SCHAKO
KLIMA-LUFT

# Ceiling induction diffuser

## DISA-360

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# Ceiling induction diffuser DISA-360

**Contents**

# Ceiling induction diffuser DISA-360

## Description

The ceiling induction diffuser DISA-360 is based on air/water technology and works by the energy-efficient induction principle. Its four-way throw of the cooled and heated air fulfills maximum performance and comfort requirements. The construction is very maintenance-friendly and is also suitable for low false ceiling heights, due to its small height. 4 different nozzle configurations B, C, D, E and two sizes 600 x 600 and 600 x 1200 allow the DISA-360 to be adjusted to almost any performance requirements and grid ceiling sizes.

The cold water supply temperature must be selected such that it does not fall below the dew point, which may make it necessary to install protective devices (condensate monitors).

The register of the DISA-360 can be swivelled downwards if the flexible connecting hoses are long enough.

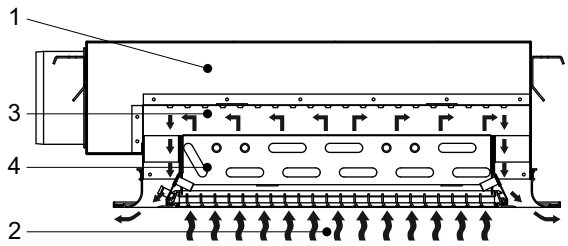
## Advantages

- 4-way throw for optimum air distribution and excellent reduction in temperature
- High energy efficiency
- High performance (compensation of high thermal loads)
- Compact dimensions and low height
- Saving in energy by means of reduced primary air
- Low noise level
- low mounting and maintenance expenditure

## Function

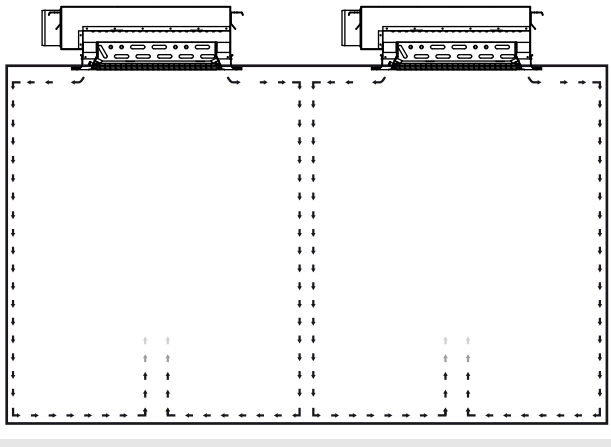
The primary air (1) supplied from the plenum box induces secondary air in the room (2), which is cooled or heated via the register (4).
The primary air is mixed with the cooled secondary air.
The combined (3) primary (external) and secondary air (room air) flows are supplied to the room at low velocity via 4 linear supply air slots.

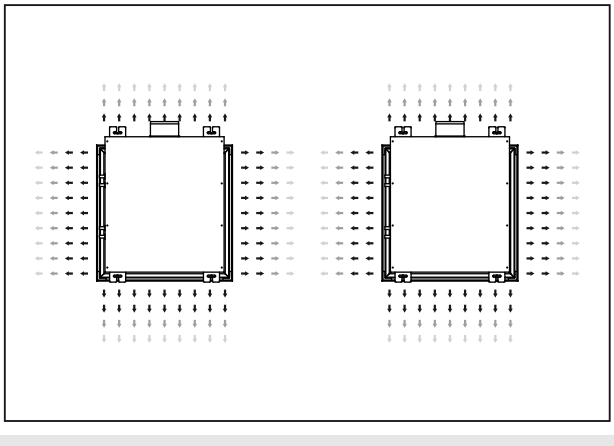
**Schematic diagram of the mode of operation**




1 Primary air
2 Room air
3 Secondary air
4 Heat exchanger

**Schematic diagram of the jet path**





# Ceiling induction diffuser DISA-360

## Description of the equipment

### Construction

Housing

- Galvanised steel sheet with 1 or 2 primary air connecting pieces ø98, ø123 (standard).
- Connection pipe position primary air:
  - Horizontal (-H)
  - Vertical (-V)
- Connection pipe arrangement primary air:
  - 1 horizontal connecting piece in the middle (-AS1, standard)
  - 1 vertical connecting piece in the middle (-AS4)
  - 2 horizontal connecting pieces (-AS2 / AS3)
  - 2 vertical connecting pieces (-AS5 /-AS6)

Slot

- Extruded aluminium profile painted to RAL 9010 (white, standard)

Perforated sheet grille (-SR/-SQ/-RE/-OB)

- Galvanised sheet steel perforated sheet grille painted to RAL 9010 (white, standard) with different perforated sheet grille designs

Louvre grid (-PA)

- Extruded aluminium profile painted to RAL 9010 (white, standard)

Heat exchanger

- 2-pipe system (cooling or heating) or optionally 4-pipe system (cooling and heating)
  - Galvanised sheet steel frame
  - Aluminium blades
  - Copper pipes ø 12 mm
  - Connection Cu, d=12 x 1.0 smooth
  - painted RAL 9005 (black, optional)

### Model

| | | |
|---|---|---|
| DISA-360-H | - | 2-pipe system (standard) |
| DISA-360 -HT | - | 4-pipe system |
| DISA-360-BO | - | Without register |
| DISA-...-LE | - | With individually adjustable air deflection blades |
| DISA-...-LB | - | Blockwise adjustable air deflection blades |
| DISA-...-SR | - | Foldable perforated sheet, perforation Ø 6 mm (standard) |
| DISA-...-SQ | - | Foldable perforated sheet, perforation 8x8 mm |
| DISA-...-RE | - | Foldable perforated sheet, perforation 12x5 mm |
| DISA-...-OB | - | Foldable perforated sheet, oval perforation 18x6 mm |
| DISA-...-PA | - | Foldable louvre grid type PA |
| DISA-...-B | - | Nozzle configuration B (Technical data p. 8, 12, 16 , 17 and 18) |
| DISA-...-C | - | Nozzle configuration C (Technical data p. 9, 13, 16 , 19 and 20) |
| DISA-...-D | - | Nozzle configuration D (Technical data p. 10, 14, 16 , 21 and 22) |
| DISA-...-E | - | Nozzle configuration E (Technical data p. 11, 15, 16 , 23 and 24) |
| DISA-...-592 | - | Total width 592 mm |
| DISA-...-597 | - | Total width 597 mm |
| DISA-...-617 | - | Total width 617 mm |
| DISA-...-622 | - | Total width 622 mm |
| DISA-...-592 | - | Total length 592 mm |
| DISA-...-597 | - | Total length 597 mm |
| DISA-...-617 | - | Total length 617 mm |
| DISA-...-622 | - | Total length 622 mm |
| DISA-...-1192 | - | Total length 1192 mm |
| DISA-...-1197 | - | Total length 1197 mm |
| DISA-...-1242 | - | Total length 1242 mm |
| DISA-...-1247 | - | Total length 1247 mm |
| DISA-...-FM | - | Freely suspended installation |

### Accessories

Rubber lip seal (-GD)

Flexible connection hoses

- 500 mm (-FA 500)
- 800 mm (-FA 800)
- 1200 mm (-FA1200)

External thread flat sealing (-WA 1/2)

Volumetric flow measuring tube (-MR)

Control units

- Valves
- Actuators
- Room temperature control
- Condensation detector

### Fastening

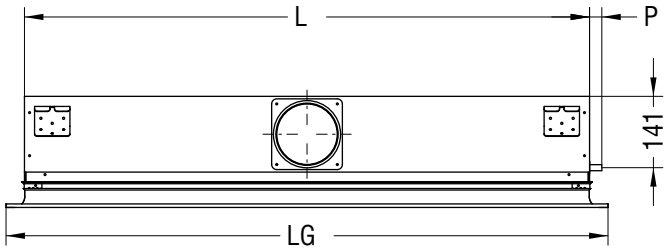
Fixing lugs

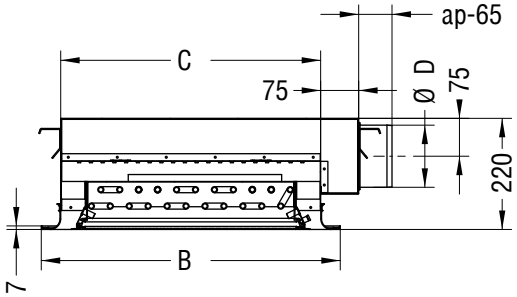
- for easy suspension of the induction diffuser

# Ceiling induction diffuser DISA-360

## Models and dimensions

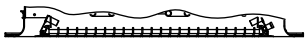
### Dimensions and weights



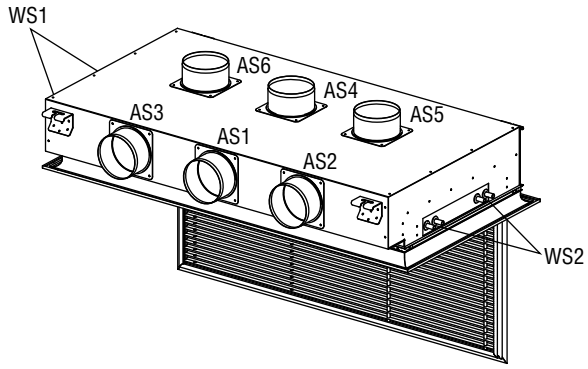

| | BxLG | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 592x592 | 592x1192 | 597x597 | 597x1197 | 617x617 | 617x1242 | 622x622 | 622x1247 |
| **L** (mm) | 519 | 1119 | 524 | 1124 | 519 | 1144 | 524 | 1149 |
| **C** (mm) | 515 | | 520 | | 515 | | 520 | |
| **D** (mm) | 98 / 123 | | | | | | | |
| **P** (mm) | 24 | 24 | 22 | 22 | 24 | 12 | 22 | 9 |
| **-FM** (mm) | 900x900 | 900x1500 | 900x900 | 900x1500 | 900x900 | 900x1500 | 900x900 | 900x1500 |

**with perforated sheet grille (-SR/-SQ/-RE/-OB)**

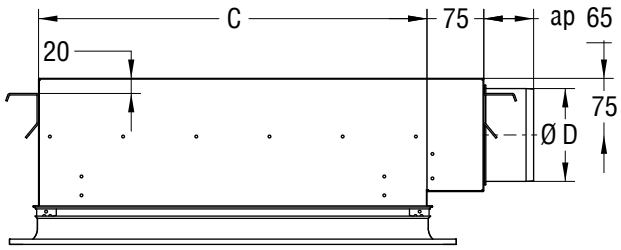


**with louvre grid (-PA)**

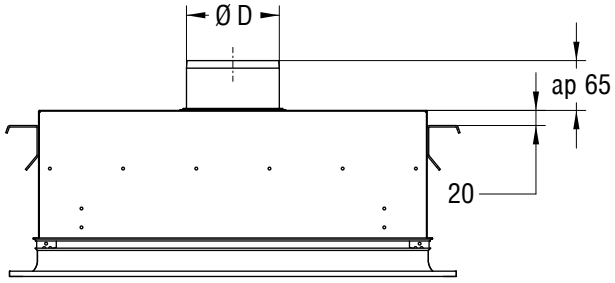
**Arrangement of the connection pipes (-AS) and water connection (-WS)**




**Horizontal connection (-H)**




**Vertical connection (-V)**




**Number/position of the connection pipes**

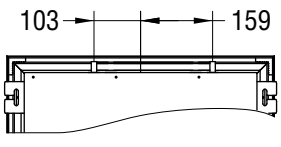
- with horizontal connection (**-H**)
  - with 1 central connecting piece (-**AS1**)
  - with 2 connecting pieces (**-AS2/AS3**)
- with vertical connection (**-V**)
  - with 1 central connecting piece (-**AS4**)
  - with 2 connecting pieces (**-AS5/AS6**)

**Number/position of the water connections**

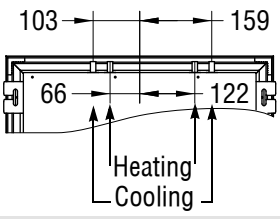
- with 2 water connections (2-pipe system, standard)
- with 4 water connections (4-pipe system)
- lateral left (-**WS1**)
- lateral right (-**WS2**)

**Hydraulic connections**

**DISA-360-H (2-pipe)**




**DISA-3604-pipe (-HT)**




**Weights DISA-360**

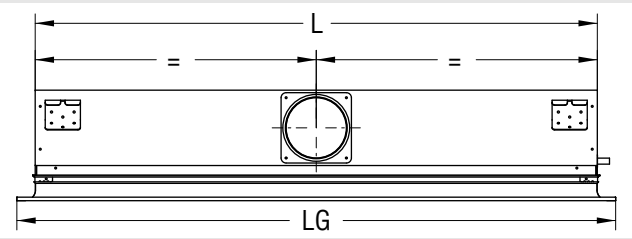
| NL | 600 | 1200 |
|---|---|---|
| **Weights** [1] (kg) | 14,5 | 28 |

[1] Standard unit: housing + slot + grille and heat exchanger (empty)

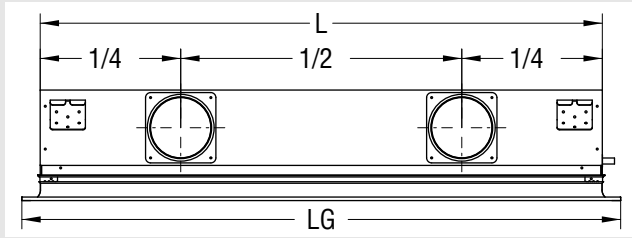
# Ceiling induction diffuser DISA-360

**Number of connecting pieces**
**Horizontal connection (-H)**

**with 1 connecting piece (-AS1)**

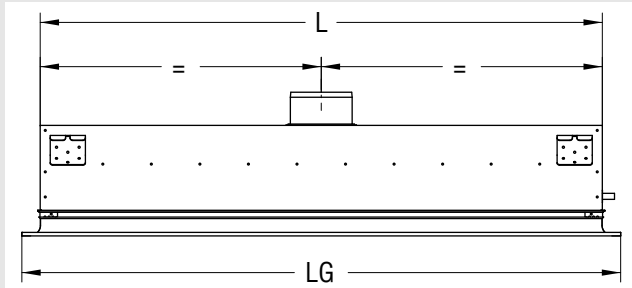



**with 2 connecting pieces (-AS2/AS3)**

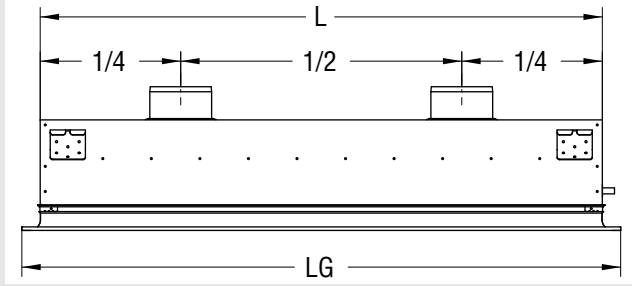



**Vertical connection (-V)**

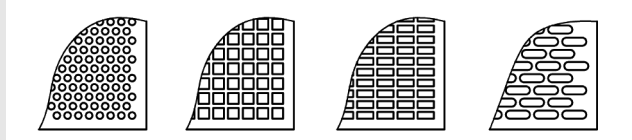
**with 1 connecting piece (-AS4)**




**with 2 connecting pieces (-AS5/AS6)**

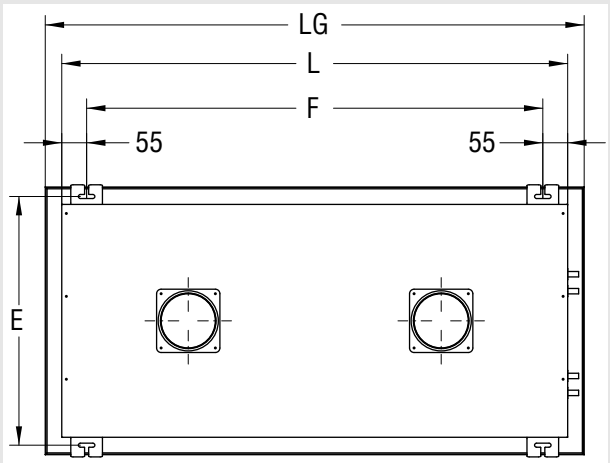



**Perforated sheet grille- Design**



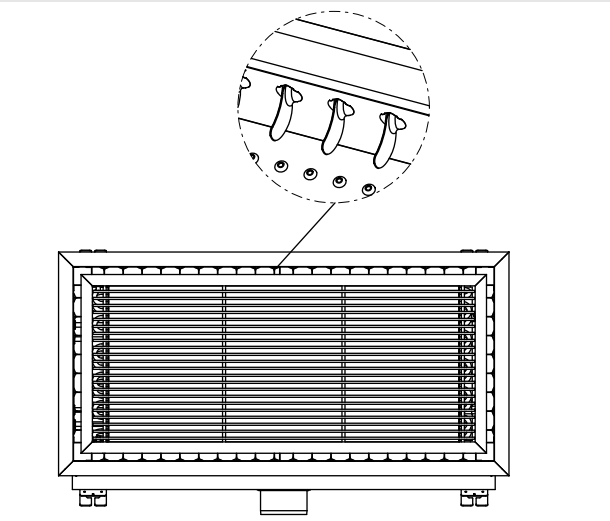
DISA-...-SR DISA-...-SQ DISA-...-RE DISA-...-OB

**Fixing lugs**




| | | B x LG | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 592 x 592 | 592 x 1192 | 597 x 597 | 597 x 1197 | 617 x 617 | 617 x 1242 | 622 x 622 | 622 x 1247 |
| E | -H | 625 | | 630 | | 625 | | 630 | |
| | -V | 550 | | 555 | | 550 | | 555 | |
| F | | 409 | 1009 | 414 | 1014 | 409 | 1034 | 414 | 1039 |

**Air deflection blades**



- Individually adjustable air deflection blades (**-LE**)
- Blockwise adjustable air deflection blades (**-LB**)

With blockwise adjustable blades, 5 blades can be adjusted simultaneously.

