



# SRUB

## Self-Contained Air Cooled

*SRUB Model*  
7.5-20 Tons  
50 Hz





## Self-Contained Air Cooled, 50 Hz

### No Water Required

You will find the efficiency, flexibility, and unobtrusive styling of the SRUB models. The SRUBs are hard to be beaten especially for the scarce water in the local area, and high-rise office buildings. The SRUB get along fine without cooling by water. And this is another kind of Trane products which can serve the requirement in nearly every application.



### Designed For You

- Light and compact.
- Available in 7.5, 9, 10.5, 13.5, 16, 18 and 20 ton capacity.
- The cabinet is thermally and acoustically insulated to make it even quieter.

### Quality and Reliability

- Scroll compressors are available from 7.5 to 20 tons with excellent reliability and high efficiency.
- Dual compressors and independent circuits are standard in the SRUB160-SRUB250 models.
- All units are 100 percent run tested prior to leaving the production line.

### Maximum Efficiency

- Lower noise operation and higher efficiency with the new generation higher EER Scroll Compressor.
- 64% fewer parts than a comparable capacity reciprocating compressor.
- Single rotating assembly minimizes the friction and mechanical losses.
- Smooth operation, similar to a centrifugal compressor, give low torque variation and extend motor life, and minimal vibration reducing wear.
- Solid mount with no internal suspension to be worn out.
- Integral inlet dirt separator removes contaminants.
- Rolling element bearings for higher efficiency reduced friction. No suction or discharge valves for improved efficiency compared to a reciprocating compressor.

### System Advantage

- Factory assembly reduces installation costs - no field assembly is needed.
- No need for external heat ex-changers, water towers and other space requirement.
- Simply choose the location, install properly ducting, arrange drain piping and make electrical connection.
- Horizontal and vertical discharge arrangement.
- Quick-access panels for fast and easy servicing.



### Rigorous Testing

At Trane's System Extreme Environmental Test Center (SEET), Trane engineers conduct a 16 week test designed to simulate five years of field stress.

## System Performance Matrix

Model	Evaporator CFM	Condenser CFM	Total Capacity (MBH)	Sensible Capacity (MBH)
SRUB 080	2,800	4,500	87	61
SRUB 110	3,600	5,500	110	73
SRUB 130	4,400	5,500	127	92
SRUB 160	5,200	8,000	165	113
SRUB 190	6,200	9,000	194	141
SRUB 220	7,200	10,000	213	159
SRUB 250	8,300	11,000	251	184

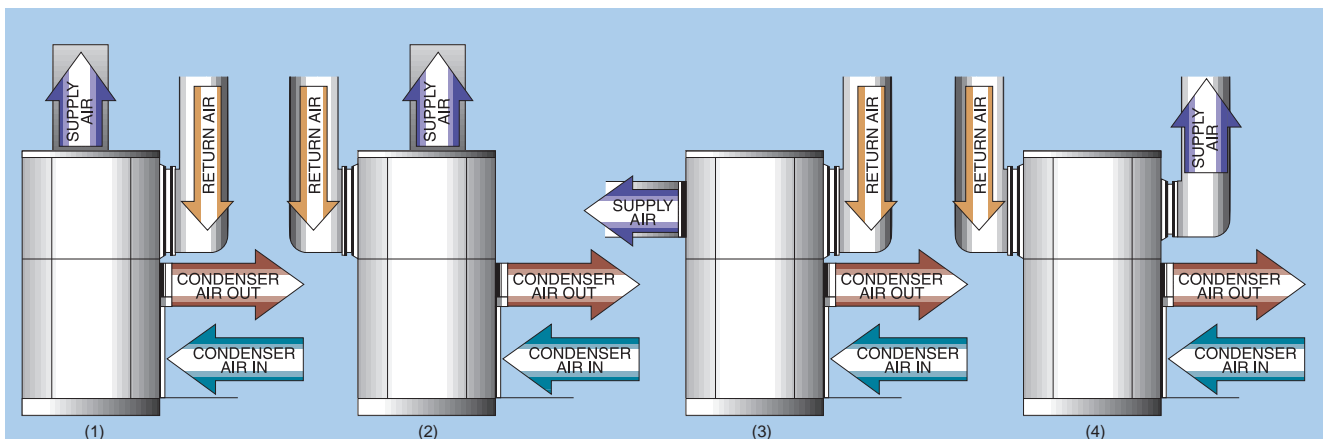
Note: 1. Matched system ratings are per ARI condition. Full load ratings are at 95°F entering condenser air temperature, and 80/67°F air dry bulb/wet bulb entering the air handler coil.

