



High Induction Ceiling Diffusers

**PALMA**



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## High Induction Ceiling Diffusers

### PALMA



PALMA high-induction square ceiling diffuser, for mixing primary air and inducted ambient air. Made in aluminium. Finished in any RAL colour upon request. Recommended installation height between 3 and 10 m. It can be set to a new position by hand or its setting can be changed by a motor.

- Recommended for spaces with a maximum ceiling height of 3 - 10 m.
- Easy-to-install
- Manages large supply airflows
- Manuel adjustment in standard or motorized optional
- For variable and constant volume flows
- For supply air to room air temperature differences from -12 to +15 K
- Angled or vertical air discharge in heating mode

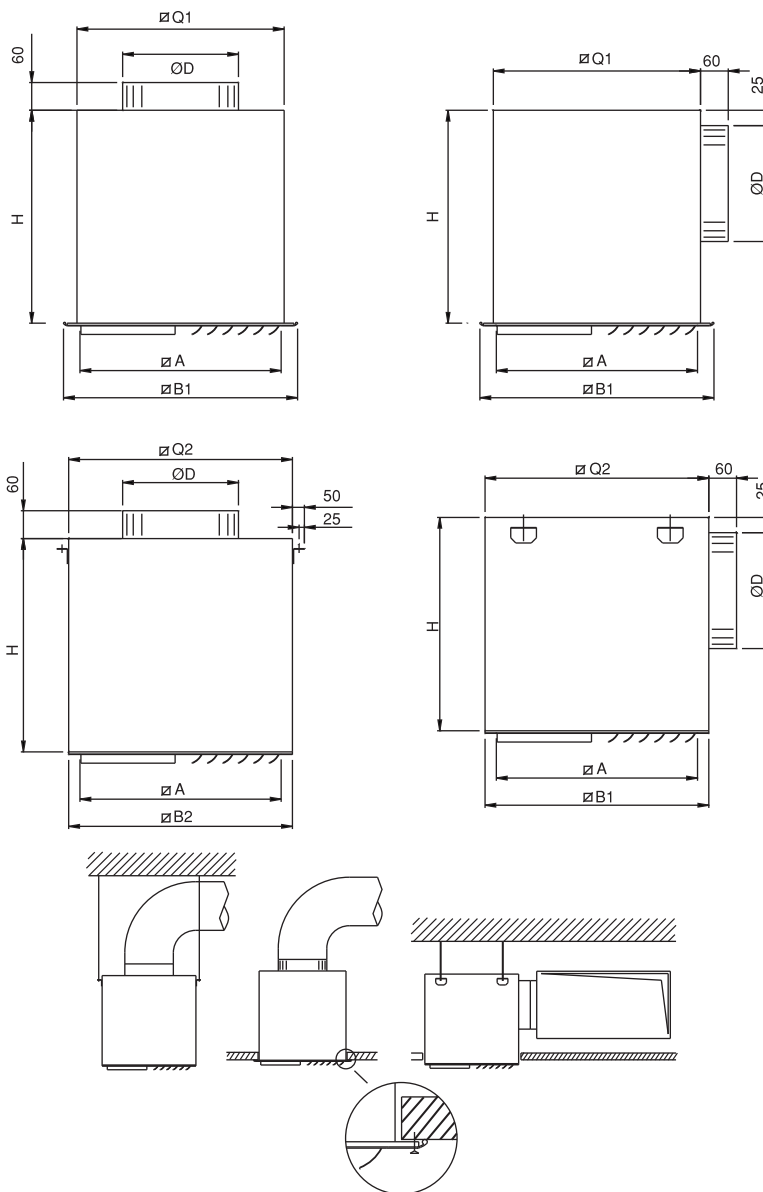
### Quick sizing

Nominal size	m <sup>3</sup> /h	Pa	db(A)
425	350	7	22
	550	15	30
	775	30	40
	1000	51	50
600	750	8	27
	1100	20	35
	1500	35	45
	1850	55	50
775	1350	7	25
	1850	15	35
	2375	23	40
	3200	44	50
1050	2450	15	337
	3000	20	42
	3500	25	45
	4000	35	50

'Air conditioning systems employ ceiling swirl diffusers to create a swirling effect when supplying air to rooms. This airflow pattern effectively mixes the room air, leading to a rapid reduction in the velocity of the supplied air and the temperature difference between the supplied air and the room air. Ceiling swirl diffusers have the advantage of accommodating large volume flow rates. Consequently, they promote mixed flow ventilation in comfort zones, ensuring excellent overall room ventilation with minimal turbulence in the occupied area.'

