

31-45-Koanda-2D



Linear grille with fixed blades at 45° in 2 directions



Product description

KOOLAIR **31-45-20-Koanda-2D** two-way air supply linear grille for ceiling installation: fixed blades at 45° and a 20x1.5 mm flat frame to fit flush with wall. Anodised aluminium finish or painted in RAL colour (to be defined). The main advantage of the grille is that it achieves the Coanda effect, i.e. when the grille is installed in the ceiling, the air jet adheres to the ceiling (horizontal air outlet). Annoying draughts in the occupied zone are therefore avoided and the air jet reaches further compared to conventional ceiling grilles (e.g. single/double deflection etc.). Another standout feature is the pleasing aesthetic appearance created by the continuous lines of the inclined blades, which block the view of the duct or plenum interior to a large extent. To ensure a perfect adhesion of the air jet to the ceiling, we recommend installing the grille with a PE type, standardised galvanised sheet steel plenum box.

Other models

31-45-20-Koanda-2D. Linear grille with blades fixed at 45° for supplying air in 2 directions, with Coanda effect, with 20x1.5 mm frame.

31-45-11-Koanda-2D. Linear grille with blades fixed at 45° for supplying air in 2 directions, with Coanda effect, with 11x5 mm frame.

31-45-Koanda-Placa-2D. Linear grille with blades fixed at 45° for supplying air in 2 directions, with Coanda effect, integrated in ceiling tile LxH (600x600, 1200x300 mm...).

Mounting

With clips. Mounting frame required (-MM).

T. With screws. The grille is pre-drilled for fixing with screws. Only available with the 20 mm frame.

PM. Mounting brackets

PE21. Galvanised sheet steel plenum with lateral connection.

PE20. Galvanised sheet steel plenum with top connection.

PDL. Plenum box with lateral grille connection by means of mounting brackets.

PDS. Plenum box with top grille connection by means of mounting brackets.

Accessories

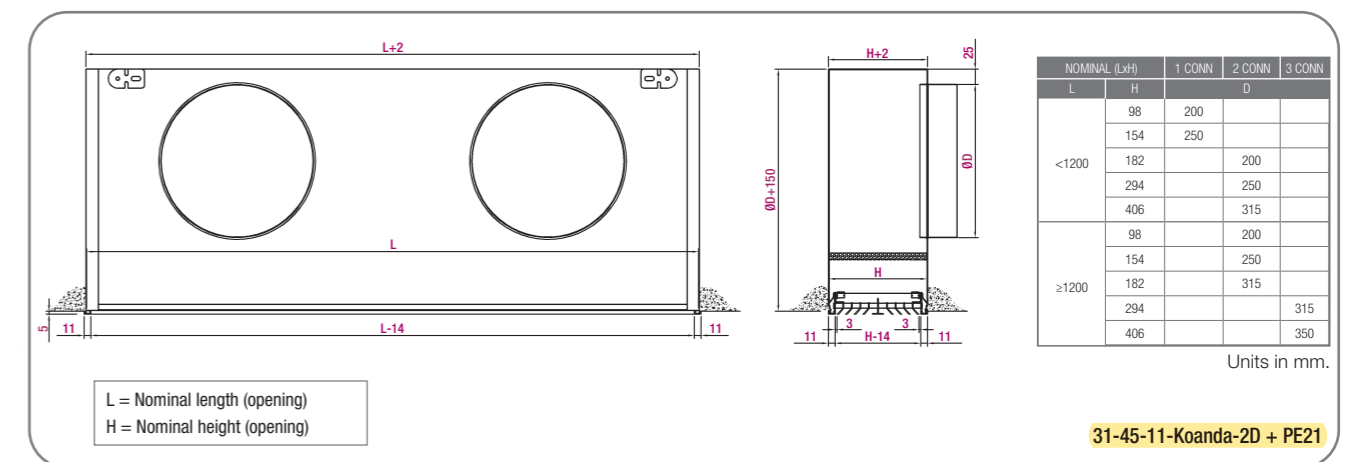
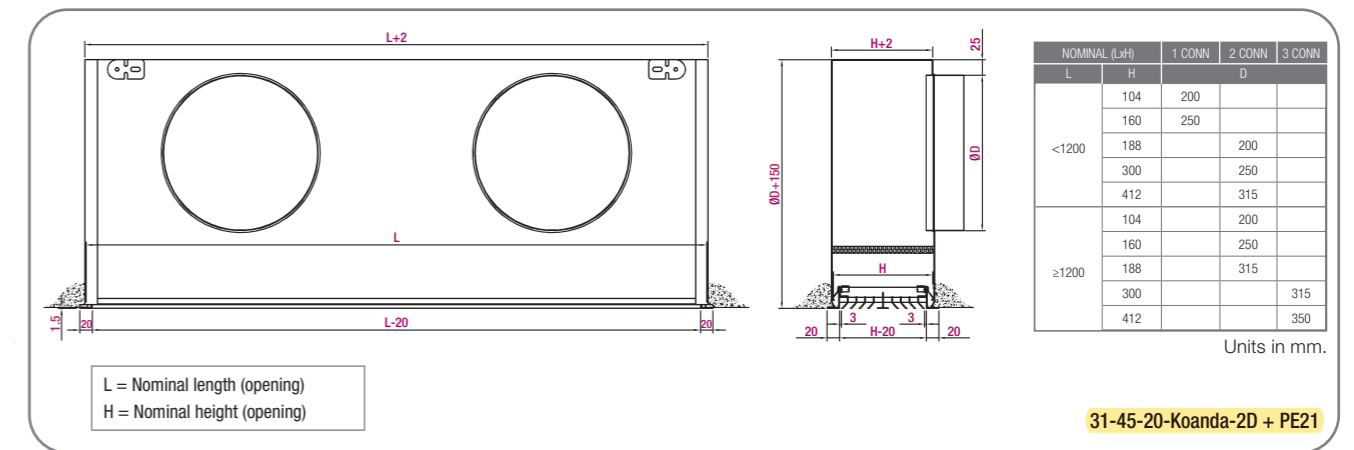
(-RL.) Control damper at the plenum box connection, accessible from below.

