



There are 4 different sizes to move flows from 500 to 8,000 m³/h:

- UTBS-2: Flow rates from 500 to 2.150 m³/h and 360 mm high.
- UTBS-3: Flow rates from 1.200 to 4.400 m³/h and 410 mm high.
- UTBS-5: flow rates from 2.400 to 6.000 m³/h y 410 mm high.
- UTBS-8: Flow rates from 4.000 to 8.000 m³/h and 500 mm high.

Main module composed of 3 sections; filtration, coils and fan.

Filters

Filtration section with two alternatives:

- Long version P F7 with capacity for mounting two filters: F7 with very low built-in pressure drop and possibility of mounting a second filter inside the unit (supplied as accessory).
- M5 short version with capacity for a single M5 filter.

Coils section with option to equip water coils, direct expansion coils or electric batteries.

Fan section, allows the air outlet to be oriented upwards or frontally, by exchanging the front and upper panels.

Motors

Model 2 and 3: Single phase EC motors with integrated electronic protection, 230V/I/50-60Hz IP44, Class B.

Model 5: Single phase EC motors with integrated electronic protection, 230V/I/50-60Hz IP55, Class F.

Model 8: Three phase EC motors with integrated electronic protection, 400V/III/50-60Hz IP55, Class F.

Available in a version with perimetral base which facilitates the installation on roof.

Minimum ambient temperature: -10°C.
 Minimum air inlet temperature: -20°C.

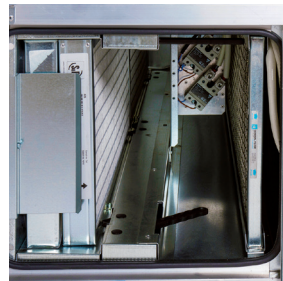
Components / Modules

- Silencers
- Mixing box

Other configurations available through the treatment unit selection program.



Product selection program
 S&P air handling units selection software available.



Tightening system
 In version P F7: The articulated arm system guarantees the tightness of the filtration section.



Robust construction
 High quality finishing with aluminium profile structure, providing a robust and tight assembly.

CONTROL

UTBS PRO-REG includes integral operating control.

It includes manual or automatic control of the fan for VAV, CAV or COP modes:

VAV - Variable air volume

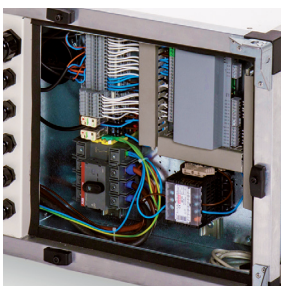
Fan speed can be adjusted via analogue 0-10V signal.

CAV - Constant air volume

Fan speed can be adjusted to allow a constant airflow.

COP - Constant pressure

Fan speed can be adjusted to maintain a constant pressure in the ducting system.



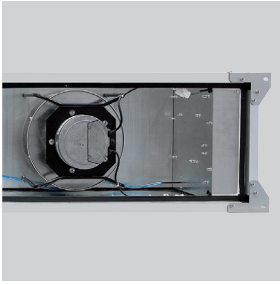
Coils management

Versions equipped with coils allow the management of the chilled/hot water via temperature probes included in the unit.

* See complete table of control functionalities.



VENTAJAS CONSTRUCTIVAS



Fans
Plug-fan with backward blades impeller and EC motor.



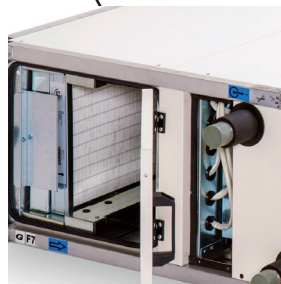
Condensate tray
Versions with cold water coil and direct expansion coil in stainless steel with lateral outlet.



Easy access to filters through panels, side or bottom.
Two filtering options:
- Long version **P F7** with capacity for mounting two filters: F7 with very low built-in pressure drop and possibility of mounting a second filter (supplied as an accessory). The filter clamping system with articulated arms ensures excellent sealing of the filter assembly.
- **M5** short version with capacity to allow a single M5 filter mounted over a rail without filter clamping devices.



Integrated control
Integrated electronic control, inside the unit.



Heating and cooling coils
Batteries section with option to equip water coils, direct expansion coils or electric batteries.

TECHNICAL CHARACTERISTICS

Units with electrical battery

	Complete unit				Fan			Electric battery	
	Rectangular air connections (mm)	Nominal flow rate (m³/h)	Power supply	Max. abs. current (A)	Quantity	Power* (kW)	Maximum absorbed current. Total fans (A)	Heating power (kW)	Max. Current (A)
UTBS-2 PRO-REG	690 x 300	1.850	3F+N/400V, 50-60Hz	9,2	1	0,46	2,0	4,5	6,9
				25,3				15	23
UTBS-3 PRO-REG	1040 x 350	3.500	3F+N/400V, 50-60Hz	13,4	2	0,9	3,9	6	9,2
				27,2				15	23
				40,7				24	36,5
UTBS-5 PRO-REG	1440 x 350	5.300	3F+N/400V, 50-60Hz	21,5	2	1,7	7,6	9	13,7
				30,8				15	23
				62,5				36	54,7
UTBS-8 PRO-REG	1840 x 440	7.200	3F+N/400V, 50-60Hz	27,0	2	2	3,8	15	23
				40,5				24	36,5
				72,5				45	68,5

* In units with two fans, this value corresponds to the sum of both fans.

Units with hot water coil

	Complete unit				Fan			2-rows coil H2	4-rows coil H4
	Rectangular air connections (mm)	Nominal flow rate (m³/h)	Power supply	Max. abs. current (A)	Quantity	Power* (kW)	Maximum absorbed current. Total fans (A)	Heating power (kW)	Heating power (kW)
UTBS-2 PRO-REG	690 x 300	1.800	1F /230V, 50-60Hz	2,3	1	0,46	2,0	10 - 14,4	22,7 - 15,5
UTBS-3 PRO-REG	1040 x 350	3.250	1F /230V, 50-60Hz	4,2	2	0,9	3,9	20,9 - 30,5	46,8 - 31,9
UTBS-5 PRO-REG	1440 x 350	5.000	1F /230V, 50-60Hz	7,8	2	1,7	7,6	29,4 - 42,7	66,6 - 45,2
UTBS-8 PRO-REG	1840 x 440	6.900	3F+N/400V, 50-60Hz	4,0	2	2	3,8	49,8 - 72,5	111,5 - 76,1

* In units with two fans, this value corresponds to the sum of both fans.

Units with cool water coil

	Complete unit				Fan			4-rows coil C4	6-rows coil C6
	Rectangular air connections (mm)	Nominal flow rate (m³/h)	Power supply	Max. abs. current (A)	Quantity	Power* (kW)	Maximum absorbed current. Total fans (A)	Cooling power (kW)	Cooling power (kW)
UTBS-2 PRO-REG	690 x 300	1.300	1F /230V, 50-60Hz	2,3	1	0,46	2,0	10	11,9
UTBS-3 PRO-REG	1040 x 350	2.600	1F /230V, 50-60Hz	4,2	2	0,9	3,9	20,5	23,3
UTBS-5 PRO-REG	1440 x 350	3.750	1F /230V, 50-60Hz	7,8	2	1,7	7,6	29,6	38,4
UTBS-8 PRO-REG	1840 x 440	6.100	3F+N/400V, 50-60Hz	4,0	2	2	3,8	48,2	64,8

* In units with two fans, this value corresponds to the sum of both fans.

TECHNICAL CHARACTERISTICS

Fan section

The UTBS-2 model incorporates a fan, while the UTBS-3,5 and 8 models have two. Each model has associated a certain size of fan and motor. The integrated controller, makes it possible to adapt the working point to the needs of each installation, obtaining a high efficiency at the required working point.

Model	Maximum airflow (m³/h)			Fans				
	Chilled water coil/DX	Hot water coil	Electric battery	Quantity	Power supply voltage	Rotation speed (r.p.m.)	Motor power (kW)	Maximum absorbed current. Total fans* (A)
UTBS-2	1.300	2.150	2.150	1	230/I/50-60	2850	0,45	2
UTBS-3	2.600	4.000	4.000	2	230/I/50-60	2850	2 x 0,45	3,9
UTBS-5	3.750	5.800	5.800	2	230/I/50-60	2830	2 x 0,85	7,2
UTBS-8	6.100	8.000	8.000	2	400/III/50-60	2600	2 x 1,00	3,6

Coil section

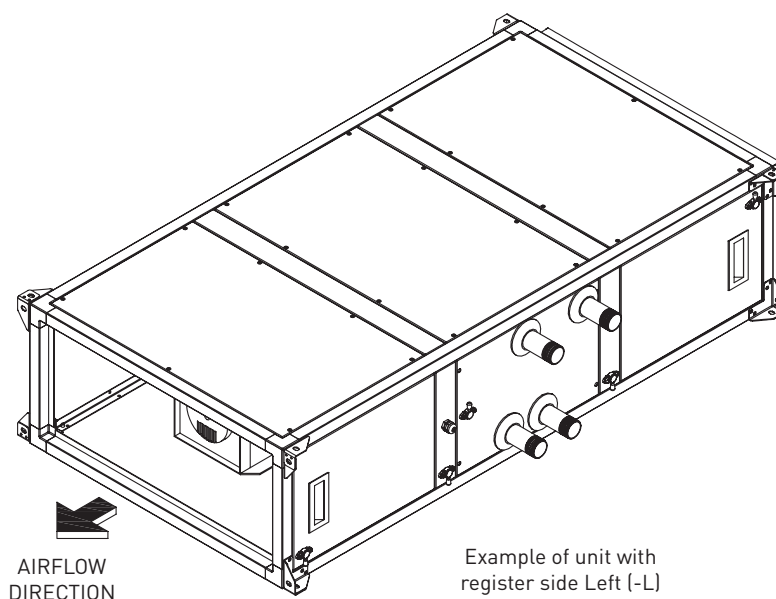
Water coils

The section can be formed by a cold or heat coil or by two coils, one of cold and the other of heat. The units can be supplied with 2 or 4 row heaters and 4 or 6 row cooling coils. If a cooling coil is installed, the section has a tray for collecting condensate made of AISI 304 stainless steel and a droplet separator to avoid dragging the droplets. Both the outlet of the connections and the condensate drain can be carried out on the right or left side of the unit.

Model	Air flow (m³/h)	Coils Thermal power (kW)						Inlet/Outlet connections
		Hot water coil				Cold water coil		
		H2		H4		C4	C6	
		80°C/60°C	50°C/45°C	80°C/60°C	50°C/45°C	7°C/12°C	7°C/12°C	
UTBS-2	900	11,9	8,3	18,2	22,7	8,1	9,6	1-1/4" GM
	1.200	14,4	10,0	22,7	15,5	10,0	11,9	
UTBS-3	1.700	23,5	16,0	34,7	23,5	15,5	20,0	1-1/4" GM
	2.500	30,5	20,9	46,8	31,9	20,5	23,3	
UTBS-5	2.500	33,9	23,3	51,2	34,7	23,2	29,2	1-1/4" GM
	3.500	42,7	29,4	66,6	45,2	29,6	38,4	
UTBS-8	4.000	55,0	37,7	81,4	55,4	36,0	46,8	1-1/2" GM
	6.000	72,5	49,8	111,5	76,1	48,2	64,8	

*Air inlet temperature: -5°C, Rel. Hum: 80%

**Air inlet temperature: 32°C, Rel. Hum: 50%



Electric batteries

The unit can be supplied with electric batteries made of shielded resistances with a galvanised sheet frame. The heaters are equipped with safety protection with manual and automatic reset. The battery includes an anti-radiation screen to protect the filters.

Model	Available electric power / Stages					
	Power (kW)	Stages	Power (kW)	Stages	Power (kW)	Stages
UTBS-2	E4,5	4,5 kW/ 1et.	E15	15,0 kW/ 2et.		
UTBS-3	E6	6,0 kW/ 1et.	E15	15,0 kW/ 2et.	E24	24,0 kW/ 2et.
UTBS-5	E9	9,0 kW/ 2et.	E15	15,0 kW/ 2et.	E36	36,0 kW/ 3et.
UTBS-8	E15	15,0 kW/ 2et.	E24	24,0 kW/ 2et.	E45	45,0 kW/ 3et.

Direct expansion coil (DX)

The unit can be supplied with direct expansion coils for R-410A refrigerant. Compatible with the main DX-Control kits of the market.

4 rows coil

For applications with 100% recirculated air.

Model	Air flow (m³/h)	Coil internal volume (dm³)	Nº Stages	Ø Distributor (Liquid line)	Ø Colector (Gas Line)	COOLING					HEATING				
						Power* (kW)	Supply air Temp. (°C)	Rel. Hum. (%)	R410A Mass flow (kg/h)	ΔP R410A (kPa)	Power** (kW)	Supply air Temp. (°C)	Rel. Hum. (%)	R410A Mass flow (kg/h)	ΔP R410A (kPa)
UTBS-2	1.250	1,2	1	3/8"	5/8"	4,6	14,2	87	84,6	14,9	4,9	32,7	25	87,9	9,6
UTBS-3	2.500	2,21	1	1/2"	5/8"	8,8	14,4	87	163,3	13,0	8,0	33,6	28	143,4	6,1
UTBS-5	3.500	2,41	1	1/2"	5/8"	10,9	15,2	85	200,0	10,9	10,0	32,7	30	180,2	5,1
UTBS-8	6.000	4,4	1	1/2"	5/8"	19,9	14,9	86	368,3	22,1	17,2	32,7	30	310,1	8,8

*Air Inlet 24°C / 50%R.H. R-410a refrigerant. Evaporation temperature: 7°C

**Air Inlet 21°C / 50%R.H. R-410a refrigerant. Condensation temperature: 39°C

6 rows coil

For applications with 50% outdoor air/ 50% recirculated air

Model	Air flow (m³/h)	Coil internal volume (dm³)	Nº Stages	Ø Distributor (Liquid line)	Ø Colector (Gas Line)	COOLING					HEATING				
						Power* (kW)	Supply air Temp. (°C)	Rel. Hum. (%)	R410A Mass flow (kg/h)	ΔP R410A (kPa)	Power** (kW)	Supply air Temp. (°C)	Rel. Hum. (%)	R410A Mass flow (kg/h)	ΔP R410A (kPa)
UTBS-2	1.250	2	1	1/2"	5/8"	10,0	14,5	94	185,3	8,6	10,5	34,4	17	190,5	5,1
UTBS-3	2.500	3,31	1	1/2"	5/8"	19,4	14,9	94	358,6	25,3	19,9	30,8	18	359,0	13,7
UTBS-5	3.500	4,3	1	1/2"	3/4"	26,6	15,2	94	490,5	18,6	27,6	30,6	18	498,0	10,3
UTBS-8	6.000	8,4	2	2 x 1/2"	2x 3/4"	47,8	14,6	94	882,0	25,3	49,8	31,8	17	897,0	12,3

**Air Inlet 29°C / 55%R.H. R-410a refrigerant. Evaporation temperature: 7°C

**Air Inlet 8°C / 75%R.H. R-410a refrigerant. Condensation temperature: 39°C.

Filtered section

Filtration section with two alternatives:

- Long version **P F7** with capacity for mounting two filters: F7 with very low built-in pressure drop and possibility of mounting a second filter inside the unit (supplied as accessory). The filter clamping system with articulated arms ensures excellent sealing of the filter assembly. Available filters G4, M5 and F9.

- **M5** short version capacity to allow a single M5 filter mounted over a rail.

Filtration efficiency according to ISO-16890 up to ePM10 = 99.5%, ePM2.5 = 98.5%, ePM1 = 96.2%. Corresponding to units equipped with F7+F9 filters.

Filter combination	Filtration efficiency s/ISO-16890*		
	ePM10	ePM2,5	ePM1
M5	55%	-	-
F7	90%	83%	75%
M5+F7	95,5%	83%	75%
M5+F9	97,7%	91%	85%
F7+F9	99,5%	98,5%	96,2%

* Considering filters at mid-life of its service life.

PLUG & PLAY CONTROL PRO-REG FUNCTIONS

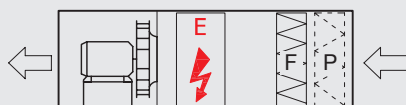
	With water coils	With electrical coil	With DX coil
MAIN COMPONENTS			
General switch	•	•	•
Electric box including control and wiring components, with access from side panel			
External air temperature probe	•	•	•
Return air temperature probe	•	•	•
Supply air temperature probe	•	•	•
Defrost temperature probe	•		
Change over thermostat to be installed on the water supply coil THCO	0	-	-
3 way valve with proportional 0-10V actuator 3WV PROP 24V	0	-	-
Clogged filters switches	•	•	•
Pressure transmitters	•	•	•
FUNCTIONS			
ON/OFF function (Remote ON/OFF via external free voltage contact)	•	•	•
Automatic airflow adjustment, according to a configurable time schedule (Configurable timer)	•	•	•
Supply airflow value shown in the display (For all working modes VAV,COP and CAV)	•	•	•
Automatic speed adjustment of the fans in Constant Airflow mode (Increase of fan speed to compensate filters fouling). No accessoires are required	•	•	•
Automatic airflow adjustment in VAV mode, according to external signal 0-10V (CO ₂ accessory)	•	•	-
Automatic speed adjustment of the fans in Constant Pressure mode (Increase of fan speed when pressure in the duct system decreases). It is necessary TDP-S accessory	•	•	-
BOOST function (Forced speed preset via external free voltage contact)	•	•	•
Thermal power regulation of water coils. 0-10V to manage 3 ways valve (accessory)	•	-	-
Regulation of electric heater battery thermal power. Proportional control via SSR	-	•	-
Proportional control of thermal demand (0-10V output signal) to manage expansion valve kit (verify compatibility with used DX control valve kit)	-	-	•
Isolation damper control (accessory)	•	•	•
Operation of an external mixing box (accessory)	•	•	•
Speed-control of an external fan (slave) with analogic signal 0-10V available	•	•	•
CONTROL AND SAFETY			
Control of polluted filters via pressure switches (included).	•	•	•
Failure in temperature probes	•	•	•
Failure in fan via pressure trasmitters (included)	•	•	•
Anti-frost protection of water coils	•	-	-
Alarm display in remote control.	•	•	•
Detailed information about alarms	•	•	•
Fire alarm indication, via activation by external contact coming from fire switchboard	•	•	•
COMMUNICATION			
Control via touch-screen included	•	•	•
Modbus RTU (RS-485)	•	•	•
BACNET TCP/IP	•	•	•

• Included 0 Optional - Not available

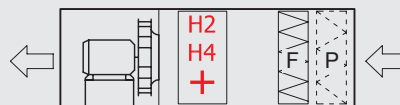
STANDARD CONFIGURATION

P F7 VERSIONS WITH THE POSSIBILITY OF MOUNTING TWO FILTERS (LONG CHASSIS)

Fan+Heating

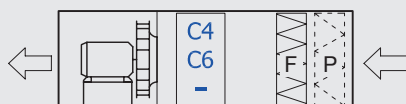


P: Prefilter G4/M5 (accessory)
F: Filter F7
E: Electric coil (E 4.5 to E45)



P: Prefilter G4/M5 (accessory)
F: Filter F7
H2: 2 Rows hot water coil
H4: 4 Rows hot water coil

Fan+Cooling

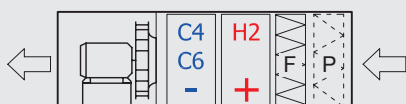


P: Prefilter G4/M5 (accessory)
F: Filter F7
C4: 4 Rows cool water coil
C6: 6 Rows cool water coil

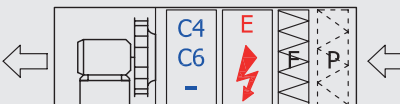


P: Prefilter G4/M5 (accessory)
F: Filter F7
X4: 4 Rows direct expansion coil
X6: 6 Rows direct expansion coil

Fan+Heating+Cooling



P: Prefilter G4/M5 (accessory)
F: Filter F7
H2: 2 Rows hot water coil
C4: 4 Rows cool water coil
C6: 6 Rows cool water coil

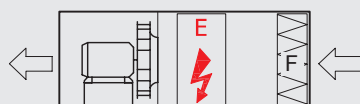


P: Prefilter G4/M5 (accessory)
F: Filter F7
E: Electric battery (E4,5 to E45)
C4: 4 Rows cool water coil
C6: 6 Rows cool water coil

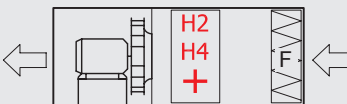
All the versions are available with connections side on the left or right side (according to air flow sense)

M5 VERSIONS WITH A SINGLE FILTER (SHORT CHASSIS)

Fan+Heating

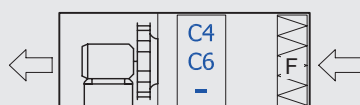


F: Filter M5
E: Electric coil (E 4.5 to E45)

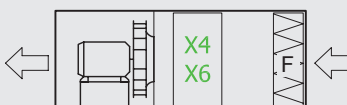


F: Filter M5
H2: 2 Rows hot water coil
H4: 4 Rows hot water coil

Fan+Cooling

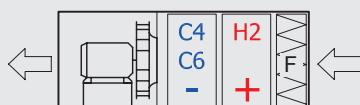


F: Filter M5
C4: 4 Rows cool water coil
C6: 6 Rows cool water coil

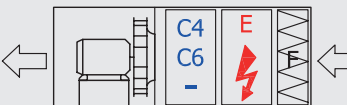


F: Filter M5
X4: 4 Rows direct expansion coil
X6: 6 Rows direct expansion coil

Fan+Heating+Cooling



F: Filter M5
H2: 2 Rows hot water coil
C4: 4 Rows cool water coil
C6: 6 Rows cool water coil



