

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 (TTA180-240)

- 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
- 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	
		2,000	72	45	
TTA075ED	TTH075ED	2,500	75	49	
		3,000	78	52	
		2,700	96	62	
TTA100ED	TTH100ED	3,400	100	68	
		4,100	103	72	
		3,200	115	75	
TTA120ED	TTH120ED	4,000	120	82	
		4,800	124	88	
		4,300	145	103	
TTA150ED	TTH160ED	5,300	150	114	
		6,300	156	120	
		4,800	171	110	
TTA180ED	TTH180ED	6,000	180	120	
		7,200	185	130	
		5,600	193	135	
TTA200ED	TWE210ED	7,000	200	150	
		8,400	207	160	
		6,400	227	140	
TTA240ED	TWE240ED	8,000 9,600	240 250	151 161	

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	TTH120ED	TTH160ED	TTH180ED	TTH210ED	TTH240ED
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
MCA ¹	Α	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	1	2	2	2
Refrigerant Connection Type		BRAZE	BRAZE	BRAZE	BRAZE	BRAZE	BRAZE	BRAZE
Suction Line OD	in (mm)	1 1/8 (28.58)	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)	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
Fins per inch		15	15	15	14	14	14	14
Refrigerant Flow Control		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)
Drain Connection Type		STEEL PIPE - MPT						
FAN								
Fan Type			DOU	BLE INLET CENTR	IFUGAL WITH FOR	WARD CURVED W	HEEL	
Qty		1	2	2	2	2	2	2
Drive Type				BEI	T-ADJUSTABLE DF	RIVE		
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
RLA/LRA	Α	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)								
Uncrated (Net)	mm	520x1,406x916	520x1,774x916	620x1,774 x916	798x2,059x1,260	798x2,059x1,260	850x2,440x1,515	850x2,440x1,515
WEIGHT								
Uncrated (Net)	kg	92	136	141	180	189	214	225

¹MCA - Minimum Circuit Ampacity

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

General Data-Condensing Units

UNIT MODELS		TTA075ED	TTA100ED	TTA120ED	TTA150ED	TTA180ED	TTA200ED	TTA240ED
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
MCA ¹	Α	17.94	25.20	29.83	31.45	37.73	48.98	53.93
SYSTEM DATA								
Refrigerant Type ²		R407C	R407C	R407C	R407C	R407C	R407C	R407C
Refrigerant Connection Type		BRAZE	BRAZE	BRAZE	BRAZE	BRAZE	BRAZE	BRAZE
No of Refrigerant Circuit		1	1	1	1	1*	1*	1*
Suction Line OD	in (mm)	1 1/8 (28.58)	1 3/8 (34.93)	1 3/8 (34.93)	1 5/8 (41.28)	1 5/8 (41.28)	1 5/8 (41.28)	1 5/8 (41.28)
Liquid Line OD	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	2	2	2
RLA/LRA	Α	13.5 / 84.0	19.2 / 140.0	22.9 / 145	24.2 / 175.0	15.7 / 130.0	20.7 / 130.0	22.9 / 145
COIL								
Fin Type				l	Jncoated Corrugate	е		
Fins per inch		16	16	16	16	16	16	16
FAN								
Fan Type		Propeller	Propeller	Propeller	Propeller	Propeller	Propeller	Propeller
Qty		1	1	1	1	2	2	2
Drive Type		Direct	Direct	Direct	Direct	Direct	Direct	Direct
Nominal Airflow ²	cfm (cmh)	4885 (8300)	5768 (9800)	6828 (11600)	8212 (13950)	11536 (19600)	13537 (23000)	13537 (23000)
MOTOR								
No. of Motor		1	1	1	1	2	2	2
Motor Output	Watt	290	300	300	300	300	300	300
No. of Speed		1	1	1	1	1	1	1
Motor Speed	rpm	750	875	875	875	875	875	875
RLA/LRA	Α	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)								
Uncrated (Net)	mm	1,050 x 950 x 1,060	1,050 x 950 x 1,060	1,050 x 950 x 1,060	1,250 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
WEIGHT								
Uncrated (Net)	kg	164	180	192	245	415	428	462

¹ MCA - Minimum Circuit Ampacit

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

^{*} For TTA180-240, Dual refrigerant circuits are standard for Export.





