



Horizontal discharge version CVHT-H



Range of belt driven cabinet fans designed for smoke extraction in fire conditions and certified F400-120 (CE marked). The casings are manufactured from heavy gauge galvanised sheet steel. All models incorporate double inlet forward curved centrifugal impellers. Belt-driven transmission system mounted external to the air stream. Motor mounted within the fan cabinet onto a specific support giving optimal belt tension. Supplied as standard in horizontal discharge (code H) or vertical (code V) configuration with motor, pulley and belt assembly on the right hand side of the unit when viewed from the discharge end.



Vertical discharge version CVHT-V

**Motors**

All motors are IP55, class F insulation. Electrical supply. Three phase 230/ 400V-50Hz, up to 4 kW. 400/690V-50Hz, for higher motor powers. (See characteristics chart).

**On request**

Motor, pulley and belt assembly fitted on the left hand side of the unit when viewed from the discharge end (TI version). Two speed motors (4/6 and 4/8 poles). Single phase motors 230V-50Hz up to 2,2 kW. Single phase motor (CVHB) up to 2,2 kW.



**Easy to install**  
 The cabinets have fixing points on the corners easing the installation either on the floor or ceiling.



**Compact design**  
 Motor inside the fan casing, providing a smaller size and a higher compacity.



**Automatically tensioned and maintenance free system**  
 Exclusive of S&P. The only system ensuring a constant belt tension without any maintenance required.



**Robustness**  
 Quality finishing, with aluminium corners providing a high robustness.

**Specific applications**



### TECHNICAL CHARACTERISTICS

Before installation check that the product electrical characteristics listed on the data plate label (voltage, power, frequency, etc.) match those of the intended electrical supply.

Model	Motor power		Fan speed		Airflow		Weight with bigger motor
	Minimum (kW)	Maximum (kW)	Minimum (rpm)	Maximum (rpm)	Minimum (m³/h)	Maximum (m³/h)	
CVHT-9/9	0,25	1,1	800	1700	700	4.400	60
CVHT-10/10	0,25	2,2	700	1700	1.100	6.300	70
CVHT-12/12	0,37	3	600	1500	1.300	9.300	85
CVHT-15/15	0,75	4	600	1200	3.000	12.000	121
CVHT-18/18	0,75	7,5	400	950	2.500	21.200	160
CVHT-20/20	2,2	7,5	500	1000	4.500	24.400	250
CVHT-22/22	2,2	15	400	850	5.000	36.000	320
CVHT-25/25	2,2	15	350	750	5.000	42.000	330
CVHT-30/28	2,2	18,5	300	600	12.000	57.000	648

### ACOUSTIC CHARACTERISTICS

Sound power spectrum: To obtain the sound power level spectrum subtract the correction values (dB(A)) shown in the table below at the corresponding octave average frequencies from the value provided in the product performance.

Model	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	16000 Hz
CVHT-9/9	17	15	11	12	4	5	14	19	27
CVHT-10/10	17	15	11	11	4	5	14	20	27
CVHT-12/12	16	14	11	10	4	5	15	21	27
CVHT-15/15	13	13	10	10	5	5	15	22	27
CVHT-18/18	11	12	9	9	5	6	15	22	27
CVHT-20/20	10	11	8	8	6	7	16	23	27
CVHT-22/22	9	11	7	8	6	8	17	24	27
CVHT-25/25	9	11	7	8	6	8	17	25	27
CVHT-30/28	9	11	7	8	6	8	18	25	27

### MOTOR POWERS (KW) FOR CVHT PRODUCT RANGE

1 SPEED	4 POLES	0,25	0,37	0,55	0,75	1,1	1,5	2,2	3	4	5,5	7,5	11	15	18,5
2 SPEED	4/6 POLES	0,25/0,09	-	-	0,7/0,2	0,85/0,25	1,4/0,5	2,4/0,75	3,4/1,1	4/1,2	6,3/1,9	9/3	11/3,7	15/5	18,5/6,5
	4/8 POLES	0,25/0,06	0,37/0,07	0,55/0,09	0,75/0,12	1,1/0,18	1,5/0,25	2,2/0,37	3/0,55	4/0,75	5,5/1,1	7,5/1,5	11/2,8	15/3,8	18,5/4,8

NOTE: For 2 speed motors, the powers may have small variations depending on the motor manufacturer.