The adjusting angle of the air deflection blades must not be more than ± 45°, in order to guarantee its function.

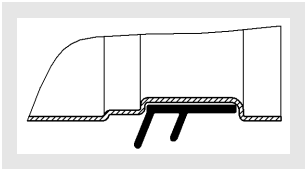
At an adjusting angle of the air deflection blades outside the straight air throw of up to 45°, the cooling capacity of the heat exchanger is reduced by up to 5%, and the horizontal throw is reduced.

# Ceiling induction diffuser DISA-360

## Accessories

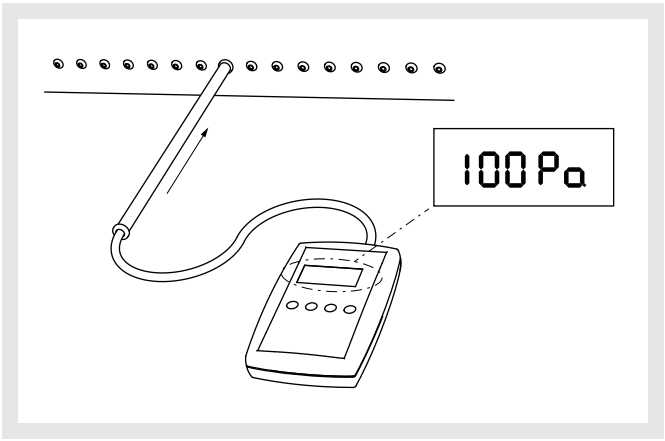
### Rubber lip seal (-GD)

At the connecting piece for better tightness.



### Volumetric flow measuring tube (-MR)

The supplied primary volumetric flow can be simply checked by checking the static pressure with a Pa meter.




### Flexible connection hoses (-FA)

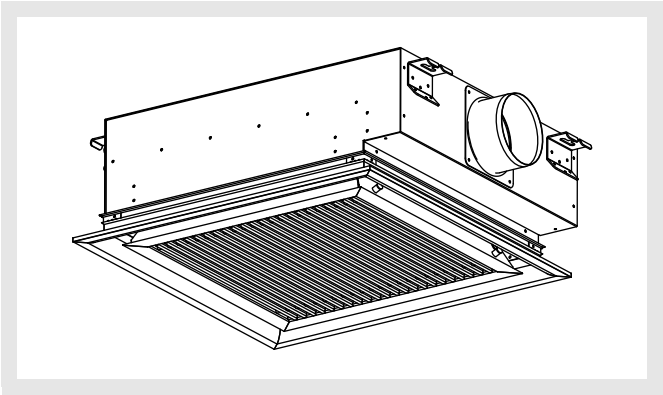
Flexible armoured hose with stainless steel braid, oxygen diffusion layer to DIN 4726, one-sided by means of plug-in fitting 90° with stainless steel claw, support ring, 2 sealing rings (operating pressure 20 bar, test pressure 60 bar, temperature -40° to +80°) and lock washer, other side 1/2" spigot nut with flat seal.
L= 500, 800 and 1200 mm. Other lengths on request.

### External thread flat-sealing

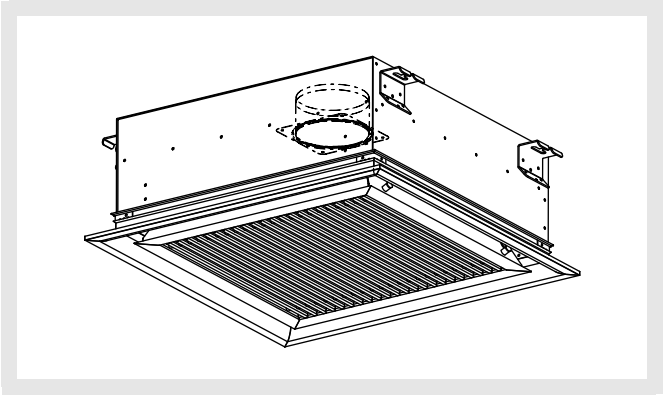
Water connections 1/2" external thread flat-sealing

## Figures

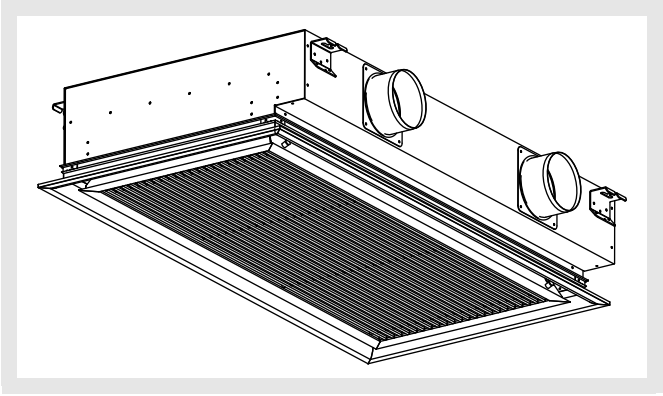
**DISA-360-…-592-…-H-AS1**



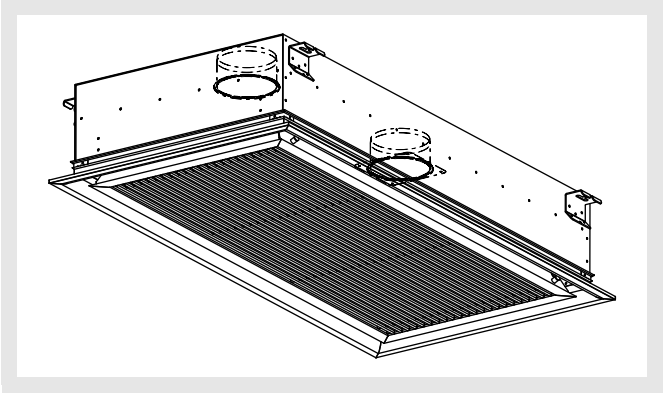
**DISA-360-…-592-…-V-AS4**



**DISA-360-…-1192-…-H-AS2/3**



**DISA-360-…-1192-…-V-AS5/6**



# Ceiling induction diffuser DISA-360

## Technical data

### Performance data

### DISA-360-H -…-B -Cooling-

| NL | V | | $P_S$ | Cooling capacity primary air (W) $\Delta t_{Pr}$ (K) | | | | Cooling capacity water (W) $\Delta t_{RWV}$ (K) | | | | | | | $\Delta p_W$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (mm) | (m³/h) | [l/s] | (Pa) | 6 | 8 | 10 | 12 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | (kPa) |
| 600 | 24,1 | 6,7 | 50 | 48 | 64 | 80 | 96 | 177 | 207 | 236 | 266 | 295 | 325 | 354 | 5,7 |
| | 29,5 | 8,2 | 75 | 59 | 79 | 98 | 118 | 208 | 243 | 277 | 312 | 347 | 381 | 416 | 5,7 |
| | 34,2 | 9,5 | 100 | 68 | 91 | 114 | 137 | 235 | 274 | 314 | 353 | 392 | 431 | 470 | 5,7 |
| | 38,2 | 10,6 | 125 | 76 | 102 | 127 | 153 | 259 | 302 | 345 | 388 | 431 | 475 | 518 | 5,7 |
| | 41,8 | 11,6 | 150 | 84 | 111 | 139 | 167 | 279 | 326 | 373 | 419 | 466 | 512 | 559 | 5,7 |
| | 45,4 | 12,6 | 175 | 91 | 121 | 151 | 181 | 297 | 347 | 396 | 446 | 495 | 545 | 595 | 5,7 |
| 1200 | 40,3 | 11,2 | 50 | 81 | 108 | 134 | 161 | 318 | 372 | 425 | 478 | 531 | 584 | 637 | 11,6 |
| | 49,3 | 13,7 | 75 | 99 | 132 | 164 | 197 | 396 | 462 | 528 | 594 | 660 | 726 | 792 | 11,6 |
| | 56,9 | 15,8 | 100 | 114 | 152 | 190 | 228 | 447 | 522 | 596 | 671 | 745 | 820 | 894 | 11,6 |
| | 63,7 | 17,7 | 125 | 127 | 170 | 212 | 255 | 484 | 565 | 645 | 726 | 806 | 887 | 968 | 11,6 |
| | 69,8 | 19,4 | 150 | 140 | 186 | 233 | 279 | 513 | 598 | 684 | 769 | 855 | 940 | 1026 | 11,6 |
| | 75,6 | 21 | 175 | 151 | 202 | 252 | 302 | 538 | 628 | 717 | 807 | 896 | 986 | 1076 | 11,6 |

### DISA-360-HT -…-B -Cooling-

| NL | V | | $P_S$ | Cooling capacity primary air (W) $\Delta t_{Pr}$ (K) | | | | Cooling capacity water (W) $\Delta t_{RWV}$ (K) | | | | | | | $\Delta p_W$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (mm) | (m³/h) | [l/s] | (Pa) | 6 | 8 | 10 | 12 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | (kPa) |
| 600 | 24,1 | 6,7 | 50 | 48 | 64 | 80 | 96 | 172 | 200 | 229 | 258 | 286 | 315 | 343 | 4,1 |
| | 29,5 | 8,2 | 75 | 59 | 79 | 98 | 118 | 200 | 234 | 267 | 301 | 334 | 367 | 401 | 4,1 |
| | 34,2 | 9,5 | 100 | 68 | 91 | 114 | 137 | 225 | 263 | 300 | 338 | 375 | 413 | 450 | 4,1 |
| | 38,2 | 10,6 | 125 | 76 | 102 | 127 | 153 | 247 | 288 | 329 | 370 | 411 | 452 | 493 | 4,1 |
| | 41,8 | 11,6 | 150 | 84 | 111 | 139 | 167 | 265 | 309 | 353 | 397 | 442 | 486 | 530 | 4,1 |
| | 45,4 | 12,6 | 175 | 91 | 121 | 151 | 181 | 281 | 327 | 374 | 421 | 468 | 515 | 561 | 4,1 |
| 1200 | 40,3 | 11,2 | 50 | 81 | 108 | 134 | 161 | 298 | 348 | 398 | 448 | 497 | 547 | 597 | 8,4 |
| | 49,3 | 13,7 | 75 | 99 | 132 | 164 | 197 | 369 | 430 | 492 | 553 | 615 | 676 | 738 | 8,4 |
| | 56,9 | 15,8 | 100 | 114 | 152 | 190 | 228 | 414 | 483 | 552 | 622 | 691 | 760 | 829 | 8,4 |
| | 63,7 | 17,7 | 125 | 127 | 170 | 212 | 255 | 447 | 522 | 596 | 671 | 745 | 820 | 894 | 8,4 |
| | 69,8 | 19,4 | 150 | 140 | 186 | 233 | 279 | 473 | 552 | 630 | 709 | 788 | 867 | 946 | 8,4 |
| | 75,6 | 21 | 175 | 151 | 202 | 252 | 302 | 495 | 577 | 660 | 742 | 825 | 907 | 989 | 8,4 |

$V_{Wn}$ = 0.07 l/s corresponds to 250 l/h

# Ceiling induction diffuser DISA-360

## DISA-360-H -...-C -Cooling-

| NL | V | | $P_S$ | Cooling capacity primary air (W) $\Delta t_{Pr}$ (K) | | | | Cooling capacity water (W) $\Delta t_{RWV}$ (K) | | | | | | | $\Delta p_W$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (mm) | (m³/h) | [l/s] | (Pa) | 6 | 8 | 10 | 12 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | (kPa) |
| 600 | 44,6 | 12,4 | 50 | 89 | 119 | 149 | 179 | 212 | 247 | 282 | 318 | 353 | 388 | 424 | 5,7 |
| | 54,7 | 15,2 | 75 | 109 | 146 | 182 | 219 | 256 | 298 | 341 | 383 | 426 | 468 | 511 | 5,7 |
| | 63 | 17,5 | 100 | 126 | 168 | 210 | 252 | 287 | 335 | 383 | 431 | 479 | 526 | 574 | 5,7 |
| | 70,6 | 19,6 | 125 | 141 | 188 | 235 | 282 | 311 | 363 | 415 | 466 | 518 | 570 | 622 | 5,7 |
| | 77 | 21,4 | 150 | 154 | 205 | 257 | 308 | 329 | 384 | 439 | 494 | 548 | 603 | 658 | 5,7 |
| | 83,2 | 23,1 | 175 | 166 | 222 | 277 | 333 | 343 | 400 | 457 | 514 | 571 | 628 | 686 | 5,7 |
| 1200 | 74,2 | 20,6 | 50 | 148 | 198 | 247 | 297 | 368 | 430 | 491 | 553 | 614 | 675 | 737 | 11,6 |
| | 91,1 | 25,3 | 75 | 182 | 243 | 304 | 364 | 477 | 556 | 636 | 715 | 795 | 874 | 954 | 11,6 |
| | 105,1 | 29,2 | 100 | 210 | 280 | 350 | 420 | 538 | 628 | 718 | 808 | 897 | 987 | 1077 | 11,6 |
| | 117,4 | 32,6 | 125 | 235 | 313 | 391 | 469 | 575 | 671 | 767 | 863 | 959 | 1055 | 1151 | 11,6 |
| | 128,5 | 35,7 | 150 | 257 | 343 | 428 | 514 | 599 | 698 | 798 | 898 | 998 | 1097 | 1197 | 11,6 |
| | 139 | 38,6 | 175 | 278 | 371 | 463 | 556 | 614 | 716 | 819 | 921 | 1024 | 1126 | 1228 | 11,6 |

