

# TERMINAL BOXES (DK), ROOF EXHAUST UNITS (TVC), ROOF SUPPLY UNITS (DTU)

- Terminal Boxes with or without fan
- Air supply or air extraction
- Supplied complete with a Roof Frame and Silencer
- Durable maintenance free casing



## Description

Balanced air management in buildings begins to play a more important role. The horizontally directed Terminal Boxes of the DTU/ TVC series, have been specifically designed to supply fresh air whilst extracting impure air. These units can be supplied with a Roof Frame. Thanks to intelligent designing, the Silencer can be fitted within the Frame to allow the Terminal to be mounted on top. The Terminal, the Frame and the eventual Silencer can be removed easily and quickly. The Silencer ensures a low noise level in the outside area and in the air duct system.

## Function

Our Terminal Boxes can be supplied with or without fan motors. You are free in your choice of which system suits your requirements. These units are designed for roof installation. The Roof Frame should be installed before roofing material is placed to prevent leakage.

- DK, without fan: for air supply or air extraction, with an external fan (VK)
- TVC with fan: suitable as an air extraction unit
- DTU with fan: suitable as an air supply unit

All types with motor fans can be supplied with a fixed maintenance switch and/or with a separate 3-step switch or speed controller. This makes it possible to remotely control the ventilation flow.

## Technical specifications

The double-walled polyester casing is supplied in the colour RAL9002. This thermally and acoustically insulated casing is durable, resistant to all weather conditions and therefore has a long life expectancy. The TVC's and DTU's are fitted with high quality Imofa fans. These fans are mounted vibration free to ensure silent operation. The TVC is supplied standard with a back draught shutter that has been specifically selected for optimal balance between flow, air speed and sound. A protection grille is installed standard on the exhaust end. The power cable can be connected without removal of the fan by way of a maintenance switch or motor safe activation switch.

Compliance as per the Standards stated in Machine Directive 89/336 EC (attachment 2B) and the Low Voltage Directive 73/23/EEC.

## Supplied with:

- maintenance friendly polyester double-walled casing
- DD-fans
- energy saving DDEC-fan (optional)
- Roof Frame (optional)
- Silencer (optional)
- fitted activation switch (optional)
- Speed Controller (optional)
- step switch (optional)



## Technical data

### Terminal Boxes with fan

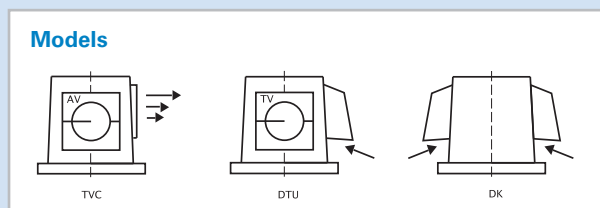
TVC air extraction unit	Unit	TVC-7			TVC-9			
DTU air supply unit		DTU-7			DTU-9			
Fan	type	DD-180-178/3	DD-7-7-9	DD-7-7-14	DD-9-7-9	DD-9-7-14	DD-9-9-9	DD-9-9-14
Motor rating	W	45	62	92	184	368	245	368
Speed	rev. / min	1420	880	1380	880	1320	900	1320
Maximum current	A	0,65	0,60	1,00	2,00	3,10	2,30	3,10
Noise pressure outlet side <sup>1)</sup>	dB(A)	55	51	57	56	66	59	61
Noise pressure outlet side fan + silencer <sup>2)</sup>	dB(A)	46	42	48	47	57	50	52
Minimum air volume	m <sup>3</sup> /h	250	250	500	500	750	750	750
Maximum air volume	graph	1	2	3	4	5	6	7
Minimum external resistance	Pa	0	0	75	0	230	0	260
Weight	Kg	10	12	12	19	21	22	22
Speed controller applicable	-	yes	yes	yes	yes	yes	yes	yes
Electrical connection	V/ph/Hz	230/50/1			230/50/1			
Article number	TVC	991-403	991-405	991-407	991-413	991-415	991-417	991-419
	DTU	991-053	991-055	991-057	991-513	991-515	991-517	991-519

