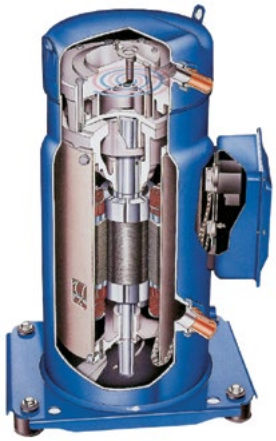
Odyssey

Split System 5-20 Tons Light Commercial
TTA / TTH / TWE
Series 50 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.

Manifolding Scroll Compressors (TTA180-240RD)
- The key to this system is an oil equalized line connecting the two compressors. In addition, the discharge lines are simply manifolded togethers.
- Efficiency and proven Technology. A manifolded set of compressors is more efficient at part load than the compressors with independent circuits.
- Manifolded to be single circuit provides cost and time saving for installation.

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 (Option)
Trane air handler (TWE Model) can easily be converted for vertical or horizontal airflow in free blow and ducted applications. Please refer to TWE specification sheet for your futher reference if needed.

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.

Trane Split System Units
- A reputation for quality and reliability.
- Improvements in efficiency, flexibility and installation.

System Performance Matrix

Model		Evaporator	Total Capacity	Sensible Capacity
Outdoor	Indoor	cfm	MBH	MBH
TTK060QD	TTH060BD	1,600 2,000 2,400	57 60 62	36 39 42
TTA075RD	TTH075BD	2,000 2,500 3,000	72 75 78	45 49 52
TTA100RD	TTH100BD	2,700 3,400 4,100	97 101 104	63 69 73
TTA120RD	TTH120BD	3,200 4,000 4,800	114 120 124	74 82 88
TTA150RD	TTH160BD	4,300 5,300 6,300	150 155 161	106 117 124
TTA180RD	TTH180BD	4,800 6,000 7,200	172 180 186	111 121 131
TTA200RD	TTH210BD	5,600 7,000 8,400	195 201 209	137 151 162
TTA240RD	TTH240BD	6,400 8,000 9,600	228 241 252	141 152 162

Note : Product design and specification are subject to change without notice.

Designed With Your Needs In Mind

General Data-Air Handler Units

UNIT MODELS		TTH060BD	TTH075BD	TTH100BD	TTH120BD	TTH160BD	TTH180BD	TTH210BD	TTH240BD
POWER CONNECTION	V/ph/Hz	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50
MCA[1]	A	1.8	2.5	4.6	4.6	4.6	6.4	6.4	10.0
SYSTEM DATA									
Refrigerant Type		R22	R22	R22	R22	R22	R22	R22	R22
No. Refrigerant Circuits		1	1	1	1	1	2	2	2
Refrigerant Connection Type		BRAZE	BRAZE	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 5/8 (41.3)	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)	5/8 (15.9)	1/2 (12.7)	1/2 (12.7)	1/2 (12.7)
COIL									
Fin Type		UNCOATED SLIT	UNCOATED SLIT	UNCOATED SLIT	UNCOATED SLIT	UNCOATED SLIT	UNCOATED SLIT	UNCOATED SLIT	UNCOATED SLIT
Fins per inch		15	15	15	15	14	14	14	14
Refrigerant Flow Control		Cap.Tube.	Thermostatic 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)	1 (25.4)	1 (25.4)
Drain Connection Type		STEEL PIPE - MPT							
FAN									
Fan Type		DOUBLE INLET CENTRIFUGAL WITH FORWARD CURVED WHEEL							
Qty		1	1	2	2	2	2	2	2
Drive Type		BELT-ADJUSTABLE DRIVE							
MOTOR									
Qty		1	1	1	1	1	1	1	1
Motor hp	hp (kW)	3/4 (0.55)	1 (0.75)	2 (1.5)	2 (1.5)	2 (1.5)	3 (2.2)	3 (2.2)	5 (3.7)
No. of Speed		1	1	1	1	1	1	1	1
Motor Speed	rpm	1405	1400	1405	1405	1405	1425	1425	1440
RLA/LRA		1.61-8.40	1.99 - 11.0	3.66 - 21.0	3.66 - 21.0	3.66 - 21.0	5.08 - 34.0	5.08 - 34.0	8.03 - 63
FILTER									
Type		WASHABLE AIR FILTER							
DIMENSION (HxWxD)									
Unit (Net)	mm	520 x 1,406 x 916	520x1,406 x 916	520 x 1,774 x 916	620 x 1,774 x 916	798 x 2,059x 1,260	798 x 2,059 x 1,260	850 x 2,440 x 1,515	850 x 2,440 x 1,515
WEIGHT									
Unit (Net)	kg	87	92	136	141	180	189	214	225

[1] MCA - Minimum Circuit Ampacity

Note : Product design and specification are subject to change without notice.

