

TECHNICAL CHARACTERISTICS

KVC SERIES

OVERVIEW

The KVC series of long throw concentric diffusers comprise of one or more individually adjustable (up to a 30° inclination) diffusers - up to a maximum of four, fitted on a custom made plate.

MATERIALS

The KVC diffusers are made from carbon steel sheet, painted RAL9010 with epoxy powder.

INSTALLATION : The installation is made using screws on the face of the diffuser plate in custom made holes in walls or directly adjustable concentric rings diffusers installed on a metal on sides of rectangular ducts.

SELECTION METHOD

Using diagram shown below, it is possible to make a preliminary selection of the diffuser on the basis of the air flow rate.

It is recommended to check, using the diagrams shown in the following technical pages, the effective correspondence of the choice made to the specific conditions intended of use for the diffuser.

DESCRIPTION FOR TENDER

long throw concentric diffuser comprising of one or more plate all painted RAL 9010, with all parts visible.

UNSUITABLE ENVIRONMENTS

The products in painted carbon steel are not suitable for installation in environments with high humidity and in environments with a potentially explosive atmosphere or containing powders or vapors of corrosive substances.



Free section of air passage single diffuser		
Nominal Ak		
diameter	m ²	
200	0,0305	
250	0,0479	
315	0,0765	
355	0,0973	





KVC200 DIMENSIONS

150

Ø80 Ø140 KVC SERIES









DIFFUSER NR	DIAMETER	BASE	HEIGHT
1	200	304	304
2	200	584	304
3	200	864	304
4	200	1144	304





KVC250 DIMENSIONS

Ø100 Ø175 KVC SERIES









DIFFUSER NR	DIAMETER	BASE	HEIGHT
1	250	354	354
2	250	684	354
3	250	1014	354
4	250	1344	354





KVC315 DIMENSIONS

KVC SERIES









DIFFUSER NR	DIAMETER	BASE	HEIGHT
1	315	419	419
2	315	814	419
3	315	1209	419
4	315	1604	419





KVC355 DIMENSIONS

KVC SERIES



N° DIFFUSORI	DIAMETRO	BASE	ALTEZZA
1	355	459	459
2	355	894	459
3	355	1329	459
4	355	1674	459





KVC SERIES

PERFORMANCE KVC-1-200



KVC-1-200 Pressure drop 140 120 100 Δp (Pa) 80 60 40 20 0 500 600 1000 200 300 400 700 800 900 Q (m³/h)



Values measured in isothermal conditions with diffuser placed horizontally in accordance with the following international standard: ISO 5219 1984: *Air distribution and air diffusion*

 Laboratory. Aerodynamic testing and rating of air terminal devices.

Data measured in reverberation room in accordance with international standards: ISO 3741 1999: Acoustic - determination of sound power levels of noise sources using sound pressure -Precision methods for reverberation rooms ISO 5135 1997: Acoustic - determination of sound power levels of noise from air-terminal devices; air terminal units; dampers and valves by measurement in a reverberation room.





KVC SERIES

PERFORMANCE KVC-1-250



Values measured in isothermal conditions with diffuser placed horizontally in accordance with the following international standard: ISO 5219 1984: Air distribution and air diffusion

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Data measured in reverberation room in accordance with international standards: ISO 3741 1999: Acoustic - determination of sound power levels of noise sources using sound pressure -Precision methods for reverberation rooms ISO 5135 1997: Acoustic - determination of sound power levels of noise from air-terminal devices; air terminal units; dampers and valves by measurement in a reverberation room.





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KVC SERIES

PERFORMANCE KVC-2-200



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- Laboratory. Aerodynamic testing and rating of air terminal devices.





Data measured in reverberation room in accordance with international standards: ISO 3741 1999: Acoustic - determination of sound power levels of noise sources using sound pressure -Precision methods for reverberation rooms ISO 5135 1997: Acoustic - determination of sound power levels of noise from air-terminal devices; air terminal units; dampers and valves by measurement in a reverberation room.





PERFORMANCE KVC-2-250









Values measured in isothermal conditions with diffuser placed horizontally in accordance with the following international standard: ISO 5219 1984: Air distribution and air diffusion

- Laboratory. Aerodynamic testing and rating of air terminal devices.

