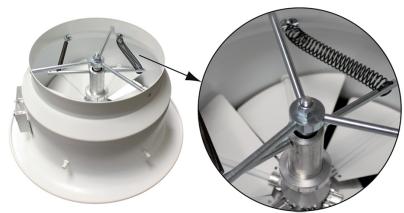


**RWR-4 TS  
(RAL9010)**

- Thermostatic swirl diffusers
- Circular
- Steel and aluminium
- White, RAL 9010



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

- Circular thermoadjustable swirl ceiling diffuser for high ceiling
- Set blade angle switches automatically between cooling and heating mode.

**Application**

- For air supply in ventilation and air conditioning systems.

**Material**

- Steel and aluminium

**Colour**

- White, RAL 9010

**Composition**

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

**Text for tender**

- The air supply diffusers are of the swirl type with adjustable blades with a thermostatic regulator (bimetal). They are made of steel and aluminium with white powder coating finish RAL 9010.

- Cairox type **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**

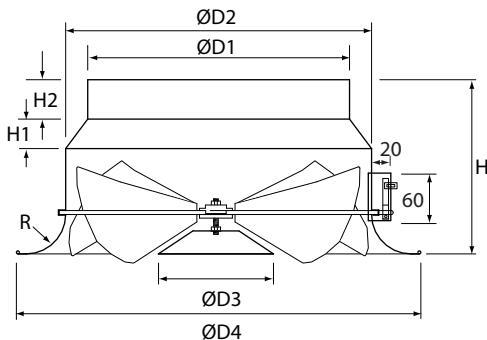
- **RWR-4 TS, 400**

Explanation

**RWR-4** = Diffuser type

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

**400** = Neck size of diffuser



Dimensions								
	D1 [mm]	D2 [mm]	D3 [mm]	D4 [mm]	H [mm]	H1 [mm]	H2 [mm]	R [mm]
RWR-4 TS 200	198	248	96	350	180	20	40	30
RWR-4 TS 250	248	298	133	400	205	30	40	30
RWR-4 TS 315	313	398	175	500	230	30	40	30
RWR-4 TS 400	398	465	175	615	270	45	60	60
RWR-4 TS 500	498	565	225	780	320	35	60	80
RWR-4 TS 630	628	665	273	935	390	25	80	100
RWR-4 TS 800	798	798	368	1020	390	0	80	100

Quick selection								
RWR-4TS		200	250	315	400	500	630	800
Q	Ak	0.0305	0.0479	0.0765	0.1238	0.194	0.3088	0.4989
	Hm	2,5 - 3,8	3,0 - 5,3	3,3 - 6	4,3 - 7,5	5,5 - 16	7,5 - 26	8,0 - 29
300	B(min)	2,4	1,6					
	Y0,25	1,7	1,3					
	Vk	2,7	1,7					
	Ps	7	3					
400	Lw(A)	33	22					
	B(min)	3	2,2					
	Y0,25	2,3	1,8					
	Vk	3,6	2,3					
500	Ps	12	5					
	Lw(A)	42	30					
	B(min)	3,8	2,8	2				
	Y0,25	2,9	2,2	1,4				
600	Vk	4,6	2,9	1,8				
	Ps	19	7	3				
	Lw(A)	49	37	22				
	B(min)	3,4	2,4	2,8				
800	Y0,25	2,7	1,7	1				
	Vk	3,5	2,2	1,3				
	Ps	11	4	2				
	Lw(A)	42	27	20				
1000	B(min)			3	2,8			
	Y0,25			2,2	1,3			
	Vk			2,9	1,8			
	Ps			8	3			
2000	Lw(A)			36	23			
	B(min)			3,8	2,8	3,4		
	Y0,25			2,8	1,7	2,2		
	Vk			3,6	2,2	1,4		
3000	Ps			12	5	2		
	Lw(A)			43	30	20		
	B(min)				5,4	4	4,2	
	Y0,25				3,4	4,6	3,5	
4000	Vk				4,5	2,9	1,8	
	Ps				19	7	3	
	Lw(A)				51	38	22	
	B(min)					6	4,4	3
5000	Y0,25					7	5,5	3,2
	Vk					4,3	2,7	1,7
	Ps					17	7	2
	Lw(A)					50	33	21
6000	B(min)						5,8	3,8
	Y0,25						7,5	4,6
	Vk						3,6	2,2
	Ps						12	4
Lw(A)							42	28
	B(min)						7,2	4,8
	Y0,25						9,6	6
	Vk						4,5	2,8
Lw(A)	Ps						19	7
							49	35
	B(min)							5,8
	Y0,25							7,5
Lw(A)	Vk							3,3
	Ps							10
								41
	B(min)							

### 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
- Y0,25 = Maximum throw depth in m at end velocity Vt of 0,25 m/s
- Vk = Air velocity through the neck of the diffuser in m/s

