

## WDVOSC

Series of types of roof fans with the exceptionally low noise level in the operational area with the highest efficiency



**WDVOSC are designed in order to maximally reduce the noise level of their operation. Comparing to the WDVOS fans they have lower rotational velocities of fans impellers and lower motor power.**

### INTENDED USE

Roof fans with vertical air outflow are intended for removing the air from the production warehouses, storage warehouses, retail pavilions, shops, offices etc.

Removed foul air can be polluted with the vapors and corrosive gases and the dust pollution within the limits permitted by the environment protection regulations.

### DEVICE DESCRIPTION

Series of types of roof fans include 6 sizes

Fans consist of:

- highly efficient plastic centrifugal rotor with motor placed inside of the rotor,
- carrying plate made from polyester-glass laminate,
- shield made from polyester-glass laminate.

Fans are adapted for mounting them on the universal bases or on the damping universal bases.

### WORKING CONDITIONS

Fans are supplied with the following motors:

- single-phase
- three-phase two-gear

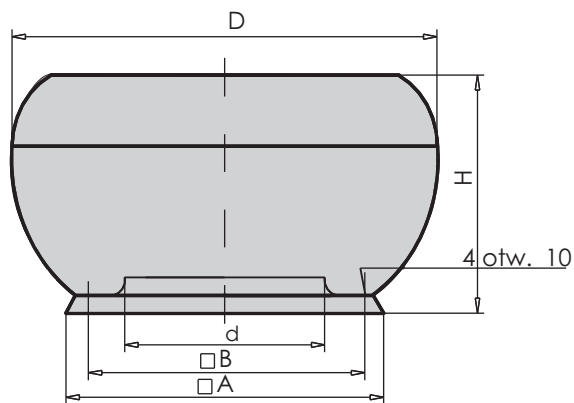
Permissible temperature of removed air is 50°C

### DESIGNATIONS

Roof fan	WDVOSC - 35 - J
Size	31; 35; 40; 45
Motor type	single phase (J); three phase two gear (TD)

## TECHNICAL DATA

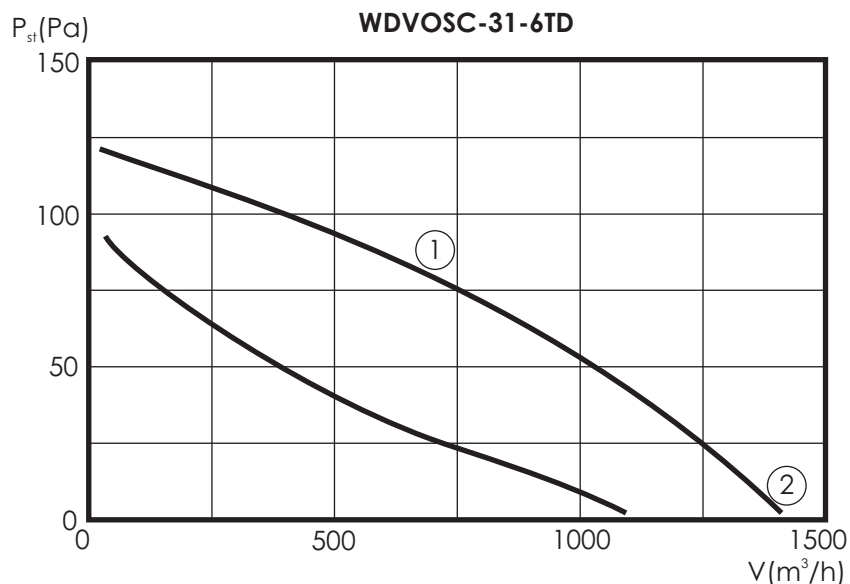
Basic dimensions



Fan size	d [mm]	D [mm]	A [mm]	B [mm]	H [mm]	Weight [kg]
WDVOSC-31	203	807	605	480	465	20
WDVOSC-35	228	807	605	480	465	22
WDVOSC-40	258	927	675	560	560	28
WDVOSC-45	297	927	675	560	560	31

