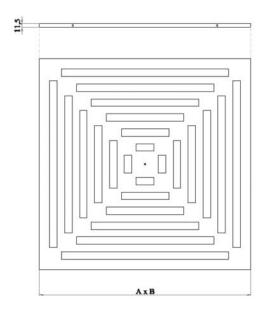


DAM11

4-ways diffuser with adjustable deflectors with a high induction ratio between the injected and the ambient air. Made up of a plate with holes inside which adjustable plastic deflectors are housed.

TECHNICAL SPECIFICATION AND USAGE LIMIT										
INSTALLATION HEIGHT	APPLICATIONS	MATERIAL	SURFACE FINISH	COLOR	FASTENING					
2,5 to 4 m	The diffuser can also be used for air return; in this case it is supplied without deflecting fins. The deflectors can also be oriented after the diffuser has been installed in order to make adjustments to optimise airflow in the room once the system is running.	Painted steel panel, ABS supports and black PVC deflectors	Epoxy powder coating resistant to impact and abrasion	RAL 9010 white. On request, coating in non-standard RAL colors.	by means of side screws or a central screw					



GREEN BUILDING

Thanks also to the support of GreenMap, products manufactured by Tecnica srl contribute to obtain the credits of the major international rating systems for suistainable buildings:



LEEDContributes to credits:
IP, EA, MR, EQ



WELL
Contributes to credits:
AIR, THERMAL COMFORT,
MATERIALS, COMMUNITY



BREEAM
Contributes to credits:
MAN, HEA, WST

For further details about specific contributions to the credits indicated, contact Tecnica Srl

TECHNICAL DATA								
Model	A [mm]	B [mm]						
DAM11 300	295	295						
DAM11 400	395	395						
DAM11 500	495	495						
DAM11 600	595	595						
DAM11 625	625	625						
DAM11 800	795	795						

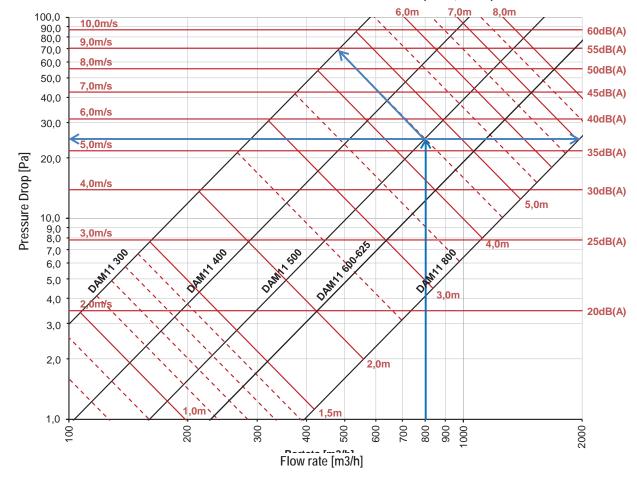


APPLICATIONS									
		+- ×=	REACH	RoHS	<u> Ín</u>		*		
Residential	Easy Pack	Calculation Method	REACH Certificate	RoHS Certificate	Industry	Building	Air Conditioning	Interior design	

*on request

Selection charts

Flow Rate / Pressure Drop Air Otlet Speed / Noise Level / Horizontal Throw (Vt.: 0,25m/s)



C A L C U L A T I O N (input data)								
Total Flow Rate	8000 m ³ /h							
Max Noise Level	40dB(A)							
Number of diffusers expected	10pz.							
Horizontal Isother- mal Throw	4,5m							

SELECTION							
Model	DAM11 500						
Flow Rate	800 m ³ /h						
Pressure Drop	+/- 25Pa						
Noise Level	36dB(A)						
Inlet Air Speed	Flow Rate / (Ak * 3600) = 5,37m/s						
Horizontal Isother- mal Throw	4,5m						

Diagram 1

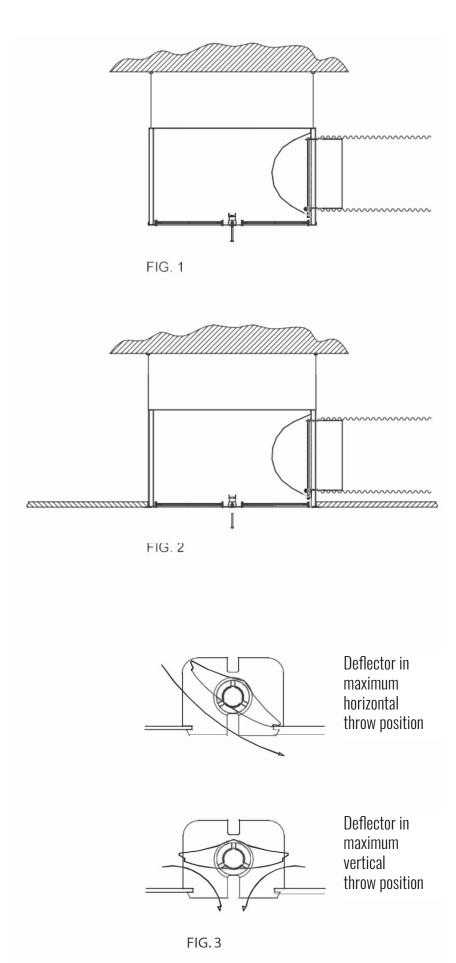
The diagram shows the diffuser pressure drop based on the flow rate with relative indication of the noise level without environmental attenuation, air outlet speed and horizontal throw with terminal speed equal to 0.25m/s.