TTA075-120ED (Option)









TTH Model



TWF Model













AHU Starter Panel (Option)



Features and Benefits

TTA Condensing Units

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

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

- · 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
- · 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
- · 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

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

- · TWE model as vertical configuration
- · Discharge Plenum.

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

Trane Multi-Stage Thermostat controlled

by micro processor is available for 1, 2

and 4 stage monitor, 7-segment display,

with the external sensor & auto-restart

Aeriscoat R removes and protects all microorganisms, biofilm & corrosion in

function with ON/OFF switch.

hotels, etc.

15°C-30°C temperature setting, connectable

heat exchanger & evaporator especially for

use in humid climate, seaside, factories

- Designed to fit easily into tight ceiling
- 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
- For maximum application flexibility and performance, capacity modulation provides improved comfort and backup in the event of a malfunction with one
- · Provide more application flexibility.
- · Designed for free blow application.
- · For high static pressure applications.
- Designed to provide corrosion protection on sea coast application.

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, one step certified by CSIRO & approved by reliable according to UL/IEC/NEMA USEPA. The effectiveness lasts 5 years and standard and easy to install reduces maintenance. Applicable to coil in













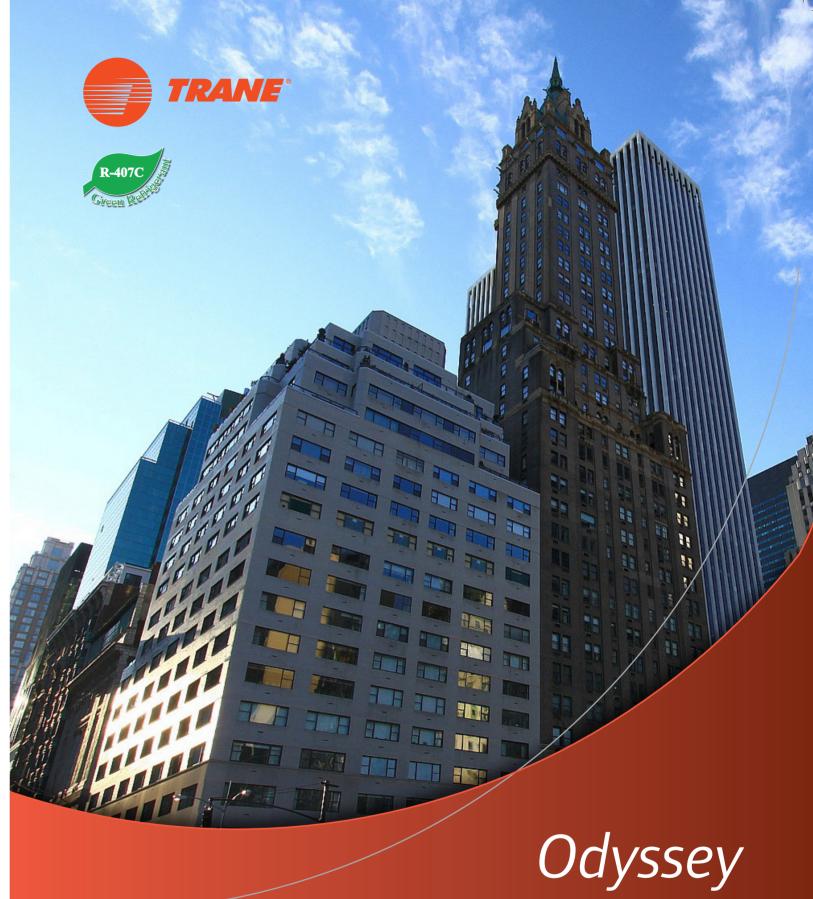
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Split System 6-20 Tons Light Commercial TTA / TTH / TWE Series R407C, 50 Hz

