

WPA-D-N/Ex – roof fan with vertical outlet



II 2 G c Ex e II T3

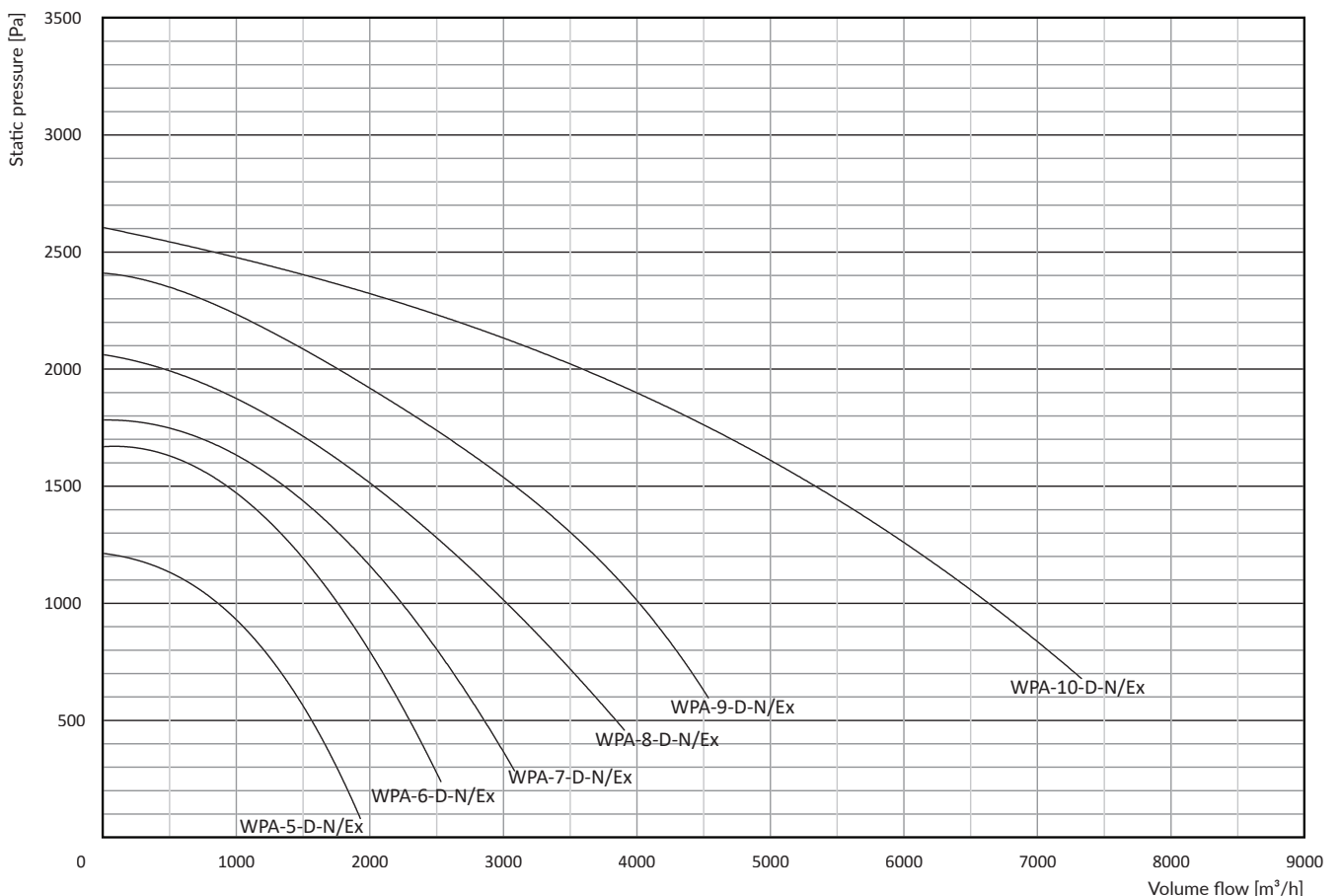
Purpose

WPA-D-N/Ex fans have been designed for application in the areas of explosion risk, where explosive atmosphere (i.e. mixture of flammable compounds in the form of gas and vapour with the air) is likely to occur. Increased fan pressure make them particularly efficient within installations of local exhausts, filtering units and also within a system of significant flow resistances. The fan can be applied in a system with an air discharge of required dynamic uplift.

Structure

The fan consists of a spiral steel housing, Ex motor, aluminium radial impeller and a steel hood. The impeller is directly installed at the motor shaft (direct drive). Impeller blades cross-section reminds the profile of an aircraft wing, providing low acoustic pressure level. The fan inlet is equipped with a flange to install it on a roof base or on wall bracket. Typical feature of the fan is a silencer fastened at the fan outlet of its spiral housing, directed vertically. For safety reason, the inlet and outlet are equipped with a protective grill.

