



ODYSSEY

Product Catalogue

Light Commercial

Split System 5-20 Tons

TTA/TTH/TWE Models 50 Hz



Condensing Models

TTK 060 KD
TTA 075 RD
TTA 100 RD
TTA 120 RD
TTA 150 RD
TTA 200 RD
TTA 240 RD

Air Handling Models

TTH 060 BD
TTH 075 BD
TTH 100 BD
TWE 120 AD
TWE 180 BD
TWE 240 BD

April 2005

SSA5-PRC 002-EN

Features and Benefits

Feature and Benefits



TTK060KD



TTA075-120RD



TTA150-240RD



TTH060-100BD



TWE120-240BD

TTA Condensing Units

Features

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

Optional

- Copper fin / Blue fin.
- Manifolding single circuit (for TTA150-240RD).

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.

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.

Optional

- Discharge Plenum.
- Return air grille (for TWE model only).
- High static motor.

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 wide forward curved fans provide quiet operation.
- 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.

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System Performance

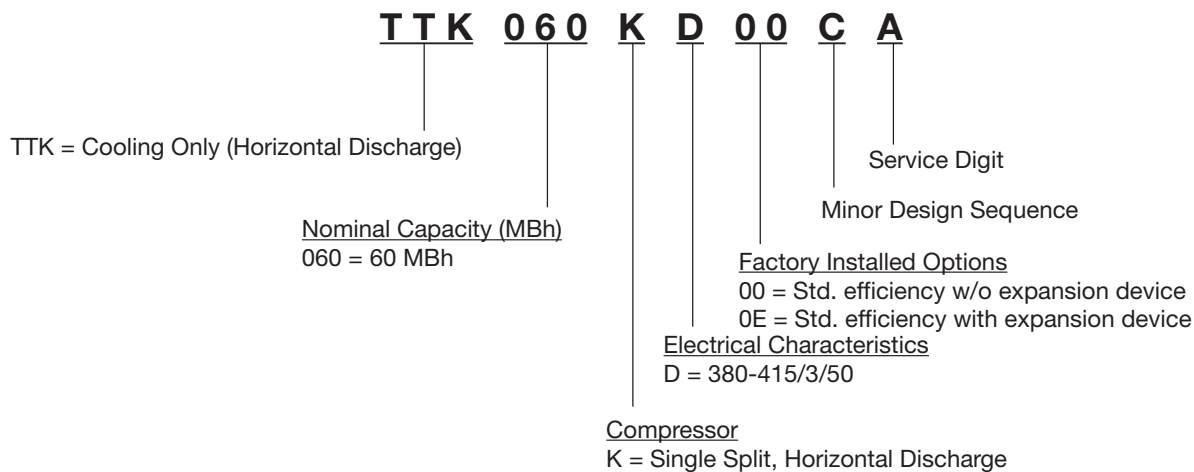
System Performance Matrix

Outdoor Unit	Indoor Unit	Evaporator CFM	Total Capacity MBH
TTK060KD	TTH060BD	2,000	60
TTA075RD	TTH075BD	2,500	75
TTA100RD	TTH100BD	3,400	100
TTA120RD	TWE120AD	4,000	120
TTA150RD	TWE180BD	5,000	160
TTA200RD	TWE240BD	6,650	200
TTA240RD	TWE240BD	8,000	240

- Notes :
1. Matched system ratings are ARI 360. Full load rating is at 95°F, entering condensing air temperature and 80/67 FDB/FWB entering air handler coil.
 2. Indoor fan power accounts for ARI 360 required external static pressure and loss associated with air filter, casing and wet evaporator coil pressure.

