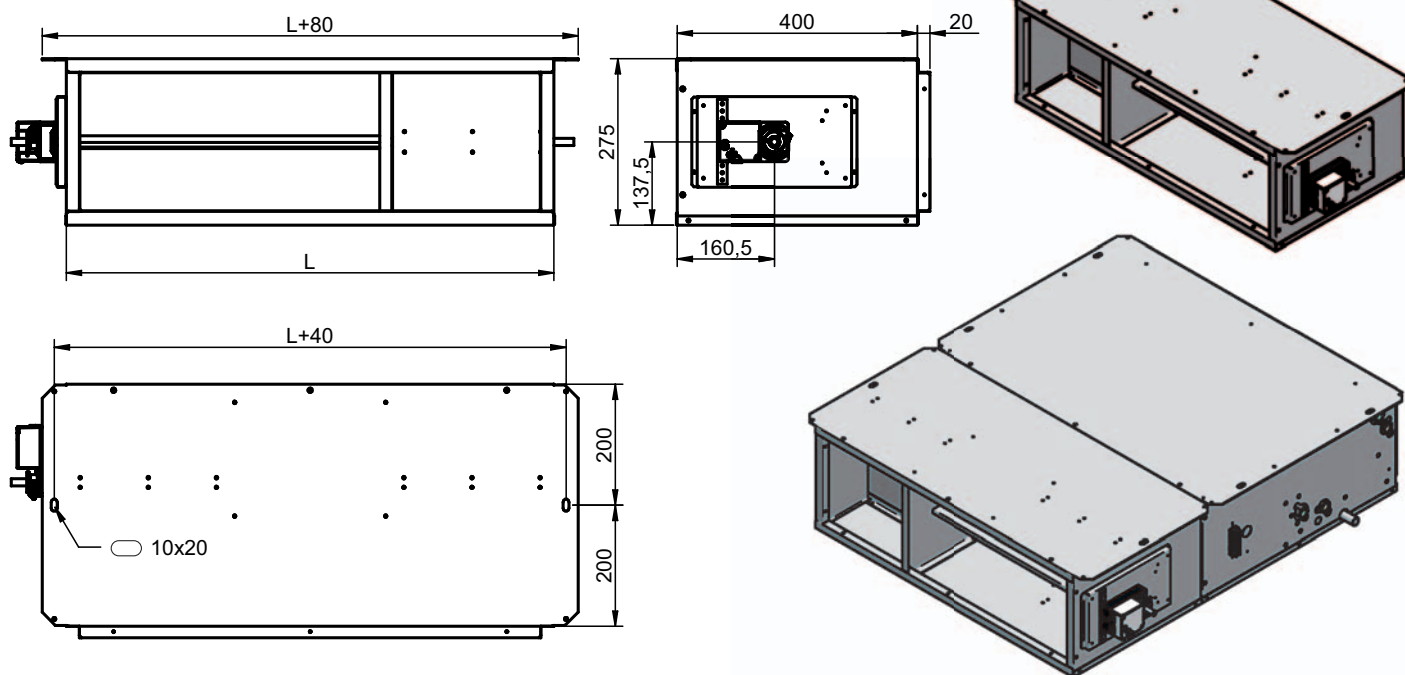
Size	L (mm)
102-202-302	806
402-502-602	1206
702-802-902	1606



a-HWD2	102/104	202/204	302	402/404	502/504	602	702/704	802/804	902
Air pressure drop (PA)	11	13	12	19	22	20	22	27	24

SECTION WITH MOTORISED AIR DAMPER, 0-33% - 100-67% CLOSING

Size	L (mm)
102-202-302	806
402-502-602	1206
702-802-902	1606

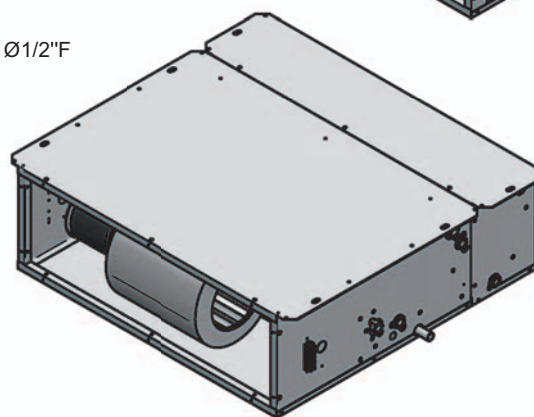
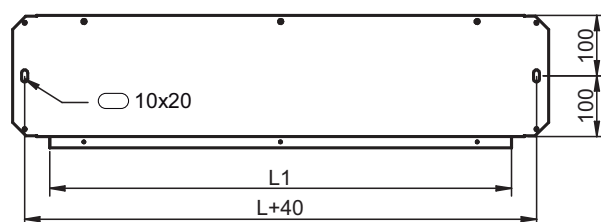
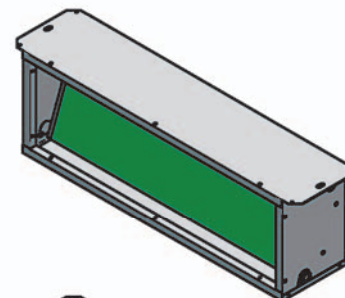
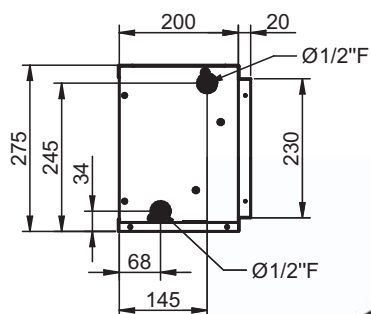
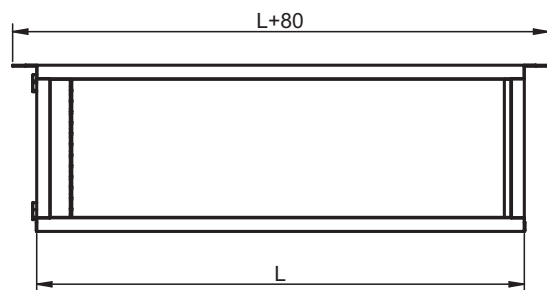


a-HWD2	102/104	202/204	302	402/404	502/504	602	702/704	802/804	902
Air pressure drop (PA)	15	19	18	28	33	30	32	39	36

12. ACCESSORIES

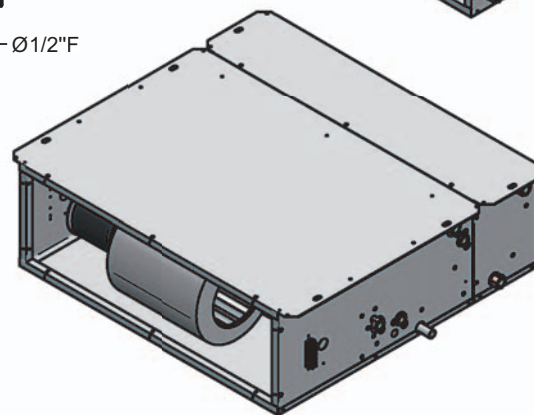
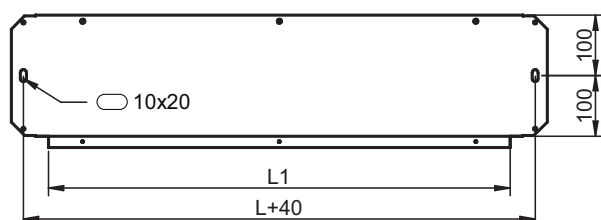
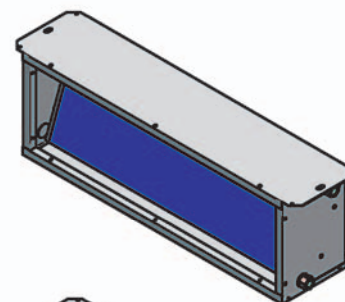
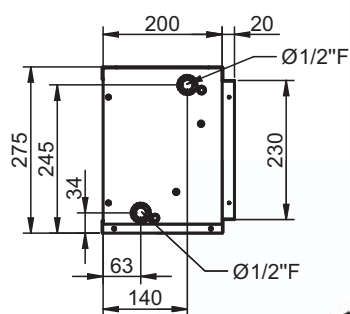
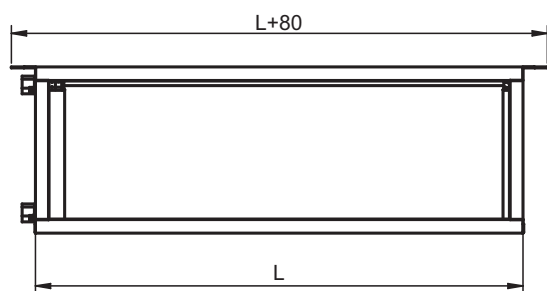
SUPPLEMENTARY HEATING SECTION WITH 1 ROW WATER COIL

Size	L (mm)	L1 (mm)
102-202-302	806	763,
402-502-602	1206	1163
702-802-902	1606	1563