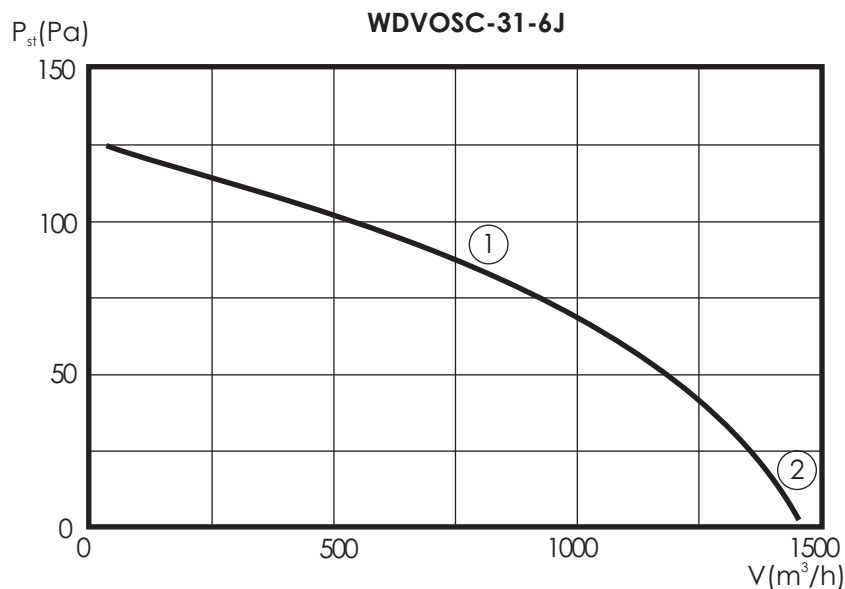
### Motor

RH31V-SDK.2A.1R  
 3~400 V  
 0,05/0,03 kW  
 0,11/0,06 A  
 860/640 rpm

