

Water terminals

SysSquare

Chilled water cassettes

from 360 to 1598 m³/h



from 1.4 to 9.6 kW



from 1.1 to 14.0 kW



 systemair

SysQuare

The best way to combine low noise and energy savings



- 6 sizes (20, 30, 40, 50, 60 and 70)
- 3 versions (2 pipes, 2 pipes/2 wires, 4 pipes)
- AC (SysQuare) or EC (SysQuare EC) motor
- Plastic or metallic diffuser
- Cooling capacities from 1.4 to 9.6 kW
- Heating capacities from 1.1 to 14.0 kW
- Perfect integration into standard 600x600 ceiling tiles *

These new low noise chilled water cassettes offer a comfortable air conditioning with improved acoustic performances. Their design and their small dimensions allow them to fit harmoniously into standard 600x600mm ceiling tiles*. These cassettes have been specially designed for an easy and fast installation, as well as for a great ease of maintenance with a complete access to the internal components.

Advantages

Easy installation

- Perfect integration into standard 600x600 ceiling tiles *.
- Low built-in-height.
- Direct access to the electrical connections.
- Mounted valve(s) and control system as an option.
- Drain pump mounted as a standard.
- Eurovent certified.



Quality

100% of our units are tested.

Customization











To satisfy your requirements, SysQuare cassettes are configurable with many options (factory mounted) and accessories (delivered unmounted).

A low consumption solution

- High energy efficiency fan.
- Permanent magnet brushless EC motor.
- Operating within maximum efficiency range.
- High level of energy performances with Energy Class A or B.
- Thermal capacity identical to units with standard fan.
- Variable air flow tailored to your exact needs.



The preservation of the environment and energy saving are at the heart of the Systemair philosophy and our research of energy saving on and all around our products.

SQ	FCEER (2 pipes)	FCCOP (2 pipes)
20 EC	 B	 B
30 EC	 A	 A
40 EC	 B	 B
60 EC	 A	 A
70 EC	 A	 A

Absorbed power reduced by 65% in comparison with AC motor.

* from SQ20 to SQ40 with IRYS COANDA diffuser.

Absolute performance and silence

Systemair focuses on the improvement of energy efficiency and acoustic emission issues. SysQuare cassettes guarantee a silent airflow and an optimal air quality thanks to their innovative internal components.



Impeller with aerodynamically profiled blades.

Optimized fan speed staging to reduce sound level.



3-top condensate drain pump.



Wide range of control for ultimate comfort

Concerned about the performance of its products and the comfort of its users, Systemair provides you a range of electronic controls to optimize the operation of the SysQuare cassettes.



WRC remote control



SysLogic



BRC remote control

Many options and accessories to meet exactly your needs

- 2 way or 3 way valves,
- Auxiliary drain pan,
- ECoSpeed3 board for EC fan(s),
- Electrical heater,
- Fresh air kit,
- Infrared control system,
- IR remote control,
- Modbus communication board for SysLogic,
- Plastic or metallic IRYS COANDA diffusers (mandatory),
- SysLogic controller (other electromechanical or electronic control systems also available),
- WRC/BRC wall mounted remote control for Syslogic.




Sysoft AC, the online selection software for all your Air Conditioning projects

Thanks to our online selection tool Sysoft AC, select and dimension precisely and quickly, by yourself, "THE" water terminal unit(s) you need.

www.sysoftac.com

Quick selection guide

Your cassette, your performance

SysQuare	Cooling and heating capacities* (kW)		Acoustic *	Air flow * LS/MS/HS (m³/h)	Pressure	Fan
	20	2.4	2.7	NR 27 at MS	360/450/659	0 Pa EC or AC
	30	4.0	5.5	NR 30 at MS	320/504/734	
	40	4.7	5.8	NR 34 at MS	486/626/900	
	50	6.1	6.8	NR 26 at MS	529/720/979	
	60	7.2	10.0	NR 32 at MS	500/824/1159	
	70	9.6	14.0	NR 38 at MS	601/1080/1598	

