

Working principle

The air intake is from the conditioned environment.
This air is accelerated and forced through a narrow discharge along the length of the air curtain creating a laminar airflow.

The door air curtain is used to separate one environment from another. It creates a "curtain" of moving air that is blown over the opening of a doorway. This invisible "wall" barrier made of air will not allow air to flow through it.

The main advantages of this units are:

Energy savings - stops drafts and reduces infiltration of outdoor air into heated or air conditioned areas.

Comfort - protects people indoor (employee and customers) by preventing cold or heat to flow indoor at door openings and at the same time keep the conditioned air inside the building from escaping.

Increase safety - allow easy access to door opening while preventing the flow of undesired smells and blocking the passage of small insects.

	SDI	DI	BIG DI
TWIN	✓	✓	✓
TRIPLE	✓	✓	✓
DOUBLE TWIN			✓

With these kits is possible to connect more than one indoor unit of the same size and capacity to a single outdoor unit in order to improve the air distribution in a large zone.

One unit is designated the master unit which manage the room temperature reference for the other indoor units.

The indoor units should be installed in the same room, operate simultaneously and share a single controller.

Precise capacity control in all conditions.

Ideal for large shops, open-plan offices and other similar application.

User friendly controls.

Twinning requires a connection kit that includes an electromagnetic noise filter and pipe joint.

Triple combination requires a piping connection kit to optimize refrigerant flow.

The branching kits operates with all light commercial indoor units.

Check the matching table below for the allowed size/units combinations.

AIR CURTAIN

DI AND SDI INVERTER

Branching Kits

TWIN, TRIPLE, DOUBLE TWIN

Toshiba range in 2012

Toshiba plan to launch a range of air curtains in 2012 in four styles:

- Cassette
- Under Ceiling
- Built in
- Recessed

Initially available the 1,5m and 2,5m length models, followed by the introduction of 1m and 2m models.

