CIRCULAR DIFFUSERS ••••• Multicone circular diffusers for horizontal or vertical air discharge (adjustable core only). 43-SF: Circular diffuser with fixed cones. 44/45-SF: Circular diffusers with adjustable core (3 rings). 40.4/40.5-SF: Circular diffusers with adjustable core (2 rings). DAI: High induction diffuser, low primary air temperatures. 44-SF-TR: Thermo-adjustable circular diffuser.

LINEAR DIFFUSERS

Diffusers for installation in false ceiling preferably, for variable or constant air flow. Suitable for supply and extract air.

LK-70: Highly aesthetic diffuser with adjustable directional

S-74-18: Adjustable blades diffuser.

S-74-25: High capacity slot diffuser.

KLD: High capacity slot diffuser, fixed blades. KFD: High capacity slot diffuser, adjustable blades.

HIDE: Linear slot diffuser, 21 mm width slot.

DF-LIT-E: Invisible linear diffuser.

KLR. Linear slot diffuser equipped with cylindrical adjustable blades to achieve high induction rate.

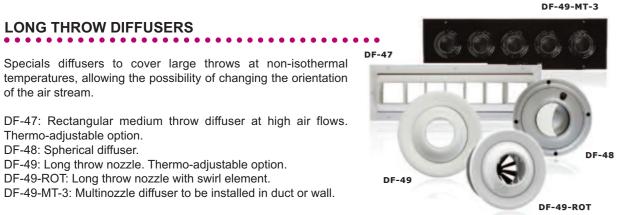
LONG THROW DIFFUSERS

Specials diffusers to cover large throws at non-isothermal temperatures, allowing the possibility of changing the orientation of the air stream.

DF-47: Rectangular medium throw diffuser at high air flows. Thermo-adjustable option.

DF-48: Spherical diffuser.

DF-49: Long throw nozzle. Thermo-adjustable option. DF-49-ROT: Long throw nozzle with swirl element. DF-49 DF-49-MT-3: Multinozzle diffuser to be installed in duct or wall.



•••••

Supply or Return linear bar grilles.

31-1 / 31-15: Horizontal fixed blades at 0° or 15°. Different frame widths (24, 20, 8,7 & 6,6 mm), SB (without frame).

31-HI: Reversible high induction rate linear bar grille.

31-1-F / 31-15-F: Linear bar floor grille.

31-FS: Heavy duty linear floor grille to replace floor technical tiles.

SQUARE DIFFUSERS

Square diffusers with removable central core to supply air in 4 directions.

50-FR-4: Made in aluminium / 51-FR-4: Made in steel.

51-FR-4-F: Fixed core diffuser, made in steel.

Diffusers with central core for integrating various components.

KLDQ: Four ways supply square diffuser. Made in aluminium.

KCDQ- PANEL KCDQ: Made in steel.

KLDQ-Panel: Allows to integrate a piece of tile replacement in the central core, made in aluminium.

KCDQ-Panel: Made in steel. KLDQ-I/R: Supply and return square diffuser in the same unit, made in aluminium.

KCDQ-I/R: Made in steel. KLDQ-I/R-PF: Supply and return square diffuser with an integrated filterholder in the

same unit, made in aluminium. KCDQ-I/R-PF: Made in steel.

KLDQ-FLASH: Supply square diffuser which allows to integrate lighting, made in aluminium

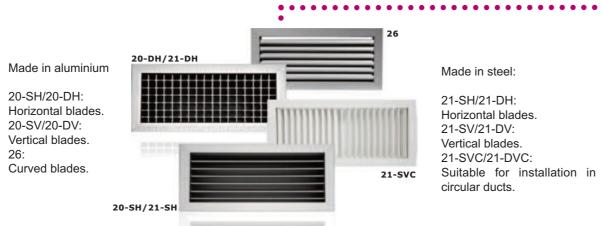
KCDQ-FLASH: Made in steel.

SUPPLY AIR GRILLES

21-45-H:

made in steel.

Horizontal fixed blades at 45°,



RETURN AIR GRILLES



FLOOR / STEP DIFFUSERS



Designed to ensure low noise levels, reduced air velocities and a moderate temperature gradient in the occupied zone. For variable or constant air volume installations.