* Data for EC versions / According to Eurovent standard

Technical Data

SysQuare		SQ20	SQ30	SQ40	SQ50	SQ60	SQ70
		S2 / S3 / S4 **	S2 / S3 / S4 **	S2 / S3 / S4 **	S2 / S3 / S4 **	S2 / S3 / S4 **	S2 / S3 / S4 **
Capacities - 2 pipes							
Cooling ⁽¹⁾	Total cooling capacity	kW	1.54/1.76/2.35	1.88/2.86/3.96	2.78/3.46/4.65	3.35/4.42/6.05	4.03/6.45/8.57
	Sensible capacity	kW	1.28/1.46/1.95	1.41/2.16/3.01	2.10/2.64/3.57	2.58/3.44/4.67	2.95/4.81/6.40
	Water flow	l/h	265/303/404	323/493/683	478/597/801	576/762/1042	695/1111/1476
	Water pressure drop	kPa	5.5/6.8/10.9	4.4/8.5/14.4	7.8/11.2/18.3	8.3/13/21.9	6.4/13/20.5
Heating ⁽²⁾	Heating capacity	kW	1.92/2.17/2.74	1.94/3.15/3.68	3.16/3.92/5.28	3.80/5.08/6.84	3.85/6.26/8.51
	Water flow	l/h	331/374/472	334/543/634	544/675/909	655/875/1178	754/1369/1771
	Water pressure drop	kPa	6.4/7.7/10.9	4.5/9.3/11.8	7.8/10.8/17.4	8.6/13.5/21.8	6.7/16.8/25.6
Capacities - 4 pipes							
Cooling ⁽¹⁾	Total cooling capacity	kW	1.35/1.50/1.97	1.99/2.70/3.35	2.54/3.27/3.97	-	2.96/4.94/6.60
	Sensible capacity	kW	1.18/1.36/1.84	1.49/2.11/2.62	2.04/2.55/3.20	-	2.31/3.78/5.08
	Water flow	l/h	232/25/359	342/465/576	437/563/683	-	511/851/1137
	Water pressure drop	kPa	7.5/8.9/13.6	5.2/8.3/11.6	7.5/11.2/15.3	-	6.4/13.9/22.2
Heating ⁽³⁾	Heating capacity	kW	1.09/1.27/1.67	3.10/4.40/5.46	4.32/5.00/5.80	-	5.28/7.79/10.00
	Water flow	l/h	94/109/144	267/379/470	372/431/500	-	455/671/865
	Water pressure drop	kPa	15/19/30.2	8.1/14/19.9	13.9/17.6/22.5	-	4.7/8.2/12.1
Sound Levels - 2 pipes							
Sound power level		dB(A)	36/40/49	35/47/53	42/48/57	35/40/49	38/46/54
Sound pressure level ⁽⁴⁾		dB(A)	27/31/40	26/35/44	33/39/48	26/31/40	29/37/45
NR ⁽⁴⁾		dB(A)	23/27/35	20/30/39	28/34/43	21/26/35	22/32/40
Sound Levels - 4 pipes							
Sound power level		dB(A)	36/40/49	35/47/53	42/48/57	-	38/46/54
Sound pressure level ⁽⁴⁾		dB(A)	27/31/40	26/35/44	33/39/48	-	29/37/45
NR ⁽⁴⁾		dB(A)	23/27/35	20/30/39	28/34/43	-	22/32/40
Fan							
Number					1		
Air flow		m³/h	360/450/659	320/504/734	486/626/900	529/720/979	500/824/1159
Filter					G1		
Electrical Data							
Power supply		V/Ph/Hz	230V / 1~ / 50/60 Hz				
Consumption - 2 pipes		W	25/35/58	17/34/58	38/58/99	28/41/66	34/61/88
Consumption - 4 pipes		W	25/35/58	17/34/58	38/58/99	-	34/61/88
Electrical heater		W	1380	2300	2300	2760	2760
Water Connections							
Type			Female gas threaded				
2 pipes or 4 pipes "cooling"		inch	3/4"	3/4"	3/4"	1"	1"
4 pipes "heating"		inch	1/2"	1/2"	1/2"	-	3/4"
Weight and Dimensions							
Weight (without valve)		kg	14.8	16.5	16.5	37.1	37.1
Dimensions			see page 5				

With G1 filter.


