

PRODUCT BROCHURE

SMARTEMP[®]
IN COMFORT



Jet Swirl Diffuser
JSC-AD

JSC-AD : 092022

smartemp.com

DESCRIPTION

The SMARTEMP® Jet Swirl Diffuser, type JSC-AD (figure 1), offers adjustable discharge direction from horizontal to vertical for extremely high discharge heights. In cooling mode, horizontal discharge with strong swirl produces high induction, diffusing the swirling air stream with strong mixing characteristics into the space. In heating mode, concentrated vertical supply air is discharged as a jet – without swirl – to achieve exceptionally long downward throw.

The JSC-AD diffuser is flush mounted in a ceiling or freely suspended (ie no Coanda attachment to the ceiling required). Cambered radial swirl vanes surrounding a central core tube that houses the adjustment mechanism are recessed within a round bell-mouth with suspended guide ring and integrated jet

straightener.

The JSC-AD diffuser is made of powder coated aluminium.

Diffuser discharge direction is adjustable (manual, with self-acting thermostatic element or electrically motorised) from a horizontally projecting swirl disc to a vertically projecting jet.

The diffuser is characterised by highly inductive swirl discharge when discharging horizontally, which achieves intense mixing as the highly turbulent supply air stream projects from the diffuser to be strongly diluted with large quantities of entrained room air. The discharge velocity breaks down rapidly. Enhanced draught-free comfort with uniform temperature distribution is achieved throughout the occupancy space. Vertical jet discharge allows

