

**PS/RWR-4 TS  
(RAL9016)**

- Swirl diffusers
- Circular
- Steel
- White, RAL 9016



## Variable thermostatic swirl diffusers type PS/RWR-4 TS (RAL9016)

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

**Brand**

- Cairox

**Application**

- For air supply in ventilation and air conditioning systems.

**Material**

- Steel and aluminium

**Colour**

- Standard colour white, RAL 9016
- Other colours available upon request

**Composition**

- Adjustable blades with thermostatic regulator (bimetal)
- Perforated plate in the collar of the diffuser
- $\alpha$ = Blade angle

**Order example**

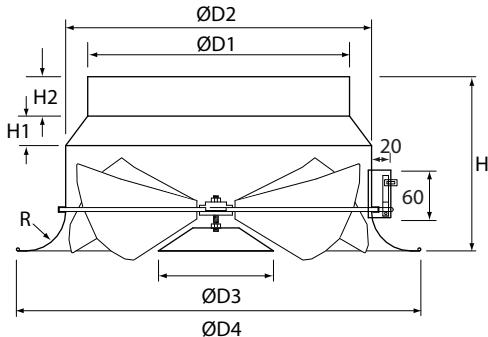
- PS/RWR-4 TS, 315

Explanation

**PS/RWR-4** = Diffuser type

**TS** = Thermostatic control element (bi-metal)

**315** = Neck size of diffuser



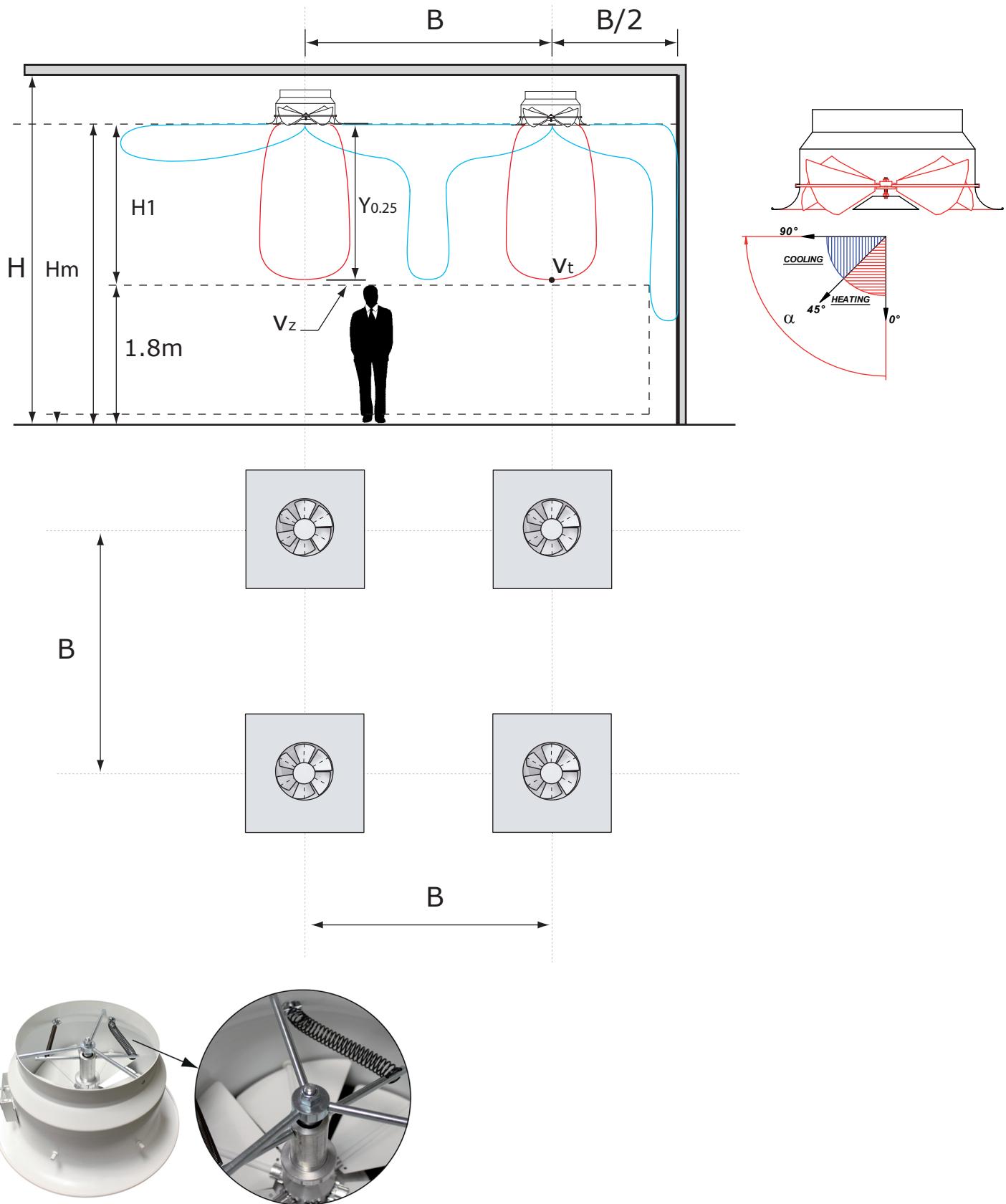
Dimensions							
Type	D1 [mm]	D2 [mm]	D3 [mm]	H [mm]	H1 [mm]	H2 [mm]	R [mm]
PS/RWR-4 TS 200	198	248	96	180	20	40	30
PS/RWR-4 TS 250	248	298	133	205	30	40	30
PS/RWR-4 TS 315	313	398	175	230	30	40	30

