



LARGE COMMERCIAL

Split System 25-55 Tons

*Large Commercial
Split System 25-55 Tons
RAUP/TTV Series 50 Hz*





LARGE COMMERCIAL Split System 50 Hz - Extend to 55 tons

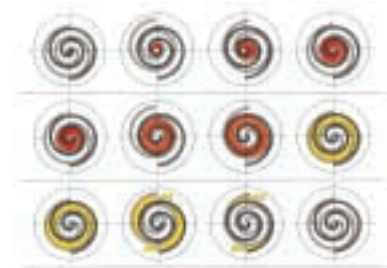


Quality And Reliability

- Hermetic Scroll Compressors are available on all 25-55 ton units, providing excellent reliability and high efficiency.
- System reliability is improved by the passive manifolded of compressors with no mechanical parts.
- A weathertight cabinet protects the condenser coils.
- Dual compressor circuits are used, beginning with the RAUP40 model.
- Microprocessor controller with trouble shooting from LED output.

Maximum Efficiency

- Quieter and smoother operation with the improved Scroll Compressor. Low torque variations extend motor life and a minimal vibration reduces wear.
- Smooth operation, like a centrifugal compressor.
- Super efficient when compared to reciprocating compressors.
- 64% fewer parts than a comparable capacity reciprocating compressor.
- Patented 3-dimensional design. Tip seal allows for axial contact and maximum efficiency.
- A single rotating assembly minimizes friction and mechanical losses.
- Integrated inlet dirt separator removes contaminants.
- Rolling element bearings reduce friction for higher efficiency.
- The lack of suction or discharge valves further improves efficiency over a comparable reciprocating compressor.



System Performance Matrix

Outdoor unit	Indoor unit	Evaporator cfm	Total Capacity (MBH)	Sensible Capacity (MBH)	Total Unit Compressor kw	Condenser Fan kw each/total	Indoor Fan kw	Control kw	Total System kw
RAUP-C30	TTV250	7,760	320.0	214.4	25.20	0.75/2.25	3.7	0.25	31.40
RAUP-C30	TTV300	9,240	340.0	241.5	25.20	0.75/2.25	5.5	0.25	33.20
RAUP-C40	TTV300	9,240	380.0	254.6	33.60	0.75/2.25	5.5	0.34	41.69
RAUP-C40	TTV400	12,120	410.0	295.1	33.60	0.75/2.25	5.5	0.34	41.69
RAUP-C50	TTV400	12,120	500.0	335.0	42.00	0.75/3.00	5.5	0.49	50.99
RAUP-C50	TTV500	15,130	520.0	379.6	42.00	0.75/3.00	7.5	0.49	52.99
RAUP-C60	TTV500	15,130	610.0	420.9	50.40	0.75/4.50	7.5	0.49	62.89
RAUP-C60	TTV600	18,080	660.0	493.1	50.40	0.75/4.50	11.0	0.49	66.39

Notes: 1. Matched system ratings are per ARI 360. 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. Capacities are gross and do not include an evaporator fan motor heat deduction.



General Data - Condensing Units

OUTDOOR UNIT MODEL		RAUP-C30	RAUP-C40	RAUP-C50	RAUP-C60
POWER CONNS.-V/ph/Hz		380-415/3/50			
Min. Cir. Ampacity	A	61.0	80.0	95.0	117.0
Max. Fuse Size	A	87.0	93.0	122.0	144.0
COMPRESSOR DATA-Type		Hermetic Scroll			
No. Used-Size		2-15	4-10	2-10 2-15	4-15
Unit Capacity Steps (%)		100-50	100-75-50-25	100-80-50-21	100-75-50-25
V/ph/Hz		380-415/3/50			
R.L. Amps-L.R. (each)	A	22-153	15-104	15-104 22-153	22-153
CONDENSER FAN DATA-Type		Direct Drive-Propeller Fan			
No. Used/Size	in	3/28"	3/28"	4/28"	6/28"
No. Motors/hp (each)		3/1.0	3/1.0	4/1.0	6/1.0
Nominal	cfm	15,000	17,100	22,280	29,400
V/ph/Hz		380/3/50			
FLA-LRA (each)	A	3.2-0.75	3.2-0.75	3.2-0.75	3.2-0.75
CONDENSER COIL DATA					
No. Coil		1	2	380/3/50 2	2
Face Area	sq.ft.	35.1	46.3	58.2	68.0
Rows/FPF		3/144	3/144	3/144	3/144
REFRIGERANT-Type		R-22			
No. Refrigerant Circuits		1	2	2	2
Operating Charge	lbs.	22.0	43.0	44.1	60.6
Line Size O.D. Suction (each)	in	2 1/8	1 5/8	2 1/8	2 1/8
Line Size O.D. Liq. (each)	in	7/8	7/8	7/8	7/8
DIMENSIONAL DATA (HxWxD)					
Uncrated	mm	1,465x2,910x1,206	1,414x2,513x1,920	1,718x2,513x1,920	1,515x2,910x1,920
OPERATING WEIGHT	lbs. (kg)	2,339 (1,061)	2,943 (1,335)	3,494 (1,585)	3,935 (1,785)

- Notes:
1. Minimum circuit ampacity equals the RLA of one compressor motor times 1.25 plus the total RLA of the remaining motors.
 2. Local codes may take precedence for maximum fuse size.
 3. Recommended dual element fuse size is 150 percent of the RLA of one compressor plus the RLA of the remaining motors.
 4. Operating charge is approximate for condensing unit only, and does not include charge for low side or interconnecting lines.