**PERFORMANCE CURVES**

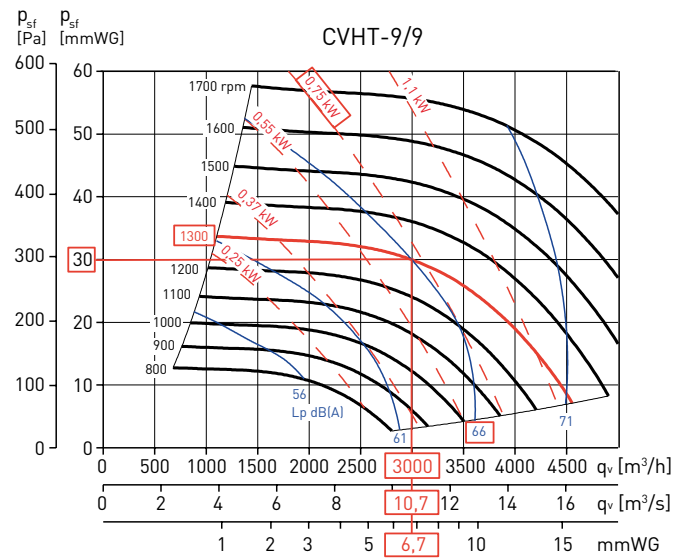
Fan selection example for a cabinet fan:

Required airflow: 3.000 m<sup>3</sup>/h  
 System resistance: 30 mmWG  
 Horizontal discharge

From x-axis (horizontal) with an airflow of 3.000 m<sup>3</sup>/h. and in the y-axis (vertical) with a pressure of 30 mmWG, those conditions meet in the Performance curve at 1.300 rpm (red curve) below the motor power of 0,75 kW (red dashed curve) and with a sound pressure level of 66 dB(A).

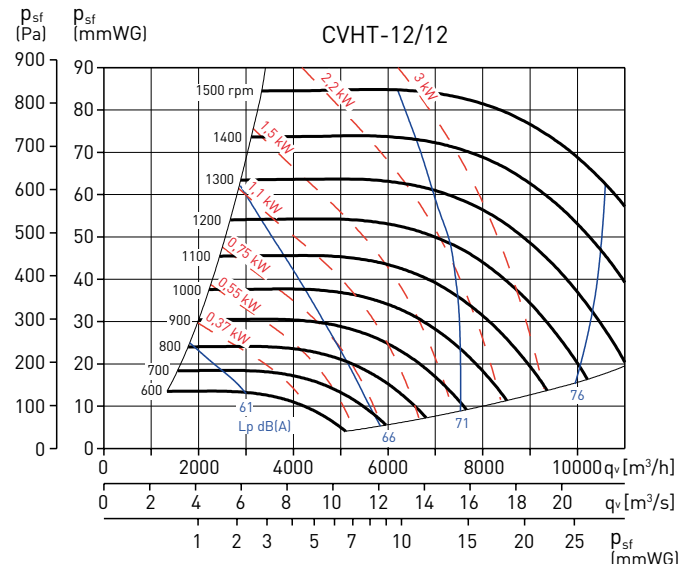
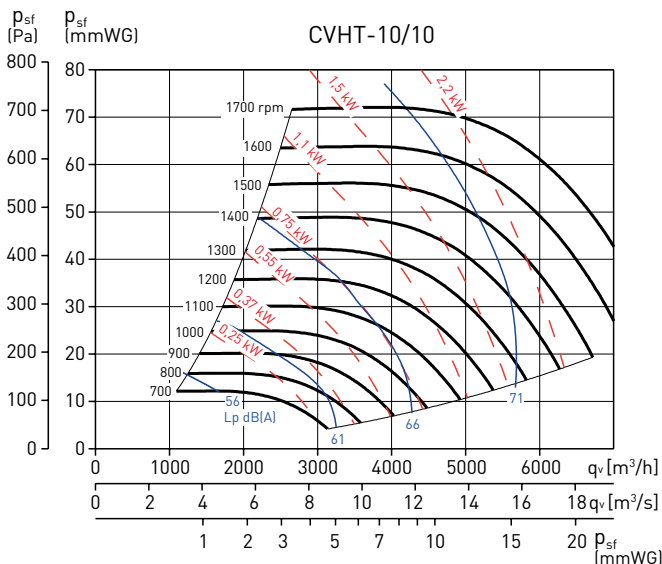
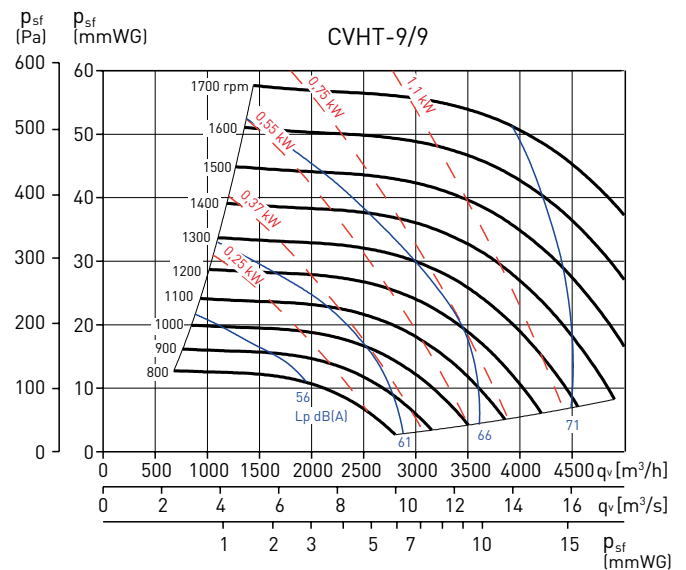
- Then, the resulting model would be:
- CVHT/H-9/9 - 0,75 kW (1.300 rpm)
  - Motor power: 0,75 kW
  - Speed 1.300 rpm
  - Sound Pressure at 1,5 m: 66 dB(A)
  - ir Velocity at Discharge: 10,7 m/s