** Standard factory set speeds with SysLogic controller.

1 According to Eurovent standard. Air: 27°C DB/19°C WB, Water in/out: 7°C/12°C.

2 According to Eurovent standard. Air: 20°C, Water in/out: 45°C/40°C.

3 According to Eurovent standard. Air: 20°C, Water in/out: 65°C/55°C.

4 Information data considering an hypothetical sound attenuation of the room and installation of -9 dB(A).

SysQuare EC 			SQ20	SQ30	SQ40	SQ50	SQ60	SQ70
			S2 / S3 / S4 **	S2 / S3 / S4 **	S2 / S3 / S4 **	S2 / S3 / S4 **	S2 / S3 / S4 **	S2 / S3 / S4 **
Capacities - 2 pipes								
Cooling ⁽¹⁾	Total cooling capacity	kW	1.55/1.78/2.38	1.89/2.88/3.99	2.80/3.50/4.69	3.36/4.44/6.09	3.71/5.48/7.22	4.06/6.50/9.58
	Sensible capacity	kW	1.29/1.49/1.98	1.42/2.18/3.04	2.13/2.67/3.61	2.60/3.46/4.72	2.68/4.07/5.44	2.98/4.86/7.15
	Water flow	l/h	267/306/409	325/497/688	481/604/808	579/765/1050	640/944/1243	700/1119/1649
	Water pressure drop	kPa	5.6/6.9/11.2	4.4/8.6/14.6	7.9/11.4/18.6	8.4/13.1/22.2	4.3/7.6/11.7	6.4/13.1/24.6
Heating ⁽²⁾	Heating capacity	kW	1.92/2.17/2.74	1.94/3.15/3.68	3.16/3.92/5.28	3.80/5.08/6.84	3.85/6.26/8.51	4.38/7.95/11.00
	Water flow	l/h	331/374/472	334/543/634	544/675/909	655/875/1178	663/1078/1466	754/1369/1900
	Water pressure drop	kPa	6.4/7.7/10.9	4.5/9.3/11.8	7.8/10.8/17.4	8.6/13.5/21.8	4.3/8.9/14.4	6.7/16.8/28.8
Capacities - 4 pipes								
Cooling ⁽¹⁾	Total cooling capacity	kW	1.36/1.52/2.00	2.00/2.70/3.37	2.57/3.23/4.01	-	2.99/4.98/6.64	3.19/6.04/7.93
	Sensible capacity	kW	1.19/1.39/1.86	1.50/2.04/2.64	2.06/2.59/3.29	-	2.33/3.82/5.12	2.57/4.69/6.28
	Water flow	l/h	234/262/344	344/464/581	442/556/690		516/858/1144	549/1041/1366
	Water pressure drop	kPa	7.6/9.1/14	5.2/8.2/11.7	7.6/10.9/15.5	-	6.5/14.1/22.4	7.2/19.2/30.1
Heating ⁽³⁾	Heating capacity	kW	1.09/1.27/1.67	3.10/4.40/5.46	4.32/5.00/5.80	-	5.28/7.79/10.00	6.43/10.10/14.00
	Water flow	l/h	94/109/144	267/379/470	372/431/500		455/671/865	554/867/1205
	Water pressure drop	kPa	15/19/30.2	8.1/14/19.9	13.9/17.6/22.5	-	4.7/8.2/12.1	6.2/12.1/20.5
Sound Levels - 2 pipes								
Sound power level		dB(A)	36/40/49	35/47/53	42/48/57	35/40/49	38/46/54	40/52/59
Sound pressure level ⁽⁴⁾		dB(A)	27/31/40	26/35/44	33/39/48	26/31/40	29/37/45	31/43/50
NR ⁽⁴⁾		dB(A)	23/27/35	20/30/39	28/34/43	21/26/35	22/32/40	25/38/45
Sound Levels - 4 pipes								
Sound power level		dB(A)	36/40/49	35/44/53	42/48/57	-	38/46/54	40/52/59
Sound pressure level ⁽⁴⁾		dB(A)	27/31/40	26/35/44	33/39/48	-	29/37/45	31/43/50
NR ⁽⁴⁾		dB(A)	23/27/35	20/30/39	28/34/43	-	22/32/40	25/38/45
Fan								
Number						1		
Air flow		m³/h	360/450/659	320/504/734	486/626/900	529/720/979	500/824/1159	601/1080/1598
Filter						G1		
Electrical Data								
Power supply		V/Ph/Hz	230V / 1~ / 50/60 Hz					
Voltage		V	2/6/10	2/6/10	2/6/10	2/6/10	2/6/10	2/6/10
Consumption - 2 pipes		W	9/13/29	7/14/32	13/22/57	7/12/25	9/23/25	11/40/115
Consumption - 4 pipes		W	9/13/29	7/14/32	13/22/57	-	9/23/46	11/40/115
Electrical heater		W	1380	2300	2300	2760	2760	2760
Water Connections								
Type						Female gas threaded		
2 pipes or 4-pipe “cooling”		inch	3/4”	3/4”	3/4”	1”	1”	1”
4 pipes “heating”		inch	1/2”	1/2”	1/2”	-	3/4”	3/4”
Weight and Dimensions								
Weight (without valve)		kg	14.8	16.5	16.5	37.1	37.1	39.6
Dimensions			see page 5					