## DISA-360-HT -...-C -Cooling-

| NL | V | | $P_S$ | Cooling capacity primary air (W) $\Delta t_{Pr}$ (K) | | | | Cooling capacity water (W) $\Delta t_{RWV}$ (K) | | | | | | | $\Delta p_W$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (mm) | (m³/h) | [l/s] | (Pa) | 6 | 8 | 10 | 12 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | (kPa) |
| 600 | 44,6 | 12,4 | 50 | 89 | 119 | 149 | 179 | 195 | 228 | 260 | 293 | 326 | 358 | 391 | 4,1 |
| | 54,7 | 15,2 | 75 | 109 | 146 | 182 | 219 | 239 | 278 | 318 | 358 | 398 | 438 | 477 | 4,1 |
| | 63 | 17,5 | 100 | 126 | 168 | 210 | 252 | 268 | 313 | 357 | 402 | 447 | 491 | 536 | 4,1 |
| | 70,6 | 19,6 | 125 | 141 | 188 | 235 | 282 | 289 | 337 | 385 | 434 | 482 | 530 | 578 | 4,1 |
| | 77 | 21,4 | 150 | 154 | 205 | 257 | 308 | 305 | 355 | 406 | 457 | 508 | 558 | 609 | 4,1 |
| | 83,2 | 23,1 | 175 | 166 | 222 | 277 | 333 | 316 | 369 | 422 | 474 | 527 | 580 | 632 | 4,1 |
| 1200 | 74,2 | 20,6 | 50 | 148 | 198 | 247 | 297 | 352 | 410 | 469 | 528 | 586 | 645 | 703 | 8,4 |
| | 91,1 | 25,3 | 75 | 182 | 243 | 304 | 364 | 451 | 526 | 601 | 676 | 752 | 827 | 902 | 8,4 |
| | 105,1 | 29,2 | 100 | 210 | 280 | 350 | 420 | 507 | 592 | 676 | 761 | 845 | 930 | 1014 | 8,4 |
| | 117,4 | 32,6 | 125 | 235 | 313 | 391 | 469 | 541 | 631 | 721 | 811 | 901 | 991 | 1081 | 8,4 |
| | 128,5 | 35,7 | 150 | 257 | 343 | 428 | 514 | 562 | 655 | 749 | 842 | 936 | 1029 | 1123 | 8,4 |
| | 139 | 38,6 | 175 | 278 | 371 | 463 | 556 | 575 | 671 | 767 | 863 | 959 | 1055 | 1151 | 8,4 |

$V_{Wn}$ = 0.07 l/s corresponds to 250 l/h

# Ceiling induction diffuser DISA-360

## DISA-360-H -…-D -Cooling-

| NL | V | | $P_S$ | Cooling capacity primary air (W) $\Delta t_{Pr}$ (K) | | | | Cooling capacity water (W) $\Delta t_{RWV}$ (K) | | | | | | | $\Delta p_W$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (mm) | (m³/h) | [l/s] | (Pa) | 6 | 8 | 10 | 12 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | (kPa) |
| 600 | 65,9 | 18,3 | 50 | 132 | 176 | 220 | 264 | 255 | 298 | 340 | 383 | 425 | 468 | 510 | 5,7 |
| | 80,6 | 22,4 | 75 | 161 | 215 | 269 | 323 | 294 | 343 | 392 | 441 | 490 | 539 | 588 | 5,7 |
| | 93,2 | 25,9 | 100 | 186 | 249 | 311 | 373 | 324 | 378 | 432 | 486 | 540 | 594 | 648 | 5,7 |
| | 104,4 | 29 | 125 | 209 | 278 | 348 | 418 | 349 | 407 | 465 | 523 | 581 | 639 | 697 | 5,7 |
| | 114,1 | 31,7 | 150 | 228 | 304 | 380 | 456 | 369 | 431 | 492 | 554 | 615 | 677 | 738 | 5,7 |
| | 123,5 | 34,3 | 175 | 247 | 329 | 412 | 494 | 386 | 451 | 515 | 580 | 644 | 708 | 773 | 5,7 |
| 1200 | 109,8 | 30,5 | 50 | 220 | 293 | 366 | 439 | 429 | 501 | 572 | 644 | 715 | 787 | 858 | 11,6 |
| | 134,6 | 37,4 | 75 | 269 | 359 | 449 | 539 | 499 | 582 | 665 | 749 | 832 | 915 | 998 | 11,6 |
| | 155,5 | 43,2 | 100 | 311 | 415 | 518 | 622 | 555 | 647 | 740 | 832 | 924 | 1017 | 1109 | 11,6 |
| | 173,9 | 48,3 | 125 | 348 | 464 | 580 | 696 | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 | 11,6 |
| | 190,4 | 52,9 | 150 | 381 | 508 | 635 | 762 | 637 | 744 | 850 | 956 | 1062 | 1168 | 1275 | 11,6 |
| | 205,6 | 57,1 | 175 | 411 | 548 | 685 | 822 | 668 | 779 | 890 | 1002 | 1113 | 1224 | 1336 | 11,6 |

## DISA-360-HT -…-D -Cooling-

| NL | V | | $P_S$ | Cooling capacity primary air (W) $\Delta t_{Pr}$ (K) | | | | Cooling capacity water (W) $\Delta t_{RWV}$ (K) | | | | | | | $\Delta p_W$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (mm) | (m³/h) | [l/s] | (Pa) | 6 | 8 | 10 | 12 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | (kPa) |
| 600 | 65,9 | 18,3 | 50 | 132 | 176 | 220 | 264 | 231 | 269 | 308 | 346 | 385 | 423 | 462 | 4,1 |
| | 80,6 | 22,4 | 75 | 161 | 215 | 269 | 323 | 266 | 311 | 355 | 400 | 444 | 488 | 533 | 4,1 |
| | 93,2 | 25,9 | 100 | 186 | 249 | 311 | 373 | 292 | 340 | 389 | 438 | 486 | 535 | 584 | 4,1 |
| | 104,4 | 29 | 125 | 209 | 278 | 348 | 418 | 312 | 363 | 415 | 467 | 519 | 571 | 623 | 4,1 |
| | 114,1 | 31,7 | 150 | 228 | 304 | 380 | 456 | 328 | 382 | 437 | 492 | 546 | 601 | 656 | 4,1 |
| | 123,5 | 34,3 | 175 | 247 | 329 | 412 | 494 | 342 | 399 | 456 | 513 | 570 | 627 | 683 | 4,1 |
| 1200 | 109,8 | 30,5 | 50 | 220 | 293 | 366 | 439 | 407 | 475 | 542 | 610 | 678 | 746 | 814 | 8,4 |
| | 134,6 | 37,4 | 75 | 269 | 359 | 449 | 539 | 471 | 549 | 627 | 706 | 784 | 863 | 941 | 8,4 |
| | 155,5 | 43,2 | 100 | 311 | 415 | 518 | 622 | 521 | 608 | 695 | 782 | 868 | 955 | 1042 | 8,4 |
| | 173,9 | 48,3 | 125 | 348 | 464 | 580 | 696 | 562 | 656 | 749 | 843 | 936 | 1030 | 1124 | 8,4 |
| | 190,4 | 52,9 | 150 | 381 | 508 | 635 | 762 | 595 | 694 | 794 | 893 | 992 | 1091 | 1190 | 8,4 |
| | 205,6 | 57,1 | 175 | 411 | 548 | 685 | 822 | 622 | 726 | 830 | 933 | 1037 | 1141 | 1245 | 8,4 |

$V_{Wn}$ = 0.07 l/s corresponds to 250 l/h

# Ceiling induction diffuser DISA-360

## DISA-360-H -...-E -Cooling-

| NL | V | | $P_S$ | Cooling capacity primary air (W) $\Delta t_{Pr}$ (K) | | | | Cooling capacity water (W) $\Delta t_{RWV}$ (K) | | | | | | | $\Delta p_W$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (mm) | (m³/h) | [l/s] | (Pa) | 6 | 8 | 10 | 12 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | (kPa) |
| 600 | 113 | 31,4 | 50 | 226 | 301 | 377 | 452 | 296 | 345 | 394 | 443 | 493 | 542 | 591 | 5,7 |
| | 138,6 | 38,5 | 75 | 277 | 370 | 462 | 554 | 340 | 396 | 453 | 510 | 566 | 623 | 679 | 5,7 |
| | 159,8 | 44,4 | 100 | 320 | 426 | 533 | 639 | 371 | 432 | 494 | 556 | 618 | 679 | 741 | 5,7 |
| | 178,9 | 49,7 | 125 | 358 | 477 | 596 | 716 | 394 | 460 | 525 | 591 | 657 | 722 | 788 | 5,7 |
| | 195,8 | 54,4 | 150 | 392 | 522 | 653 | 783 | 413 | 482 | 550 | 619 | 688 | 757 | 826 | 5,7 |
| | 211,7 | 58,8 | 175 | 423 | 564 | 706 | 847 | 429 | 500 | 572 | 643 | 714 | 786 | 857 | 5,7 |
| 1200 | 188,6 | 52,4 | 50 | 377 | 503 | 629 | 755 | 486 | 567 | 648 | 729 | 810 | 891 | 973 | 11,6 |
| | 230,8 | 64,1 | 75 | 462 | 615 | 769 | 923 | 555 | 647 | 739 | 832 | 924 | 1017 | 1109 | 11,6 |
| | 266,4 | 74 | 100 | 533 | 710 | 888 | 1066 | 603 | 703 | 804 | 904 | 1005 | 1105 | 1206 | 11,6 |
| | 298,1 | 82,8 | 125 | 596 | 795 | 994 | 1192 | 639 | 746 | 852 | 959 | 1066 | 1172 | 1279 | 11,6 |
| | 326,5 | 90,7 | 150 | 653 | 871 | 1088 | 1306 | 668 | 780 | 891 | 1002 | 1114 | 1225 | 1336 | 11,6 |
| | 352,4 | 97,9 | 175 | 705 | 940 | 1175 | 1410 | 692 | 807 | 923 | 1038 | 1153 | 1269 | 1384 | 11,6 |

## DISA-360-HT -...-E -Cooling-

| NL | V | | $P_S$ | Cooling capacity primary air (W) $\Delta t_{Pr}$ (K) | | | | Cooling capacity water (W) $\Delta t_{RWV}$ (K) | | | | | | | $\Delta p_W$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (mm) | (m³/h) | [l/s] | (Pa) | 6 | 8 | 10 | 12 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | (kPa) |
| 600 | 113 | 31,4 | 50 | 226 | 301 | 377 | 452 | 278 | 325 | 371 | 417 | 464 | 510 | 557 | 4,1 |
| | 138,6 | 38,5 | 75 | 277 | 370 | 462 | 554 | 316 | 369 | 422 | 475 | 527 | 580 | 633 | 4,1 |
| | 159,8 | 44,4 | 100 | 320 | 426 | 533 | 639 | 343 | 400 | 457 | 514 | 571 | 628 | 686 | 4,1 |
| | 178,9 | 49,7 | 125 | 358 | 477 | 596 | 716 | 363 | 423 | 483 | 544 | 604 | 665 | 725 | 4,1 |
| | 195,8 | 54,4 | 150 | 392 | 522 | 653 | 783 | 378 | 441 | 504 | 567 | 630 | 693 | 756 | 4,1 |
| | 211,7 | 58,8 | 175 | 423 | 564 | 706 | 847 | 391 | 457 | 522 | 587 | 652 | 717 | 783 | 4,1 |
| 1200 | 188,6 | 52,4 | 50 | 377 | 503 | 629 | 755 | 448 | 523 | 597 | 672 | 747 | 822 | 896 | 8,4 |
| | 230,8 | 64,1 | 75 | 462 | 615 | 769 | 923 | 509 | 594 | 679 | 764 | 849 | 934 | 1018 | 8,4 |
| | 266,4 | 74 | 100 | 533 | 710 | 888 | 1066 | 551 | 643 | 735 | 827 | 919 | 1011 | 1103 | 8,4 |
| | 298,1 | 82,8 | 125 | 596 | 795 | 994 | 1192 | 583 | 680 | 777 | 874 | 971 | 1069 | 1166 | 8,4 |
| | 326,5 | 90,7 | 150 | 653 | 871 | 1088 | 1306 | 608 | 709 | 810 | 911 | 1013 | 1114 | 1215 | 8,4 |
| | 352,4 | 97,9 | 175 | 705 | 940 | 1175 | 1410 | 628 | 733 | 837 | 942 | 1047 | 1151 | 1256 | 8,4 |

$V_{Wn}$ = 0.07 l/s corresponds to 250 l/h

# Ceiling induction diffuser DISA-360

## DISA-360-H -…-B -Heating-

| NL | V | | $P_S$ | Heating capacity primary air (W) $\Delta t_{Pr}$ (K) | | | | Heating capacity water (W) $\Delta t_{RWV}$ (K) | | | | | | | $\Delta p_W$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (mm) | (m³/h) | [l/s] | (Pa) | 6 | 8 | 10 | 12 | 16 | 18 | 20 | 22 | 24 | 26 | 28 | (kPa) |
| 600 | 24,1 | 6,7 | 50 | 48 | 64 | 80 | 96 | 444 | 500 | 555 | 611 | 666 | 722 | 777 | 5,3 |
| | 29,5 | 8,2 | 75 | 59 | 79 | 98 | 118 | 517 | 581 | 646 | 711 | 775 | 840 | 904 | 5,3 |
| | 34,2 | 9,5 | 100 | 68 | 91 | 114 | 137 | 579 | 651 | 724 | 796 | 868 | 941 | 1013 | 5,3 |
| | 38,2 | 10,6 | 125 | 76 | 102 | 127 | 153 | 632 | 711 | 790 | 869 | 948 | 1027 | 1106 | 5,3 |
| | 41,8 | 11,6 | 150 | 84 | 111 | 139 | 167 | 678 | 763 | 848 | 932 | 1017 | 1102 | 1187 | 5,3 |
| | 45,4 | 12,6 | 175 | 91 | 121 | 151 | 181 | 717 | 807 | 896 | 986 | 1076 | 1165 | 1255 | 5,3 |
| 1200 | 40,3 | 11,2 | 50 | 81 | 108 | 134 | 161 | 765 | 860 | 956 | 1052 | 1147 | 1243 | 1338 | 10,4 |
| | 49,3 | 13,7 | 75 | 99 | 132 | 164 | 197 | 927 | 1043 | 1159 | 1275 | 1391 | 1507 | 1623 | 10,4 |
| | 56,9 | 15,8 | 100 | 114 | 152 | 190 | 228 | 1031 | 1160 | 1289 | 1418 | 1547 | 1676 | 1805 | 10,4 |
| | 63,7 | 17,7 | 125 | 127 | 170 | 212 | 255 | 1105 | 1243 | 1381 | 1519 | 1657 | 1795 | 1933 | 10,4 |
| | 69,8 | 19,4 | 150 | 140 | 186 | 233 | 279 | 1161 | 1306 | 1451 | 1596 | 1742 | 1887 | 2032 | 10,4 |
| | 75,6 | 21 | 175 | 151 | 202 | 252 | 302 | 1208 | 1359 | 1510 | 1661 | 1812 | 1963 | 2115 | 10,4 |

## DISA-360-HT -…-B -Heating-

| NL | V | | $P_S$ | Heating capacity primary air (W) $\Delta t_{Pr}$ (K) | | | | Heating capacity water (W) $\Delta t_{RWV}$ (K) | | | | | | | $\Delta p_W$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (mm) | (m³/h) | [l/s] | (Pa) | 6 | 8 | 10 | 12 | 16 | 18 | 20 | 22 | 24 | 26 | 28 | (kPa) |
| 900 | 24,1 | 6,7 | 50 | 48 | 64 | 80 | 96 | 271 | 304 | 338 | 372 | 406 | 440 | 474 | 1,5 |
| | 29,5 | 8,2 | 75 | 59 | 79 | 98 | 118 | 300 | 338 | 375 | 413 | 450 | 488 | 525 | 1,5 |
| | 34,2 | 9,5 | 100 | 68 | 91 | 114 | 137 | 324 | 364 | 405 | 445 | 486 | 526 | 567 | 1,5 |
| | 38,2 | 10,6 | 125 | 76 | 102 | 127 | 153 | 343 | 386 | 429 | 472 | 515 | 558 | 601 | 1,5 |
| | 41,8 | 11,6 | 150 | 84 | 111 | 139 | 167 | 359 | 404 | 449 | 494 | 539 | 584 | 629 | 1,5 |
| | 45,4 | 12,6 | 175 | 91 | 121 | 151 | 181 | 372 | 419 | 465 | 512 | 558 | 605 | 652 | 1,5 |
| 1200 | 40,3 | 11,2 | 50 | 81 | 108 | 134 | 161 | 503 | 566 | 629 | 692 | 755 | 818 | 881 | 2,8 |
| | 49,3 | 13,7 | 75 | 99 | 132 | 164 | 197 | 580 | 652 | 725 | 797 | 870 | 942 | 1015 | 2,8 |
| | 56,9 | 15,8 | 100 | 114 | 152 | 190 | 228 | 628 | 706 | 785 | 863 | 942 | 1020 | 1099 | 2,8 |
| | 63,7 | 17,7 | 125 | 127 | 170 | 212 | 255 | 661 | 743 | 826 | 909 | 991 | 1074 | 1156 | 2,8 |
| | 69,8 | 19,4 | 150 | 140 | 186 | 233 | 279 | 685 | 771 | 857 | 943 | 1028 | 1114 | 1200 | 2,8 |
| | 75,6 | 21 | 175 | 151 | 202 | 252 | 302 | 706 | 794 | 882 | 970 | 1058 | 1147 | 1235 | 2,8 |