Data measured in reverberation room in accordance with international standards: ISO 3741 1999: Acoustic - determination of sound power levels of noise sources using sound pressure -Precision methods for reverberation rooms ISO 5135 1997: Acoustic - determination of sound power levels of noise from air-terminal devices; air terminal units; dampers and valves by measurement in a reverberation room.





KVC SERIES

PERFORMANCE KVC-2-315



Values measured in isothermal conditions with diffuser placed horizontally in accordance with the following international standard: ISO 5219 1984: Air distribution and air diffusion

- Laboratory. Aerodynamic testing and rating of air terminal devices.





Data measured in reverberation room in accordance with international standards: ISO 3741 1999: Acoustic - determination of sound power levels of noise sources using sound pressure -Precision methods for reverberation rooms ISO 5135 1997: Acoustic - determination of sound power levels of noise from air-terminal devices; air terminal units; dampers and valves by measurement in a reverberation room.





KVC SERIES

PERFORMANCE KVC-2-355



KVC-2-355 Pressure drop 60 50 40 Δp (Pa) ³⁰ 20 10 0 3500 1000 1500 2000 2500 3000 4000 4500 5000 5500 Q (m³/h)



Values measured in isothermal conditions with diffuser placed horizontally in accordance with the following international standard: ISO 5219 1984: Air distribution and air diffusion

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Data measured in reverberation room in accordance with international standards: ISO 3741 1999: Acoustic - determination of sound power levels of noise sources using sound pressure -Precision methods for reverberation rooms ISO 5135 1997: Acoustic - determination of sound power levels of noise from air-terminal devices; air terminal units; dampers and valves by measurement in a reverberation room.





KVC SERIES

PERFORMANCE KVC-3-200



Values measured in isothermal conditions with diffuser placed horizontally in accordance with the following international standard: ISO 5219 1984: Air distribution and air diffusion

- Laboratory. Aerodynamic testing and rating of air terminal devices.





Data measured in reverberation room in accordance with international standards: ISO 3741 1999: Acoustic - determination of sound power levels of noise sources using sound pressure -Precision methods for reverberation rooms ISO 5135 1997: Acoustic - determination of sound power levels of noise from air-terminal devices; air terminal units; dampers and valves by measurement in a reverberation room.





KVC SERIES

PERFORMANCE KVC-3-250



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KVC SERIES

PERFORMANCE KVC-3-315







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KVC SERIES

PERFORMANCE KVC-3-355







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Data measured in reverberation room in accordance with international standards: ISO 3741 1999: Acoustic - determination of sound power levels of noise sources using sound pressure -Precision methods for reverberation rooms ISO 5135 1997: Acoustic - determination of sound power levels of noise from air-terminal devices; air terminal units; dampers and valves by measurement in a reverberation room.





KVC SERIES

PERFORMANCE KVC-4-200



KVC-4-200 Pressure drop 80 70 60 50 (Pa) 40 ٩ 30 20 10 0 2000 2250 2500 750 1500 1750 2750 3000 3250 1000 1250 Q (m³/h)



Values measured in isothermal conditions with diffuser placed horizontally in accordance with the following international standard: ISO 5219 1984: Air distribution and air diffusion

- Laboratory. Aerodynamic testing and rating of air terminal devices.

Data measured in reverberation room in accordance with international standards: ISO 3741 1999: Acoustic - determination of sound power levels of noise sources using sound pressure -Precision methods for reverberation rooms ISO 5135 1997: Acoustic - determination of sound power levels of noise from air-terminal devices; air terminal units; dampers and valves by measurement in a reverberation room.





KVC SERIES





KVC-4-250 Pressure drop 70 60 50 **d** 30 20 10 0 2000 2500 3000 3500 5000 1000 1500 4000 4500 Q (m³/h)



Values measured in isothermal conditions with diffuser placed horizontally in accordance with the following international standard: ISO 5219 1984: Air distribution and air diffusion

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Data measured in reverberation room in accordance with international standards: ISO 3741 1999: Acoustic - determination of sound power levels of noise sources using sound pressure -Precision methods for reverberation rooms ISO 5135 1997: Acoustic - determination of sound power levels of noise from air-terminal devices; air terminal units; dampers and valves by measurement in a reverberation room.





KVC SERIES

PERFORMANCE KVC-4-315





KVC-4-315 Sound power 50 45 40 35 00 g 25 g 25 g ≥ 20 15 10 5 0 3500 4000 4500 5000 5500 7000 2000 2500 3000 6000 6500 Q (m³/h)

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