With G1 filter.


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4 Information data considering an hypothetical sound attenuation of the room and installation of -9 dB(A).



Syssoft AC

For a precise selection
and more technical information

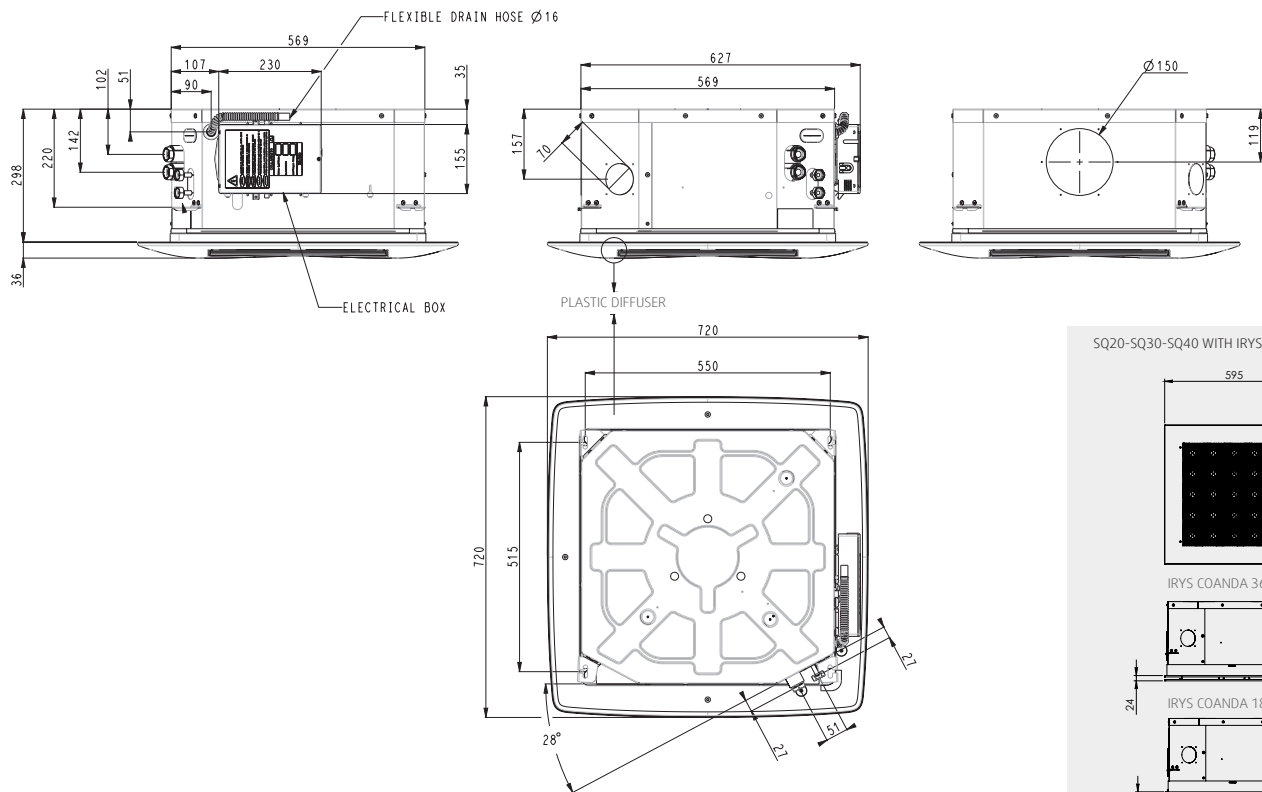
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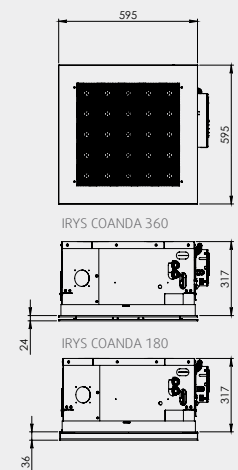
Dimensions