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				
	Vk	2.7	1.7				
300	Ps	7	3				
	Lw(A)	33	22				
	B(min)	3	2.2				
	Vk	3.6	2.3				
400	Ps	12	5				
	Lw(A)	42	30				
	B(min)	3.8	2.8	2			
	Vk	4.6	2.9	1.8			
500	Ps	19	7	3			
	Lw(A)	49	37	22			
	B(min)		3.4	2.4			
	Vk		3.5	2.2			
600	Ps		11	4			
	Lw(A)		42	27			
	B(min)			3			
	Vk			2.9			
800	Ps			8			
	Lw(A)			36			
	B(min)			3.8			
	Vk			3.6			
1000	Ps			12			
	Lw(A)			43			

### Symbols and specifications

- Q = Air Volume in m<sup>3</sup>/h
- Ak = Effective surface (free area) of the neck of the diffuser in m<sup>2</sup>
- Hm = Advised minimum - maximum mounting height in m
- Bmin = Advised minimum distance between diffusers in m
- 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  $\alpha$  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  $\Delta t$  between the supply air and room air temperature. (see selection graphs)
- Acoustic powers below 20dB(A) are mentioned as "<20" in the tables.
- For all special requirements, please contact our engineering office.

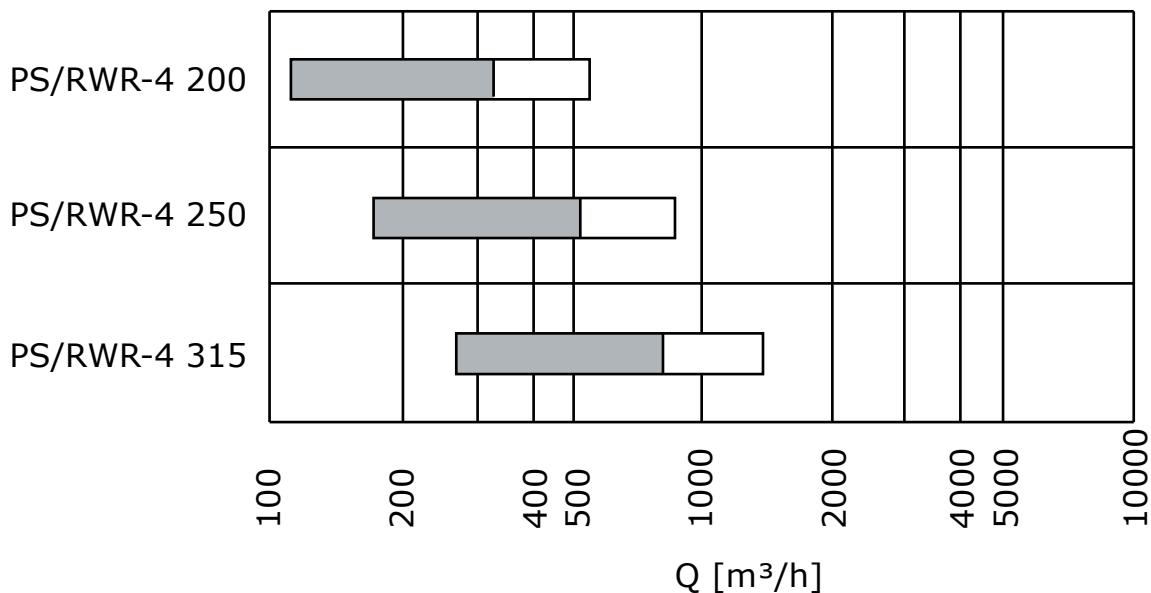
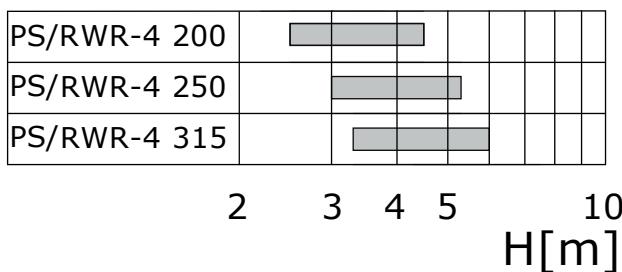
## Placement instruction

