

# Perforated diffuser - rectangular

# CRA



## Description

Comdif CRA is a rectangular perforated displacement diffuser for installation against a wall or column. CRA has a rectangular connection and therefore has a limited depth, making it ideal for installation in premises where a discrete appearance is required. Behind the perforated front plate, CRA is equipped with individually adjustable nozzles, making it possible to alter the geometry of the near zone. The diffuser can be turned and has a rectangular duct connection, so the diffuser can be connected at the top or bottom. The connection duct CRAZ with a circular connection is available as an accessory. The diffuser is suitable for the supply of large volumes of moderately cooled air.

- The diffuser is suitable for the supply of large volumes of air.
- The geometry of the near zone can be adjusted using adjustable nozzles
- Duct connections and plinths can be supplied as accessories

## Maintenance

The front plate can be removed from the diffuser, making it possible to clean the nozzles. The visible parts of the diffuser can be wiped with a damp cloth.

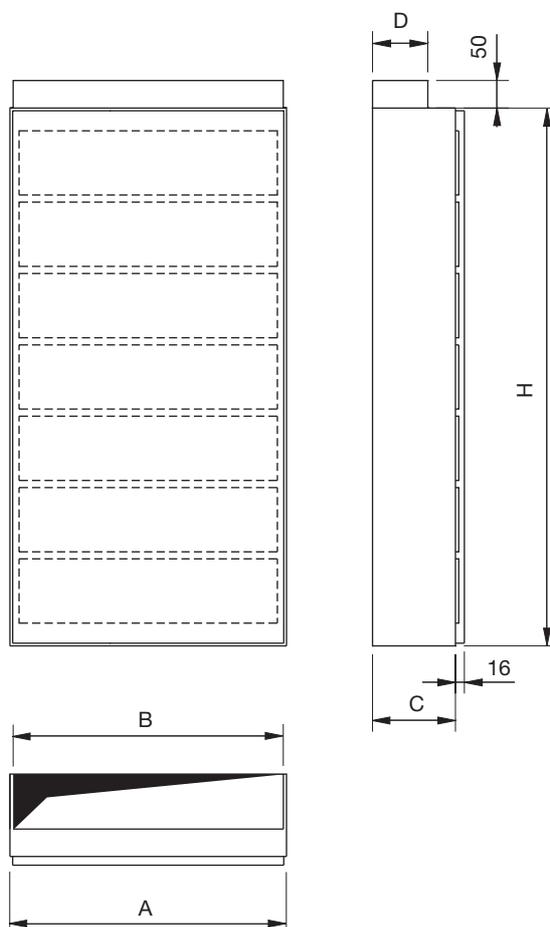
## Order code

|                |            |             |
|----------------|------------|-------------|
| <b>Product</b> | <b>CRA</b> | <b>aaaa</b> |
| Type           |            |             |
| Size           |            |             |

## Order - accessories

Connection duct: CRAZ - 1 - size  
 Plinth: CRAZ - 2 - size

## Dimensions



| Size | A mm | B mm | C mm | D mm | H mm | Weight kg |
|------|------|------|------|------|------|-----------|
| 3010 | 300  | 278  | 150  | 98   | 980  | 10,0      |
| 5010 | 500  | 478  | 150  | 98   | 980  | 17,0      |
| 8010 | 800  | 778  | 150  | 98   | 980  | 27,0      |
| 8020 | 800  | 778  | 250  | 198  | 2020 | 32,0      |

## Accessories

Can be supplied with duct connection and plinth.

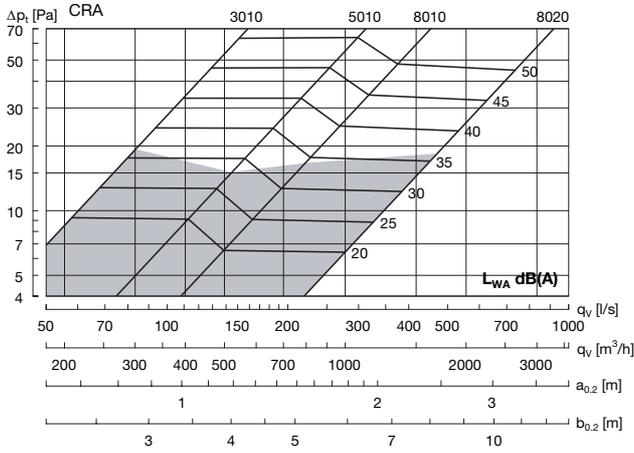
## Materials and finish

Diffuser: Galvanised steel  
 Nozzles: Black plastic  
 Front plate: 1,5 mm galvanised steel  
 Standard finish: Powder-coated  
 Standard colour: RAL 9010 - white, gloss 30

The diffuser is available in other colours. Please contact Lindab's sales department for further information.

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## Technical data



Recommended maximum volume flow

The near zone is given at an under-temperature of -3 K to a maximum terminal velocity of 0.20 m/s.

Conversion to other terminal velocities - see table 1, correction of the near zone for -3 K and -6 K respectively.