$V_{Wn}$ = 0.0416 l/s corresponds to 150 l/h

# Ceiling induction diffuser DISA-360

## DISA-360-H -...-C -Heating-

| NL | V | | $P_S$ | Heating capacity primary air (W) $\Delta t_{Pr}$ (K) | | | | Heating capacity water (W) $\Delta t_{RWV}$ (K) | | | | | | | $\Delta p_W$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (mm) | (m³/h) | [l/s] | (Pa) | 6 | 8 | 10 | 12 | 16 | 18 | 20 | 22 | 24 | 26 | 28 | (kPa) |
| 600 | 44,6 | 12,4 | 50 | 89 | 119 | 149 | 179 | 527 | 593 | 659 | 725 | 791 | 857 | 923 | 5,3 |
| | 54,7 | 15,2 | 75 | 109 | 146 | 182 | 219 | 626 | 704 | 782 | 860 | 938 | 1016 | 1095 | 5,3 |
| | 63 | 17,5 | 100 | 126 | 168 | 210 | 252 | 695 | 782 | 869 | 956 | 1042 | 1129 | 1216 | 5,3 |
| | 70,6 | 19,6 | 125 | 141 | 188 | 235 | 282 | 746 | 839 | 933 | 1026 | 1119 | 1213 | 1306 | 5,3 |
| | 77 | 21,4 | 150 | 154 | 205 | 257 | 308 | 785 | 883 | 981 | 1079 | 1177 | 1275 | 1373 | 5,3 |
| | 83,2 | 23,1 | 175 | 166 | 222 | 277 | 333 | 814 | 916 | 1017 | 1119 | 1221 | 1323 | 1424 | 5,3 |
| 1200 | 74,2 | 20,6 | 50 | 148 | 198 | 247 | 297 | 872 | 981 | 1090 | 1199 | 1308 | 1417 | 1526 | 10,4 |
| | 91,1 | 25,3 | 75 | 182 | 243 | 304 | 364 | 1089 | 1225 | 1362 | 1498 | 1634 | 1770 | 1906 | 10,4 |
| | 105,1 | 29,2 | 100 | 210 | 280 | 350 | 420 | 1210 | 1361 | 1512 | 1663 | 1815 | 1966 | 2117 | 10,4 |
| | 117,4 | 32,6 | 125 | 235 | 313 | 391 | 469 | 1280 | 1440 | 1600 | 1760 | 1920 | 2080 | 2240 | 10,4 |
| | 128,5 | 35,7 | 150 | 257 | 343 | 428 | 514 | 1323 | 1488 | 1653 | 1819 | 1984 | 2149 | 2314 | 10,4 |
| | 139 | 38,6 | 175 | 278 | 371 | 463 | 556 | 1350 | 1519 | 1688 | 1857 | 2026 | 2194 | 2363 | 10,4 |

## DISA-360-HT -...-C -Heating-

| NL | V | | $P_S$ | Heating capacity primary air (W) $\Delta t_{Pr}$ (K) | | | | Heating capacity water (W) $\Delta t_{RWV}$ (K) | | | | | | | $\Delta p_W$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (mm) | (m³/h) | [l/s] | (Pa) | 6 | 8 | 10 | 12 | 16 | 18 | 20 | 22 | 24 | 26 | 28 | (kPa) |
| 600 | 44,6 | 12,4 | 50 | 89 | 119 | 149 | 179 | 312 | 351 | 390 | 429 | 468 | 508 | 547 | 1,5 |
| | 54,7 | 15,2 | 75 | 109 | 146 | 182 | 219 | 354 | 399 | 443 | 487 | 531 | 576 | 620 | 1,5 |
| | 63 | 17,5 | 100 | 126 | 168 | 210 | 252 | 381 | 429 | 477 | 524 | 572 | 620 | 667 | 1,5 |
| | 70,6 | 19,6 | 125 | 141 | 188 | 235 | 282 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 1,5 |
| | 77 | 21,4 | 150 | 154 | 205 | 257 | 308 | 413 | 464 | 516 | 567 | 619 | 671 | 722 | 1,5 |
| | 83,2 | 23,1 | 175 | 166 | 222 | 277 | 333 | 422 | 475 | 527 | 580 | 633 | 686 | 738 | 1,5 |
| 1200 | 74,2 | 20,6 | 50 | 148 | 198 | 247 | 297 | 572 | 644 | 715 | 787 | 858 | 930 | 1001 | 2,8 |
| | 91,1 | 25,3 | 75 | 182 | 243 | 304 | 364 | 682 | 767 | 852 | 938 | 1023 | 1108 | 1193 | 2,8 |
| | 105,1 | 29,2 | 100 | 210 | 280 | 350 | 420 | 740 | 833 | 925 | 1018 | 1111 | 1203 | 1296 | 2,8 |
| | 117,4 | 32,6 | 125 | 235 | 313 | 391 | 469 | 773 | 870 | 966 | 1063 | 1160 | 1256 | 1353 | 2,8 |
| | 128,5 | 35,7 | 150 | 257 | 343 | 428 | 514 | 792 | 891 | 990 | 1089 | 1188 | 1287 | 1387 | 2,8 |
| | 139 | 38,6 | 175 | 278 | 371 | 463 | 556 | 805 | 905 | 1006 | 1107 | 1207 | 1308 | 1409 | 2,8 |

$V_{Wn}$ = 0.0416 l/s corresponds to 150 l/h

# Ceiling induction diffuser DISA-360

## DISA-360-H -…-D -Heating-

| NL | V | | $P_S$ | Heating capacity primary air (W) $\Delta t_{Pr}$ (K) | | | | Heating capacity water (W) $\Delta t_{RWV}$ (K) | | | | | | | $\Delta p_W$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (mm) | (m³/h) | [l/s] | (Pa) | 6 | 8 | 10 | 12 | 16 | 18 | 20 | 22 | 24 | 26 | 28 | (kPa) |
| 600 | 65,9 | 18,3 | 50 | 132 | 176 | 220 | 264 | 621 | 698 | 776 | 853 | 931 | 1008 | 1086 | 5,3 |
| | 80,6 | 22,4 | 75 | 161 | 215 | 269 | 323 | 713 | 802 | 891 | 980 | 1069 | 1158 | 1247 | 5,3 |
| | 93,2 | 25,9 | 100 | 186 | 249 | 311 | 373 | 778 | 875 | 972 | 1070 | 1167 | 1264 | 1361 | 5,3 |
| | 104,4 | 29 | 125 | 209 | 278 | 348 | 418 | 828 | 932 | 1035 | 1139 | 1242 | 1346 | 1449 | 5,3 |
| | 114,1 | 31,7 | 150 | 228 | 304 | 380 | 456 | 869 | 978 | 1087 | 1195 | 1304 | 1412 | 1521 | 5,3 |
| | 123,5 | 34,3 | 175 | 247 | 329 | 412 | 494 | 904 | 1017 | 1130 | 1243 | 1356 | 1469 | 1583 | 5,3 |
| 1200 | 109,8 | 30,5 | 50 | 220 | 293 | 366 | 439 | 996 | 1120 | 1245 | 1369 | 1494 | 1618 | 1743 | 10,4 |
| | 134,6 | 37,4 | 75 | 269 | 359 | 449 | 539 | 1135 | 1276 | 1418 | 1560 | 1702 | 1844 | 1985 | 10,4 |
| | 155,5 | 43,2 | 100 | 311 | 415 | 518 | 622 | 1241 | 1396 | 1551 | 1706 | 1861 | 2016 | 2171 | 10,4 |
| | 173,9 | 48,3 | 125 | 348 | 464 | 580 | 696 | 1325 | 1491 | 1656 | 1822 | 1987 | 2153 | 2319 | 10,4 |
| | 190,4 | 52,9 | 150 | 381 | 508 | 635 | 762 | 1392 | 1566 | 1741 | 1915 | 2089 | 2263 | 2437 | 10,4 |
| | 205,6 | 57,1 | 175 | 411 | 548 | 685 | 822 | 1447 | 1627 | 1808 | 1989 | 2170 | 2351 | 2531 | 10,4 |

## DISA-360-HT -…-D -Heating-

| NL | V | | $P_S$ | Heating capacity primary air (W) $\Delta t_{Pr}$ (K) | | | | Heating capacity water (W) $\Delta t_{RWV}$ (K) | | | | | | | $\Delta p_W$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (mm) | (m³/h) | [l/s] | (Pa) | 6 | 8 | 10 | 12 | 16 | 18 | 20 | 22 | 24 | 26 | 28 | (kPa) |
| 600 | 65,9 | 18,3 | 50 | 132 | 176 | 220 | 264 | 368 | 414 | 461 | 507 | 553 | 599 | 645 | 1,5 |
| | 80,6 | 22,4 | 75 | 161 | 215 | 269 | 323 | 402 | 452 | 503 | 553 | 603 | 653 | 704 | 1,5 |
| | 93,2 | 25,9 | 100 | 186 | 249 | 311 | 373 | 425 | 479 | 532 | 585 | 638 | 691 | 744 | 1,5 |
| | 104,4 | 29 | 125 | 209 | 278 | 348 | 418 | 443 | 498 | 554 | 609 | 664 | 720 | 775 | 1,5 |
| | 114,1 | 31,7 | 150 | 228 | 304 | 380 | 456 | 457 | 514 | 571 | 628 | 685 | 742 | 799 | 1,5 |
| | 123,5 | 34,3 | 175 | 247 | 329 | 412 | 494 | 468 | 527 | 585 | 644 | 702 | 761 | 819 | 1,5 |
| 1200 | 109,8 | 30,5 | 50 | 220 | 293 | 366 | 439 | 653 | 735 | 817 | 898 | 980 | 1062 | 1143 | 2,8 |
| | 134,6 | 37,4 | 75 | 269 | 359 | 449 | 539 | 721 | 812 | 902 | 992 | 1082 | 1172 | 1263 | 2,8 |
| | 155,5 | 43,2 | 100 | 311 | 415 | 518 | 622 | 772 | 869 | 965 | 1062 | 1158 | 1255 | 1351 | 2,8 |
| | 173,9 | 48,3 | 125 | 348 | 464 | 580 | 696 | 811 | 913 | 1014 | 1116 | 1217 | 1319 | 1420 | 2,8 |
| | 190,4 | 52,9 | 150 | 381 | 508 | 635 | 762 | 842 | 948 | 1053 | 1158 | 1263 | 1369 | 1474 | 2,8 |
| | 205,6 | 57,1 | 175 | 411 | 548 | 685 | 822 | 867 | 975 | 1083 | 1192 | 1300 | 1408 | 1517 | 2,8 |

$V_{Wn}$ = 0.0416 l/s corresponds to 150 l/h

# Ceiling induction diffuser DISA-360

## DISA-360-H -...-E -Heating-

| NL | V | | $P_S$ | Heating capacity primary air (W) $\Delta t_{Pr}$ (K) | | | | Heating capacity water (W) $\Delta t_{RWV}$ (K) | | | | | | | $\Delta p_W$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (mm) | (m³/h) | [l/s] | (Pa) | 6 | 8 | 10 | 12 | 16 | 18 | 20 | 22 | 24 | 26 | 28 | (kPa) |
| 600 | 113 | 31,4 | 50 | 226 | 301 | 377 | 452 | 713 | 802 | 891 | 980 | 1069 | 1158 | 1247 | 5,3 |
| | 138,6 | 38,5 | 75 | 277 | 370 | 462 | 554 | 807 | 908 | 1009 | 1110 | 1211 | 1312 | 1413 | 5,3 |
| | 159,8 | 44,4 | 100 | 320 | 426 | 533 | 639 | 872 | 981 | 1090 | 1199 | 1308 | 1417 | 1526 | 5,3 |
| | 178,9 | 49,7 | 125 | 358 | 477 | 596 | 716 | 920 | 1035 | 1151 | 1266 | 1381 | 1496 | 1611 | 5,3 |
| | 195,8 | 54,4 | 150 | 392 | 522 | 653 | 783 | 958 | 1078 | 1198 | 1318 | 1438 | 1557 | 1677 | 5,3 |
| | 211,7 | 58,8 | 175 | 423 | 564 | 706 | 847 | 990 | 1114 | 1237 | 1361 | 1485 | 1609 | 1732 | 5,3 |
| 1200 | 188,6 | 52,4 | 50 | 377 | 503 | 629 | 755 | 1102 | 1240 | 1378 | 1515 | 1653 | 1791 | 1929 | 10,4 |
| | 230,8 | 64,1 | 75 | 462 | 615 | 769 | 923 | 1230 | 1384 | 1538 | 1692 | 1845 | 1999 | 2153 | 10,4 |
| | 266,4 | 74 | 100 | 533 | 710 | 888 | 1066 | 1318 | 1483 | 1648 | 1812 | 1977 | 2142 | 2307 | 10,4 |
| | 298,1 | 82,8 | 125 | 596 | 795 | 994 | 1192 | 1383 | 1556 | 1729 | 1901 | 2074 | 2247 | 2420 | 10,4 |
| | 326,5 | 90,7 | 150 | 653 | 871 | 1088 | 1306 | 1433 | 1612 | 1791 | 1970 | 2150 | 2329 | 2508 | 10,4 |
| | 352,4 | 97,9 | 175 | 705 | 940 | 1175 | 1410 | 1473 | 1658 | 1842 | 2026 | 2210 | 2394 | 2579 | 10,4 |

## DISA-360-HT -...-E -Heating-

| NL | V | | $P_S$ | Heating capacity primary air (W) $\Delta t_{Pr}$ (K) | | | | Heating capacity water (W) $\Delta t_{RWV}$ (K) | | | | | | | $\Delta p_W$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (mm) | (m³/h) | [l/s] | (Pa) | 6 | 8 | 10 | 12 | 16 | 18 | 20 | 22 | 24 | 26 | 28 | (kPa) |
| 600 | 113 | 31,4 | 50 | 226 | 301 | 377 | 452 | 394 | 443 | 492 | 541 | 590 | 640 | 689 | 1,5 |
| | 138,6 | 38,5 | 75 | 277 | 370 | 462 | 554 | 425 | 478 | 531 | 585 | 638 | 691 | 744 | 1,5 |
| | 159,8 | 44,4 | 100 | 320 | 426 | 533 | 639 | 447 | 502 | 558 | 614 | 670 | 726 | 781 | 1,5 |
| | 178,9 | 49,7 | 125 | 358 | 477 | 596 | 716 | 462 | 520 | 578 | 635 | 693 | 751 | 809 | 1,5 |
| | 195,8 | 54,4 | 150 | 392 | 522 | 653 | 783 | 474 | 533 | 593 | 652 | 711 | 770 | 830 | 1,5 |
| | 211,7 | 58,8 | 175 | 423 | 564 | 706 | 847 | 484 | 544 | 605 | 665 | 726 | 786 | 847 | 1,5 |
| 1200 | 188,6 | 52,4 | 50 | 377 | 503 | 629 | 755 | 734 | 826 | 918 | 1010 | 1101 | 1193 | 1285 | 2,8 |
| | 230,8 | 64,1 | 75 | 462 | 615 | 769 | 923 | 797 | 896 | 996 | 1096 | 1195 | 1295 | 1394 | 2,8 |
| | 266,4 | 74 | 100 | 533 | 710 | 888 | 1066 | 839 | 944 | 1049 | 1154 | 1259 | 1363 | 1468 | 2,8 |
| | 298,1 | 82,8 | 125 | 596 | 795 | 994 | 1192 | 870 | 978 | 1087 | 1196 | 1305 | 1413 | 1522 | 2,8 |
| | 326,5 | 90,7 | 150 | 653 | 871 | 1088 | 1306 | 893 | 1005 | 1117 | 1228 | 1340 | 1452 | 1563 | 2,8 |
| | 352,4 | 97,9 | 175 | 705 | 940 | 1175 | 1410 | 912 | 1026 | 1140 | 1255 | 1369 | 1483 | 1597 | 2,8 |