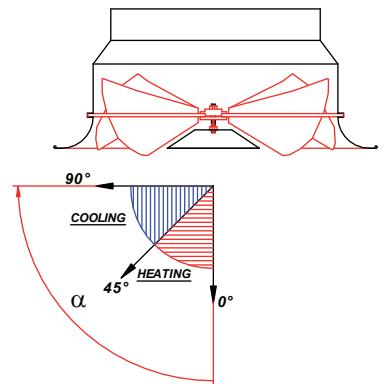
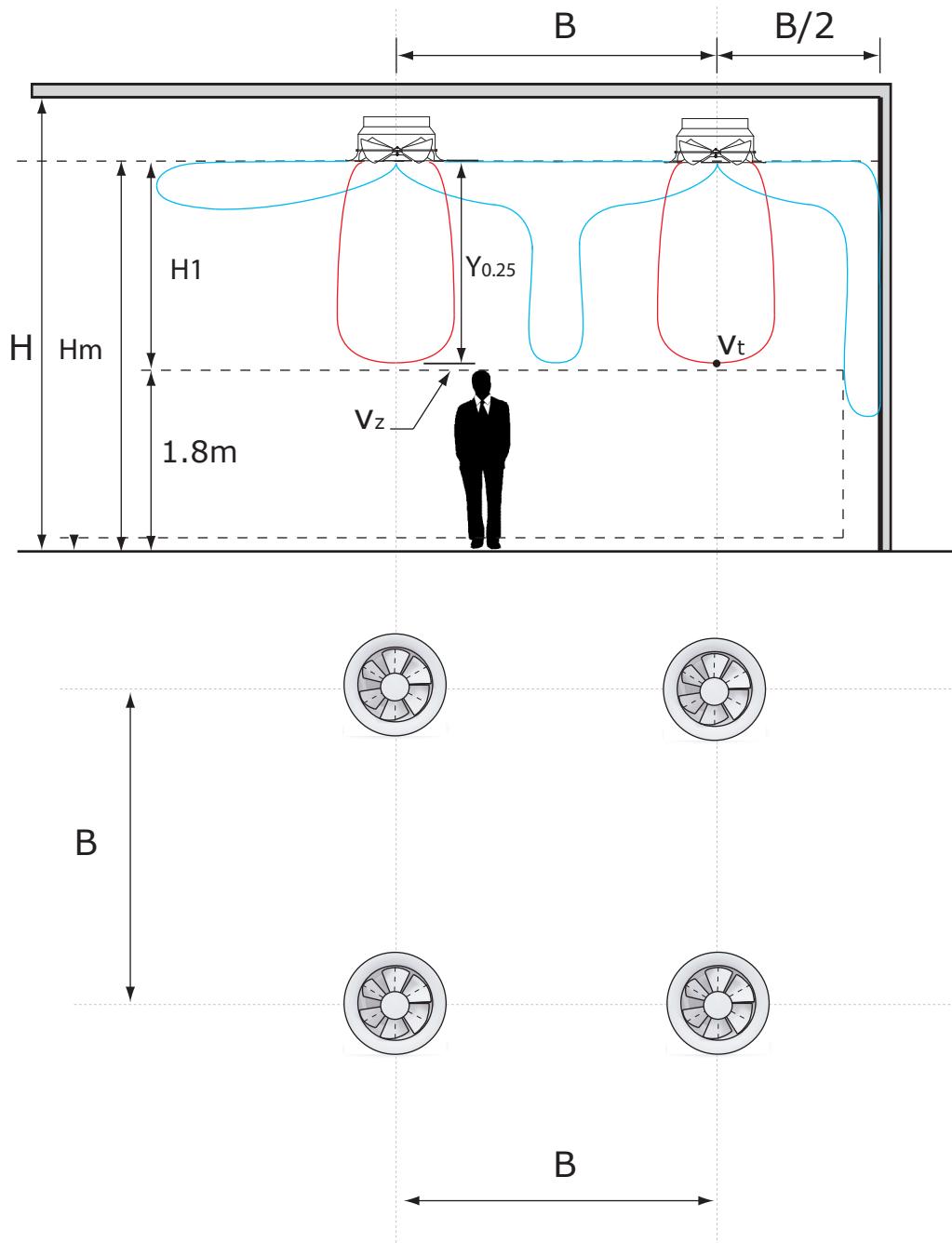
- $P_s$  = Static pressure loss in Pa
- $L_w(A)$  = Acoustic power in dB(A)

- 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.

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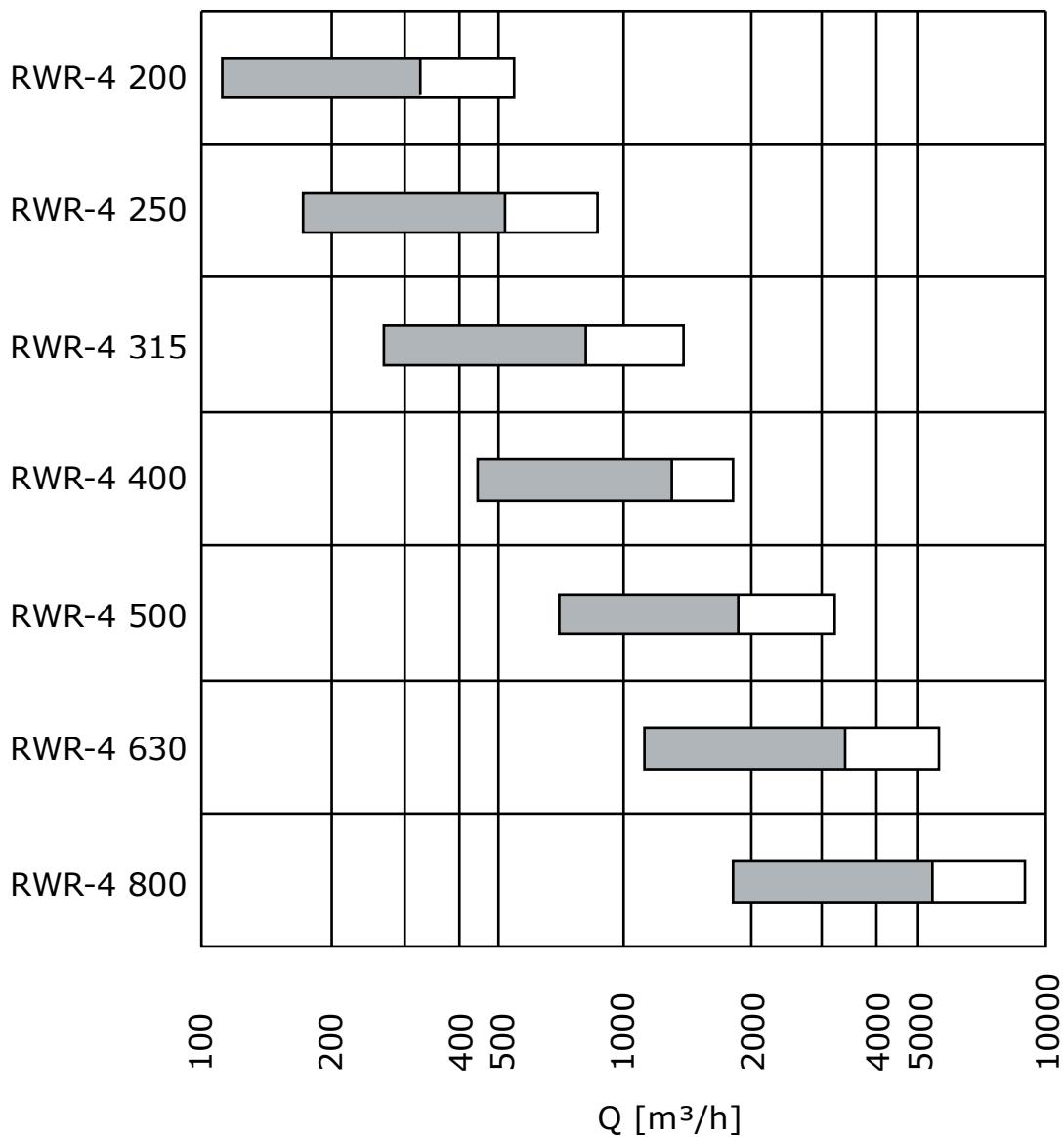
**Placement instruction**