SUPPLEMENTARY HEATING SECTION WITH 2 ROW WATER COIL

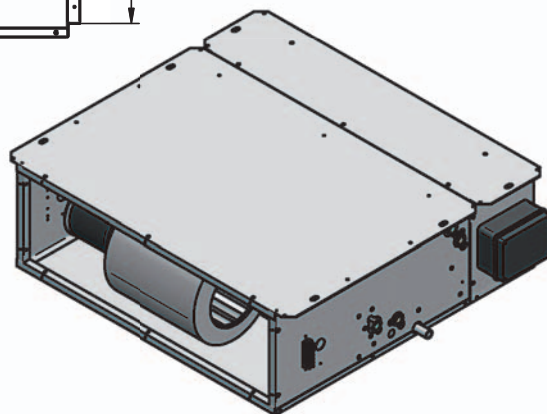
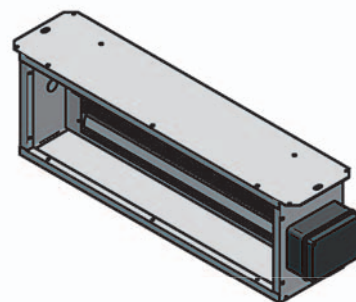
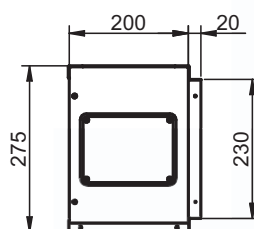
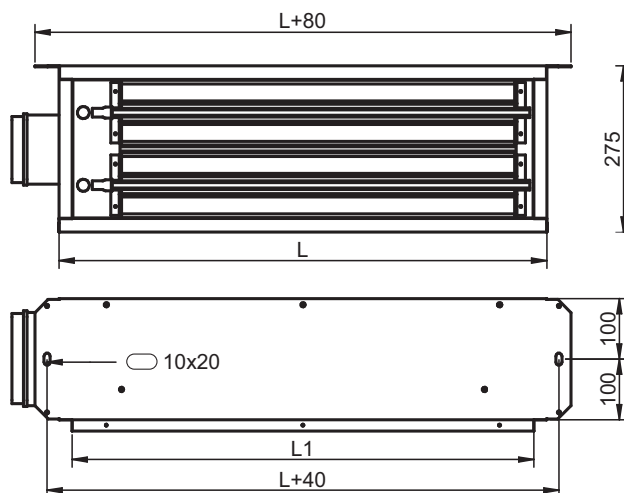
Size	L (mm)	L1 (mm)
102-202-302	806	763,
402-502-602	1206	1163
702-802-902	1606	1563



12. ACCESSORIES

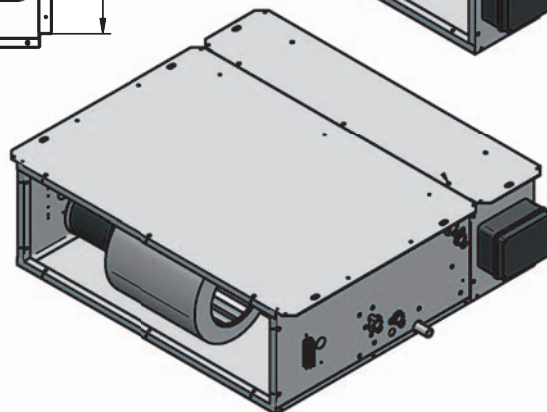
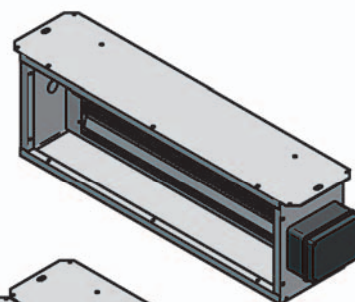
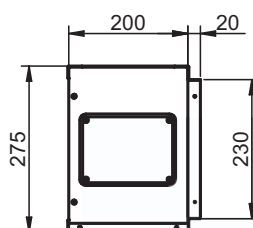
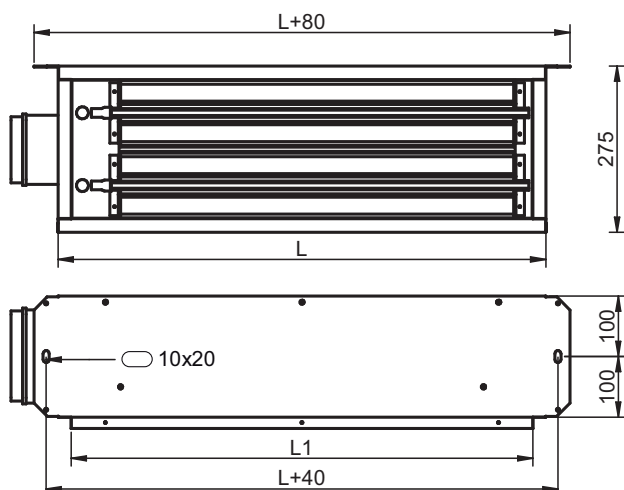
SUPPLEMENTARY HEATING SECTION WITH 230 V ELECTRIC HEATERS

Size	L (mm)	L1 (mm)
102-202-302	806	763
402-502-602	1206	1163
702-802-902	1606	1563



SUPPLEMENTARY HEATING SECTION WITH 400V ELECTRIC HEATERS

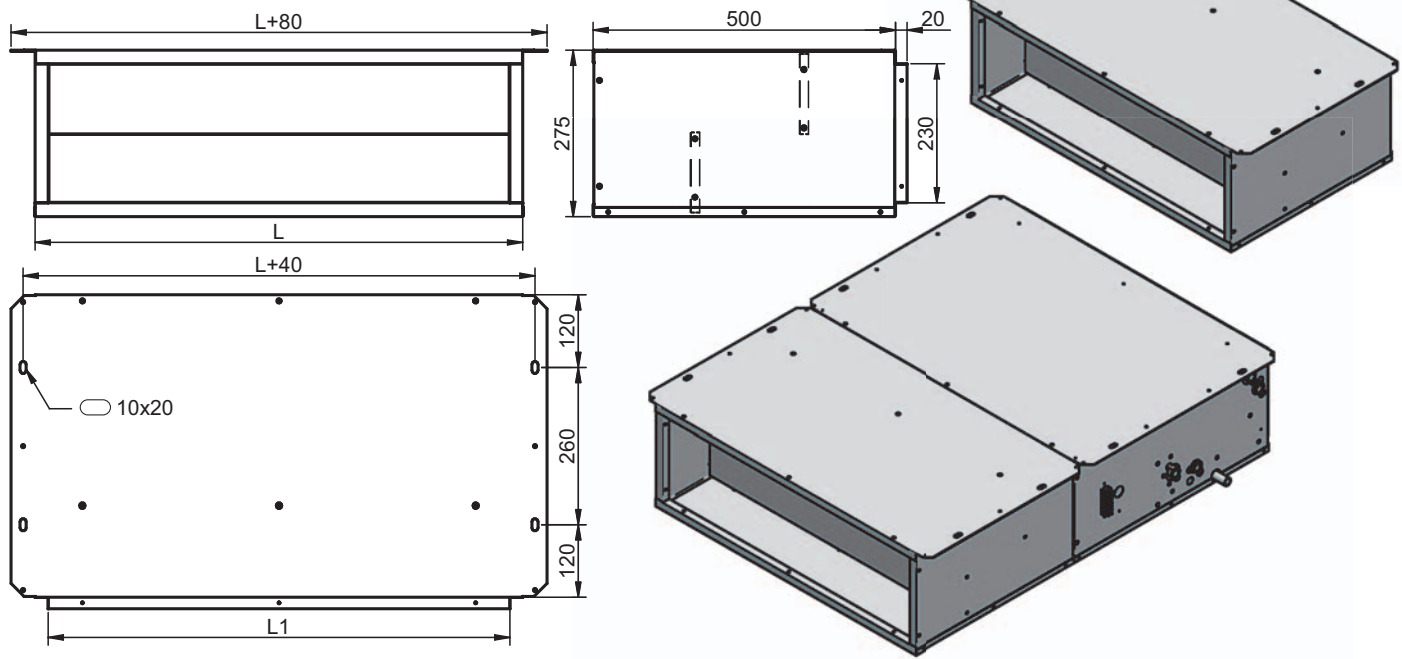
Size	L (mm)	L1 (mm)
102-202-302	806	763
402-502-602	1206	1163
702-802-902	1606	1563



12. ACCESSORIES

LABYRINTH SILENCER SECTION ON INTAKE

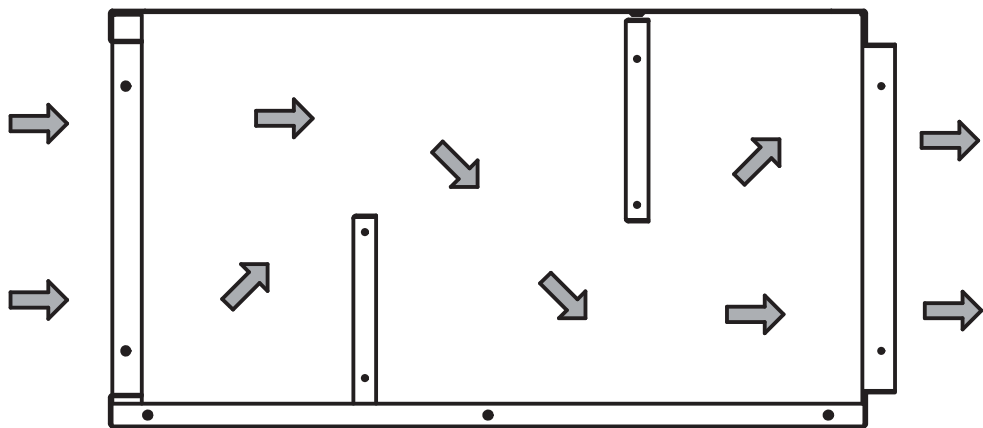
Size	L (mm)	L1 (mm)
102-202-302	806	240
402-502-602	1206	240
702-802-902	1606	270



a-HWD2	102/104	202/204	302	402/404	502/504	602	702/704	802/804	902
Air pressure drop (PA)	28	35	33	50	60	54	60	71	65

