CAIRO



Variable thermostatic swirl diffusers type PS/RWR-4 TS (RAL9010)

- Round thermoadjustable swirl ceiling diffuser for high ceiling
 Set blade angle switches automatically between set angles for cooling and heating.

Application

• For air supply in ventilation and air conditioning systems.

Material

Steel and aluminium

■ White, RAL 9010

Composition

- Adjustable blades with thermostatical regulator (bimetal)
- Perforated plate in the collar of the diffuser
- α= Blade angle

Text for tender

- The air supply diffusers are of the swirl type with adjusable blades with a thermostatical regulator (bimetal). They are made of steel and aluminium with white powder coating finish RAL 9016.

 • Cairox type PS/RWR-4 TS

Other available products

Manual adjustable version RWR 4, motorized versions RWR 4 B1 (24V on/off) or RWR 4 B2 (230V on/off), available upon request

Order example

PS/RWR-4 TS, 315

Explanation

PS/RWR-4 = Diffuser type

TS = Thermostatic contol element (bi-metal)

315 = Neck size of diffuser

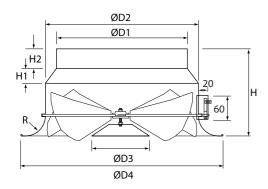
Ceiling diffusers and grilles

PS/RWR-4 TS (RAL9010)

- Variable thermostatic swirl diffusers
- Square
- Steel and aluminium
- White, RAL 9010







Dimensions									
Туре	D1 [mm]	D2 [mm]	D3 [mm]	H [mm]	H1 [mm]	H2 [mm]	R [mm]		
PS/RWR-4 TS 200	198	248	96	180	20	40	30		
PS/RWR-4 TS 250	248	298	133	205	30	40	30		
PS/RWR-4 TS 315	313	398	175	230	30	40	30		

Quick selection								
PS/RWR-4 TS		200	250	315				
Q	Ak	0.0305	0.0479	0.0765				
	Hm	2,5 - 3,8	3,0 - 5,3	3,3 - 6				
	B(min)	2.4	1.6					
300	Y0.25	1.7	1.3					
	Vk	2.7	1.7					
	Ps	7	3					
	Lw(A)	33	22					
	B(min)	3	2.2					
400	Y0.25	2.3	1.8					
	Vk	3.6	2.3					
	Ps	12	5					
	Lw(A)	42	30					
500	B(min)	3.8	2.8	2				
	Y0.25	2.9	2.2	1.4				
	Vk	4.6	2.9	1.8				
	Ps	19	7	3				
	Lw(A)	49	37	22				
600	B(min)		3.4	2.4				
	Y0.25		2.7	1.7				
	Vk		3.5	2.2				
	Ps		11	4				
	Lw(A)		42	27				
800	B(min)			3				
	Y0.25			2.2				
	Vk			2.9				
	Ps			8				
	Lw(A)			36				
1000	B(min)			3.8				
	Y0.25			2.8				
	Vk			3.6				
	Ps			12				
	Lw(A)			43				

Symbols and specifications

- Q = Air Volume in m³/h
- $A\dot{k}$ = Effective surface (free area) of the neck of the diffuser in m^2
- Hm = Advised minimum maximum mounting height in m
- Bmin = Advised minimum distance between diffusers in m
- Y0.25 = Maximum throw depth in m at end velocity Vt of 0,25 m/s
- $Vk = Air \ velocity \ trough \ the \ neck \ of \ the \ diffuser \ in \ m/s$
- Ps = Static pressure loss in Pa
- Lw(A) = Acoustic power in dB(A)

- The values are given for isothermal supply air without Coanda effect. The values in the table are given at an inclination angle α of the vanes of the diffuser set at 45°. In order to achieve a high comfort level, the angle of the blades are automatically altered according to air supply temperature. The minimum and maximum angle of the blades can mechanically be limited. The ideal set angles can be determined in function of the temperature difference Δt between the supply air and room air temperature. (see selection
- Acoustic powers below 20dB(A) are mentioned as "<20" in the tables.
- For all special requirements, please contact our engineering office.