**If the fan operates at free discharge, an additional system resistance, shown in the lower scale measured in mmWG for every curve, should be added.**  
**In this example 6,7 mmWG should be foreseen.**



- q<sub>v</sub>: Airflow in m<sup>3</sup>/h and m<sup>3</sup>/s.
- p<sub>sf</sub>: Static pressure in mmWG and Pa.
- Dry air at 20°C and 760 mmHg.
- Performance data in accordance with ISO 5801 and AMCA 210-99 Standards.

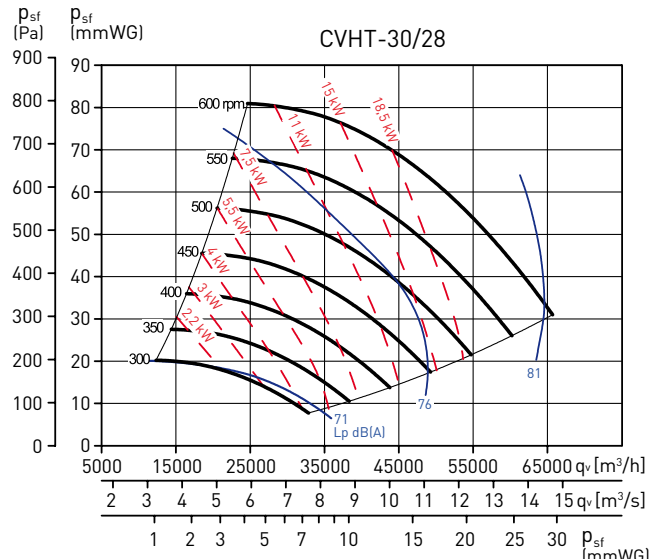
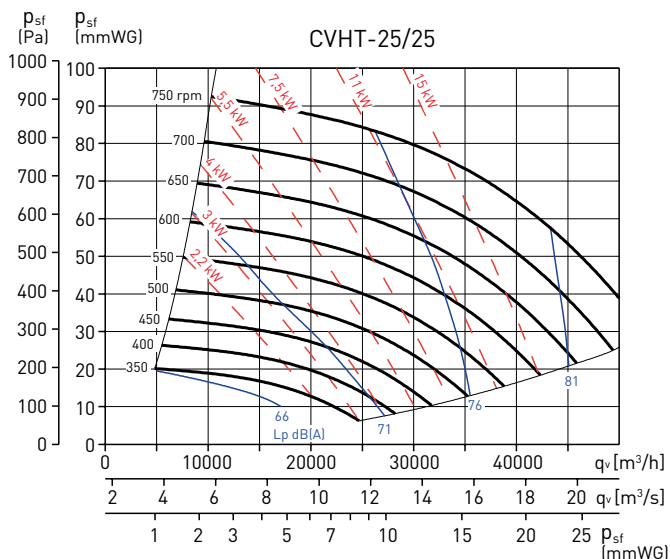
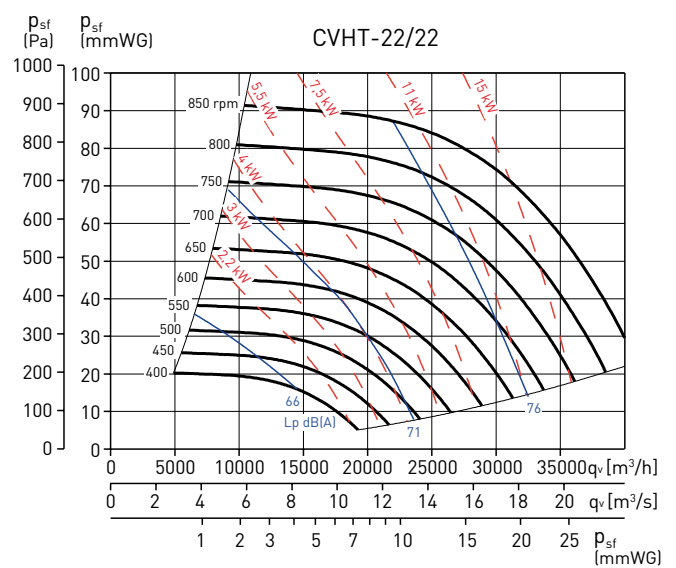
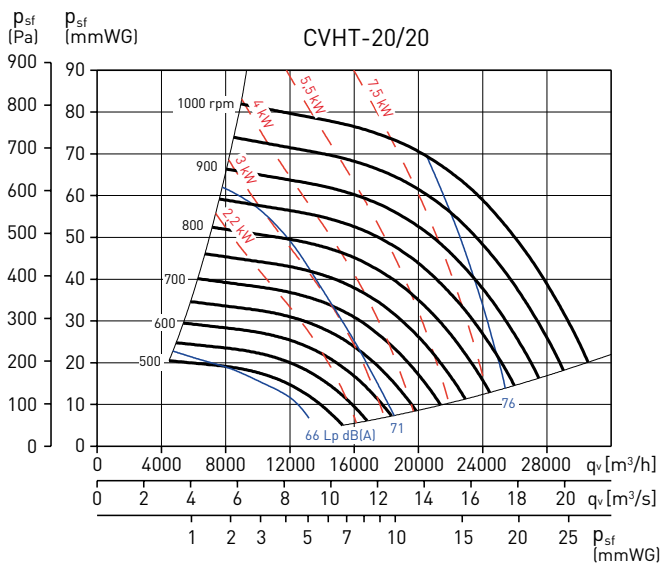
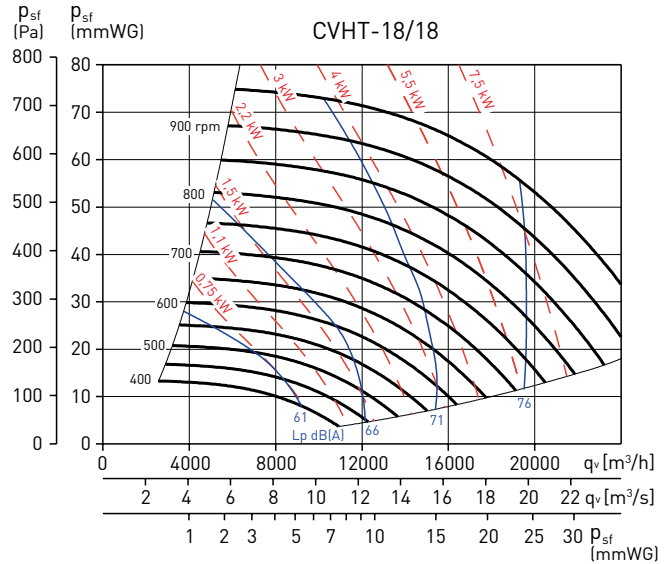
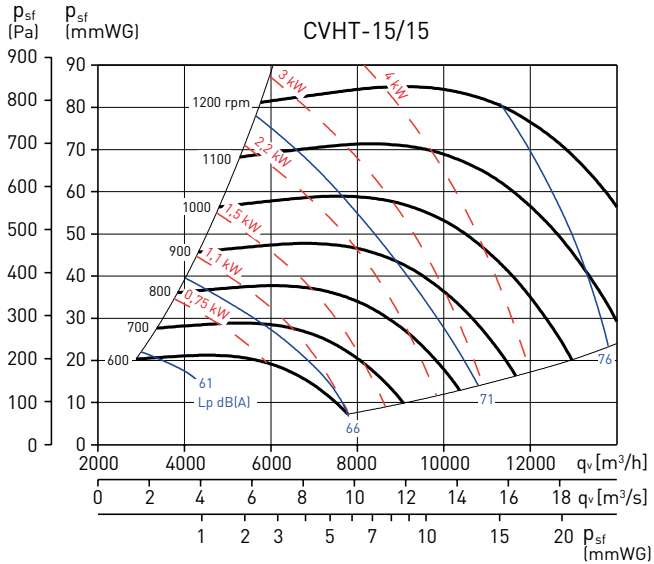
The fan revolutions are set in multiples of 50 rpm



Sound pressure level (Lp dB(A)) measured on the inlet side at 1,5 m distance.

