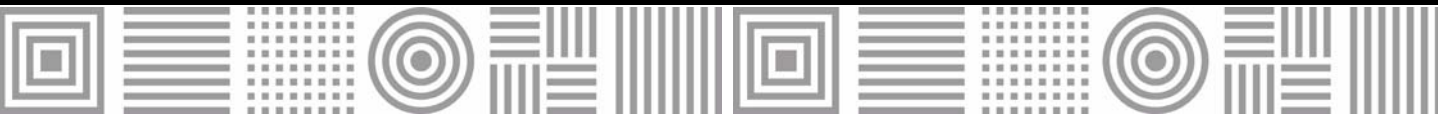


## DRIM supply-return modular diffusers



# MADEL®

The **DRIM** series modular diffusers are designed to be applied in air conditioning ventilation and heating systems. This sort of diffuser can be used in premises from 2,6 up to 4 meters high and with a temperature differential up to 12° C, obtaining good results, not only in air speed but also in sound pressure level in the comfort zone.

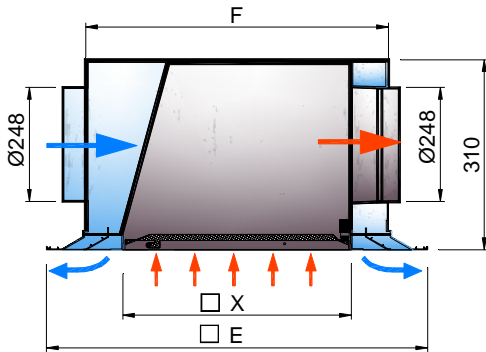
The **DRIM** diffuser causes a 4- way horizontal air supply with coanda effect and the air return is done through its inner core. The perforated face in air return is hinged removable core without tools, by pressing on the invisible PUSH fasteners. KLIN system allows for the easy access to the diffuser that conform with the required regulations for maintenance of HVAC installations.

The **DRIM** modular diffusers meet the functional requirements of modern updated locations. Its design fits perfectly in the technical false ceiling.

## CLASSIFICATION

**DRIM** Four-Way square diffuser for air supply-return with connection plenum box incorporated.

**DRIM...-R**



Dim.	E	F	X
1x600	595	473	438
2x600	595	473	374
1x625	620	498	465
2x625	620	498	399
1x675	670	548	513
2x675	670	548	449

## MATERIAL

Diffuser constructed from aluminium and galvanised steel. All diffusers are provided with a seal on the back of the frame in order that the perimeter in contact with the ceiling is airtight.

## ADDITIONAL ACCESSORIES

**PFT** Filter (K/8 type EN 779 G3) incorporated in the diffuser return.

**RR** Plenum box with air flow damper in the spigot, as much of supply as of return.

**/AIS/** Plenum box thermo acoustically insulated by a foam with a coefficient of thermal conductivity of 0,04 w/mk. This foam complies with the fire reaction specifications:

UNE 23-727 M2

NFP 92-501 M2

DIN 4102 M2

## FIXING SYSTEMS

1) Support brackets to hang from the ceiling with drop rods.

## FINISHES

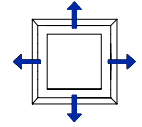
**M9016** Painted in white similar to RAL 9016.

