



# 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)	Total Unit Compressor KW	Evaporator Fan KW	Condenser Fan KW	Total System KW
SRUB 080	2,800	4,500	87	61	7.67	0.53	1.03	9.23
SRUB 110	3,600	5,500	110	73	9.52	1.03	1.50	12.05
SRUB 130	4,400	5,500	127	92	10.88	1.03	1.50	13.41
SRUB 160	5,200	8,000	165	113	14.92	1.50	2.49	18.91
SRUB 190	6,200	9,000	194	141	16.87	1.50	2.49	20.86
SRUB 220	7,200	10,000	213	159	18.20	1.50	2.49	22.19
SRUB 250	8,300	11,000	251	184	21.55	1.50	3.64	26.69

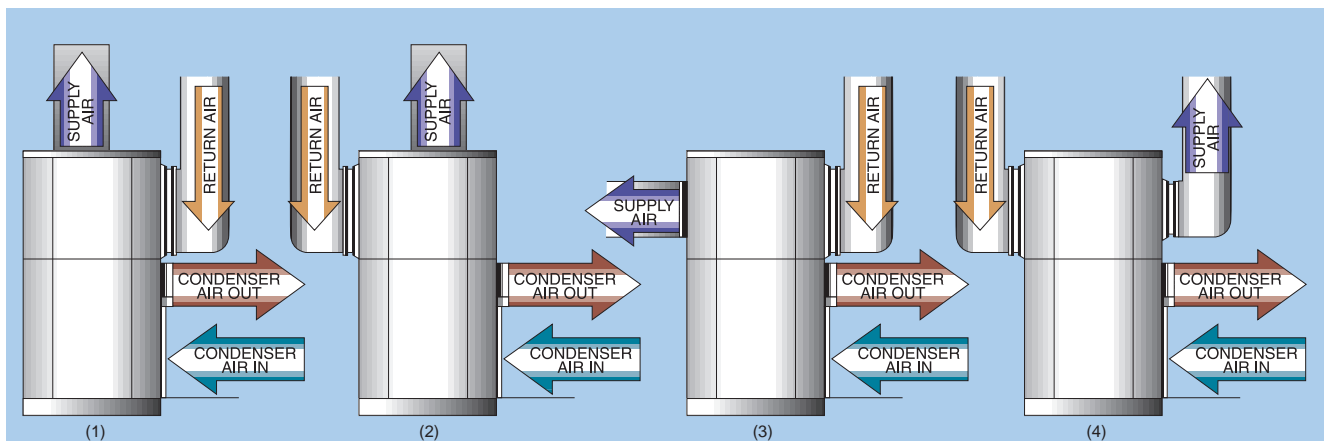
Note: 1. Matched system ratings are per ARI condition. Full load ratings are at 95°F entering condenser air temperature, and 80/67°F air dry bulb/wet bulb entering the air handler coil.

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.

