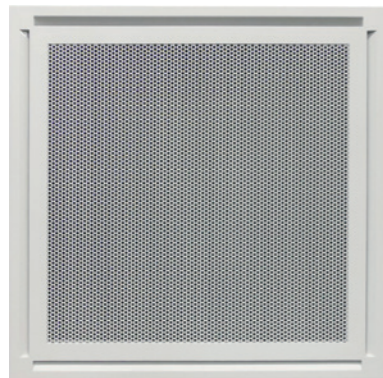


KCD-Q-I/R



Four-way square diffuser for supply/return air

Product description

KOOLAIR four-way square diffuser, model **KCD-Q-IR**, size 595x595 or 675x675, with ___ no. of ways (1 to 4), for supply and return connections integrated in the same unit. Designed for installations with variable or constant volume flow. Diffuser equipped with two independent galvanised sheet steel plenums for supply and return air. Available on request with regulating damper in the supply connection, accessible from the false ceiling (-RE). Perforated sheet metal central core. Lateral or axial connections. Wide range of RAL colours available. Possibility of manufacturing custom sizes and number of ways as specified. Recommended installation height between 2.5 and 4 m.

Other models

KCD-Q-I/R-FF. Four-way square diffuser with 1, 2, 3 or 4 ways, to integrate supply and return air in the same unit. Central core made of foldable perforated plate with push&pull system or magnets with filter holders. Standard dimensions 595x595 and 675x675.

KCD-Q-I/R-FF L x H. Four-way square diffuser with 1, 2, 3 or 4 ways, to integrate supply and return air in the same unit. Central core made of foldable perforated plate with push&pull system or magnets with filter holders. Dimensions L x H mm to be determined and on request.

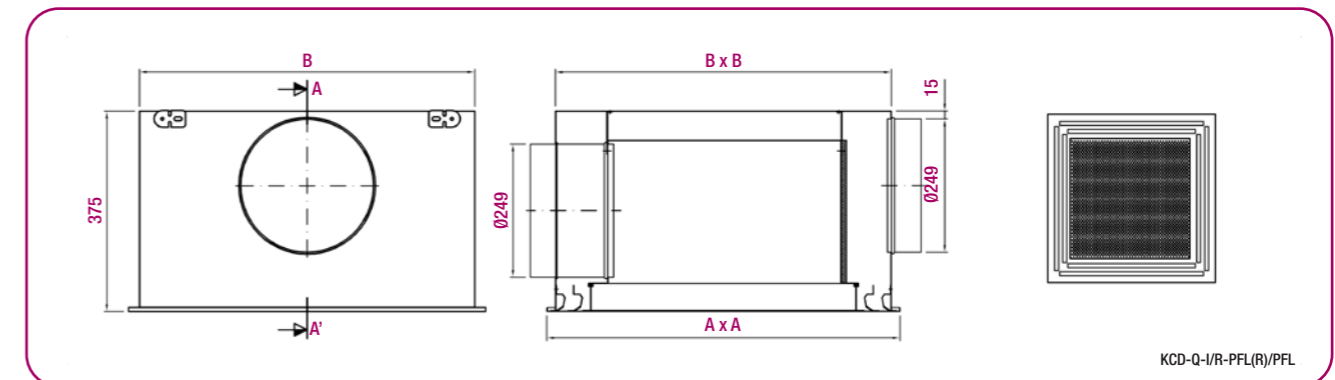
Mounting

- PFL(R)/PFL**. Fixed plenum box with side connections for supply and return.
- PFS(R)/PFL**. Fixed plenum box with axial connection for return and side connection for supply.
- PFL(R)/PFS**. Fixed plenum box with side connection for return and axial connection for supply.

Accessories

- A**. Insulated plenum box.
- RE**. With regulating damper accessible from false ceiling.
- G2**. Filtration efficiency G2.
- G3**. Filtration efficiency G3.
- G4**. Filtration efficiency G4.