**PERFORMANCE CURVES**

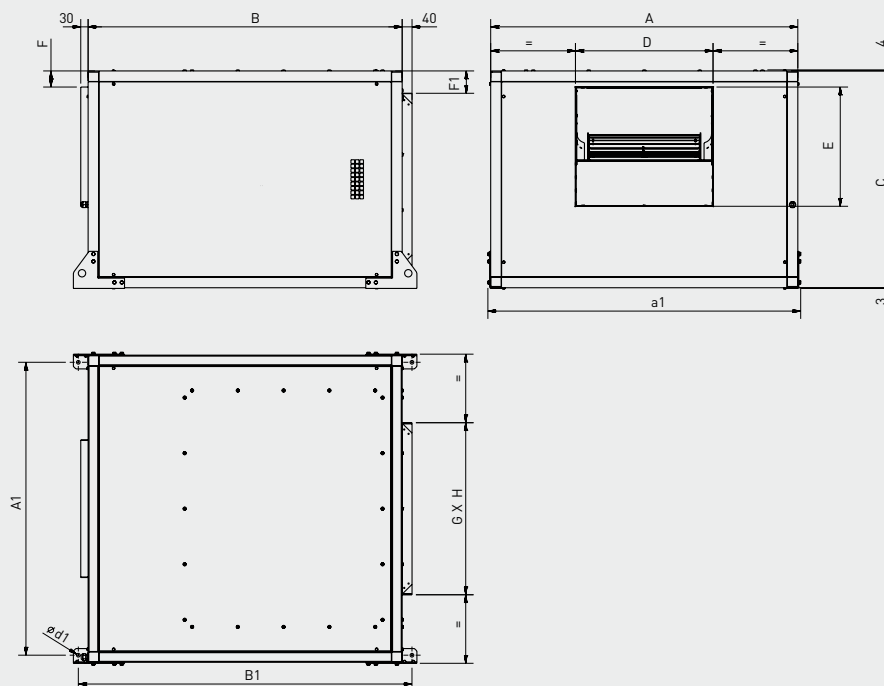
- $q_v$ : Airflow in  $m^3/h$  and  $m^3/s$ .
- $p_{sf}$ : Static pressure in mmWG and Pa.
- Dry air at 20°C and 760 mmHg.
- Performance data in accordance with ISO 5801 and AMCA 210-99 Standards.



Sound pressure level (Lp dB(A)) measured on the inlet side at 1,5 m distance.

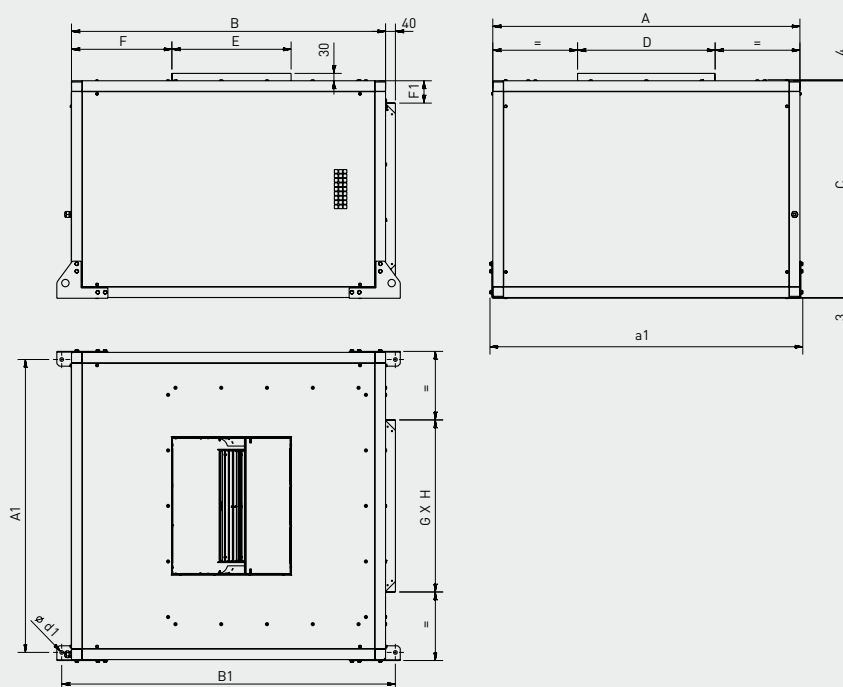
**DIMENSIONS (mm)**

CVHT 9-10-12-15-18 Horizontal



Model	A	A1	a1	B	B1	C	D	ø d1	E	F	F1	GxH
CVHT-9/9-H	759	701	782	783	863	592	304	15	264	65,5	96	400x400
CVHT-10/10-H	821	763	844	837	917	618	337	15	293,5	65,5	84	450x450
CVHT-12/12-H	945	887	968	959	1.039	680,5	400	15	345	65,5	90,25	500x500
CVHT-15/15-H	1104	1046	1127	1.092	1.172	776	476	15	407	65,5	88	600x600
CVHT-18/18-H	1250	1192	1273	1.278	1.358	882	560	15	485	65,5	91	700x700