F: Filter M5
E: Electric coil (E4.5 to E45)
C4: 4 Rows cool water coil
C6: 6 Rows cool water coil

All the versions are available with connections side on the left or right side (according to air flow sense)

ACOUSTIC CHARACTERISTICS - UTBS 2 PRO-REG

Sound power levels at INLET (Lw(A))										
Airflow (m³/h)	Total Pressure (Pa)	Frequency (Hz)								
		63	125	250	500	1000	2000	4000	8000	Total dB(A)
500	200	45	52	57	53	49	43	40	35	60
	400	53	60	65	60	56	50	47	42	68
1.000	200	45	52	57	53	49	43	40	35	60
	400	51	58	63	59	55	49	46	41	66
	600	57	64	69	64	60	54	51	46	70
1.500	800	60	67	72	68	64	58	55	50	75
	200	51	58	63	59	55	49	46	41	66
	400	53	60	65	61	57	51	48	43	68
	600	56	63	68	64	60	54	51	46	71
	800	59	66	71	66	62	56	53	48	74

Sound power levels at OUTLET (Lw(A))										
Airflow (m³/h)	Total Pressure (Pa)	Frequency (Hz)								
		63	125	250	500	1000	2000	4000	8000	Total dB(A)
500	200	36	48	56	59	61	62	57	54	67
	400	44	56	64	66	68	69	64	61	74
1.000	200	36	48	56	59	61	62	57	54	67
	400	42	54	62	65	67	68	63	60	73
	600	48	60	68	70	72	73	68	65	78
1.500	800	51	63	71	74	76	77	72	69	82
	200	42	54	62	65	67	68	63	60	73
	400	44	56	64	67	69	70	65	62	75
	600	47	59	67	70	72	73	68	65	77
	800	50	62	70	72	74	75	70	67	80

Sound power levels at RADIATED (Lw(A))										
Airflow (m³/h)	Total Pressure (Pa)	Frequency (Hz)								
		63	125	250	500	1000	2000	4000	8000	Total dB(A)
500	200	32	36	43	38	44	44	39	35	50
	400	40	44	51	46	52	52	47	43	57
1.000	200	32	36	43	38	44	44	39	35	50
	400	38	42	49	44	50	50	45	41	56
	600	44	48	55	49	55	55	50	46	61
1.500	800	47	51	58	53	59	59	54	50	65
	200	38	42	49	44	50	50	45	41	56
	400	40	44	51	46	52	52	47	43	58
	600	43	47	54	49	55	55	50	46	61
	800	46	50	57	51	57	57	52	48	63

THERMAL CHARACTERISTICS - UTBS 2 PRO-REG

2-row heating coil									
Airflow		900 (m³/h)				1200 (m³/h)			
Water T. (°C)	Ext. T. (°C)	Power (kW)	Output T. (°C)	Water flow (l/s)	Water pressure drop (kPa)	Power (kW)	Output T. (°C)	Water flow (l/s)	Water pressure drop (kPa)
80/60	-10	12,6	32,1	0,15	3,4	15,3	28,4	0,18	4,8
	-5	11,9	34,7	0,14	3,0	14,4	31,1	0,17	4,3
	0	11,1	37,1	0,13	2,7	13,5	33,8	0,16	3,8
	5	10,3	39,5	0,12	2,3	12,5	36,4	0,15	3,4
	10	9,6	41,8	0,11	2,0	11,6	39,0	0,14	2,9
50/45	-10	9,0	19,9	0,43	25,0	10,9	17,2	0,52	36,0
	-5	8,3	22,5	0,40	21,5	10,0	20,1	0,48	30,8
	0	7,5	25,0	0,36	18,0	9,1	22,8	0,43	25,9
	5	6,8	27,5	0,32	14,8	8,2	25,5	0,39	21,2
	10	6,0	29,9	0,29	11,8	7,7	28,1	0,34	17,0

4-row heating coil									
Airflow		900 (m³/h)				1200 (m³/h)			
Water T. (°C)	Ext. T. (°C)	Power (kW)	Output T. (°C)	Water flow (l/s)	Water pressure drop (kPa)	Power (kW)	Output T. (°C)	Water flow (l/s)	Water pressure drop (kPa)
80/60	-10	19,3	54,3	0,23	4,6	24,1	50,3	0,29	6,9
	-5	18,2	55,6	0,22	4,1	22,7	51,9	0,27	6,2
	0	17,0	56,8	0,20	3,6	21,3	53,3	0,25	5,5
	5	15,9	57,9	0,19	3,2	19,9	54,6	0,24	4,8
	10	14,7	59,0	0,18	2,8	18,3	55,9	0,22	4,2
50/45	-10	13,5	34,8	0,64	32,8	16,8	32,1	0,80	49,6
	-5	12,4	36,2	0,59	28,0	15,5	33,7	0,75	42,5
	0	11,2	37,4	0,54	23,5	14,1	35,2	0,66	35,7
	5	10,1	38,7	0,48	19,4	12,6	36,6	0,61	29,7
	10	8,9	39,8	0,43	15,5	11,2	38,1	0,52	23,5

4-row cooling coil									
Airflow		900 (m³/h)				1200 (m³/h)			
Water T. (°C)	Ext. T. (°C) / RH (%)	Power (kW)	Output Temp (°C) / RH (%)	Water flow (l/s)	Water pressure drop (kPa)	Power (kW)	Output Temp (°C) / RH (%)	Water flow (l/s)	Water pressure drop (kPa)
7/12	25 / 50	3,4	15,4 / 84,7	0,16	2,5	4,2	15,9 / 82,2	0,20	3,9
	27 / 50	4,6	15,6 / 86	0,22	4,6	5,7	16,3 / 83,3	0,27	7,1
	32 / 50	8,1	16,5 / 87,7	0,39	14,3	10,0	17,5 / 85,0	0,48	21,7

6-row cooling coil									
Airflow		900 (m³/h)				1200 (m³/h)			
Water T. (°C)	Ext. T. (°C) / RH (%)	Power (kW)	Output Temp (°C) / RH (%)	Water flow (l/s)	Water pressure drop (kPa)	Power (kW)	Output Temp (°C) / RH (%)	Water flow (l/s)	Water pressure drop (kPa)
7/12	25 / 50	3,7	14,2 / 91,3	0,18	1,2	4,8	14,5 / 89,4	0,23	1,8
	27 / 50	5,2	14,1 / 93,2	0,25	2,1	6,7	14,5 / 91,1	0,32	3,4
	32 / 50	9,6	13,8 / 94,8	0,46	7,1	11,9	14,8 / 92,7	0,57	11,0

ACOUSTIC CHARACTERISTICS - UTBS 3 PRO-REG

Sound power levels at INLET (Lw(A))										
Airflow (m ³ /h)	Total pressure (Pa)	Frequency (Hz)								
		63	125	250	500	1000	2000	4000	8000	Total dB(A)
1.000	400	51	58	63	59	55	49	46	41	66
	600	57	64	69	64	60	54	51	46	72
	800	60	67	72	68	64	58	55	50	75
2.000	400	55	62	67	62	58	52	49	44	70
	800	60	67	72	67	63	57	54	49	75
	1200	64	71	76	72	68	62	59	54	79
	1600	68	75	80	76	72	66	63	58	83

Sound power levels at OUTLET (Lw(A))										
Airflow (m ³ /h)	Total pressure (Pa)	Frequency (Hz)								
		63	125	250	500	1000	2000	4000	8000	Total dB(A)
1.000	400	42	54	62	65	67	68	63	60	73
	600	48	60	68	70	72	73	68	65	78
	800	51	63	71	74	76	77	72	69	82
2.000	400	46	58	66	68	70	71	66	63	79
	800	51	63	71	73	75	76	71	68	81
	1200	55	67	75	78	80	81	76	73	86
	1600	59	71	79	82	84	85	80	77	90

Sound power levels at RADIATED (Lw(A))										
Airflow (m ³ /h)	Total pressure (Pa)	Frequency (Hz)								
		63	125	250	500	1000	2000	4000	8000	Total dB(A)
1.000	400	38	42	49	44	50	50	45	41	56
	600	44	48	55	49	55	55	50	46	61
	800	47	51	58	53	59	59	54	50	65
2.000	400	42	46	53	48	54	54	49	45	59
	800	47	51	58	53	59	59	54	50	64
	1200	52	56	63	57	63	63	58	54	69
	1600	56	60	67	61	67	67	62	58	73

THERMAL CHARACTERISTICS - UTBS 3 PRO-REG

2-row heating coil									
Airflow		1700 (m ³ /h)				2500 (m ³ /h)			
Water T. (°C)	Ext. T. (°C)	Power (kW)	Output T. (°C)	Water flow (l/s)	Water pressure drop (kPa)	Power (kW)	Output T. (°C)	Water flow (l/s)	Water pressure drop (kPa)
80/60	-10	27,9	33,9	0,30	6,7	32,4	28,8	0,39	10,9
	-5	23,5	36,4	0,28	6,1	30,5	31,6	0,36	9,8
	0	22,0	38,8	0,26	5,4	28,6	34,3	0,34	8,7
	5	20,5	41,1	0,25	4,7	26,6	36,9	0,32	7,6
	10	18,9	43,4	0,23	4,1	24,6	39,5	0,29	6,6
50/45	-10	17,4	20,8	0,83	48,2	22,7	17,2	1,08	78,2
	-5	16,0	23,3	0,77	41,5	20,9	20,0	1,00	67,2
	0	14,6	25,8	0,70	35,0	19,0	22,8	0,91	56,7
	5	13,2	28,2	0,63	28,9	17,2	25,5	0,82	46,8
	10	11,7	30,6	0,56	23,2	15,2	28,2	0,72	37,6

4-row heating coil									
Airflow		1700 (m ³ /h)				2500 (m ³ /h)			
Water T. (°C)	Ext. T. (°C)	Power (kW)	Output T. (°C)	Water flow (l/s)	Water pressure drop (kPa)	Power (kW)	Output T. (°C)	Water flow (l/s)	Water pressure drop (kPa)
80/60	-10	36,8	55,0	0,44	4,4	49,7	49,7	0,59	7,7
	-5	34,7	56,2	0,42	3,9	46,8	51,2	0,56	6,8
	0	32,5	57,4	0,39	3,5	43,8	52,6	0,52	6,1
	5	30,3	58,4	0,36	3,1	40,9	54,0	0,49	5,3
	10	28,0	59,5	0,34	2,7	37,8	55,3	0,45	4,6
50/45	-10	25,7	32,6	1,23	31,5	34,7	31,6	1,60	55,0
	-5	23,5	36,6	1,13	26,9	31,9	33,2	1,50	47,0
	0	21,4	37,8	1,02	22,6	29,0	34,8	1,39	39,5
	5	19,3	39,0	0,92	18,6	26,1	36,3	1,25	32,5
	10	17,1	40,1	0,82	14,9	23,1	37,7	1,10	26,0

4-row cooling coil									
Airflow		1700 (m ³ /h)				2500 (m ³ /h)			
Water T. (°C)	Ext. T. (°C) / RH (%)	Power (kW)	Output Temp (°C) / RH (%)	Water flow (l/s)	Water pressure drop (kPa)	Power (kW)	Output Temp (°C) / RH (%)	Water flow (l/s)	Water pressure drop (kPa)
7/12	25 / 50	6,2	15,45/85	0,3	2,2	8,6	16,1 / 81,7	0,41	4,2
	27 / 50	8,7	15,56/86,5	0,42	4,3	11,6	16,5 / 82,8	0,55	7,7
	32 / 50	15,5	16,32/88,1	0,74	13,6	20,5	17,7 / 84,4	0,98	23,8

6-row cooling coil									
Airflow		1700 (m ³ /h)				2500 (m ³ /h)			
Water T. (°C)	Ext. T. (°C) / RH (%)	Power (kW)	Output Temp (°C) / RH (%)	Water flow (l/s)	Water pressure drop (kPa)	Power (kW)	Output Temp (°C) / RH (%)	Water flow (l/s)	Water pressure drop (kPa)
7/12	25 / 50	9,6	12,13/93,5	0,46	7,2	12,9	13,0 / 90,5	0,62	13,1
	27 / 50	12,3	12,18/94,1	0,59	12,0	16,6	13,2 / 91,1	0,79	21,7
	32 / 50	20,0	12,38/95,5	0,96	31,5	23,3	13,7 / 92,8	1,31	57,4

ACOUSTIC CHARACTERISTICS - UTBS 5 PRO-REG

Sound power levels at INLET (Lw(A))										
Airflow (m ³ /h)	Total pressure (Pa)	Frequency (Hz)								
		63	125	250	500	1000	2000	4000	8000	Total dB(A)
2.000	400	56	63	68	64	60	54	51	46	71
	800	65	72	77	72	68	62	59	54	79
3.000	400	56	63	68	63	59	53	50	45	70
	800	64	71	76	71	67	61	58	53	79
	1200	69	76	81	76	72	66	63	58	84
4.000	1600	72	79	84	80	76	70	67	62	87
	400	58	65	70	65	61	55	52	47	73
	800	63	70	75	70	66	60	57	52	78
	1200	67	74	79	75	71	65	62	57	80
5.000	1600	71	78	83	79	75	69	66	61	86
	400	61	68	73	69	65	59	56	51	76
	800	64	71	76	72	68	62	59	54	79
	1200	67	74	79	75	71	65	62	57	82
	1600	70	77	82	78	74	68	65	60	85

Sound power levels at OUTLET (Lw(A))										
Airflow (m ³ /h)	Total pressure (Pa)	Frequency (Hz)								
		63	125	250	500	1000	2000	4000	8000	Total dB(A)
2.000	400	47	59	67	70	72	73	68	65	78
	800	56	68	76	78	80	81	76	73	86
3.000	400	47	59	67	69	71	72	67	64	77
	800	55	67	75	77	79	80	75	72	85
	1200	60	72	80	82	84	85	80	77	90
4.000	1600	63	75	83	86	88	89	84	81	94
	400	49	61	69	71	73	74	69	66	79
	800	54	66	74	76	78	79	74	71	84
	1200	58	70	78	81	83	84	79	76	89
5.000	1600	62	74	82	85	87	88	83	80	93
	400	52	64	72	75	77	78	73	70	83
	800	55	67	75	78	80	81	76	73	86
	1200	58	70	78	81	83	84	79	76	89
	1600	61	73	81	84	86	87	82	79	92

Sound power levels at RADIATED (Lw(A))										
Airflow (m ³ /h)	Total pressure (Pa)	Frequency (Hz)								
		63	125	250	500	1000	2000	4000	8000	Total dB(A)
2.000	400	44	48	55	49	55	55	50	46	61
	800	52	56	63	57	63	63	58	54	69
3.000	400	43	47	54	48	54	54	49	45	60
	800	51	55	62	56	62	62	57	53	68
	1200	56	60	67	61	67	67	62	58	73
4.000	1600	59	63	70	65	71	71	66	62	77
	400	45	49	56	51	57	57	52	48	62
	800	50	54	61	55	61	61	56	52	67
	1200	55	59	66	60	66	66	61	57	72
5.000	1600	59	63	70	64	70	70	65	61	76
	400	49	53	60	54	60	60	55	51	66
	800	51	55	62	57	63	63	58	54	69
	1200	54	58	65	60	66	66	61	57	72
	1600	57	61	68	63	69	69	64	60	75

THERMAL CHARACTERISTICS - UTBS 5 PRO-REG

2-row heating coil									
Airflow		2500 (m³/h)				4500 (m³/h)			
Water T. (°C)	Ext. T. (°C)	Power (kW)	Output T. (°C)	Water flow (l/s)	Water pressure drop (kPa)	Power (kW)	Output T. (°C)	Water flow (l/s)	Water pressure drop (kPa)
80/60	-10	36	33,2	0,43	4,9	56,6	25,7	0,64	10,1
	-5	33,9	35,7	0,41	4,4	50,5	28,7	0,6	9,1
	0	31,8	38,1	0,38	3,9	47,3	31,5	0,57	8
	5	29,6	40,5	0,35	3,4	44	34,3	0,53	7,1
	10	27,3	42,8	0,33	2,9	40,6	37,1	0,49	6,1
50/45	-10	25,4	20,5	1,21	35,7	37,8	15,2	1,81	74,3
	-5	23,3	23	1,12	30,6	34,8	18,2	1,67	63,7
	0	21,3	25,5	1,02	25,7	31,7	21,1	1,52	53,6
	5	19,1	27,9	0,92	21,2	28,5	24,1	1,36	44,2
	10	16,9	30,3	0,81	17	25,3	26,8	1,21	35,3

4-row heating coil									
Airflow		2500 (m³/h)				4500 (m³/h)			
Water T. (°C)	Ext. T. (°C)	Power (kW)	Output T. (°C)	Water flow (l/s)	Water pressure drop (kPa)	Power (kW)	Output T. (°C)	Water flow (l/s)	Water pressure drop (kPa)
80/60	-10	54,3	55,2	0,65	6,1	85,6	47	1,02	14,2
	-5	51,2	56,4	0,61	5,5	80,6	48,7	0,96	12,7
	0	48	57,6	0,57	4,9	75,6	50,4	0,9	11,3
	5	44,7	58,7	0,54	4,3	70,4	51,9	0,84	9,9
	10	41,4	59,7	0,5	3,7	65,2	53,5	0,78	8,6
50/45	-10	37,7	35,3	1,8	43,7	59,6	29,7	2,85	102,4
	-5	34,7	36,6	1,66	37,4	54,8	31,5	2,62	87,5
	0	31,5	37,8	1,51	31,3	49,9	33,3	2,39	73,5
	5	28,3	39	1,36	25,8	44,9	39,4	2,15	60,4
	10	25,1	40,1	1,2	20,6	39,8	36,5	1,9	48,2

4-row cooling coil									
Airflow		2500 (m³/h)				4000 (m³/h)			
Water T. (°C)	Ext. T. (°C) / RH (%)	Power (kW)	Output Temp (°C) / RH (%)	Water flow (l/s)	Water pressure drop (kPa)	Power (kW)	Output Temp (°C) / RH (%)	Water flow (l/s)	Water pressure drop (kPa)
7/12	25 / 50	9,7	15,1 / 85,3	0,5	3,4	14,2	16 / 81,1	0,68	7,4
	27 / 50	13,5	15,2 / 86,4	0,65	6,7	18,7	16,6 / 81,9	0,9	12,8
	32 / 50	23,2	16,1 / 88,1	1,11	19,6	32,6	17,9 / 83,6	1,56	38,8

6-row cooling coil									
Caudal		2500 (m³/h)				4000 (m³/h)			
Water T. (°C)	Ext. T. (°C) / RH (%)	Power (kW)	Output Temp (°C) / RH (%)	Water flow (l/s)	Water pressure drop (kPa)	Power (kW)	Output Temp (°C) / RH (%)	Water flow (l/s)	Water pressure drop (kPa)
7/12	25 / 50	13,9	12,3 / 93,4	0,66	7,2	21,7	13,6 / 88,6	1,04	17,6
	27 / 50	18	12,3 / 94	0,86	12,1	28,1	13,9 / 89,3	1,35	29,5
	32 / 50	29,2	12,5 / 95,4	1,4	31,9	46,8	14,5 / 91,1	2,24	78,3

ACOUSTIC CHARACTERISTICS - UTBS 8 PRO-REG

Sound power levels at INLET (Lw(A))										
Airflow (m³/h)	Total pressure (Pa)	Frequency (Hz)								
		63	125	250	500	1000	2000	4000	8000	Total dB(A)
3.000	400	56	63	68	64	60	54	51	46	71
	800	65	72	77	73	69	63	60	55	80
	1200	70	77	82	77	73	67	64	59	85
5.000	400	59	66	71	66	62	56	53	48	74
	800	64	71	76	71	67	61	58	53	79
	1200	69	76	81	76	72	66	63	58	83
6.000	400	62	69	74	69	65	59	56	51	77
	800	65	72	77	72	68	62	59	54	80
	1200	68	75	80	76	72	66	63	58	83
	1600	71	78	83	79	75	69	66	61	86
7.000	400	65	72	77	72	68	62	59	54	80
	800	66	73	78	74	70	64	61	56	81
	1200	69	76	81	76	72	66	63	58	84

Sound power levels at OUTLET (Lw(A))										
Airflow (m³/h)	Total pressure (Pa)	Frequency (Hz)								
		63	125	250	500	1000	2000	4000	8000	Total dB(A)
3.000	400	47	59	67	70	72	73	68	65	78
	800	56	68	76	79	81	82	77	74	87
	1200	61	73	81	83	85	86	81	78	91
5.000	400	50	62	70	72	74	75	70	67	80
	800	55	67	75	77	79	80	75	72	85
	1200	60	72	80	82	84	85	80	77	90
6.000	400	53	65	73	75	77	78	73	70	83
	800	56	68	76	78	80	81	76	73	86
	1200	59	71	79	82	84	85	80	77	90
	1600	62	74	82	85	87	88	83	80	93
7.000	400	56	68	76	78	80	81	76	73	86
	800	57	69	77	80	82	83	78	75	88
	1200	60	72	80	82	84	85	80	77	90