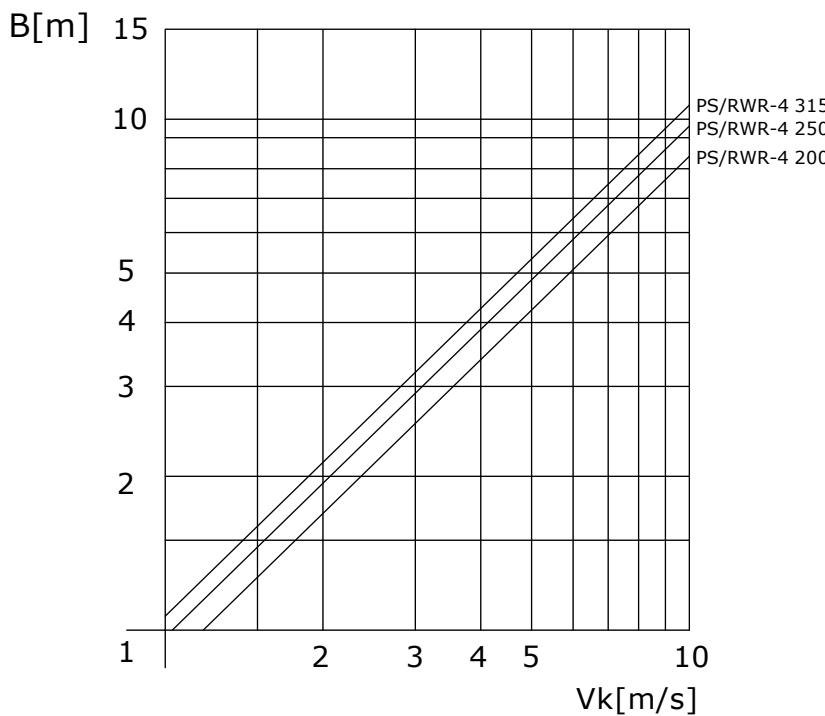


**Noise selection table** $\alpha = 45^\circ$ 

$35 < (LwA \text{ [dB(A)]}) < 20$

$50 < (LwA \text{ [dB(A)]}) < 35$

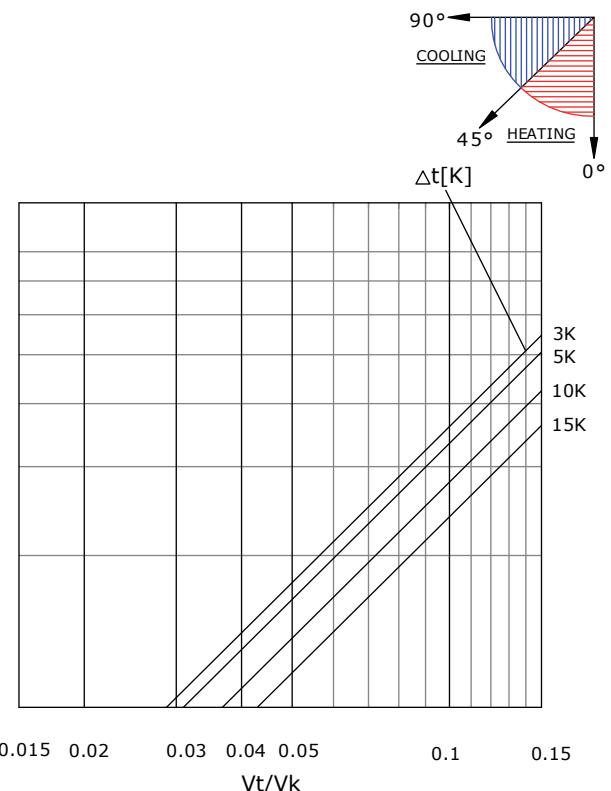
