

RTS

Small roof-top units

Cooling capacity from 8,4 to 47,7 kW

The small rooftop units in the RTS series represent the ideal solution for the climate control of small to medium size rooms for residential, commercial and industrial use such as offices, restaurants, supermarkets etc.

The units offer considerable advantages in terms of high air quality and comfort, easy installation and quiet operation. The availability of many accessories also provides considerable versatility and makes the RTS series perfectly adaptable to the various plant requirements.



> Versions

RTS F cooling only version.

RTS H heat pump version.

> Accessories

SM, SCSM two-way mixing box.

SM3P, SM3I, SCSM3P, SCSM3I

three-way mixing box.

P filter differential pressure switch.

BRT two or three row water coils.

BRE electric battery.

TP pressure transducer (only RTS F).

DCPR device for low temperatures.

DP dehumidification and re-heating control kit.

FCH enthalpic free-cooling control.

PUC ON/OFF humidification contact.

SQA air quality probe.

PR2 remote panel.

SSV supervision card.

GP coil protection grille.

BSP, BSR, BSS coils with special treatment.

VT rubber anti vibration mounts.

AVX spring anti-vibration mounts.

RC roof-curb.



>Main technical data

RTS model		008	010	012	015	018	022	029	035	046
Total cooling capacity (RTS F)	kW	8,4	9,8	11,6	14,8	20,1	22,0	29,2	35,1	47,7
Sensible cooling capacity (RTS F)	kW	6,0	6,8	8,3	10,7	14,8	16,5	21,4	26,7	37,1
Input power (RTS F)	kW	3,5	4,1	5,6	6,7	8,8	9,9	14,4	17,4	21,2
Total cooling capacity (RTS H)	kW	7,9	9,2	11,0	14,0	18,8	20,6	27,4	33,0	44,5
Sensible cooling capacity (RTS H)	kW	5,6	6,4	7,9	10,1	13,8	15,5	20,1	25,1	34,6
Input power (RTS H)	kW	3,7	4,2	5,6	6,7	8,7	9,6	14,4	17,5	21,2
Heating capacity (RTS H)	kW	7,4	8,7	10,9	13,9	17,5	19,5	25,6	31,2	41,6
Input power (RTS H)	kW	3,4	3,9	5,2	6,4	8,1	9,2	13,3	16,2	19,7
Nominal air flow rate internal fans	m ³ /h	1.500	1.900	2.400	2.900	4.000	4.500	6.000	8.000	9.000
Minimum airflow for the handling section	m ³ /h	1.275	1.615	2.040	2.465	3.400	3.825	5.100	6.800	7.650
Maximum airflow for the handling section	m ³ /h	1.725	2.185	2.760	3.400	4.600	5.175	6.900	9.200	10.350
Compressors	q.ty type	1 scroll	1 scroll	1 scroll	1 scroll	1 scroll	1 scroll	1 scroll	1 scroll	1 scroll
Cooling circuits	n°	1	1	1	1	1	1	1	1	1
External fans	q.ty type	1 AXL	1 AXL	1 AXL	1 AXL	1 AXL	1 AXL	4 AXL	4 AXL	4 AXL
Internal fans	q.ty	1	1	1	1	2	2	2	2	2
Maximum available pressure	Pa	315	275	345	287	350	330	365	360	330
Water coil heating capacity*	kW	16,3 22,5	19,2 27,0	22,5 32,2	25,5 37,1	36,1 52,1	39,0 56,8	57,0 81,8	68,9 100,4	74,4 109,3
Electric coil heating capacity	kW	3/6/9	3/6/9	3/6/9	6/12 18	6/12 18	12/18 24/36	12/18 24/36	12/18 24/36	12/18 24/36
Electrical power supply V/Ph/Hz	400/3+N/50									

cooling

heating

Cooling capacity Tin 27°C RH 50% (Twb 19°C), Text 35°C RH 50%;

Heating capacity Tin 20°C RH 50%, Text 7°C RH 70%.

* Room air 20°C d.b., water 80/70°C.

>Accessories compatibility

	008	010	012	015	018	022	029	035	046
SM, SM3P, SCSM, SCSM3P, P, BRT, TP, DCP, DP, R2, GP, VT, AVX, BSP, BRP, BSS	○	○	○	○	○	○	○	○	○
SM3I, SCSM3	–	–	–	–	○	○	○	○	○
BRE103, 106, 109	○	○	○	○	–	–	–	–	–
BRE107, 112, 118	–	–	–	–	○	○	–	–	–
BRE212, 218, 224, 236	–	–	–	–	–	–	○	○	○
FCH, PUC, SQA	–	–	–	–	–	–	○	○	○
RC	–	–	–	–	○	○	○	○	○

● Standard, ○ Optional, – Not available.