Sound power levels at RADIATED (Lw(A))										
Airflow (m³/h)	Total pressure (Pa)	Frequency (Hz)								
		63	125	250	500	1000	2000	4000	8000	Total dB(A)
3.000	400	43	47	54	49	55	55	50	46	61
	800	52	56	63	58	64	64	59	55	70
	1200	57	61	68	63	69	69	64	60	74
5.000	400	46	50	57	51	57	57	52	48	63
	800	51	55	62	56	62	62	57	53	68
	1200	56	60	67	61	67	67	62	58	73
6.000	400	49	53	60	54	60	60	55	51	66
	800	52	56	63	57	63	63	58	54	69
	1200	55	59	66	61	67	67	62	58	73
	1600	58	62	69	64	70	70	65	61	76
7.000	400	52	56	63	57	63	63	58	54	69
	800	53	57	64	59	65	65	60	56	71
	1200	56	60	67	61	67	67	62	58	73

THERMAL CHARACTERISTICS - UTBS 8 PRO-REG

2-row heating coil									
Airflow		4000 (m ³ /h)				6000 (m ³ /h)			
Water T. (°C)	Ext. T. (°C)	Power (kW)	Output T. (°C)	Water flow (l/s)	Water pressure drop (kPa)	Power (kW)	Output T. (°C)	Water flow (l/s)	Water pressure drop (kPa)
80/60	-10	58,4	33,8	0,70	5,9	77,0	28,5	0,92	9,8
	-5	55,0	36,3	0,66	5,3	72,5	31,2	0,87	8,8
	0	51,5	38,7	0,62	4,7	68,0	34,0	0,81	7,8
	5	48,0	41,0	0,57	4,1	63,3	36,6	0,75	6,8
	10	44,4	43,3	0,53	3,6	58,5	39,2	0,70	5,9
50/45	-10	41,0	20,7	1,96	42,7	54,1	17,0	2,60	70,8
	-5	37,7	23,3	1,80	36,6	49,8	19,9	2,38	60,9
	0	34,3	25,8	1,64	30,8	45,3	22,7	2,17	51,3
	5	30,9	28,2	1,48	25,4	40,8	25,4	1,95	42,3
	10	27,4	30,5	1,31	20,4	36,2	28,1	1,73	33,9

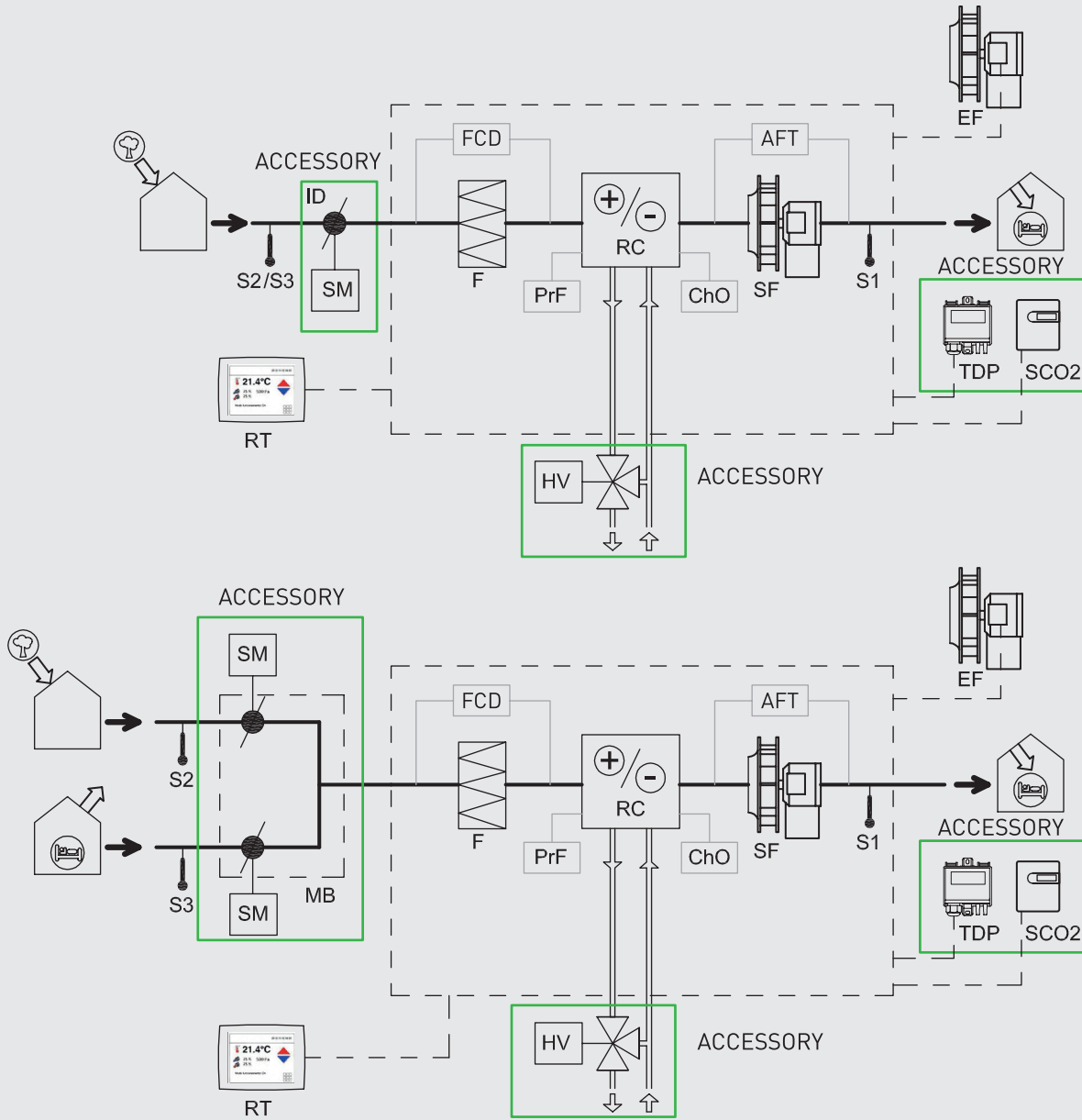
4-row heating coil									
Airflow		4000 (m ³ /h)				6000 (m ³ /h)			
Water T. (°C)	Ext. T. (°C)	Power (kW)	Output T. (°C)	Water flow (l/s)	Water pressure drop (kPa)	Power (kW)	Output T. (°C)	Water flow (l/s)	Water pressure drop (kPa)
80/60	-10	86,4	54,8	1,03	4,7	118,5	49,2	1,41	8,4
	-5	81,4	56,0	0,97	4,2	111,5	50,7	1,33	7,5
	0	76,2	57,2	0,91	3,7	104,5	52,2	1,25	6,7
	5	71,0	58,3	0,85	3,2	97,3	53,6	1,16	5,8
	10	65,7	59,3	0,79	2,8	89,0	55,0	1,07	5,0
50/45	-10	60,3	35,2	2,88	34,1	82,9	31,4	3,96	62,1
	-5	55,4	36,5	2,65	29,1	76,1	33,1	3,64	52,9
	0	50,3	37,8	2,41	24,3	69,3	34,6	3,31	44,3
	5	45,2	38,9	2,16	19,9	62,3	36,1	2,97	36,2
	10	40,1	40,0	1,92	15,9	55,1	37,5	2,63	28,8

4-row cooling coil									
Airflow		4000 (m ³ /h)				6000 (m ³ /h)			
Water T. (°C)	Ext. T. (°C) / RH (%)	Power (kW)	Output Temp (°C) / RH (%)	Water flow (l/s)	Water pressure drop (kPa)	Power (kW)	Output Temp (°C) / RH (%)	Water flow (l/s)	Water pressure drop (kPa)
7/12	25 / 50	13,3	16 / 84	0,6	1,9	19,5	16,3 / 81,2	0,93	4,1
	27 / 50	19,5	15,9 / 86,5	0,93	4,0	27,2	16,7 / 82,7	1,30	7,9
	32 / 50	36,0	16,5 / 88,1	1,72	13,8	48,2	17,9 / 84,2	2,31	24,8

6-row cooling coil									
Airflow		4000 (m ³ /h)				6000 (m ³ /h)			
Water T. (°C)	Ext. T. (°C) / RH (%)	Power (kW)	Output Temp (°C) / RH (%)	Water flow (l/s)	Water pressure drop (kPa)	Power (kW)	Output Temp (°C) / RH (%)	Water flow (l/s)	Water pressure drop (kPa)
7/12	25 / 50	22,0	12,3 / 93,4	1,05	6,7	30,4	13,2 / 90,3	1,45	12,7
	27 / 50	28,7	12,3 / 84,1	1,37	11,4	39,2	13,4 / 91,0	1,87	21,2
	32 / 50	46,8	12,5 / 95,5	2,24	30,2	64,8	13,8 / 92,7	3,10	57,2

SCHEMATIC DIAGRAM

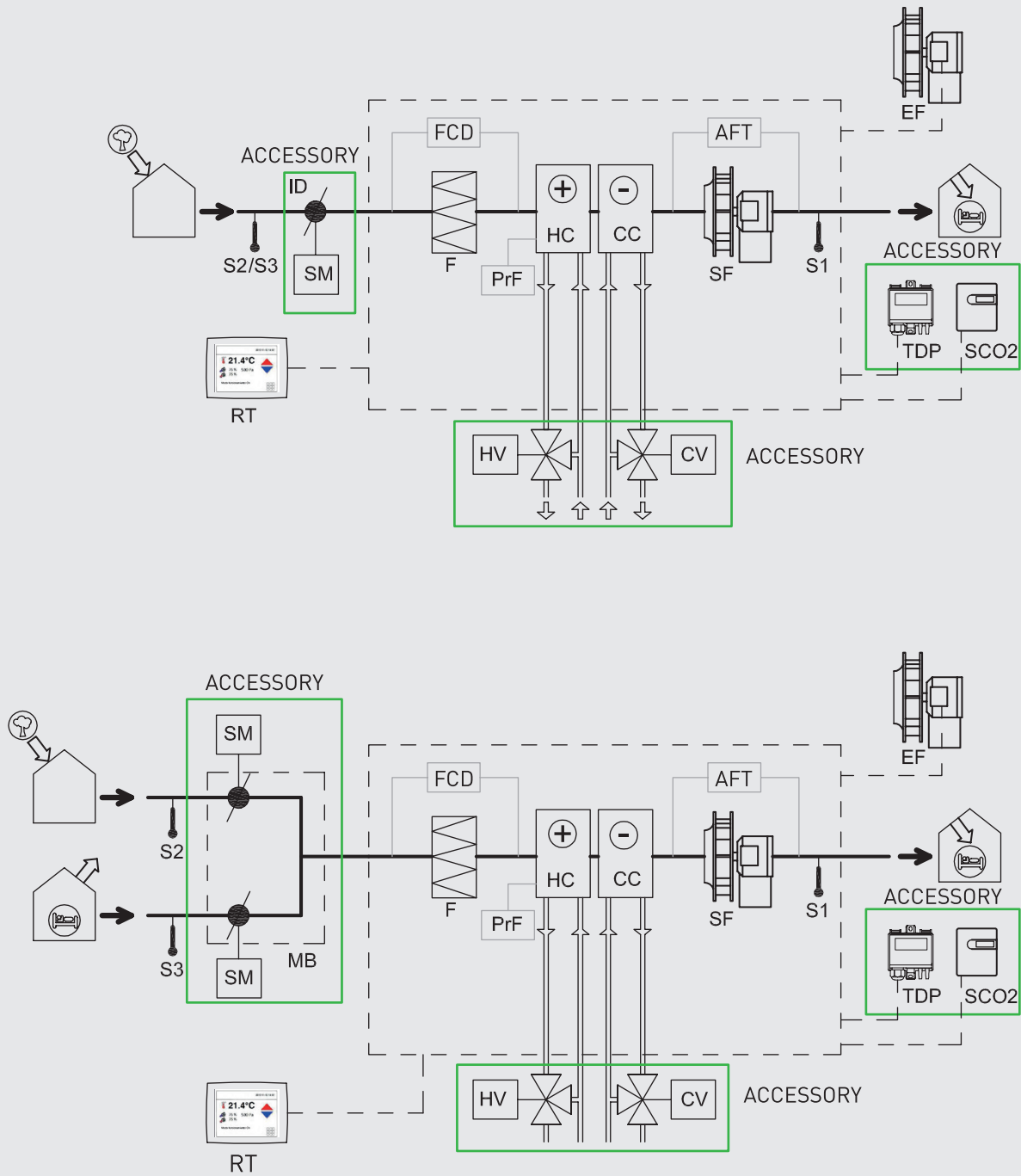
Versions with reversible water coil



SF	Supply fan	RT	Remote hand terminal	PrF	Freeze protection
FCD	Filter clogging detector (Pressure switch)	EF	External Fan (slave model)	ID	Isolation Damper (Accessory)
S1	Supply air temperature probe	F	Filter	MB	Mixing box (Accessory)
S2	External air temperature probe	RC	Reversible coil	SM	Damper servo-motor (Accessory)
S3	Return air temperature probe	HV	Heating/cooling regulation valve	SCO2	CO ₂ Sensor (Accessory)
AFT	Air flow transmitter	ChO	Change Over Thermostat (Accessory)	TDP	Pressure transmitter TDP-S (Accessory)

SCHEMATIC DIAGRAM

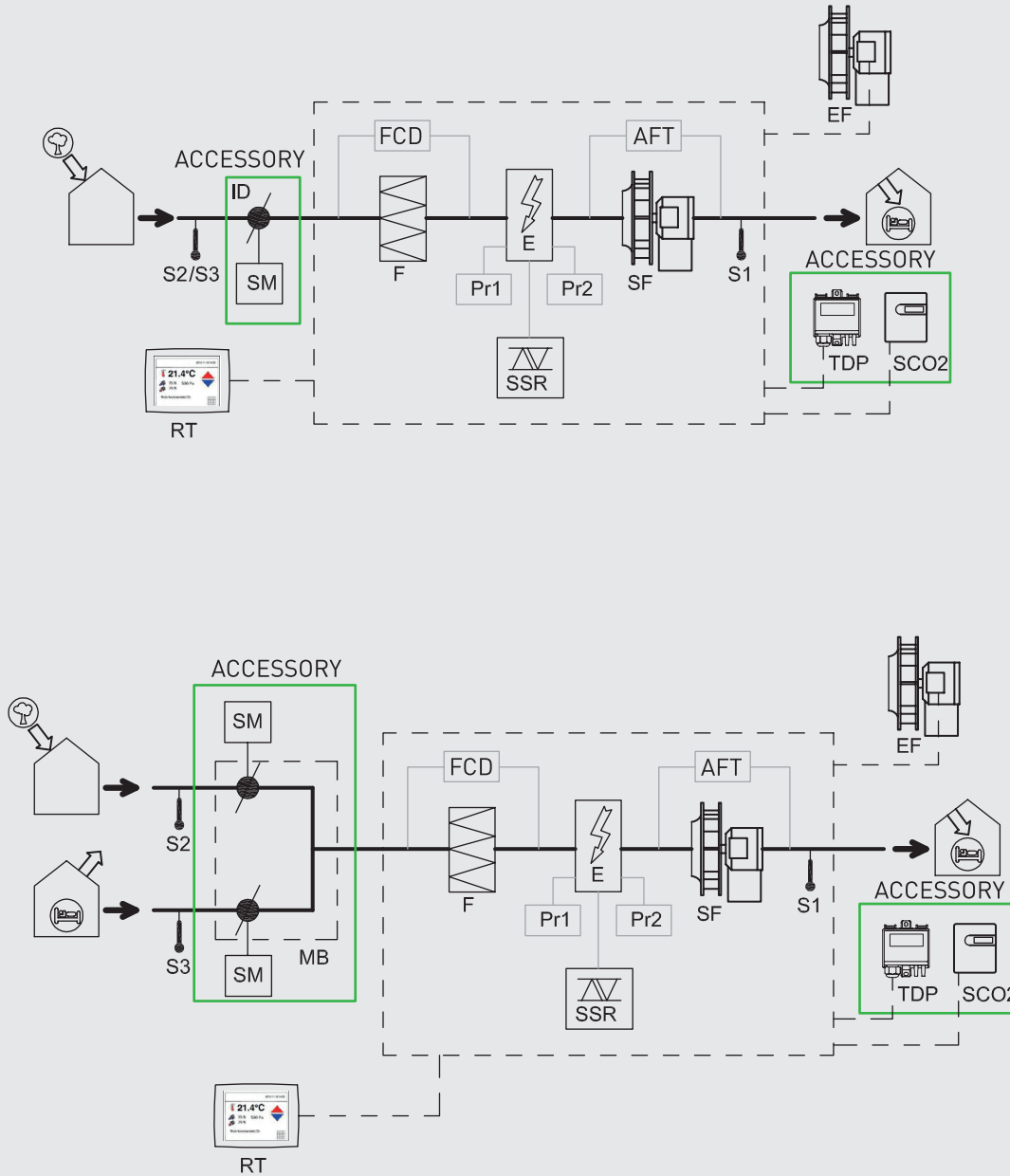
Versions with hot water coil and/or cool water coil



- | | | | | | |
|-----|--|----|---------------------------|------|--|
| SF | Supply fan | RT | Remote hand terminal | CV | Cooling regulation valve |
| FCD | Filter clogging detector (Pressure switch) | EF | External Fan (slave mode) | PrF | Freeze protection |
| S1 | Supply air temperature probe | F | Filter | ID | Isolation Damper (Accessory) |
| S2 | External air temperature probe | HC | Heating coil | MB | Mixing box (Accessory) |
| S3 | Return air temperature probe | CC | Cooling coil | SM | Damper servo-motor (Accessory) |
| AFT | Air flow transmitter | HV | Heating regulation valve | SCO2 | CO ₂ Sensor (Accessory) |
| | | | | TDP | Pressure transmitter TDP-S (Accessory) |

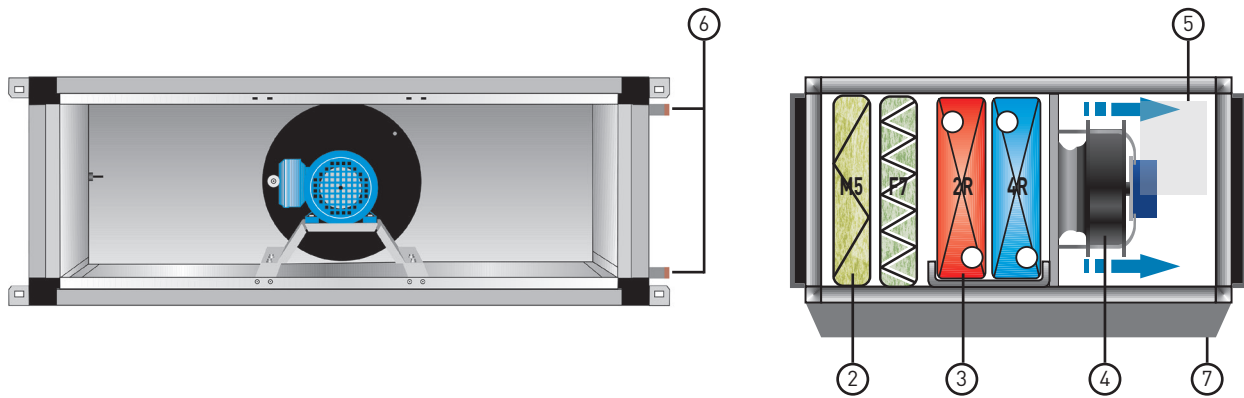
SCHEMATIC DIAGRAM

Versions with electric battery



SF	Supply fan	FCD	Filter clogging detector (Pressure switch)	Pr1/Pr2	Safety Thermostat (Manual/Auto)
SSR	Electrical heater regulator	AFT	Air flow transmitter	ID	Isolation Damper (Accessory)
E	Electrical heater	RT	Remote hand terminal	MB	Mixing box (Accessory)
S1	Supply air temperature probe	EF	External Fan (slave mode)	SM	Damper servo-motor (Accessory)
S2	External air temperature probe	F	Filter	SCO2	CO ₂ Sensor (Accessory)
S3	Return air temperature probe			TDP	Pressure transmitter TDP-S (Accessory)

REFERENCE



U	T	B	S	-	5	P F7	E	1,7	kW	PRO-REG	R	B
1						2	3	4		5	6	7

1. SIZE

- UTBS-2
- UTBS-3
- UTBS-5
- UTBS-8

2. FILTERING STAGE

P F7: Filter F7 with capacity for mounting an additional filter inside the unit (accessory). Tightening system for high sealing filters, by means of articulated arms.

M5: Filter mounted by means of a guide system without filter clamping devices. It does not allow the installation of additional filters.

