



# 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 Option (TTA150-240RD)

- The key to this system is an oil equalized line connecting the two compressors. In addition, the discharge lines are simple manifolded together.
- 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

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

### 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

Model		Evaporator cfm	Total Capacity MBH	Sensible Capacity MBH
Outdoor	Indoor			
TTK060QD	TTH060BD	1,600	57	36
		2,000	60	39
		2,400	62	42
TTA075RD	TTH075BD	2,000	72	45
		2,500	75	49
		3,000	78	52
TTA100RD	TTH100BD	2,700	97	63
		3,400	101	69
		4,100	104	73
TTA120RD	TWE120CD	3,200	116	76
		4,000	121	83
		4,800	125	89
TTA150RD	TWE160CD	4,300	151	107
		5,300	156	118
		6,300	162	125
TTA180RD	TWE180CD	4,800	173	112
		6,000	181	122
		7,200	187	132
TTA200RD	TWE210CD	5,600	198	139
		7,000	205	154
		8,400	212	164
TTA240RD	TWE240CD	6,400	230	142
		8,000	243	153
		9,600	253	163



## Designed With Your Needs In Mind

### General Data-Air Handler Units

UNIT MODELS		TTH060BD	TTH075BD	TTH100BD	TWE120CD	TWE160CD	TWE180CD	TWE210CD	TWE240CD
<b>POWER CONNECTION</b>	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
<b>MCA<sup>1</sup></b>	A	1.8	2.5	4.6	4.6	6.4	6.4	10.0	10.0
<b>SYSTEM DATA</b>									
Refrigerant Type		R22	R22	R22	R22	R22	R22	R22	R22
No. Refrigerant Circuits		1	1	1	1	2	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 1/8 (28.57)	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)	1/2 (12.7)	1/2 (12.7)
<b>COIL</b>									
Face Area	sq.ft. (m <sup>2</sup> )	4.22 (0.39)	5.06 (0.47)	6.67 (0.62)	9.6(0.89)	12.7 (1.18)	14 (1.47)	16.3 (1.51)	18(1.67)
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)	3/8 (9.53)	3/8 (9.53)
Rows		3	3	3	3	3	3	3	3
Fins per inch		15	15	15	14	14	12	15	15
Refrigerant Flow Control		CAP TUBE	EXPANSION VALVE	EXPANSION VALVE	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)	1 (25.4)	1 (25.4)
Drain Connection Type			STEEL PIPE - MPT				PLASTIC - FEMALE PIPE		
<b>FAN</b>									
Fan Type				DOUBLE INLET CENTRIFUGAL WITH FORWARD CURVED WHEEL					
No. used		1	1	2	1	1	1	2	2
Diameter	in (mm)	10 (254)	10 (254)	10 (254)	15 (381.0)	18 (457.2)	18 (457.2)	15 (381.0)	15 (381.0)
Width	in (mm)	10 (254)	10 (254)	8 (203.2)	15 (381.0)	18 (457.2)	18 (457.2)	15 (381.0)	15 (381.0)
Drive Type				BELT - ADJUSTABLE DRIVE					
<b>MOTOR</b>									
No. of Motor		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	1360	1400	1405	1405	1405	1425	1425	1440
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
RLA / LRA		1.4 - 5.2	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
<b>FILTER</b>									
Type		WASHABLE ALUMINUM AIR FILTER							
No. used		2	2	3	4	4	4	4	4
Size (WxLxD)	mm	520x440x25	600x440x25	520x440x25	355 x 635 x 25	927x400x25	927x400x25	555x727x25	555x727x25
<b>DIMENSION (HxWxD)</b>									
Crated (Shipping)	mm	673x1,410x970	673x1,410x970	673x1,778x970	1651x1499x724	1867x1702x939	1867x1702x939	1867x2299x794	1867x2299x794
Uncrated (Net)	mm	520x1,312x841	520x1,312x841	520x1,680x841	1523x1410x635	1751x1613x850	1751x1613x850	1751x2210x702	1751x2210x702
<b>WEIGHT</b>									
Uncrated (Net)	kg	86.7	91.3	135.4	154	275	285	355	361