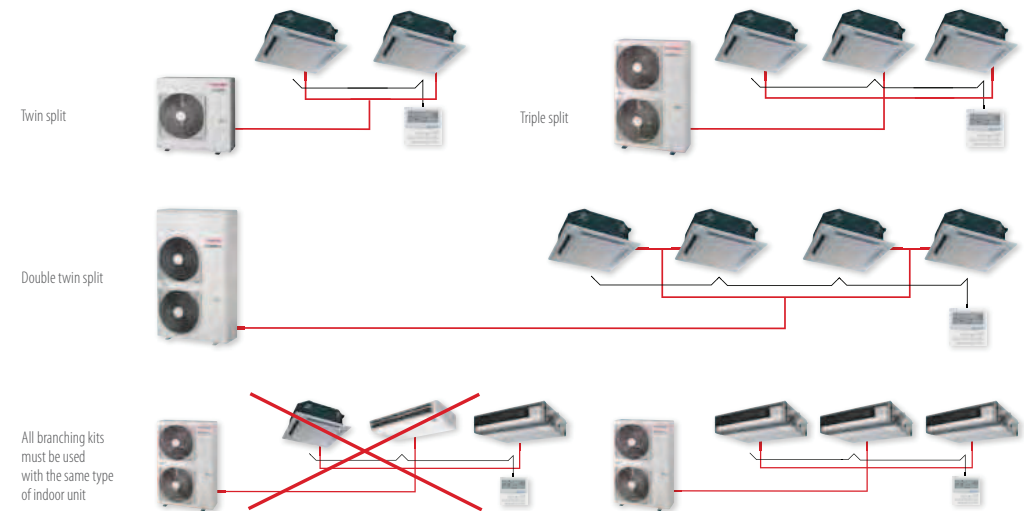


OUTDOOR UNITS

Digital Inverter

Super Digital Inverter

Digital Inverter Big



Cooling Twin Split SDI

Indoor unit model	Outdoor unit RAV-	Indoor unit RAV-	HP	capacity		Power input kW	EER W/W	Energy class	AEC kWh
				nominal kW	min. - max. kW				
4-way cassette	SP1104AT-E	SM564UT-E	4	10.0	2,6 - 12,0	2,21	4,52	A	1105
4-way cassette	SP1104AT8-E	SM564UT-E	4	10,0	2,6 - 12,0	2,37	4,22	A	1185
4-way cassette	SP1404AT-E	SM804UT-E	5	12,5	2,6 - 14,0	3,16	3,96	-	1580
4-way cassette	SP1404AT8-E	SM804UT-E	5	12,5	2,6 - 14,0	3,46	3,61	-	1730
4-way cassette	SP1604AT8-E	SM804UT-E	6	14,0	2,6 - 16,0	4,49	3,12	-	2245
Compact 4-way cassette	SP804AT-E	SM404MUT-E	3	7,1	1,9 - 8,0	2,21	3,21	A	1105
Compact 4-way cassette	SP1104AT-E	SM564MUT-E	4	10,0	2,6 - 12,0	2,67	3,75	A	1335
Compact 4-way cassette	SP1104AT8-E	SM564MUT-E	4	10,0	2,6 - 12,0	2,79	3,58	-	1395
Ducted	SP804AT-E	SM406BT-E	3	7,1	1,9 - 8,0	2,06	3,45	A	1030
Ducted	SP1104AT-E	SM566BT-E	4	10,0	2,6 - 12,0	2,64	3,79	A	1320
Ducted	SP1104AT8-E	SM566BT-E	4	10,0	2,6 - 12,0	2,64	3,79	A	1320
Ducted	SP1404AT-E	SM806BT-E	5	12,5	2,6 - 14,0	3,83	3,26	-	1915
Ducted	SP1404AT8-E	SM806BT-E	5	12,5	2,6 - 14,0	3,83	3,26	-	1915
Ducted	SP1604AT8-E	SM806BT-E	6	14,0	2,6 - 16,0	4,65	2,81	-	2325
Slim duct	SP804AT-E	SM404SDT-E	3	7,1	1,9 - 8,0	2,21	3,21	A	1105
Slim duct	SP1104AT-E	SM564SDT-E	4	10,0	2,6 - 12,0	2,77	3,61	A	1385
Slim duct	SP1104AT8-E	SM564SDT-E	4	10,0	2,6 - 12,0	2,79	3,58	A	1395
Ceiling	SP1104AT-E	SM564CT-E	4	10,0	2,6 - 12,0	2,67	3,75	A	1335
Ceiling	SP1104AT8-E	SM564CT-E	4	10,0	2,6 - 12,0	2,79	3,58	A	1395
Ceiling	SP1404AT-E	SM804CT-E	5	12,5	2,6 - 14,0	3,73	3,35	-	1865
Ceiling	SP1404AT8-E	SM804CT-E	5	12,5	2,6 - 14,0	3,83	3,26	-	1915
Ceiling	SP1604AT8-E	SM804CT-E	6	14,0	2,6 - 16,0	4,99	2,81	-	2495
High-wall	SP1104AT-E	SM566KRT-E	4	10,0	2,6 - 12,0	2,77	3,61	A	1385
High-wall	SP1104AT8-E	SM566KRT-E	4	10,0	2,6 - 12,0	2,92	3,42	A	1460
High-wall	SP1404AT-E	SM806KRT-E	5	12,5	2,6 - 14,0	3,88	3,17	-	1940
High-wall	SP1404AT8-E	SM806KRT-E	5	12,3	2,6 - 13,5	4,00	3,08	-	2000
High-wall	SP1604AT8-E	SM806KRT-E	6	14,0	2,6 - 16,0	5,10	2,75	-	2550