3. COIL STAGE

- E: Electric battery from 4,5 kW to 45kW.
- H2: 2-row hot water coil
- H4: 4-row hot water coil
- C4: 4-row cold water coil
- C6: 6-row cold water coil
- X4: 4-row direct expansion coil
- X6: 6-row direct expansion coil
- H2 C4: 2-rows hot water coil + 4-rows cold water coil
- H2 C6: 2-rows hot water coil + 6-rows cold water coil
- E C4: Electric battery + 4-rows cold water coil
- E C6: Electric battery + 6-rows cold water coil

4. MOTOR POWER

- 0,46 kW for UTBS-2
- 0,9 kW for UTBS-3
- 1,7 kW for UTBS-5
- 2,0 kW for UTBS-8

5. CONTROL TYPE

PRO-REG: Advanced plug&play control

6. CONNECTION SIDE (according to air direction)

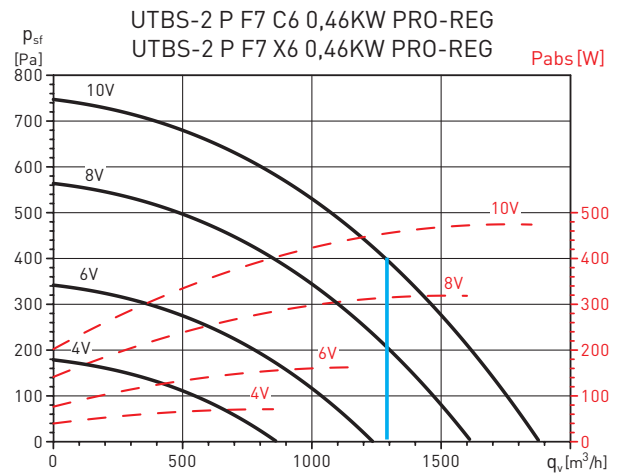
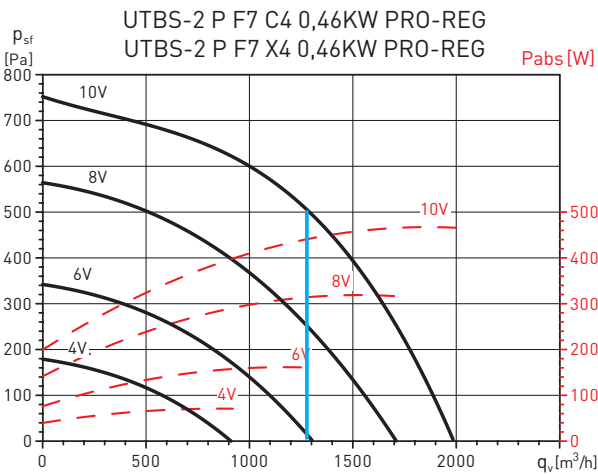
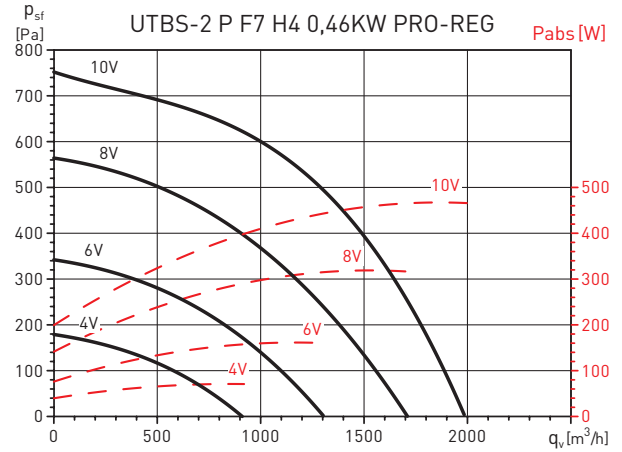
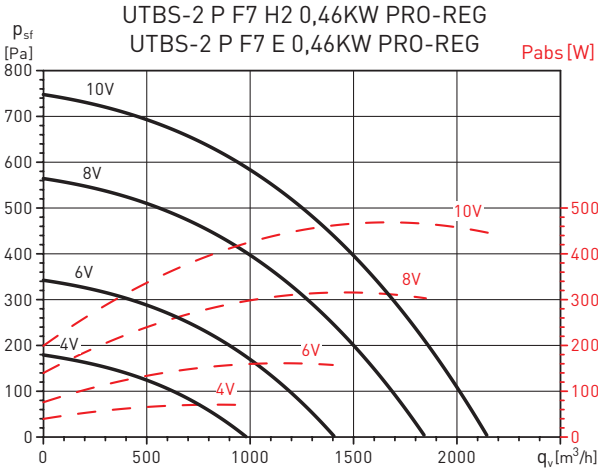
- R: Right connections
- L: Left connections

7. STRUCTURAL BASE

- B: With structural base (factory mounted)
- Ø: Without structural base

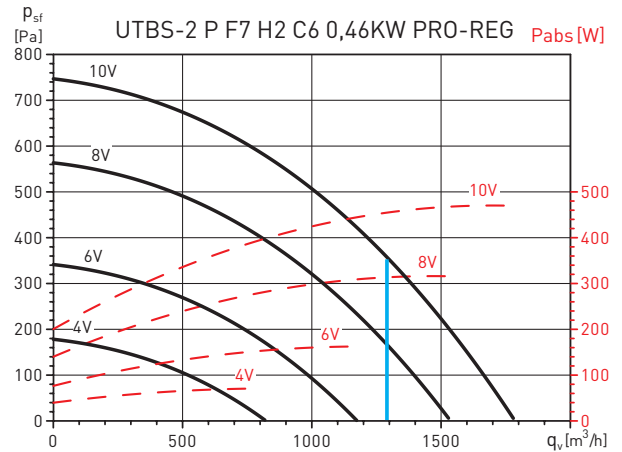
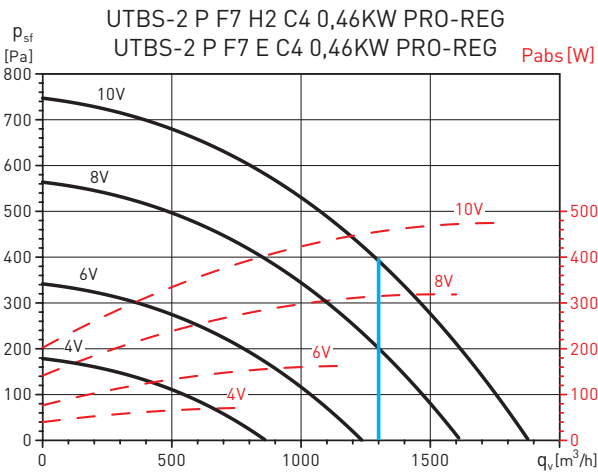
CHARACTERISTIC CURVES - UTBS 2

- q_v : Airflow in m^3/h .
- p_{sf} : Static pressure in Pa.
- P_{abs} : Absorbed power at maximum speed [W].
- Dry air at 20°C and 760 mmHg.
- Performance data in accordance with ISO 5801 and AMCA 210-99.



Recommended limit to avoid droplet drag.

Recommended limit to avoid droplet drag.

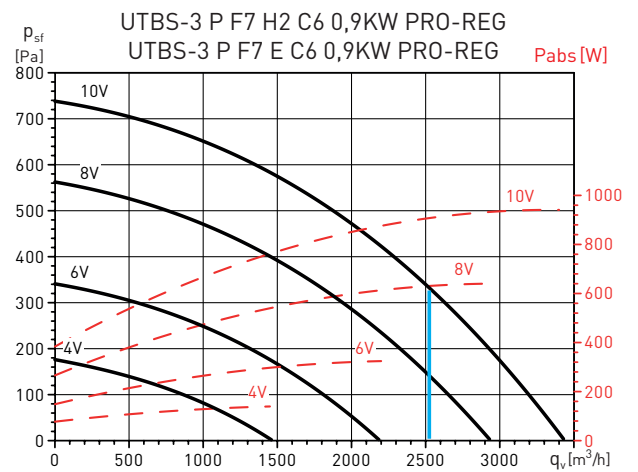
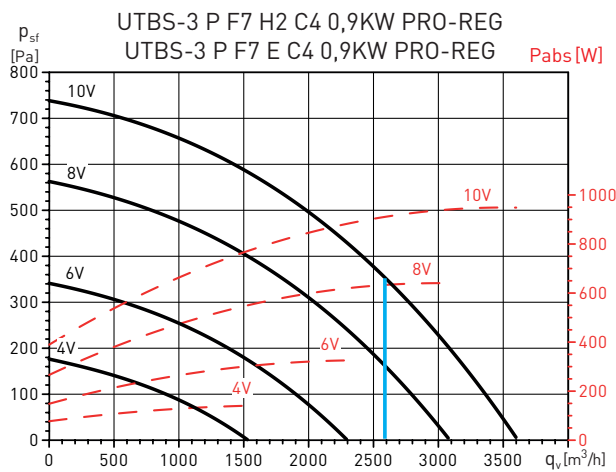
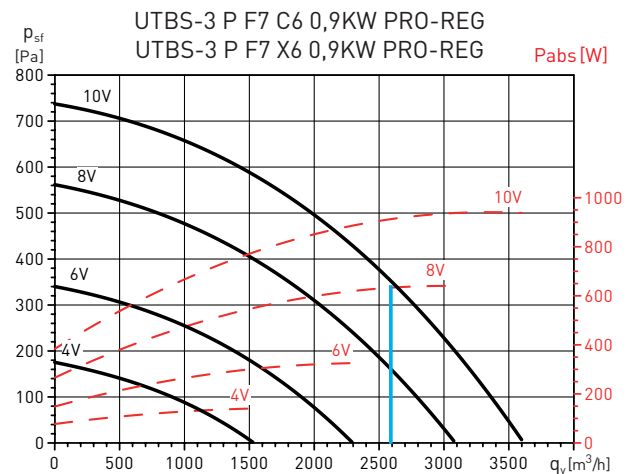
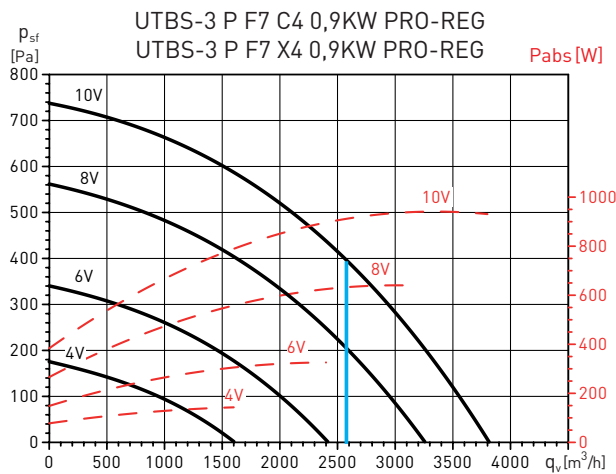
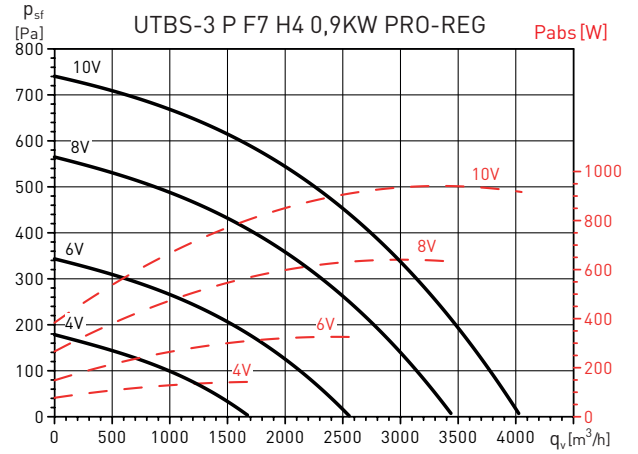
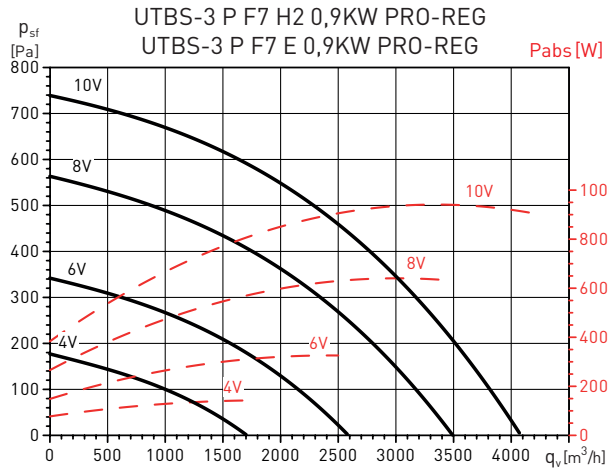


Recommended limit to avoid droplet drag.

Recommended limit to avoid droplet drag.

CHARACTERISTIC CURVES - UTBS 3

- q_v : Airflow in m^3/h .
- p_{sf} : Static pressure in Pa.
- P_{abs} : Absorbed power at maximum speed [W].
- Dry air at 20°C and 760 mmHg.
- Performance data in accordance with ISO 5801 and AMCA 210-99.



Recommended limit to avoid droplet drag.

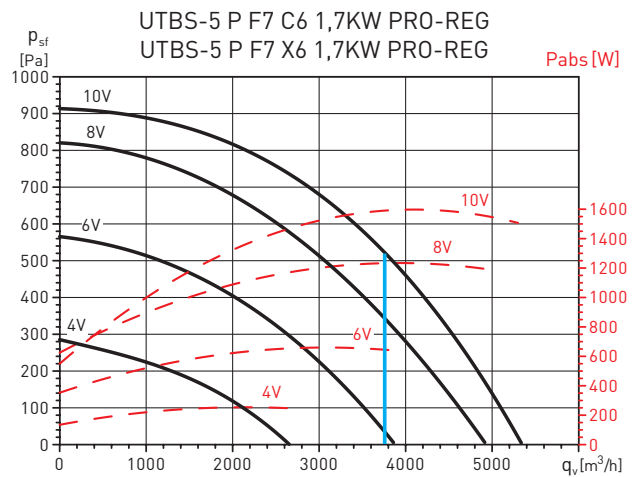
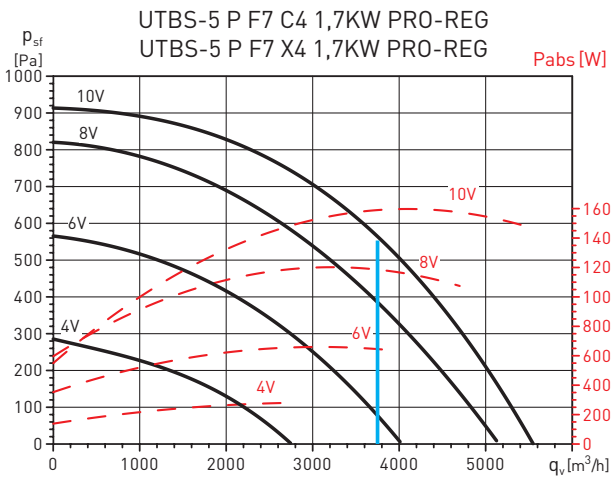
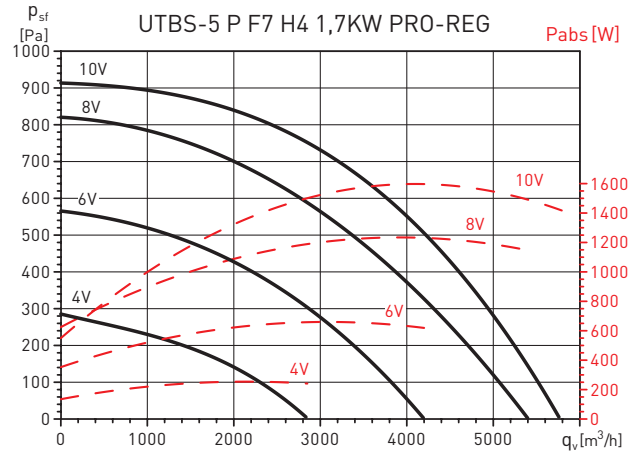
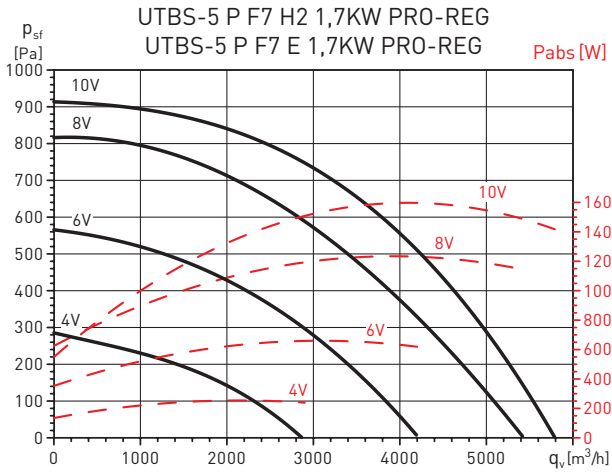
Recommended limit to avoid droplet drag.

Recommended limit to avoid droplet drag.

Recommended limit to avoid droplet drag.

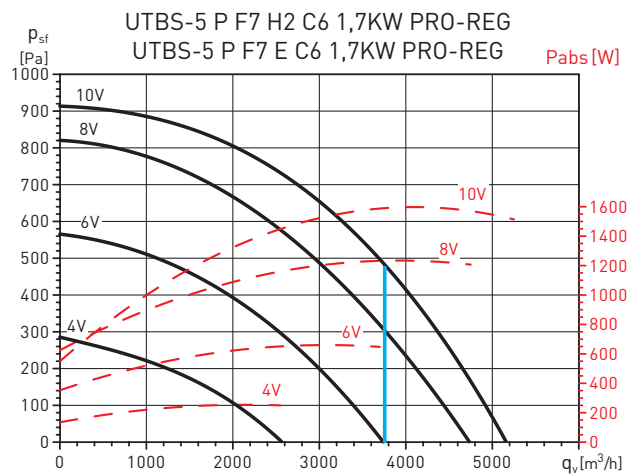
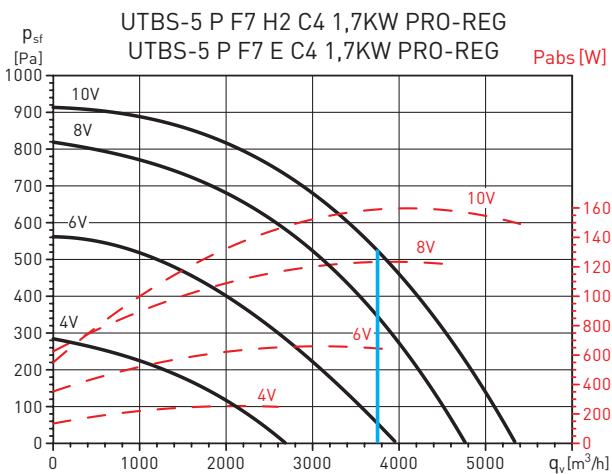
CHARACTERISTIC CURVES - UTBS 5

- q_v : Airflow in m^3/h .
- p_{sf} : Static pressure in Pa.
- P_{abs} : Absorbed power at maximum speed [W].
- Dry air at 20°C and 760 mmHg.
- Performance data in accordance with ISO 5801 and AMCA 210-99.



Recommended limit to avoid droplet drag.

Recommended limit to avoid droplet drag.

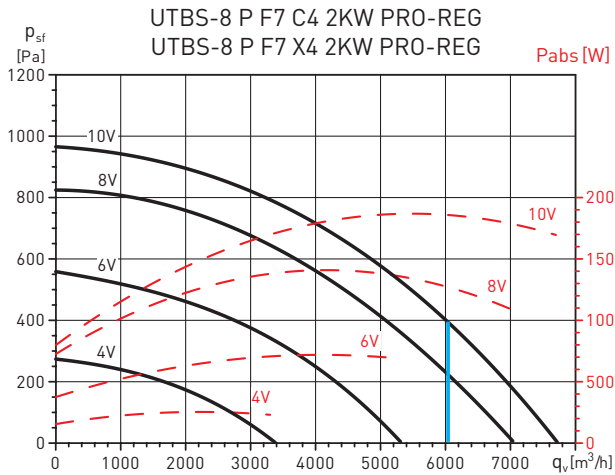
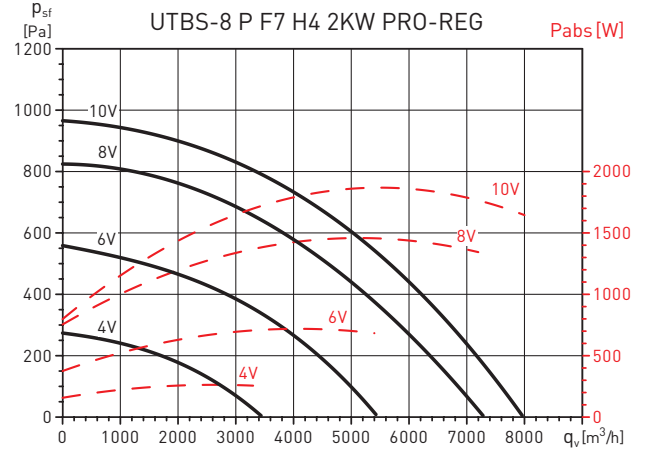
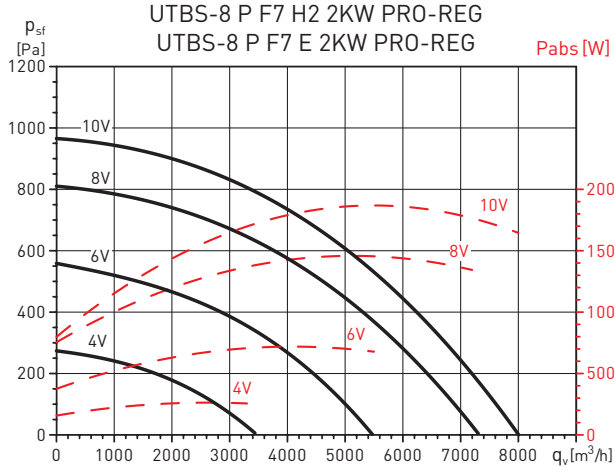


Recommended limit to avoid droplet drag.