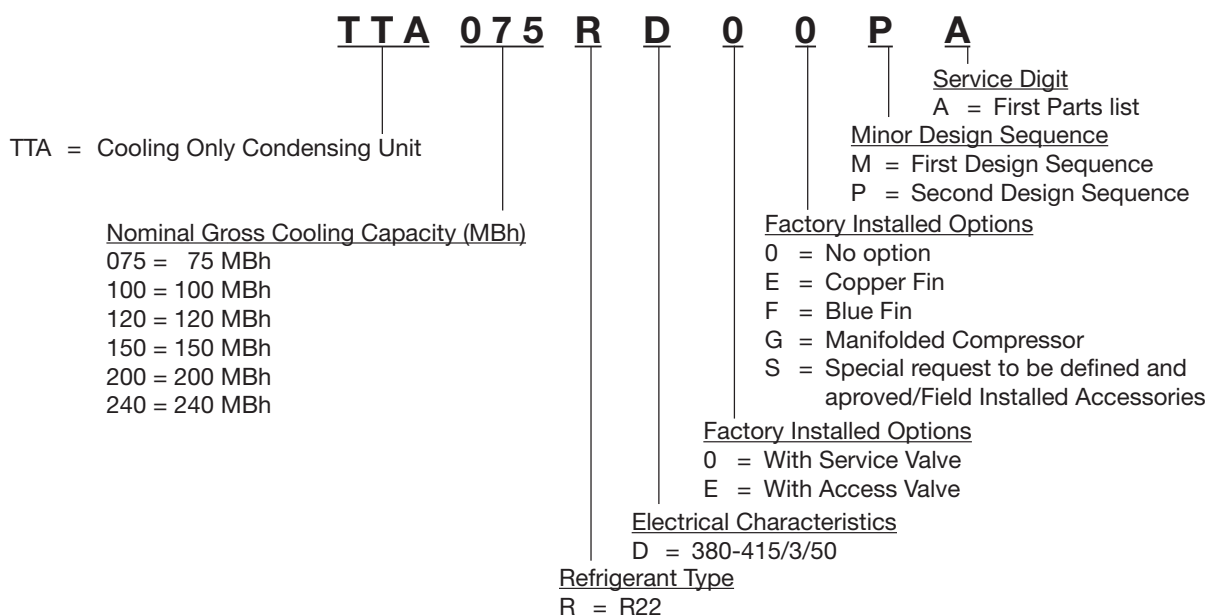
Model Nomenclature

Condensing Unit Model Nomenclature

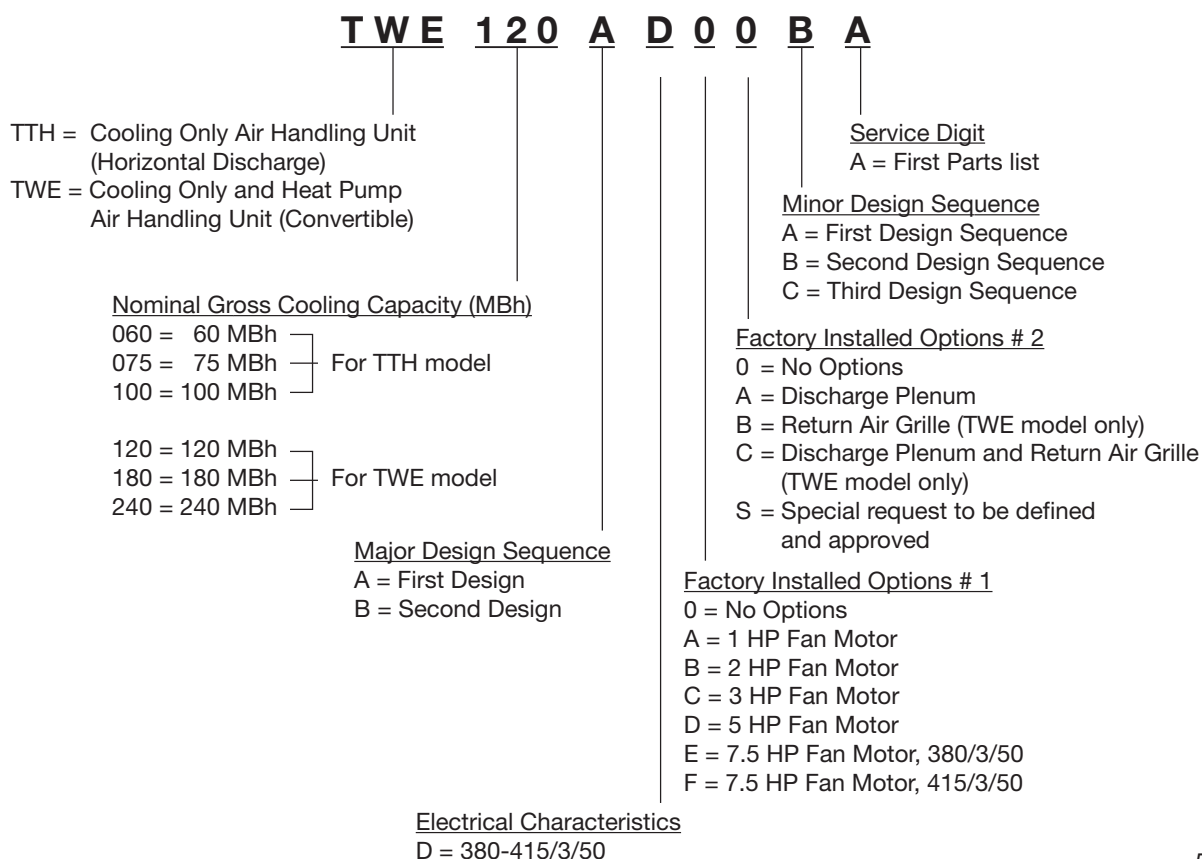


Model Nomenclature

Condensing Unit Model Nomenclature



Air Handling Unit Model Nomenclature



General Data

General Data - Condensing Units

		TTK060KD	TTA075RD00	TTA100RD00	TTA120RD00
Electrical Data					
Main Power Supply	V/ph/Hz			380-415/3/50	
Min.Brch.Cir.Ampacity	A	14.4	19.0	27.7	31.0
Compressor					
Number		1	1	1	1
Type			Hermetic Scroll		
Rated Amps (each)	A	10.0	13.6	20.7	22.9
Locked Rotor Amps (each)	A	74	98	130	145
Motor RPM	rpm	2,900	2,900	2,900	2,900
System Data					
Refrigerant Circuit		1	1	1	1
Suction Line	in	1 1/8	1 1/8	1 3/8	1 3/8
Liquid Line	in	3/8	1/2	1/2	1/2
Outdoor Coil					
Tube Size	in	3/8	3/8	3/8	3/8
Face Area	sq-ft	11.7	15.1	20.0	25.0
Rows	#	2	2	2	2
Fins Per Inch (fpi)	#	21(252)	16(192)	16(192)	16(192)
Outdoor Fan					
Type				Propeller	
Number		2	1	1	1
Diameter	ft	18	28	28	28
Drive Type				Direct	
Air Flow	cfm	2,700	4,900	5,800	6,800
Motors Number		2	1	1	1
Motor HP (each)	hp	1/8	3/4	3/4	3/4
Rated Amps (each)	A	0.97	1.95	1.82	2.37
Locked Rotor Amps (each)	A	1.76	2.33	3.07	7.46
Motor RPM	rpm	900	700	800	950
R-22 Refrigerant Charge¹					
		Holding Charge			
Dimensions		HxWxD	HxWxD	HxWxD	HxWxD
Crated	mm	1,371x1,131x450	1,190x1,194x1,042	1,190x1,194x1,042	1,190x1,397x1,143