SQ20-SQ30-SQ40

Dimensions in mm

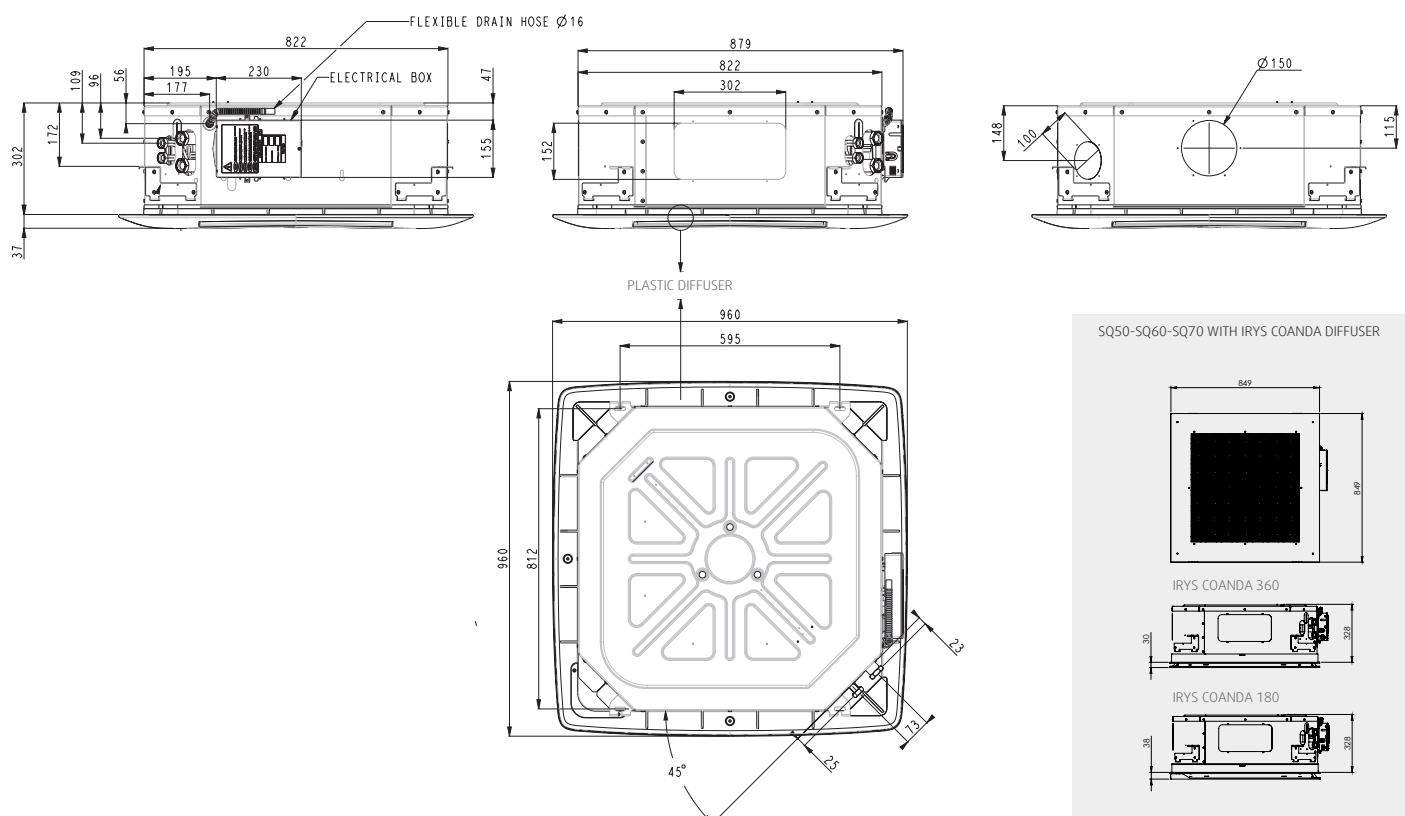


SQ20-SQ30-SQ40 WITH IRYS COANDA DIFFUSER

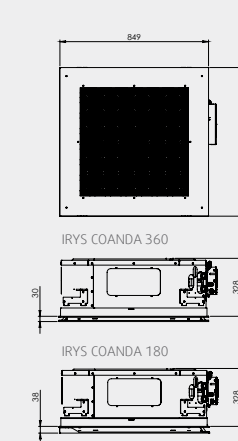