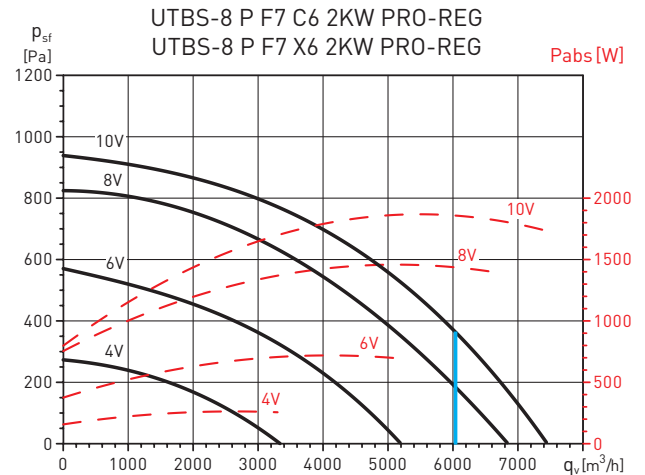
Recommended limit to avoid droplet drag.

CHARACTERISTIC CURVES - UTBS 8

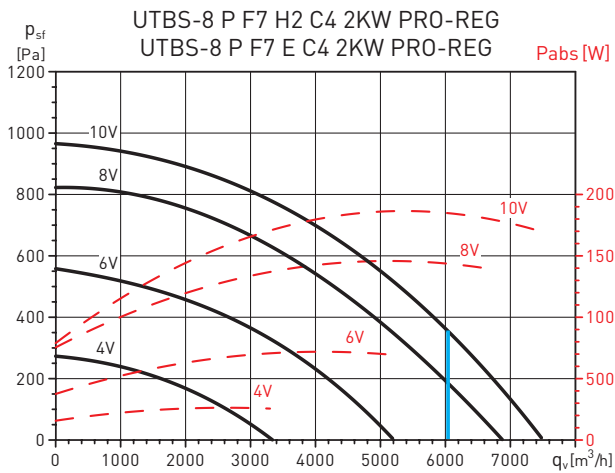
- q_v : Airflow in m^3/h .
- p_{sf} : Static pressure in Pa.
- P_{abs} : Absorbed power at maximum speed (W).
- Dry air at 20°C and 760 mmHg.
- Performance data in accordance with ISO 5801 and AMCA 210-99.



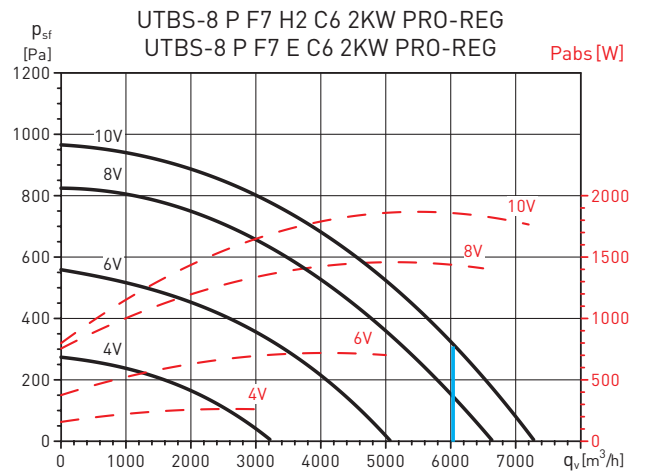
Recommended limit to avoid droplep drag.



Recommended limit to avoid droplep drag.



Recommended limit to avoid droplep drag.

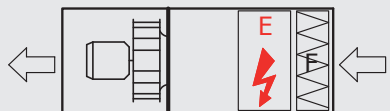


Recommended limit to avoid droplep drag.

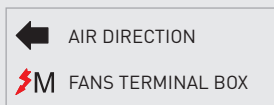
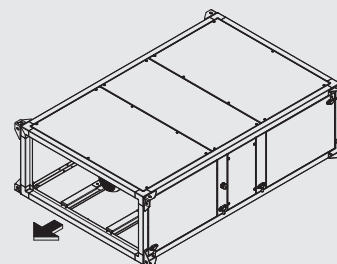
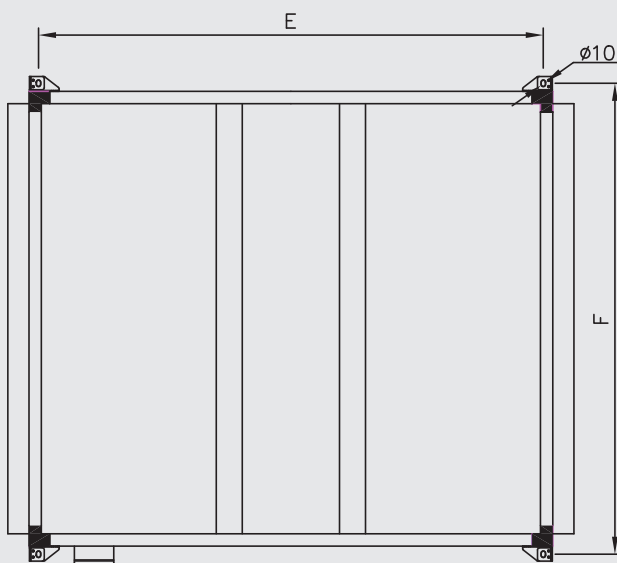
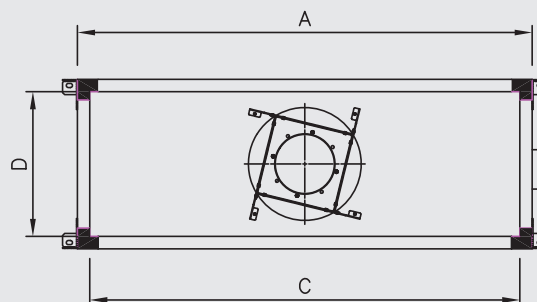
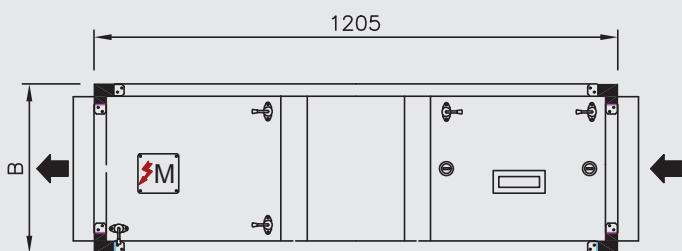
DIMENSIONS (mm)

Short version: Single filter M5

Configuration with electric battery



F: Filter M5
 E: Electric battery (E4,5 to E45)



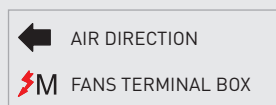
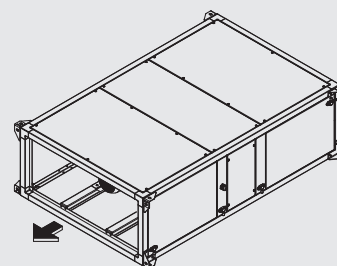
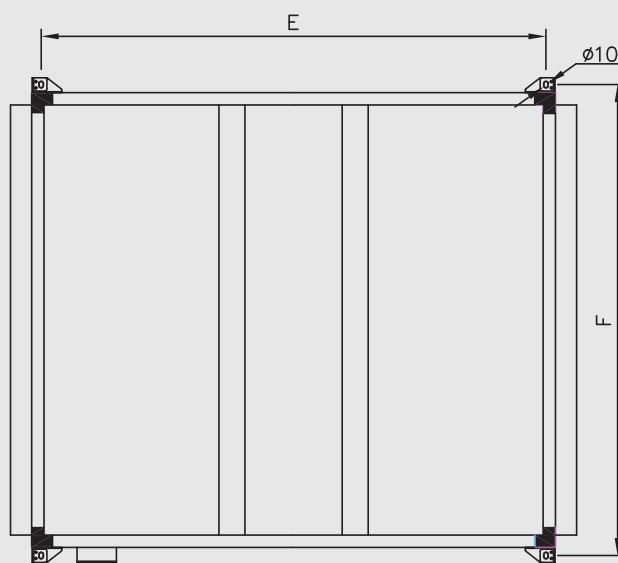
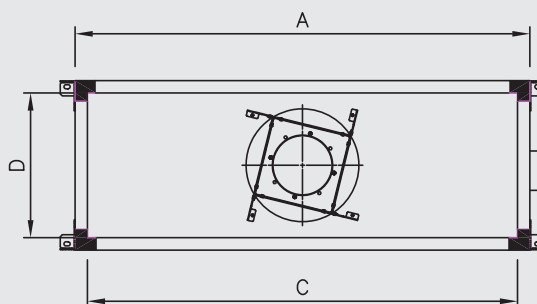
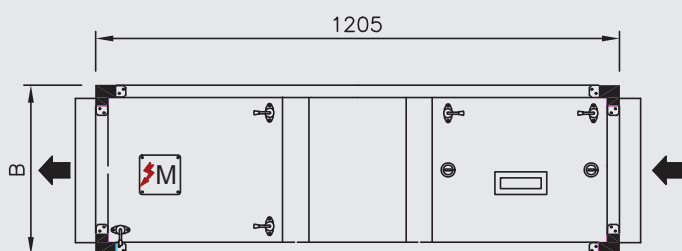
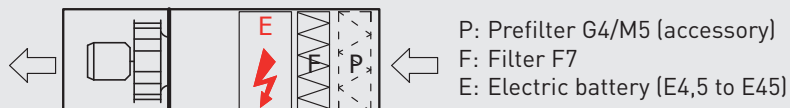
Views corresponding to version L
 (Connections on the left side)

Model	External		Connections		Suports		Weight (kg)
	A	B	C	D	E	F	
UTBS-2	750	360	690	300	1159	790	86
UTBS-3	1100	410	1040	350	1159	1140	118
UTBS-5	1500	410	1440	350	1159	1540	174
UTBS-8	1900	500	1840	440	1159	1940	218

DIMENSIONES (mm)

Long version: F7 filter and capacity for mounting one additional filter

Configuration with electric battery

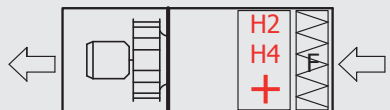


Views corresponding to version L
 (Connections on the left side)

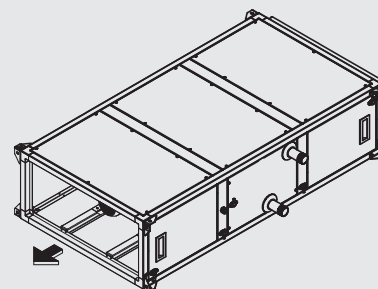
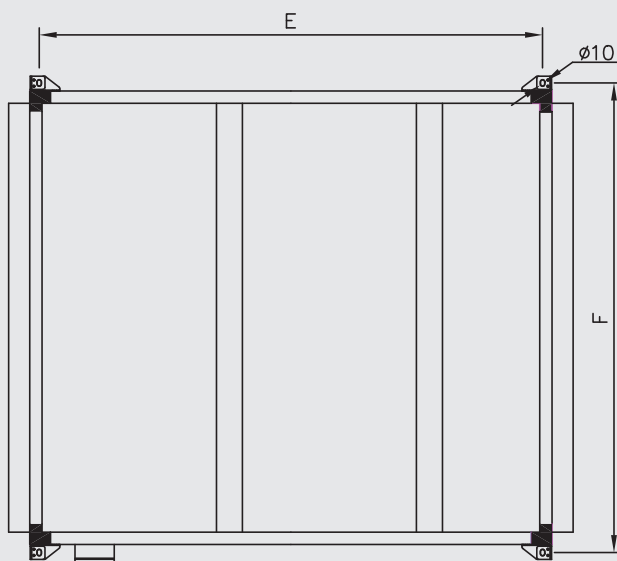
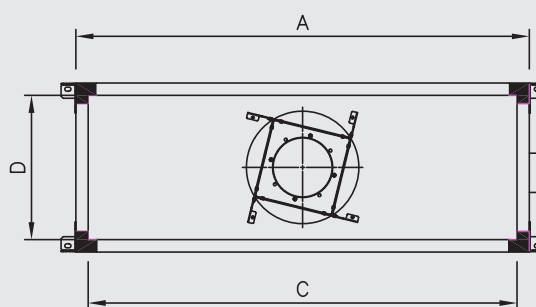
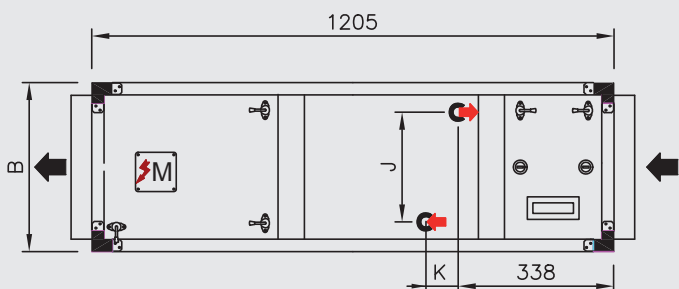
Model	External		Connections		Suports		Weight (kg)
	A	B	C	D	E	F	
UTBS-2	750	360	690	300	1159	790	86
UTBS-3	1100	410	1040	350	1159	1140	118
UTBS-5	1500	410	1440	350	1159	1540	174
UTBS-8	1900	500	1840	440	1159	1940	218

DIMENSIONS (mm)

Short version: Single filter M5
 Configuration with hot water coil



F: Filter M5
 H2/H4: Hot water coil (2 Rows/4 Rows)



AIR DIRECTION
 FANS TERMINAL BOX
 HOT WATER INLET
 HOT WATER OUTLET

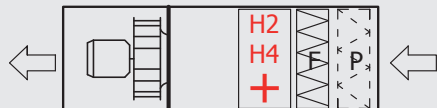
Views corresponding to version L
 (Connections on the left side)

Model	External		Connections		Suports		Coils		Weight (kg)		
	A	B	C	D	E	F	J	K	Connections	H2	H4
UTBS-2	750	360	690	300	1159	790	219	80	1-1/4"	97	100
UTBS-3	1100	410	1040	350	1159	1140	269	80	1-1/4"	131	135
UTBS-5	1500	410	1440	350	1159	1540	269	80	1-1/4"	188	204
UTBS-8	1900	500	1840	440	1159	1940	344	80	1-1/2"	233	245

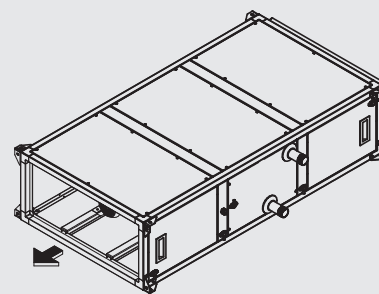
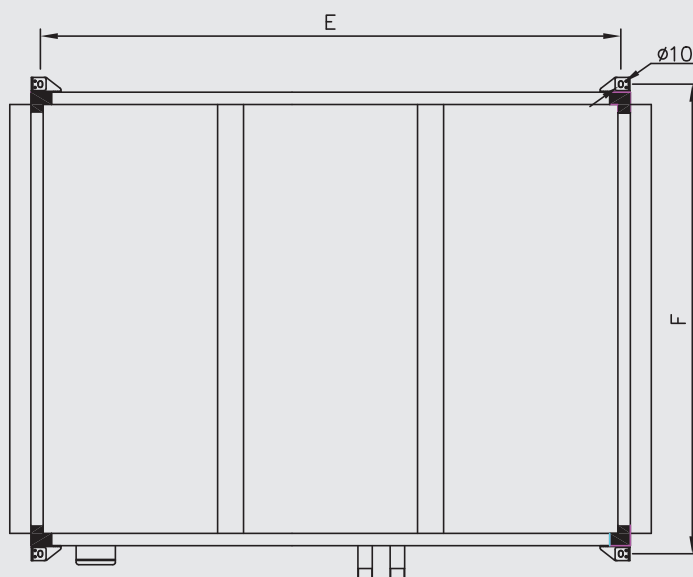
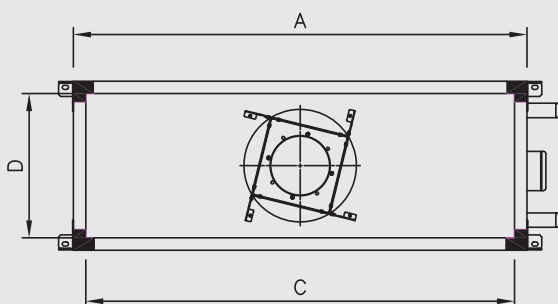
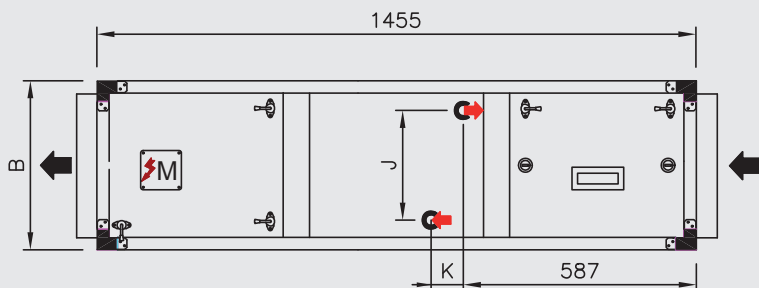
DIMENSIONS (mm)

Long version: F7 filter and capacity for mounting one additional filter

Configuration with hot water coil



P: Prefilter G4/M5 (accessory)
 F: Filter F7
 H2/H4: Hot water coil (2 Rows/4 Rows)



AIR DIRECTION
 FANS TERMINAL BOX
 HOT WATER INLET
 HOT WATER OUTLET

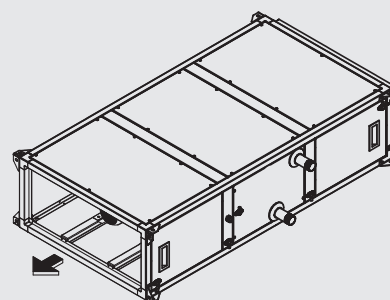
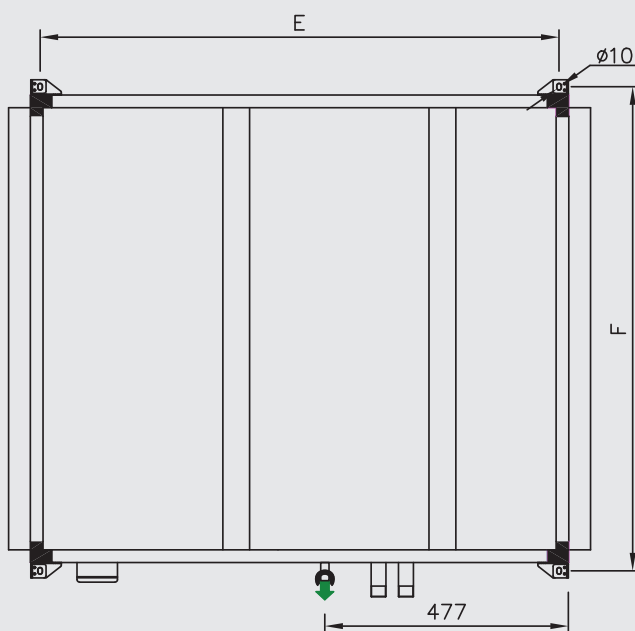
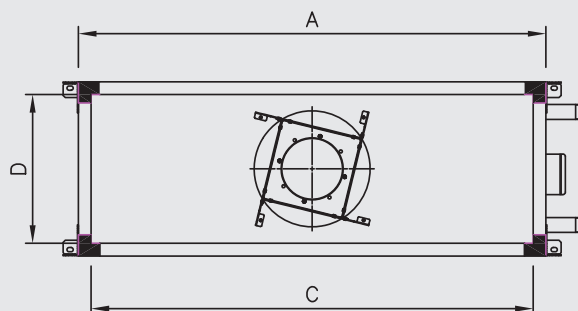
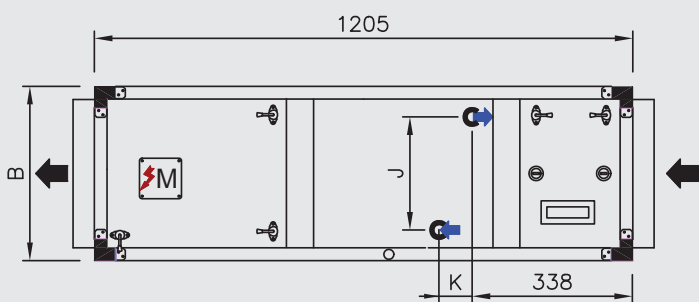
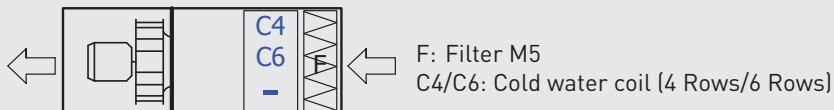
Views corresponding to version L
 (Connections on the left side)

Model	External		Connections		Suports		Coils			Weight (kg)	
	A	B	C	D	E	F	J	K	Connections	H2	H4
UTBS-2	750	360	690	300	1409	790	219	80	1-1/4"	97	100
UTBS-3	1100	410	1040	350	1409	1140	269	80	1-1/4"	131	135
UTBS-5	1500	410	1440	350	1409	1540	269	80	1-1/4"	188	204
UTBS-8	1900	500	1840	440	1409	1940	344	80	1-1/2"	233	245

DIMENSIONS (mm)