Heating Twin Split SDI

Indoor unit model	Outdoor unit RAV-	Indoor unit RAV-	HP	capacity		Power input kW	EER W/W	Energy class
				nominal kW	min. - max. kW			
4-way cassette	SP1104AT-E	SM564UT-E	4	11,2	2,4 - 13,0	2,34	4,79	A
4-way cassette	SP1104AT8-E	SM564UT-E	4	11,2	2,4 - 15,6	2,42	4,63	A
4-way cassette	SP1404AT-E	SM804UT-E	5	14,0	2,4 - 16,5	3,21	4,36	-
4-way cassette	SP1404AT8-E	SM804UT-E	5	14,0	2,4 - 18,0	3,42	4,09	-
4-way cassette	SP1604AT8-E	SM804UT-E	6	16,0	2,4 - 19,0	4,30	3,72	-
Compact 4-way cassette	SP804AT-E	SM404MUT-E	3	8,0	1,3 - 10,6	2,16	3,70	A
Compact 4-way cassette	SP1104AT-E	SM564MUT-E	4	11,2	2,4 - 13,0	2,67	4,19	A
Compact 4-way cassette	SP1104AT8-E	SM564MUT-E	4	11,2	2,4 - 14,0	2,67	4,19	A
Ducted	SP804AT-E	SM406BT-E	3	8	1,3 - 10,6	2,21	3,62	A
Ducted	SP1104AT-E	SM566BT-E	4	11,2	2,4 - 13,0	2,77	4,04	A
Ducted	SP1104AT8-E	SM566BT-E	4	11,2	2,4 - 14,0	2,77	4,04	A
Ducted	SP1404AT-E	SM806BT-E	5	14,0	2,4 - 16,5	3,67	3,81	-
Ducted	SP1404AT8-E	SM806BT-E	5	14,0	2,4 - 18,0	3,67	3,81	-
Ducted	SP1604AT8-E	SM806BT-E	6	16,0	2,4 - 19,0	4,60	3,48	-
Slim duct	SP804AT-E	SM404SDT-E	3	8,0	1,3 - 10,6	2,16	3,70	A
Slim duct	SP1104AT-E	SM564SDT-E	4	11,2	2,4 - 13,0	2,67	4,19	A
Slim duct	SP1104AT8-E	SM564SDT-E	4	11,2	2,4 - 14,0	2,67	4,19	A
Ceiling	SP1104AT-E	SM564CT-E	4	11,2	2,4 - 13,0	2,62	4,27	A
Ceiling	SP1104AT8-E	SM564CT-E	4	11,2	2,4 - 14,0	2,67	4,19	A
Ceiling	SP1404AT-E	SM804CT-E	5	14,0	2,4 - 16,5	3,65	3,84	-
Ceiling	SP1404AT8-E	SM804CT-E	5	14,0	2,4 - 18,0	3,70	3,78	-
Ceiling	SP1604AT8-E	SM804CT-E	6	16,0	2,4 - 19,0	4,60	3,48	-
High-wall	SP1104AT-E	SM566KRT-E	4	11,2	2,4 - 13,0	2,8	4,00	A
High-wall	SP1104AT8-E	SM566KRT-E	4	11,2	2,4 - 14,0	2,85	3,93	A
High-wall	SP1404AT-E	SM806KRT-E	5	14,0	2,4 - 16,5	3,83	3,66	-
High-wall	SP1404AT8-E	SM806KRT-E	5	14,0	2,4 - 18,0	3,88	3,61	-
High-wall	SP1604AT8-E	SM806KRT-E	6	16,0	2,4 - 19,0	4,88	3,28	-

Cooling Twin split DI

Indoor unit model	Outdoor unit RAV-	Indoor unit RAV-	HP	capacity		Power input kW	EER W/W	Energy class	AEC kWh
				nominal kW	min. - max. kW				
4-way cassette	SM1103AT-E1	SM564UT-E	4	10,0	3,0 - 11,2	3,11	3,22	A	1555
4-way cassette	SM1403AT-E1	SM804UT-E	5	12,5	3,0 - 13,2	4,09	3,06	-	2045
4-way cassette	SM1603AT-E	SM804UT-E	6	14,0	3,0 - 16,0	4,49	3,12	-	2245
Compact 4-way cassette	SM1103AT-E1	SM564MUT-E	4	10,0	3,0 - 11,2	3,52	2,84	C	1760
Ducted	SM1103AT-E1	SM566BT-E	4	10,0	3,0 - 11,2	3,5	2,86	C	1750
Ducted	SM1403AT-E1	SM806BT-E	5	12,1	3,0 - 13,2	4,28	2,83	-	2140
Ducted	SM1603AT-E	SM806BT-E	6	14,0	3,0 - 16,0	5,13	2,73	-	2565
Slim duct	SM1103AT-E1	SM564SDT-E	4	10,0	3,0 - 11,2	3,55	2,82	C	1775
Ceiling	SM1103AT-E1	SM564CT-E	4	10,0	3,0 - 11,2	3,51	2,85	C	1755
Ceiling	SM1403AT-E1	SM804CT-E	5	12,1	3,0 - 13,2	4,52	2,72	-	2260
Ceiling	SM1603AT-E	SM804CT-E	6	14,0	3,0 - 16,0	4,99	2,81	-	2495
High-wall	SM1103AT-E1	SM566KRT-E	4	10,0	3,0 - 11,2	3,48	2,87	C	1740
High-wall	SM1403AT-E1	SM806KRT-E	5	12,1	3,0 - 13,0	4,57	2,65	-	2285
High-wall	SM1603AT-E	SM806KRT-E	6	14,0	3,0 - 16,0	5,10	2,75	-	2550

