



Odyssey™

Split System 5-20 Tons

Light Commercial
TTA / TTH / TWE
Series 60 Hz





ODYSSEY - Light Commercial

Split System Cooling Units

A new standard for the air conditioning industry, Trane sets new appearance and new standard for **Serviceability... Installability... Reliability... and Flexibility** for all applications in split system air conditioning.



Design for You

Trane consulted its customers during the split system design phase to bring a product to the market place which would meet job needs every time.

Quality and Reliability

- Scroll compressors are available from 5 to 20 tons with excellent reliability and high efficiency.
- 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.

Flexibility

Trane Split System offers single and dual compressors allowing the right equipment to be matched to the job application and save on operating cost.

Convertibility

Trane air handler can easily be converted for vertical or horizontal airflow in free blow and ducted applications.

Installation

- Compact design makes smaller footprint in the market so we can save the area cost.
- Installation is simplified through fully factory packaged assembled indoor and outdoor units. Ready to run when they arrive at the jobsites.

Ease of Service

Reduction of service time and cost through

- Single side access on condenser.
- Multiple removable panels on air handlers.
- Colored and numbered wiring.
- Service valves.
- Dual circuits allow for comfort cooling even during service time. (TTA150-240)

Trane Split System Units

- A reputation for quality and reliability.
- Improvements in efficiency, flexibility and installation.

System Performance Matrix

Outdoor Unit	Indoor Unit	Evaporator cfm	Total Capacity MBH
TTK060K3	TTH060B3	2,000	60
TTA075R3	TTH075B3	2,500	75
TTA100R3	TTH100B3	3,400	100
TTA120R3	TWE120A3	4,000	120
TTA150R3	TWE180B3	6,000	160
TTA200R3	TWE240B3	6,650	200
TTA240R3	TWE240B3	8,000	240

Notes : 1. Matched system ratings are ARI 360. Full load rating is at 95°F, entering condensing air temperature and 80/67 FDB/FWB entering air handler coil.
 2. Indoor fan power accounts for ARI 360 required external static pressure and loss associated with air filter, casing and wet evaporator coil pressure.



Designed With Your Needs In Mind

Product Line

Indoor Units							Outdoor Units							
Model	TTH060	TTH075	TTH100	TWE120	TWE180	TWE240	Model	TTK060	TTA075	TTA100	TTA120	TTA150	TTA200	TTA240
Single Circuit	x	x	x	x			Single Compressor	x	x	x	x			
Dual Circuits					x	x	Dual Circuits					x	x	x

General Data-Air Handler Units

UNIT MODELS		TTH060B3	TTH075B3	TTH100B3	TWE120A3	TWE180B3	TWE240B3
POWER CONNECTION	V/ph/Hz	230/3/60	230/3/60	230/3/60	230/3/60	230/3/60	230/3/60
MCA ¹	A	3.2	4.0	7.3	7.3	10.0	16.6
SYSTEM DATA							
Refrigerant Type		R22	R22	R22	R22	R22	R22
No. Refrigerant Circuits		1	1	1	1	2	2
Refrigerant Connection Type		BRAZE	BRAZE	BRAZE	BRAZE	BRAZE	BRAZE
Suction Line OD	in (mm)	1 1/8 (28.57)	1 1/8 (28.57)	1.3/8 (34.93)	1 3/8 (34.93)	1 3/8 (34.93)	1 3/8 (34.93)
Liquid line OD	in (mm)	3/8 (9.53)	1/2 (12.7)	1/2 (12.7)	1/2 (12.7)	1/2 (12.7)	1/2 (12.7)
COIL							
Face Area	sq ft (m ²)	4.22 (0.39)	5.06 (0.47)	6.67 (0.62)	11.2 (1.04)	16.3 (1.51)	21.6 (2.00)
Tube Size OD	in (mm)	3/8 (9.53)	3/8 (9.53)	3/8 (9.53)	3/8 (9.53)	3/8 (9.53)	3/8 (9.53)
Rows		3	3	3	3	3	3
Fins per inch		15	15	15	12	12	12
Refrigerant Flow Control		CAP. TUBE	EXPANSION VALVE	EXPANSION VALVE	EXPANSION VALVE	EXPANSION VALVE	EXPANSION VALVE
Drain Connection Size	in (mm)	1 (25.4)	1 (25.4)	1 (25.4)	1 (25.4)	1 (25.4)	1 (25.4)
Drain Connection Type			STEEL PIPE - MPT			PLASTIC - FEMALE PIPE	
FAN							
Fan Type		DOUBLE INLET CENTRIFUGAL WITH FORWARD CURVED WHEEL					
No. used		1	1	2	1	2	2
Diameter	in (mm)	10 (254)	10 (254)	10 (254)	15 (381.0)	15 (381.0)	15 (381.0)
Width	in (mm)	10 (254)	10 (254)	8 (203.2)	15 (381.0)	15 (381.0)	15 (381.0)
Drive Type		BELT-ADJUSTABLE DRIVE					
Nominal Airflow ²	cfm	2000	2500	3400	4000	6000	8000
MOTOR							
Motor Type		TOTALLY ENCLOSED-FAN COOLED, THREE PHASE INDUCTION MOTOR					
No. of Motor		1	1	1	1	1	1
Motor hp	hp (kW)	3/4 (0.55)	1 (0.75)	2 (1.5)	2 (1.5)	3 (2.2)	5 (3.7)
No. of Speed		1	1	1	1	1	1
Motor Speed	rpm	1670	1690	1705	1705	1715	1730
V/ph/Hz		230/3/60	230/3/60	230/3/60	230/3/60	230/3/60	230/3/60
RLA		2.53	3.16	5.85	5.85	7.97	13.3
FILTER							
Type		WASHABLE ALUMINUM AIR FILTER					
No. used		2	2	3	4	4	4
Size (WxLxD)	mm	440 X 520 X 25	440 X 600 X 25	440 X 520 X 25	406 x 635 x 25	528 x 727 x 25	572 x 815 x 25
DIMENSION (HxWxD)							
Crated (Shipping)	mm	673 x 1,410 x 970	673 x 1,410 x 970	673 x 1,778 x 970	1651 x 1702 x 724	1867 x 2108 x 794	1943 x 2413 x 858
Uncrated (Net)	mm	520 x 1,312 x 841	520 x 1,312 x 841	520 x 1,680 x 841	1523 x 1613 x 635	1751 x 2019 x 702	1824 x 2350 x 773
WEIGHT							
Uncrated (Net)	kg	93.9	89.3	133.9	188.5	311	371