Short version: Single filter M5

Configuration with cold water coil



- AIR DIRECTION
- FANS TERMINAL BOX
- COLD WATER INLET
- COLD WATER OUTLET
- DRAIN OUTLET 3/4"

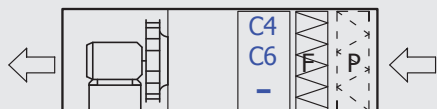
Views corresponding to version L
 (Connections on the left side)

Model	External		Connections		Suports		Coils			Weight (kg)		
	A	B	C	D	E	F	J	K (C4/C6)	Connections	C4	C6	
UTBS-2	750	360	690	300	1159	790	219	80	120	1-1/4"	105	107
UTBS-3	1100	410	1040	350	1159	1140	269	80	120	1-1/4"	142	147
UTBS-5	1500	410	1440	350	1159	1540	269	80	120	1-1/4"	204	210
UTBS-8	1900	500	1840	440	1159	1940	344	80	120	1-1/2"	258	268

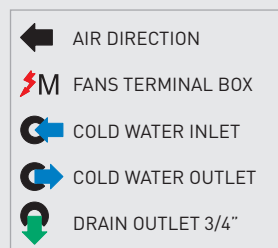
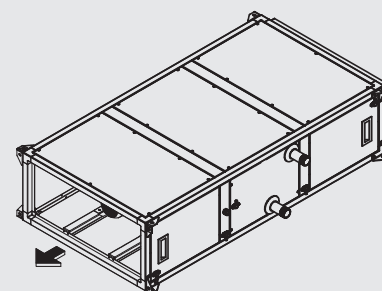
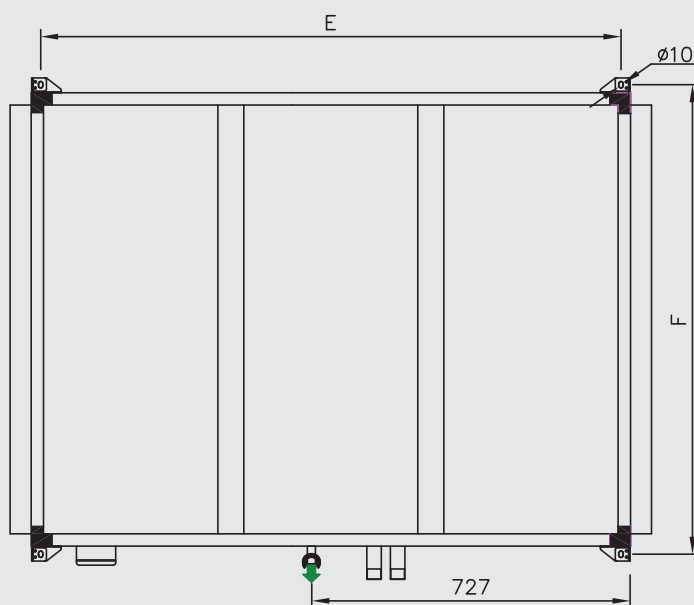
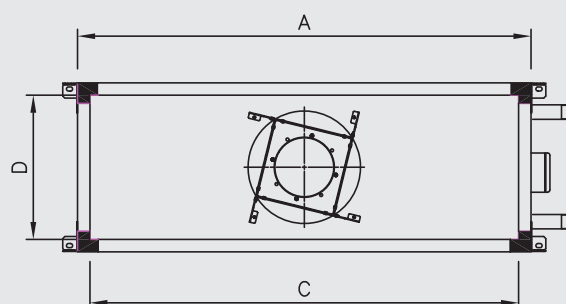
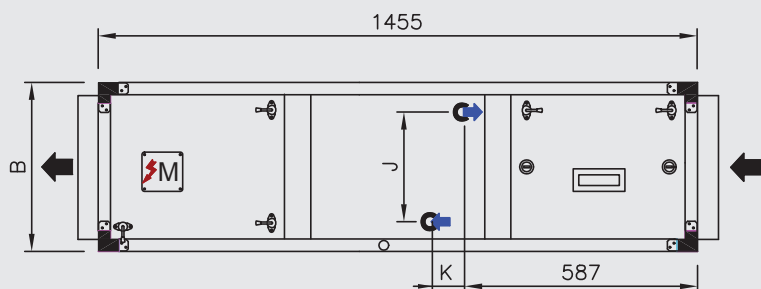
DIMENSIONS (mm)

Long version: F7 filter and capacity for mounting one additional filter

Configuration with cold water coil



P: Prefilter G4/M5 (accessory)
F: Filter F7
C4/C6: Cold water coil (4 Rows/6 Rows)



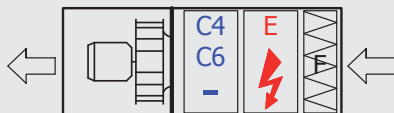
Views corresponding to version L
(Connections on the left side)

Model	External		Connections		Suports		Coils			Weight (kg)		
	A	B	C	D	E	F	J	K (C4/C6)	Connections	C4	C6	
UTBS-2	750	360	690	300	1409	790	219	80	120	1-1/4"	105	107
UTBS-3	1100	410	1040	350	1409	1140	269	80	120	1-1/4"	142	147
UTBS-5	1500	410	1440	350	1409	1540	269	80	120	1-1/4"	204	210
UTBS-8	1900	500	1840	440	1409	1940	344	80	120	1-1/2"	258	268

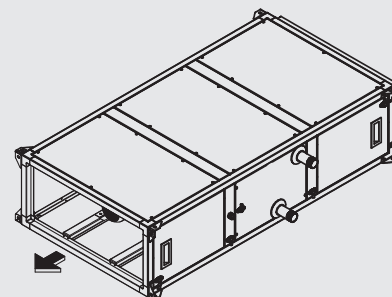
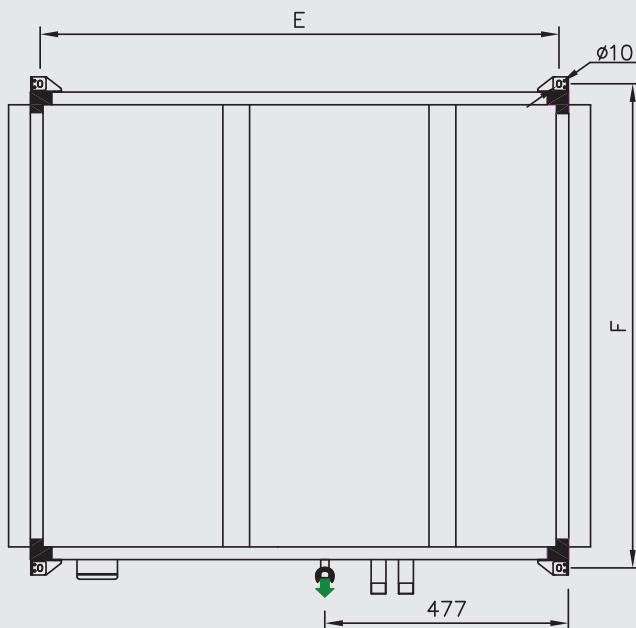
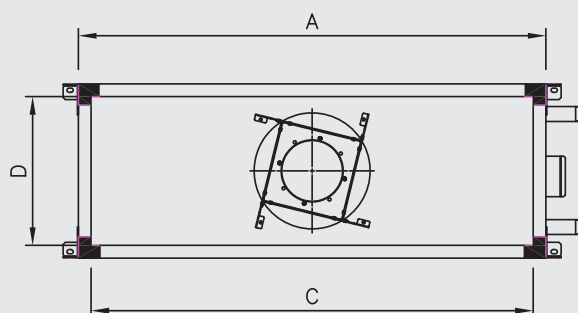
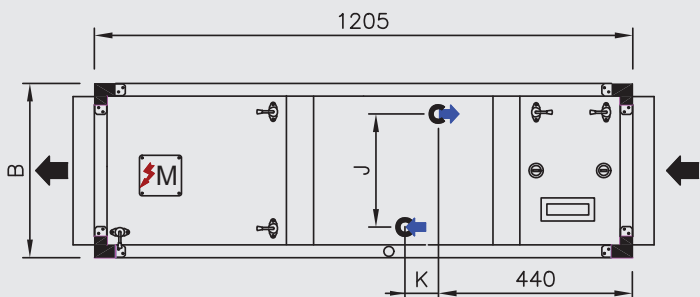
DIMENSIONS (mm)

Short version: Single filter M5

Configuration with electric battery and cold water



F: Filter M5
 E: Electric battery (E4,5 to E45)
 C4/C6: Cold water coil (4 Rows/6 Rows)



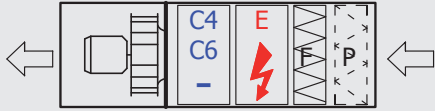
- AIR DIRECTION
- FANS TERMINAL BOX
- COLD WATER INLET
- COLD WATER OUTLET
- DRAIN OUTLET 3/4"

Views corresponding to version L
 (Connections on the left side)

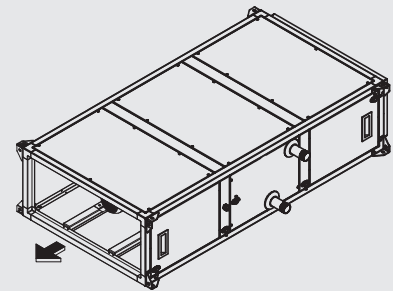
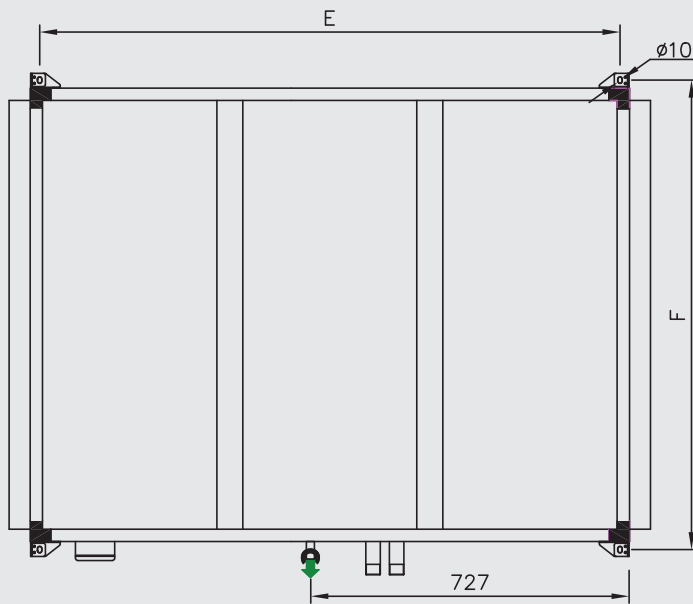
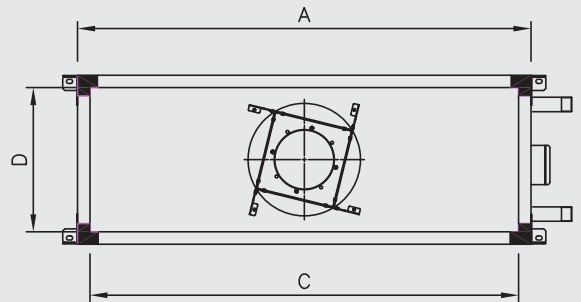
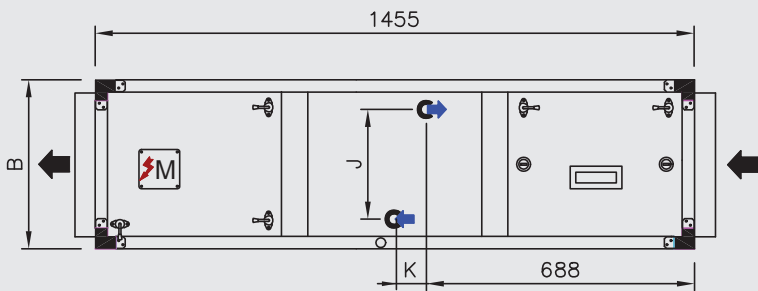
Model	External		Connections		Suports		Coils			Weight (kg)		
	A	B	C	D	E	F	J	K (C4/C6)	Connections	C4	C6	
UTBS-2	750	360	690	300	1159	790	219	80	120	1-1/4"	105	107
UTBS-3	1100	410	1040	350	1159	1140	269	80	120	1-1/4"	142	147
UTBS-5	1500	410	1440	350	1159	1540	269	80	120	1-1/4"	204	210
UTBS-8	1900	500	1840	440	1159	1940	344	80	120	1-1/2"	258	268

DIMENSIONS (mm)

Long version: F7 filter and capacity for mounting one additional filter
 Configuration with electric battery and cold water



P: Prefilter G4/M5 (accessory)
 F: Filter F7
 E: Electric battery (E4,5 to E45)
 C4/C6: Cold water coil (4 Rows/6 Rows)



- AIR DIRECTION
- FANS TERMINAL BOX
- COLD WATER INLET
- COLD WATER OUTLET
- DRAIN OUTLET 3/4"

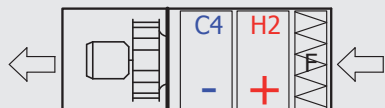
Views corresponding to version L
 (Connections on the left side)

Model	External		Connections		Suports		Coils			Weight (kg)		
	A	B	C	D	E	F	J	K (C4/C6)	Connections	C4	C6	
UTBS-2	750	360	690	300	1409	790	219	80	120	1-1/4"	105	107
UTBS-3	1100	410	1040	350	1409	1140	269	80	120	1-1/4"	142	147
UTBS-5	1500	410	1440	350	1409	1540	269	80	120	1-1/4"	204	210
UTBS-8	1900	500	1840	440	1409	1940	344	80	120	1-1/2"	258	268

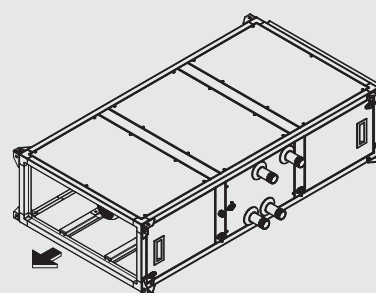
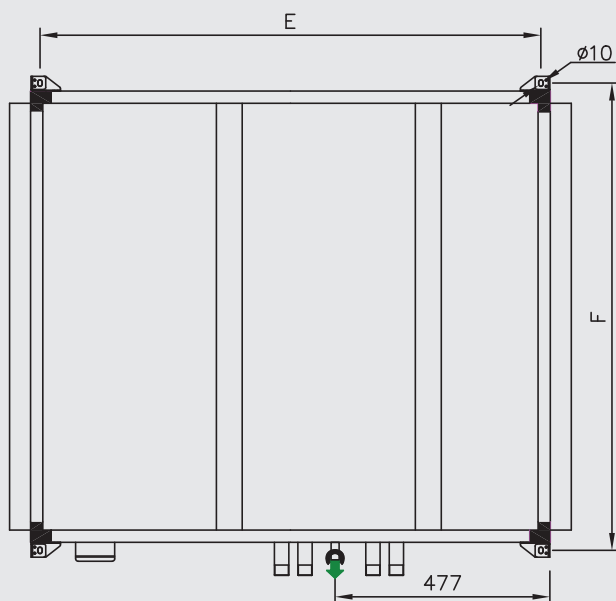
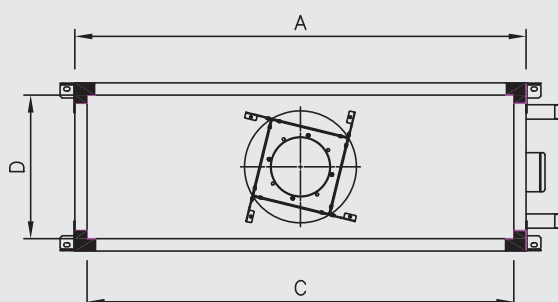
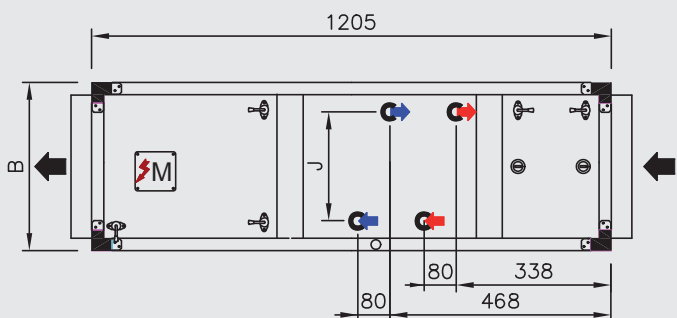
DIMENSIONS (mm)

Short version: Single filter M5

Configuration with hot water coil and cold water coil



F: Filter M5
 H2: Hot water coil (2 Rows/4 Rows)
 C4: Cold water coil (4 Rows)



- AIR DIRECTION
- FANS TERMINAL BOX
- HOT WATER INLET
- HOT WATER OUTLET
- COLD WATER INLET
- COLD WATER OUTLET
- DRAIN OUTLET 3/4"

Views corresponding to version L
 (Connections on the left side)

Model	External		Connections		Suports		Coils			Weight (kg)
	A	B	C	D	E	F	J	Connections C4 / H2		
UTBS-2	750	360	690	300	1159	790	219	1-1/4"	1-1/4"	111
UTBS-3	1100	410	1040	350	1159	1140	269	1-1/4"	1-1/4"	151
UTBS-5	1500	410	1440	350	1159	1540	269	1-1/4"	1-1/4"	216
UTBS-8	1900	500	1840	440	1159	1940	344	1-1/2"	1-1/2"	272

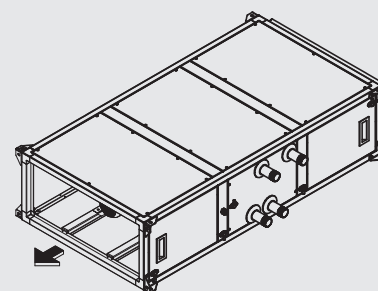
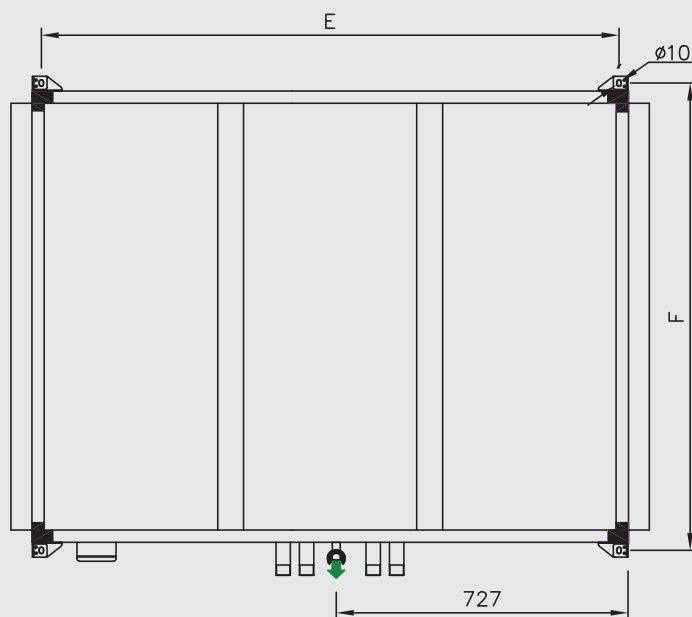
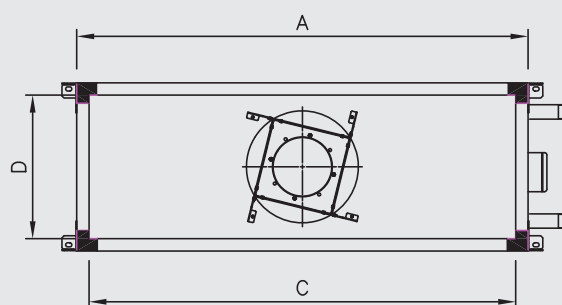
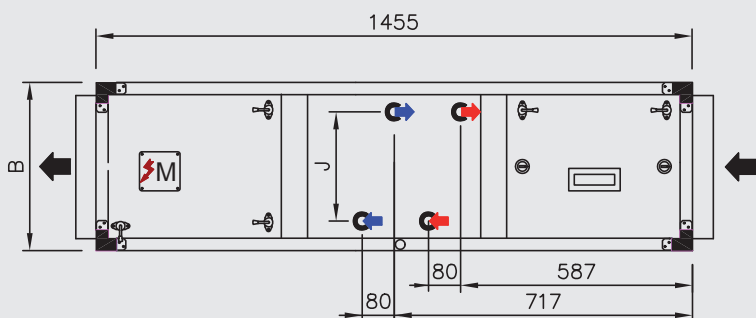
DIMENSIONS (mm)

Long version: F7 filter and capacity for mounting one additional filter

Configuration with hot water coil and cold water coil



P: Prefilter G4/M5 (accessory)
F: Filter F7
H2: Hot water coil (2 Rows)
C4: Cold water coil (4 Rows)



Views corresponding to version L
(Connections on the left side)

Model	External		Connections		Suports		Coils		Weight (kg)	
	A	B	C	D	E	F	J	Connections C4 / H2		
UTBS-2	750	360	690	300	1409	790	219	1-1/4"	1-1/4"	111
UTBS-3	1100	410	1040	350	1409	1140	269	1-1/4"	1-1/4"	151
UTBS-5	1500	410	1440	350	1409	1540	269	1-1/4"	1-1/4"	216
UTBS-8	1900	500	1840	440	1409	1940	344	1-1/2"	1-1/2"	272