TVC air extraction unit	Unit	TVC-10				TVC-12	
DTU air supply unit		DTU-10				DTU-12	
Fan	type	DD-10-8-9	DD-10-10-9	DD-11-9-9	DD-12-9-9	DD-11-11-9	DD-12-12-9
Motor rating	W	245	245	550	736	736	920
Speed	omw. / min	900	900	850	920	920	875
Maximum current	A	2,30	2,30	4,00	6,00	6,00	7,00
Noise pressure outlet side <sup>1)</sup>	dB(A)	56	57	60	65	65	71
Noise pressure outlet side fan + silencer <sup>2)</sup>	dB(A)	47	48	51	56	56	62
Minimum air volume	m <sup>3</sup> /h	1000	1000	1500	1500	1000	2100
Maximum air volume	graph	8	9	10	11	12	13
Minimum external resistance	Pa	100	75	50	150	0	80
Weight	Kg	26	27	29	37	55	60
Speed controller applicable	-	yes	yes	yes	no	no	no
Electrical connection	V/ph/Hz	230/50/1				230/50/1	
Article number	TVC	991-423	991-425	991-427	991-429	991-433	991-435
	DTU	991-523	991-525	991-527	991-529	991-533	991-535

1) Sound pressure measured at 3 metre distance from the outlet nozzle ref 10e-12W. All values +/- 3 dB(A)

2) Only for type DTU

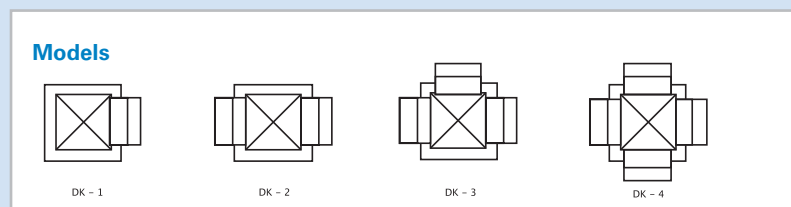
### Models



## Terminal boxes without fan

DK air supply and extraction	Unit	DK-7				DK-9			
Model		1	2	3	4	1	2	3	4
Air volume	m <sup>3</sup> /h	1000	2000	3000	4000	1500	3000	4500	6000
Air speed	m <sup>3</sup> /s	0,28	0,56	0,83	1,11	0,42	0,83	1,25	1,67
Weight	Kg	5	6	6	7	9	11	12	13
Article number	DK	991-601	991-602	991-603	991-604	991-611	991-612	991-613	991-614

DK Terminal	Unit	DK-10				DK-12			
Model		1	2	3	4	1	2	3	4
Air volume	m <sup>3</sup> /h	2000	4000	6000	8000	2500	5000	7500	10000
Air speed	m <sup>3</sup> /s	0,56	1,11	1,67	2,22	0,69	1,39	2,08	2,78
Weight	Kg	13	14	16	17	25	28	31	34
Article number	DK	991-621	991-622	991-623	991-624	991-631	991-632	991-633	991-634