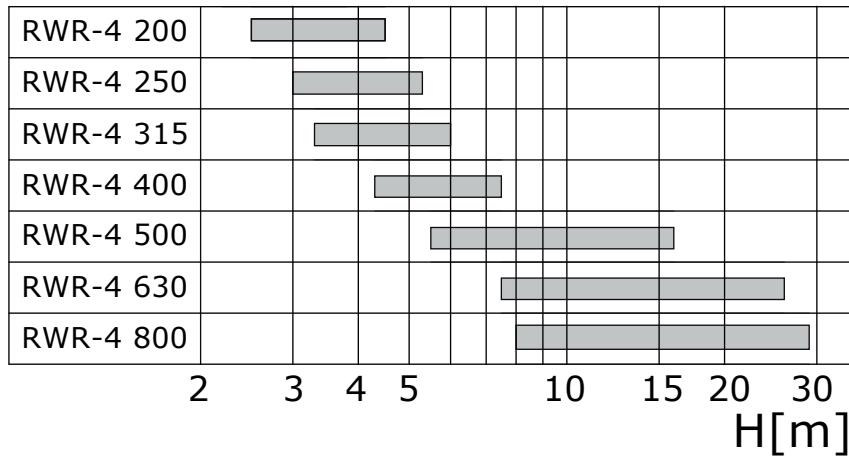
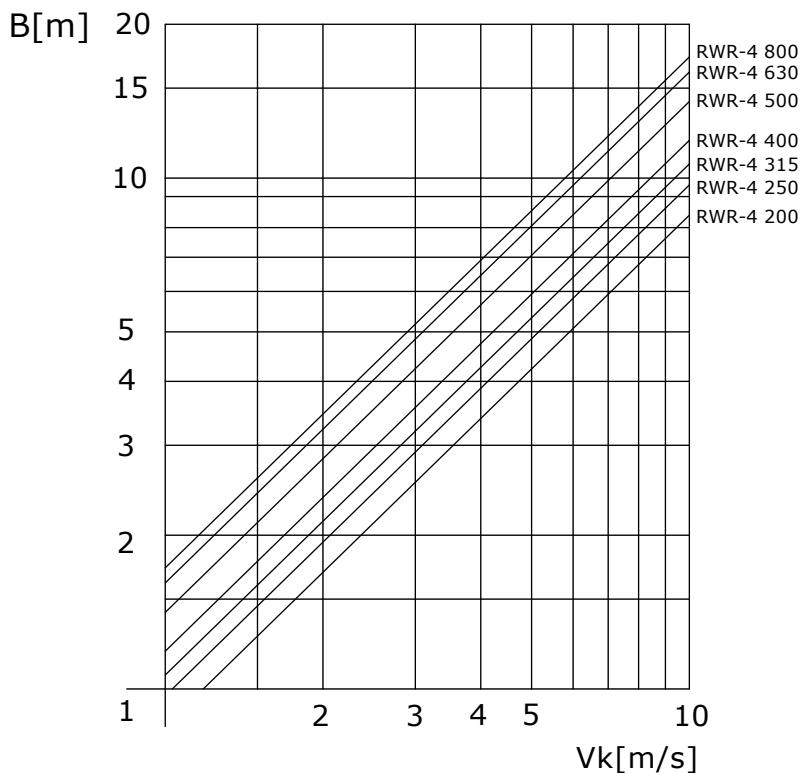
**Noise selection table**

$$\alpha = 45^\circ$$

  35 < (LwA [dB(A)]) < 20

  50 < (LwA [dB(A)]) < 35

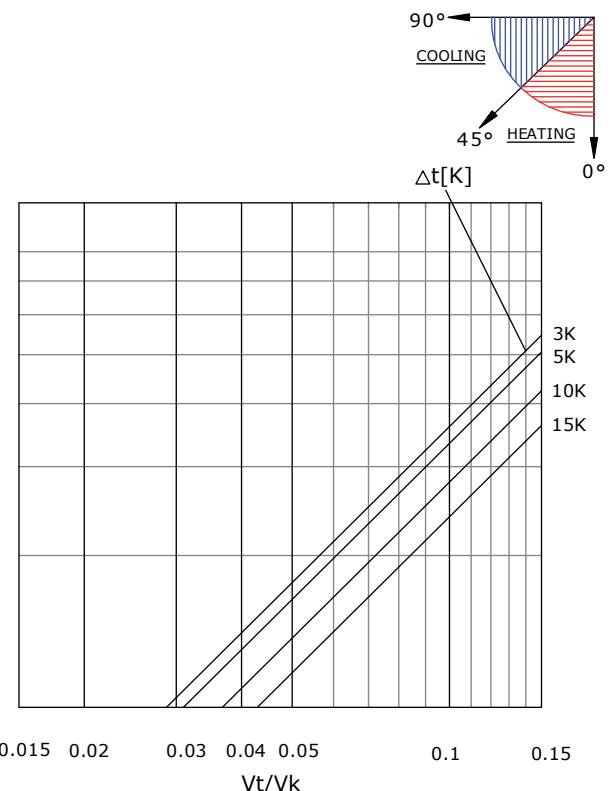
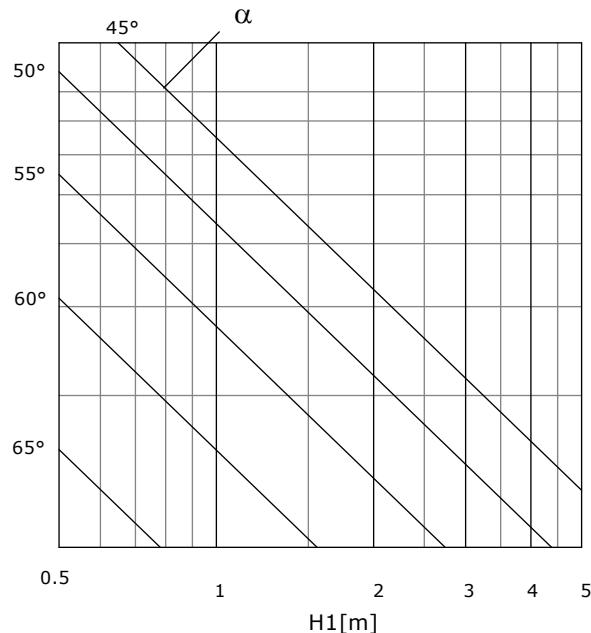


