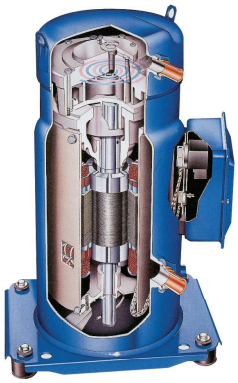
ODYSSEY

Split System 5-20 Tons
Light Commercial
TTA/TTH R22 Series 50Hz

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 SEER 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.

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.

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 further reference if needed.

Free Blow (Option)

- Fan motor hp output will be specially to properly match with Free Blow application.

System Performance Matrix

Model		Evaporator	Total Capacity	Sensible Capacity
Outdoor	Indoor	cfm	MBH	MBH
TTK060KD	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-Fan Coil 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	2	2.5	4.6	4.6	4.6	6.4	6.4	10.0
SYSTEM DATA									
Refrigerant Type						R22			
No. Refrigerant Circuits		1	1	1	1	2	2	2	2
Refrigerant Connection Type						BRAZE			
Suction Line OD (per ciruit)	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)	1 3/8 (34.93)	1 3/8 (34.93)
Liquid Line OD (per ciruit)	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)	1/2 (12.7)	1/2 (12.7)
COIL									
Fin Type						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-DRIVE			
STANDARD FAN MOTOR									
Qty		1	1	1	1	1	1	1	1
Motor Output	hp	3/4	1	2	2	2	3	3	5.5
No. of Speed		1	1	1	1	1	1	1	1
Motor Speed	rpm	1405	1400	1405	1405	1405	1425	1425	1440
RLA		1.61	1.99	3.67	3.67	3.67	4.90	4.90	8.56
FILTER									
Type						WASHABLE AIR FILTER			
DIMENSION (HxWxD)									
Unit (Net)	mm	520 x 1,406 x 916	520 x 1,406 x 916	520 x 1,774 x 916	620 x 1,774 x 916	798 x 2,059 x 1,260	798 x 2,059 x 1,260	849 x 2,366 x 1,319	849 x 2,366 x 1,319
WEIGHT									
Unit (Net)	kg	87	92	136	141	172	181	210	240

Note: 1. MCA-Minimum Circuit Ampacity
2. Unit width and depth do not include size of mounting feet
3. Product design and specification are subject to change without notice.

General Data - Condensing Units

UNIT MODELS		TTK060KD	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	14.10	17.94	25.20	27.08	31.45	38.40	45.60	48.98
SYSTEM DATA									
Refrigerant Type[2]						R22			
Refrigerant Connection Type						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		10.0	13.5	19.2	20.7	24.2	16.0	19.2	20.7
COIL									
Fin Type						Uncoated Corrugate			
Fins per inch		17	16	16	16	16	16	16	16
FAN									
Fan Type						Propeller			
Qty		2	1	1	1	1	2	2	2
Drive Type						Direct			
MOTOR									
Qty		2	1	1	1	1	2	2	2
Motor Output	Watt	98	290	400	400	400	400	400	400
No. of Speed		1	1	1	1	1	1	1	1
RLA		0.8	1.06	1.2	1.2	1.2	1.2	1.2	1.2
DIMENSION (HxWxD)									
Unit (Net)	mm	1,254 x 988 x 350	1,070 x 1,042 x 953	1,070 x 1,042 x 953	1,070 x 1,042 x 953	1,270 x 1,242 x 953	1,050 x 2,200 x 1,050	1,050 x 2,200 x 1,050	1,050 x 2,200 x 1,050
WEIGHT									
Unit (Net)	kg	95	170	186	199	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.
** TTA150RD standard 1 refrigerant circuit is 1-Fan type. For dual circuit is 2-Fan type.
Note : Product design and specification are subject to change without notice.

Features and Benefits

TTA075-150RD

TTA075-120RD (Option)

TTA180-240RD

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)

AHU Starter Panel/Smart Starter (Option)

TTA Condensing Units

Standard Features	Benefits
• Powder paint finish.	• Full covering of all edges and a uniform paint finish for a smooth, attractive and durable cabinet exterior.
• Innovative cabinet design.	• The most attractive light commercial condensing unit available.
• Single and dual compressors.	• Optimized operation and reduced service time.
• Refrigerant accessories as standard.	• Each unit provided with liquid & suction lines shut-off valve, hi-low pressure control and liquid filter drier as standard from factory.
• Digital under/over voltage and phase protection device.	• Protect compressor damage from unstable electrical source or mis-phase connection.

Optional	Benefits
• Stainless casing/Copper fin/Blue fin.	• Designed to provide corrosion protection on sea coast application.
• Horizontal air discharge (for TTA075-120).	• Flexible application when vertical space limited.
• Wire Guard.	• Protect coil from delivery damage.
• Dual circuits (Thailand) or manifolding single circuit (Export) for TTA150-240.	• Dual circuits allow for comfort during service time.

TTH/TWE Air Handler Units

Standard Features	Benefits
• 500 mm in height (TTH075-100).	• Designed to fit easily into tight ceiling spaces.
• Excellent drain pan.	• Specially designed drain pan with a deep pitch to catch and drain water safely away.
• Belt drive.	• Fully adjustable airflow for application versatility and ease of servicing.
• Insulated galvanized steel fully drain pan.	• Fully drain pan prevents condensation outside the unit.
• Quiet operation.	• Well-insulated cabinet with fire retardant Polyethylene foam and wide forward curved fans.
• Thermal expansion valve. (except TTH060)	• For maximum application flexibility and performance. Capacity modulation provides improved comfort.

Optional	Benefits
• TWE model as vertical configuration application (as option for TTH120-240).	• Provide more application flexibility.
• Discharge Plenum.	• Designed for free blow application.
• High static motor.	• For high static pressure applications.
• Stainless casing/Copper fin/Blue fin.	• Designed to provide corrosion protection on sea coast application.
• PM 2.5 filter.	• Better protection of your health with improved IQA.
• Return air grille (for TWE model only).	

Trane Multi-Stage Thermostat

controlled by microprocessor 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.

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/Smart Starter

Particularly controls the HVAC system. Integrated with motor and and compressor protection system and temperature control,reliable according to UL/IEC/NEMA standard and easy to install.

TRANE

Copper Condenser Coil

เทรน (ประเทศไทย)

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