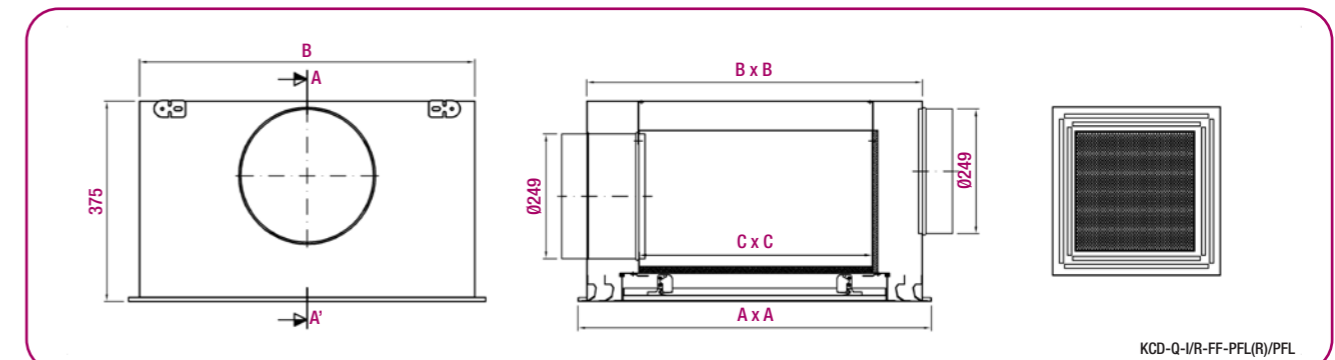
General dimensions



DIFFUSER	SLOTS	A	B
600 x 600	1	595	566
600 x 600	2	595	566
600 x 600	3	595	566
600 x 600	4	595	566

DIFFUSER	SLOTS	A	B
675 x 675	1	670	631
675 x 675	2	670	631
675 x 675	3	670	631
675 x 675	4	670	631

Unit mm



DIFFUSER	SLOTS	C x C	A	B
600 x 600	1	422 x 422	595	566
600 x 600	2	358 x 358	595	566
600 x 600	3	294 x 294	595	566
600 x 600	4	232 x 232	595	566

DIFFUSER	SLOTS	C x C	A	B
675 x 675	1	497 x 497	670	631
675 x 675	2	433 x 433	670	631
675 x 675	3	369 x 369	670	631
675 x 675	4	305 x 305	670	631

Unit mm

Selection table 600x600

Slots	Q (m³/h)	Supply			Return without filter		Return with filter	
		L _{wa} [dB(A)]	ΔP (Pa)	X (m)	L _{wa} [dB(A)]	ΔP ₁ (Pa)	ΔP ₂ (Pa)	
1	165	24	2	0,9	<20	1	1	
	220	32	4	1,2	<20	2	2	
	300	40	7	1,6	<20	3	3	
2	280	24	4	1,1	<20	3	4	
	380	32	6	1,5	24	6	8	
	510	40	12	2,1	31	10	14	
3	380	24	7	1,3	25	7	11	
	520	32	13	1,8	32	13	19	
	700	40	23	2,4	39	23	33	
4	480	24	5	1,5	31	13	23	
	650	32	10	2,0	38	24	39	
	875	40	17	2,7	45	43	67	

Selection table 675x675

Slots	Q (m³/h)	Supply			Return without filter		Return with filter	
		L _{wa} [dB(A)]	ΔP (Pa)	X (m)	L _{wa} [dB(A)]	ΔP ₁ (Pa)	ΔP ₂ (Pa)	
1	200	24	7	0,7	<20	1	1	
	270	32	13	1,0	<20	3	3	
	360	40	23	1,3	22	4	4	
	340	24	9	1,1	21	4	5	
2	450	32	15	1,4	27	7	9	
	600	40	27	1,9	34	13	16	
	450	24	9	1,3	28	8	11	
3	600	32	17	1,7	35	14	19	
	810	40	30	2,4	42	26	33	
	570	24	11	1,6	34	15	22	
4	750	32	18	2,1	41	26	37	
	1010	40	33	2,8	48	48	64	

LEGEND

Q (m³/h): Air flow. L_{wa} [dB(A)]: Sound power level. ΔP (Pa): Pressure loss. ΔP₁ (Pa): Pressure loss without filter (KCD-Q-I/R). ΔP₂ (Pa): Pressure loss with filter with efficiency G2 (KCD-Q-I/R-FF). X (m): Horizontal range of air jet for a maximum velocity of 0.25 m/s in occupied zone. Thermal gap ΔT = 0° C and an installation height of 2.8m.