Symbols and specifications

- O = Air Volume in m³/h
- $A\dot{k}$ = Effective surface (free area) of the neck of the diffuser in m^2
- Hm = Advised minimum maximum mounting height in m
- Bmin = Advised minimum distance between diffusers in m
- Y0.25 = Maximum throw depth in m at endvelocity Vt of 0,25m/s
- Vk = Air velocity trough the neck of the diffuser in m/s

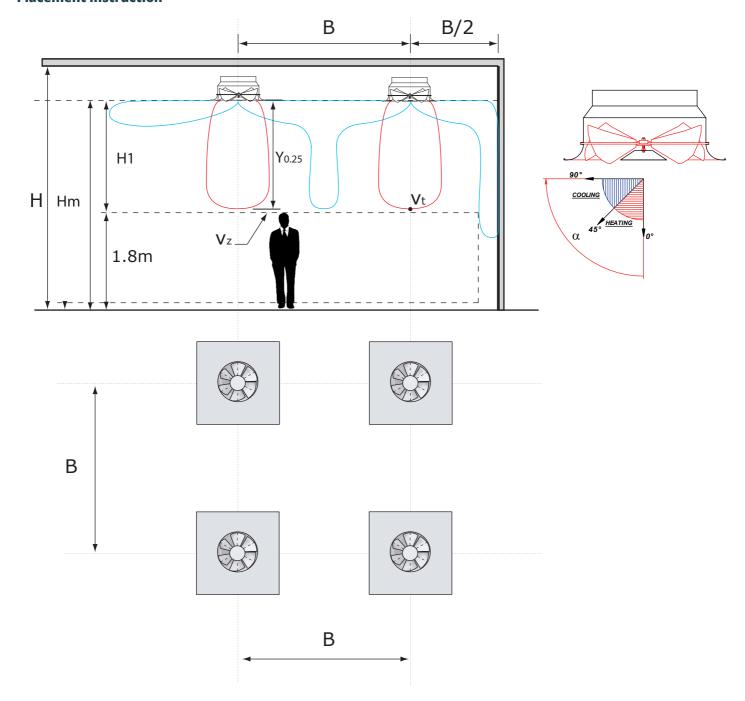


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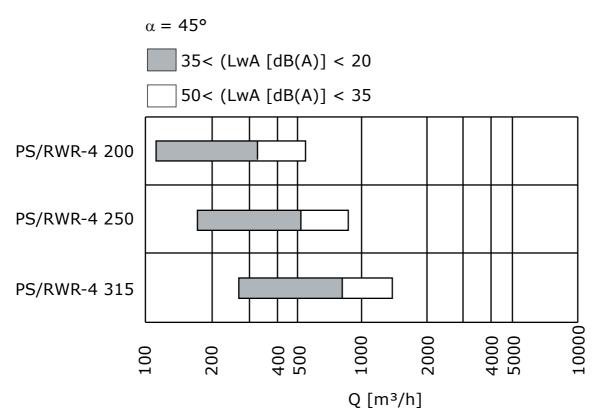
Placement instruction



