

WPA-D-N – fan with vertical outlet



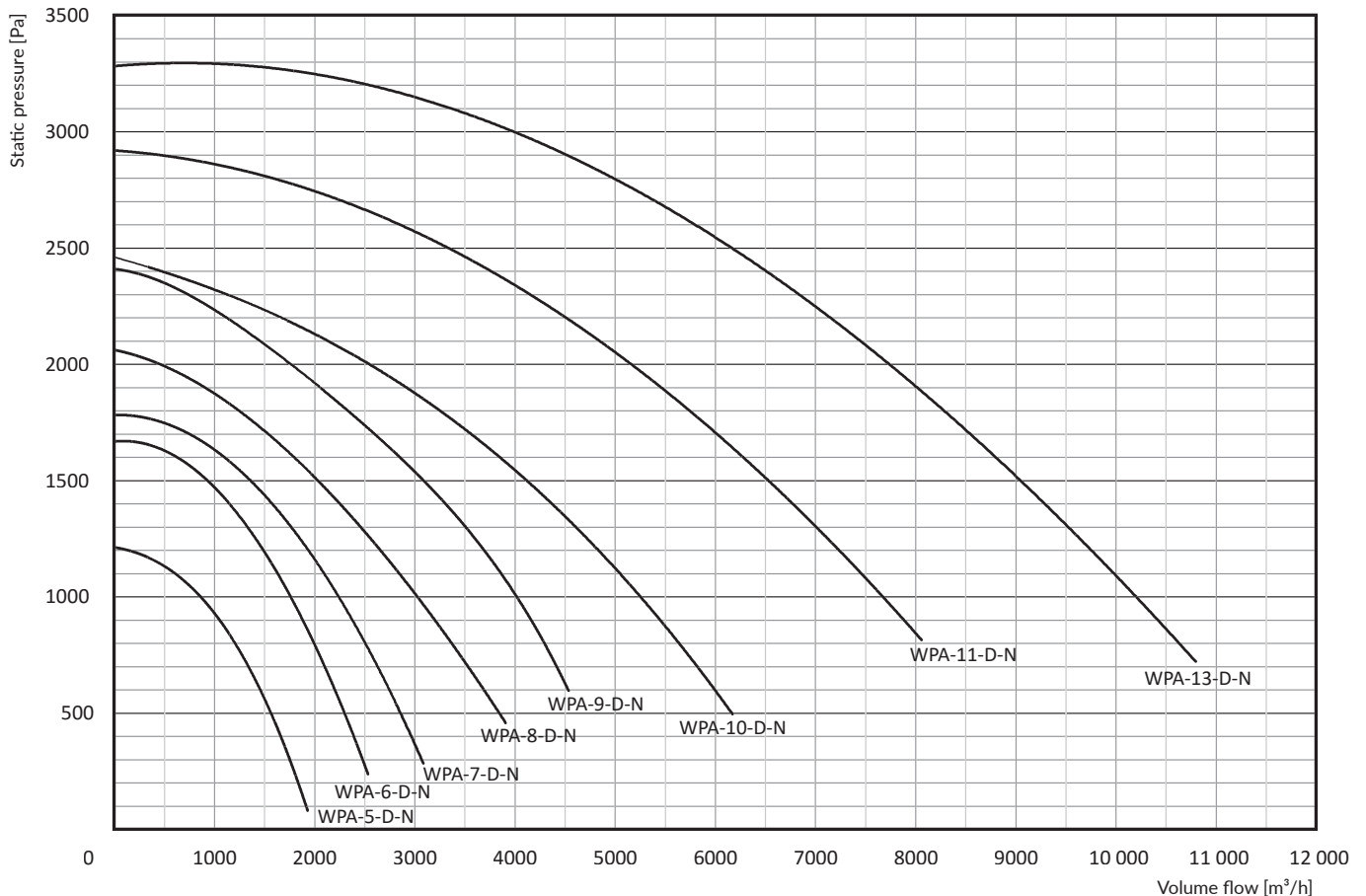
Purpose

WPA-D-N fans are generally designed for local ventilation. They are installed outside the buildings (outdoor application), on roof bases or on wall brackets. As they can overcome significant air flow resistances, they are particularly efficient within installations of local exhausts. They meet the requirements of the ErP 2009/125/EC Directive.

Structure

The fan consists of a spiral steel housing, motor and a plastic hood. The radial aluminium impeller is directly installed