¹ MCA - Minimum Circuit Ampacity

² CFM is rated with standard air-dry coil.

General Data - Condensing Unit

		TTK060K3	TTA075R3	TTA100R3	TTA120R3	TTA150R300	TTA200R3	TTA240R3
Electrical Data								
Main Power supply	V/Ph/Hz	230/3/60	230/3/60	230/3/60	230/3/60	230/3/60	230/3/60	230/3/60
Min.Brch.Cir.Ampacity	A	28.1	33.3	44.0	54.9	60.3	79.5	99.3
Compressor								
Type		Reciprocate	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
No. Used		1	1	1	1	2	2	2
Rated Amps (2)	A	21.4	25	33.6	42	25	33.6	42
Dimensions								
Height	mm	1254	1050	1050	1050	1050	1050	1050
Length	mm	988	1060	1060	1260	2200	2200	2200
Width	mm	350	950	950	1050	1050	1050	1050
Weight uncrated	kg	85	140	177	221	357	408	424
System Data								
Refrigerant circuit		1	1	1	1	2	2	2
Suction line	inch	1 1/8	1 1/8	1 3/8	1 3/8	1 1/8	1 3/8	1 3/8
Liquid line	inch	3/8*	1/2*	1/2*	1/2*	1/2*	1/2*	1/2*
Outdoor Coil								
Tube size	in (mm)	3/8 (9.53)	3/8 (9.53)	3/8 (9.53)	3/8 (9.53)	3/8 (9.53)	3/8 (9.53)	3/8 (9.53)
Face Area	ft ² (m ²)	11.7 (1.08)	15.1 (1.40)	20.0 (1.86)	25.0 (2.32)	30.2 (2.81)	40.0 (3.72)	42.5 (3.95)
Rows	#	2	2	2	2	2	2	2
Fins per inch (fpf)	#	21	16 (192)	16 (192)	16 (192)	16 (192)	16 (192)	16 (192)
Outdoor Fan								
Type		Propeller	Propeller	Propeller	Propeller	Propeller	Propeller	Propeller
Number		2	1	1	1	2	2	2
Diameter	mm	457	710	710	710	710	710	710
Drive type		Direct	Direct	Direct	Direct	Direct	Direct	Direct
Speeds number		1	1	1	1	1	1	1
Air flow	cfm (m ³ /h)	2690 (4570)	4900 (8300)	5800 (9800)	6800 (11600)	9800 (16600)	11600 (19600)	13600 (23000)
Motors Number		2	1	1	1	2	2	2
Motor power supply	V/Ph/Hz	230/3/60	230/3/60	230/3/60	230/3/60	230/3/60	230/3/60	230/3/60
Motor Watt Output	kW	43	250	320	400	250	320	400
Rated Amps (2)	A	0.66	2.00	1.97	2.4	2.00	1.97	2.4
Motor RPM	rpm	900	750	820	925	750	820	925
R-22 Refrigerant Charge	kg	5.2				Holding Charge		

Notes: 1. at 7°C SST and 35°C ambient
2. per motor



TTK060K3



TTA075-120R3



TTA150-240R3



TTH060-100B3



TWE120-240B3

Feature and Benefits

TTA Condensing Units

Features

- Powder paint finish.
- Innovative cabinet design.
- Refrigerant accessories as standard.
- Single and dual compressors

Optional

- Copper fin / Blue fin.

Benefits

- Full covering of all edges and a uniform paint finish for a smooth, attractive and durable cabinet exterior.
- The most attractive light commercial condensing unit available.
- Each unit ships standard with the service valves, hi-low pressure controls, liquid line filter drier.
- Optimized operation and reduced service time.
- Designed to provide corrosion protection on sea coast application.

TTH/TWE Air Handler Units

Features

- 500 mm in height (TTH060-100).
- Excellent drain pan.
- Belt drive.
- Factory installed mounting channel (TTH060-100).
- Quiet operation.
- Convertible for horizontal or vertical configuration (TWE120-240).
- Thermal expansion valve. (Except TTH060)

Optional

- Discharge Plenum.
- Return air grille (for TWE model only).
- High static motor.

Benefits

- Designed to fit easily into tight ceiling spaces.
- Specially designed drain pan with a deep pitch to catch and drain water safely away.
- Fully adjustable airflow for application versatility and ease of servicing.
- Supports the unit from below, and saves time and money for the installer.
- Well-insulated cabinet with wide forward curved fans provide quiet operation.
- Maximum application flexibility without the extra inventory of dedicated models.
- For maximum application flexibility and performance, capacity modulation provides improved comfort and backup in the event of a malfunction with one circuit.
- Designed for free blow application.
- For high static pressure applications.



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For more information contact your local district office

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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.