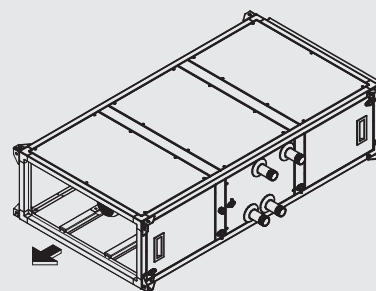
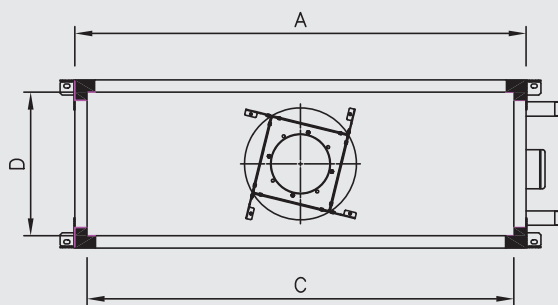
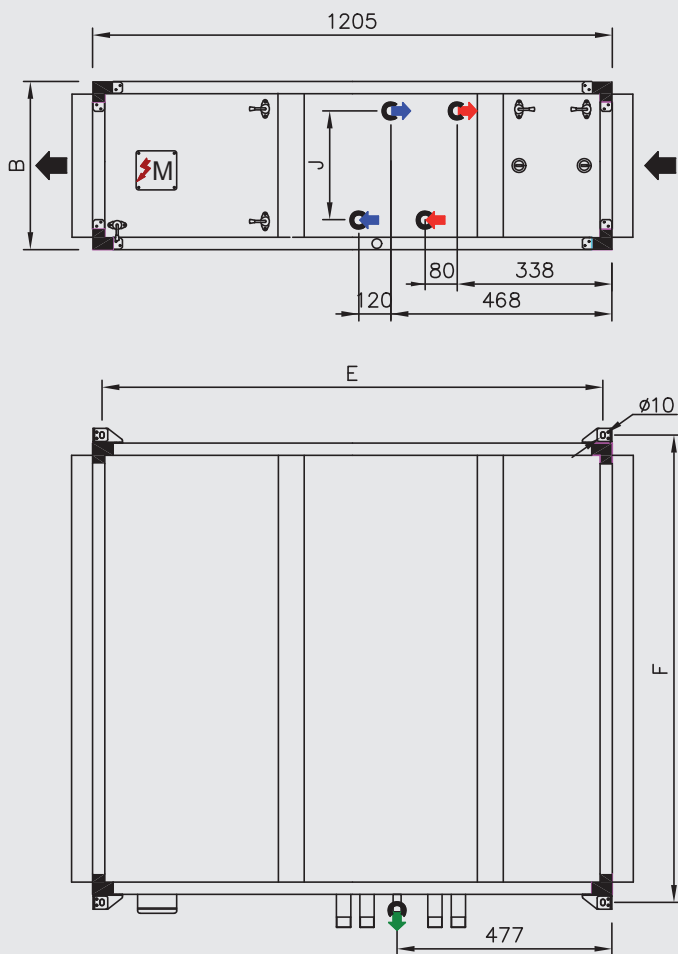
DIMENSIONS (mm)

Short version: Single filter M5

Configuration with hot water coil and cold water coil



F: Filter M5
 H2: Hot water coil (2 Rows)
 C6: Cold water coil (6 Rows)



- AIR DIRECTION
- FANS TERMINAL BOX
- HOT WATER INLET
- HOT WATER OUTLET
- COLD WATER INLET
- COLD WATER OUTLET
- DRAIN OUTLET 3/4"

Views corresponding to version L
 (Connections on the left side)

Model	External		Connections		Suports		Coils			Weight (kg)
	A	B	C	D	E	F	J	Connections C6 / H2		
UTBS-2	750	360	690	300	1159	790	219	1-1/4"	1-1/4"	113
UTBS-3	1100	410	1040	350	1159	1140	269	1-1/4"	1-1/4"	156
UTBS-5	1500	410	1440	350	1159	1540	269	1-1/4"	1-1/4"	222
UTBS-8	1900	500	1840	440	1159	1940	344	1-1/2"	1-1/2"	282

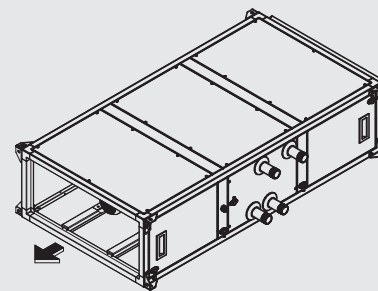
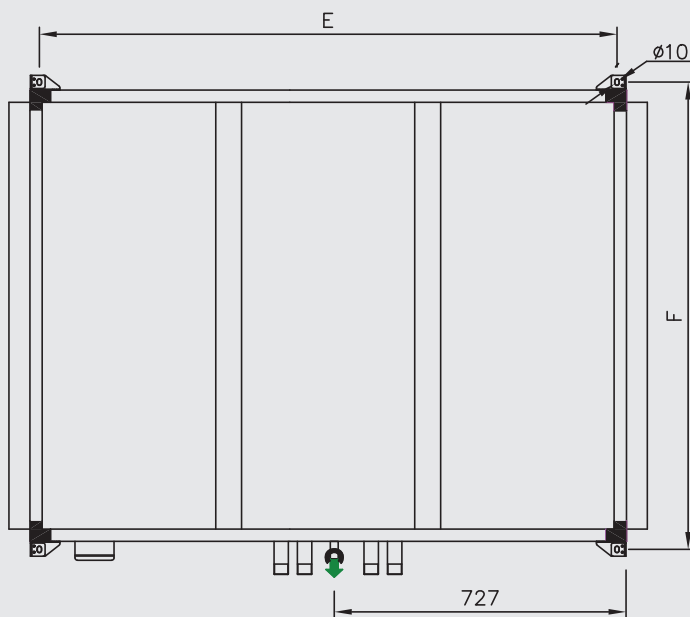
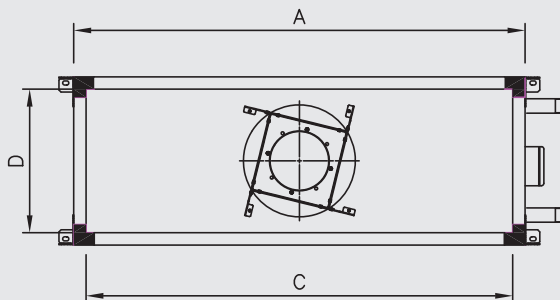
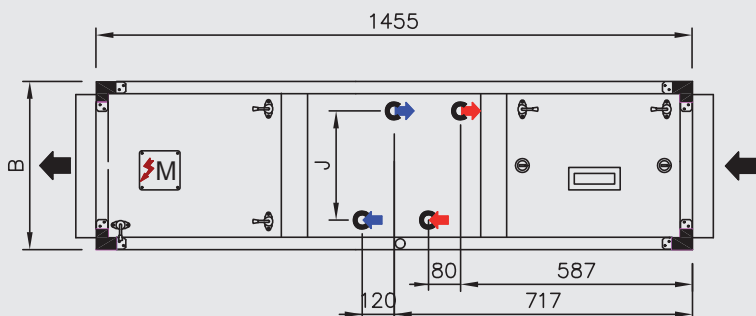
DIMENSIONS (mm)

Long version: F7 filter and capacity for mounting one additional filter

Configuration with hot water coil and cold water coil



P: Prefilter G4/M5 (accessory)
F: Filter F7
H2: Hot water coil (2 Rows)
C6: Cold water coil (6 Rows)



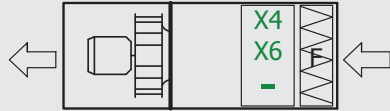
Views corresponding to version L
(Connections on the left side)

Model	External		Connections		Suports		Coils		Weight (kg)	
	A	B	C	D	E	F	J	Connections C6 / H2		
UTBS-2	750	360	690	300	1409	790	219	1-1/4"	1-1/4"	113
UTBS-3	1100	410	1040	350	1409	1140	269	1-1/4"	1-1/4"	156
UTBS-5	1500	410	1440	350	1409	1540	269	1-1/4"	1-1/4"	222
UTBS-8	1900	500	1840	440	1409	1940	344	1-1/2"	1-1/2"	282

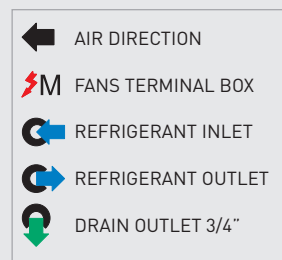
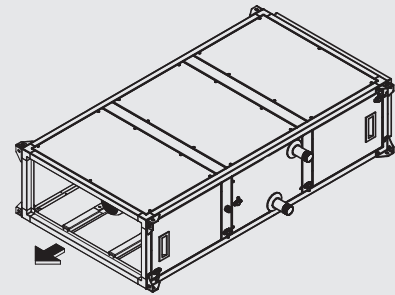
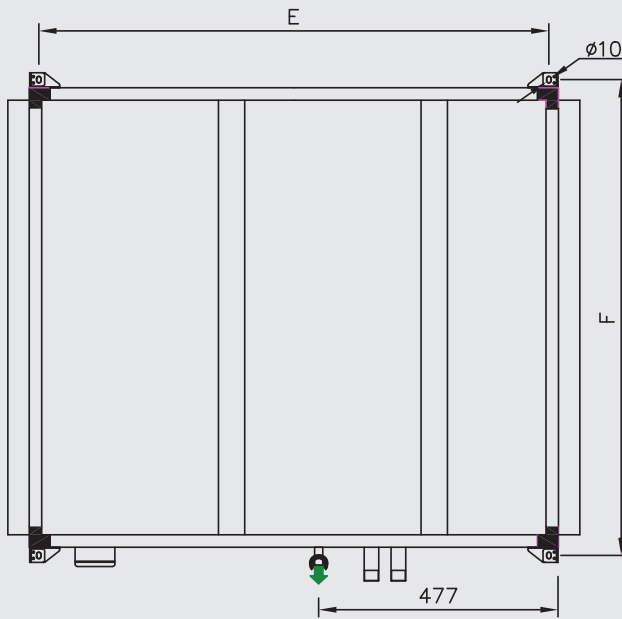
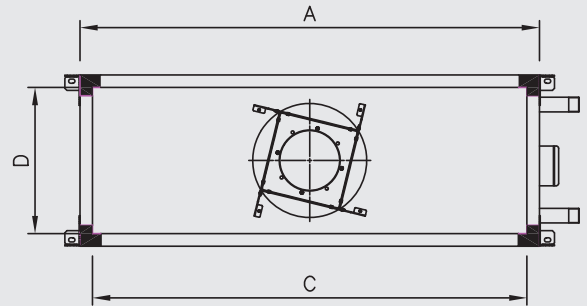
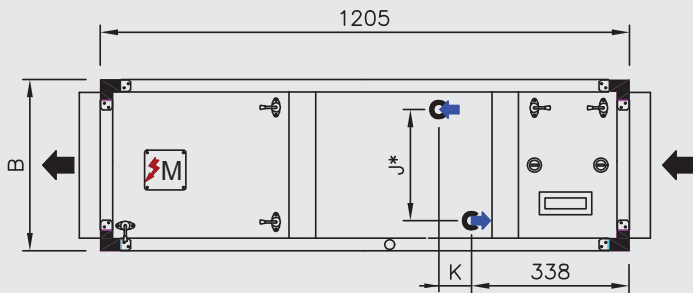
DIMENSIONS (mm)

Short version: Single filter M5

Configuration with direct expansion coil



F: Filter M5
 X4/X6: Direct expansion coil (4 Rows/6 Rows)



Views corresponding to version L
 (Connections on the left side)

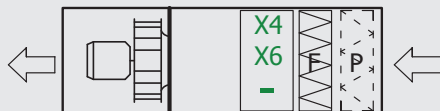
Model	External		Connections		Suports		Coils							Weight (kg)	
	A	B	C	D	E	F	J	K (X4/X6)		Inlet Connection (X4/X6)		Outlet Connection (X4/X6)		C4	C6
UTBS-2	750	360	690	300	1159	790	232	80	120	3/8"	1/2"	5/8"	5/8"	105	107
UTBS-3	1100	410	1040	350	1159	1140	280	80	108	1/2"	1/2"	5/8"	5/8"	142	147
UTBS-5	1500	410	1440	350	1159	1540	280	80	100	1/2"	1/2"	5/8"	3/4"	204	210
UTBS-8	1900	500	1840	440	1159	1940	355*	55	120	1/2"	2 x 1/2"	5/8"	2 x 3/4"	258	268

* On the UTBS-8 model with coil X6 the coil is two-stage (double inlet and outlet connection).

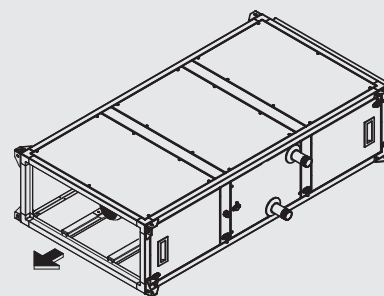
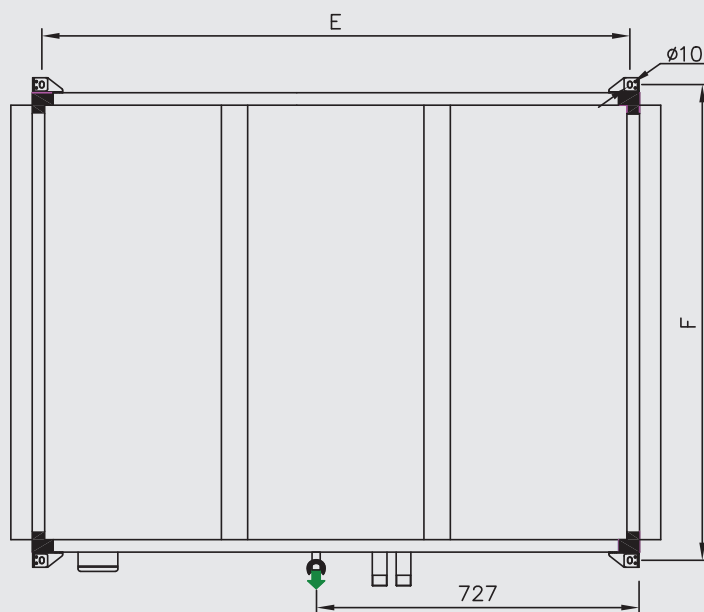
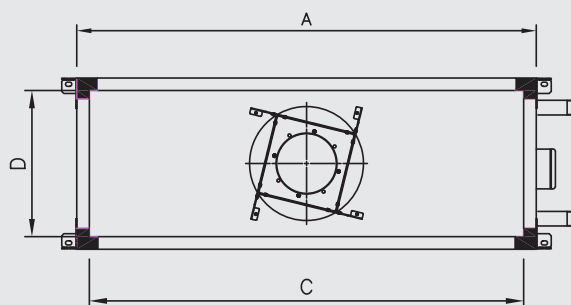
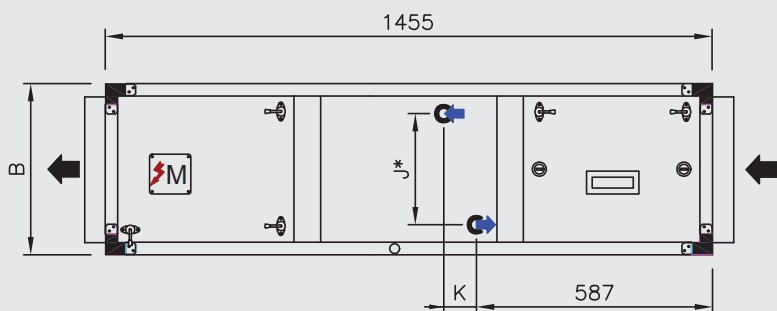
DIMENSIONS (mm)

Long version: F7 filter and capacity for mounting one additional filter

Configuration with direct expansion coil



P: Prefilter G4/M5 (accessory)
F: Filter F7
X4/X6: Direct expansion coil (4 Rows/6 Rows)



- AIR DIRECTION
- FANS TERMINAL BOX
- REFRIGERANT INLET
- REFRIGERANT OUTLET
- DRAIN OUTLET 3/4"

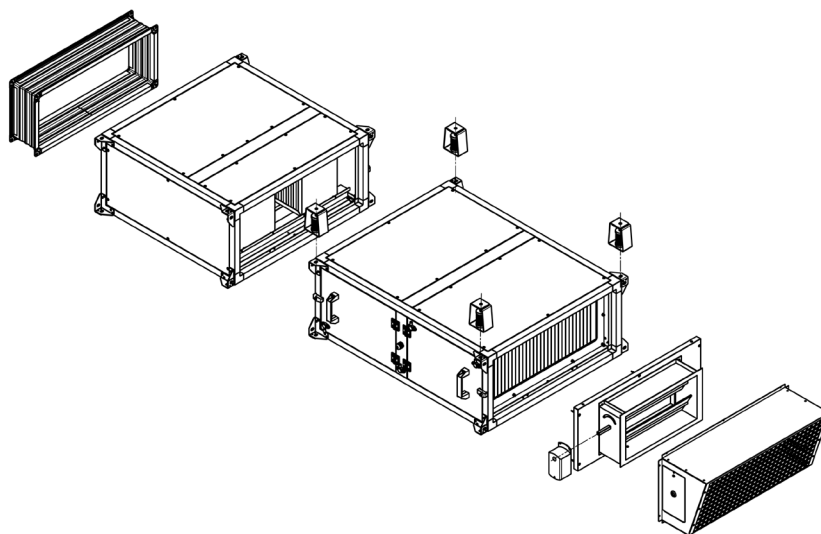
Views corresponding to version L
(Connections on the left side)

Model	External		Connections		Suports		Coils						Weight (kg)		
	A	B	C	D	E	F	J	K (X4/X6)		Inlet Connection (X4/X6)		Outlet Connection (X4/X6)		C4	C6
UTBS-2	750	360	690	300	1409	790	232	80	120	3/8"	1/2"	5/8"	5/8"	105	107
UTBS-3	1100	410	1040	350	1409	1140	280	80	108	1/2"	1/2"	5/8"	5/8"	142	147
UTBS-5	1500	410	1440	350	1409	1540	280	80	100	1/2"	1/2"	5/8"	3/4"	204	210
UTBS-8	1900	500	1840	440	1409	1940	355*	55	120	1/2"	2 x 1/2"	5/8"	2 x 3/4"	258	268

* On the UTBS-8 model with coil X6 the coil is two-stage [double inlet and outlet connection].

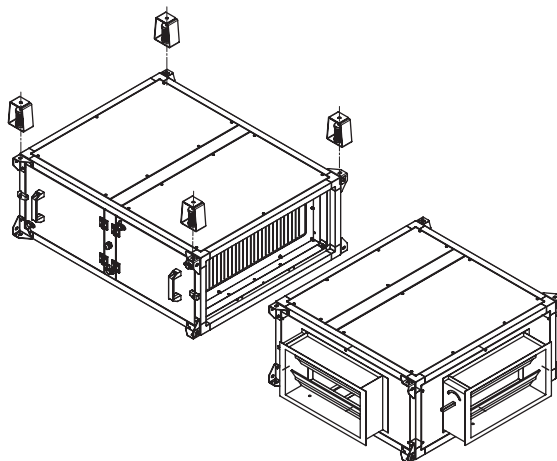
MOUNTING ACCESSORIES

Installation with 100% fresh air



Model	Flexible connector	Sound attenuator	Antivibration support	Cover	Isolation damper module	Actuator 24V
UTBS-2	JF-UTBS 650x250	SIL-2 750	AMORTIGUADOR DE MUELLE TM-50	VF UTBS-2	ID KIT COMP. UTBS-2	LF 24 S
UTBS-3	JF-UTBS 1000x300	SIL-3 750	AMORTIGUADOR DE MUELLE TM-50	VF UTBS-3	ID KIT COMP. UTBS-3	
UTBS-5	JF-UTBS 1400x300	SIL-5 750	AMORTIGUADOR DE MUELLE TM-75	VF UTBS-5	ID KIT COMP. UTBS-5	
UTBS-8	JF-UTBS 1800x400	SIL-8 750	AMORTIGUADOR DE MUELLE TM-100	VF UTBS-8	ID KIT COMP. UTBS-8	

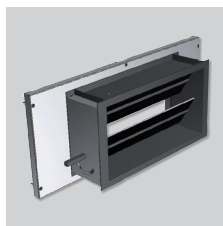
Installation with mixing module



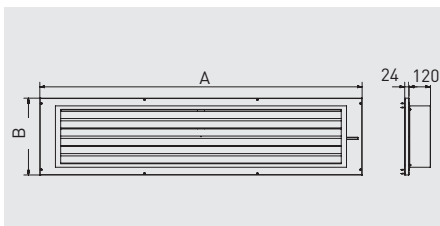
Model	Antivibrator pads	Mixing box (2 rails)				Actuator 24V
		Front and upper/ below damper	Front and side damper	Opposite side dampers	Opposite side and upper/below dampers	
UTBS-2	AMORTIGUADOR DE MUELLE TM-50	2MA-2	2MB-2	2MD-2	2ME-2	SM-24/ PRO (2 uds.)
UTBS-3	AMORTIGUADOR DE MUELLE TM-50	2MA-3	2MB-3	2MD-3	2ME-3	
UTBS-5	AMORTIGUADOR DE MUELLE TM-75	2MA-5	2MB-5	2MD-5	2ME-5	
UTBS-8	AMORTIGUADOR DE MUELLE TM-100	2MA-8	2MB-8	2MD-8	2ME-8	

MOUNTING ACCESSORIES

Mounting accessories made from galvanized steel (without painting)



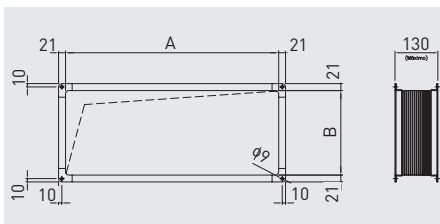
ID Isolation damper
to be installed at supply and/or extraction.