SILENCER INTERNAL PROFILE

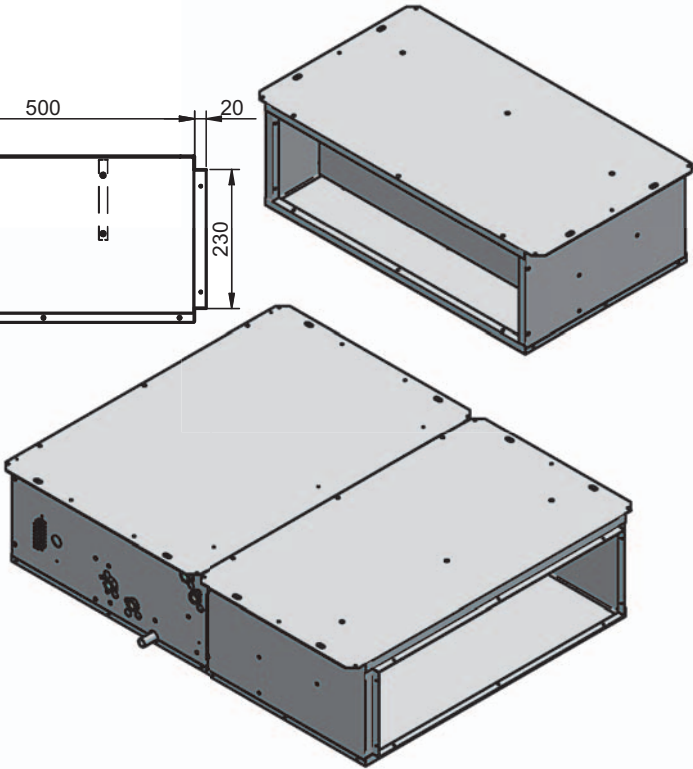
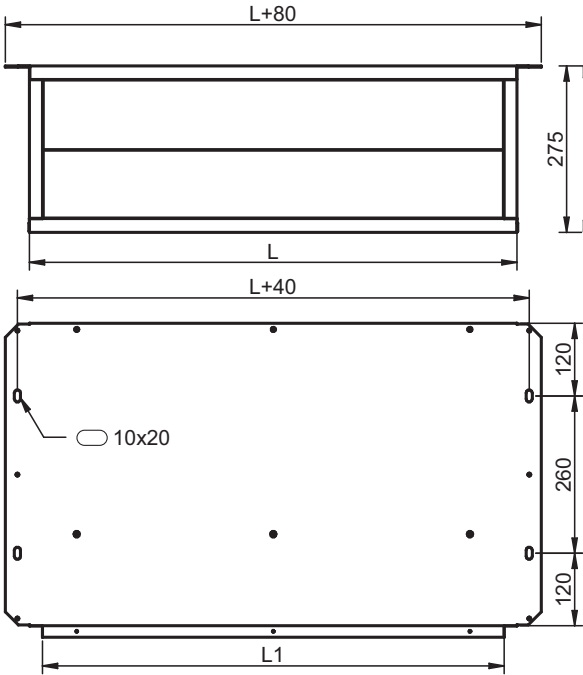
Noise level attenuation
Open cell PE internal lining
Noise attenuation dB(A):
- 6 for sizes 102/104, 202/204, 302
- 7 for sizes 402/404, 502/504, 602
- 8 for sizes 702/704, 802/804, 902



12. ACCESSORIES

LABYRINTH SILENCER SECTION ON SUPPLY

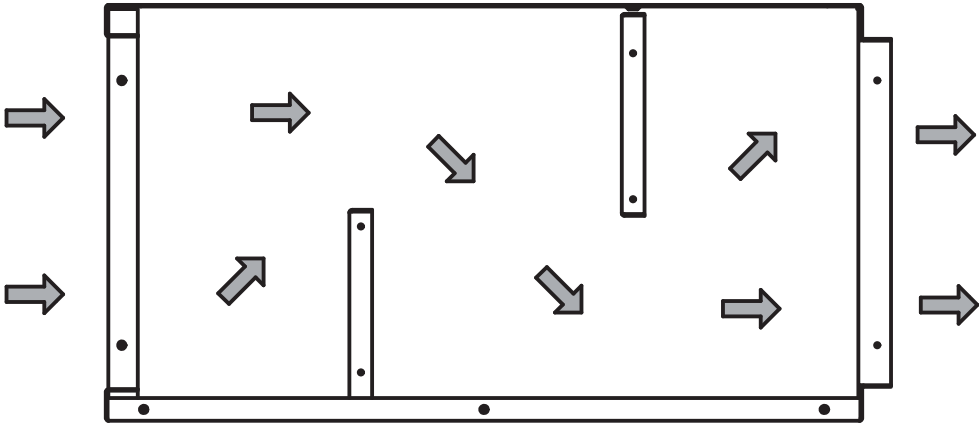
Size	L (mm)	L1 (mm)
102-202-302	806	240
402-502-602	1206	240
702-802-902	1606	270



a-HWD2	102/104	202/204	302	402/404	502/504	602	702/704	802/804	902
Air pressure drop (PA)	28	35	33	50	60	54	60	71	65

SILENCER INTERNAL PROFILE

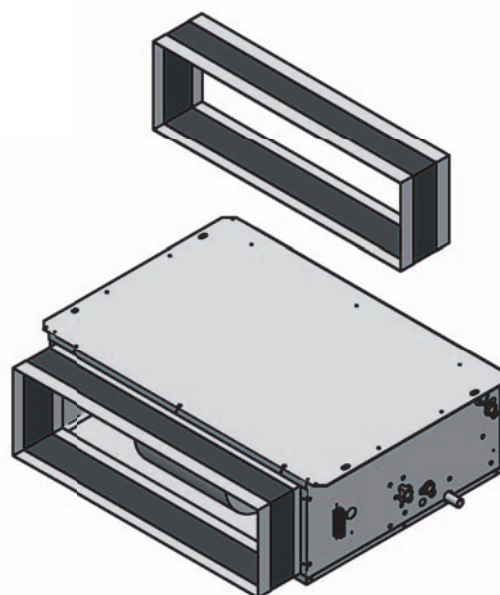
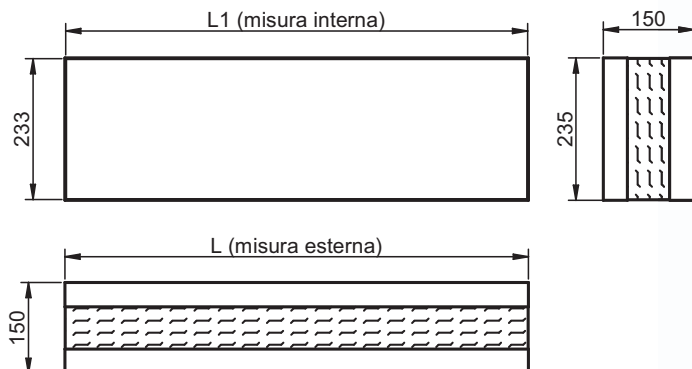
Noise level attenuation
Open cell PE internal lining
Noise attenuation dB(A):
- 6 for sizes 102/104, 202/204, 302
- 7 for sizes 402/404, 502/504, 602
- 8 for sizes 702/704, 802/804, 902



12. ACCESSORIES

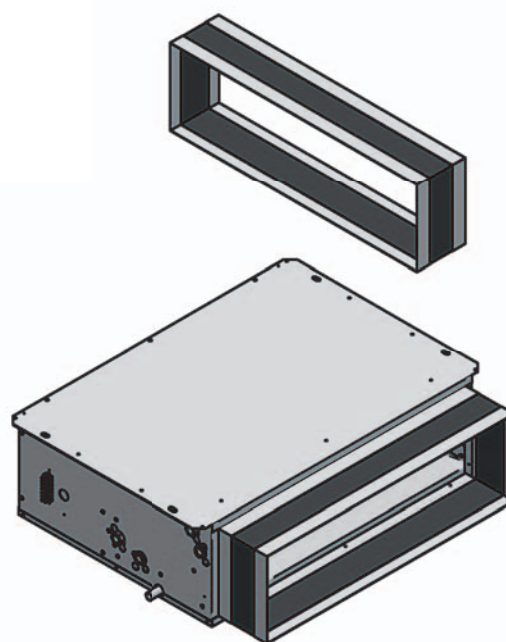
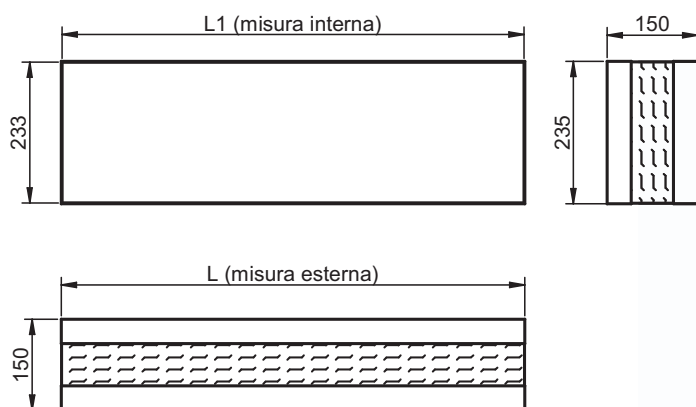
VIBRATION-ISOLATING JOINT ON INTAKE

Size	L (mm)	L1 (mm)
102-202-302	766	764
402-502-602	1166	1164
702-802-902	1566	1564