<sup>1</sup>MCA - Minimum Circuit Ampacity

### General Data - Condensing Units

UNIT MODELS		TTK060QD	TTA075RD	TTA100RD	TTA120RD	TTA150RD	TTA180RD	TTA200RD	TTA240RD
<b>POWER CONNECTION</b>	V/ph/Hz	380-415/3/50							
<b>MCA<sup>1</sup></b>	A	11.97	18.06	27.29	29.83	32.72	35.00	49.40	53.93
<b>SYSTEM DATA</b>									
No. Refrigerant Circuits		1	1	1	1	2	2	2	2
Refrigerant Connection Type		BRAZE	BRAZE	BRAZE	BRAZE	BRAZE	BRAZE	BRAZE	BRAZE
Refrigerant <sup>2</sup>		R22							
Suction Line OD <sup>3</sup>	in (mm)	1 1/8 (28.6)	1 1/8 (28.6)	1 3/8 (34.9)	1 3/8 (34.9)	1 1/8 (28.6)	1 3/8 (34.9)	1 3/8 (34.9)	1 3/8 (34.9)
Liquid line OD <sup>3</sup>	in (mm)	3/8 (9.5)	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)
<b>COMPRESSOR</b>									
Compressor Type		Hermetic Scroll							
No. Used		1	1	1	1	2	2	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	380/3/50
RLA/LRA		8.8/77.0	13.6 / 98	20.7 / 130	22.9 / 145	13.6 / 98	14.3 / 130	20.7 / 130	22.9 / 145
<b>COIL</b>									
Face Area	sq ft (m <sup>2</sup> )	11.67 (1.08)	15.1 (1.40)	20.0 (1.86)	25.0 (2.32)	30.2 (2.81)	40.0 (3.72)	40.0 (3.72)	42.5 (3.95)
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)	3/8 (9.53)	3/8 (9.53)
Rows		2	2	2	2	2	2	2	2
Fins per inch		21	16	16	16	16	16	16	16
<b>FAN</b>									
Fan Type		Propeller	Propeller	Propeller	Propeller	Propeller	Propeller	Propeller	Propeller
No. used		2	1	1	1	2	2	2	2
Diameter	in (mm)	18 (457.2)	28 (711)	28 (711)	28 (711)	28 (711)	28 (711)	28 (711)	28 (711)
Drive Type		Direct	Direct	Direct	Direct	Direct	Direct	Direct	Direct
Nominal Airflow	cfm (cmh)	2660 (4520)	4885 (8300)	5768 (9800)	6828 (11600)	9770 (16600)	11536 (19600)	11536 (19600)	13537 (23000)
<b>MOTOR</b>									
No. of Motor		2	1	1	1	2	2	2	2
Motor Output	Watt	110	290	420	300	290	420	420	300
No. of Speed		1	1	1	1	1	1	1	1
Motor Speed	rpm	930	750	830	875	750	830	830	875
V/ph/Hz		220/1/50	380/3/50	380/3/50	380/3/50	380/3/50	380/3/50	380/3/50	380/3/50
RLA/LRA		0.97/1.76	1.06 / 2.27	1.41 / 3.53	1.2 / 2.8	1.06 / 2.27	1.41 / 3.53	1.41 / 3.53	1.2 / 2.8
<b>DIMENSION (HxWxD)</b>									
Uncrated (Net)	mm	1254 x 988 x 350	1050x950x1060	1050x950x1060	1050x1050x1260	1050x2200x1050	1050x2200x1050	1050x2200x1050	1050x2200x1050
<b>WEIGHT</b>									
Uncrated (Net)	kg	105	164	189	240	382	420	432	462

<sup>1</sup> MCA - Minimum Circuit Ampacity.

<sup>2</sup> Refrigerant is R22 holding charged.

<sup>3</sup> Piping connections of TTK060KD are 7/8 inch suction line and 1/2 inch liquid line for Thailand.



TTK060QD



TTA075-120RD



Micro processor controller



TTA075-120RD



TTA150-240RD



TTH060-100BD



TWE120-240CD



Digital Thermostat

# Feature and Benefits

## TTA Condensing Units

### Features

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

### Optional

- Stainless casing / Copper fin / Blue fin / Aeris coating
- Manifolding single circuit (for TTA150-240RD).
- Micro processor controller
- Horizontal air discharge (for TTA075-120RD)

### 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.
- More efficiency at part load.
- Troubleshooting status display helps reduce service time.
- Extend compressor life time by balancing compressors loading.
- Flexible application when vertical space limited.

## 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.
- Single stage and two stages thermostat
- Stainless casing / Copper fin / Blue fin / Aeris coating

### 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.
- 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.
- Precise temperature control
- Troubleshooting status display helps reduce service time.
- Designed to provide corrosion protection on sea coast application



### เทรน(ประเทศไทย)

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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.