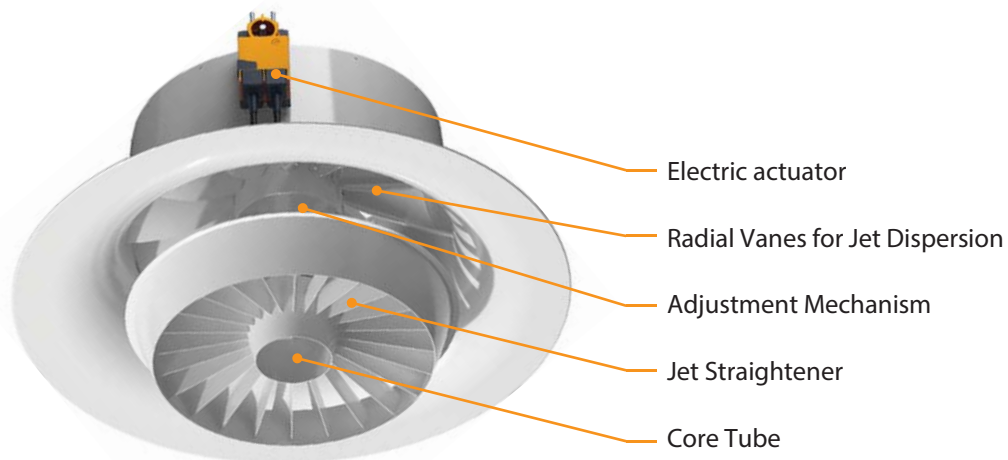
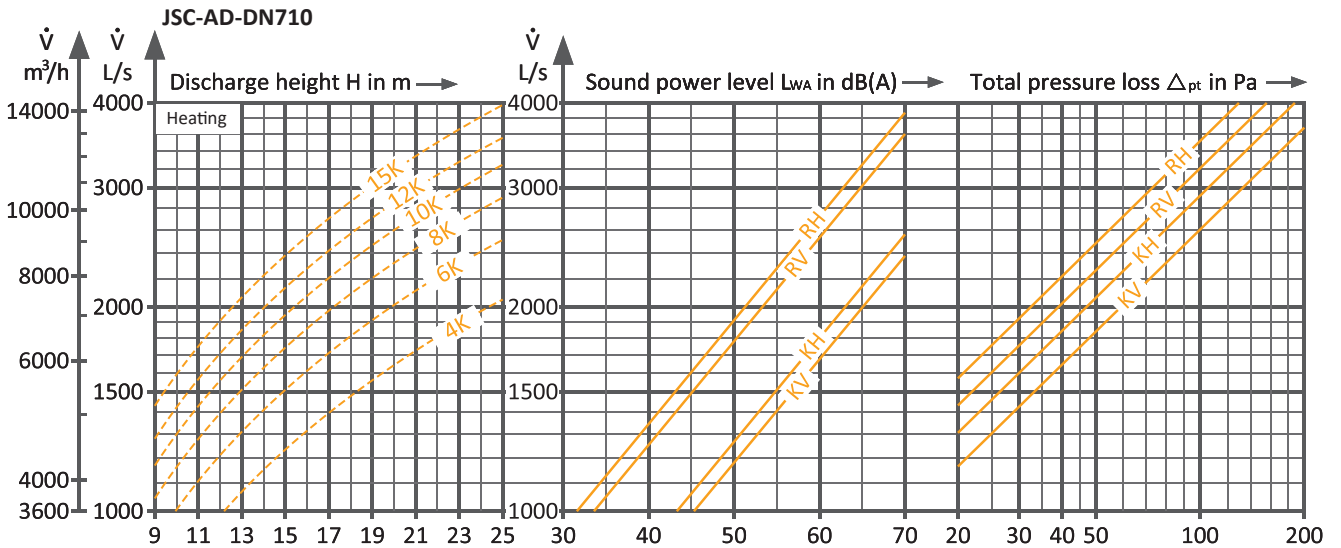
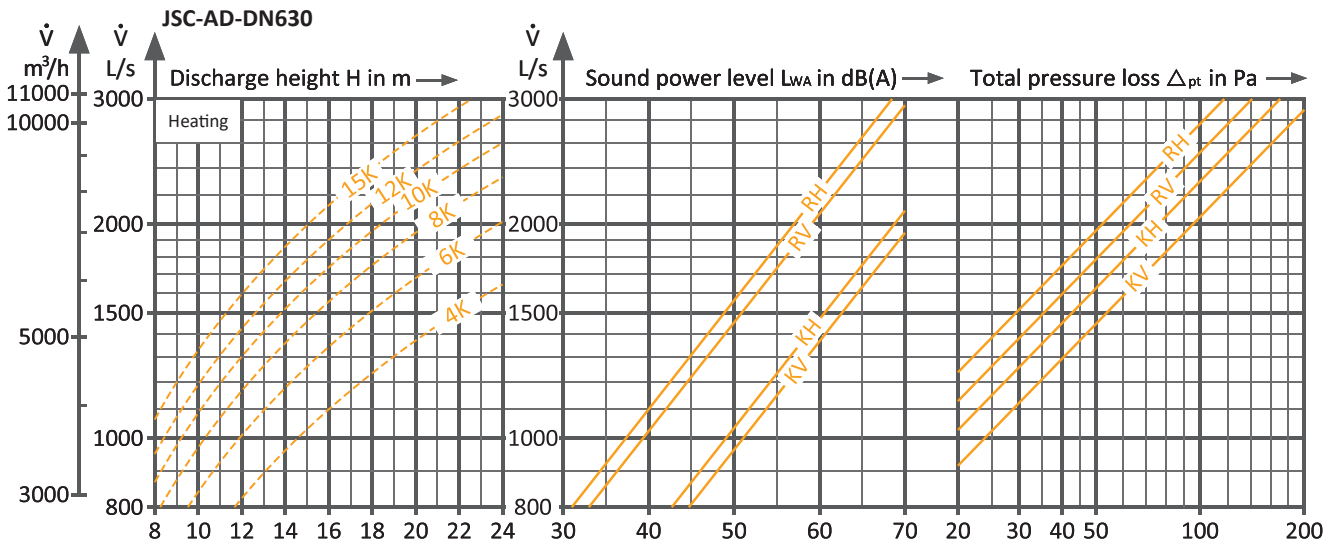
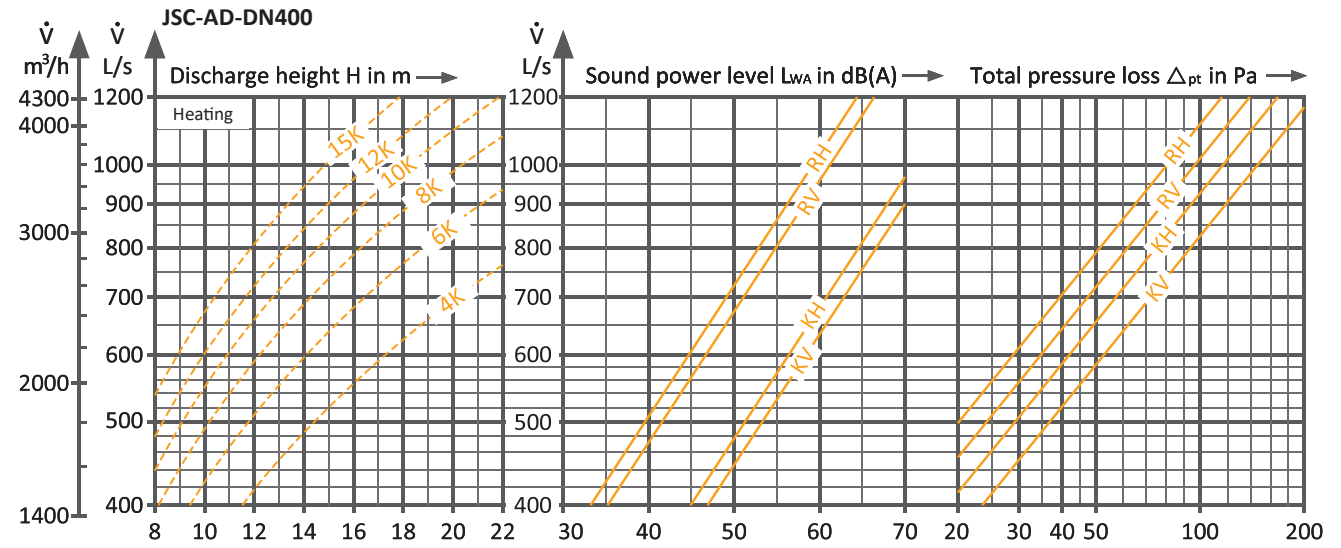


