

OWD



INTENDED USE

Roof fans are used to remove air from workshops, storerooms, department stores etc. The used air that is removed may be contaminated with vapours, corroding gases and dusts within the limits allowed by regulations concerning environment protection.

UNIT DESCRIPTION

Series of types of fans includes 8 sizes.

The fans consist of:

- rotor made of plastic
- electric motor
- and the supporting panel, body and cover made of polyester-glass laminate.

The fans are fitted for mounting on the roof bases suited the dimension of the supporting panel. The roof bases may be provided with damping insert.

WORKING CONDITIONS

The fans may be equipped with tri-phase motors with 610-2650rpm or with single-phase motors. Acceptable temperature of the removed air is 50°C.

DESIGNATIONS

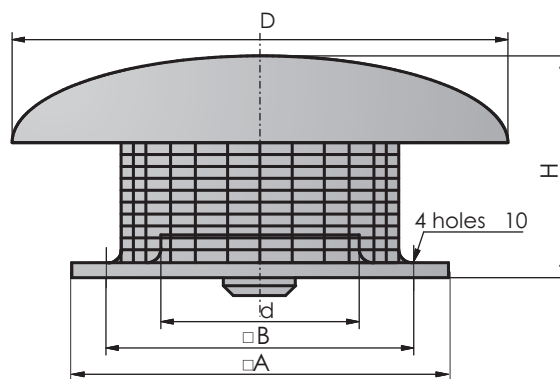
Axial-flow roof fan OWD - 40 - T - 1070/1370

Type	31; 35; 40; 45; 50; 56; 63; 71	
Motor type	single-phase-J; three-phase-T	
Revolutions	1440rpm	for OWD-31
	1400rpm	for OWD-35
	1070/1340rpm	for OWD-40
	750; 1070/1370rpm	for OWD-45
	720; 1080/1370rpm	for OWD-50
	740; 1080/1370rpm	for OWD-56
	760; 1100/1360rpm	for OWD-63
	750/920rpm	for OWD-71

OWD roof fans sizes 31; 35; 40; 45; 50; 56 i 63 in agreement with manufacturer could be equipped with single phase motors.

TECHNICAL DATA

Basic dimensions



Fan size	d [mm]	A [mm]	B [mm]	D [mm]	H [mm]
OWD-31	315	400	330	600	240
OWD-35	355	450	380	660	270
OWD-40	400	500	420	760	300
OWD-45	450	560	480	840	330
OWD-50	500	630	560	940	370
OWD-56	560	710	630	1060	410
OWD-63	630	800	710	1200	450
OWD-71	710	900	800	1400	510

Three phase motors parameters

Fan size	Fan type	Revolutions [rpm]	Motor power [kW]	Current [A]	Air capacity		Weight [kg]
					with PU roof base [m ³ /h]	with PUT roof base [m ³ /h]	
OWD-31	FE031-4DQ.0C.3	1440	0,12	0,29	2130	1900	9
OWD-35	FE035-4DQ.0C.3	1400	0,175	0,34	2900	2700	11
OWD-40	FE040-VDQ.2C.3	1070	0,18	0,29	3420	3080	14
		1340	0,27	0,48	4270	3970	
OWD-45	FE045-SDQ.4F.3	750	0,135	0,31	3980	3660	11
	FE045-VDQ.4F.3	1070 1370	0,41 0,61	0,72 1,15	5400 6800	4900 6270	
OWD-50	FE050-SDQ.4F.3	720	0,2	0,41	4500	3900	25
	FE050-VDQ.4I.3	1080 1370	0,55 0,78	0,94 1,35	7000 8870	6100 8000	
OWD-56	FE056-SDQ.4F.3	740	0,28	0,46	6000	5500	30
	FE056-VDQ.4M.3	1100 1360	0,8 1,25	1,45 2,60	8800 10850	8100 10200	
OWD-63	FE063-SDQ.4I.3	760	0,48	0,78	8800	8150	39
	FE063-VDQ.6N.V7	1050 1330	1,6 2,6	2,70 4,80	14300 18400	13000 17000	
OWD-71	FE071-SDQ.6F.V7	750	0,7	1,15	11600	10500	48
		920	0,98	1,75	14150	13000	

Manufacturer reserves the rights to implement modifications.

Operating noise level

Fan size	Revolutions [rpm]	Operating noise level [dB(A)]					
		at the air outlet side*		at the air inlet side**			
				with PU roof base		with PUT roof base	
		from dist. of 1m	from dist. of 5m	from dist. of 1m	from dist. of 5m	from dist. of 1m	from dist. of 5m
OWD-31	1440	60	48	61	52	49	40
OWD-35	1400	60	48	61	52	49	40
OWD-40	1070	60	48	61	52	49	40
	1340	64	52	65	56	53	44
OWD-45	750	56	44	57	48	45	36
	1070	66	54	67	58	55	46
	1370	70	58	71	62	59	50
OWD-50	720	55	43	56	47	44	35
	1080	62	50	63	54	51	42
	1370	68	56	69	60	57	48
OWD-56	740	63	51	64	55	52	43
	1100	72	60	73	64	61	52
	1360	77	65	78	69	66	57
OWD-63	760	64	52	65	56	53	44
	1050	75	63	76	67	64	55
	1330	81	69	82	73	70	61
OWD-71	750	65	53	66	57	54	45
	920	69	57	70	61	58	49

* Operating noise level defined as the acoustic pressure at the side of the air discharge, in open air, taking the directivity factor $Q=2$ and distance from the fan 1 and 5m.

** Operating noise level is defined as the acoustic pressure at the side of the air inlet, taking into account the dispersion factor of room $A=300m^2$ and the directivity factor $Q=2$ and distance from the fan 1 and 5m.

ADDITIONAL INFORMATION

For the OWD roof fans we can supply the universal bases and the additional elements.

Fan size	Roof base size		Additional elements			
			Assembly plate	Throttle	Inlet diffuser	Elastic spout
OWD-31	PU-1	PUT-1	PM-1	SWD-1	DW-1	KE-1
OWD-35	PU-2	PUT-2	PM-2	SWD-2	DW-2	KE-2
OWD-40	PU-3	PUT-3	PM-3	SWD-3	DW-3	KE-3
OWD-45	PU-4	PUT-4	PM-4	SWD-4	DW-4	KE-4
OWD-50	PU-5	PUT-5	PM-5	SWD-5	DW-5	KE-5
OWD-56	PU-6	PUT-6	PM-6	SWD-6	DW-6	KE-6
OWD-63	PU-7	PUT-7	PM-7	SWD-7	DW-7	KE-7
OWD-71	PU-8	PUT-8	PM-8	SWD-8	DW-8	KE-8

Elements necessary for assembling the OWD fans

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

Additional elements supplied for the OWD fans

- PM assembly plate;
- SWD self-closing throttle or single-planed throttle operated manually or by the use of servo-motor
- DW inlet diffusers;

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