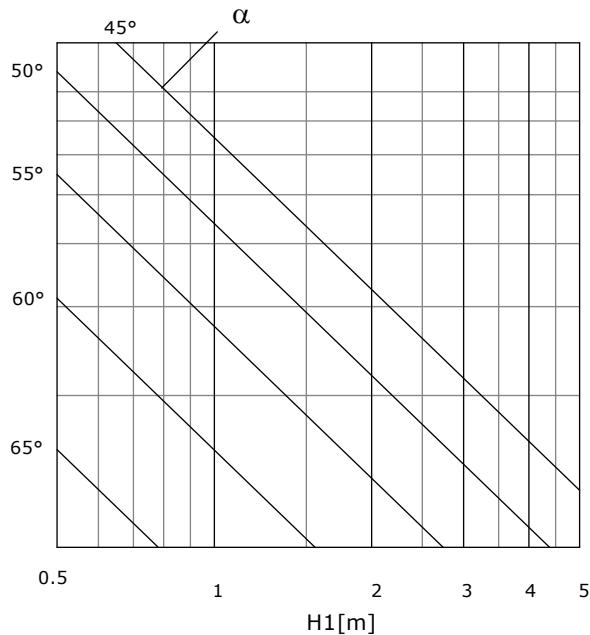
**Placement height selector**

**Minimum distance selection**

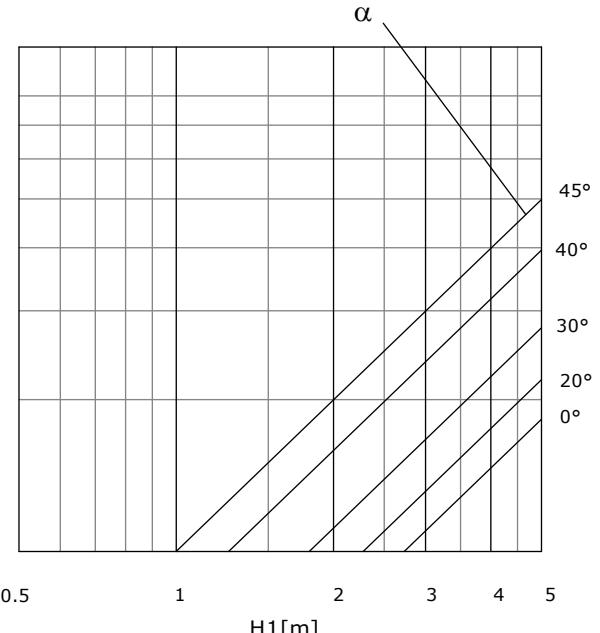
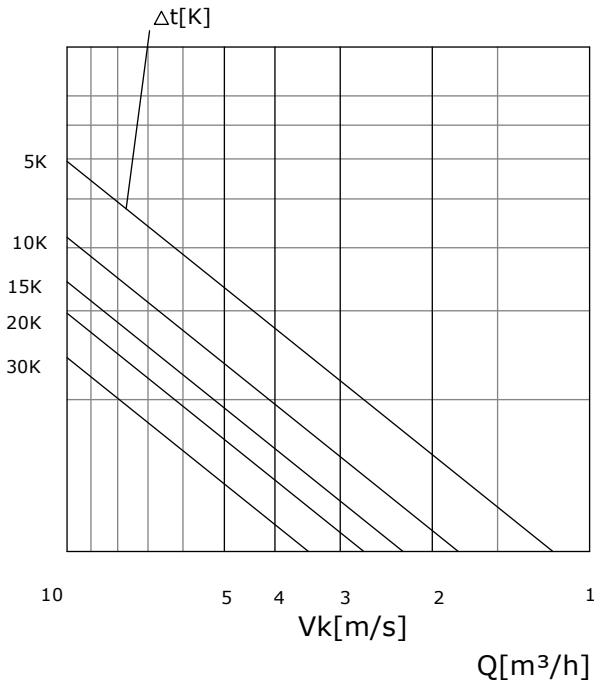
**Angle setting size 200**