$V_{Wn}$ = 0.0416 l/s corresponds to 150 l/h

# Ceiling induction diffuser DISA-360

## Sound level

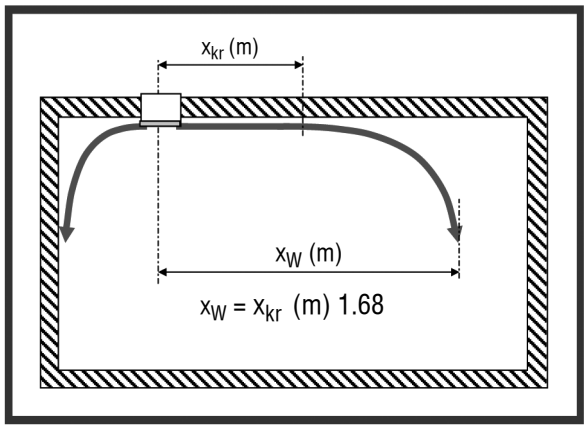
**Sound pressure level (room damping -8 dB)**

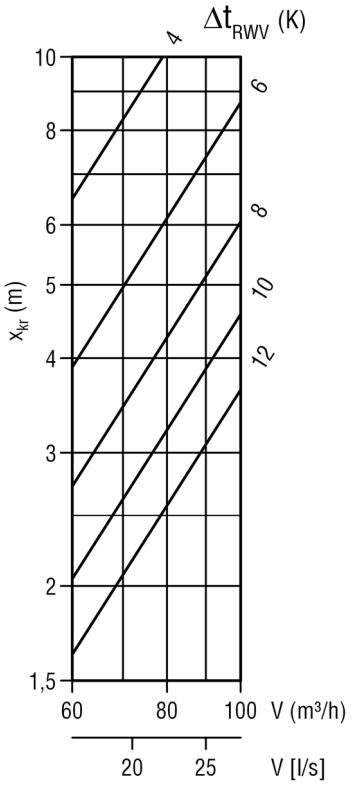
| L (mm) | $P_S$ (Pa) | $L_p$ [dB(A)] | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | DISA-360-…-B | | | | DISA-360-…-C | | | | DISA-360-…-D | | | | DISA-360-…-E | | | |
| | | 1 x Ø98 | 1 x Ø123 | 2 x Ø98 | 2 x Ø123 | 1 x Ø98 | 1 x Ø123 | 2 x Ø98 | 2 x Ø123 | 1 x Ø98 | 1 x Ø123 | 2 x Ø98 | 2 x Ø123 | 1 x Ø98 | 1 x Ø123 | 2 x Ø98 | 2 x Ø123 |
| 600x600 | 50 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 23 | 16 | 15 | 15 | 31 | 26 | 23 | 19 |
| | 75 | 15 | 15 | 15 | 15 | 18 | 15 | 15 | 15 | 28 | 22 | 21 | 16 | 36 | 31 | 27 | 23 |
| | 100 | 15 | 15 | 15 | 15 | 22 | 19 | 15 | 15 | 32 | 27 | 25 | 19 | 39 | 35 | 30 | 26 |
| | 125 | 19 | 16 | 15 | 15 | 25 | 23 | 18 | 15 | 35 | 30 | 28 | 22 | 42 | 38 | 33 | 29 |
| | 150 | 21 | 19 | 16 | 15 | 28 | 25 | 21 | 18 | 37 | 33 | 30 | 24 | 44 | 41 | 35 | 31 |
| | 175 | 24 | 21 | 18 | 17 | 30 | 28 | 23 | 20 | 39 | 35 | 32 | 26 | 45 | 43 | 36 | 33 |
| 600x1200 | 50 | 15 | 15 | 15 | 15 | 26 | 18 | 15 | 15 | 37 | 29 | 26 | 19 | 45 | 39 | 36 | 28 |
| | 75 | 15 | 15 | 15 | 15 | 31 | 23 | 21 | 20 | 42 | 34 | 32 | 25 | 50 | 44 | 42 | 34 |
| | 100 | 20 | 17 | 15 | 15 | 34 | 27 | 26 | 24 | 45 | 38 | 36 | 30 | 54 | 47 | 46 | 38 |
| | 125 | 23 | 20 | 18 | 18 | 37 | 30 | 29 | 27 | 48 | 41 | 39 | 33 | 57 | 50 | 49 | 41 |
| | 150 | 26 | 23 | 21 | 21 | 39 | 33 | 32 | 30 | 50 | 43 | 42 | 36 | 59 | 52 | 52 | 44 |
| | 175 | 28 | 25 | 24 | 24 | 41 | 35 | 35 | 32 | 52 | 45 | 44 | 38 | 61 | 54 | 54 | 46 |

$L_P$[dB (A)] <= 15 display 15

# Ceiling induction diffuser DISA-360

## Flow data
## DISA-360...-B-...
### Critical throw

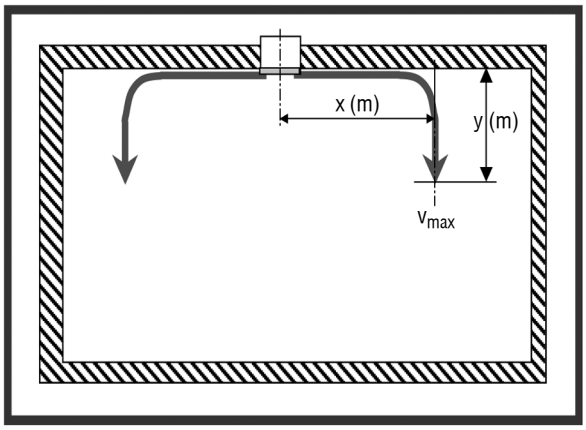


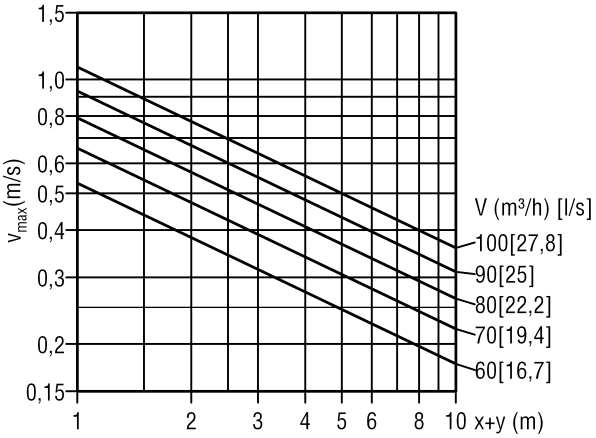




### Correction factors for the critical throw

| Water $\Delta T_{RWV}$ (K) | Amount of water [l/h] | Correction factor x critical |
|---|---|---|
| 6 | 150 | 0,74 |
| 8 | 150 | 0,66 |
| 10 | 150 | 0,58 |
| 6 | 250 | 0,60 |
| 8 | 250 | 0,55 |
| 10 | 250 | 0,49 |

### Maximum end velocity of jet (isothermal) with coanda effect



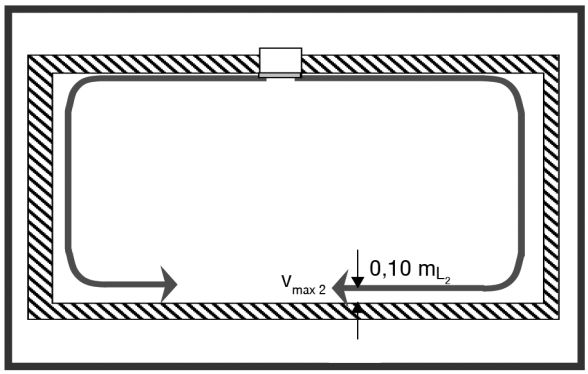

$v_{mittel} = v_{max} \times 0.8$

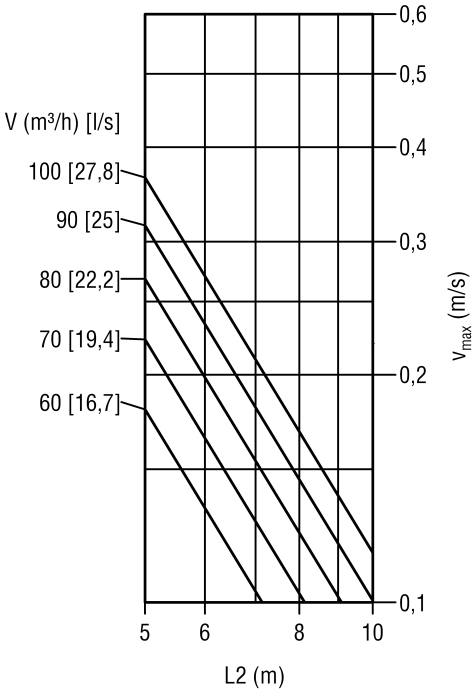
### Length correction factor for air volumes
V x KF

| NL | KF |
|---|---|
| 600 | 1.5 |
| 1200 | 1.0 |

# Ceiling induction diffuser DISA-360

### Maximum end velocity of jet (isothermal) at floor level



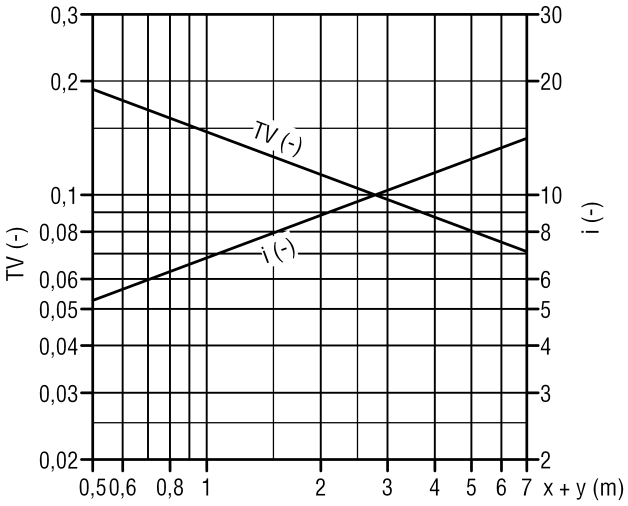

$v_{mittel} = v_{max} \times 0.8$

### Length correction factor for air volumes

V x KF

| NL | KF |
|---|---|
| 600 | 1.5 |
| 1200 | 1.0 |

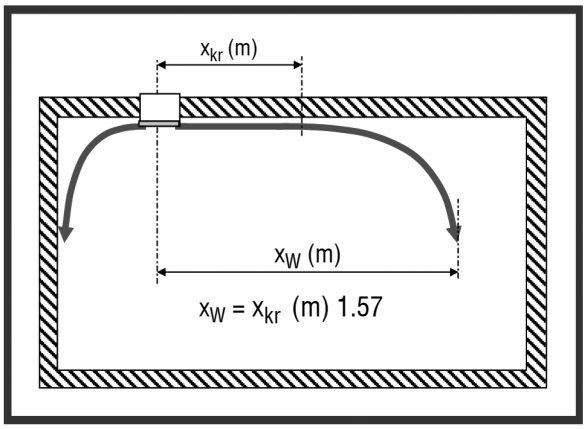
### Temperature ratio / induction ratio secondary slot - primary air only

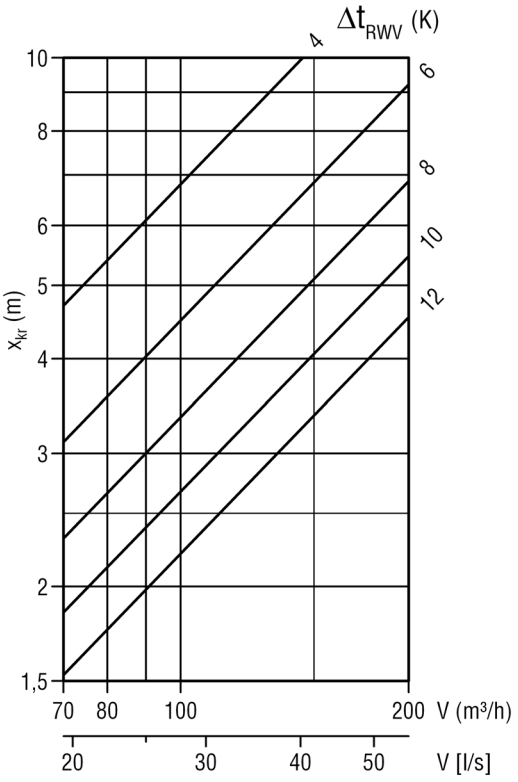


# Ceiling induction diffuser DISA-360

## DISA-360...-C-...

### Critical throw

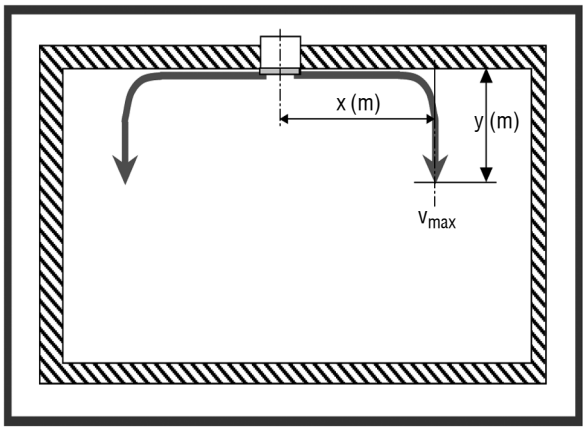


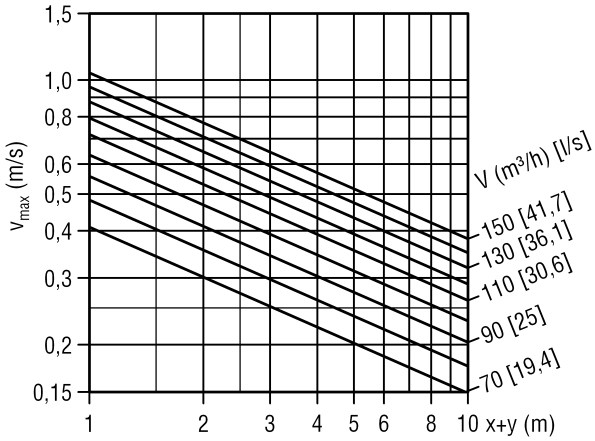




### Correction factors for the critical throw

| Water $\Delta T_{RWV}$ (K) | Amount of water [l/h] | Correction factor x critical |
|---|---|---|
| 6 | 150 | 0,87 |
| 8 | 150 | 0,85 |
| 10 | 150 | 0.83 |
| 6 | 250 | 0,79 |
| 8 | 250 | 0,77 |
| 10 | 250 | 0,75 |

### Maximum end velocity of jet (isothermal) with coanda effect




$v_{mittel} = v_{max} \times 0.8$

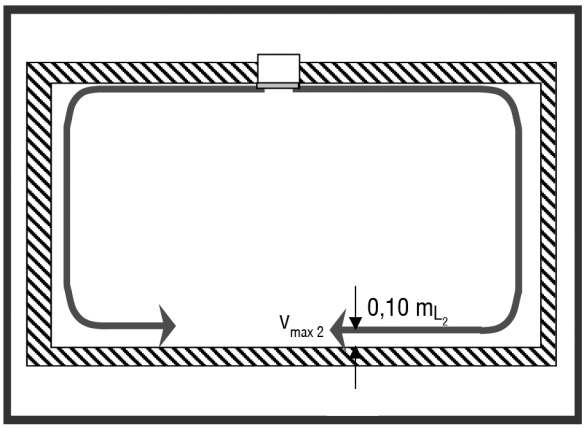
### Length correction factor for air volumes