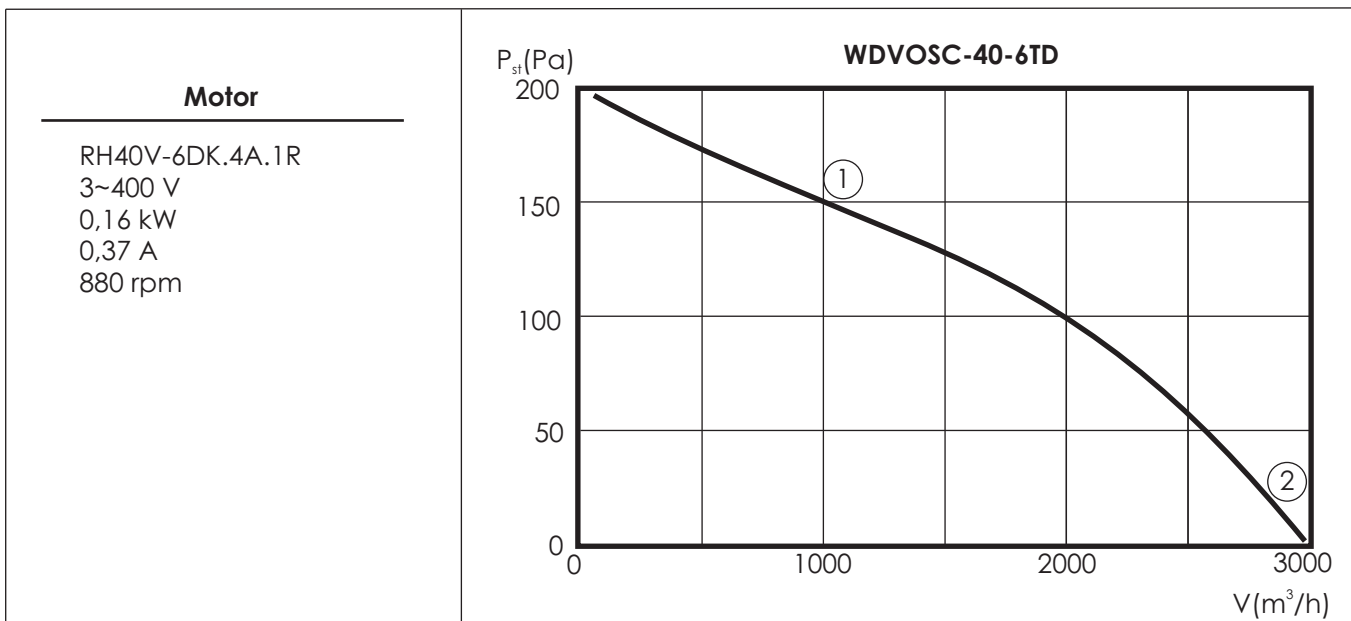
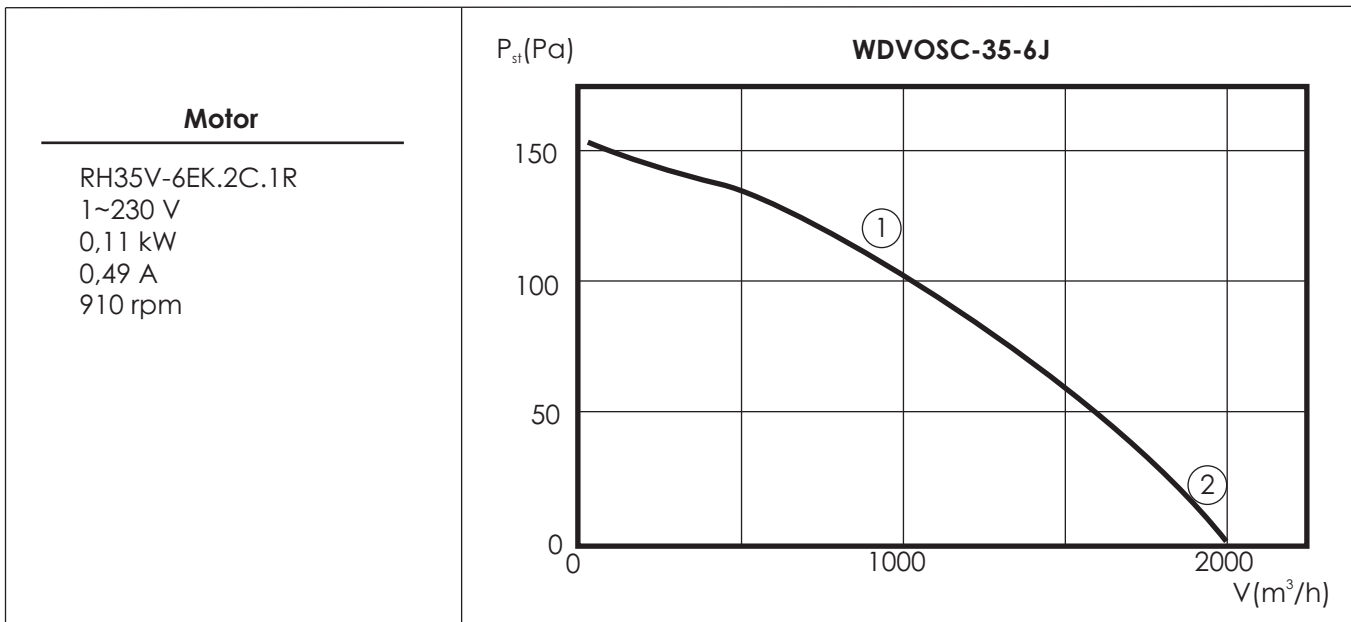
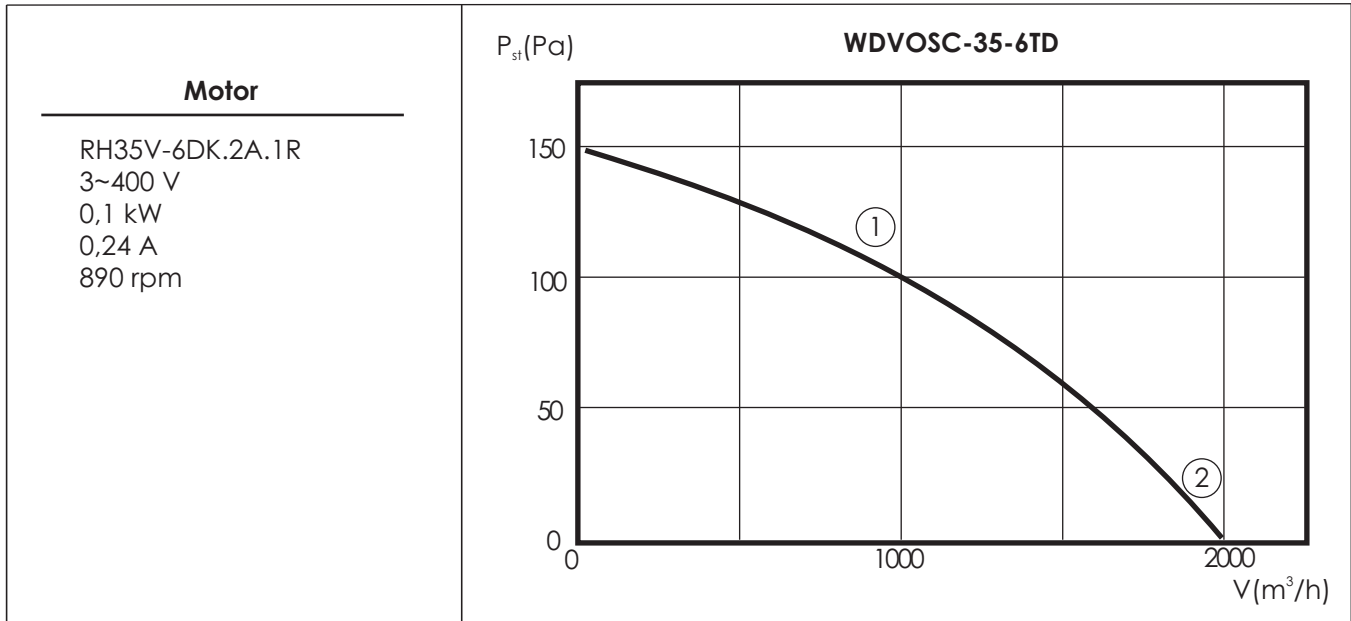