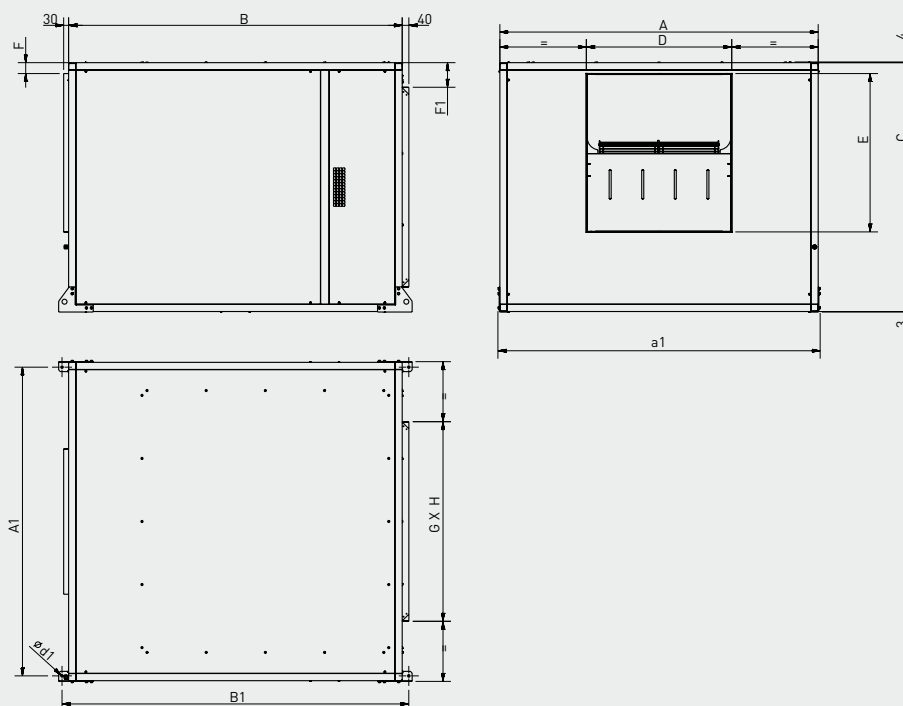
CVHT 9-10-12-15-18 Vertical



Model	A	A1	a1	B	B1	C	D	ø d1	E	F	F1	GxH
CVHT-9/9-V	759	701	782	783	863	592	304	15	264	316,5	96	400x400
CVHT-10/10-V	821	763	844	837	917	618	337	15	293,5	316,5	84	450x450
CVHT-12/12-V	945	887	968	959	1.039	680,5	400	15	345	343,5	90,25	500x500
CVHT-15/15-V	1104	1046	1127	1.092	1.172	776	476	15	407	368,5	88	600x600
CVHT-18/18-V	1250	1192	1273	1.278	1.358	882	560	15	485	408,5	91	700x700

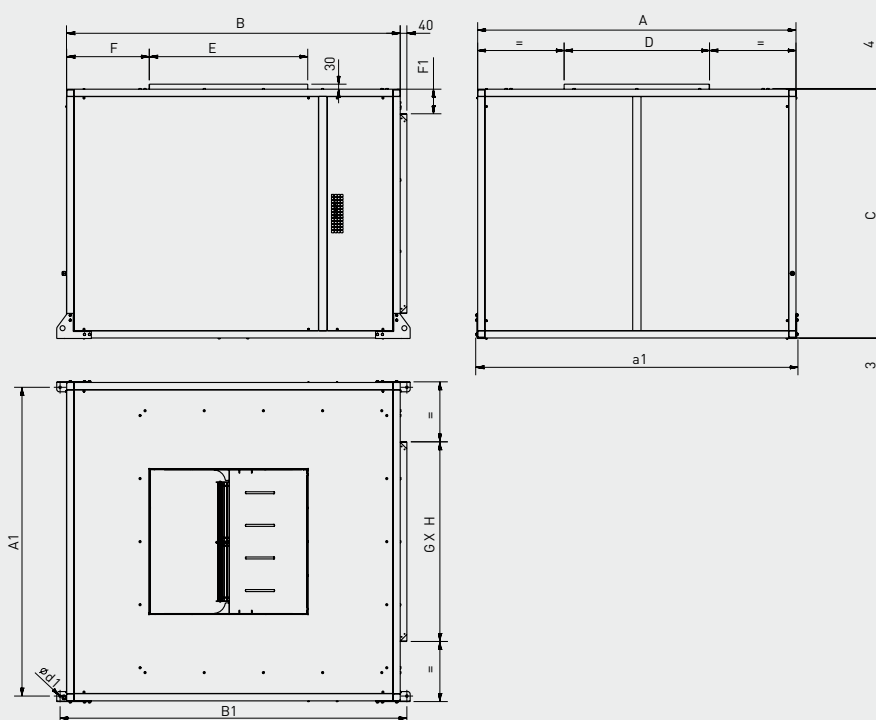
DIMENSIONS (mm)