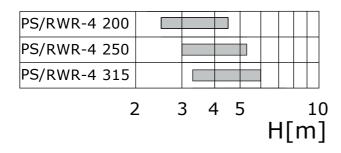




Noise selection table

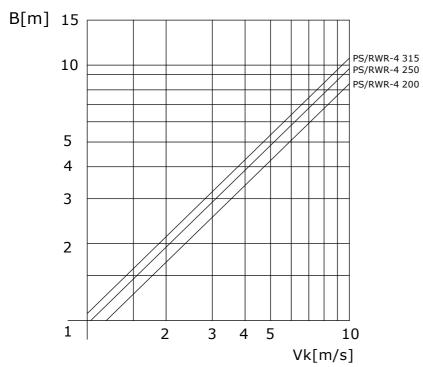


Placement height selector





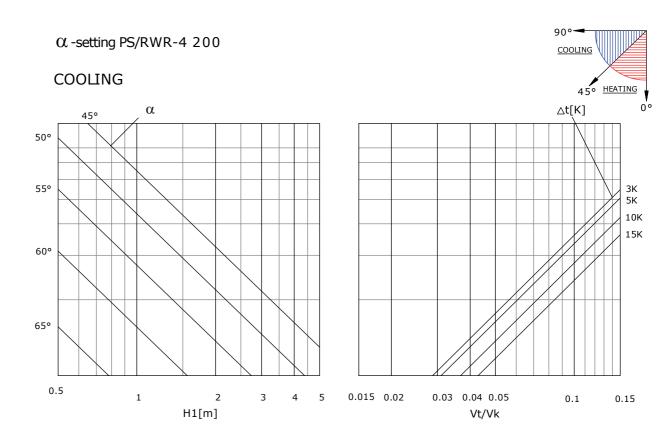
Minimum distance selection



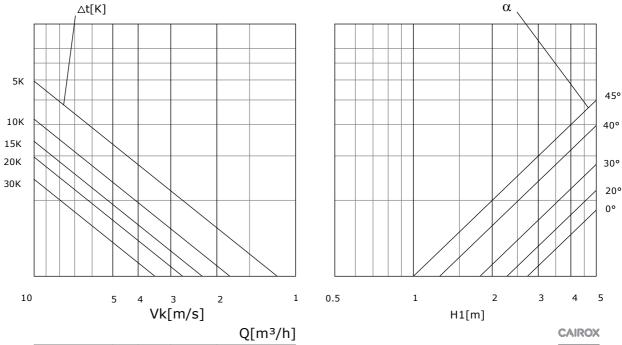


Angle setting size 200





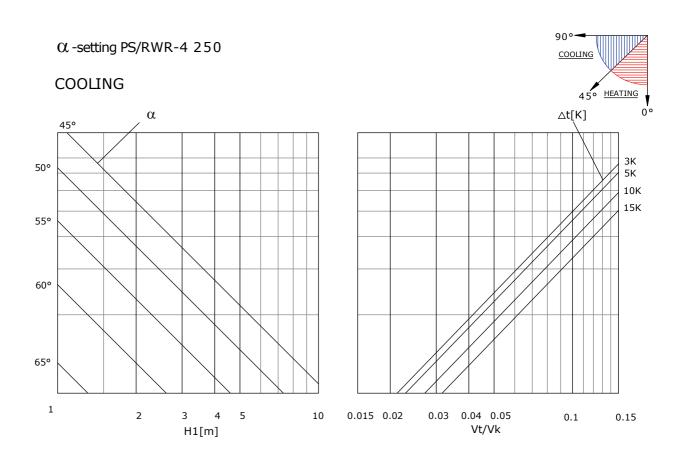
HEATING



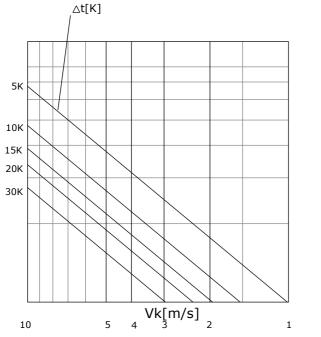


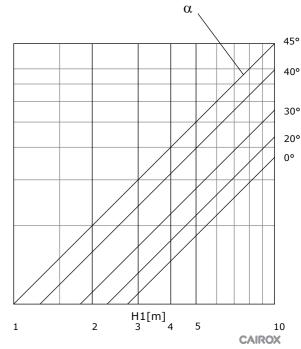
Angle setting size 250





HEATING

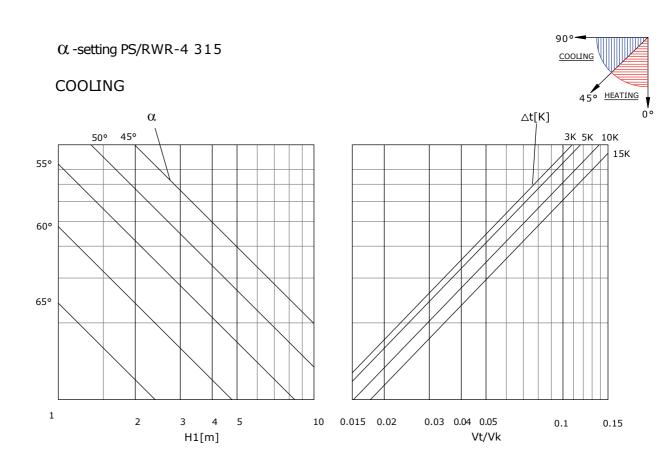




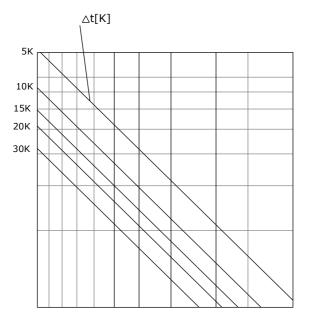


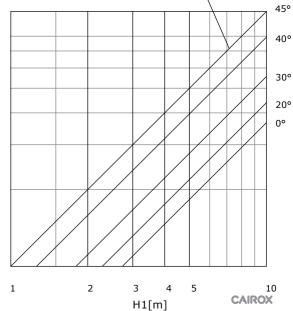
Angle setting size 315





HEATING





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