# Dimensions

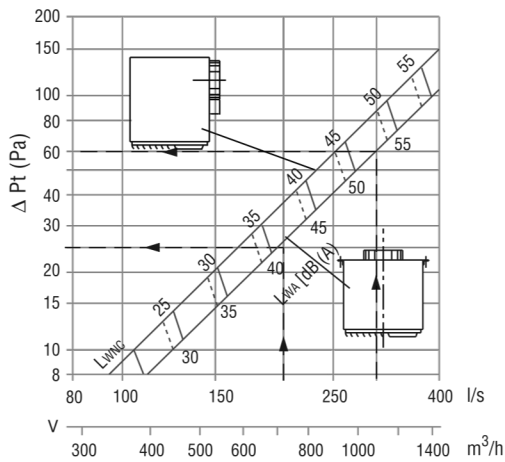
Size	A	D	H	Q1	Q2	B1	B2
425	425	248	400	440	469	489	469
600	600	300	550	615	644	664	644
775	775	350	600	790	819	839	819
1050	1050	400	650	1065	1094	1114	1094



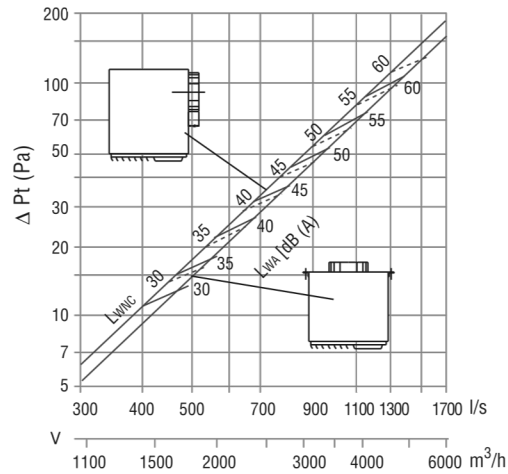
# Technical data

## Sound power level and differential pressures.

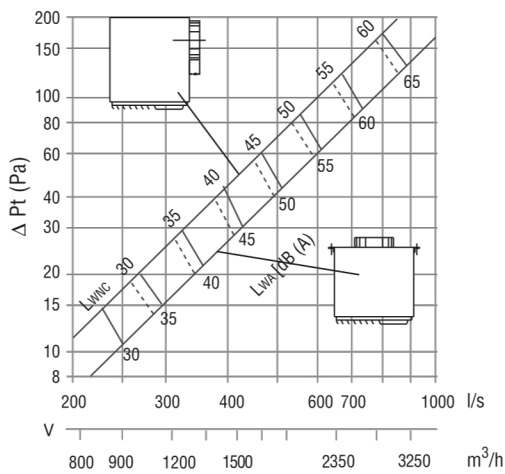
Palma 425



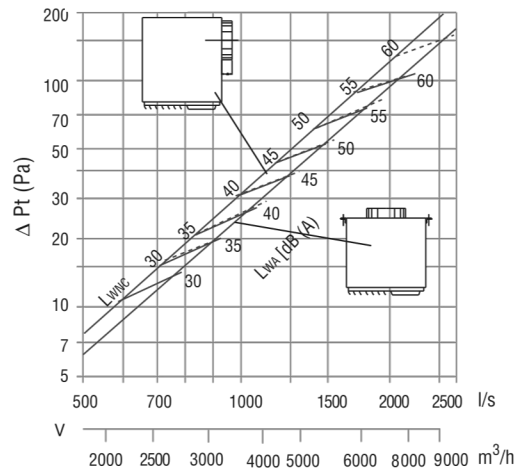
Palma 775



Palma 600



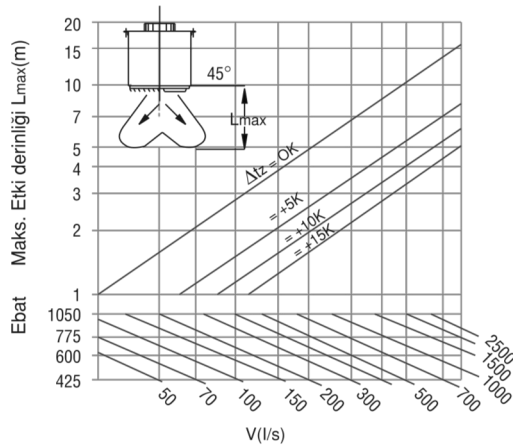