CVHT 20-22-25-30 Horizontal



Model	A	A1	a1	B	B1	C	D	ø d1	E	F	F1	GxH
CVHT-20/20-H	1414	1356	1437	1495	1575	1051	636	15	631	65,5	125,5	800x800
CVHT-22/22-H	1542	1448	1565	1638	1718	1142,5	697,5	15	705,5	65,5	121,25	900x900
CVHT-25/25-H	1697	1639	1720	1800	1880	1278	801	15	805	65,5	139	1000x1000
CVHT-30/28-H	1914	1856	1937	2005	2084	1495,5	874,5	15	952,5	65,5	147,75	1200x1200

CVHT 20-22-25-30 Vertical

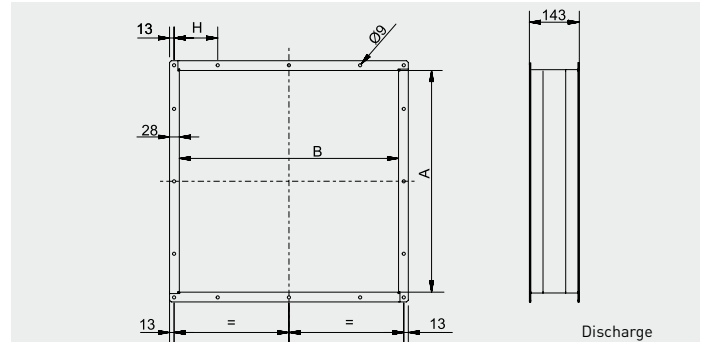
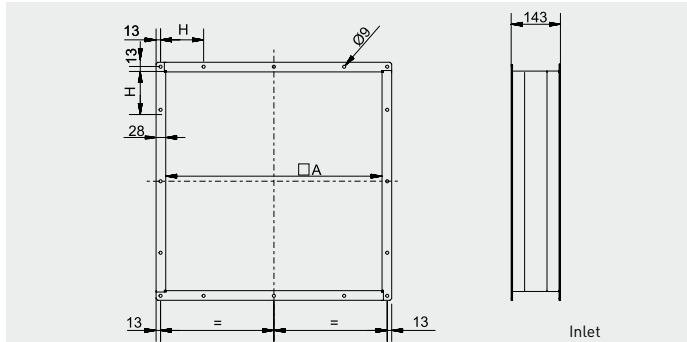


Model	A	A1	a1	B	B1	C	D	ø d1	E	F	F1	GxH
CVHT-20/20-V	1414	1356	1437	1495	1.575	1.051	636	15	631	451,5	125,5	800x800
CVHT-22/22-V	1542	1484	1565	1.638	1.718	1142,5	697,5	15	705,5	498	121,25	900x900
CVHT-25/25-V	1697	1639	1720	1.800	1.880	1278	801	15	805	497,5	139	1000x1000
CVHT-30/28-V	1914	1856	1937	2.005	2.084	1495,5	874,5	15	952,5	496,5	147,75	1200x1200

**MOUNTING ACCESSORIES**



**ACOP RECT F400**  
 Rectangular flexible connectors.



Model Cabinet	Inlet			
	Model	A	H	Nº holes
CVHT-9/9	ACOP RECT F400 9/9 ASP	402		8
CVHT-10/10	ACOP RECT F400 10/10 ASP	452		8
CVHT-12/12	ACOP RECT F400 12/12 ASP	502		8
CVHT-15/15	ACOP RECT F400 15/15 ASP	602		8
CVHT-18/18	ACOP RECT F400 18/18 ASP	702		8
CVHT-20/20	ACOP RECT F400 20/20 ASP	802	168	16
CVHT-22/22	ACOP RECT F400 22/22 ASP	902	199	16
CVHT-25/25	ACOP RECT F400 25/25 ASP	1002	208	16
CVHT-30/28	ACOP RECT F400 30/28 ASP	1202	247	16