**R9010** Painted in white RAL 9010.

**RAL...** Painted in other RAL colours.

## SPECIFICATION TEXT

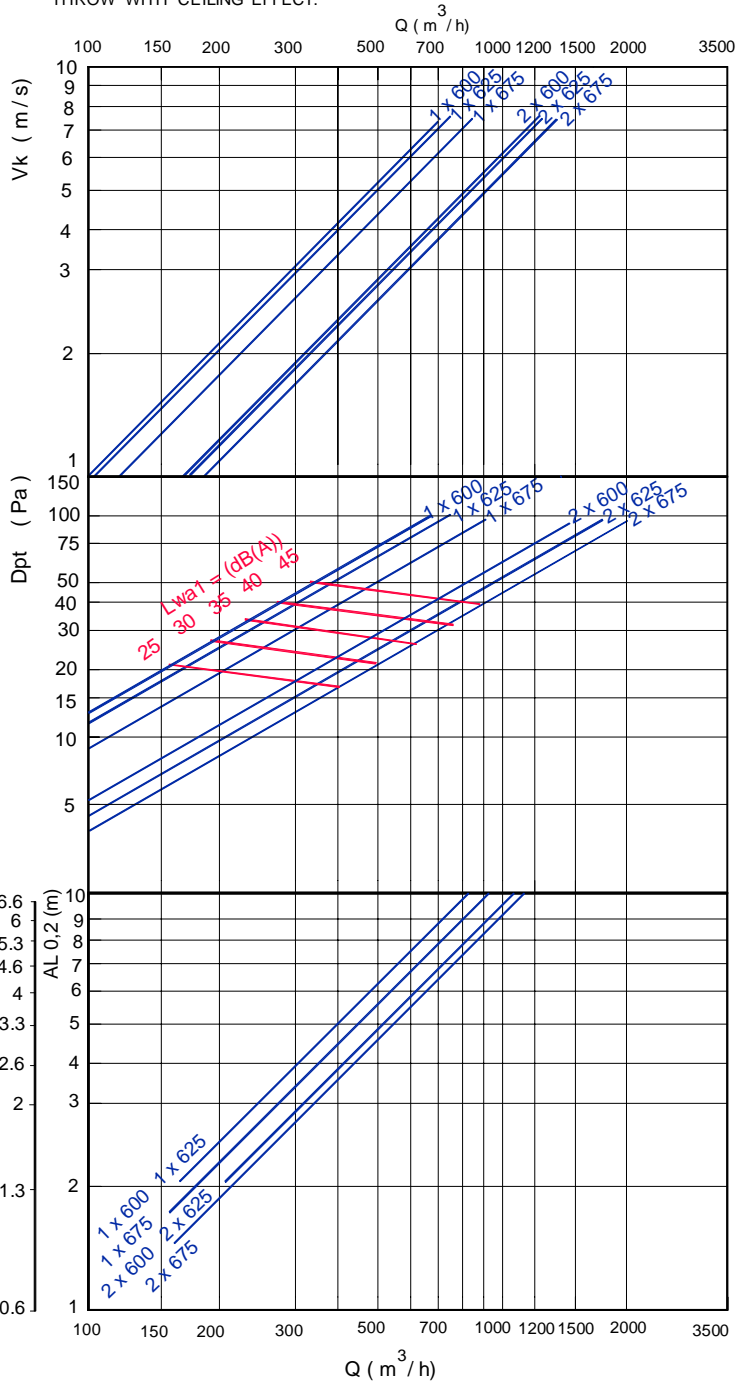
Supply and mounting of Four-Way diffuser for air supply with return core and lateral circular connection plenum box incorporated series **DRIM M9016 dim. 2x600** constructed from galvanised steel and aluminium, paint in white **M9016**. Manufacturer **MADEL**.



RECOMMENDED VELOCITY.

DRIM	Vmin m/s	Vmax m/s
1 x 600	2.5	4.2
2 x 600	2.5	4.2
1 x 625	2.5	4.2
2 x 625	2.5	4.2
1 x 675	2.5	4.2
2 x 675	2.5	4.2

NECK VELOCITY, PRESSURE LOSS AND SOUND POWER LEVEL, THROW WITH CEILING EFFECT.

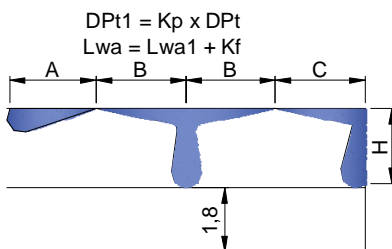


NECK AREA m2.

DRIM	Afree m2	Qmin. m3/h	Qmax. m3/h
1 x 600	.0269	242	406
2 x 600	.0449	404	678
1 x 625	.0275	247	415
2 x 625	.0467	420	705
1 x 675	.0316	284	477
2 x 675	.0515	463	780

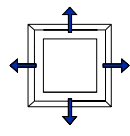
CORRECTION FACTOR FOR Dpt AND Lwa1.

DRIM-RR		100% Open	50% Open	10% Open
		Dpt (Kp)	1	1,82
1 x 600	Lwa1 (Kf)	+0	+6	+15
	Dpt (Kp)	1	4,38	7,5
2 x 600	Lwa1 (Kf)	+0	+6	+15
	Dpt (Kp)	1	4,17	8,33
1 x 625	Lwa1 (Kf)	+0	+6	+16
	Dpt (Kp)	1	3	18
2 x 625	Lwa1 (Kf)	+0	+7	+16
	Dpt (Kp)	1	4,17	8,33
1 x 675	Lwa1 (Kf)	+0	+6	+16
	Dpt (Kp)	1	3	18
2 x 675	Lwa1 (Kf)	+0	+7	+16

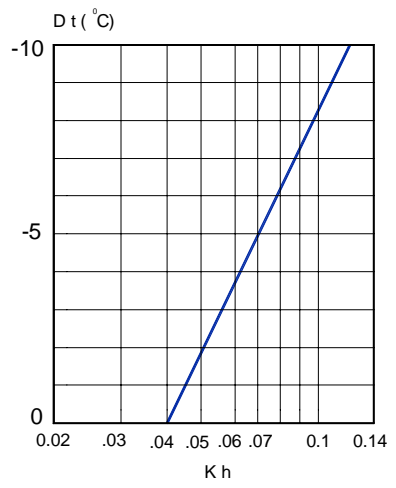


$AL_{0,2} = A$   
 $AL_{0,2} = B+H$   
 $AL_{0,2} = C+H$

Note: In MadelMedia Octava band centre frequency in Hz.