Palma 1050



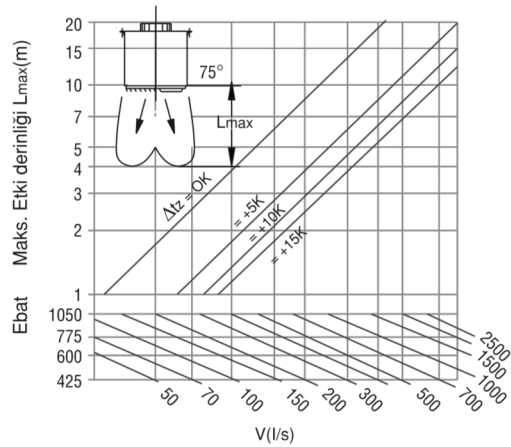
# Technical data

## High induction results according to blade angle / heating

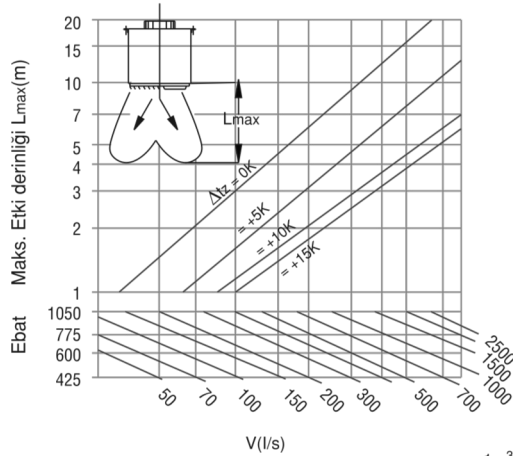
45° blade angle.



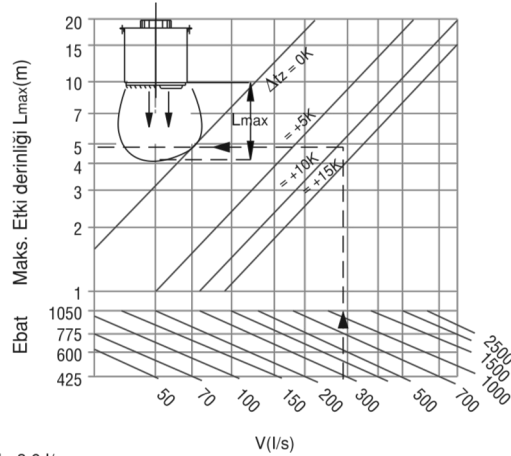
75° blade angle.



60° blade angle.



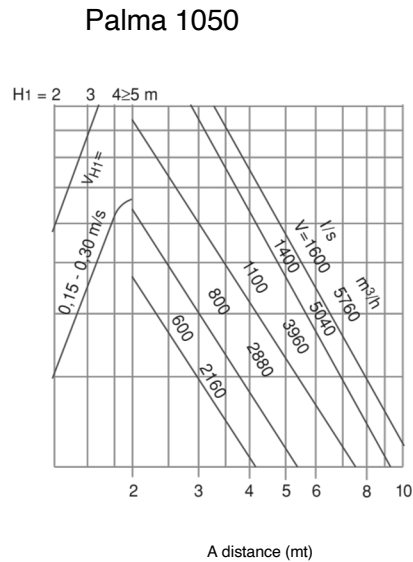
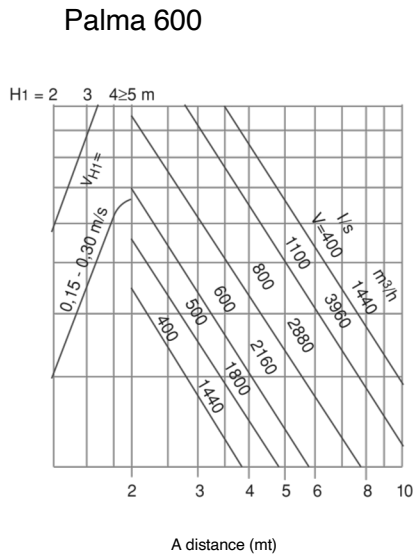
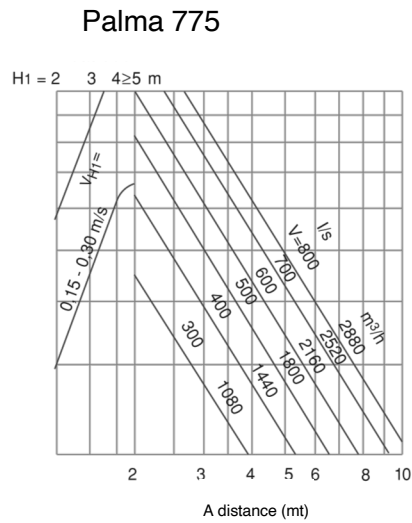
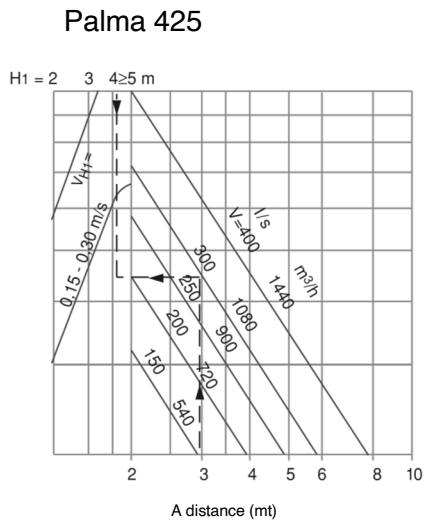
90° blade angle.