2. Evaporator fan power accounts for ARI condition required external static pressure, and losses associated with air filters, casing and wet evaporator coil pressure drop.

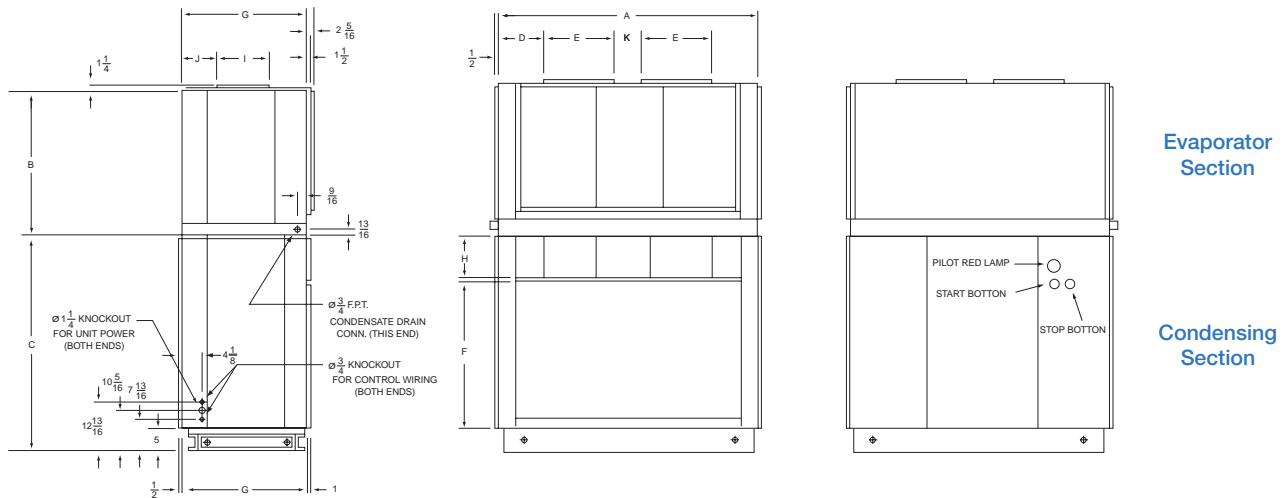
## Product Specifications

Models			SRUB080	SRUB110	SRUB130	SRUB160	SRUB190	SRUB220	SRUB250
Electrical Data	Power Supply	V/ph/Hz	380/3/50	380/3/50	380/3/50	380/3/50	380/3/50	380/3/50	380/3/50
Function			Cooling						
Performance Data	Nominal Capacity	Btu/h	87,000	110,000	127,000	165,000	194,000	213,000	251,000
Indoor Side									
Expansion Device			Expansion Valve						
Fan Motor	Type		Totally Enclosed - Fan Cooled, Three Phase Induction Motor						
	Number Used		1	1	1	1	1	1	1
	Speed	RPM	1,420	1,420	1,420	1,420	1,420	1,420	1,430
	RLA/LRA	A	1.99/11.0	3.66/21.0	3.66/21.0	5.08/34.0	5.08/34.0	5.08/34.0	8.03/63.0
	Power Input	W	750	1,490	1,490	2,240	2,240	2,240	3,730
	Power Supply	V/ph/Hz	380/3/50	380/3/50	380/3/50	380/3/50	380/3/50	380/3/50	380/3/50
Fan	Type		Forward Curved Centrifugal Fan						
	Number Used		1	1	1	1	1	2	2
	DiameterxWidth	in	12x15	12x15	12x15	15x15	15x15	15x12	15x12
	Drive		Belt Drive						
Evaporator Coil	Type		Aluminum Fin with Copper Tube						
	Fin per Inch	FPI	12	12	12	12	12	12	14
	Tube Type		Plain						
	Tube Size OD	in	3/8	3/8	3/8	3/8	3/8	3/8	3/8
	Number of Rows		3	3	3	3	4	4	4
	Face Area	Sq.Ft.	7.22	10.83	10.83	12.92	12.92	15.0	15.0
	Drain Connection Size	in	1	1	1	1	1	1	1
Filter	Type		Washable Aluminum Filter						
	Number Used - Size	in	2-25 3/4 x 21 1/4 x 1	2-25 3/4 x 21 1/4 x 1	2-25 3/4 x 21 1/4 x 1	3-30 3/4 x 21 3/4 x 1	3-30 3/4 x 21 3/4 x 1	3-30 3/4 x 25 1/4 x 1	3-30 3/4 x 25 1/4 x 1
				1-25 3/4 x 20 1/4 x 1	1-25 3/4 x 20 1/4 x 1				
Outdoor Side									
Compressor	Type		Hermetic Scroll Compressor						
	Number Used		1	1	1	2	1-1	2	2
	RLA/LRA	A	16.4/95.0	19.2/125.0	19.6/125.0	16.4/95.0	16.4/95.0/19.2/125.0	19.2/125.0	19.2/125.0
Fan Motor	Type		Totally Enclosed - Fan Cooled, Three Phase Induction Motor						
	Number Used		1	1	1	1	1	1	1
	Speed	RPM	1,420	1,420	1,420	1,430	1,430	1,430	1,440
	RLA/LRA	A	3.66/21.0	5.08/34.0	5.08/34.0	8.03/63.0	8.03/63.0	8.03/63.0	12.0/79.0
	Power Input	W	1,490	2,240	2,240	3,730	3,730	3,730	5,590
	Power Supply	V/ph/Hz	380/3/50	380/3/50	380/3/50	380/3/50	380/3/50	380/3/50	380/3/50
Fan	Type		Forward Curved Centrifugal Fan						
	Number Used		1	2	2	2	2	2	2
	DiameterxWidth	in	15x15	12x15	12x15	15x15	15x15	15x15	15x15
	Drive		Belt Drive						
Condenser Coil	Type		Aluminum Fin with Copper Tube						
	Fin per Inch	FPI	12	12	12	12	12	12	14
	Tube Type		Plain						
	Tube Size OD	in	3/8	3/8	3/8	3/8	3/8	3/8	3/8
	Number of Rows		4	4	5	4	5	5	5
	Face Area	Sq.Ft.	9.06	12.5	12.5	17.22	17.22	20.14	20.14
Unit									
Dimensions	Height	mm	1,955	1,955	1,955	2,375	2,375	2,375	2,375
	Width	mm	1,295	1,700	1,700	1,765	1,765	2,030	2,030
	Depth	mm	965	845	845	965	965	965	965
Net Weight	kg	522	638	678	814	968	1,062	1,070	
Number of Refrigerant Circuits	R-22		1	1	1	2	2	2	2