$\alpha$  -setting PS/RWR-4 200

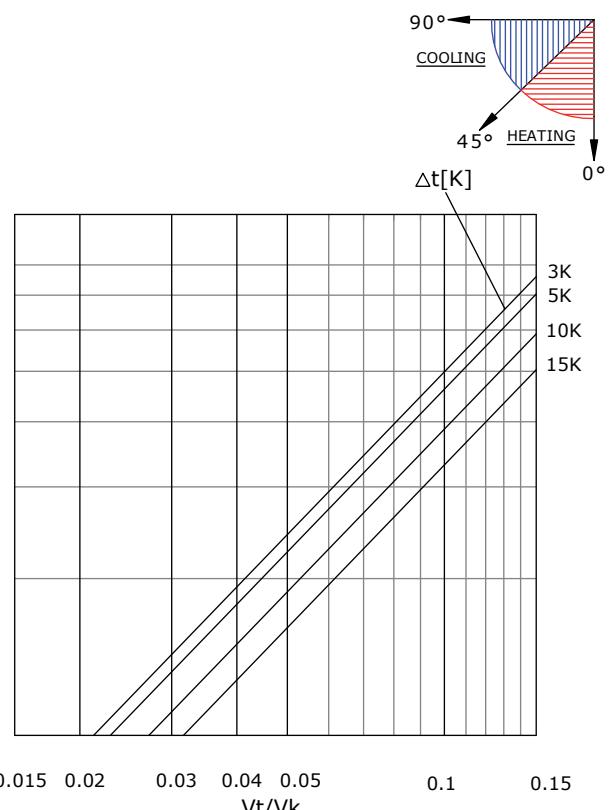
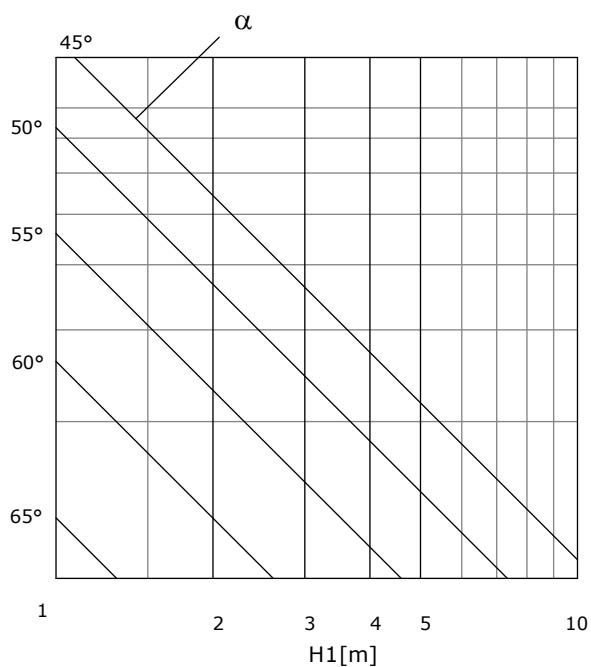
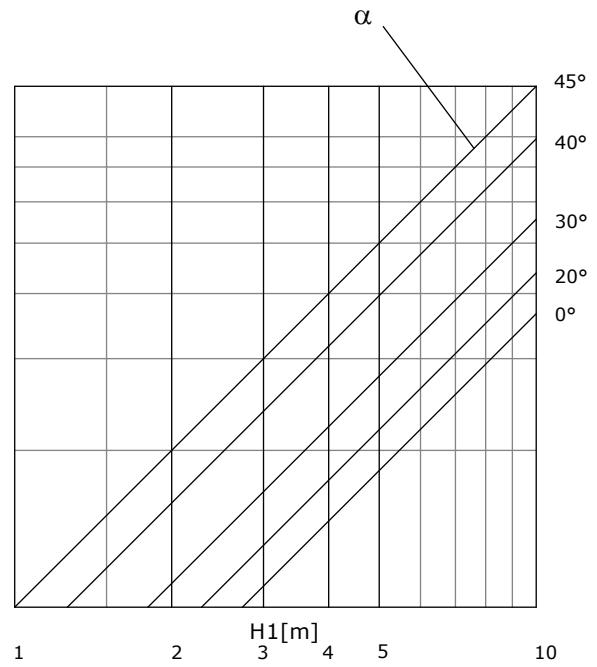
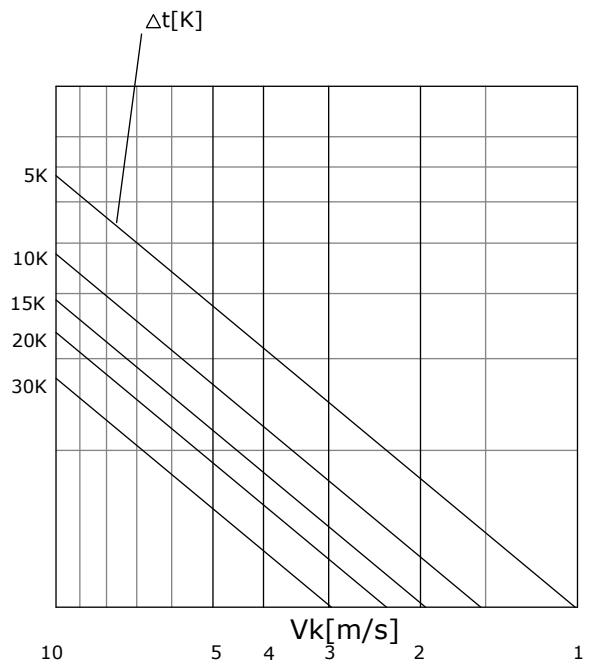
## COOLING