### Motor

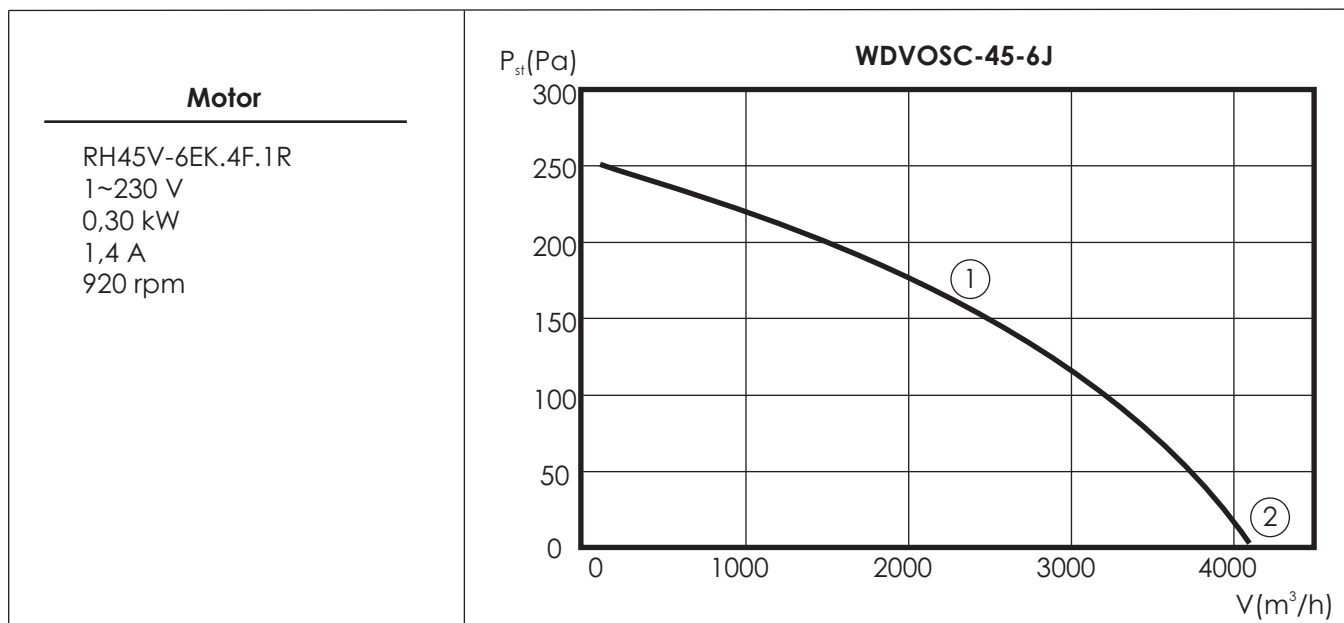
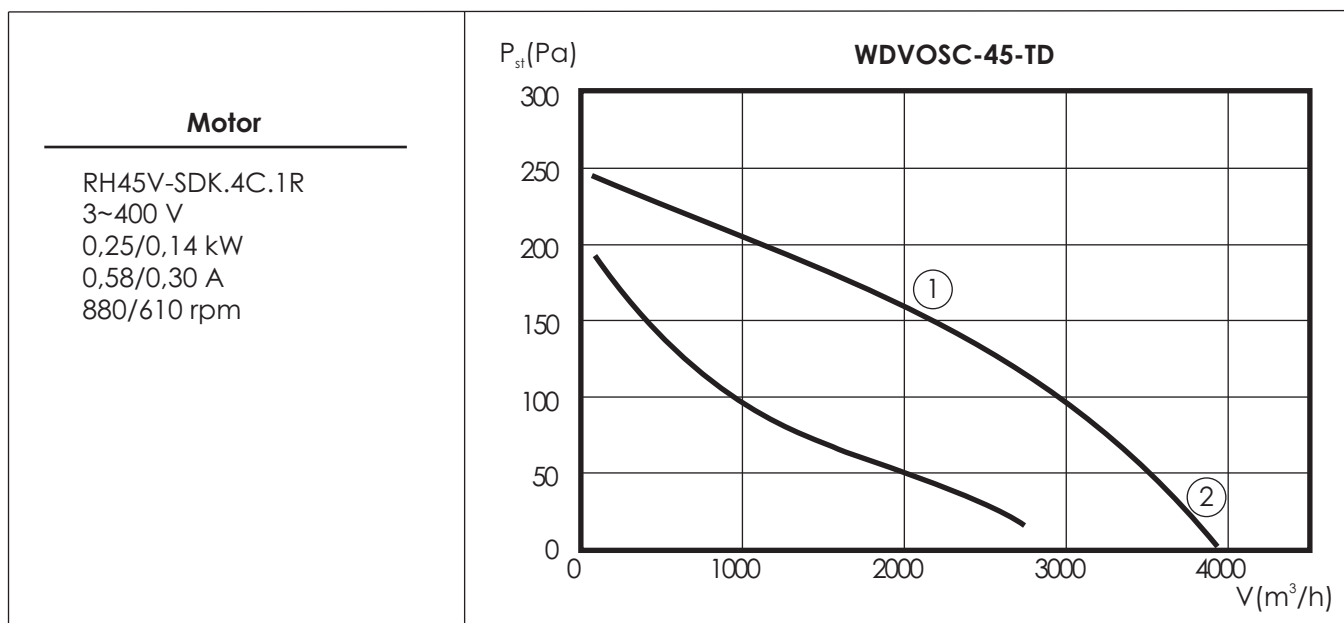