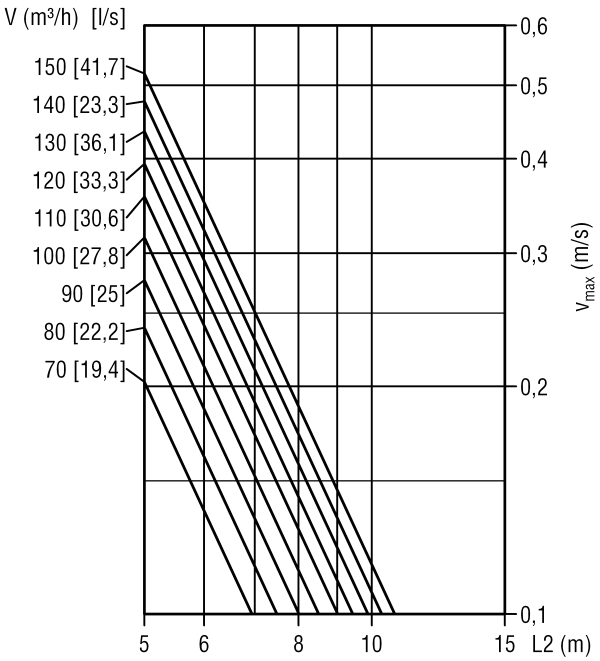
V x KF

| NL | KF |
|---|---|
| 600 | 1,5 |
| 1200 | 1,0 |

# Ceiling induction diffuser DISA-360

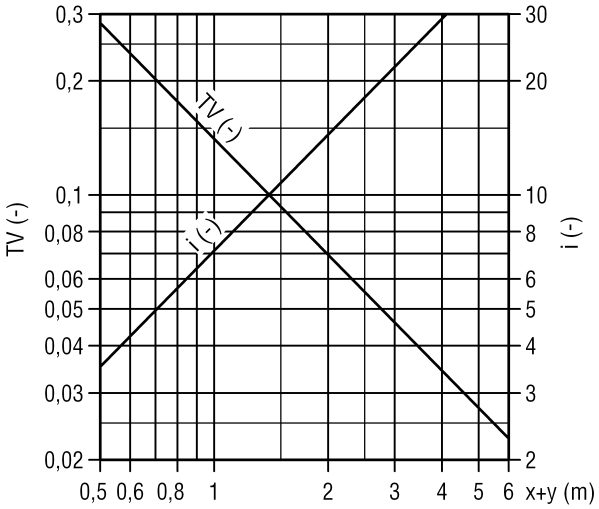
### Maximum end velocity of jet (isothermal) at floor level




$v_{mittel} = v_{max} \times 0.8$

### Temperature ratio / induction ratio secondary slot - primary air only




### Length correction factor for air volumes

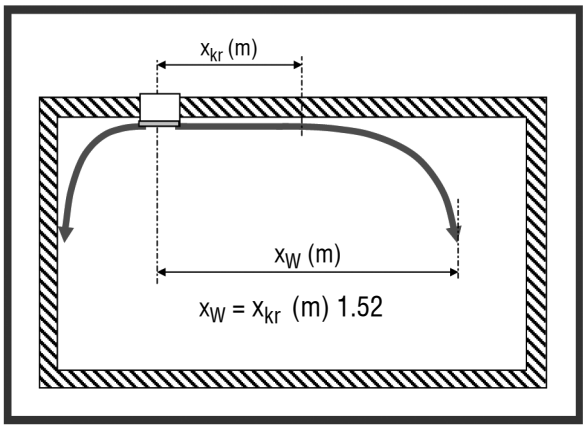
V x KF

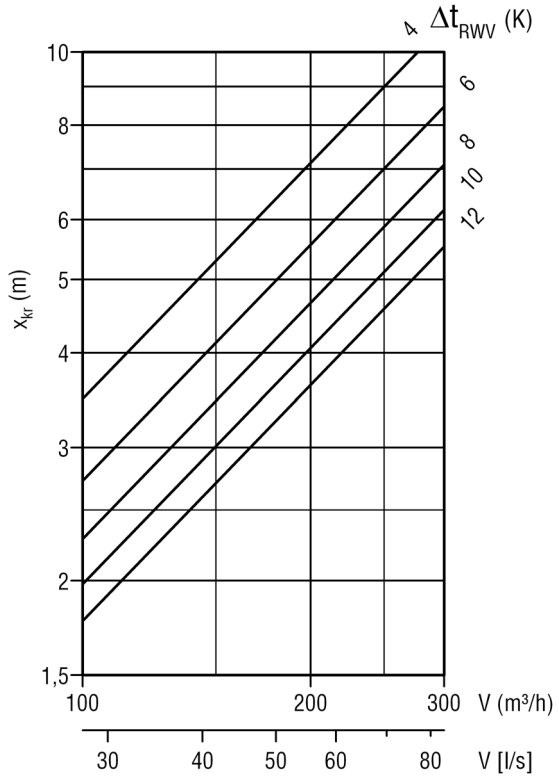
| NL | KF |
|---|---|
| 600 | 1,5 |
| 1200 | 1,0 |

# Ceiling induction diffuser DISA-360

## DISA-360...-D-...

### Critical throw

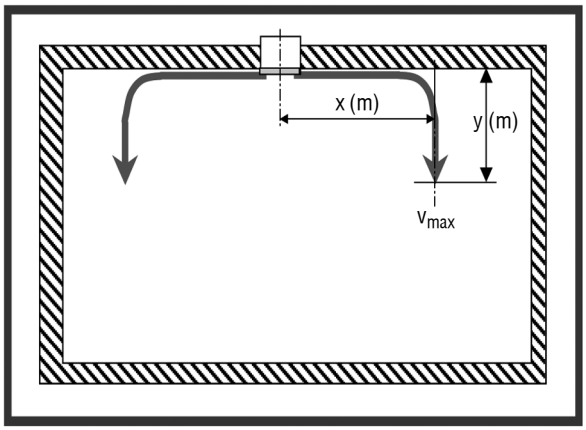


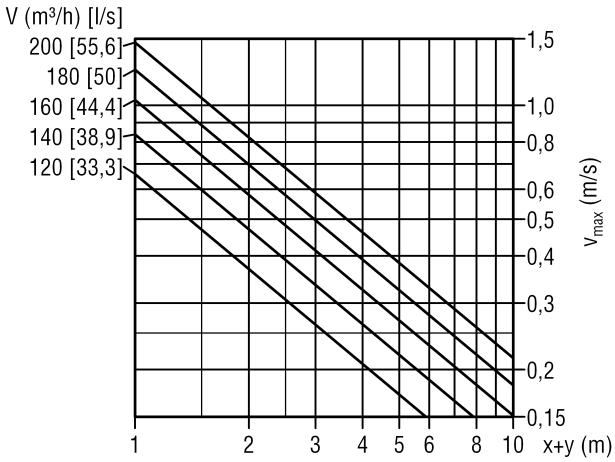




### Correction factors for the critical throw

| Water $\Delta T_{RWV}$ (K) | Amount of water [l/h] | Correction factor x critical |
|---|---|---|
| 6 | 150 | 0,88 |
| 8 | 150 | 0,86 |
| 10 | 150 | 0,83 |
| 6 | 250 | 0,83 |
| 8 | 250 | 0,78 |
| 10 | 250 | 0,76 |

### Maximum end velocity of jet (isothermal) with coanda effect




$v_{mittel} = v_{max} \times 0.8$

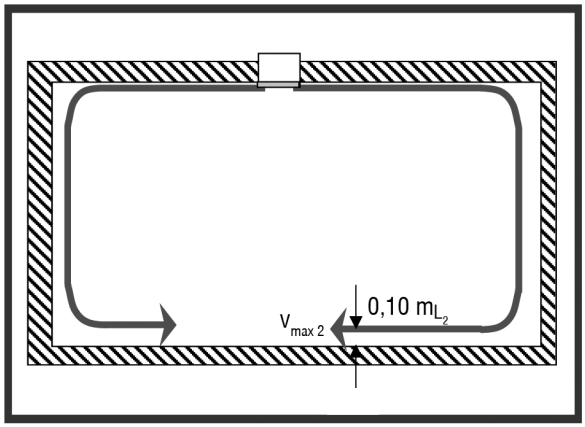
### Length correction factor for air volumes

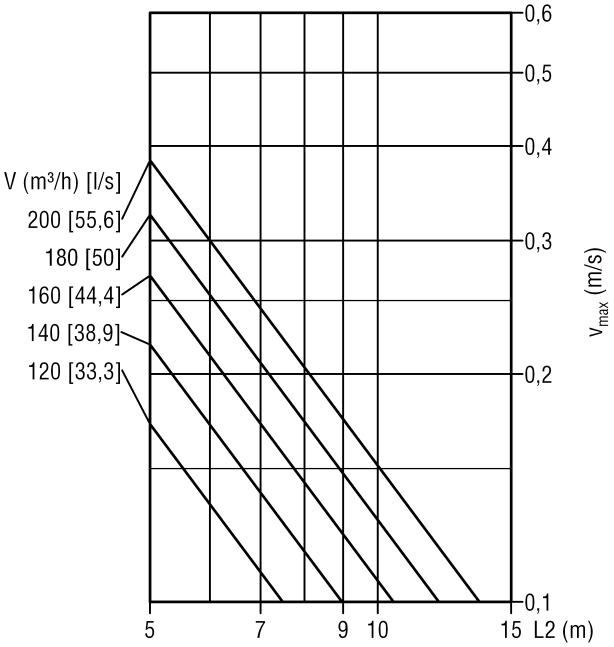
V x KF

| NL | KF |
|---|---|
| 600 | 1,5 |
| 1200 | 1,0 |

# Ceiling induction diffuser DISA-360

### Maximum end velocity of jet (isothermal) at floor level



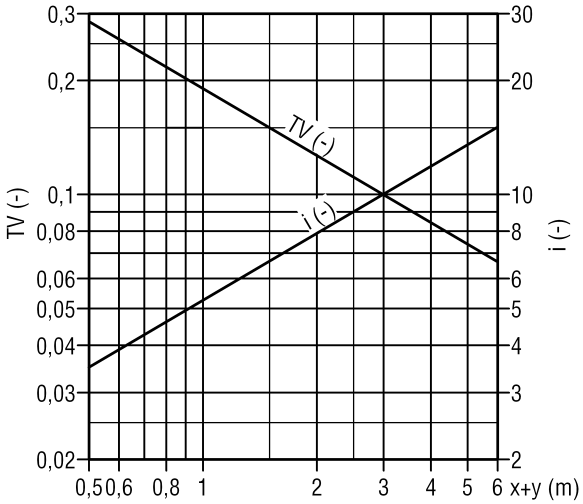

$v_{mittel} = v_{max} \times 0.8$

### Length correction factor for air volumes

V x KF

| NL | KF |
|---|---|
| 600 | 1,5 |
| 1200 | 1,0 |

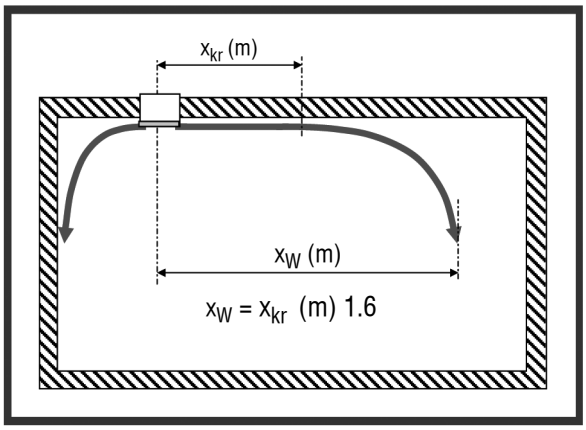
### Temperature ratio / induction ratio secondary slot - primary air only

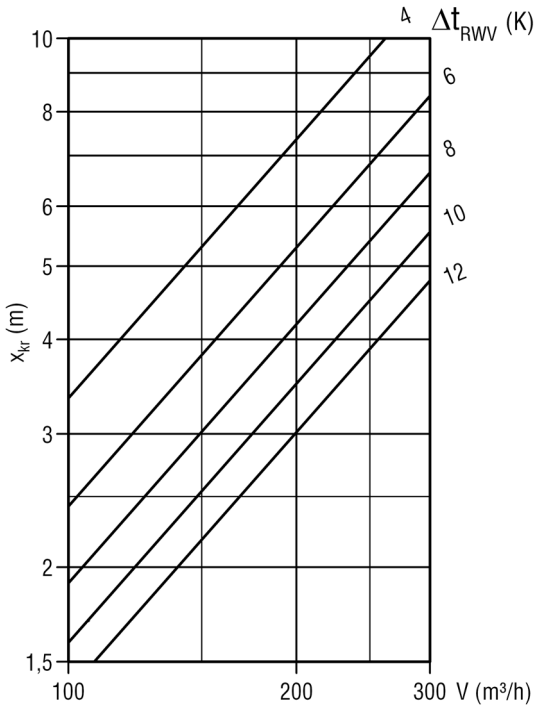


# Ceiling induction diffuser DISA-360

## DISA-360…-E-…

### Critical throw

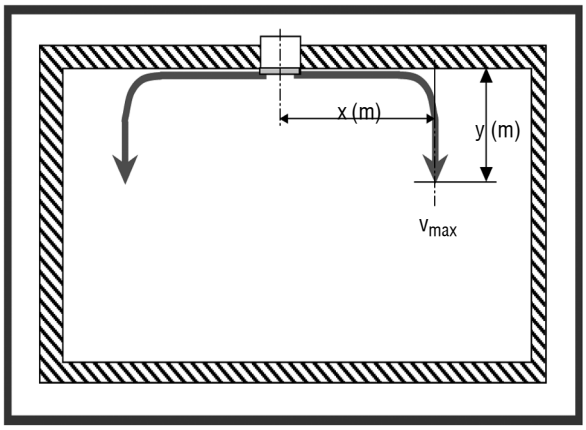


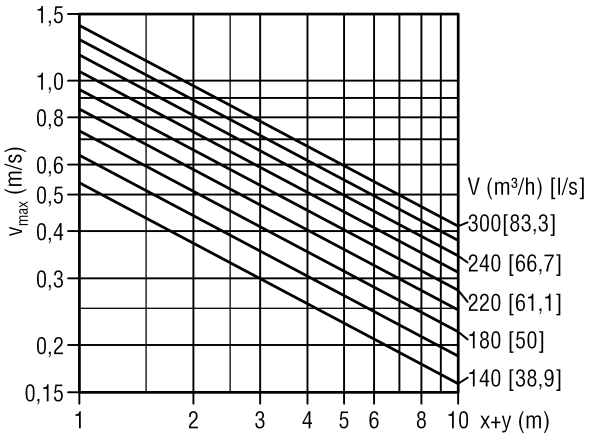




### Correction factors for the critical throw

| Water $\Delta T_{RWV}$ (K) | Amount of water [l/h] | Correction factor x critical |
|---|---|---|
| 6 | 150 | 0,78 |
| 8 | 150 | 0,74 |
| 10 | 150 | 0,72 |
| 6 | 250 | 0,68 |
| 8 | 250 | 0,66 |
| 10 | 250 | 0,64 |

### Maximum end velocity of jet (isothermal) with coanda effect




$v_{mittel} = v_{max} \times 0.8$

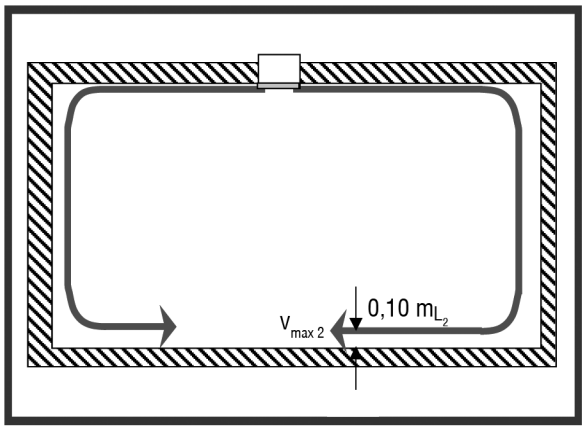
### Length correction factor for air volumes