VIBRATION-ISOLATING JOINT ON SUPPLY

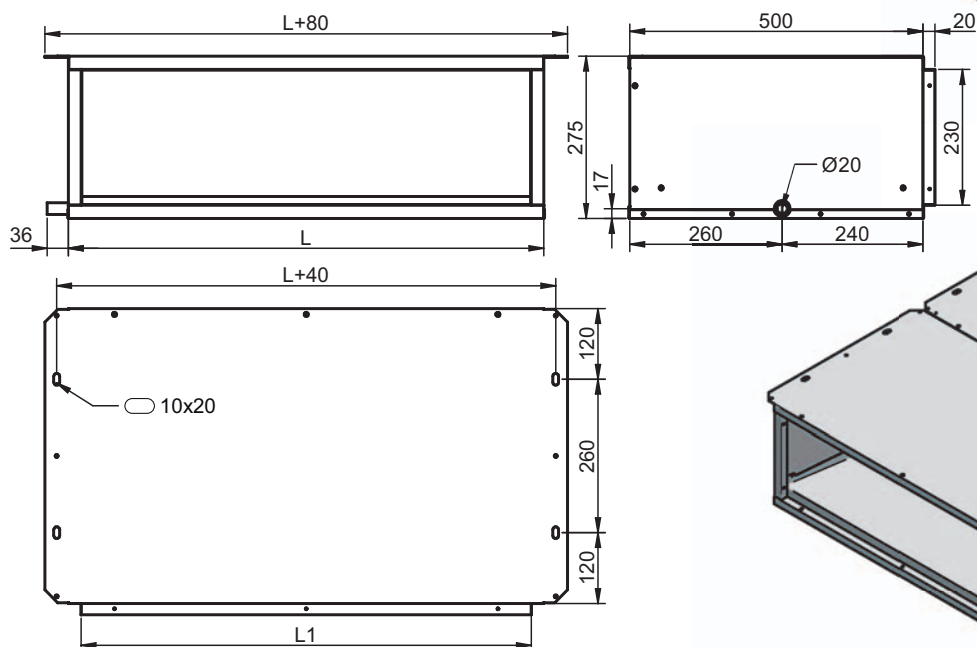
Size	L (mm)	L1 (mm)
102-202-302	766	764
402-502-602	1166	1164
702-802-902	1566	1564



12. ACCESSORIES

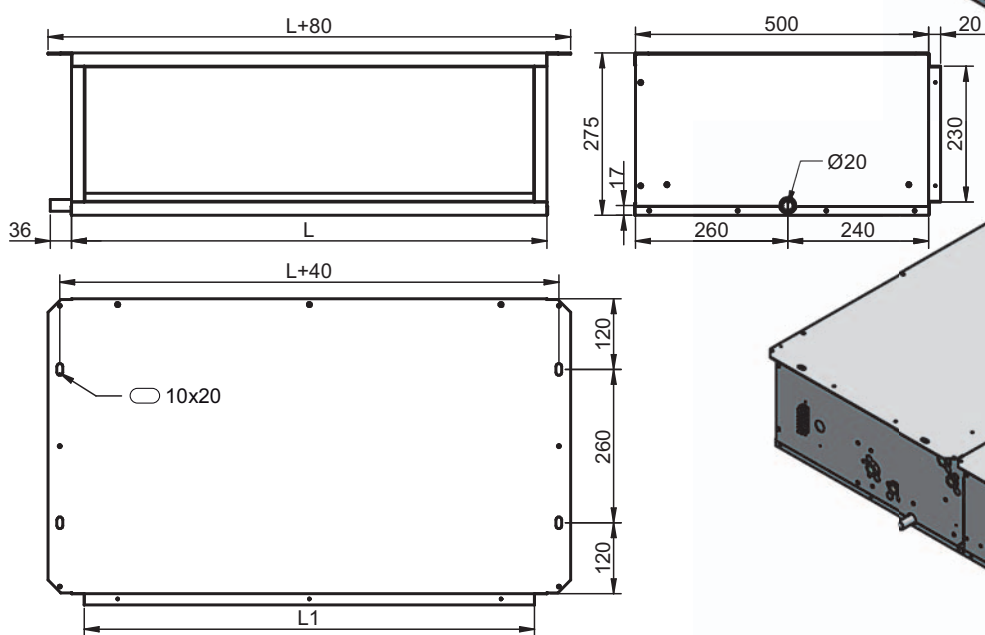
SECTION WITH PAN KIT FOR INSTALLING A STEAM HUMIDIFIER (INTAKE)

Size	L (mm)	L1 (mm)
102-202-302	806	763
402-502-602	1206	1163
702-802-902	1606	1563



SECTION WITH PAN FOR INSTALLING A STEAM HUMIDIFIER (INTAKE)

Size	L (mm)	L1 (mm)
102-202-302	806	763
402-502-602	1206	1163
702-802-902	1606	1563

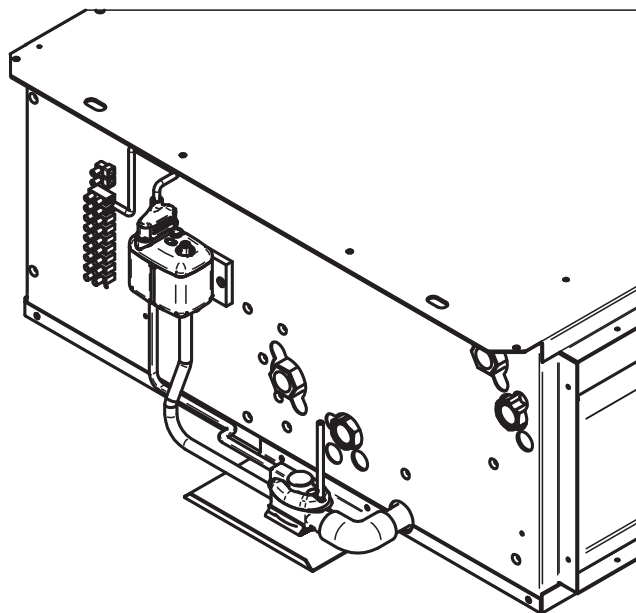
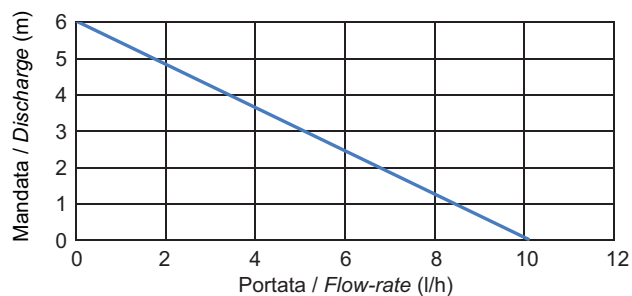


12. ACCESSORIES

CONDENSATE DRAIN PUMP FOR UNITS WITH HORIZONTAL INSTALLATION

Condensate pump technical specifications

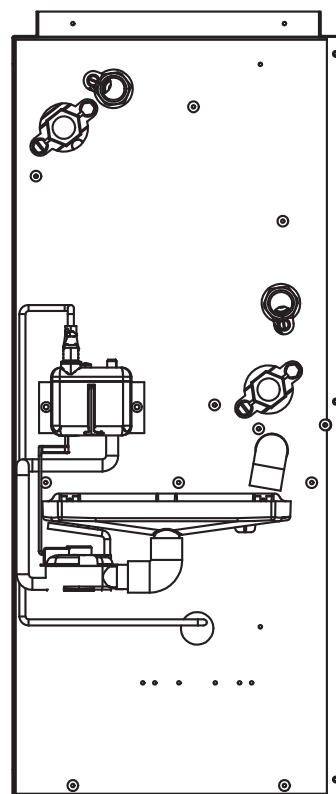
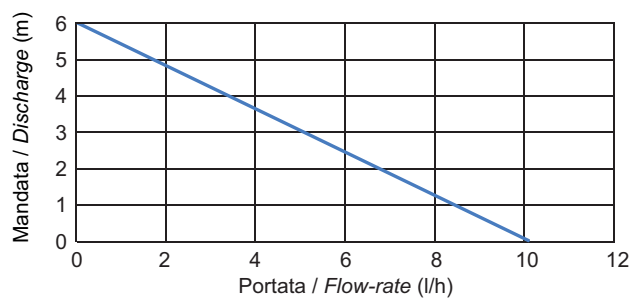
Rated voltage	AC 230-50-60 Hz
Power consumption	18 W
Maximum flow-rate $\pm 10\%$	10,1 l/h
Maximum discharge $\pm 10\%$	6 m
Maximum suction $\pm 10\%$	2 m



CONDENSATE DRAIN PUMP FOR UNITS WITH VERTICAL INSTALLATION

Condensate pump technical specifications

Rated voltage	AC 230-50-60 Hz
Power consumption	18 W
Maximum flow-rate $\pm 10\%$	10,1 l/h
Maximum discharge $\pm 10\%$	6 m
Maximum suction $\pm 10\%$	2 m



12. ACCESSORIES

"MRS1" TERMINAL BLOCK KIT FOR ASYNCHRONOUS FC

- Terminal block featuring a number of terminals based on unit configuration (min. PE+1+2+3+4) ; (max PE+....12)
- Wiring according to the requirements of the configuration

Obbligatorio: Quando presente la res. elettr., proteggere la linea alimentazione 230V~50/60Hz del Relè (morsetti 11-12) tramite adeguato interruttore magnetotermico, a cura del cliente.
Compulsory: When electrical heater is installed, protect the 230V~50/60Hz feeding line of the Relay (terminals 11-12) with appropriate thermomagnetic switch, by the customer.