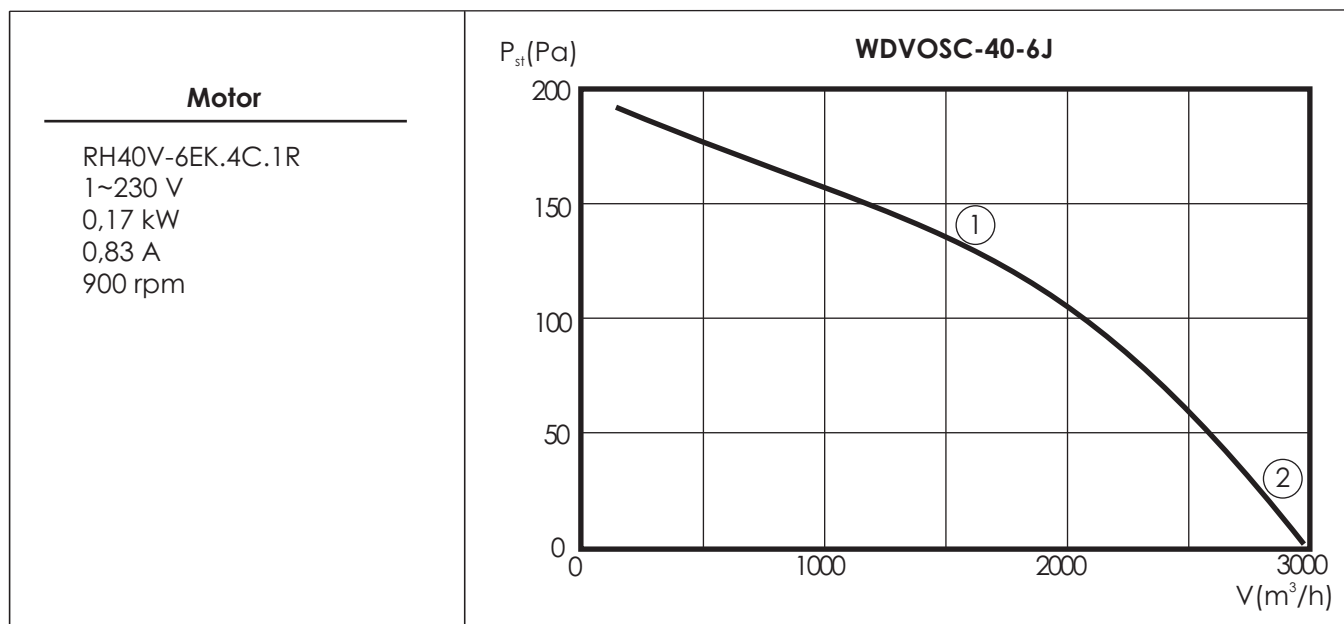
RH31V-6EK.2A.1R  
 1~230 V  
 0,08 kW  
 0,42 A  
 920 rpm



