

EDRCS THERM - EDRCS-PQR THERM Variable geometry thermostatic diffusers



Description

Variable geometry diffusers with thermostatic actuator and equaliser. The diffuser blades are adjusted automatically, without the need for a power supply, by means of a thermostatic actuator consisting of special shape memory nickel-titanium materials which vary their length according to the temperature of the air supplied to the diffuser, thus opening and closing the blades.

The individually adjustable blades provide the air with a helical movement and, at the same time, provide the direction of the air throw.

On the neck of the diffuser there is a graduated scale indicating the angle of the blade during heating or conditioning.

Characteristics

Material: aluminium structure with steel blades
Finish: painted white RAL 9010.

Use

Diffusers suitable for heating and cooling large rooms requiring a high installation height and in any case not less than 3.5 metres.

For both duct and ceiling installation.

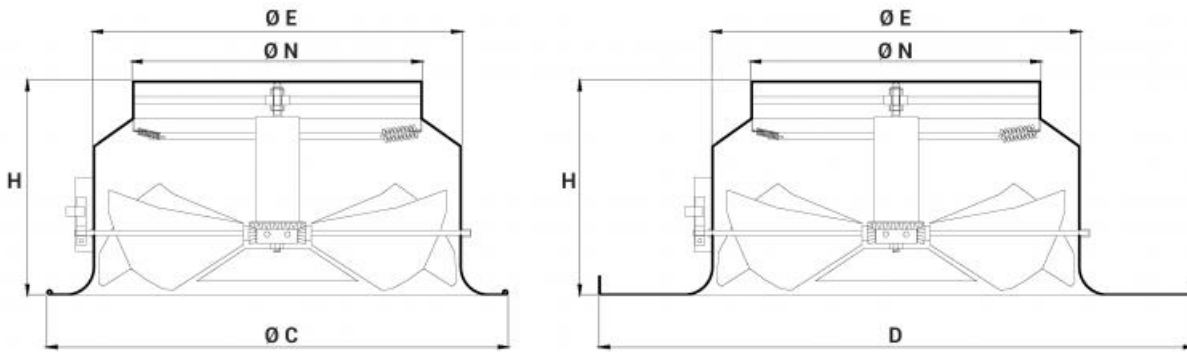
Models

-EDRCS THERM: Variable geometry thermostatic diffusers with equaliser;
-EDRCS-PQR THERM: Variable geometry thermostatic diffusers with equaliser on square panel 595x595 mm.

On request

EDRCS THERM-PQR diffusers can be supplied without equaliser.

Dimensions



all dimensions are expressed in mm

model	effective cross-section m ²	EDRCS THERM				EDRCS-PQR THERM			
		Ø N	Ø C	Ø E	H	Ø N	DxD	Ø E	H
250	0,0569	248	400	298	205	248	595x595	298	205
315	0,0902	313	500	398	230	313	595x595	398	230
400	0,1243	398	615	465	270	-	-	-	-
500	0,1947	498	780	565	320	-	-	-	-
630	0,3095	628	935	665	390	-	-	-	-

Operating data in heating mode with blade angle at 35°

Data referring to a terminal velocity $V_t=0.25$ m/s and with a temperature differential of 10 and 15°C

Vk: effective speed (m/s)