1m<sup>3</sup>/h=3,6 l/s

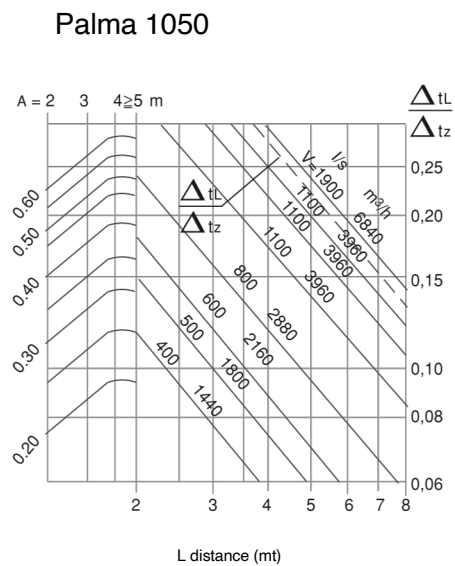
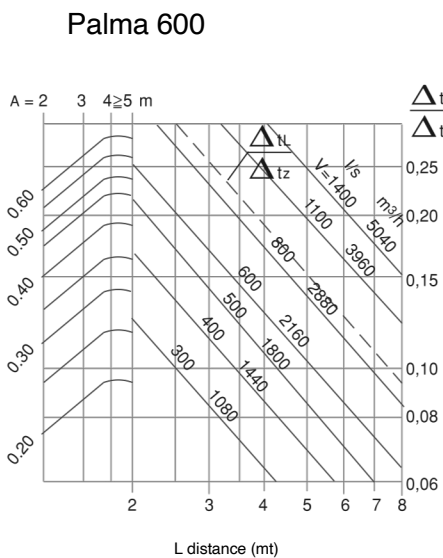
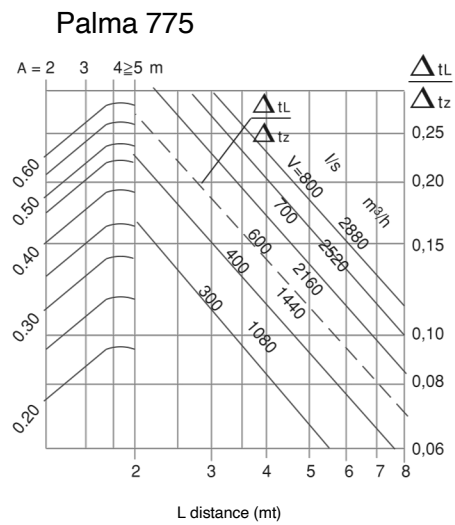
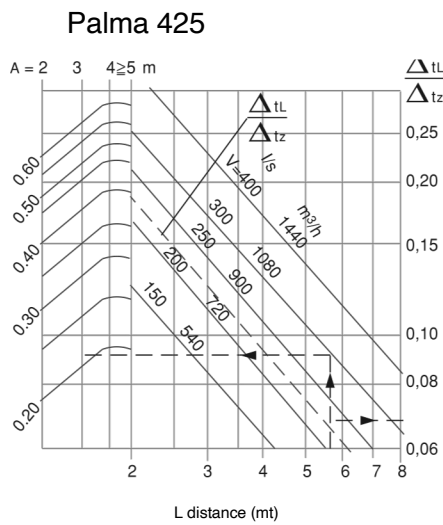
# Technical data

## High induction results according to blade angle / cooling temperature difference -10°



# Technical data

## Average velocity and temperature section on the wall / cooling temperature difference -10°





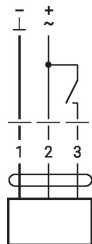


# Controller

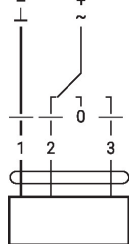
## Controller for motor-actuated air diffusers

The air diffuser is available with motorized actuation of the blade position via thermostat, or other external switch, control from horizontal to vertical air diffusion or vice versa.

**Wiring diagrams**  
AC/DC 24 V, open/close

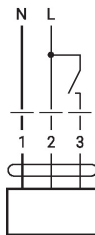


AC/DC 24 V, 3-point

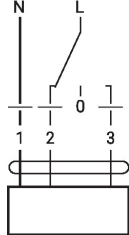


1	2	3		
			↓	↑
			↑	↓
			stop	stop
			↑	↓

**Wiring diagrams**  
AC 230 V, open/close



AC 230 V, 3-point



1	2	3		
			↓	↑
			↑	↓
			stop	stop
			↑	↓



## High Induction Ceiling Diffusers

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