Collegamento con accessorio RESISTENZA ELETTRICA
Connection with accessory ELECTRICAL HEATER

Termostati Sicurezza - Safety Thermostats:

- **TS1** riarmo automatico - automatic reset
- **TS2** riarmo manuale - manual reset

GNYE	Giallo/Verde-Yellow/Green	WH	Bianco - White
BN	Marrone - Brown	RD	Rosso - Red
BU	Blu - Blue	BK	Nero - Black

L	Fase (linha 230V~) - Phase (230V~line)
N	Neutro - Neutral
PE	Terra - Earth

Com	Comune ventilatore - Common of the fan
Min	Velocità Minima - Min. speed (Low)
Med	Velocità Media - Med. speed (Medium)
Max	Velocità Massima - Max. speed (High)

MV	Motore ventilatore – Fan motor
C	Condensatore – Capacitor

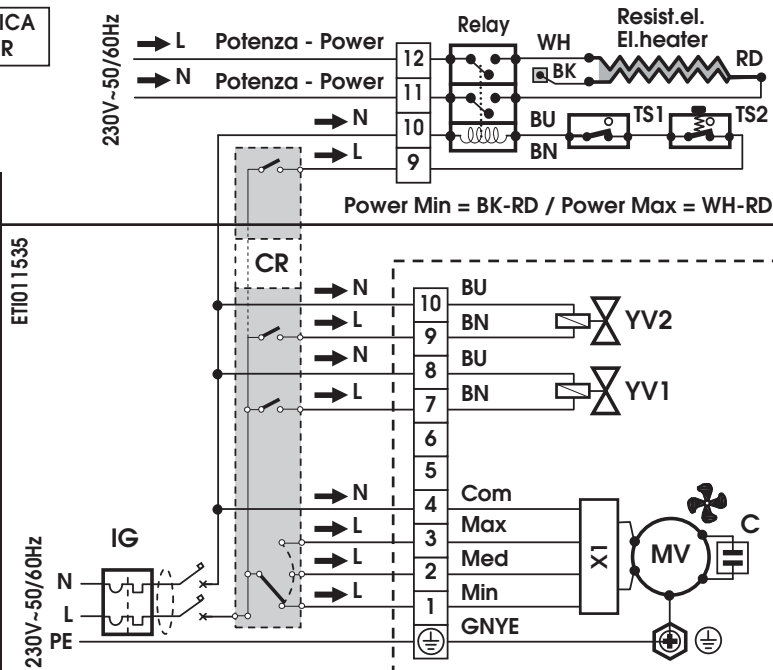
X1	Eventuale dispositivo intermedio (es.: Connettore, Autotrasformatore, ecc.) - Possible intermediate equipment (ex.: Connector, Autotransformer, etc.)
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ACCESSORI - ACCESSORIES

YV1	Valvola batteria principale - Principal coil valve
YV2	Valvola batteria aggiuntiva - Secondary coil valve

A CURA DEL CLIENTE - BY THE CUSTOMER

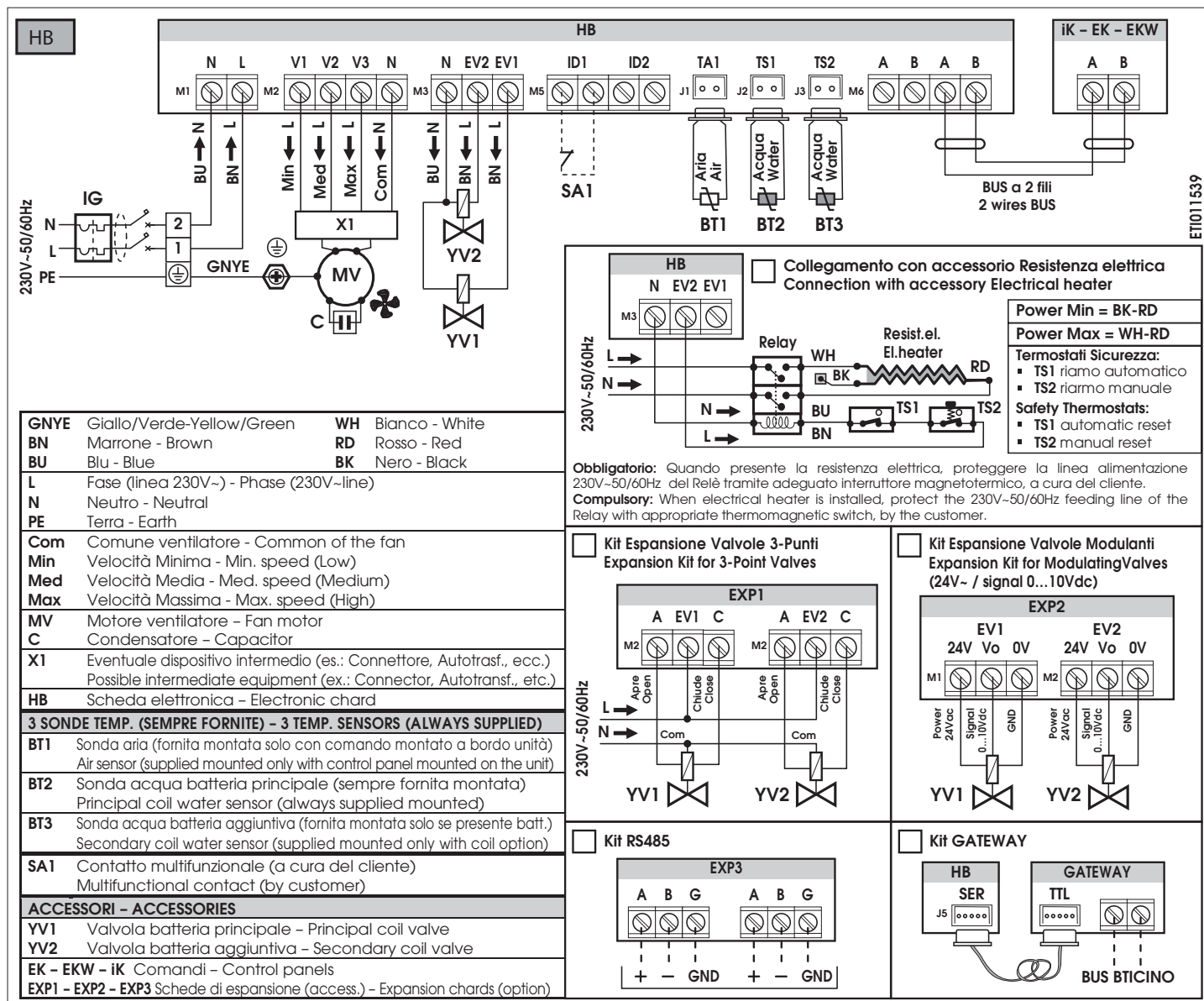
CR	Comando remoto - Remote control
IG	Interruttore di protezione - Thermomagnetic switch



Note: Standard solo morsetti PE,1,2,3,4 (morsetti 5...12 presenti solo se installati i relativi accessori)
Standard only terminals PE,1,2,3,4 (terminals 5...12 exist if related accessories are installed)

12. ACCESSORIES

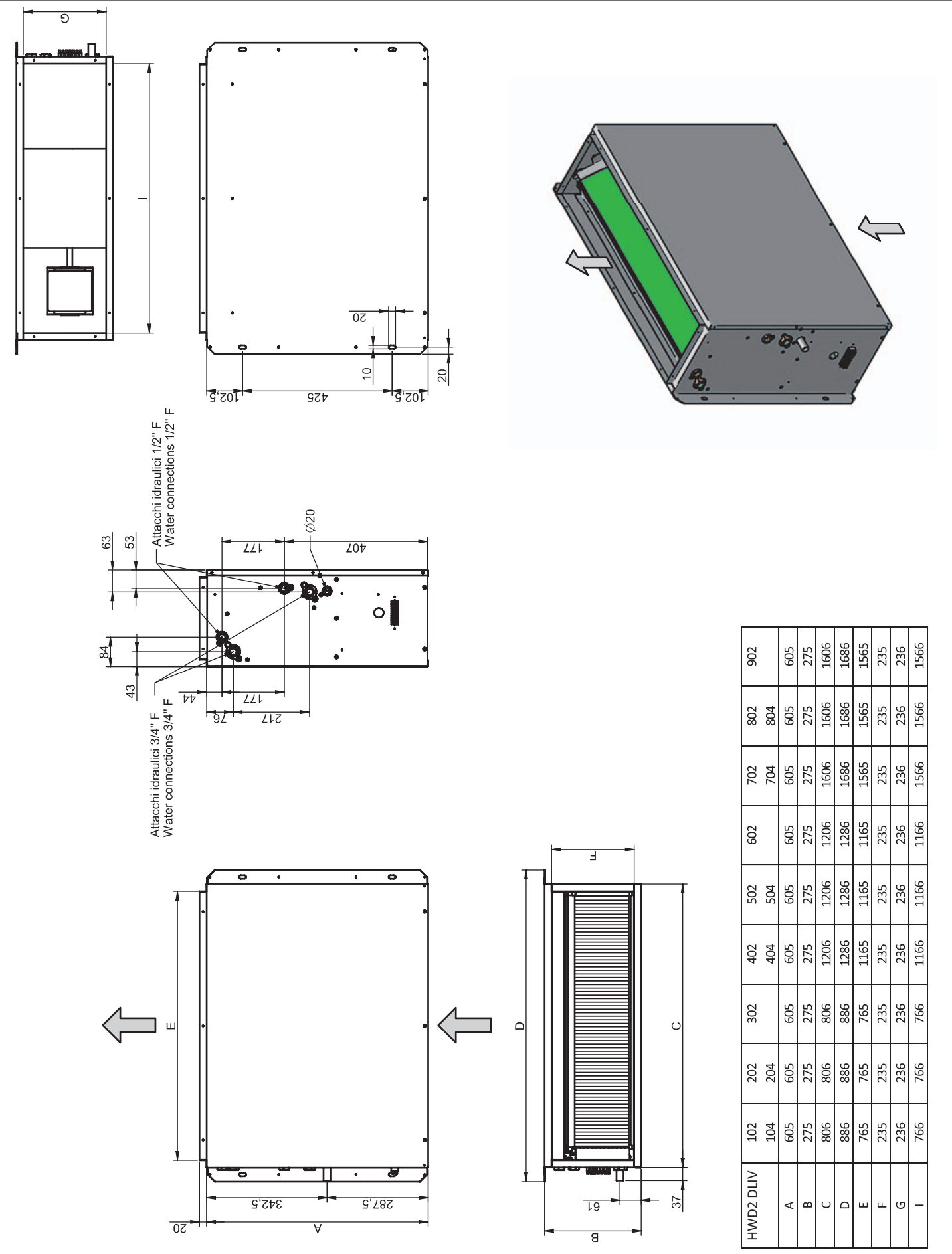
KIT HB



ET1011539

11. DIMENSIONAL DATA AND WATER CONNECTIONS (a-HWD2 DLIV)

Fan coils have been designed and made for installation in heating and air-conditioning systems.

