SRR-D (RAL9010)

- Ceiling diffusers
- Circular
- Aluminium + ABS
- White, RAL 9010

Round ceiling diffusers type SRR-D (RAL9010)

Round ceiling diffusers with adjustable cones

Application

- For supply and exhaust air in ventilation and air conditioning systems.

Material

- Aluminium + ABS

Colour

- White, RAL 9010

Composition

- Adjustable rings
- Adjustable damper in plastic

Mounting

- Direct mounting by the collar in the duct

Accessories

- Clips mounting system **SRR-DMC** for plasterboard ceiling

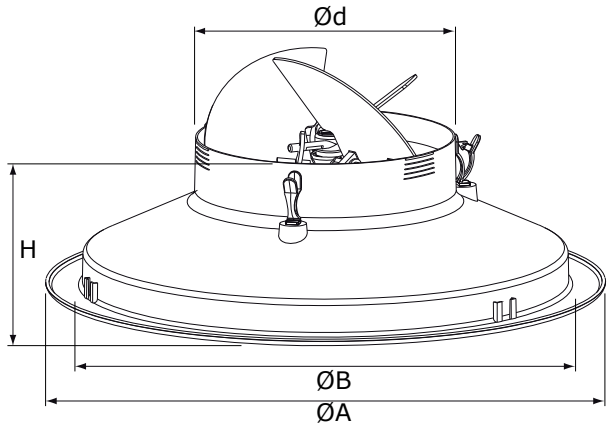
Text for tender

- The circular ceiling diffusers shall have adjustable diffusion rings. External cone shall be made of aluminium with white powder coated finish RAL 9016, central cone, screw and volume control damper made of ABS
- **Cairox** type **SRR-D**

Order example

- **SRR-D, 200**

Explanation
SRR-D = Type diffuser
200 = Size diffuser (Ø diffuser neck connection)



Dimensions				
SRR-D	Ød [mm]	ØA [mm]	ØB [mm]	H [mm]
160	158	335	310	105
200	198	423	395	118
250	248	517	490	135
315	313	640	615	145

Quick selection															
SRR-D			160			200			250			315		
Q	Ak răcire		0.031			0.046			0.069			0.106		
	Ak iarna		0.029			0.042			0.06			0.088		
	B		1.2	2.4	3.6	1.2	2.4	3.6	2.4	3.6	4.2	3.6	4.2	4.8
200	Vz	H= 2.7	0.43	0.31	0.24	0.33	0.24	0.18						
		H= 3.2	0.32	0.25	0.2	0.25	0.19	0.15						
		H= 3.8	0.25	0.2	0.17	0.19	0.15	0.13						
	Vk răcire			1.8			1.2							
	Vk iarna			1.9			1.3							
	X0,25			2.6			2							
	Y0,25 @Dt +10K			2.3			1.4							
	Ps răcire			5			2							
	Ps încălzire			16			7							
	Lw(A) răcire			<20			<20							
	Lw(A) încălzire			30			<20							
300	Vz	H= 2.7	0.64	0.46	0.36	0.49	0.35	0.27	0.26	0.2	0.18			
		H= 3.2	0.48	0.37	0.3	0.37	0.28	0.23	0.21	0.17	0.16			
		H= 3.8	0.37	0.3	0.25	0.28	0.23	0.19	0.17	0.15	0.13			
	Vk răcire			2.7			1.8			1.2				
	Vk încălzire			2.9			2			1.4				
	X0,25			3.9			3			2.2				
	Y0,25 @Dt +10K			3.2			2.8			2				
	Ps răcire			12			5			2				
	Ps încălzire			36			16			8				
	Lw(A) răcire			27			<20			<20				
	Lw(A) încălzire			44			33			21				
400	Vz	H= 2.7	0.86	0.61	0.48	0.66	0.47	0.37	0.35	0.27	0.25	0.18	0.17	0.15
		H= 3.2	0.64	0.5	0.4	0.49	0.38	0.31	0.28	0.23	0.21	0.15	0.14	0.13
		H= 3.8	0.5	0.4	0.34	0.38	0.31	0.26	0.23	0.19	0.18	0.13	0.12	0.11
	Vk răcire			3.6			2.4			1.6			1	
	Vk încălzire			3.8			2.6			1.9			1.3	
	X0,25			5.2			3.9			3			2	
	Y0,25 @Dt +10K			4.2			3.4			3.2			2.6	
	Ps răcire			21			8			3			1	
	Ps încălzire			62			27			14			6	
	Lw(A) răcire			37			26			<20			<20	
	Lw(A) încălzire			54			43			31			<20	
600	Vz	H= 2.7	1.29	0.92	0.72	0.99	0.71	0.55	0.53	0.41	0.37	0.29	0.26	0.24
		H= 3.2	0.97	0.74	0.6	0.74	0.57	0.46	0.43	0.35	0.32	0.25	0.23	0.21
		H= 3.8	0.74	0.6	0.51	0.57	0.46	0.39	0.35	0.29	0.27	0.21	0.19	0.18
	Vk răcire			5.4			3.6			2.4			1.6	
	Vk încălzire			5.7			4			2.8			1.9	
	X0,25			7.7			5.9			4.4			3.2	
	Y0,25 @Dt +10K			6			4.7			4.1			3.8	
	Ps răcire			47			18			7			3	
	Ps încălzire			137			63			29			13	
	Lw(A) răcire			52			40			27			<20	
	Lw(A) încălzire			68			57			45			32	
800	Vz	H= 2.7				1.32	0.94	0.73	0.7	0.55	0.49	0.39	0.35	0.32
		H= 3.2				0.99	0.76	0.62	0.57	0.46	0.42	0.32	0.3	0.27
		H= 3.8				0.76	0.62	0.52	0.46	0.39	0.36	0.27	0.25	0.24
	Vk răcire						4.8			3.2			2.1	
	Vk încălzire						5.3			3.7			2.5	
	X0,25						7.9			5.9			4.2	
	Y0,25 @Dt +10K						6.1			5			4.5	
	Ps răcire						32			12			5	
	Ps încălzire						110			51			22	
	Lw(A) răcire						50			37			23	
	Lw(A) încălzire						67			55			42	