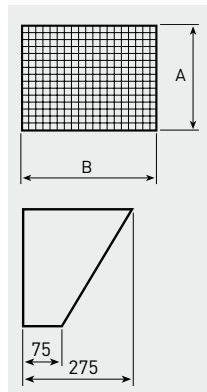
Model Cabinet	Discharge				
	Model	A	B	H	Nº holes
CVHT-9/9	ACOP RECT F400 9/9 IMP	305	265		8
CVHT-10/10	ACOP RECT F400 10/10 IMP	338	294		8
CVHT-12/12	ACOP RECT F400 12/12 IMP	401	346		8
CVHT-15/15	ACOP RECT F400 15/15 IMP	477	408		8
CVHT-18/18	ACOP RECT F400 18/18 IMP	561	486		8
CVHT-20/20	ACOP RECT F400 20/20 IMP	637	632	125	8
CVHT-22/22	ACOP RECT F400 22/22 IMP	698	706	150	16
CVHT-25/25	ACOP RECT F400 25/25 IMP	802	806	175	16
CVHT-30/28	ACOP RECT F400 30/28 IMP	875	953	210	16

Dimensions (mm)

Dimensions (mm)

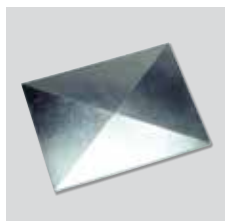


**CVD (Discharge) - CVA (Inlet)**  
**Protection guards**  
 Wire protection guards for mounting on the discharge sides of the cabinets.

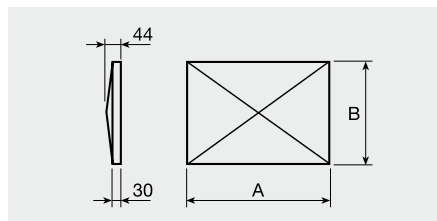


Cabinet model	Discharge		Inlet			
	Guard model	A	B	Guard model	A	B
CVHT-9/9	CVD-9	263	303	CVA-9	403	403
CVHT-10/10	CVD-10	292	336	CVA-10	453	453
CVHT-12/12	CVD-12	344	399	CVA-12	503	503
CVHT-15/15	CVD-15	406	476	CVA-15	603	603
CVHT-18/18	CVD-18	482	559	CVA-18	703	703
CVHT-20/20	CVD-20	633	633	CVA-20	803	803
CVHT-22/22	CVD-22	698	703	CVA-22	903	903
CVHT-25/25	CVD-25	799	803	CVA-25	1003	1003
CVHT-30/28	CVD-30	873	948	CVA-30	1203	1203

Dimensions (mm)



**CHTI**  
**Pitched roof cover**  
 For outdoor mounted installations of horizontal discharge cabinet fans.



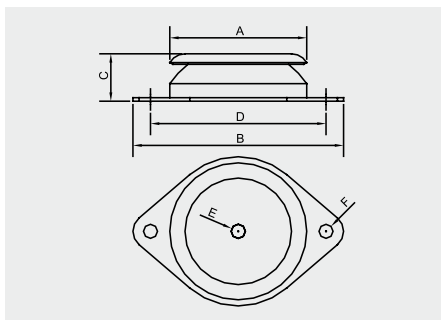
Cabinet model	Cover model	A	B
CVHT-H-9/9	CHTI-9/9	787	763
CVHT-H-10/10	CHTI-10/10	841	825
CVHT-H-12/12	CHTI-12/12	963	949
CVHT-H-15/15	CHTI-15/15	1096	1108
CVHT-H-18/18	CHTI-18/18	1284	1254
CVHT-H-20/20	CHTI-20/20	1499.5	1418.5
CVHT-H-22/22	CHTI-22/22	1642.5	1546.5
CVHT-H-25/25	CHTI-25/25	1804.5	1701.5
CVHT-H-30/28	CHTI-30/28	2009.5	1918.5

Dimensions (mm)

**MOUNTING ACCESSORIES**



**PAVZ**  
 Rubber anti-vibration mounts with metallic bases that absorb vibration and attenuate the noise produced in the installation.



Model	A	B	C	D	ØE	ØF	Weight (kg)
PAVZ-60	60	90	24	76	M6	6,2	40
PAVZ-80	80	120	27	100	M8	8,2	80
PAVZ-100	100	148	28	124	M10	10,2	205
PAVZ-150	150	214	39	182	M14	12,2	358
PAVZ-200	200	280	44	240	M18	14,5	499

Dimensions (mm)