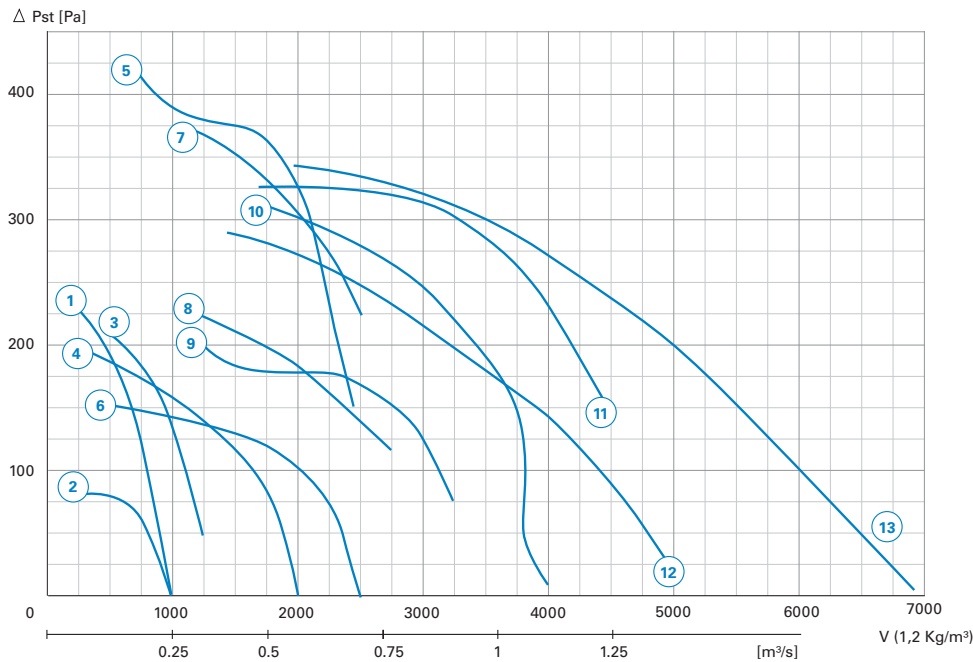
## Product Options

Options	Type	DK-7 / TVC-7 / DTU-7			DK-9 / TVC-9 / DTU-9			
		DD-180-178/3	DD-7-7-9	DD-7-7-14	DD-9-7-9	DD-9-7-14	DD-9-9-9	DD-9-9-14
Adapter plate *)	T *)	033-205			033-210			
Roof frame	DO	033-005			033-010			
Silencer	GD	033-105			033-110			
Vertical discharger	V	033-305			033-310			
Speed controller	TRK	-	411-101		411-101	411-103	411-101	411-103
Electronic speed controller	VEB	411-204			411-204			
Maintenance switch	WS	411-005	411-003		411-003			

Options	Type	DK-10 / TVC-10 / DTU-10				DK-12 / TVC-12 / DTU-12	
		DD-10-8-9	DD-10-10-9	DD-11-9-9	DD-12-9-9	DD-11-11-9	DD-12-12-9
Adapter plate *)	T *)	033-215				033-220	
Roof frame	DO	033-015				033-020	
Silencer	GD	033-115				033-120	
Vertical discharger	V	033-215				033-220	
Speed controller	TRK	411-103			-	-	-
Electronic speed controller	VEB	411-204			-	-	-
Maintenance switch	WS	411-003				411-003	

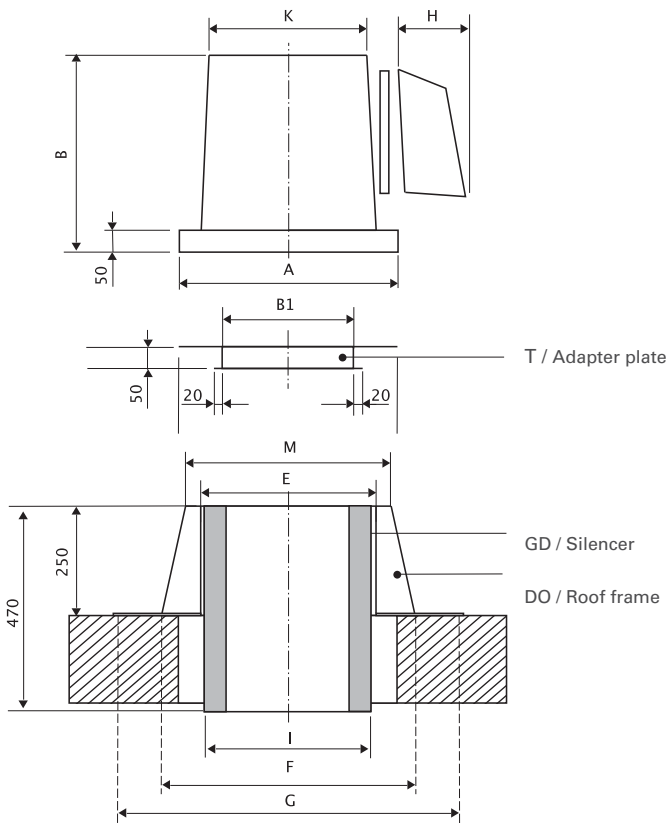
\*) Adapter plate T option available for the DK and TVC. Supplied as standard with the DTU. For converting the DK to DTU, and as a connection to the air duct for the DK.

## Fan selection curves (TVC/DTU)



No	Type
1	TVC-7 (180-178/3)
2	TVC-7 (7-7-9)
3	TVC-7 (7-7-14)
4	TVC-9 (9-7-9)
5	TVC-9 (9-7-14)
6	TVC-9 (9-9-9)
7	TVC-9 (9-9-14)
8	TVC-10 (10-8-9)
9	TVC-10 (10-10-9)
10	TVC-10 (11-9-9)
11	TVC-10 (12-9-9)
12	TVC-12 (11-11-9)
13	TVC-12 (12-12-9)

## Measurements



## Dimensions

Model	TVC-7	TVC-9	TVC-10	TVC-12
	DTU-7	DTU-9	DTU-10	DTU-12
	DK-7	DK-9	DK-10	DK-12
A	500	600	700	810
B	450	550	650	690
D	480	580	680	775
E	400	500	600	690
F	580	680	780	830
G	780	880	980	1155
H	200	250	300	290
I	380	480	580	670
K	360	450	540	645
L	150	200	200	300
M	470	570	670	760
N	300	350	400	500