Symbols and specifications

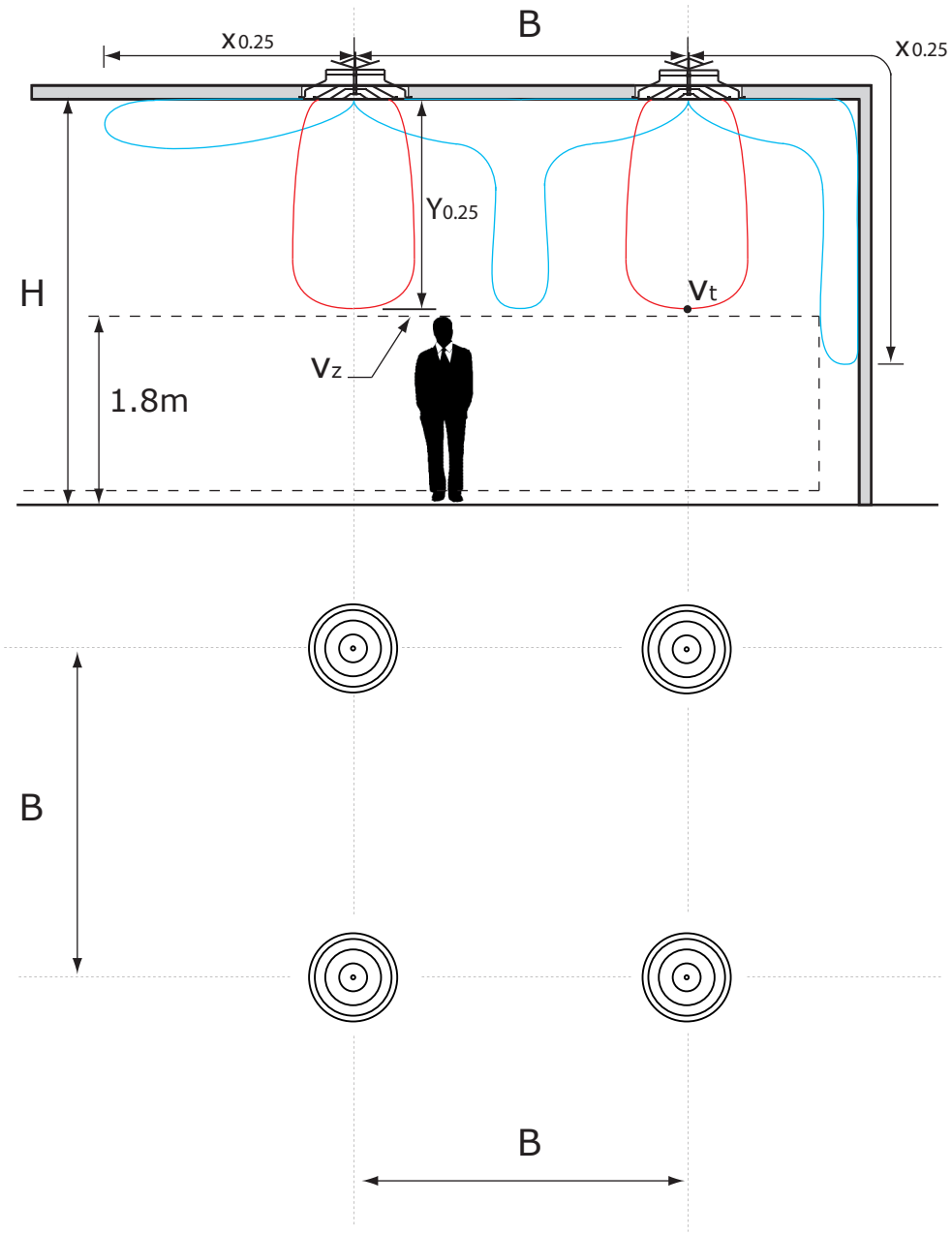
- Q = Air Volume in m³/h
- Ak winter = Effective surface (free area) in m² given at the upper position of the inner adjustable cone
- Ak summer = Effective surface (free area) in m² given at the lower position of the inner adjustable cone
- B = Distance between diffusers in m
- H = Installation height of the diffusers in m
- Vz = Maximum velocity at the occupied zone, given for cooling at the lower position of the inner adjustable cone, regarding the distance between diffusers and installation height in m/s
- Vk winter = Average effective velocity for Ak winter through the diffuser in m/s
- Vk summer = Average effective velocity for Ak summer through the diffuser in m/s
- X0.25 = Horizontal throw in m at an endvelocity Vt of 0,25m/s isothermal at the lower position of the inner cone
- Y0.25 = Vertical throw in m at an endvelocity Vt of 0,25m/s with a temperature difference of +10K at the upper position of the inner cone
- Ps winter = Static pressure loss for Ak winter given in Pa
- Ps summer = Static pressure loss for Ak summer given in Pa
- Lw(A) winter = Acoustic power for Ak winter in dB(A)
- Lw(A) summer = Acoustic power for Ak summer in dB(A)