(-A.) Internal insulation in the plenum box

(-O.) Manual damper with opposed blades.

Note: Possibility of forming continuous lines (Maximum length per section 2000 mm).

General dimensions



Selection table

| Size | Q (m³/h) | L _{WA} [dB(A)] | ΔP _t (Pa) | X (m) | V _k (m/s) |
|------------|----------|-------------------------|----------------------|-------|----------------------|
| 1000 x 104 | 260 | 24 | 7 | 1,0 | 2,1 |
| | 350 | 32 | 13 | 1,4 | 2,9 |
| | 470 | 40 | 24 | 1,9 | 3,8 |
| 1000 x 160 | 470 | 24 | 9 | 1,5 | 2,3 |
| | 620 | 32 | 16 | 1,9 | 3,1 |
| | 810 | 40 | 27 | 2,5 | 4,0 |
| 1000 x 188 | 610 | 24 | 7 | 1,5 | 2,0 |
| | 810 | 32 | 13 | 2,0 | 2,7 |
| | 1080 | 40 | 23 | 3,3 | 3,6 |
| 1000 x 300 | 940 | 24 | 6 | 2,0 | 2,1 |
| | 1250 | 32 | 10 | 2,6 | 2,8 |
| | 1700 | 40 | 19 | 3,5 | 3,9 |
| 1000 x 412 | 1180 | 24 | 3 | 2,1 | 2,0 |
| | 1560 | 32 | 5 | 2,8 | 2,7 |
| | 2100 | 40 | 9 | 3,8 | 3,6 |

LEGEND

Q (m³/h): Air flow.

L_{WA} [dB(A)]: Sound power level.

ΔP_t (Pa): Total pressure loss.

X (m): Horizontal range with a maximum velocity in occupied zone of 0.25 m/s, realising Coanda effect, thermal gap ΔT = -10°C (cold) and an installation height of 2.7 m, with ceiling effect.

V_k (m/s): Effective velocity.

The selection table reflects the technical data for the model: **31-45-20-Koanda-2D** (Data with plenum). Please check with the Sales Department or online selection software for the availability of other sizes.