## Unit Arrangement



## Feature Summary



### Evaporator Section

For SRUB 080, 110, 130, 160, 190, with 1 Evaporator Blower.  
 Except SRUB 220, 250 with 2 Evaporator Blowers.

### Condensing Section

For SRUB 110, 130, 190, 220, 250 with 2 Condenser Blowers.  
 Except SRUB 080 with 1 Condenser Blower.

MODEL	A	B	C	D	E	F	G	H	I	J	K
SRUB 080	50 1/2	29 1/2	54	16 1/16	18 7/8	29 1/8	36 7/16	9	13 7/8	7 1/2	-
SRUB 110/130	67	29 1/2	47	24 1/16	18 7/8	29 1/8	31 3/4	9	13 7/8	7 1/2	-
SRUB 160/190	69	34 3/4	58	25 1/16	18 7/8	39 1/16	36 3/4	10	16 1/4	9 7/8	-
SRUB 220/250	79 1/2	34 3/4	58	17 1/16	16	39 1/16	36 1/4	10	16 1/4	8 7/8	13 3/8

Note: All dimensional data are in inch.

## Product Specifications

### Evaporator Section

- Convertible horizontal and vertical air discharge.
- Evaporator coil with 375 psig leak tested.
- Single refrigeration circuit for SRUB 080-130.
- Dual refrigeration circuits for SRUB 160-250.
- Thermal expansion valve(s), factory installed.
- Double inlet, double width, forward curve, centrifugal type evaporator fan(s) with adjustable belt drive.
- Thermal overload protection on evaporator fan motor.
- Completely insulated with fire-retardant, permanent, odorless glass fiber with foil material to unit casing.
- 1" aluminum cleanable filter.

### Condensing Section

- Single compressor for SRUB 080-130.
- Dual compressors for SRUB 160-250 with 2- step capacity control.
- Filter driers, sight glasses and service valves.
- Factory leak tested at 375 psig air pressure.
- Copper tube, aluminum plate fin coil with integral subcooled circuit.
- Suction gas cooled, temperature and current-sensitive motor overload for compressor motor.
- Double inlet, double width, forward curve, centrifugal type fan(s) with adjustable belt drive.
- Build in current and thermal overload protection or condenser fan motors.
- External high and low pressure cut-out devices.
- Completely factory wired with 220 volt control circuit.
- Plus or minus 10 percents of name plate voltage for utilization range.



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Trane has a policy of continuous product and product data improvement and reserves the right to change design and specifications without notice.