DSA: Floor circular diffuser with swirl function, made in aluminium. DF-CP-MT: Multiple swirl diffuser for riser consist of a rectangular front plate incorporating 2 to 6 micro swirl diffusers, made in steel. DAFC-P: Swirl diffuser for riser or floor, made in steel. DFRE-P: Swirl diffuser for riser or floor, made in steel.

54-FR/54-FR-R

PERFORATED FACE DIFFUSERS

54-FR and 21-FR: Perforated face diffusers for supplying air, incorporates nterior directional plates.

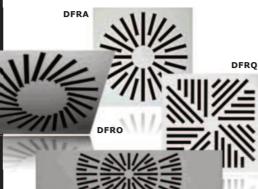
54-FR-R: Return diffuser.

LINEAR DIFFUSERS

DFKR: Linear diffuser integrated in rectangular plate. DLR: Linear slot diffuser with high induction rate.

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ADJUSTABLE BLADE SWIRL DIFFUSERS •••••



Adjustable blade swirl diffusers with high induction rate.

DFRO and DFRA models available from 12 to Ø 48 blades, DFRQ is available in 4 sizes (from 28 to 48 blades) and DFRA-OV integrated in rectangular plate.

> Suitable to be installed in circular, square or plasterboard ceilings and for variable or constant volume.

It can incorporate plenum.

DF-TR-R/V Thermo-adjustable swirl diffusers.

FIXED BLADE SWIRL DIFFUSERS ••••••

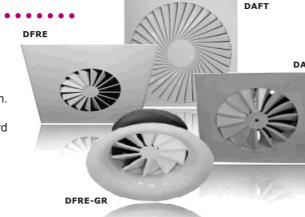
Fixed blade swirl diffusers with high induction rate.

Different designs available from Ø 125 mm to Ø 500 mm.

Suitable to be installed in circular, square or plasterboard ceilings.

Available with circular plenum.

DFRE-GR-PR



DECORATIVE FIXED BLADE SWIRL DIFFUSERS



Fixed blade swirl diffusers integrated in punched plate of special perf pattern with high induction rate.

Aesthetic core design, adapted to the requirements of the installation.

Different designs available from Ø 125 mm to Ø 500 mm.

Suitable to be installed in circular, square or plasterboard ceilings.

Available with circular plenum.

By moving its nozzles provides an optimum discharge in cooling (horizontal discharge) and heating (vertical discharge).

FLAT CIRCULAR DIFFUSER •••••••••

By moving its outer plate provides an optimum discharge in cooling (horizontal discharge) and heating (vertical discharge). Available with thermo-adjustable version.

CIRCULAR LINEAR SLOT DIFFUSER

MULTI-NOZZLE DIFFUSER



Supply linear slot diffuser integrated into a circular duct, suitable for variable or constant volume.

Equipped with adjustable blades by means of a wheel mechanism, allowing multiple air



••••••

VARIABLE GEOMETRY DIFFUSER ••••• The variable-geometry diffusers are suitable for high installations. They

provide an optimum discharge in cooling (horizontal discharge) and heating (vertical discharge) by moving an inner ring (DGV) or adjusting its blades (DVP and DFRE-GR-TR). DGV and DVP are available in three versions: manually, motorised or thermo-adjustable. DGV sizes from Ø 250 mm to Ø 630 mm and DVP from

Ø 125 mm to Ø 800 mm. DFRE-TR-GR is available in two versions: manually or thermo-adjustable.

DFRE-GR-TR sizes from Ø 160 mm to Ø 400 mm.

HIGH PERFORMANCE FILTER PLENUM

Plenum and diffusion element for high-performance filtering (HEPA).

These are available in different sizes including different types of diffusers (swirl, square, perforate plate...). Ceiling and wall



The range of security grilles are manufactured in line with the latest requirements of the

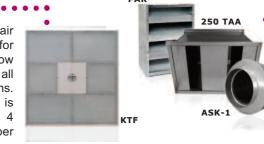
SECURITY GRILLES

Home Office and Ministry of Justice, for use in all areas requiring a robust grille.