Model	A (mm)	B (mm)
ID KIT UTBS 2	688	298
ID KIT UTBS 3	1038	348
ID KIT UTBS 5	1438	348
ID KIT UTBS 8	1838	438



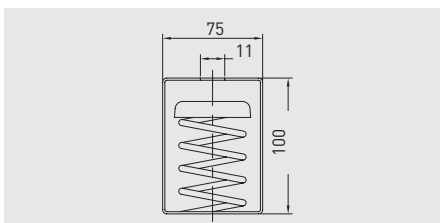
Flexible connections JF



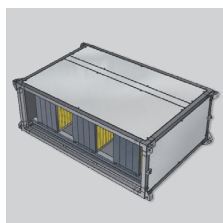
Model	A (mm)	B (mm)	Weight (kg)
JF-UTBS 650x250	646	256	3
JF-UTBS 1000x300	996	306	4
JF-UTBS 1400x300	1396	306	5
JF-UTBS 1800x400	1796	396	6



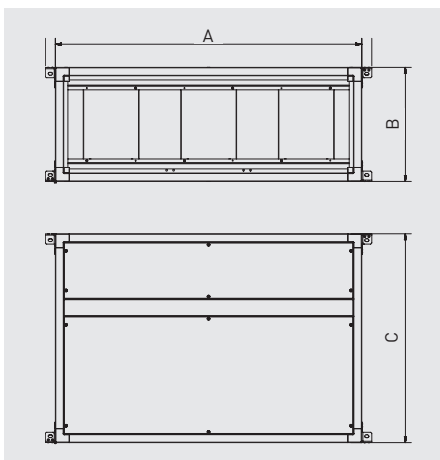
Antivibration supports



Model	Quantity for UTBS	Nominal load (kg)	Displacement (mm)
AMORTIGUADOR DE MUELLE TM-50	4	50	21-27
AMORTIGUADOR DE MUELLE TM-75	4	75	21-27
AMORTIGUADOR DE MUELLE TM-100	4	100	21-27

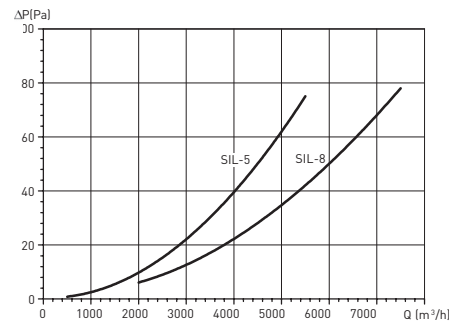
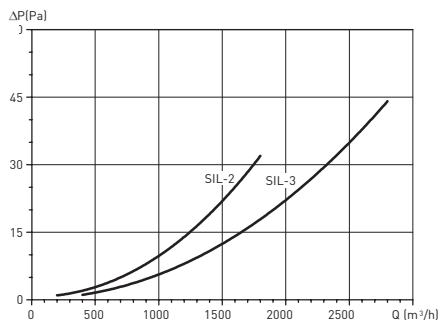


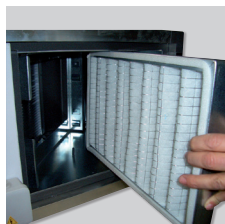
SIL Sound attenuator



Model	A (mm)	B (mm)	C (mm)	Weight (kg)
SIL-2 750	750	360	750	39
SIL-3 750	1100	410	750	53
SIL-5 750	1500	410	750	65
SIL-8 750	1900	500	750	87

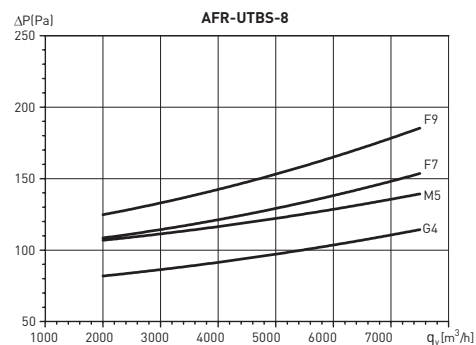
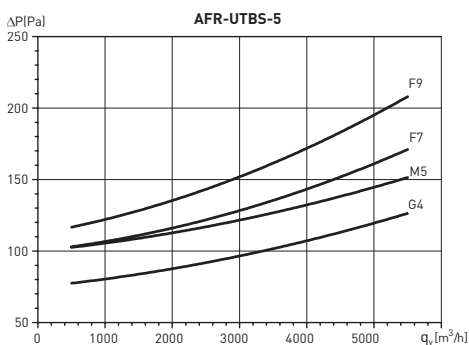
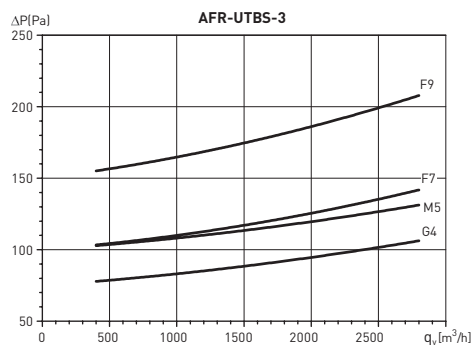
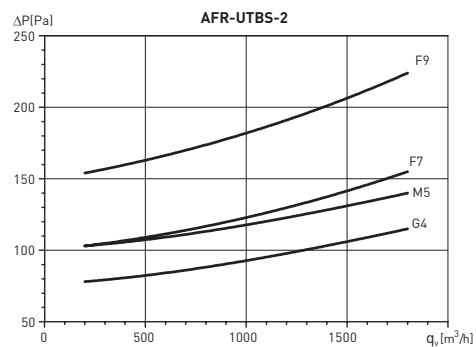
Sound attenuators pressure drop





Spare parts and accessories filters

G4	F5	F7	F9	Cty.	Dimensions
AFR UTBS-2 G4	AFR UTBS-2 F5	AFR UTBS-2 F7	AFR UTBS-2 F9	1	645x250x48
AFR UTBS-3 G4	AFR UTBS-3 F5	AFR UTBS-3 F7	AFR UTBS-3 F9	1	995x300x48
AFR UTBS-5 G4	AFR UTBS-5 F5	AFR UTBS-5 F7	AFR UTBS-5 F9	2	695x300x48
AFR UTBS-8 G4	AFR UTBS-8 F5	AFR UTBS-8 F7	AFR UTBS-8 F9	2	895x380x48



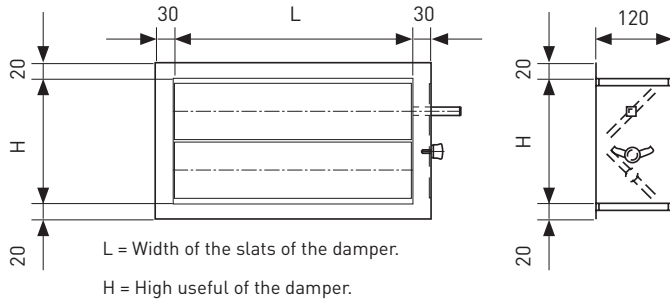
MOUNTING ACCESSORIES

Mixing module with 2 dampers (2M)

The dampers can be activated manually or with servomotor (accessory).

In the modules with side dampers, it is possible to invert the side of the damper assembly by interchanging the side panels.

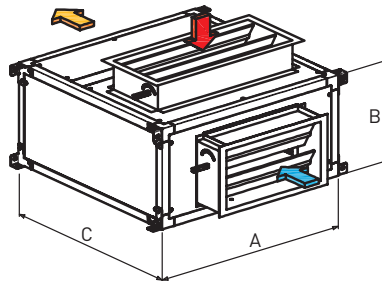
Dampers



Model	Mixing modules (2 ways)				Actuator 24V
	Front damper + upper/lower damper	Front damper + side damper	Opposite side dampers	Opposite side damper and upper/lower damper	
UTBS-2	2MA-2	2MB-2	2MD-2	2ME-2	SM-24/PRO (2 uds.)
UTBS-3	2MA-3	2MB-3	2MD-3	2ME-3	
UTBS-5	2MA-5	2MB-5	2MD-5	2ME-5	
UTBS-8	2MA-8	2MB-8	2MD-8	2ME-8	

2MA

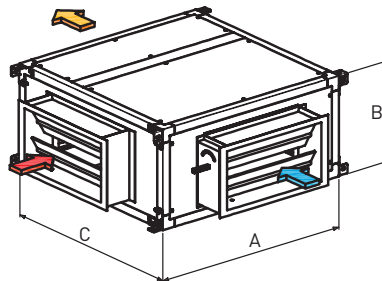
Mixing module with front damper and upper/lower damper.



Model	A (mm)	B (mm)	C (mm)	Front damper	Upper/lower damper	Weight (kg)
				LxH (mm)	LxH (mm)	
UTBS-2	750	360	360	400x210	400x210	22
UTBS-3	1100	410	410	800x210	800x210	31
UTBS-5	1500	410	410	1200x210	1200x210	44
UTBS-8	1900	500	500	1600x310	1600x310	68

2MB

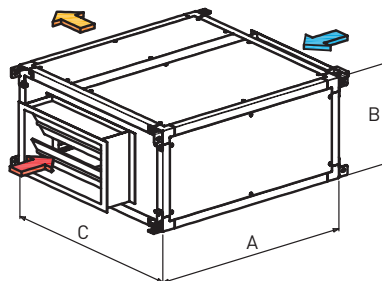
Mixing module with front and side damper.



Model	A (mm)	B (mm)	C (mm)	Lateral damper	Front damper	Weight (kg)
				LxH (mm)	LxH (mm)	
UTBS-2	750	360	750	400x210	400x210	39
UTBS-3	1100	410	750	450x310	800x210	52
UTBS-5	1500	410	1205	750x310	1200x210	106
UTBS-8	1900	500	1205	900x410	1600x310	137

2MD

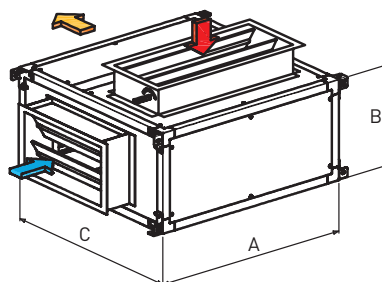
Mixing module with opposite side dampers.



Model	A (mm)	B (mm)	C (mm)	Lateral damper	Weight (kg)
				LxH (mm)	
UTBS-2	750	360	750	400x210	39
UTBS-3	1100	410	750	450x310	52
UTBS-5	1500	410	1205	750x310	106
UTBS-8	1900	500	1205	900x410	137

2ME

Mixing module with lateral damper and upper damper.



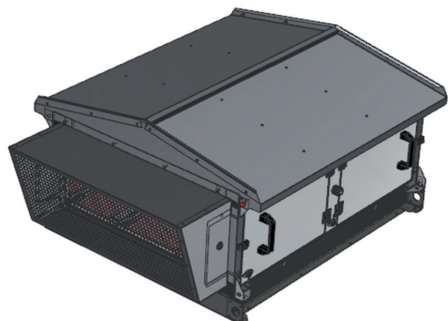
Model	A (mm)	B (mm)	C (mm)	Lateral damper	Upper/lower damper	Weight (kg)
				LxH (mm)	LxH (mm)	
UTBS-2	750	360	750	400x210	400x210	39
UTBS-3	1100	410	750	450x310	800x210	52
UTBS-5	1500	410	1205	750x310	1200x210	106
UTBS-8	1900	500	1205	900x410	1600x310	137

MOUNTING ACCESSORIES

Accessories for outdoor installation

UTBS PRO REG units are designed for being installed in false ceilings.

However, by equipping the equipment with the corresponding accessories, it is possible to install them outdoors in locations where the weather conditions are not extreme.



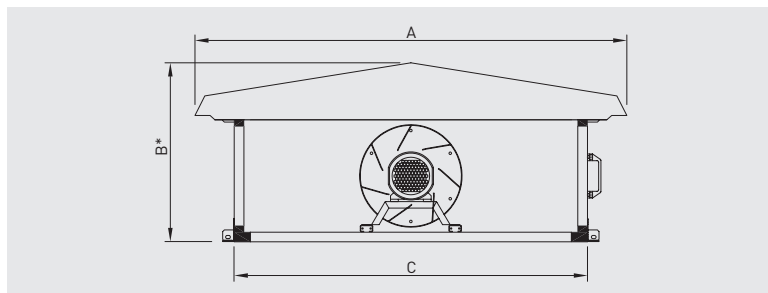
- Version with structural base (factory mounted)
- Roof (accessory)
- Cover (accessory)

Structural base

Perimetral metal structural base with profiles of height 80 mm. The bench allows to distance the equipment from the ground protecting from moisture, increases rigidity and facilitates the installation of drains.

Roof

The rainproof roof is supplied dismantled and consists of several pieces that are mounted on the equipment at the installation site.



Dimensions in mm

Model	A	B	C
UTBS-2	910	467	750
UTBS-3	1260	548	1100
UTBS-5	1660	583	1500
UTBS-8	2060	708	1900

* In versions -B, with structural base, this height increases by 80 mm.

Roofs for UTBS main modules

Model	Main module UTBS P F7 (Long frame)			Main module UTBS M5 (Short frame)	
	Without coils L = 969mm	Only electric coil L = 1205mm	With water coils L = 1455	Without coils L = 750mm	With electric and/or water coils L = 1205
UTBS-2	TPP UTBS-2 L-969	TPP UTBS-2 L-1205	TPP UTBS-2 L-1455	TPP UTBS-2 L-750	TPP UTBS-2 L-1205
UTBS-3	TPP UTBS-3 L-969	TPP UTBS-3 L-1205	TPP UTBS-3 L-1455	TPP UTBS-3 L-750	TPP UTBS-3 L-1205
UTBS-5	TPP UTBS-5 L-969	TPP UTBS-5 L-1205	TPP UTBS-5 L-1455	TPP UTBS-5 L-750	TPP UTBS-5 L-1205
UTBS-8	TPP UTBS-8 L-969	TPP UTBS-8 L-1205	TPP UTBS-8 L-1455	TPP UTBS-8 L-750	TPP UTBS-8 L-1205

Roofs for UTBS accessory modules

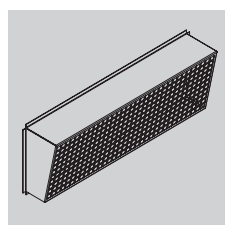
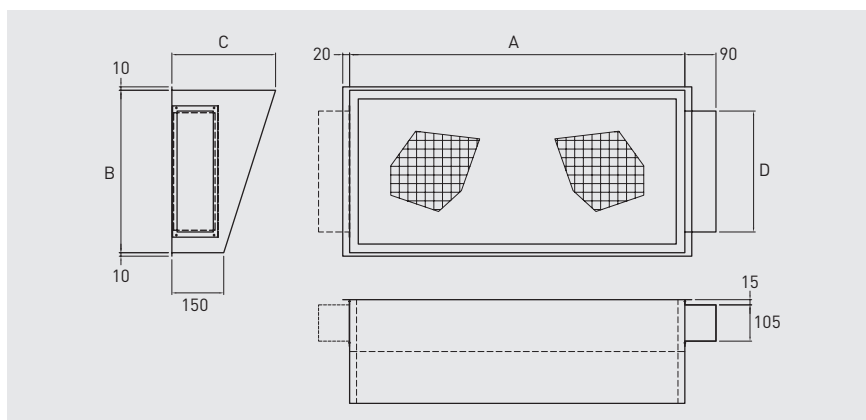
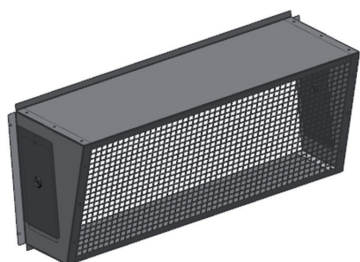
Model	Accessories					
	Sound attenuator SIL-750	Plenum module PB	Mixing module		Filter box FB	Water coil module CB
			2MA*	2MB, 2MD y 2ME*		
UTBS-2	TPP UTBS-2 L-750		TPP UTBS-2 L-360	TPP UTBS-2 L-750		TPP UTBS-2 L-485
UTBS-3	TPP UTBS-3 L-750		TPP UTBS-3 L-410	TPP UTBS-3 L-750		TPP UTBS-3 L-485
UTBS-5	TPP UTBS-5 L-750		TPP UTBS-5 L-410	TPP UTBS-5 L-1205		TPP UTBS-5 L-485
UTBS-8	TPP UTBS-8 L-750		TPP UTBS-8 L-500	TPP UTBS-8 L-1205		TPP UTBS-8 L-485

*In the mixing modules 2MA and 2ME, if the damper is mounted on the top, this is incompatible with the installation of the TPP.

MOUNTING ACCESSORIES

Covers

Mounting accessories are supplied with unpainted galvanized sheet metal finish.

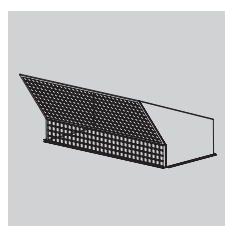
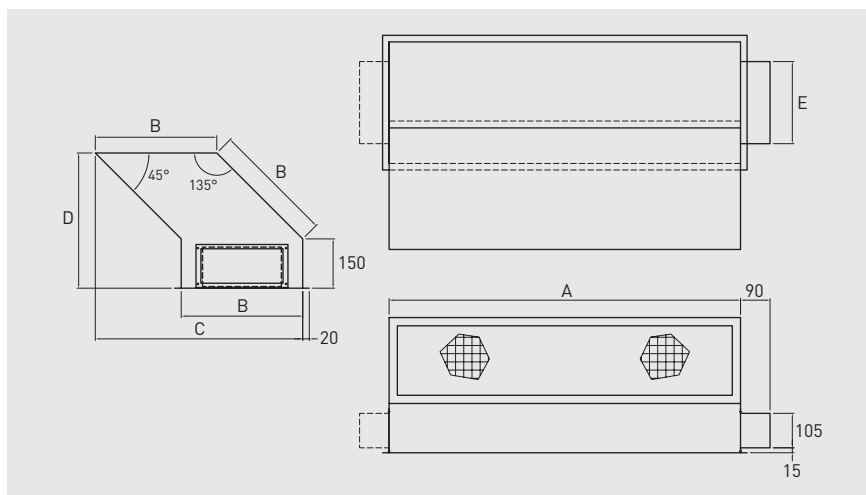


Cover for main module and mixing modules 2MA and 2MB (front)

Model	A	B	C	D	Weight (kg)
VF UTBS-2	470	270	250	200	2
VF UTBS-3	870	270	250	200	3
VF UTBS-5	1270	270	250	200	4
VF UTBS-8	1670	370	275	250	10

Cover for mixing modules: 2MB, 2MD and 2ME (lateral outlet)

Model	A	B	C	D	Weight (kg)
VL UTBS-2	470	270	250	200	2
VL UTBS-3	520	370	275	250	5
VL UTBS-5	820	370	275	250	6
VL UTBS-8	970	470	300	350	8



Covers for roof dampers

VS Cover for upper damper.

Model	A	B	C	D	F	Weight (kg)
VS UTBS-2	470	270	461	341	200	7
VS UTBS-3	870	270	461	341	200	12
VS UTBS-5	1270	270	461	341	200	18
VS UTBS-8	1670	370	631	412	250	22

ELECTRIC ACCESSORIES

External sensor depending on the fans control mode

Control type	Accessory
VAV - Variable Air Volume	SC02-A 0/10V / SC02-G 0/10V
CAV - Constant Air Volume	Integrated in the unit. Factory mounted
COP - Constant Pressure	TDP-S



TDP-S sensor
Pressure transmitters without display
 They are used to control the pressure in constant pressure ventilation systems or constant flow. It enables to control the pressure at two points and transform it into an electrical signal suitable for the different types of control.



SC02-G 0/10V
 CO₂ sensor for the duct.
 Enables control of the ventilation in sections of duct according to the CO₂ concentration of the air circulating through it.
 Output signal: 0-10V
 Power supply: 24 VDC.



SC02-A 0/10V
 Ambient CO₂ and temperature sensor without display.
 Output: 0-1-0V
 Power supply: 24VDC



Actuator for Isolation damper module (ID), LF-24-S
 24V power supply with all or nothing output and spring return.



SM-24/PRO
 Servo motor to control the mixing module dampers. Supply power 24V (proportional output 0-10V).



3-WAY VALVES WITH PROPORTIONAL ACTUATOR
 Three way motorised control valve.
 Pressure 1.6 bar.
 Rp" internal nut.
 Nickel-plated forged brass casing.
 Stainless steel valve cone.
 Stainless steel shaft.
 Average temperatures -10...+120.
 5Nm mounted rotary actuator.
 AC/DC 24V, proportional.
 90 s/90° valve response time.
 DC 2...10V working range.
 IP 54, automatic or manual activation.