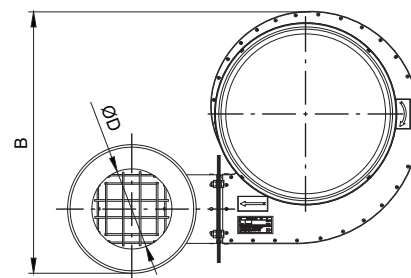
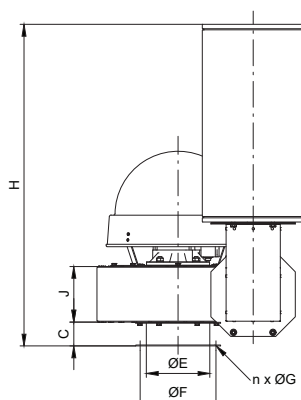
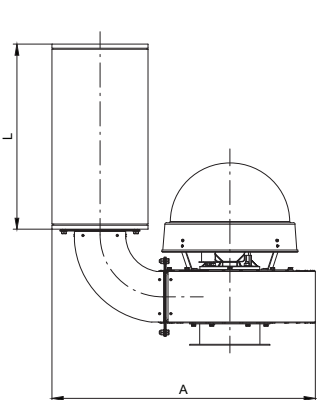
at the motor shaft. Impeller blades cross-section reminds the profile of an aircraft wing, providing low acoustic pressure level. The fan inlet is equipped with a flange to install it on a roof base or on wall bracket. Typical feature of the fan is a silencer fastened at the fan outlet of its spiral housing, directed vertically and connected through a KL-WPA elbow. For safety reason, the inlet and outlet are equipped with a protective grill. It is recommended to install a TK silencer at the fan inlet (for details see acoustic data in the table). On demand of Customer, we deliver safety switches to disconnect the power supply during the servicing and installing activities (see catalogue card ELECTRICAL ACCESSORIES).



Technical data

| Type | Part no. | 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-1-N KL-160-WPA | 807W11 829K14 | 3000 - | 230 - | 0,37 - | 54 - | 73/67* - | 59/53* - | 1900 - | 1250 - | 23 1,8 |
| WPA-5-D-3-N KL-160-WPA | 807W12 829K14 | 3000 - | 3x400 - | 0,37 - | 54 - | 73/67* - | 59/53* - | 1900 - | 1250 - | 23 1,8 |
| WPA-6-D-1-N KL-160-WPA | 807W13 829K14 | 3000 - | 230 - | 0,75 - | 54 - | 78/75* - | 64/61* - | 2500 - | 1700 - | 28 1,8 |
| WPA-6-D-3-N KL-160-WPA | 807W14 829K14 | 3000 - | 3x400 - | 0,75 - | 54 - | 78/75* - | 64/61* - | 2500 - | 1700 - | 28 1,8 |
| WPA-7-D-1-N KL-200-WPA | 807W15 829K15 | 3000 - | 230 - | 1,1 - | 54 - | 81/74* - | 67/60* - | 3100 - | 1800 - | 30 2,4 |
| WPA-7-D-3-N KL-200-WPA | 807W16 829K15 | 3000 - | 3x400 - | 1,1 - | 54 - | 81/74* - | 67/60* - | 3100 - | 1800 - | 30 2,4 |
| WPA-8-D-3-N KL-200-WPA | 807W17 829K15 | 3000 - | 3x400 - | 1,5 - | 54 - | 82/78* - | 68/64* - | 3900 - | 2050 - | 36 2,4 |
| WPA-9-D-3-N KL-200-WPA | 807W18 829K15 | 3000 - | 3x400 - | 2,2 - | 54 - | 86/82* - | 72/68* - | 4500 - | 2400 - | 44 2,4 |
| WPA-10-D-3-N KL-250-WPA | 807W19 829K16 | 3000 - | 3x400 - | 3,0 - | 54 - | 87/81* - | 73/67* - | 6200 - | 2450 - | 58 7,5 |
| WPA-11-D-3-N KL-250-WPA | 807W20 829K16 | 3000 - | 3x400 - | 5,5 - | 54 - | 91/88* - | 77/74* - | 8050 - | 2950 - | 77 7,5 |
| WPA-13-D-3-N KL-315-WPA | 807W22 829K17 | 3000 - | 3x400 - | 7,5 - | 54 - | 95/90* - | 81/76* - | 10 800 - | 3300 - | 98 12,6 |

- * 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.
 3. KL-WPA - is a type of an elbow connecting the silencer with the fan.



Top 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] | L [mm] |
|--------------|--------|--------|--------|--------|--------|--------|---------|--------|--------|--------|--------|
| WPA-5-D-1-N | 705 | 525 | 60 | 160 | 160 | 194 | 6 | 7,0 | 815 | 140 | 500 |
| WPA-5-D-3-N | | | | | | | | | | | |
| WPA-6-D-1-N | 715 | 550 | 60 | 160 | 160 | 194 | 6 | 7,0 | 815 | 140 | 500 |
| WPA-6-D-3-N | | | | | | | | | | | |
| WPA-7-D-1-N | 815 | 570 | 60 | 200 | 160 | 194 | 6 | 7,0 | 840 | 155 | 500 |
| WPA-7-D-3-N | | | | | | | | | | | |
| WPA-8-D-3-N | 840 | 600 | 60 | 200 | 200 | 224 | 8 | 9,0 | 840 | 155 | 500 |
| | | | | | | 234 | | 7,0 | | | |
| | | | | | | 246 | | 9,0 | | | |
| WPA-9-D-3-N | 880 | 665 | 60 | 200 | 200 | 224 | 8 | 9,0 | 840 | 155 | 500 |
| | | | | | | 234 | | 7,0 | | | |
| | | | | | | 246 | | 9,0 | | | |
| WPA-10-D-3-N | 960 | 675 | 80 | 250 | 250 | 274 | 8 | 9,0 | 940 | 232 | 500 |
| WPA-11-D-3-N | 980 | 695 | 80 | 250 | 250 | 274 | 8 | 9,0 | 940 | 232 | 500 |
| WPA-13-D-3-N | 1225 | 830 | 90 | 315 | 315 | 344 | 8 | 9,0 | 1300 | 258 | 500 |