It is recommended to install TK-type silencers at the fan inlet (for details see acoustic data in the table).



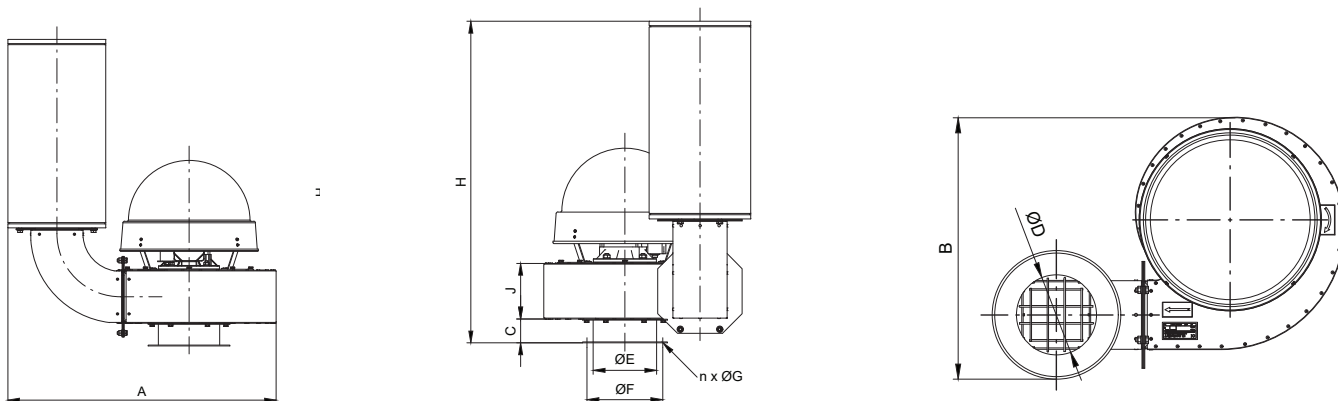
Technical data

Type	Part no.	Marking	Synchronous rotations [1/min]*	Supply voltage [V]	Motor rate [kW]	Ingress protection IP	Acoustic pressure level [dB(A)] from a distance of:		Maximum volume flow [m³/h]	Maximum vacuum [Pa]	Weight [kg]
							1 m	5 m			
WPA-5-D-N/Ex	888W09	II 2 G c Ex e II T3	3000	3×400	0,55	54	73/67**	59/53**	1900	1250	25
KL-160-WPA	829K14	-	-	-	-	-	-	-	-	-	1,8
WPA-6-D-N/Ex	888W10	II 2 G c Ex e II T3	3000	3×400	0,75	54	78/75**	64/61**	2500	1700	26
KL-160-WPA	829K14	-	-	-	-	-	-	-	-	-	1,8
WPA-7-D-N/Ex	888W11	II 2 G c Ex e II T3	3000	3×400	1,1	54	81/74**	67/60**	3100	1800	31
KL-200-WPA	829K15	-	-	-	-	-	-	-	-	-	2,4
WPA-8-D-N/Ex	888W12	II 2 G c Ex e II T3	3000	3×400	1,5	54	82/78**	68/64**	3900	2050	38
KL-200-WPA	829K15	-	-	-	-	-	-	-	-	-	2,4
WPA-9-D-N/Ex	888W13	II 2 G c Ex e II T3	3000	3×400	2,2	54	86/82**	72/68**	4500	2400	42
KL-200-WPA	829K15	-	-	-	-	-	-	-	-	-	2,4
WPA-10-D-N/Ex	888W14	II 2 G c Ex e II T3	3000	3×400	4,0	54	87/81**	73/67**	7400	2600	74
KL-250-WPA	829K16	-	-	-	-	-	-	-	-	-	7,5

* The fan motors are not adapted for application with a rotational speed governor.

** Measurements have been carried out with the additional TK L = 500 mm silencer installed at the fan inlet.

1. Maximum temperature of the conveyed air is +60°C. Maximum temperature within the work area +40°C
2. Maximum dustiness of the conveyed air should not exceed 0,3 g/m³.



Bottom view of the fan

Dimensions

Type	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	n [pc.]	G [mm]	H [mm]	J [mm]
WPA-5-D-N/Ex	700	525	60	160	160	194	6	6,5	810	140
WPA-6-D-N/Ex	715	550	60	160	160	194	6	6,5	815	155
WPA-7-D-N/Ex	815	570	60	200	160	194	6	6,5	840	155
WPA-8-D-N/Ex	840	600	60	200	200	224	8	9,0	840	155
						234	6	6,5		
						246	8	9,0		
WPA-9-D-N/Ex	880	665	60	200	200	224	8	9,0	840	155
						234	6	6,5		
						246	8	9,0		
WPA-10-D-N/Ex	960	675	100	250	250	275	8	9,0	960	323