SQ50-SQ60-SQ70

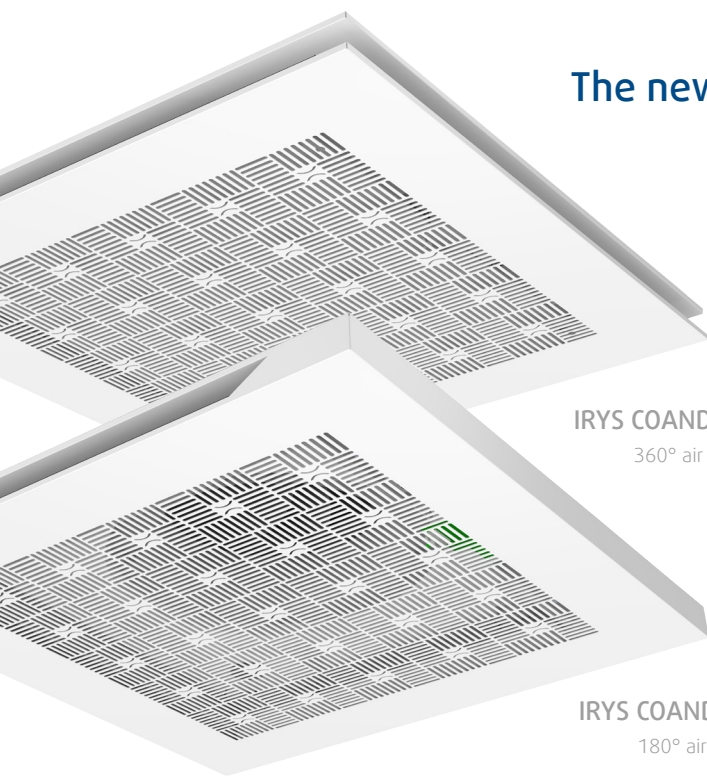
Dimensions in mm



SQ50-SQ60-SQ70 WITH IRYS COANDA DIFFUSER



The new IRYS COANDA diffusers !