General Data - Condensing Units

UNIT MODELS		TTK060QD	TTA075RD	TTA100RD	TTA120RD	TTA150RD	TTA180RD	TTA200RD	TTA240RD
POWER CONNECTION	V/ph/Hz	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50
MCA[1]	A	13.95	17.94	25.20	27.08	31.45	34.58	48.98	48.98
SYSTEM DATA									
Refrigerant Type[2]		R22	R22	R22	R22	R22	R22	R22	R22
Refrigerant Connection Type		BRAZE	BRAZE	BRAZE	BRAZE	BRAZE	BRAZE	BRAZE	BRAZE
No of Refrigerant Circuit		1	1	1	1	1	1*	1*	1*
Suction Line OD[3]	in (mm)	**	1 1/8 (28.6)	1 3/8 (34.9)	1 3/8 (34.9)	1 5/8 (41.3)	1 5/8 (41.3)	1 5/8 (41.3)	1 5/8 (41.3)
Liquid Line OD[3]	in (mm)	**	1/2 (12.7)	1/2 (12.7)	1/2 (12.7)	5/8 (15.9)	5/8 (15.9)	5/8 (15.9)	5/8 (15.9)
COMPRESSOR									
Compressor Type		Hermetic Scroll							
Qty		1	1	1	1	1	2	2	2
RLA/LRA		10.0/74.0	13.5/95.0	19.2/140.0	20.7/147.0	24.2/175.0	14.3/130.0	20.7/130.0	20.7/147.0
COIL									
Fin Type		Uncoated Corrugate							
Fins per inch		20	16	16	16	16	16	16	16
FAN									
Fan Type		Propeller	Propeller	Propeller	Propeller	Propeller	Propeller	Propeller	Propeller
Qty		1	1	1	1	1	2	2	2
Drive Type		Direct	Direct	Direct	Direct	Direct	Direct	Direct	Direct
Nominal Airflow[2]	cfm (cmh)	1903 (3233)	4885 (8300)	5768 (9800)	6828 (11600)	8212 (13950)	11536 (19600)	13537 (23000)	13537 (23000)
MOTOR									
Qty		1	1	1	1	1	2	2	2
Motor Output	Watt	165	290	300	300	300	300	300	300
No. of Speed		1	1	1	1	1	1	1	1
Motor Speed	rpm	900	750	875	875	875	875	875	875
RLA/LRA		1.45 / 2.68	1.06 / 2.27	1.2 / 2.80	1.2 / 2.80	1.2 / 2.80	1.2 / 2.80	1.2 / 2.80	1.2 / 2.80
DIMENSION (HxWxD)									
Unit (Net)	mm	795 x 1018 x 360	1050 x 950 x 1060	1050 x 950 x 1060	1050 x 950 x 1060	1250 x 950 x 1060	1050 x 2200 x 1050	1050 x 2200 x 1050	1050 x 2200 x 1050
WEIGHT									
Unit (Net)	kg	92	164	180	192	245	415	428	462

[1] MCA - Minimum Circuit Ampacity.

[2] Refrigerant R22 is holding charged for TTA and fully charged for TTK.

[3] Piping connections for TTK060QD are 7/8 inch suction line and 1/2 inch liquid line for Thailand only.
Piping connections for TTK060KD are 3/8 inch suction line and 1 1/8 inch liquid line for export.

* For TTA180-240RD, dual refrigerant circuit are standards for export.

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Features and Benefits

TTA075-150RD

TTA075-120RD (Option)

TTA180-240RD

Mirco processor controller (Option)

Phase Protector

TTH Model

TWE Model (Option)

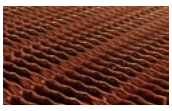
Trane Multi-Stage Thermostat (Option)

1, 2, 4 Stage Thermostat - Digital Display (Option)

1 or 2 Stage Thermostat - Without Display (Option)

Aeriscoat R (Option)

Before Coated



After Coated & Curing

AHU Starter Panel (Option)

TTA Condensing Units

Standard Features

- Powder paint finish.
- Innovative cabinet design.
- Refrigerant accessories as standard.
- Single and dual compressors
- Digital under / over voltage and phase protection device

Optional

- Stainless casing / Copper fin / Blue fin
- Dual circuits (Thailand) or manifolding single circuit (Export) for TTA180-240RD
- Horizontal air discharge (for TTA075-120)
- Micro Processor controller
- Wire Guard.

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 liquid and suction lines shut-off valve, hi-low pressure controls, liquid line filter drier.
- Optimized operation and reduced service time.
- Protect compressor damage from unstable electrical source or mis-phase connection
- Designed to provide corrosion protection on sea coast application.
- Dual circuits allow for comfort during service time.
- Flexible application when vertical space limited.
- Troubleshooting status display helps reduce service time.
- Extend compressor life time by balancing compressors loading.
- Protect coil from delivery damage.

TTH/TWE Air Handler Units

Standard Features

- 500 mm in height (TTH075-100).
- Excellent drain pan.
- Belt drive.
- Factory installed mounting channel (TTH060-240).
- Quiet operation.
- Thermal expansion valve.

Optional

- TWE model as vertical configuration application (as option for TTH120-240)
- Discharge Plenum.
- Return air grille (for TWE model only).
- High static motor.
- Stainless casing / Copper fin / Blue fin

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 fire retardant Polyethylene foam and wide forward curved fans.
- For maximum application flexibility and performance, capacity modulation provides improved comfort and backup in the event of a malfunction with one circuit.
- Provide more application flexibility
- Designed for free blow application.
- For high static pressure applications.
- Designed to provide corrosion protection on sea coast application.

Trane Multi-Stage Thermostat controlled by micro processor is available for 1, 2 and 4 stage monitor, 7-segment display, 15°C–30°C temperature setting, connectable with the external sensor & auto-restart function with ON/OFF switch.

Aeriscoat R removes and protects all microorganisms, biofilm & corrosion in one step certified by CSIRO & approved by USEPA. The effectiveness lasts 5 years and reduces maintenance. Applicable to coil in heat exchanger & evaporator especially for use in humid climate, seaside, factories, hotels, etc.

Trane 1,2,4 Stage Thermostat provides with & without display, operation control of chilled water fan coil and AHU, 16°C - 30°C temperature setting, 4-level compressor monitor & display of compressor status.

Trane AHU Starter Panel particularly controls the HVAC system. Integrated with motor and compressor protection system, reliable according to UL/IEC/NEMA standard and easy to install

TRANE®

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