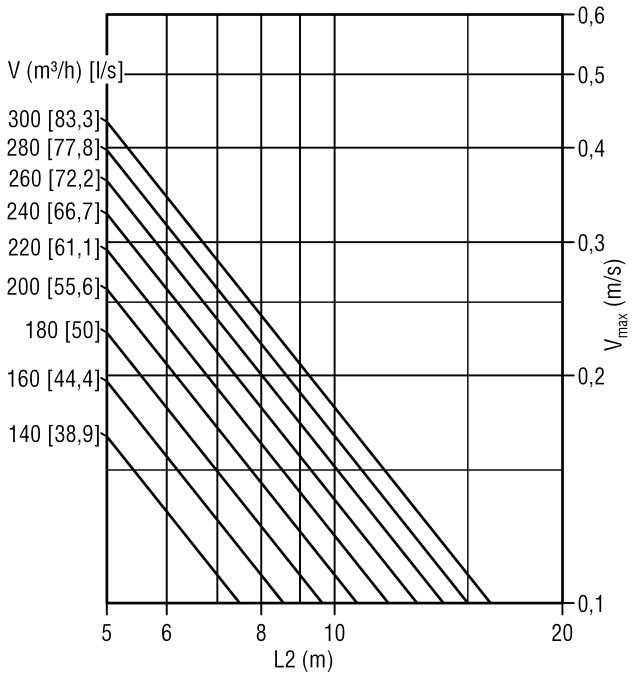
V x KF

| NL | KF |
|---|---|
| 600 | 1,5 |
| 1200 | 1,0 |

# Ceiling induction diffuser DISA-360

### Maximum end velocity of jet (isothermal) at floor level



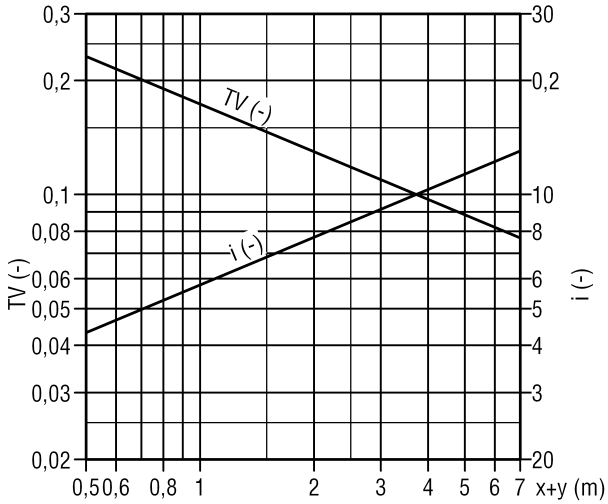

$V_{mittel} = V_{max} \times 0.8$

### Length correction factor for air volumes

V x KF

| NL | KF |
|---|---|
| 600 | 1,5 |
| 1200 | 1,0 |

### Temperature ratio / induction ratio secondary slot - primary air only



# Ceiling induction diffuser DISA-360

## Control units

### Valves

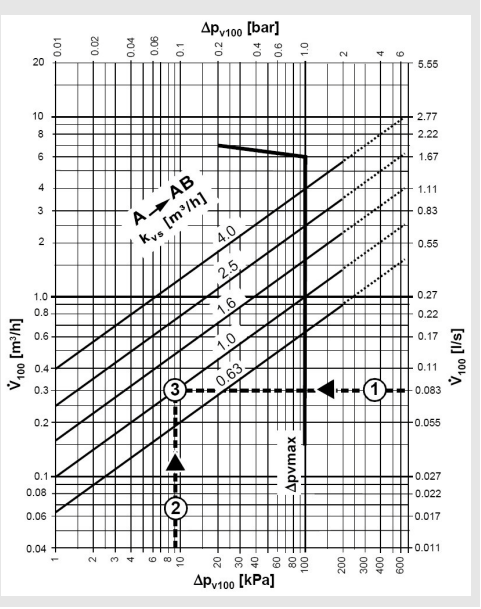
#### 3-way valves (series VXP46.10-...)

- Nominal diameter 10 mm
- Connection $G^{1/2}$ B
- $k_{VS}$: 0.63 (VXP46.10-0.63) and 1 $m^3/h$ (VXP46.10-1)
- $\Delta p_s$ : 150 kPa
- $\Delta p_{max}$:100 kPa
- Drives SSA (100 N) and STA (100 N)

**Compatible drives**:

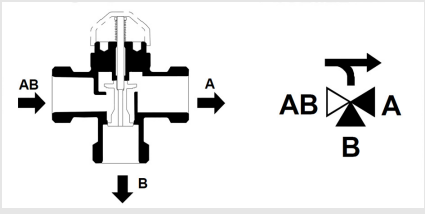
| Actuator | Operating voltage | Activation |
|---|---|---|
| **SSA31** | AC 230 V | 3-point |
| **SSA61** | AC 24 V | DC 0 ...10 V |
| **SSA81** | AC 24 V | 3-point |
| **STA23** | AC 230 V | 2-point |
| **STA73** | AC 24 V | 2-point or PWM (1) |
| **STA63** | AC 24 V | 0 ...10 V DC |

**Selection $k_{VS}$ value:**




$\dot{V}_{100}$ ($m^3/h$) = (Register) flow rate with fully opened valve
$\Delta p_{v100}$ (kPa) = Consumer pressure loss (register)

**Operation:**




**AB→A** 0...100%
**AB→B** 70...0%

The 3-way valves VXP46 are designed exclusively as distributor valves. For distributor circuits, the valve must therefore be mounted in the supply line.

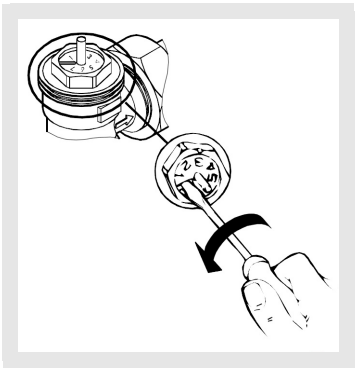
#### 2-way valves (series VD115CLC)

- Nominal diameter 15 mm
- Connections inner and outer thread 1/2 inch
- Manual setting button/protective cap included in delivery
- Valve with adjustable $k_{VS}$ by means of a ring 0.25-1.9 $m^3/h$
- Drives SSA (100 N) and STA (100 N)

**Compatible drives:**

| Actuator | Operating voltage | Activation |
|---|---|---|
| **SSA31** | AC 230 V | 3-point |
| **SSA61** | AC 24 V | DC 0 ...10 V |
| **SSA81** | AC 24 V | 3-point |
| **STA23** | AC 230 V | 2-point |
| **STA73** | AC 24 V | 2-point or PWM (1) |
| **STA63** | AC 24 V | DC 0 ...10 V |

**Valve data:**



| Numbers | Valve stroke (mm) | $k_{VS}$ ($m^3/h$) |
|---|---|---|
| 0 1.) | 0 | 0 |
| 1 | 0,188 | 0,25 |
| 2 | 0,375 | 0,65 |
| 3 | 0,563 | 0,88 |
| 4 | 0,750 | 1,12 |
| 5 | 0,938 | 1,30 |
| 6 | 1,125 | 1,46 |
| 7 | 1,313 | 1,57 |
| 0 2.) | 1,50 | 1,90 |

The presetting < 5 is not recommended because of too little stroke resolution.

Two revolutions are possible on the presetting ring. The values listed in the table (numbers $0^{1)}$... $0^{2)}$) define the first revolution. Another revolution (numbers $0^{2)}$ ... 6) will increase the stroke to 2.5 mm (completely open), but the kvs values will no longer change after $0^{2)}$ .

If Siemens valves VD115CLC are motorised with actuators SSA61..., the preset flow rate must be fixed at a valve stroke of 1.5 mm (factory setting $0^2$). At a valve stroke < 1.5 mm, self-calibration will not be possible, and the actuator/valve combination will remain blocked.

(1) in connection with room controllers RDG

# Ceiling induction diffuser DISA-360

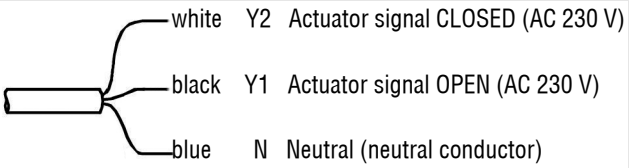
## Actuators

### Model SSA

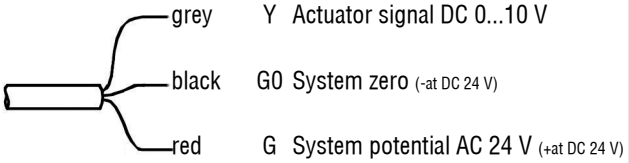
- Actuating power 100 N
- Automatic detection of the valve stroke
- Direct mounting
- Manual adjustment and position indicator
- Connecting cable lengths 1.5, 2.5 and 4.5 m

**SSA31**: actuator 230 V AC, 3-point activation
**SSA61:** actuator 24 V AC/DC, activation 0...10 V DC
**SSA81**: actuator 24 V AC, 3-point activation

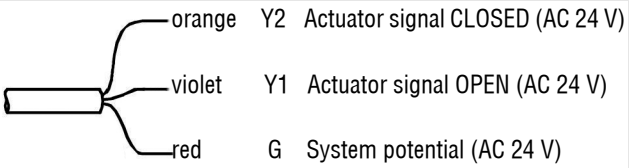
**Connection diagrams:**
**SSA31:**




**SSA61:**




**SSA81:**

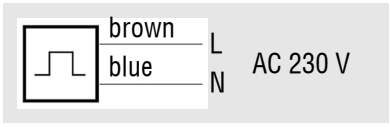



### Model STA

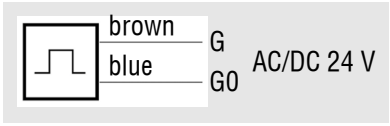
- Actuating power 100 N
- Simple installation
- Standard version including 1, 2 or 5 m connecting cables
- Motion and position indicator
- Two-wire connection
- Pulse duration modulation (PDM)
  (room temperature controls RDG and RCU)

**STA23:** Operating voltage 230 V AC, actuator signal 2-point
**STA73:** Operating voltage 24 V AC/DC, actuator signal 2-point or PDM (pulse duration modulation)

**Connection diagrams:**
**STA23**



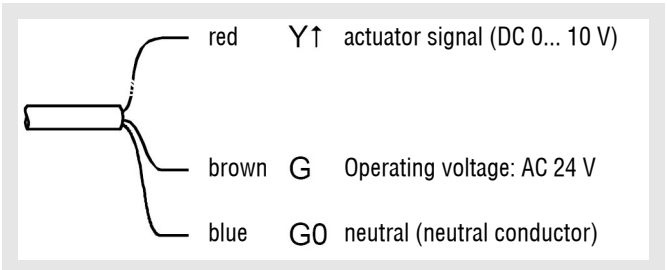

**STA73**




### Model STA63

- Actuating power 100 N
- Simple installation
- Standard version including connecting cables of 1 m (2, 5 or 7 m optional).
- 270° visible position indicator
- 3-wire connection
- Voltage AC 24 V, DC 0...10 V position signal

**Connection diagrams:**



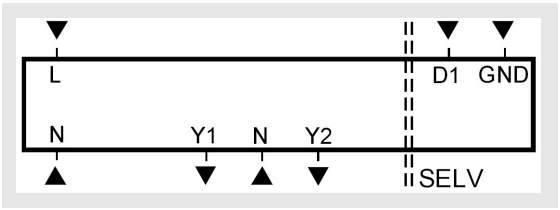
# Ceiling induction diffuser DISA-360

## Control units

### Model RCU 10

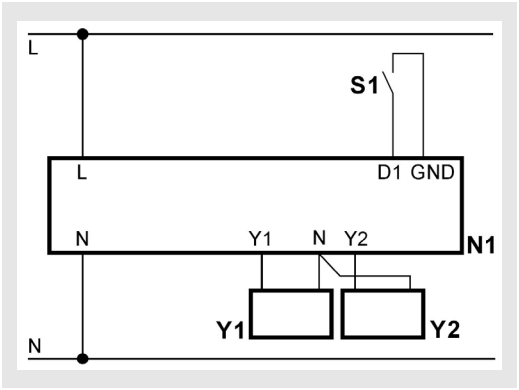
- 2-point or steady control with PI behaviour, as desired, combined with model STA
- On/Off or PWM signal
- Operating mode switchover contact input for remote circuit
- Operating voltage AC 230 V

**Terminals:**




L, N Operating voltage AC 230 V
D1, GND Signal input for potential-free operating mode switch
Y1, Y2 Control signal PWM / 2-point AC 230 V

**Connection diagram:**

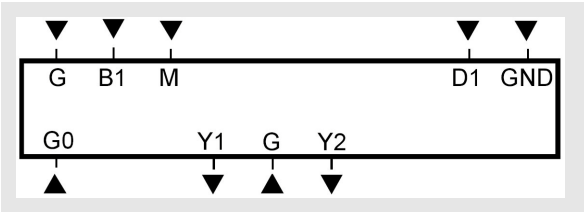



N1 Room temperature control
S1 External operating mode converter
Y1, Y2 Actuator

### Model RCU 15

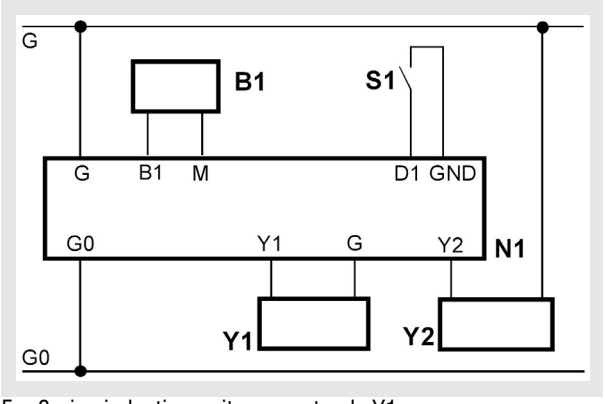
- 2-point or steady control with PI behaviour, as desired
- ON/OFF or PWM actuator signal outputs
- Standard, Economy and Stand-by operating modes
- Operating mode switchover contact input for remote circuit
- Operating voltage AC 24 V

**Terminals:**




G,G0 Operating voltage AC 24 V
B1 Signal input external room temperature sensor or return air temperature sensor
D1,GND Signal input for potential-free operating mode switch
M Measurement zero "external room temperature sensor or return air temperature sensor"
Y1, Y2 Control signal PWM / 2-point AC 24 V

**Connection diagram (4-pipe cooling and heating):**




For 2-pipe induction unit, connect only Y1

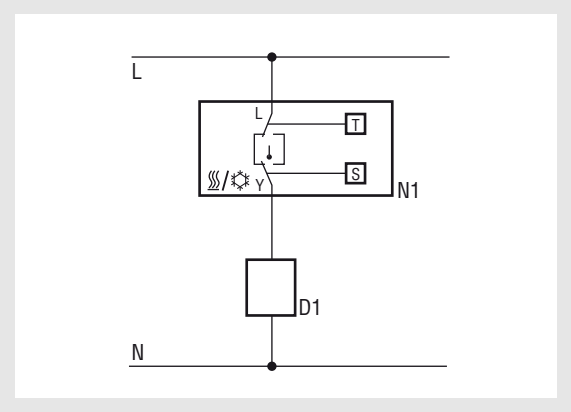
B1 External room temperature sensor (QAA32) or return air temperature sensor (QAH11.1)
N1 Room temperature control
S1 External operating mode converter
Y1, Y2 Actuator

# Ceiling induction diffuser DISA-360

## Model RAA41


- Room thermostat with manual switch for heating or cooling
- Two-point control behaviour
- Switching voltage AC 24...250 V

**Connection diagram:**

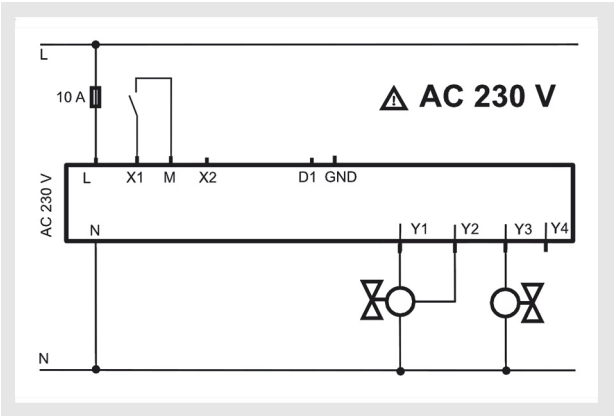



D1 Zone valves or thermal valves
L Switching voltage AC 24...250 V
N1 Room thermostat
S Selector switch Heating / OFF / Cooling
Y Control output "Heating" or "Cooling", AC 24...250 V
N Operating voltage zero
T Thermocouple (gas membrane)