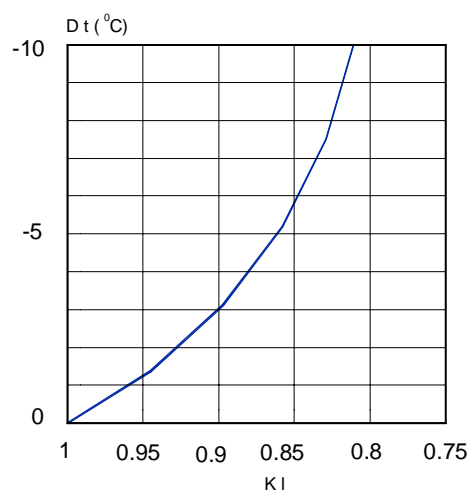


CORRECTION FACTOR FOR VERTICAL DIFFUSION (bv) FOR DT (-).

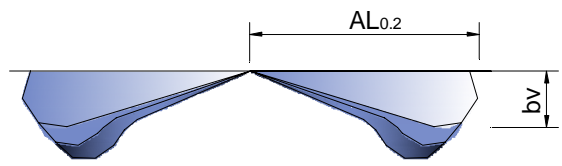


Kh = Correction factor for the vertical diffusion.

CORRECTION FACTOR FOR THROW (L0.2) DT (-).



KI = Correction factor for the throw.



$$bv = Kh \times AL_{0.2}$$

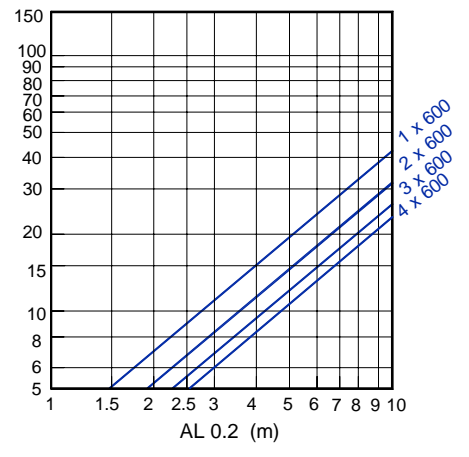
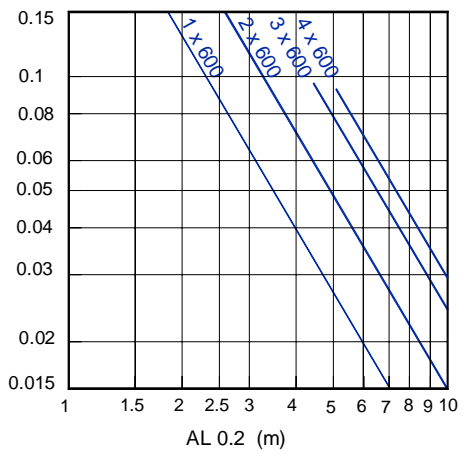
$$AL'_{0.2} (Dt < 0) = KI \times AL_{0.2}$$

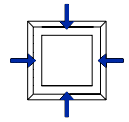
TEMPERATURE RATIO.

$$\frac{Dtl}{Dtz} = \frac{t_{room} - t_x}{t_{room} - t_{supply}}$$

INDUCTION RATIO.

$$i = \frac{Q_r}{Q_0} = \frac{Q_{total\ at\ x}}{Q\ of\ supply.}$$





RECOMMENDED VELOCITY.

DRIM	Vmin m/s	Vmax m/s
1 x 600	2.5	4.2
2 x 600	2.5	4.2
1 x 625	2.5	4.2
2 x 625	2.5	4.2
1 x 675	2.5	4.2
2 x 675	2.5	4.2

NECK AREA m<sup>2</sup>.

DRIM	Afree m <sup>2</sup>	Qmin. m <sup>3</sup> /h	Qmax. m <sup>3</sup> /h
1 x 600	.0511	367	643
2 x 600	.0731	526	920
1 x 625	.0594	427	748
2 x 625	.0804	578	1013
1 x 675	.0754	542	950
2 x 675	.0989	712	1246

CORRECTION FACTOR FOR Dpt AND Lwa1.

DRIM-RR		100% Open	50% Open	10% Open
1 x 600	Dpt (Kp)	1	1,82	4,55
	Lwa1 (Kf)	+0	+6	+15
2 x 600	Dpt (Kp)	1	4,38	7,5
	Lwa1 (Kf)	+0	+6	+15
1 x 625	Dpt (Kp)	1	4,17	8,33
	Lwa1 (Kf)	+0	+6	+16
2 x 625	Dpt (Kp)	1	3	18
	Lwa1 (Kf)	+0	+7	+16
1 x 675	Dpt (Kp)	1	4,17	8,33
	Lwa1 (Kf)	+0	+6	+16
2 x 675	Dpt (Kp)	1	3	18
	Lwa1 (Kf)	+0	+7	+16

FREE VELOCITY, PRESSURE LOSS AND SOUND POWER LEVEL,  
FOR EXTRACT.