They can be used in both supply and extract applications.

FILTRATION CEILING • • • • • • • • • • • • • • • •

The filtration ceiling is an air diffusion component for high-efficiency one-way flow filtration, in compliance with all applicable hospital regulations. The KTF filtering ceiling is suitable for risk 3 and 4 operating rooms as per NF S 90-351.



SILENCERS

ASK-1 and ASK-2: Circular silencers with or without central PAK, PBK, PAKM and PBKM:

Rectangular silencers. 250 TAA and 250 TAAD: Acoustic external louvre.

NON RETURN / PRESSURE RELIEF DAMPERS

Pressure relief damper (AR-200) blades open more or less depending on air velocities.

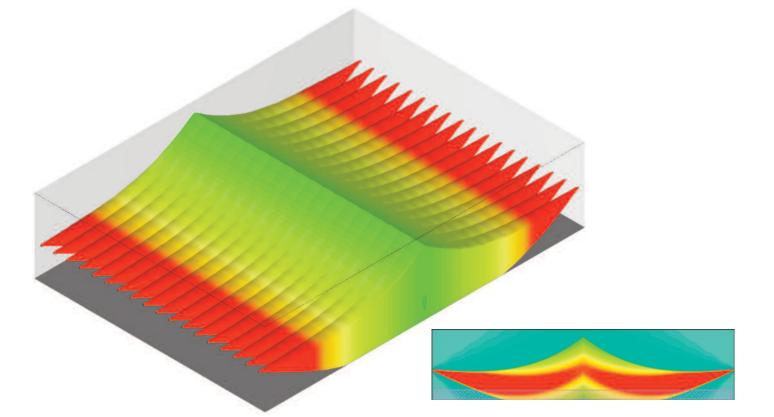
Pressure relief dampers (CSP-L, AR-200) keeping constant pressure in the duct, absorbing generated pressure increases when a diffusion element closes.



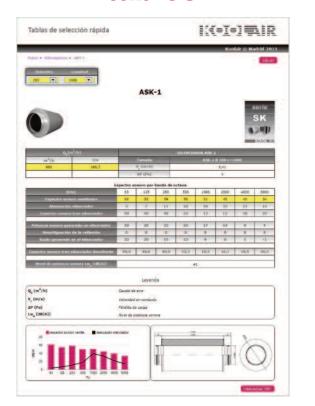




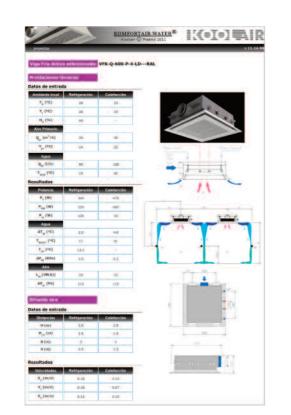
Komfortair 3D



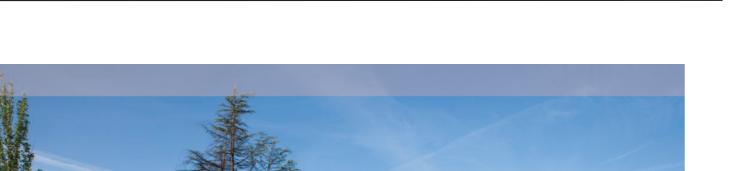
Quick selection tables



Komfortair-water



Selection software











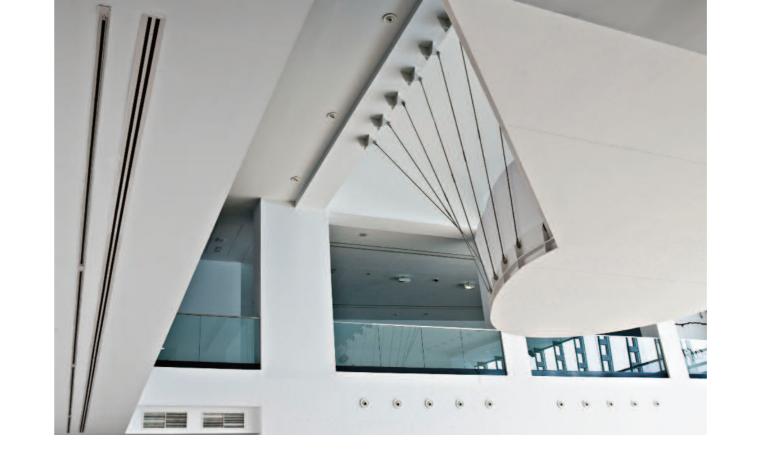




Koolair S.A.