**Placement height selector****Minimum distance selection**

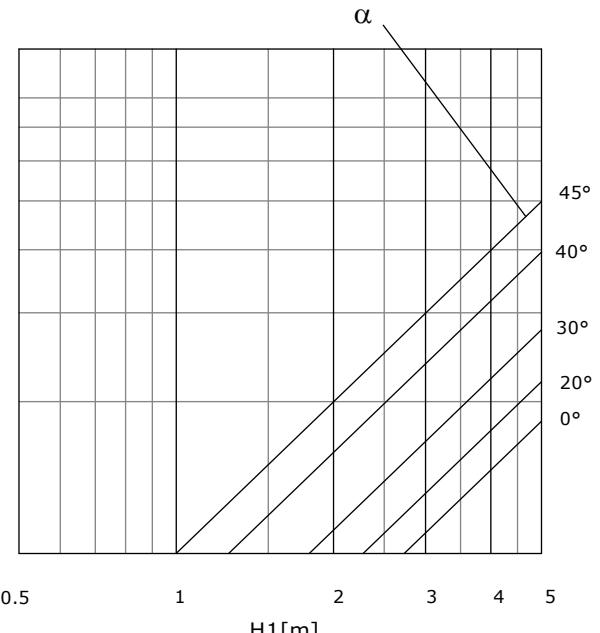
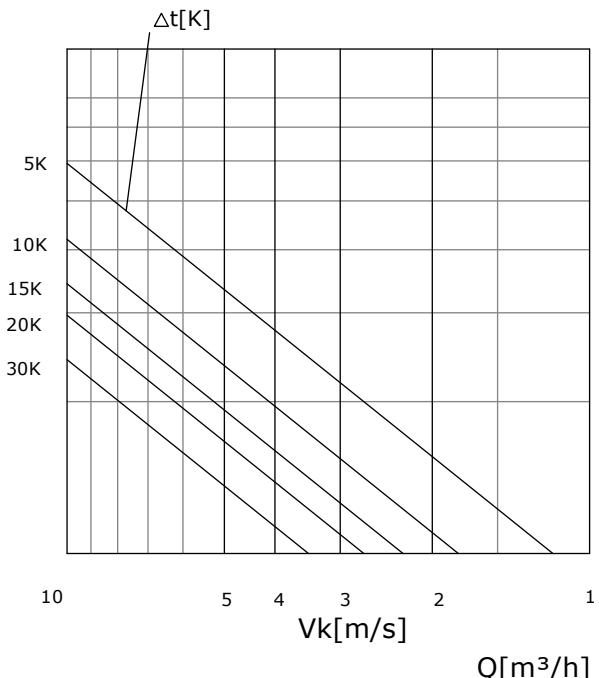
**Angle setting size 200**