Heating Twin split DI

Indoor unit model	Outdoor unit RAV-	Indoor unit RAV-	HP	capacity		Power input kW	COP W/W	Energy class
				nominal kW	min. - max. kW			
4-way cassette	SM1103AT-E1	SM564UT-E	4	11,2	3,0 - 13,0	2,93	3,82	A
4-way cassette	SM1403AT-E1	SM804UT-E	5	14,0	3,0 - 16,0	3,80	3,68	-
4-way cassette	SM1603AT-E	SM804UT-E	6	16,0	3,0 - 18,0	4,43	3,61	-
Compact 4-way cassette	SM1103AT-E1	SM564MUT-E	4	11,2	3,0 - 13,0	3,14	3,57	B
Ducted	SM1103AT-E1	SM566BT-E	4	11,2	3,0 - 12,5	3,14	3,57	B
Ducted	SM1403AT-E1	SM806BT-E	5	13,4	3,0 - 16,0	3,91	3,43	-
Ducted	SM1603AT-E	SM806BT-E	6	16,0	3,0 - 18,0	4,69	3,41	-
Slim duct	SM1103AT-E1	SM564SDT-E	4	11,2	3,0 - 12,5	3,14	3,57	B
Ceiling	SM1103AT-E1	SM564CT-E	4	11,2	3,0 - 12,5	3,20	3,50	B
Ceiling	SM1403AT-E1	SM804CT-E	5	14,0	3,0 - 16,0	4,14	3,38	-
Ceiling	SM1603AT-E	SM804CT-E	6	16,0	3,0 - 18,0	4,69	3,41	-
High-wall	SM1103AT-E1	SM566KRT-E	4	11,2	3,0 - 12,5	3,14	3,57	B
High-wall	SM1403AT-E1	SM806KRT-E	5	14,0	3,0 - 16,0	4,24	3,30	-
High-wall	SM1603AT-E	SM806KRT-E	6	16,0	3,0 - 18,0	4,98	3,21	-

Cooling Twin split Big DI

Indoor unit model	Outdoor unit RAV-	Indoor unit RAV-	HP	capacity		Power input kW	EER W/W
				nominal kW	min. - max. kW		
4-way cassette	SM2244AT8-E	SM1104UT-E	8	20,0	9,8 - 22,4	6,24	3,21
4-way cassette	SM2804AT8-E	SM1404UT-E	10	23,0	9,8 - 27,0	8,19	2,81
Ducted	SM2244AT8-E	SM1106BT-E	8	20,0	9,8 - 22,4	7,12	2,81
Ducted	SM2804AT8-E	SM1406BT-E	10	23,0	9,8 - 27,0	9,55	2,41
Ceiling	SM2244AT8-E	SM1104CT-E	8	20,0	9,8 - 22,4	7,12	2,81
Ceiling	SM2804AT8-E	SM1404CT-E	10	23,0	9,8 - 27,0	9,55	2,41

Heating Twin split Big DI

Indoor unit model	Outdoor unit RAV-	Indoor unit RAV-	HP	capacity		Power input kW	COP W/W
				nominal kW	min. - max. kW		
4-way cassette	SM2244AT8-E	SM1104UT-E	8	22,4	9,8 - 25,0	5,82	3,85
4-way cassette	SM2804AT8-E	SM1404UT-E	10	27,0	9,8 - 31,5	7,48	3,61
Ducted	SM2244AT8-E	SM1106BT-E	8	22,4	9,8 - 25,0	6,40	3,50
Ducted	SM2804AT8-E	SM1406BT-E	10	27,0	9,8 - 31,5	7,92	3,41
Ceiling	SM2244AT8-E	SM1104CT-E	8	22,4	9,8 - 25,0	6,40	3,50
Ceiling	SM2804AT8-E	SM1404CT-E	10	27,0	9,8 - 31,5	7,92	3,41