## Model RDG


- Display with backlight
- Automatic switchover between heating and cooling mode via sensor QAH11.1 (optional)
- Operating modes: Comfort, Economy and Protective modes
- PWM regulation, optional
- Automatic mode with timer program
- Optional RDG KNX communication standard protocol (RDG 100KN)
- Condensation symbol visible on the display (when condensation occurs, the cooling valve will close)

**Connection diagram (4-pipe cooling and heating):**




Y1...Y4 Valve control signal AC 230 V
L, N Operating voltage AC 230 V
D1, GND Signal input for potential-free operating mode switch
X1 Multifunctional input for dew point monitor (e.g. QXA 2000)
X2 Multifunctional input for temperature sensor (e.g. QAH11.1). Heating / cooling switchover

# Ceiling induction diffuser DISA-360

## Condensation monitor

**Models QXA2602 + QXA2604 + QXA2601 and QXA2603**


QXA2602
QXA2604

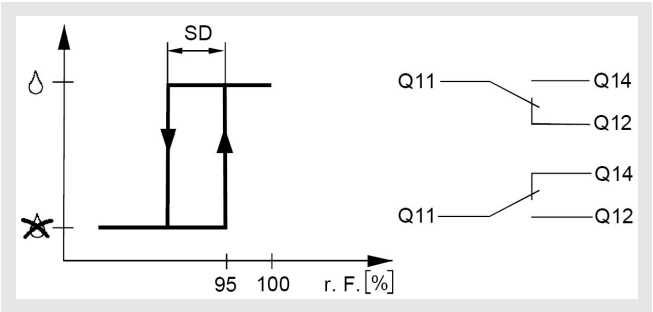

QXA2601
QXA2603

- Operating voltage AC/DC 24 V or AC 230 V
- Potential-free changeover contact AC/DC 1...30V or AC 230V
- Quick and simple installation
- Flat or pre-assembly
- Integrated and remote sensor available
- Status display via two-colour LED

**Mode of action:**

The condensation monitor detects the relative humidity near the dew point (= 100% of r. h.) via its moisture-sensitive element. During this detection, the resistance value of the element increases considerably between 90 ... 100% of r. h. Before reaching the dew point, the electronics of the relay switches. A changeover of the relay contact (two-point output) has the following effect, for example in cooling ceiling applications:

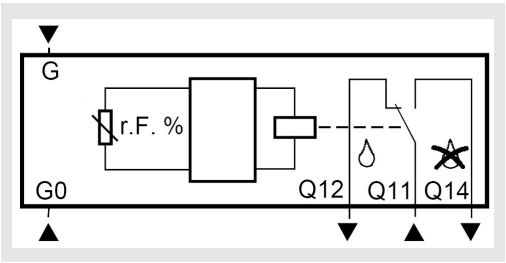
1. The cooling capacity is switched off by the valve position or by a controller until the condensation signal disappears again.
2. The water supply temperature is increased immediately by a selectable value (typically 1 to 2 K) und slowly lowered again once the signal has disappeared. This use results in a specific control function of the controller.




SD Switching difference
Q... Relay contact output

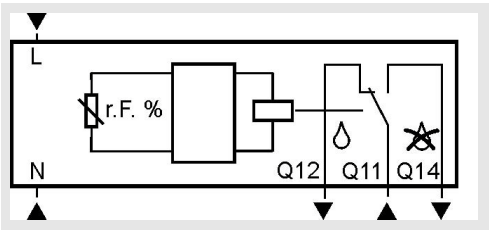
**Wiring diagrams:**

**QXA2601 / QXA2602**



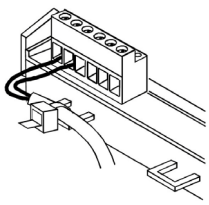

G Measurement voltage AC 24 V (DC 24 V)
G0 System zero
Q... Potential-free changeover contact AC/DC 1...48 V

**QXA2603 / QXA2604**




L, N Mains voltage AC 230 V
Q... Potential-free changeover contact AC/DC 12...250 V

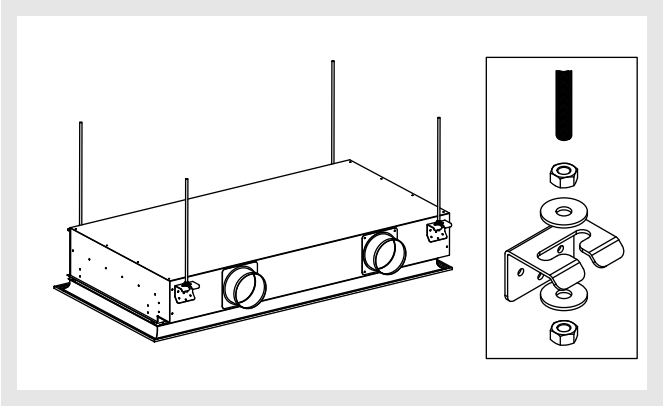
A strain relief for the AC 230 V terminals is absolutely necessary. The cables must be attached to the fishplates at the housing base using cable binders (see figure opposite).



# Ceiling induction diffuser DISA-360

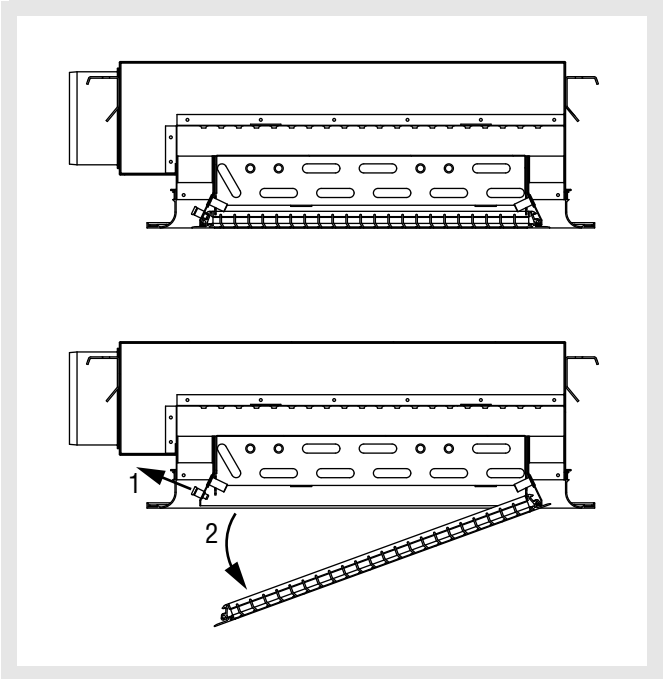
## Assembly

The DISA-360 series was developed for horizontal installation in a ceiling. The device is suspended from a load-bearing ceiling using fastening material approved by the building supervisory authorities, for example M6 or M8 threaded bars. Fastening takes place on the fixing lugs provided ex works.



## Maintenance

The induction diffuser DISA-360 is distinguished by particularly easy maintenance. Grille, register and plenum box are cleaned by spraying with compressed air.
For cleaning the heat exchanger, the secondary air grille can be easily folded down without requiring tools.

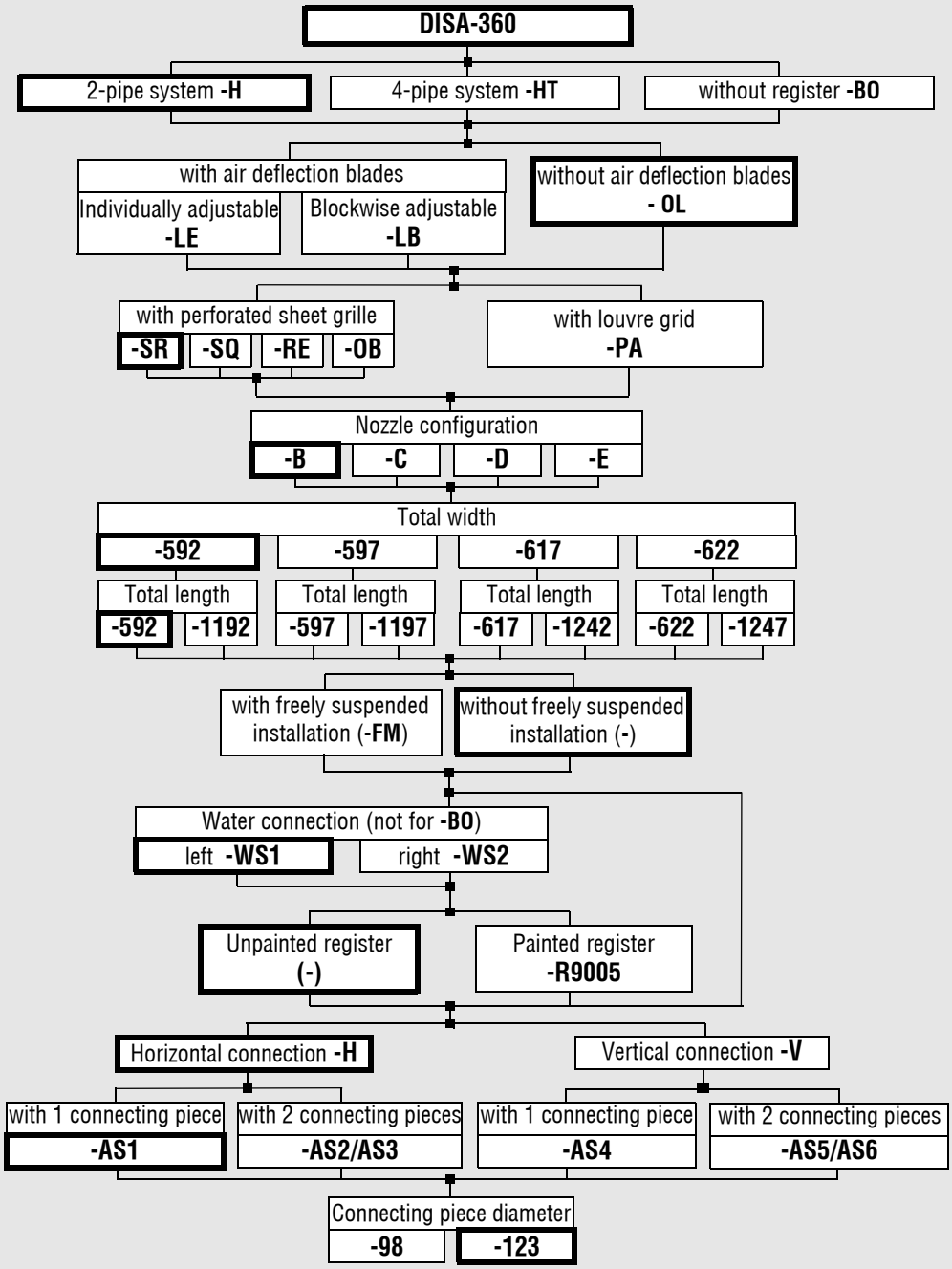



## Legend

| | | | |
|---|---|---|---|
| NL | (mm) | = | Nominal length |
| LG | (mm) | = | Total length |
| B | (mm) | = | Total width |
| V | ($m^3$/h) [l/s] | = | Primary air flow |
| $V_{Wn}$ | [l/s] | = | Standard amount of water flow |
| $P_S$ | (Pa) | = | Static pressure |
| $\Delta p_W$ | (kPa) | = | Water-side pressure loss |
| $t_{Pr}$ | (°C) | = | Primary air temperature |
| $t_R$ | (°C) | = | Room air temperature |
| $t_{WV}$ | (°C) | = | Water supply temperature |
| $\Delta t_{Pr}$ | (K) | = | Temperature difference between room air and conditioned external air |
| $\Delta t_{RWV}$ | (K) | = | Temperature difference between room air and water supply |
| $L_P$ | [dB(A)] | = | Sound pressure level (room damping - 4 dB) |
| $rF_R$ | (%) | = | Relative room humidity |
| $v_{max}$ | (m/s) | = | Maximum end velocity of jet |
| $v_{mittel}$ | (m/s) | = | Average end velocity of jet |
| $v_{max2}$ | (m/s) | = | Maximum end velocity of jet at floor level |
| x+y | (m) | = | Horizontal + vertical throw |
| $x_{kr}$ | (m) | = | Critical throw |
| $\Delta T_x$ | (K) | = | Temperature difference at point x |
| $V_x$ | ($m^3$/h) [l/s] | = | Total air jet volume at point x |
| i | (-) | = | Induction ratio ($i = V_x / V$) |
| TV | (-) | = | Temperature ratio ($TV = \Delta T_x / \Delta t_{Pr}$) |
| $x_w$ | (m) | = | Throw distance |
| $L_2$ | (m) | = | Distance covered by the jet path to the floor level |
| $k_{vs}$ | ($m^3$/h) | = | Flow characteristic value of the valve in $m^3$/h with the valve completely open and a pressure drop of 1 bar |
| $\Delta p_s$ | (kPa) | = | Maximum allowed differential pressure at which the valve will still close against the pressure. |
| $\Delta p_{max}$ | (kPa) | = | Maximum allowed differential pressure above the control path of the valve for the entire actuating range of the valve/ actuator unit |

# Ceiling induction diffuser DISA-360

## Order details




**Order example**
DISA-360-H-OL-SR-B-592-592-WS1-H-AS1-123
**Unless stated otherwise, the thick-frame model will be delivered!**

# Ceiling induction diffuser DISA-360

**Accessories:**

| | |
|---|---|
| Rubber lip seal **-GD** | Flexible connection hoses **-FA** (500/800/1200) |
| Volumetric flow measuring tube **-MR** | External thread flat-sealing **-WA 1/2** |
| Condensation monitor | Control units |
| Valves | Actuators |

## Specification text

Ceiling induction diffuser DISA-360 for installation in false ceilings Housing made of galvanised sheet steel. With foldable louvre grid type SCHAKO-PA or perforated sheet made of sheet steel painted to RAL 9010 (white, standard). Horizontal 2-pipe (standard) or 4-pipe register (optional) for cooling and heating, including galvanised sheet steel frame, copper pipes and aluminium blades Four-way supply air throw and air deflection blades (optional)
Width: 592-622 mm, height: 220 mm, length: 592-1247 mm

Product: SCHAKO **type DISA-360**

- System
  - 2-pipe system (**-H**), standard
  - 4-pipe (**-HT**)
  - Without register (**-BO**)
- Air deflection blades
  - Individually adjustable (**-LE**)
  - Blockwise adjustable (**-LB**)
  - Without air deflection blades (**-OL**)
- Secondary air grille
  - Foldable perforated sheet, perforation Ø 6 mm (-**SR**, standard)
  - Foldable perforated sheet, perforation 8x8 mm (-**SQ**)
  - Foldable perforated sheet, perforation 12x5 (-**RE**)
  - Foldable perforated sheet, oval perforation 20x6 mm (-**OB**)
- Louvre grid **(-PA)**
  - Foldable louvre grid PA
- Nozzle configuration
  - **B** (standard)
  - **C**
  - **D**
  - **E**
- Total width
  - **592**
  - **597**
  - **617**
  - **622**
- Total length
  - for a total width of 592
    - **592**
    - **1192**
  - for a total width of 597
    - **597**
    - **1197**
  - for a total width of 617
    - **617**
    - **1242**
  - for a total width of 622
    - **622**
    - **1247**
- Freely suspended installation
  - with freely suspended installation (**-FM**)
  - without freely suspended installation (**-**)
- Water connection
  - left (**-WS1**)
  - right (**-WS2**)
- Register paint
  - Unpainted register (**-**)
  - Register painted black (**-R9005**)
- Arrangement of connecting pieces
  - horizontal with 1 connecting piece (**-AS1**)
  - horizontal with 2 connecting pieces (**-AS2/AS3**)
  - vertical with 1 connecting piece (-**AS4**)
  - vertical with 2 connecting pieces (-**AS5/AS6**)
- Connecting piece diameter
  - Ø **98** mm
  - Ø **123** mm (standard)

Accessories
- Rubber lip seal (-**GD**)
- Flexible connection hoses
  - 500 mm (**-FA 500**)
  - 800 mm (**-FA 800**)
  - 1200 mm (**-FA 1200**)
- Volumetric flow measuring tube (**-MR**)
- External thread flat sealing (-**WA 1/2**)
- Condensation monitor
- Control units
- Valves
- Actuators