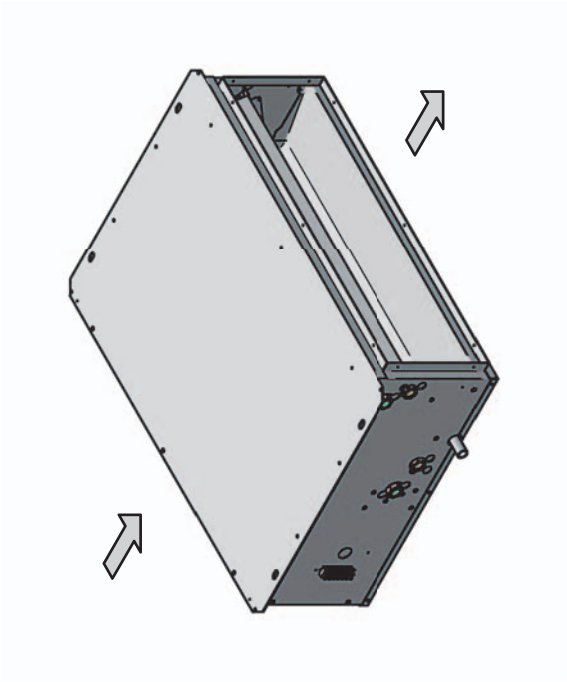
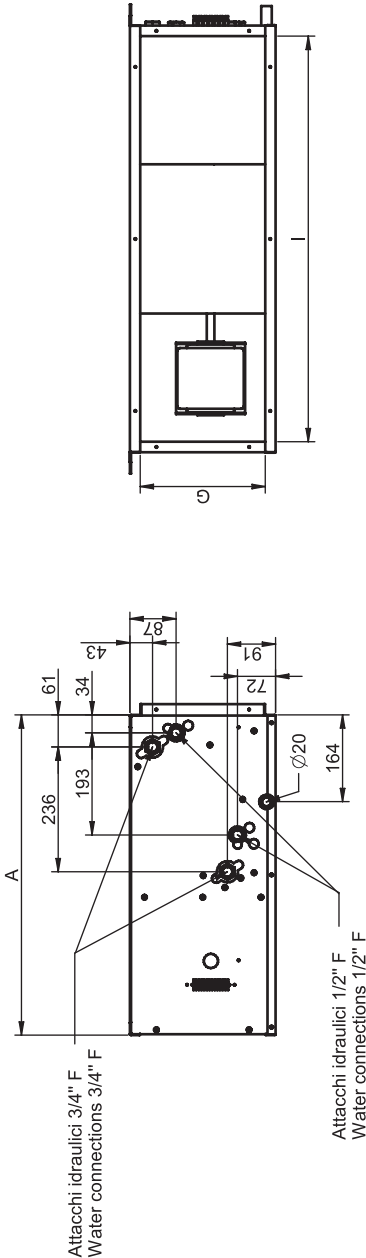


HWD2 DLIV	102	202	302	402	502	602	702	802	902
A	104	204	304	404	504	604	704	804	904
B	605	605	605	605	605	605	605	605	605
C	275	275	275	275	275	275	275	275	275
D	806	806	806	1206	1206	1206	1606	1606	1606
E	886	886	886	1286	1286	1286	1686	1686	1686
F	765	765	765	1165	1165	1165	1565	1565	1565
G	235	235	235	235	235	235	235	235	235
I	236	236	236	236	236	236	236	236	236
	766	766	766	1166	1166	1166	1566	1566	1566

11. DIMENSIONAL DATA AND WATER CONNECTIONS (a-HWD2 DLIO)

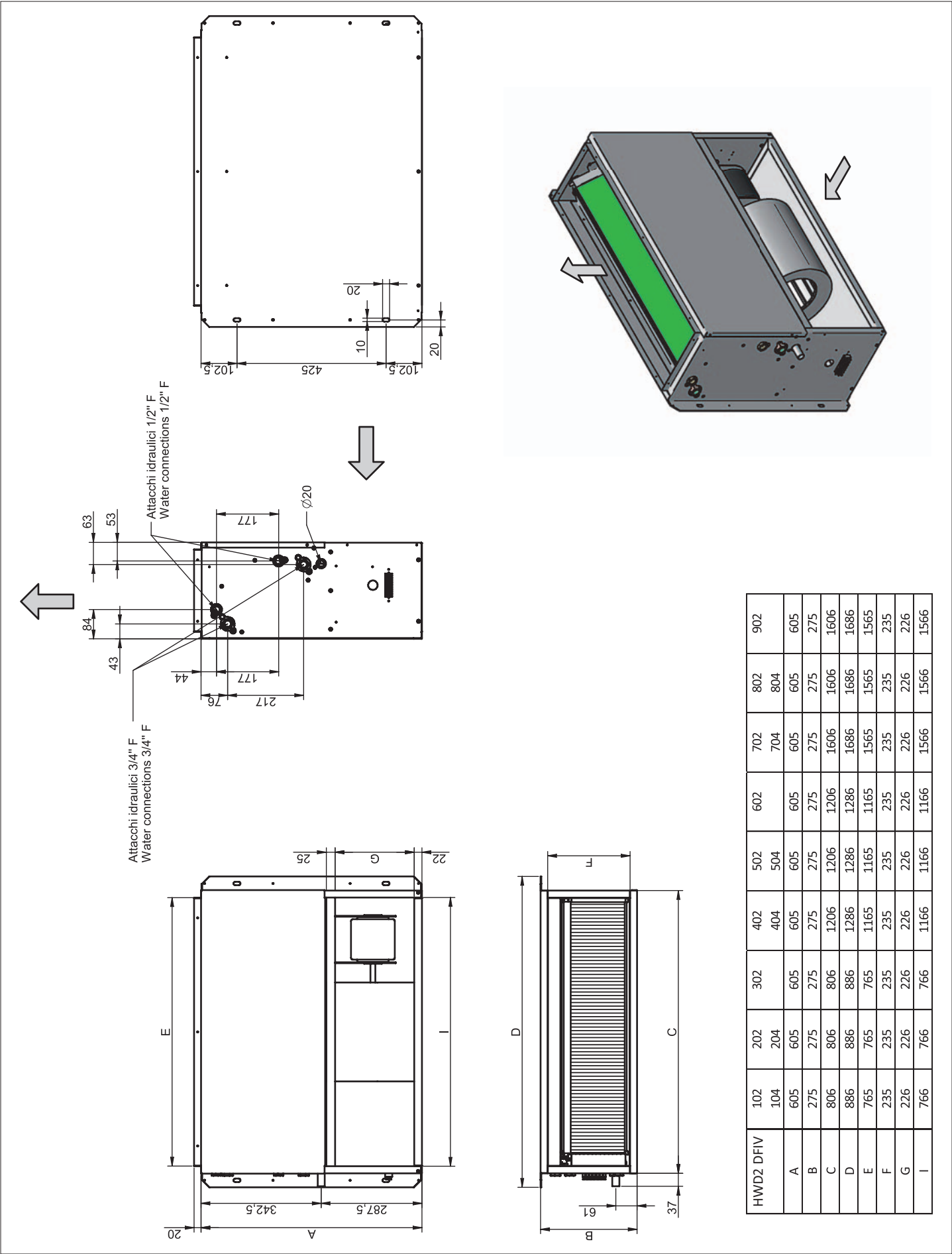
Fan coils have been designed and made for installation in heating and air-conditioning systems.