m³/h: air flow rate

Pa: pressure drops in Pascal

L(m): air throw in metres

dB(A): noise level

EDRCS THERM - EDRCS-PQ THERM Heating 35°												
Model		m ³ /h	410		630		850		1000		1300	
EDRCS THERM	250	Δt (°C)	10	15	10	15	10	15	10	15	10	15
		Vk (m/s)	2		3,1		4,1		4,9		6,3	
		L(m)	2,2	1,8	3,1	2,5	4	3,3	4,6	3,7	5,7	4,7
		Pa	5		12		22		30		51	
EDRCS-PQR THERM	250	dB(A)	37		49		58		63		70	
		m ³ /h	650		1000		1350		1590		2060	
		Δt (°C)	10	15	10	15	10	15	10	15	10	15
		Vk (m/s)	2		3,1		4,2		4,9		6,3	
EDRCS THERM	315	L(m)	2,6	2,1	4,1	3,3	5,5	4,5	6,4	5,3	8,3	6,8
		Pa	5		12		22		31		52	
		dB(A)	39		51		60		65		72	
		m ³ /h	1040		1600		2160		2540		3290	
EDRCS THERM	400	Δt (°C)	10	15	10	15	10	15	10	15	10	15
		Vk (m/s)	2,3		3,6		4,8		5,7		7,4	
		L(m)	2,8	2,3	4,3	3,5	5,9	4,8	6,9	5,7	8,9	7,3
		Pa	5		12		22		31		52	
EDRCS THERM	500	dB(A)	41		54		63		67		75	
		m ³ /h	1640		2530		3425		4020		5210	
		Δt (°C)	10	15	10	15	10	15	10	15	10	15
		Vk (m/s)	2,3		3,6		4,9		5,7		7,4	
EDRCS THERM	630	L(m)	3,2	2,6	5,1	4,1	6,9	5,6	8,2	6,7	10,7	8,7
		Pa	5		12		22		31		52	
		dB(A)	42		55		64		68		76	
		m ³ /h	2570		3970		5370		6300		8170	
EDRCS THERM	630	Δt (°C)	10	15	10	15	10	15	10	15	10	15
		Vk (m/s)	2,3		3,6		4,8		5,7		7,3	
		L(m)	3,4	2,8	5,3	4,3	7,2	5,9	8,5	6,9	11	9
		Pa	5		12		22		31		52	
EDRCS THERM	630	dB(A)	42		55		64		69		76	

Operating data in cooling mode with blade angle at 46°

Data referring to a terminal velocity Vt = 0.25 m/s and with a temperature differential of 10 and 15°C

EDRCS THERM - EDRCS-PQ THERM Cooling 46°												
Model		m ³ /h	410		630		850		1000		1300	
EDRCS THERM	250	Δt (°C)	10	15	10	15	10	15	10	15	10	15
		Vk (m/s)	2		3,1		4,1		4,9		6,3	
		L(m)	2,4	2,9	3,8	4,5	5,2	6	6,2	7,3	8,1	9,6
		Pa	14		32		58		81		137	
EDRCS-PQR THERM	250	dB(A)	39		51		60		65		72	
		m ³ /h	650		1000		1350		1590		2060	
		Δt (°C)	10	15	10	15	10	15	10	15	10	15
		Vk (m/s)	2		3,1		4,2		4,9		6,4	
EDRCS THERM	315	L(m)	2,4	2,8	3,8	4,4	5,2	6,1	6,2	7,2	8,1	9,5
		Pa	15		36		66		91		153	
		dB(A)	41		53		62		67		74	
		m ³ /h	1040		1600		2160		2540		3290	
EDRCS THERM	400	Δt (°C)	10	15	10	15	10	15	10	15	10	15
		Vk (m/s)	2,3		3,6		4,8		5,7		7,4	
		L(m)	2,3	2,7	3,6	4,2	4,9	5,8	5,8	6,9	7,6	8,9
		Pa	16		37		67		93		157	
EDRCS THERM	500	dB(A)	43		56		65		69		76	
		m ³ /h	1640		2530		3425		-		-	
		Δt (°C)	10	15	10	15	10	15	-	-	-	-
		Vk (m/s)	2,3		3,6		4,9		-		-	
EDRCS THERM	630	L(m)	5	5,8	7,9	9,2	10,8	12,7	-	-	-	-
		Pa	16		38		70		-		-	
		dB(A)	44		57		66		-		-	
		m ³ /h	2570		3970		-		-		-	
EDRCS THERM	630	Δt (°C)	10	15	10	15	-	-	-	-	-	-
		Vk (m/s)	2,3		3,6		-		-		-	
		L(m)	6,2	7,3	10	11,8	-	-	-	-	-	-
		Pa	16		38		-		-		-	
EDRCS THERM	630	dB(A)	44		57		-		-		-	

Price list

model	EDRCS THERM	EDRCS-PQR THERM
	euro	euro
250	a.r. v	a.r. v
315	a.r. v	a.r. v
400	a.r. v	-
500	a.r. v	-
630	a.r. v	-