Cooling		Triple split SDI							
Indoor unit model	Outdoor unit RAV-	Indoor unit RAV-	HP	capacity		Power input kW	EER W/W	AEC kWh	
				nominal kW	min. - max kW				
4-way cassette	SP1604AT8-E	SM564IUT-E	6	14,0	2,6 - 16,0	4,49	3,12	2245	
Compact 4-way cassette	SP1604AT8-E	SM564MUT-E	6	14,0	2,6 - 16,0	4,99	2,81	2495	
Ducted	SP1604AT8-E	SM566BT-E	6	14,0	2,6 - 16,0	4,55	3,01	2325	
Slim duct	SP1604AT8-E	SM564SDT-E	6	14,0	2,6 - 16,0	4,99	2,81	2495	
Ceiling	SP1604AT8-E	SM564CT-E	6	14,0	2,6 - 16,0	4,99	2,81	2495	
High-wall	SP1604AT8-E	SM566KRT-E	6	14,0	2,6 - 16,0	5,10	2,75	2550	

Heating		Triple split SDI							
Indoor unit model	Outdoor unit RAV-	Indoor unit RAV-	HP	capacity		Power input kW	COP W/W		
				nominal kW	min. - max kW				
4-way cassette	SP1604AT8-E	SM564IUT-E	6	16,0	2,4 - 19,0	4,30	3,72		
Compact 4-way cassette	SP1604AT8-E	SM564MUT-E	6	16,0	2,4 - 19,0	4,60	3,48		
Ducted	SP1604AT8-E	SM566BT-E	6	16,0	2,4 - 19,0	4,60	3,48		
Slim duct	SP1604AT8-E	SM564SDT-E	6	16,0	2,4 - 19,0	4,60	3,48		
Ceiling	SP1604AT8-E	SM564CT-E	6	16,0	2,4 - 19,0	4,60	3,48		
High-wall	SP1604AT8-E	SM566KRT-E	6	16,0	2,4 - 19,0	4,88	3,28		

Cooling		Triple split DI							
Indoor unit model	Outdoor unit RAV-	Indoor unit RAV-	HP	capacity		Power input kW	EER W/W	AEC kWh	
				nominal kW	min. - max kW				
4-way cassette	SM1603AT-E	SM564IUT-E	6	14,0	3,0 - 16,0	4,49	3,12	2245	
Compact 4-way cassette	SM1603AT-E	SM564MUT-E	6	14,0	3,0 - 16,0	4,99	2,81	2495	
Ducted	SM1603AT-E	SM566BT-E	6	14,0	3,0 - 16,0	5,13	2,73	2565	
Slim duct	SM1603AT-E	SM564SDT-E	6	14,0	3,0 - 16,0	4,99	2,81	2495	
Ceiling	SM1603AT-E	SM564CT-E	6	14,0	3,0 - 16,0	4,99	2,81	2495	
High-wall	SM1603AT-E	SM566KRT-E	6	14,0	3,0 - 16,0	5,10	2,75	2550	

Heating		Triple split DI							
Indoor unit model	Outdoor unit RAV-	Indoor unit RAV-	HP	capacity		Power input kW	COP W/W		
				nominal kW	min. - max kW				
4-way cassette	SM1603AT-E	SM564IUT-E	6	16,0	3,0 - 18,0	4,43	3,61		
Compact 4-way cassette	SM1603AT-E	SM564MUT-E	6	16,0	3,0 - 18,0	4,69	3,41		
Ducted	SM1603AT-E	SM566BT-E	6	16,0	3,0 - 18,0	4,69	3,41		
Slim duct	SM1603AT-E	SM564SDT-E	6	16,0	3,0 - 18,0	4,69	3,41		
Ceiling	SM1603AT-E	SM564CT-E	6	16,0	3,0 - 18,0	4,69	3,41		
High-wall	SM1603AT-E	SM566KRT-E	6	16,0	3,0 - 18,0	4,98	3,21		

Cooling		Triple split Big DI							
Indoor unit model	Outdoor unit RAV-	Indoor unit RAV-	HP	capacity		Power input kW	EER W/W		
				nominal kW	min. - max kW				
4-way cassette	SM2244AT8-E	SM804IUT-E	8	20,0	9,8 - 22,4	6,24	3,21		
4-way cassette	SM2804AT8-E	SM804IUT-E	10	23,0	9,8 - 27,0	8,19	2,81		
Ducted	SM2244AT8-E	SM806BT-E	8	20,0	9,8 - 22,4	7,12	2,81		
Ducted	SM2804AT8-E	SM806BT-E	10	23,0	9,8 - 27,0	9,55	2,41		
Ceiling	SM2244AT8-E	SM804CT-E	8	20,0	9,8 - 22,4	7,12	2,81		
Ceiling	SM2804AT8-E	SM804CT-E	10	23,0	9,8 - 27,0	9,55	2,41		
High-wall	SM2244AT8-E	SM806KRT-E	8	20,0	9,8 - 22,4	7,12	2,81		
High-wall	SM2804AT8-E	SM806KRT-E	10	23,0	9,8 - 27,0	9,55	2,41		