- The throw X0.25 is given at an end velocity of 0.25m/s for a smooth ceiling without any obstacles.
- In order to achieve a high comfort level, selections can be made according to the maximal velocity at the occupied zone Vz. These values are given at distances between diffusers B and installation heights H. Velocities Vz lower than, or equal to 0,25m/s at the occupied zone are advised.
- The pressure losses Ps are given for grilles without damper of with fully opened damper.
- The acoustic power Lw(A) are given for grilles without damper of with fully opened damper without room attenuation. Acoustic powers below 20dB(A) are mentioned as "<20" in the tables.
- For all special requirements, please contact our engineering office.

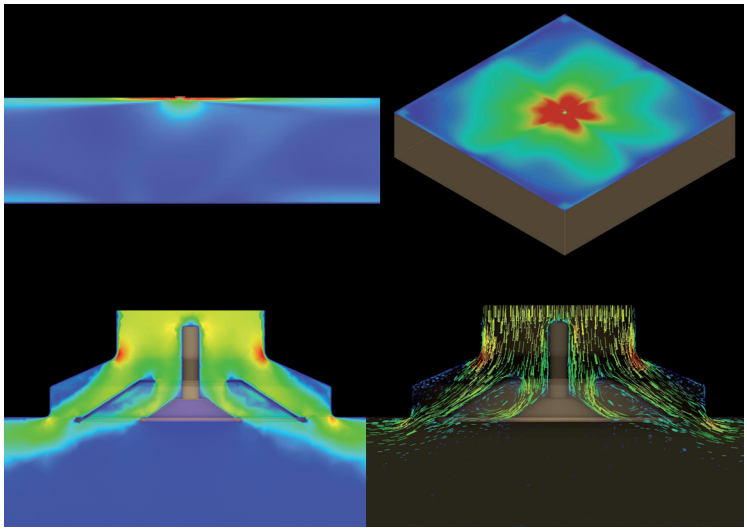
Symbols and specifications

- See introduction pages

Placement instruction



CFD simulation Cooling



CFD simulation Heating