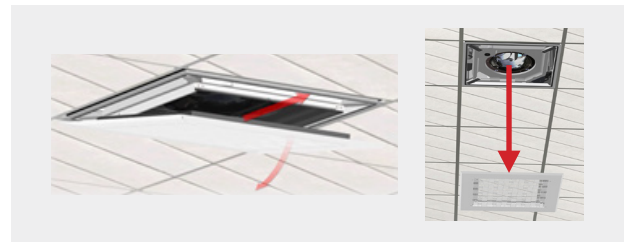


A neat aesthetic

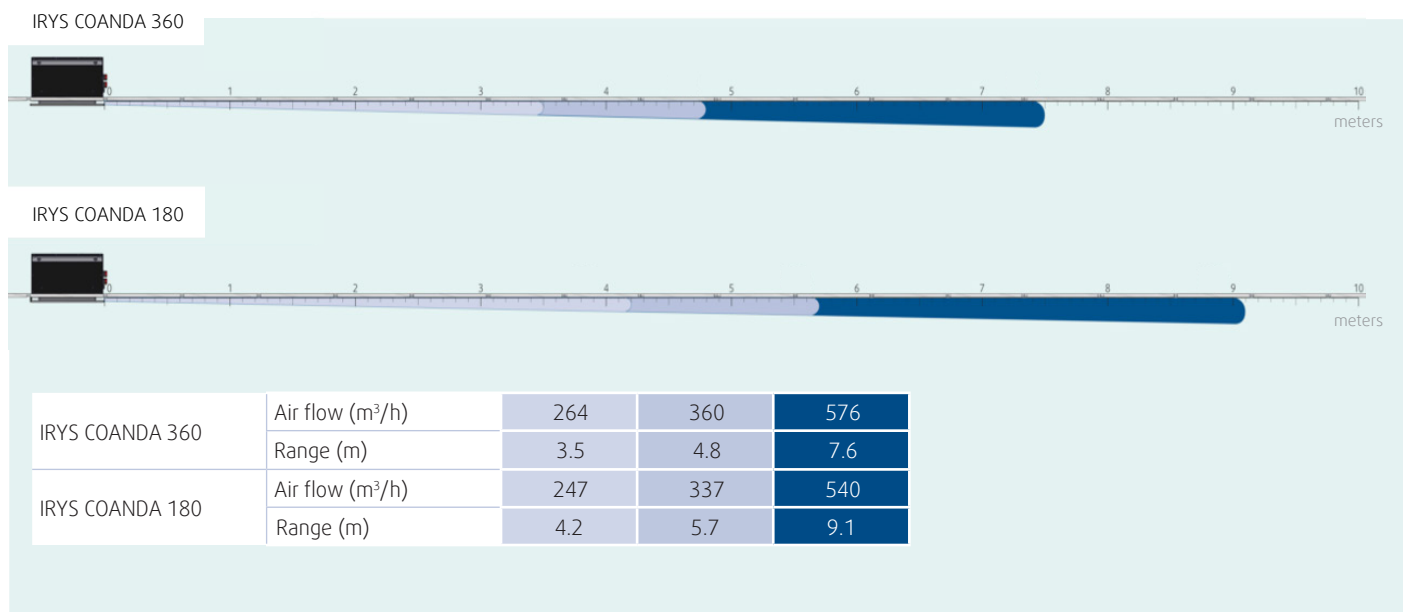
- A unique design
- High coanda effect
- Perfect integration into standard 600x600mm ceiling tiles *
- Metallic diffuser which keeps colors over time. Epoxy paint RAL 9003

Easy maintenance

- Quick access to the filter
- Access to internal components
- Easy cleaning thanks to a perfectly smooth surface



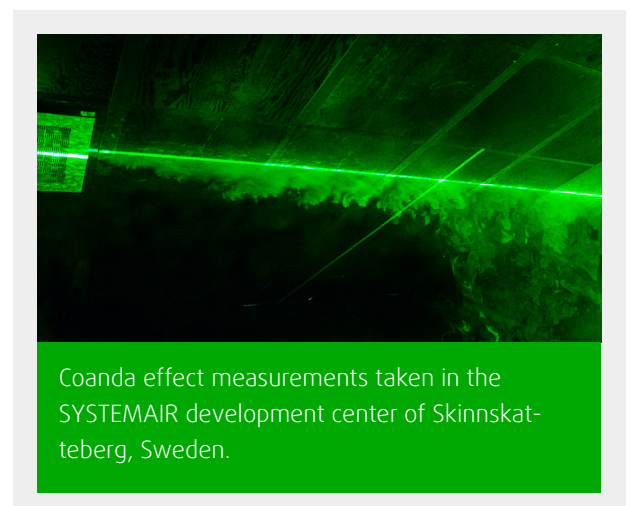
Strong coanda effect



Plastic diffuser also available



The type of diffuser selected (plastic or metallic) has to be specified when ordering.



* from SQ20 to SQ40

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