Figure 1

TECHNICAL DATA

Construction:	The JSC-AD swirl diffuser is available in three sizes. The diffuser comprises an outer neck and bellmouth incorporating curved aluminium radial vanes, a central control mechanism, and a guide ring with jet straightener. The guide ring with jet straightener can
Volume flow rate	300 - 2400 L/s
Available sizes:	DN400, DN630 and DN710
Discharge	8 - 22 m
Features:	<ul style="list-style-type: none">• Very large penetration depth when heating.• Adjustable discharge direction either manually, with self-acting thermal element or with electric actuator.• Highly inductive air pattern.

Quick selection guide. Refer to the online selection tool for detailed selections.



Notes:

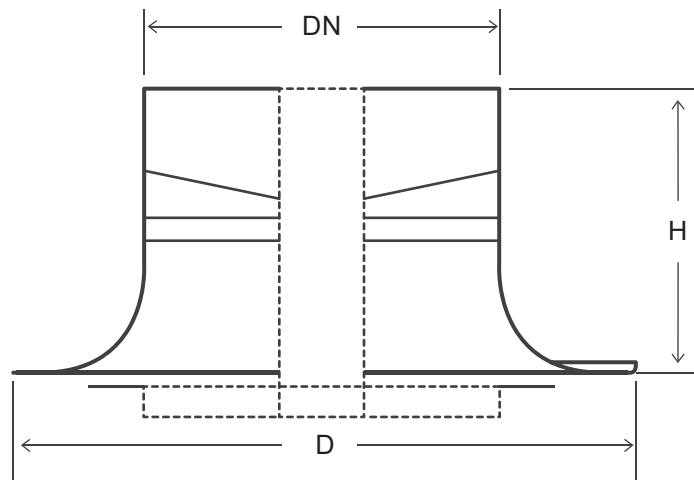
R = Round duct connection

H = Horizontal discharge

K = Connection box

V = Vertical discharge

TECHNICAL DATA



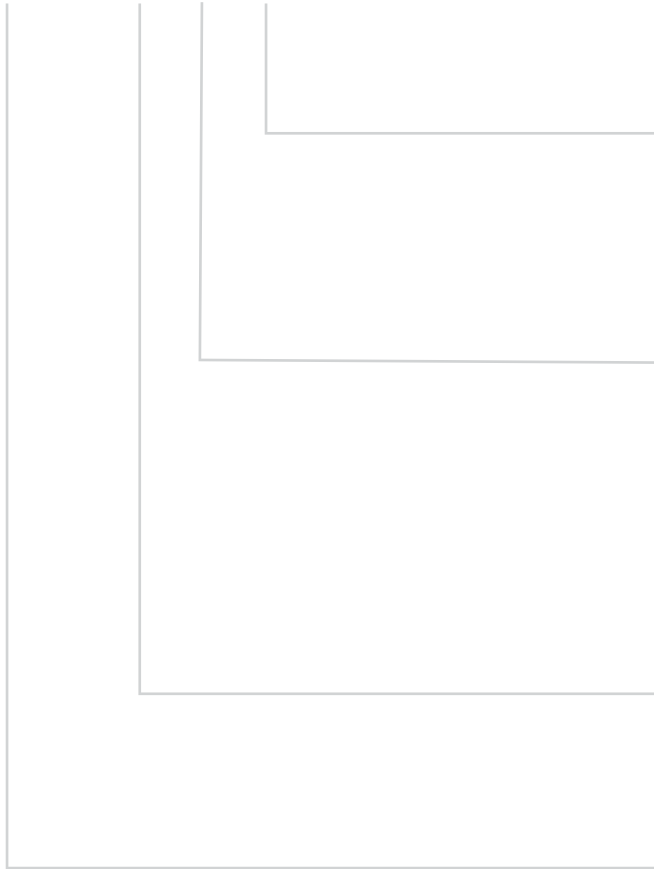
DIMENSIONS

Nominal Size	Face Dimension D [mm]	Height H [mm]	Actual Neck Diameter [mm]
DN400	724	356	398
DN630	1138	581	628
DN710	1285	650	708

Products supplied may differ slightly from those described in this technical brochure due to on-going product development.

ORDER DETAILS

JSC-AD-DN ___ - ___ - ___



FINISH:

- RAL ____

ADJUSTMENT:

- M* = Manual adjustment only.
- E1 = With electric actuator 24V, 2-10V.
- E2 = With electric actuator 24V, 3-pt (2-position).
- E3 = With electric actuator 230V, 2-10V.
- E4 = With electric actuator 230V, 3-pt (2-position).
- T = With thermal actuator

SIZE:

- DN400
- DN630
- DN710

MODEL:

- Jet Swirl Ceiling - Adjustable Direction

Note:

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