$\alpha$  -setting RWR-4 200

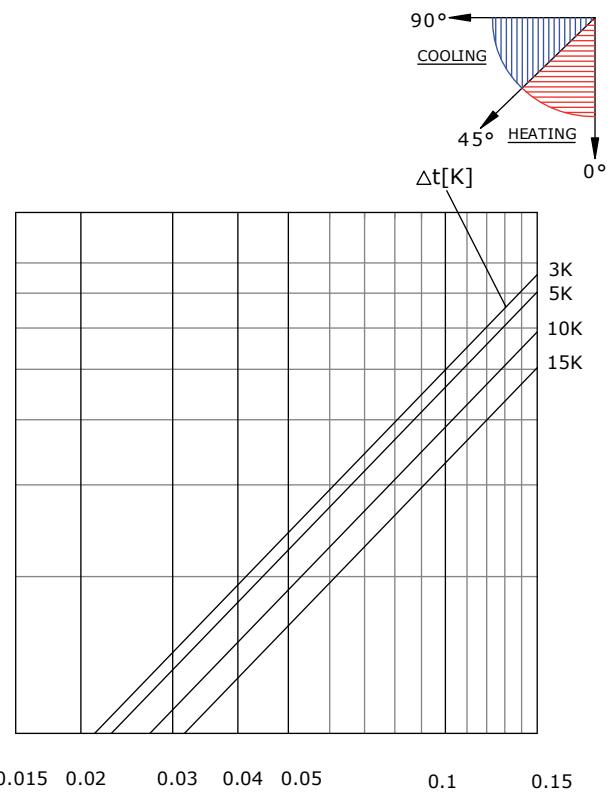
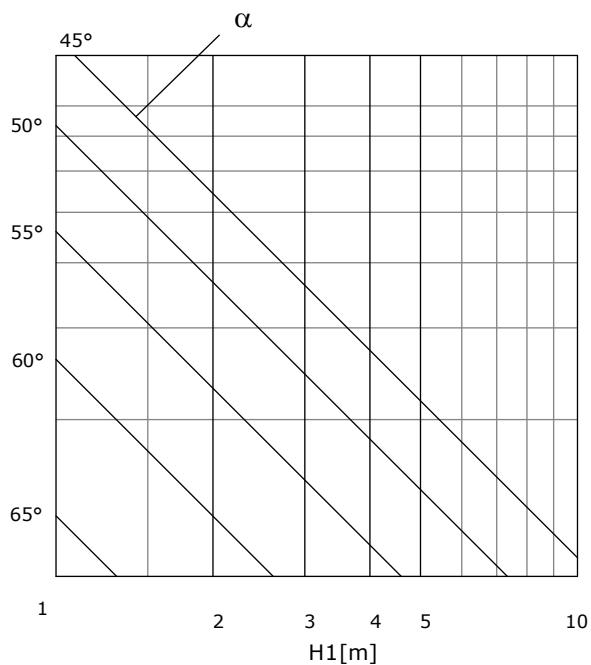
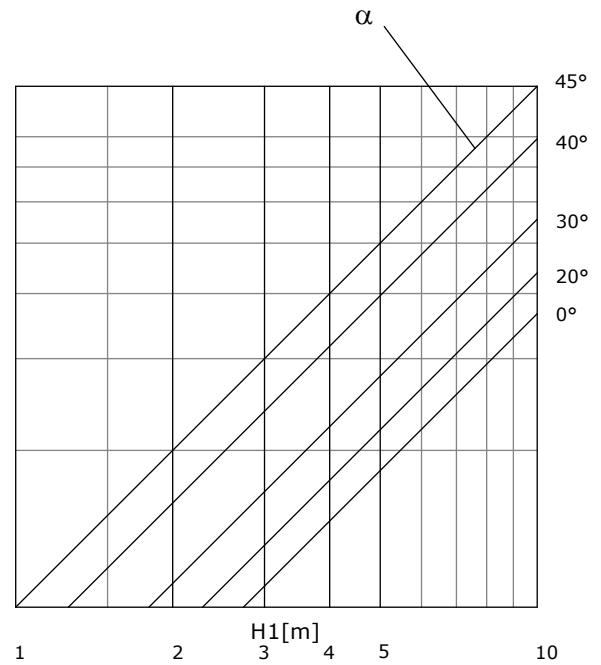
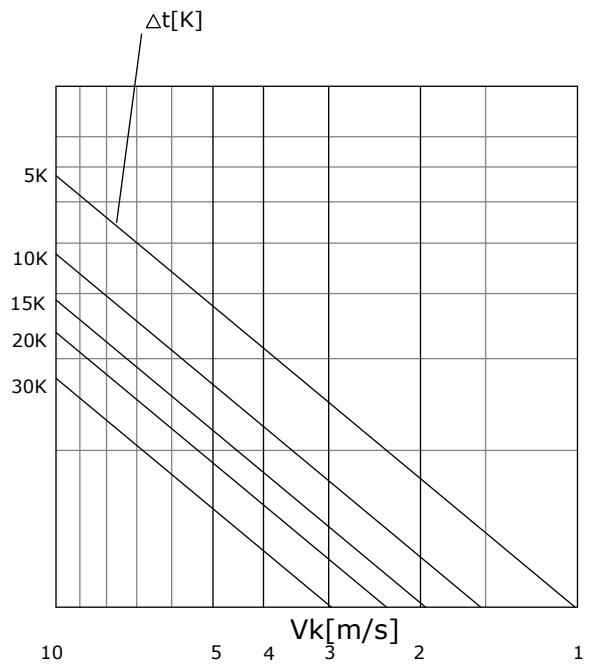
## COOLING



## HEATING



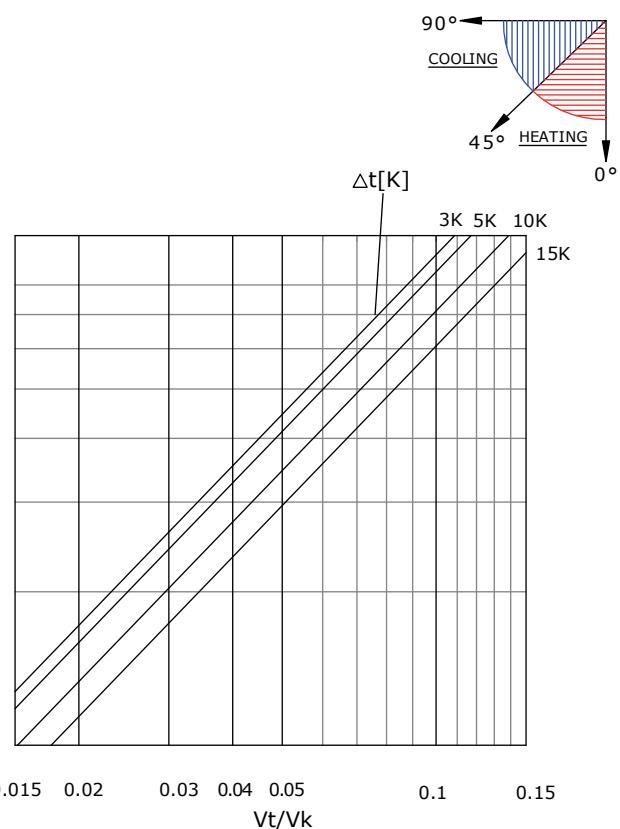
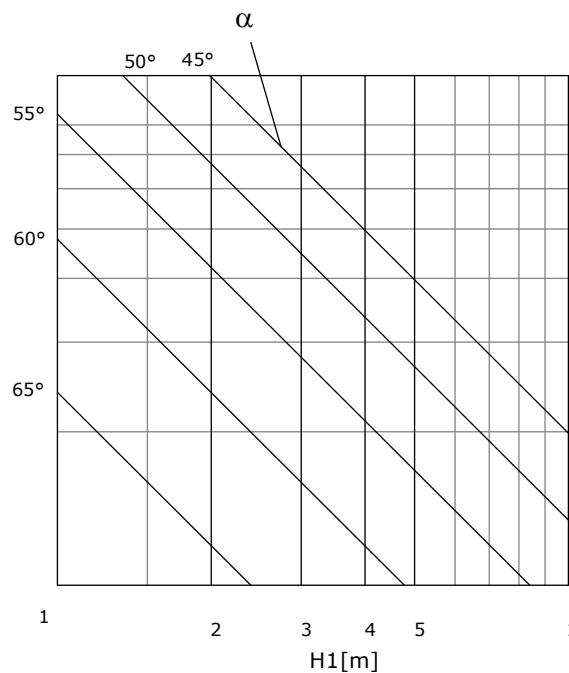
**Angle setting size 250**