HWD2 DLIO	102	202	302	402	502	602	702	802	902
	104	204		404	504		704	804	
A	605	605	605	605	605	605	605	605	605
B	275	275	275	275	275	275	275	275	275
C	806	806	806	1206	1206	1206	1606	1606	1606
D	886	886	886	1286	1286	1286	1686	1686	1686
E	765	765	765	1165	1165	1165	1565	1565	1565
F	235	235	235	235	235	235	235	235	235
G	236	236	236	236	236	236	236	236	236
I	766	766	766	1166	1166	1166	1566	1566	1566

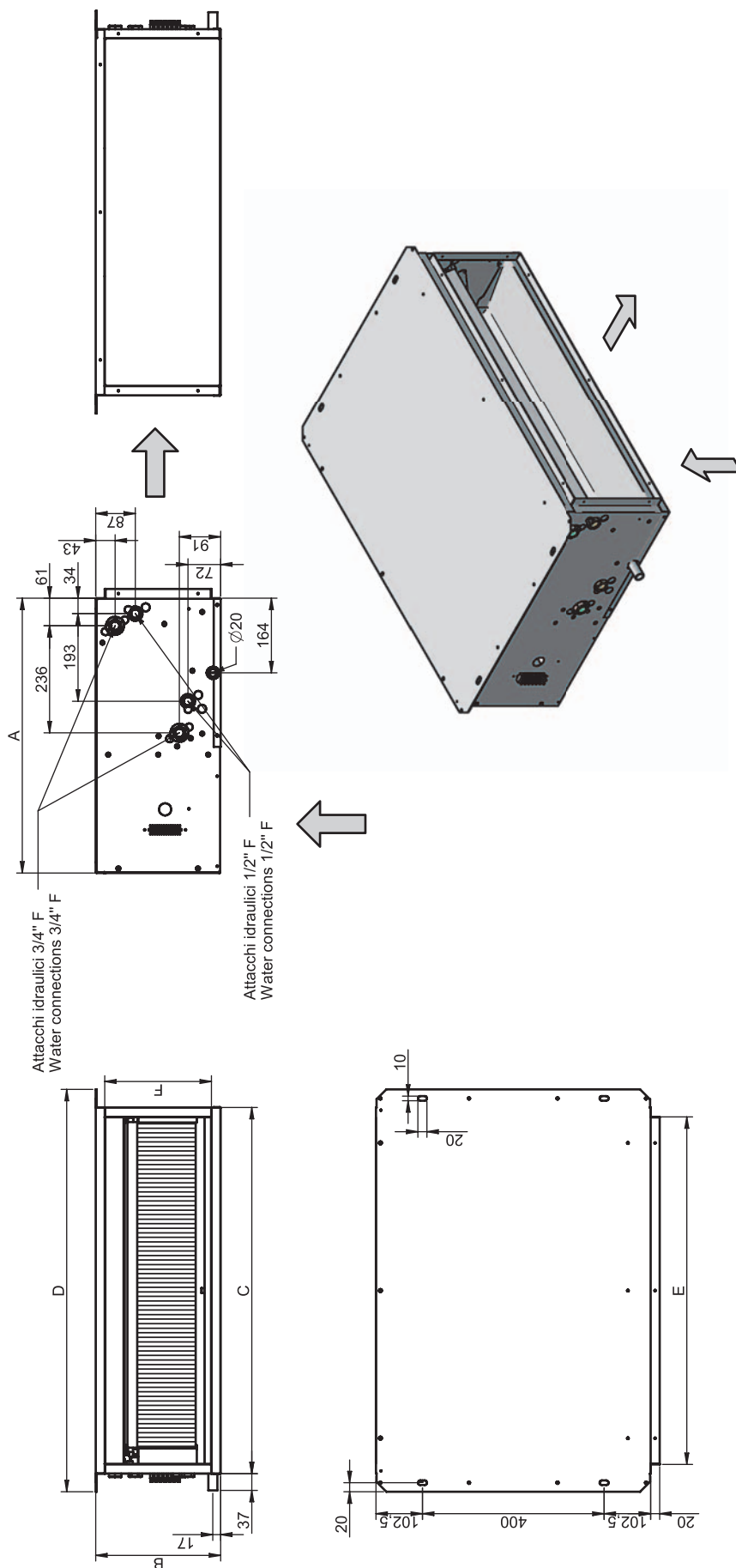
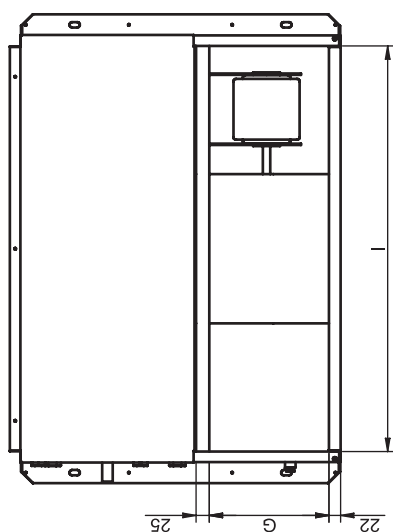


11. DIMENSIONAL DATA AND WATER CONNECTIONS (a-HWD2 DFIV)

Fan coils have been designed and made for installation in heating and air-conditioning systems.



HWD2 DFIO	102	202	302	402	502	602	702	802	902
	104	204		404	504		704	804	
A	605	605	605	605	605	605	605	605	605
B	275	275	275	275	275	275	275	275	275
C	806	806	806	1206	1206	1206	1606	1606	1606
D	886	886	886	1286	1286	1286	1686	1686	1686
E	765	765	765	1165	1165	1165	1565	1565	1565
F	235	235	235	235	235	235	235	235	235
G	226	226	226	226	226	226	226	226	226
I	766	766	766	1166	1166	1166	1566	1566	1566



REVERSING THE HYDRAULIC CONNECTIONS

⚠ WARNING! (Compulsory for vertical units only):
Run the electrical cables on the opposite side to the water connections.

If the terminal block is fitted (or electrical panel, or electronic boards), remove and position on the opposite side (1).

(1) Replace the component by following the same procedure used for dismantling, in reverse order.

Replace the component on the opposite side, corresponding (mirrored and symmetrical) to the original.

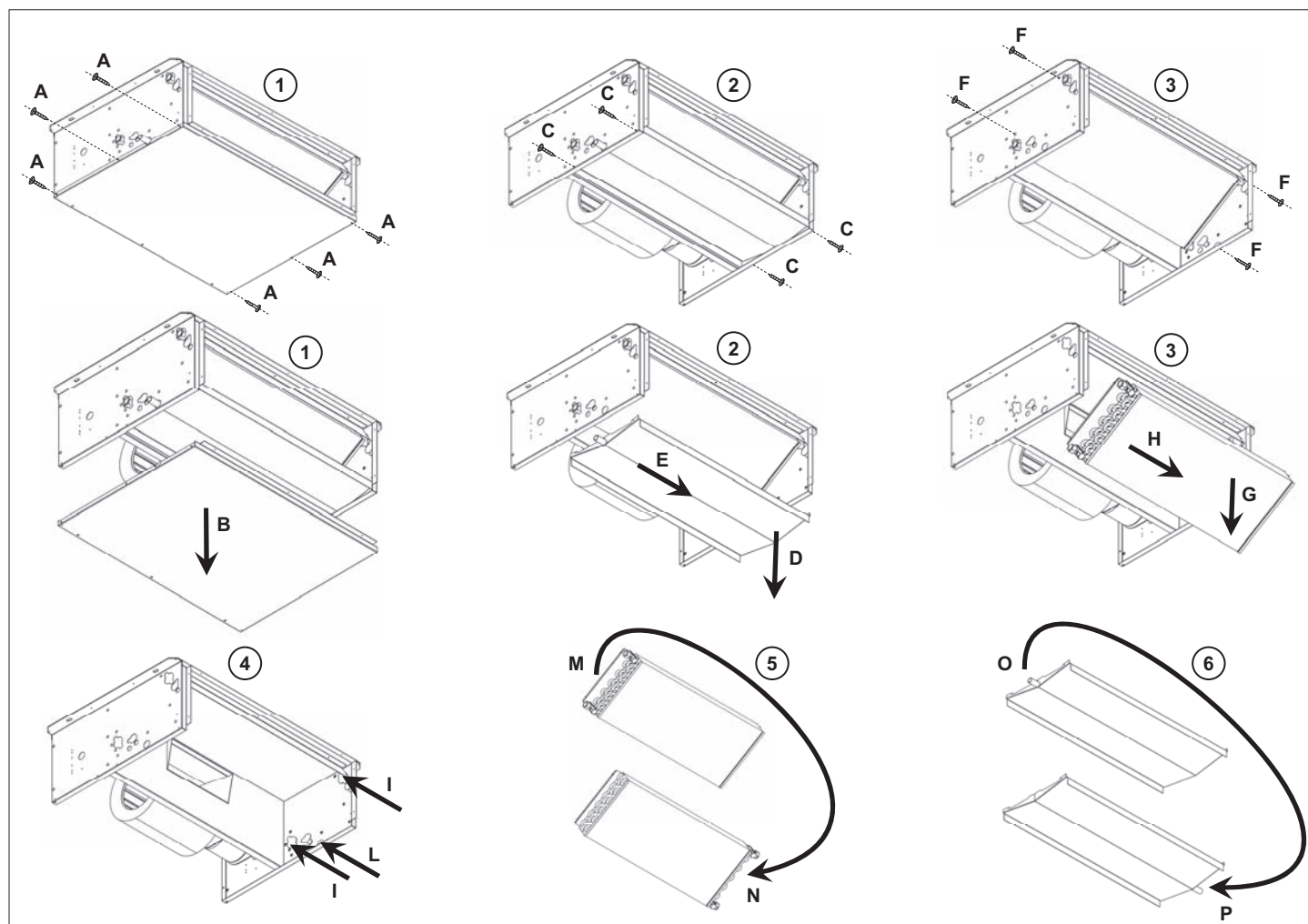
Reversal of main coil from right to left