Note: Pressure drop data shown in the diagram refer to the diffuser with the damper fully open.



							Vi (m	/sec)				
MODEL	DESCRIPTION	U.M.	1	2	3	4	5	6	7	8	9	10
DAM11 300 Ak: 0,0150m2	Flow Rate	m3/h	54	108	162	216	270	324	378	432	486	540
	Pressure Drop	Pa	1	3	8	14	22	31	43	56	70	87
	Horizontal Throw Vt 0,25m/s	mt	0,5	1,0	1,5	2,0	2,5	3,0	3,5	4,0	4,5	5,1
	Noise Level	dB(A)	15	20	25	30	35	40	45	50	55	60
	Flow Rate	m3/h	96	192	288	384	481	577	673	769	865	961
DAM11	Pressure Drop	Pa	1	3	8	14	22	31	43	56	70	87
400 Ak: 0,0267m2	Horizontal Throw Vt 0,25m/s	mt	0,7	1,3	2,0	2,7	3,4	4,0	4,7	5,4	6,1	6,7
	Noise Level	dB(A)	15	20	25	30	35	40	45	50	55	60
	Flow Rate	m3/h	149	298	447	596	745	894	1043	1192	1341	1490
DAM11	Pressure Drop	Pa	1	3	8	14	22	31	43	56	70	87
500 Ak: 0,0414m2	Horizontal Throw Vt 0,25m/s	mt	0,8	1,7	2,5	3,4	4,2	5,0	5,9	6,7	7,6	8,4
	Noise Level	dB(A)	15	20	25	30	35	40	45	50	55	60
	Flow Rate	m3/h	213	426	639	852	1066	1279	1492	1705	1918	2131
DAM11	Pressure Drop	Pa	1	3	8	14	22	31	43	56	70	87
600 Ak: 0,0592m2	Horizontal Throw Vt 0,25m/s	mt	1,0	2,0	3,0	4,0	5,0	6,0	7,0	8,0	9,0	10,0
	Noise Level	dB(A)	15	20	25	30	35	40	45	50	55	60
	Flow Rate	m3/h	213	426	639	852	1066	1279	1492	1705	1918	2131
DAM11	Pressure Drop	Pa	1	3	8	14	22	31	43	56	70	87
625 Ak: 0,0592m2	Horizontal Throw Vt 0,25m/s	mt	1,0	2,0	3,0	4,0	5,0	6,0	7,0	8,0	9,0	10,0
	Noise Level	dB(A)	15	20	25	30	35	40	45	50	55	60
DAM11 800 Ak: 0,1023m2	Flow Rate	m3/h	368	737	1105	1473	1841	2210	2578	2946	3314	3683
	Pressure Drop	Pa	1	3	8	14	22	31	43	56	70	87
	Horizontal Throw Vt 0,25m/s	mt	1,3	2,6	4,0	5,3	6,6	7,9	9,2	10,6	11,9	13,2
	Noise Level	dB(A)	15	20	25	30	35	40	45	50	55	60

ASSEMBLY INSTRUCTION



Easy installation, adjustments and maintenance. The diffusers are fastened to the plenum by means of side screws or a central screw.

Adjustment

The airflow distribution is manually adjusted by acting on the deflectors that are fitted with a snap positioning device so that they stay in position during operation.

Fig. 1 Installation with plenum fastened on the ceiling

- Hang the plenum on the ceiling using brackets or chains fastened on the plenum whose outer edge can be drilled.
- Fit the flexible duct on the connecting sleeve and fasten it with a hose clamp.
- Make a preliminary adjustment to the damper by acting on the pin with Allen screw and tightening the hexagonal-head screw that fastens the pin.
- Fit the diffuser using either a central screw screwing it onto the plenum bridge (if provided) or 4 self-tapping side screws.

Fig. 2 Installation on the false ceiling

- Hang the false ceiling elements on the ceiling.
- Make a preliminary adjustment to the damper by acting on the pin with Allen screw and tightening the hexagonalhead screw that fastens the pin.
- Fit the flexible duct on the connecting sleeve and fasten it with a hose clamp.
- Fit the diffuser using either a central screw screwing it onto the plenum bridge (if provided) or 4 self-tapping side screws.
- Rest the diffuser pre-fitted on the plenum on the square space of the false ceiling.

Fig. 3 Movable deflector adjustment

• The movable deflectors can be adjusted from an angle of 0° (maximum vertical throw position used in heating) to a maximum angle (maximum horizontal throw position used in cooling).

The deflectors are fitted with a snap positioning device in order to guarantee accuracy and always correct positioning even with high flow rates and velocities.