$\alpha$  -setting RWR-4 250COOLINGHEATING

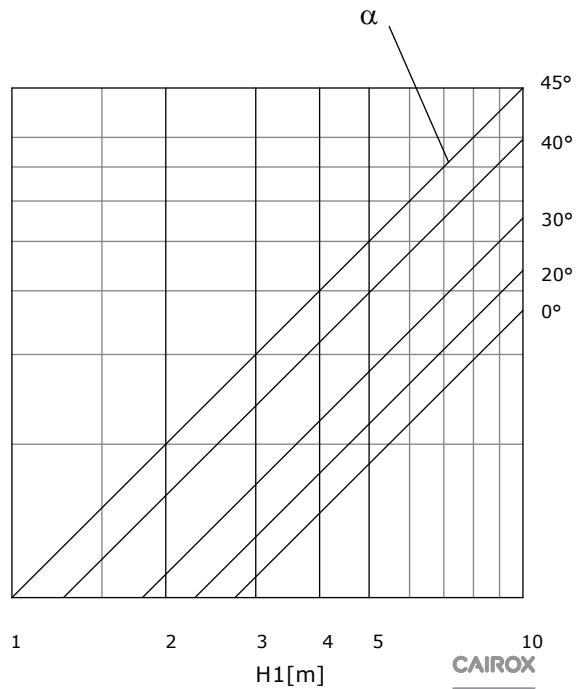
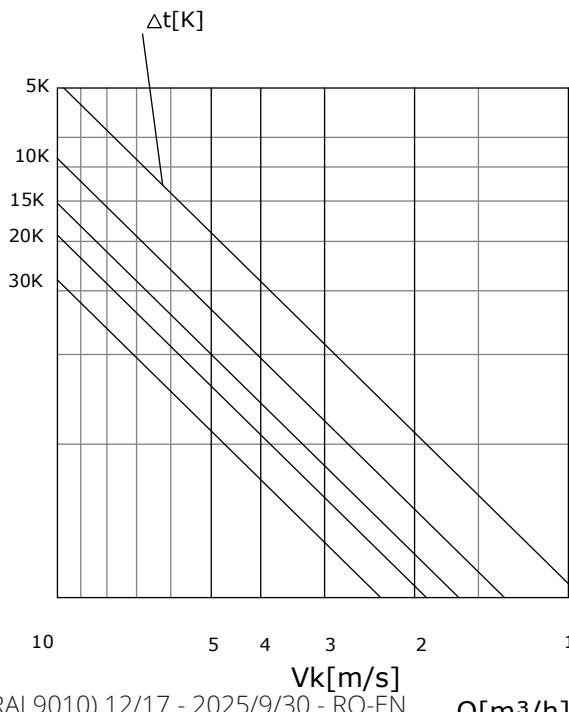
**Angle setting size 315**