Heating		Triple split Big DI							
Indoor unit model	Outdoor unit RAV-	Indoor unit RAV-	HP	capacity		Power input kW	COP W/W		
				nominal kW	min. - max kW				
4-way cassette	SM2244AT8-E	SM804IUT-E	8	22,4	9,8 - 25,0	5,82	3,85		
4-way cassette	SM2804AT8-E	SM804IUT-E	10	27,0	9,8 - 31,5	7,48	3,61		
Ducted	SM2244AT8-E	SM806BT-E	8	22,4	9,8 - 25,0	6,40	3,50		
Ducted	SM2804AT8-E	SM806BT-E	10	27,0	9,8 - 31,5	7,92	3,41		
Ceiling	SM2244AT8-E	SM804CT-E	8	22,4	9,8 - 25,0	6,40	3,50		
Ceiling	SM2804AT8-E	SM804CT-E	10	27,0	9,8 - 31,5	7,92	3,41		
High-wall	SM2244AT8-E	SM806KRT-E	8	22,4	9,8 - 25,0	6,40	3,50		
High-wall	SM2804AT8-E	SM806KRT-E	10	27,0	9,8 - 31,5	7,92	3,41		

Cooling		Double twin split Big DI							
Indoor unit model	Outdoor unit RAV-	Indoor unit RAV-	HP	capacity		Power input kW	EER W/W		
				nominal kW	min. - max kW				
4-way cassette	SM2244AT8-E	SM564IUT-E	8	20,0	9,8 - 22,4	6,24	3,21		
4-way cassette	SM2804AT8-E	SM804IUT-E	10	23,0	9,8 - 27,0	8,19	2,81		
Compact 4-way cassette	SM2244AT8-E	SM564MUT-E	8	20,0	9,8 - 22,4	7,12	2,81		
Ducted	SM2244AT8-E	SM566BT-E	8	20,0	9,8 - 22,4	7,12	2,81		
Ducted	SM2804AT8-E	SM806BT-E	10	23,0	9,8 - 27,0	9,55	2,41		
Slim duct	SM2244AT8-E	SM564SDT-E	10	20,0	9,8 - 22,4	7,12	2,81		
Ceiling	SM2244AT8-E	SM564CT-E	8	20,0	9,8 - 22,4	7,12	2,81		
Ceiling	SM2804AT8-E	SM804CT-E	10	23,0	9,8 - 27,0	9,55	2,41		
High-wall	SM2244AT8-E	SM566KRT-E	8	20,0	9,8 - 22,4	7,12	2,81		
High-wall	SM2804AT8-E	SM806KRT-E	10	23,0	9,8 - 27,0	9,55	2,41		

Heating		Double twin split Big DI							
Indoor unit model	Outdoor unit RAV-	Indoor unit RAV-	HP	capacity		Power input kW	COP W/W		
				nominal kW	min. - max kW				
4-way cassette	SM2244AT8-E	SM564IUT-E	8	22,4	9,8 - 25,0	5,82	3,85		
4-way cassette	SM2804AT8-E	SM804IUT-E	10	27,0	9,8 - 31,5	7,76	3,48		
Compact 4-way cassette	SM2244AT8-E	SM564MUT-E	8	22,4	9,8 - 25,0	6,40	3,50		
Ducted	SM2244AT8-E	SM566BT-E	8	22,4	9,8 - 25,0	6,40	3,50		
Ducted	SM2804AT8-E	SM806BT-E	10	27,0	9,8 - 31,5	7,92	3,41		
Slim duct	SM2244AT8-E	SM564SDT-E	10	22,4	9,8 - 25,0	6,40	3,50		
Ceiling	SM2244AT8-E	SM564CT-E	8	22,4	9,8 - 25,0	6,40	3,50		
Ceiling	SM2804AT8-E	SM804CT-E	10	27,0	9,8 - 31,5	7,92	3,41		
High-wall	SM2244AT8-E	SM566KRT-E	8	22,4	9,8 - 25,0	6,40	3,50		
High-wall	SM2804AT8-E	SM806KRT-E	10	27,0	9,8 - 31,5	7,92	3,41		