



Odyssey™

Split System 5-20 Tons

Light Commercial
TTA / TTH / TWE
Series R407C, 50 Hz





ODYSSEY - with environmental friendly R407C refrigerant

Split System Cooling Only Units

Cool You, Cool the Earth

A new design of industrial air conditioner with non-ozone depletion refrigerant R407C to provide steady comfort with reliability and flexibility for all applications in split air conditioning system together with the effort to cool down the earth and protect our environment.



Cool The Earth

Quality and Reliability

- Scroll compressors are available from 6 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 (TTA150-240)

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

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			
TTA075ED	TTH075ED	2,000	72	45
		2,500	75	49
		3,000	78	52
TTA100ED	TTH100ED	2,700	96	62
		3,400	100	68
		4,100	103	72
TTA120ED	TWE120ED	3,200	115	75
		4,000	120	82
		4,800	124	88
TTA150ED	TWE160ED	4,300	145	103
		5,300	150	114
		6,300	156	120
TTA180ED	TWE180ED	4,800	172	111
		6,000	180	121
		7,200	186	131
TTA200ED	TWE210ED	5,600	193	135
		7,000	200	150
		8,400	207	160
TTA240ED	TWE240ED	6,400	227	140
		8,000	240	151
		9,600	250	161

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

Designed With Your Needs In Mind

General Data-Air Handler Units

UNIT MODELS		TTH075ED	TTH100ED	TWE120ED	TWE160ED	TWE180ED	TWE210ED	TWE240ED
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
MCA¹	A	2.5	4.6	4.6	4.6	6.4	6.4	10.0
SYSTEM DATA								
Refrigerant Type		R407C	R407C	R407C	R407C	R407C	R407C	R407C
No. Refrigerant Circuits		1	1	1	2	2	2	2
Refrigerant Connection Type		BRAZE	BRAZE	BRAZE	BRAZE	BRAZE	BRAZE	BRAZE
Suction Line OD	in (mm)	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)	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								
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)
Rows		3	3	3	3	3	3	3
Fins per inch		15	15	14	14	12	15	15
Refrigerant Flow Control		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)
Drain Connection Type		STEEL PIPE - MPT				PLASTIC - FEMALE PIPE		
FAN								
Fan Type				DOUBLE INLET CENTRIFUGAL WITH FORWARD CURVED WHEEL				
No. used		1	2	1	1	1	2	2
Drive Type				BELT - ADJUSTABLE DRIVE				
MOTOR								
No. of Motor		1	1	1	1	1	1	1
Motor hp	hp (kW)	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
Motor Speed	rpm	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
RLA / LRA		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 - 63.0
FILTER								
Type		WASHABLE ALUMINIUM AIR FILTER						
No. used		2	3	4	4	4	4	4
Size (WxLxD)	mm	440 x 600 x 25	440 x 520 x 25	355 x 635 x 25	400 x 927 x 25	400 x 927 x 25	555 x 727 x 25	555 x 727 x 25
DIMENSION (HxWxD)								
Uncrated (Net)	mm	520 x 1,312 x 841	520 x 1,680 x 841	1,523 x 1410 x 635	1,751 x 1,613 x 850	1,751 x 1,613 x 850	1,751 x 2,210 x 702	1,751 x 2,210 x 702
WEIGHT								
Uncrated (Net)	kg	92	136	154	275	285	355	365

¹MCA - Minimum Circuit Ampacity

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General Data - Condensing Units

UNIT MODELS		TTA075ED	TTA100ED	TTA120ED	TTA150ED	TTA180ED	TTA200ED	TTA240ED
POWER CONNECTION	V/ph/Hz				380-415/3/50			
MCA¹	A	18.06	27.29	29.95	32.72	35.00	49.22	54.17
SYSTEM DATA								
No. Refrigerant Circuits		1	1	1	1*	1*	1*	1*
Refrigerant Connection Type		BRAZE	BRAZE	BRAZE	BRAZE	BRAZE	BRAZE	BRAZE
Refrigerant ²		R407C	R407C	R407C	R407C	R407C	R407C	R407C
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			
No. Used		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
RLA/LRA		13.6 / 98.0	20.7 / 130.0	22.9 / 145.0	13.6 / 98.0	14.3 / 130.0	20.7 / 130.0	22.9 / 145.0
COIL								
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)
Rows		2	2	2	2	2	2	2
Fins per inch		16	16	16	16	16	16	16
FAN								
Fan Type		Propeller	Propeller	Propeller	Propeller	Propeller	Propeller	Propeller
No. used		1	1	1	2	2	2	2
Drive Type		Direct	Direct	Direct	Direct	Direct	Direct	Direct
Nominal Airflow	cfm (cmh)	4885 (8300)	5768 (9800)	6828 (11600)	9770 (16600)	11536 (19600)	13537 (23000)	13537 (23000)
MOTOR								
No. of Motor		1	1	1	2	2	2	2
Motor Output	Watt	290	420	300	290	420	300	300
No. of Speed		1	1	1	1	1	1	1
Motor Speed	rpm	750	830	875	750	830	875	875
V/ph/Hz		380/3/50	380/3/50	380/3/50	380/3/50	380/3/50	380/3/50	380/3/50
RLA/LRA		1.06 / 2.27	1.41 / 3.53	1.32 / 2.80	1.06 / 2.27	1.41 / 3.53	1.32 / 2.80	1.32 / 2.80
DIMENSION (HxWxD)								
Uncrated (Net)	mm	1,050 x 950 x 1,060	1,050 x 950 x 1,060	1,050 x 950 x 1,060	1,050 x 2,200 x 1,050	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								
Uncrated (Net)	kg	164	180	192	382	415	428	462

¹ MCA - Minimum Circuit Ampacity.

² There is holding charge of refrigerant and N₂ from factory. However, when install the unit, system must be vacuumed and recharged refrigerant in the field.

* For TTA150-240, Dual refrigerant circuits are standard for Export.

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Features and Benefits



TTA075-120ED



TTA075-120ED (Option)



TTA150-240ED



Mirco processor controller
(Option)



TTH075-100ED



TWE120-240ED

TTA Condensing Units

Standard Feature

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

Optional

- Stainless casing / Copper fin / Blue fin / Aeris coating
- Dual circuits (Thailand) or manifolding single circuit (Export) for TTA150-240ED
- Horizontal air discharge (for TTA075-120)
- Mirco 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.
- 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 (TTH075-100).
- Quiet operation.
- Convertible for horizontal or vertical configuration (TWE120-240).
- Thermal expansion valve.

Optional

- Discharge Plenum.
- Return air grille (for TWE model only).
- High static motor.
- 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.
- Designed to provide corrosion protection on sea coast application.



Trane optimizes the performance of home and buildings around the world. A business of Ingersoll Rand, the leader in creating and sustaining safe, comfortable, and energy efficient environments, Trane offers a broad portfolio of advance controls and HVAC systems, comprehensive building services, and parts. For more information, visit www.tranethailand.com

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