$\alpha$  -setting RWR-4 315

## COOLING



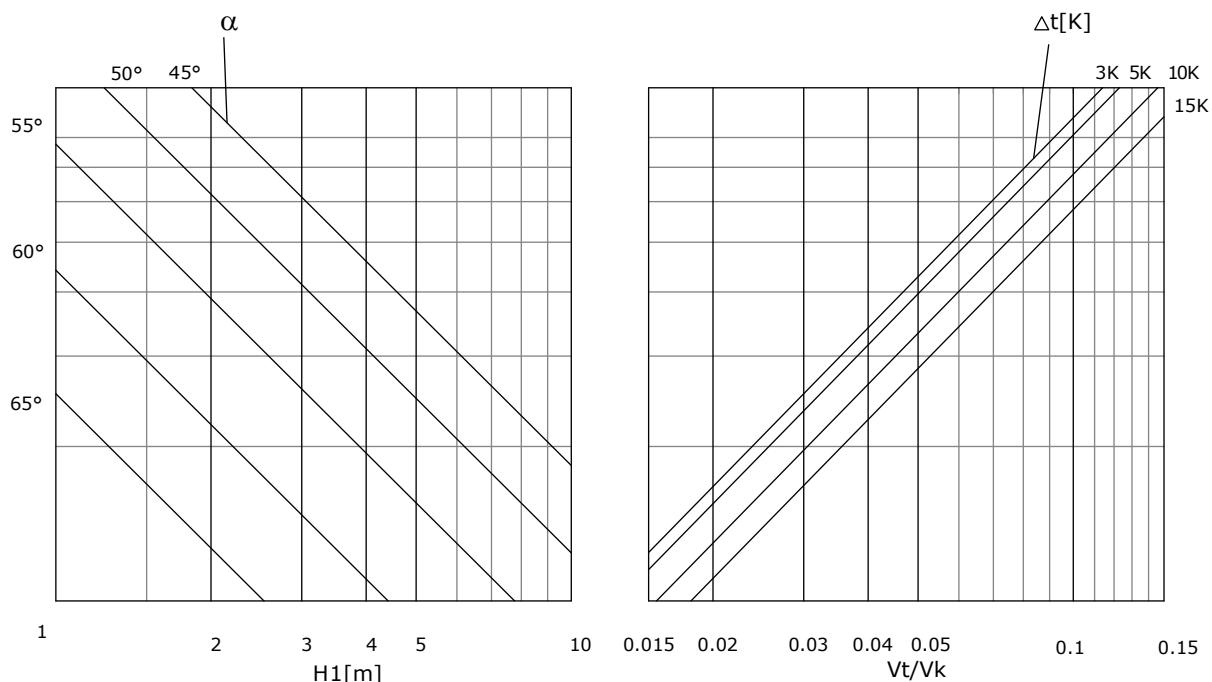
## HEATING



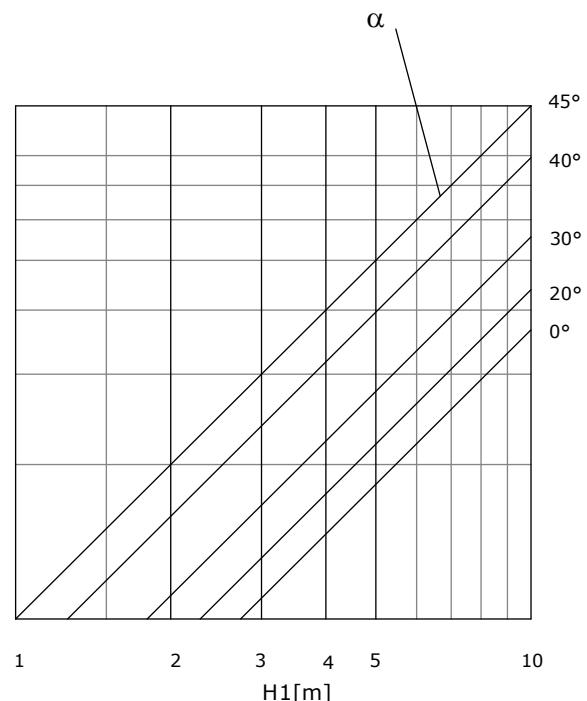
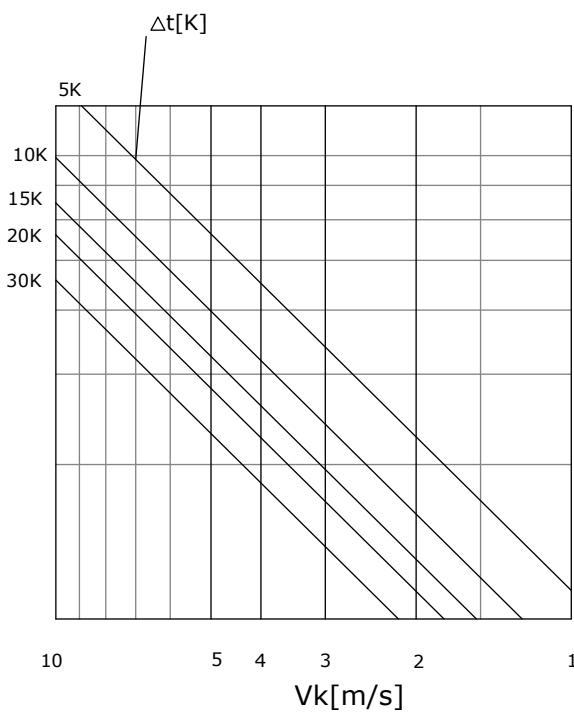
**Angle setting size 400**

$\alpha$  -setting RWR-4 400

## COOLING

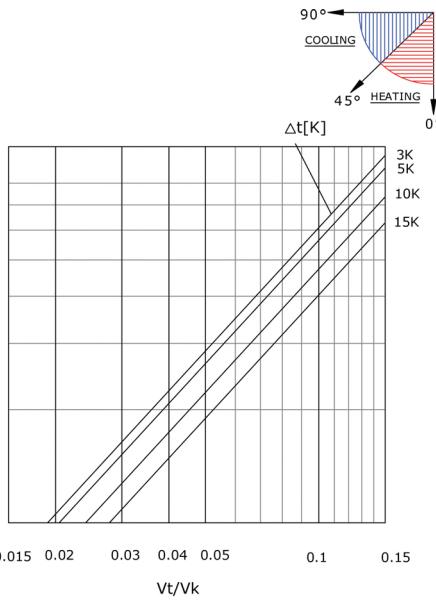
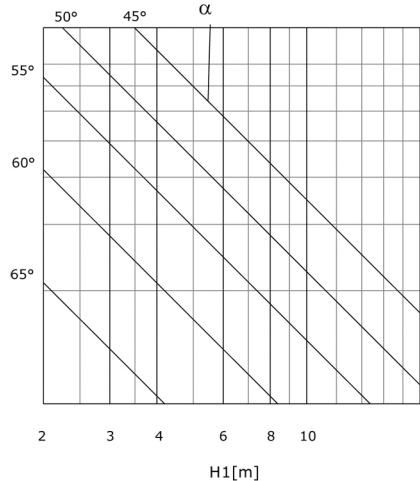


## HEATING

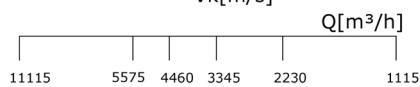
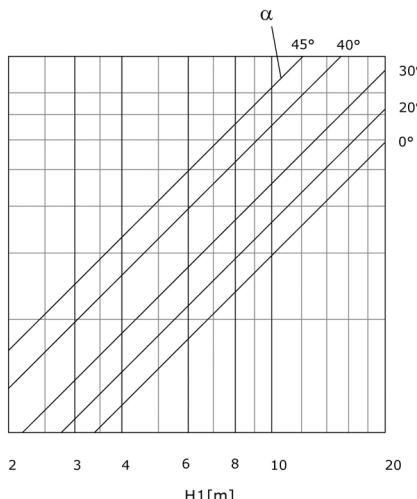
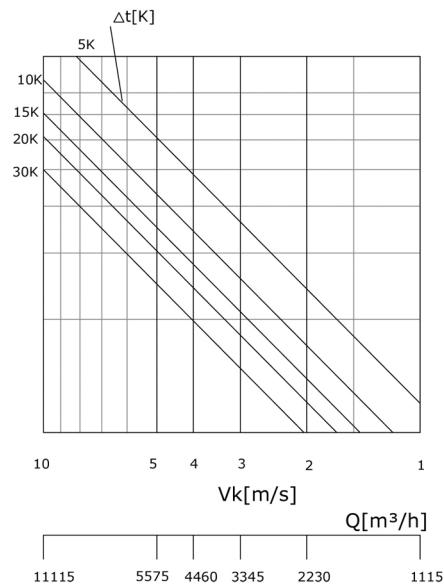