>Characteristics

Structure for the sizes **008, 010, 012, 015** is self-bearing with simple panels in aluminium with insulation of the air handling section with closed-cell polyethylene foam (density 30 kg/m³). For sizes **018, 022, 029, 035 and 046** it is self-bearing with sandwich type panels in aluminium inside and outside, 25 mm thick, with injected polyurethane insulation (density 42 kg/m³) for perimeter panels and the roof of the air handling section.

Air-handling section fans: for the sizes **008, 010, 012, 015** the fans are radial double intake type

directly coupled with electronic devices for the speed control. For the sizes **018, 022, 029, 035 and 046** the fans are radial with double intake coupled by means of belts and pulleys with variable pitch. The orientation of supply air flows can be frontal, upwards and downwards.

Condensing section axial fans balanced statically and dynamically, protected electrically with thermomagnetic switches and mechanically with grilles.

Cooling circuit equipped with scroll compressors that ensure quiet operation and high efficiency, internal and external coil with copper pipes and high-efficiency aluminium fins

Air filtering made by undulated synthetic filters with G4 (EN779) efficiency.

Microprocessor control complete with electrical panel, probes and actuators for all the components.

Several available accessories (like for example three-way mixing boxes) making the unit versatile



The units are complete with controls and are ready for installation, easy to maintain and highly reliable

The possibility for varying speed of the air treatment fans, by means of electronic controllers or with variable pulley, permits the setting of the machine and the system, guaranteeing proper unit operation

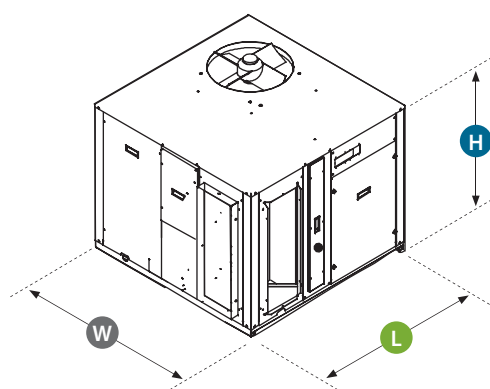




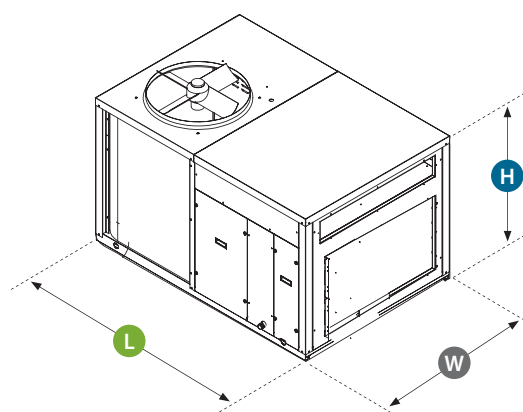
>Sizes and weights

RTS model			008	010	012	015	018	022	029	035	046
Height	H	mm	1.040	1.040	1.040	1.040	1.175	1.175	1.500	1.500	1.500
Width	W	mm	1.175	1.175	1.175	1.175	1.240	1.240	1.510	1.510	1.510
Length	L	mm	1.155	1.155	1.155	1.155	1.805	1.805	2.710	2.710	2.710
Weight RTS F		kg	235	250	270	285	435	450	650	675	735
Weight RTS H		kg	245	260	280	300	455	470	690	710	770

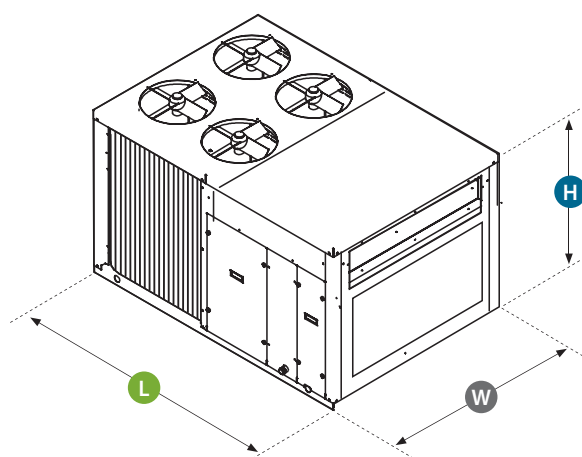
Dimensions and weights of the base unit.



RTS 008-015



RTS 018-022



RTS 029-046