## HEATING



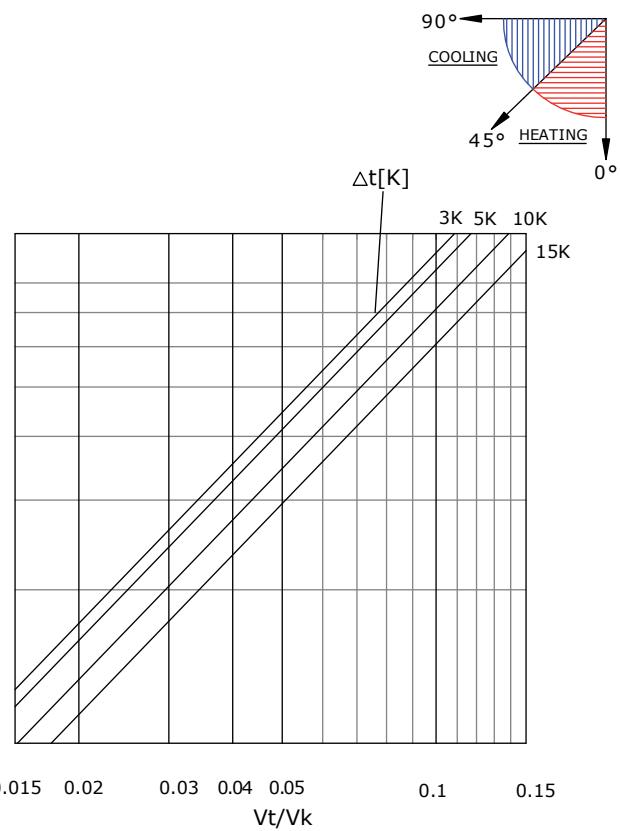
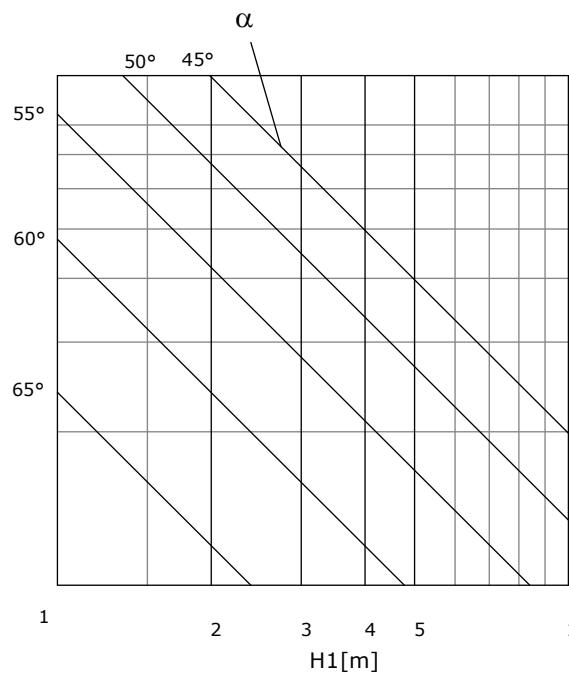
**Angle setting size 250**

$\alpha$  -setting PS/RWR-4 250COOLINGHEATING

**Angle setting size 315**

$\alpha$  -setting PS/RWR-4 315

## COOLING



## HEATING