**Angle setting size 500** $\alpha$  -setting RWR-4 500

COOLING

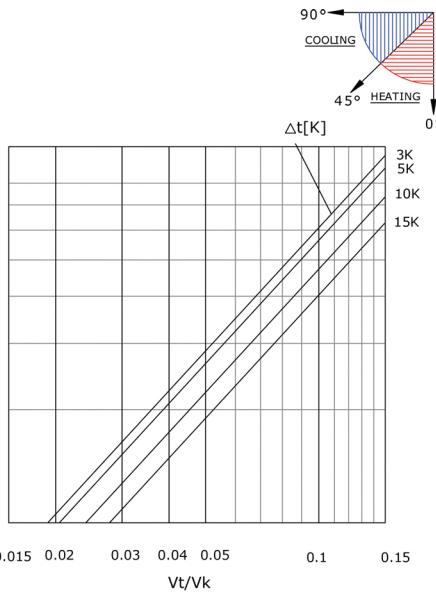
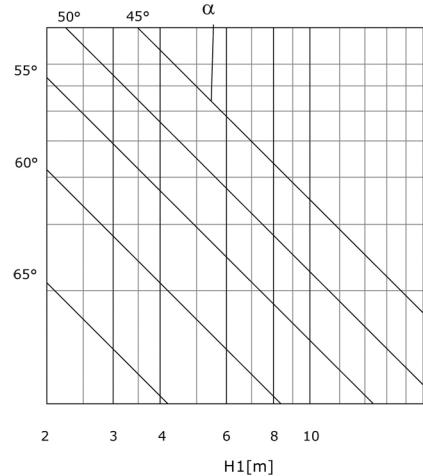


HEATING

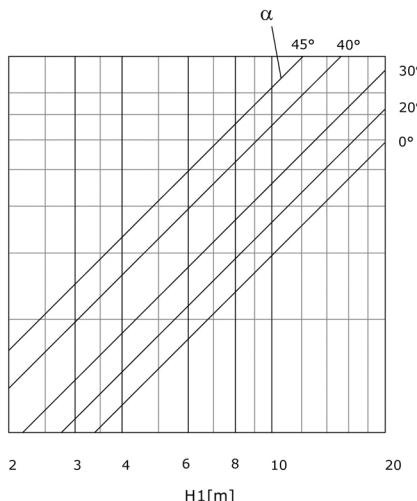
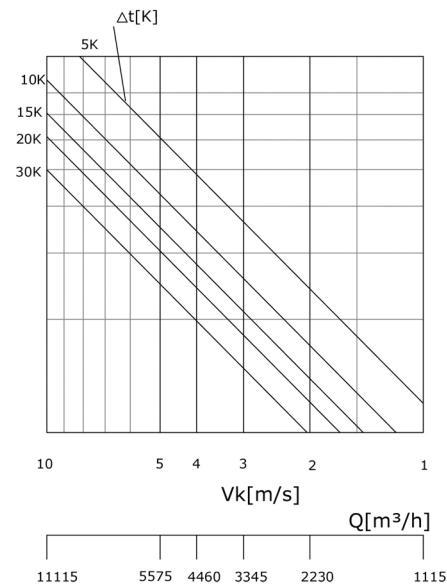


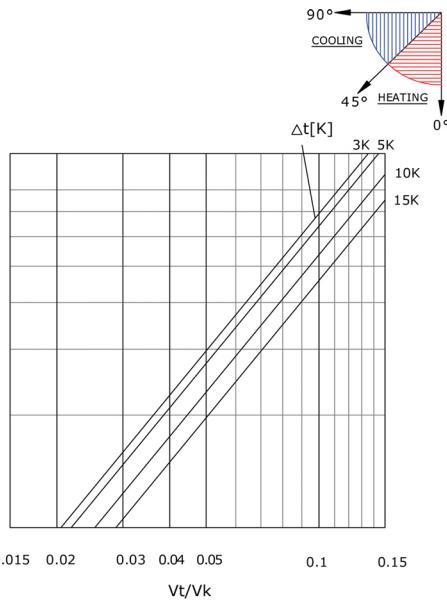
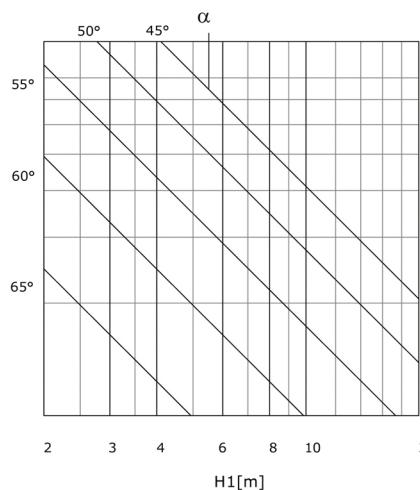
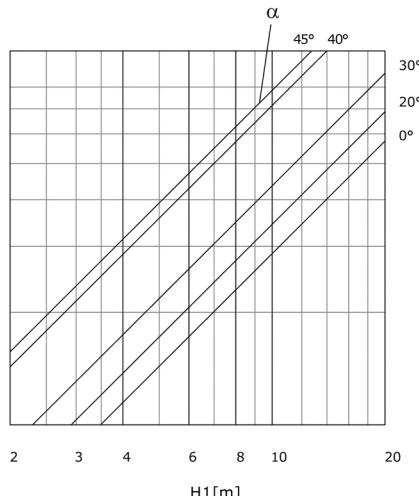
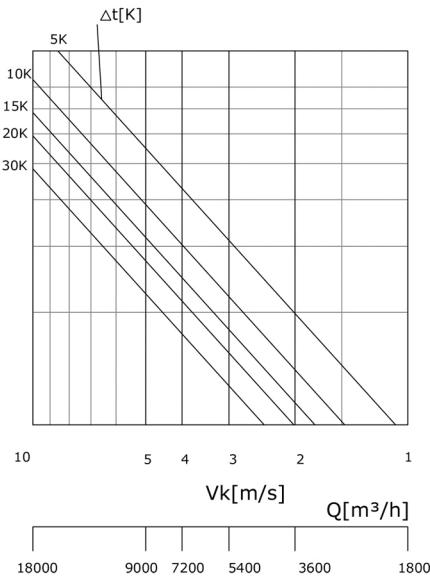
**Angle setting size 630** $\alpha$  -setting RWR-4 500

## COOLING



## HEATING



**Angle setting size 800** $\alpha$  -setting RWR-4 800**COOLING****HEATING****Angle setting**

- For angle setting see website