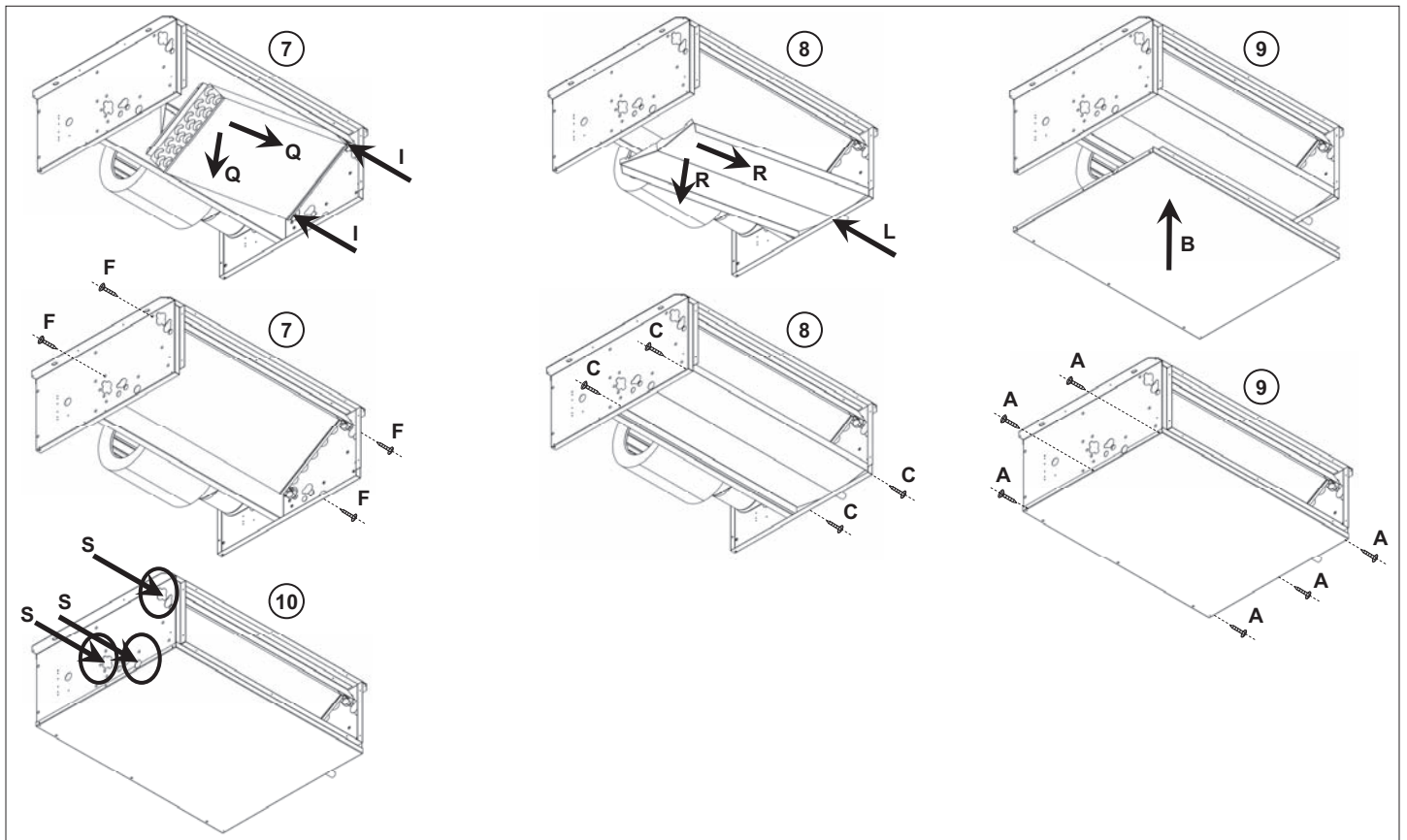
1. Unscrew the 6 screws marked "A" Ø 3.9x9.5 (3 on left + 3 on right).
Remove the panel in the direction of the arrow "B".
2. Unscrew the 4 screws marked "C" Ø 3.9x9.5 (2 on left + 2 on right).
Slightly tilt the main pan in the direction of the arrow "D" and move it away from the left shoulder, in the direction of the arrow "E".
3. Unscrew the 4 screws marked "F" Ø 3.9x9.5 that support the coil on the shoulders (2 on left + 2 on right).
Slightly tilt the coil in the direction of the arrow "G" and move it away from the left shoulder, in the direction of the arrow "H".
4. Open the 2 knock-outs provided on the opposite shoulder, corresponding to the coil water connections "I".
Open the knock-out on the opposite shoulder, corresponding to the condensate drain hose "L".

5. Reverse the direction of the coil from pos. "M" to pos. "N" (180° rotation).
6. Reverse the direction of the condensate pan from pos. "O" to pos. "P" (180° rotation).
7. Insert the coil, tilting it as shown by "Q" and inserting the water connections in the new holes "I" (created in point 4).
Tighten the 4 screws marked "F" Ø 3.9x9.5 on the holes at the shoulder (2 on left + 2 on right).
Note: same operation as point 3 in reverse; reuse the same screws.
8. Insert the condensate pan, tilting it as shown by "R" and insert the condensate drain hose in the new holes "L" (created in point 4).
Tighten the 4 screws marked "C" Ø 3.9x9.5 on the holes at the shoulder (2 on left + 2 on right).
Note: same operation as point 2 in reverse; reuse the same screws.
9. Reposition the panel "B". Tighten the 6 screws marked "A" Ø 3.9x9.5 (3 on left + 3 on right).
Note: same operation as point 1 in reverse; reuse the same screws.
10. Close the holes left open on the left shoulder "S" using closed-cell insulation.

Reversal of main coil from left to right

To reverse the position of the coil, follow the previous instructions, however considering the left shoulder as the starting point rather than the right.





14. ELECTRICAL CONNECTIONS

The fan coil comes fully wired and only requires:

- Connecting to the mains electricity supply and to any room control.

It is also recommended to check that:

- The characteristics of the mains electricity supply are suitable for the input indicated in the table below, which (with maximum values) should serve for sizing both the circuit breakers and the power cables (any other appliances working in parallel should also be taken into consideration).
- The supply voltage corresponds to the rated value +/- 10%.

The following is compulsory:

⚠ Installation near the appliance of a delayed-action single-pole linked magnetothermal circuit breaker, padlockable, line isolating switch, in compliance with CEI-EN standards (contact separation of at least 3 mm).

Table of power consumption and current draw by model

a-HWD2	102/104		202/204		302		402/404		502/504		602		702/104		802/804		902/904	
50 HZ	1,25	270	1,25A	270	1,25A	270	2,7A	570	2,7A	570	2,7A	570	3,9A	840	3,9A	840	3,9A	840
60 HZ	1,35A	290	1,35A	290	1,35A	290	2,8A	585	2,8A	585	2,8A	585	4,8A	1000	4,8A	1000	4,8A	1000

Table of electrical connections

Sizing table

a-HWD2	Power supply	Max. input (W)	Max. absorbed current (A)
102-104	230 ~ 50	270	1,25
202-204	230 ~ 50	270	1,25
302-304	230 ~ 50	270	1,25
402-404	230 ~ 50	570	2,7
502-504	230 ~ 50	570	2,7
602-604	230 ~ 50	570	2,7
702-704	230 ~ 50	840	3,9
802-804	230 ~ 50	840	3,9
902-904	230 ~ 50	840	3,9

Sizing table with 700 W heater

a-HWD2	Power supply	Max. input (W)	Max. absorbed current (A)
102-104	230 ~ 50	970	4,29
202-204	230 ~ 50	970	4,29
302-304	230 ~ 50	970	4,29
402-404	230 ~ 50	1270	5,74
502-504	230 ~ 50	1270	5,74
602-604	230 ~ 50	1270	5,74
702-704	230 ~ 50	1540	6,94
802-804	230 ~ 50	1540	6,94
902-904	230 ~ 50	1540	6,94

Sizing table with 1000 W heater

a-HWD2	Power supply	Max. input (W)	Max. absorbed current (A)
102-104	230 ~ 50	1270	5,60
202-204	230 ~ 50	1270	5,60
302-304	230 ~ 50	1270	5,60
402-404	230 ~ 50	1570	7,05
502-504	230 ~ 50	1570	7,05
602-604	230 ~ 50	1570	7,05
702-704	230 ~ 50	1840	8,25
802-804	230 ~ 50	1840	8,25
902-904	230 ~ 50	1840	8,25

Sizing table with 1500 W heater

a-HWD2	Power supply	Max. input (W)	Max. absorbed current (A)
102-104	230 ~ 50	1770	7,77
202-204	230 ~ 50	1770	7,77
302-304	230 ~ 50	1770	7,77
402-404	230 ~ 50	2070	9,22
502-504	230 ~ 50	2070	9,22
602-604	230 ~ 50	2070	9,22
702-704	230 ~ 50	2340	10,42
802-804	230 ~ 50	2340	10,42
902-904	230 ~ 50	2340	10,42

Sizing table with 2000 W heater

a-HWD2	Power supply	Max. input (W)	Max. absorbed current (A)
102-104	230 -50	2270	9,95
202-204	230 -50	2270	9,95
302-304	230 -50	2270	9,95
402-404	230 -50	2570	11,40
502-504	230 -50	2570	11,40
602-604	230 -50	2570	11,40
702-704	230 -50	2840	12,60
802-804	230 -50	2840	12,60
902-904	230 -50	2840	12,60

Sizing table with 3000 W heater

a-HWD2	Power supply	Max. input (W)	Max. absorbed current (A)
102-104	230 -50	3270	14,29
202-204	230 -50	3270	14,29
302-304	230 -50	3270	14,29
402-404	230 -50	3570	15,74
502-504	230 -50	3570	15,74
602-604	230 -50	3570	15,74
702-704	230 -50	3840	16,94
802-804	230 -50	3840	16,94
902-904	230 -50	3840	16,94



for a greener tomorrow

Eco Changes is the Mitsubishi Electric Group's environmental statement, and expresses the Group's stance on environmental management. Through a wide range of businesses, we are helping contribute to the realization of a sustainable society.



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