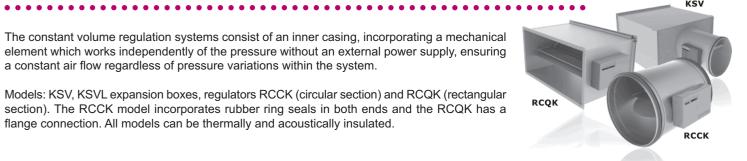
Polígono Industrial 2 La Fuensanta 28936 Móstoles (Madrid) ESPAÑA Tel +34 91 645 00 33 Fax +34 91 645 69 62 www.koolair.com email: info@koolair.com

Koolair product range



The constant volume regulation systems consist of an inner casing, incorporating a mechanical element which works independently of the pressure without an external power supply, ensuring a constant air flow regardless of pressure variations within the system.

Models: KSV, KSVL expansion boxes, regulators RCCK (circular section) and RCQK (rectangular section). The RCCK model incorporates rubber ring seals in both ends and the RCQK has a flange connection. All models can be thermally and acoustically insulated.



VARIABLE VOLUME

The variable volume regulation systems consist of a casing, which incorporates a control components as a volume damper, differential pressure cross sensor and a regulator-actuator. The elements are factory-fitted, set and calibrated in our facilities.

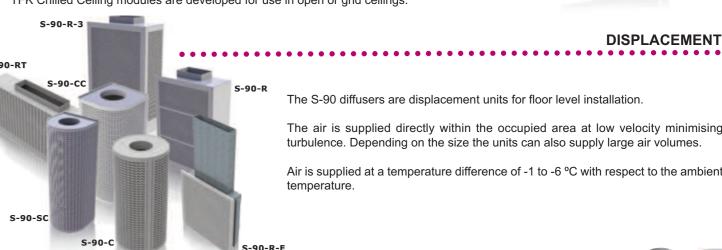
Models: KS and KSL expansion boxes, regulators RVV (circular section), RVV-Q and JVR (rectangular section). The RVV model incorporate rubber ring seals in both ends.

The EM measurement stations are elements designed to measure the air volume which

This equipment has a high degree of comfort in indoor environments with large internal loads on cooling. Selecting active chilled beams and inductor units give the advantage of using water for cooling or heating therefore providing an energy efficient and space-saving solution.

The active chilled beams VFK-600 and VFK-300 are designed to supply air through two linear slot diffusers and the VFK-Q in 4 directions. The IHK inductors are recommended for bulkhead and suspended ceiling installation, ideal for hotel guest rooms and hospitals. The VPK is a passive chilled beam. TFK Chilled Ceiling modules are developed for use in open or grid ceilings.





The S-90 diffusers are displacement units for floor level installation.

The air is supplied directly within the occupied area at low velocity minimising turbulence. Depending on the size the units can also supply large air volumes.

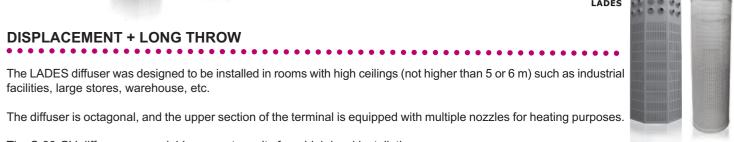
Air is supplied at a temperature difference of -1 to -6 °C with respect to the ambient

DISPLACEMENT + LONG THROW

The LADES diffuser was designed to be installed in rooms with high ceilings (not higher than 5 or 6 m) such as industrial facilities, large stores, warehouse, etc.

The diffuser is octagonal, and the upper section of the terminal is equipped with multiple nozzles for heating purposes

The S-90-GV diffusers are variable geometry units for a high level installation.



DISPLACEMENT