### Sound effect level

Sound effect level  $L_W$  [dB] =  $L_{WA} + K_{ok}$

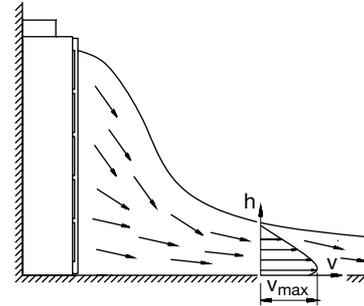
| Size | Centre frequency Hz |     |     |     |     |     |     |     |
|------|---------------------|-----|-----|-----|-----|-----|-----|-----|
|      | 63                  | 125 | 250 | 500 | 1K  | 2K  | 4K  | 8K  |
| 3010 | 9                   | -1  | 5   | -1  | -11 | -17 | -30 | -41 |
| 5010 | 7                   | 1   | 4   | 0   | -11 | -19 | -32 | -42 |
| 8010 | 15                  | 0   | 4   | 0   | -12 | -20 | -31 | -43 |
| 8020 | 10                  | 4   | 6   | -2  | -11 | -21 | -33 | -39 |

### Sound attenuation

Sound attenuation  $\Delta L$  [dB] including end reflection.

| Size | Centre frequency Hz |     |     |     |    |    |    |    |
|------|---------------------|-----|-----|-----|----|----|----|----|
|      | 63                  | 125 | 250 | 500 | 1K | 2K | 4K | 8K |
| 3010 | 11                  | 7   | 6   | 4   | 2  | 2  | 1  | 2  |
| 5010 | 10                  | 6   | 6   | 4   | 2  | 2  | 1  | 2  |
| 8010 | 10                  | 6   | 4   | 3   | 2  | 1  | 1  | 1  |
| 8020 | 7                   | 4   | 3   | 2   | 1  | 1  | 1  | 1  |

## Nearzone



Large diffusion (factory setting)

Small diffusion

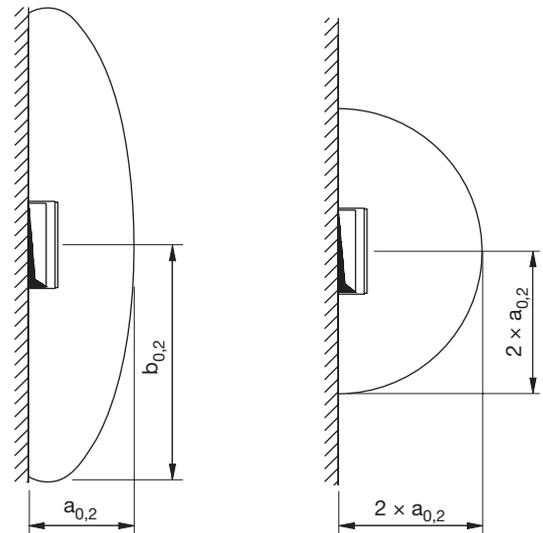


Table 1 Correction of the near zone ( $a_{0,2}$ ,  $b_{0,2}$ )

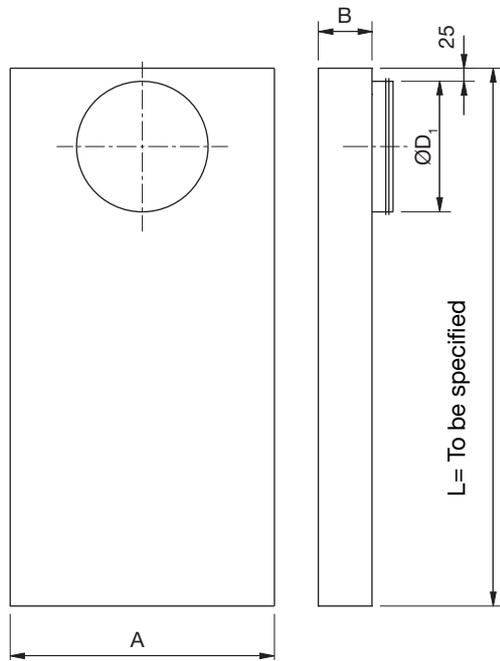
| Under-temperature $T_f - T_r$ | Maximum velocity m/s | Mean velocity m/s | Correction factor |
|-------------------------------|----------------------|-------------------|-------------------|
| -3K                           | 0.20                 | 0.10              | 1.00              |
|                               | 0.25                 | 0.12              | 0.80              |
|                               | 0.30                 | 0.15              | 0.70              |
|                               | 0.35                 | 0.17              | 0.60              |
|                               | 0.40                 | 0.20              | 0.50              |
| -6K                           | 0.20                 | 0.10              | 1.20              |
|                               | 0.25                 | 0.12              | 1.00              |
|                               | 0.30                 | 0.15              | 0.80              |
|                               | 0.35                 | 0.17              | 0.70              |
|                               | 0.40                 | 0.20              | 0.60              |

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CRA

## Accessories

### Connection duct CRAZ-1



| Size | A<br>mm | B<br>mm | ØD <sub>1</sub><br>mm | Weight<br>kg/m |
|------|---------|---------|-----------------------|----------------|
| 3010 | 280     | 100     | 200                   | 5,0            |
| 5010 | 480     | 100     | 250                   | 7,0            |
| 8010 | 780     | 100     | 315                   | 9,0            |
| 8020 | 780     | 200     | 400                   | 11,0           |

## Order code

| Connection duct | CRAZ-1   | aaaa   | bbbb | c |
|-----------------|--|--------|------|---|
| Type            |  |        |      |   |
| Size            |  |        |      |   |
| Length          | According to dimensions in mm<br>L=max. 2,000 mm |        |      |   |
| Connection      | Front<br>Back (Standard)                         | 0<br>1 |      |   |