Pst –static negative pressure in the fan inlet



P<sub>st</sub> –static negative pressure in the fan inlet



P<sub>st</sub> –static negative pressure in the fan inlet

## Operating noise level

Fan size	Operating noise level [dB(A)] of fans with single phase and three phase motors							
	at the air outlet side*				at the air inlet side**			
	at that the point ①		at the point ②		at that the point ①		at the point ②	
	at 1m dist.	at 5m dist.	at 1m dist.	at 5m dist.	at 1m dist.	at 5m dist.	at 1m dist.	at 5m dist.
WDVOSC-31	39	25	49	35	41	35	31	45
WDVOSC-35	44	30	53	39	46	40	55	49
WDVOSC-40	47	33	56	42	49	43	58	52
WDVOSC-45	49	35	59	45	51	45	61	55

\* Noise level in dB(A) - acoustic pressure level at the air outlet side in the free field with taking into consideration the directional coefficient  $Q=2$  and the distance from the fan which are presented in the table.

\*\*Noise level in dB(A) - acoustic pressure level at the air inlet side with taking into consideration the absorption ability of the compartment  $A=100m^2$ , directional coefficient  $Q=2$  and the distance from the air inlet presented in the table.

Presented in the table noise levels concern the fans with the PU universal bases – 30 cm high “without dampers”. Fans with the PTU universal damping bases have the acoustic pressure levels at the air inlet side about **12[dBA]** lower from those mentioned above.

## ADDITIONAL INFORMATION

With the WDVOSC roof fans we can supply the following additional equipment:

- universal bases
- and additional elements

Fan size	Roof base size		Additional elements		
			Assembly plate	Inlet diffuser	Elastic spout
WDVOSC-31	PU-4	PUT-4	PM-4	DW-4	KE-4
WDVOSC-35	PU-4	PUT-4	PM-4	DW-4	KE-4
WDVOSC-40	PU-5	PUT-5	PM-5	DW-5	KE-5
WDVOSC-45	PU-5	PUT-5	PM-5	DW-5	KE-5

### Elements necessary for assembling the WDVOSC fans

- **PU** universal bases
- or **PUT** universal damping bases

Additional elements supplied for the WDVOSC

- PM assembly plates;
- DW inlet diffusers;
- KE elastic spouts.

Technical data of additional fans equipment are presented in the catalogue sheet of universal bases in this catalogue.

## AUTOMATICS

Description of operation and fans automatics components selection are presented in the section: VENTILATORS CONTROL AND AUTOMATICS in this catalogue