General Data - Air Handling Units

INDOOR UNIT MODEL		TTV250	TTV300	TTV400	TTV500	TTV600
EVAPORATOR COIL DATA						
Face Area	sq.ft.	16.7	19.2	26.2	34.8	38.0
Rows/FPF		3/144	3/144	3/144	4/144	4/144
No. of Circuits		2	2	2	2	2
Fin Type (Al)		W3BS Slit	W3BS Slit	W3BS Slit	W3BS	W3BS
Drain Conn. Size	in	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4
EVAPORATOR FAN DATA-Type		Forward Curve, Centrifugal Type, Belt drive				
No. Used/Size	mm	1/400	1/400	2/390	2/450	2/450
Std.Motor-No./hp		1/5.0	1/7.5	1/7.5	1/10.0	1/15
V/ph/Hz		380/3/50	380/3/50	380/3/50	380/3/50	380/3/50
FLA-LRA (each)	A	8-42	12-82	16-104	16-104	23-153
Nominal	cfm	7,760	9,260	12,120	15,130	18,080
FILTER						
No. of Filters-Size	in	(8)-16x20x1	(2)-16x20x1,(4)-15x20x1 (1)-16x25x1,(2)-15x25x1	(6)-16x25x1 (3)-20x25x1	(2)-16x20x1,(1)-20x25x1 (6)-16x25x1,(3)-25x25x1	(3)20x20 (6)20x25
DIMENSIONAL DATA (HxWxD)						
Uncrated	mm.	1,219x1,808x1,040	1,372x1,808x1,040	1,520x2,088x1,040	1,653x2,596x1,275	1,777x2,596x1,275
OPERATING WEIGHT	lbs. (kg)	1,366 (620)	1,415 (642)	1,680 (762)	2,160 (980)	2,246 (1019)

Features Summary

Condensing Units

Standard Features

- Hermetic Scroll compressor.
- Microprocessor Controller with trouble shooting from LED output.
- Copper tube, aluminium W3BS plate fins coil with internal subcooled circuit.
- Factory leak and pressure tested at 250 and 400 psig.
- Standard ambient operating range of 40 °F to 115 °F.
- Unit panels constructed of 0.9 mm. galvanized steel.
- Exterior panels are cleaned and then chemically treated and finished with a weather-resistant baked polyester powder paint.
- Heavy gauge steel mounting/lifting rails under base.
- Direct-drive, vertical discharge.
- 3-phase motors with permanently lubricated ball bearings.
- Utilization range of plus or minus 10 percent of the nameplate voltage.
- Built-in current and thermal overload protection for condenser fan motor(s).
- Colored and numbered wiring.
- 3 Wire DOL Starter.

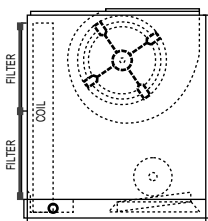


Air Handling Units

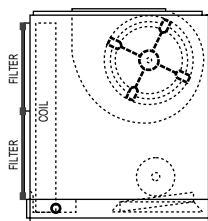
Standard Features

- Vertical or Horizontal discharge configuration.
- Zinc coated, heavy gauge, galvanized steel cabinet finished with a baked polyester powder paint.
- Completely insulated with fire-retardent, permanent, odorless fiberglass material covered with aluminium foil.
- Factory installed thermal expansion valve(s).
- Evaporator coil proof tested at 375 psig and leak-tested at 250 psig.
- Double inlet, double width, forward cured, centrifugal type evaporator fan(s) with fixed belt drive.
- Thermal overload protection on the evaporator fan motor.
- Washable air filters.
- Oversized motors for high static pressure applications (Optional).

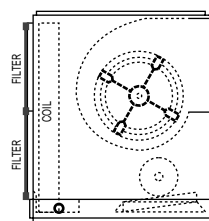
Fan Arrangement



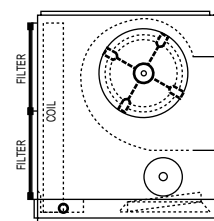
Arrangement 1
(standard)



Arrangement 2
(standard)



Arrangement 3
(optional)



Arrangement 4
(optional)



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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.