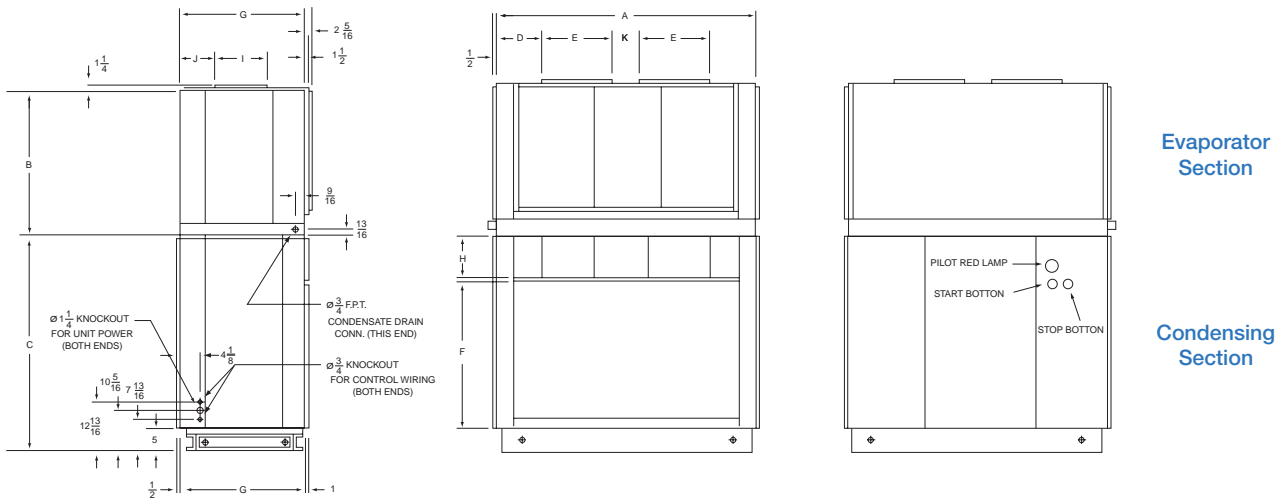
## General Data

Model	SRUB080	SRUB110	SRUB130	SRUB160	SRUB190	SRUB 220	SRUB250
POWER CONN. - V / PH / Hz	380/3/50	380/3/50	380/3/50	380/3/50	380/3/50	380/3/50	380/3/50
REFRIGERANT	R22	R22	R22	R22	R22	R22	R22
CONDENSING UNIT							
COMPRESSOR							
Type	Hermetic Scroll Compressor						
No. Used	1	1	1	2	1 - 1	2	2
V / PH / Hz	380/3/50	380/3/50	380/3/50	380/3/50	380/3/50	380/3/50	380/3/50
RLA - LRA	16.4 - 95.0	19.2 - 125.0	19.6 - 125.0	16.4 - 95.0	16.4-95.0	16.4 - 95.0	19.2-125.0
FAN							
Type	Forward Curved Centrifugal Fan						
Dia X Width (in)	15 x 15	12 x 15	12 x 15	15 x 15	15 x 15	15 x 15	15 x 15
No. Used	1	2	2	2	2	2	2
Drives	Belt Drive	Belt Drive	Belt Drive	Belt Drive	Belt Drive	Belt Drive	Belt Drive
MOTOR							
Type	"Totally Enclosed - Fan Cooled , Three Phase Induction Motor"						
No. Used - HP	1 - 2	1 - 3	1 - 3	1 - 5	1 - 5	1 - 5	1 - 7.5
Speed - RPM	1420	1420	1420	1430	1430	1430	1440
V / PH / Hz	380/3/50	380/3/50	380/3/50	380/3/50	380/3/50	380/3/50	380/3/50
FLA - LRA	3.3 - 19.0	4.8 - 28.0	4.8 - 28.0	7.5 - 50.0	7.5 - 50.0	7.5 - 50.0	11.0 - 76.0
COIL							
Type	Aluminum Fin with Copper Tube						
Fin Type - FPI	Louver - 12	Louver - 12	Louver - 12	Louver - 12	Louver - 12	Louver - 12	Louver - 14
Tube Type - Size	Plain - 3/8	Plain - 3/8	Plain - 3/8	Plain - 3/8	Plain - 3/8	Plain - 3/8	Plain - 3/8
No. 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
No. of Refrigeration Circuit	1	1	1	2	2	2	2
FAN COIL UNIT							
FAN							
Type	Forward Curved Centrifugal Fan						
Dia X Width (in)	12 x 15	12 x 15	12 x 15	15 x 15	15 x 15	15 x 12	15 x 12
No. Used	1	1	1	1	1	2	2
Drives	Belt Drive	Belt Drive	Belt Drive	Belt Drive	Belt Drive	Belt Drive	Belt Drive
MOTOR							
Type	"Totally Enclosed - Fan Cooled , Three Phase Induction Motor"						
No. Used - HP	1 - 1	1 - 2	1 - 2	1 - 3	1 - 3	1 - 3	1 - 5
Speed - RPM	1420	1420	1420	1420	1420	1420	1430
V / PH / Hz	380/3/50	380/3/50	380/3/50	380/3/50	380/3/50	380/3/50	380/3/50
FLA - LRA	1.8 - 10.6	3.3 - 19.0	3.3 - 19.0	4.8 - 28.0	4.8 - 28.0	4.8 - 28.0	7.5 - 50.0
COIL							
Type	Aluminum Fin with Copper Tube						
Fin Type - FPI	Corrugated - 12	Corrugated - 12	Corrugated - 12	Corrugated - 12	Corrugated - 12	Corrugated - 12	Corrugated - 14
Tube Type - Size	Plain - 3/8	Plain - 3/8	Plain - 3/8	Plain - 3/8	Plain - 3/8	Plain - 3/8	Plain - 3/8
No. of Rows	3	3	3	3	4	4	4
Face Area - Sq.Ft.	7.22	10.83	10.83	12.92	12.92	15	15
No. of Refrigeration Circuit	1	1	1	2	2	2	2
FILTER							
Type	Washable Aluminum Air Filter						
No. of Used - Size (in)	2 - 25 3/4 x 21 1/4 x 1	2 - 25 3/4 x 21 1/4 x 1 1 - 25 3/4 x 20 1/4 x 1	2 - 25 3/4 x 21 1/4 x 1 1 - 25 3/4 x 20 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
UNIT WEIGHT							
Weight Approx. ( Kgs )	522	638	678	814	968	1062	1070

## 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 neoprene 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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Since The Trane Company has a policy of continuous product and product data improvement, it reserves the right to change design and specifications without notice.