Uncrated	mm	1,254x988x350	1,050x1,060x950	1,050x1,060x950	1,050x1,260x1,050
Weight					
Net Weight	kg	94	164	189	240

General Data

General Data - Condensing Units

TTA150RD00	TTA150RD0G ¹	TTA200RD00	TTA200RD0G ¹	TTA240RD00	TTA240RD0G ¹
37.9	40.8	55.4	46.84	62.0	48.84
2	2	2	2	2	2
13.6	16.4	20.7	19.2	22.9	19.6
98	95	130	125	145	125
2,900	2,900	2,900	2,900	2,900	2,900
2	1	2	1	2	1
1 1/8	1 5/8	1 3/8	1 5/8	1 3/8	1 5/8
1/2	5/8	1/2	5/8	1/2	5/8
3/8	3/8	3/8	3/8	3/8	3/8
30.2	30.2	40.0	40.0	42.5	42.5
2	2	2	2	2	2
16(192)	16(192)	16(192)	16(192)	16(192)	16(192)
2	2	2	2	2	2
28	28	28	28	28	28
9,800	9,800	11,600	11,600	13,600	13,600
2	2	2	2	2	2
3/4	3/4	3/4	3/4	3/4	3/4
1.95	1.95	1.82	1.82	2.37	2.37
2.33	2.33	3.07	3.07	7.46	7.46
700	700	800	800	950	950
Holding Charge					
HxWxD	HxWxD	HxWxD	HxWxD	HxWxD	HxWxD
1,190x2,312x1,118	1,190x2,312x1,118	1,190x2,312x1,118	1,190x2,312x1,118	1,190x2,312x1,118	1,190x2,312x1,118
1,050x2,200x1,050	1,050x2,200x1,050	1,050x2,200x1,050	1,050x2,200x1,050	1,050x2,200x1,050	1,050x2,200x1,050
382	369	432	409	462	425

Note: 1. TTA 150,200 and 240 RD0G are manifolded compressor. (Single circuit option)

General Data

General Data - Air Handler Units

INDOOR UNIT MODEL		TTH060 BD	TTH075 BD	TTH100 BD
POWER CONS-V/Ph/Hz		380-415/3/50	380-415/3/50	380-415/3/50
INDOOR COIL-TYPE		SLIT FIN	SLIT FIN	SLIT FIN
Row/FPI		3/15	3/15	3/15
Face Area	sq.ft	4.22	5.06	6.67
Tube Size	in	3/8	3/8	3/8
Refrigerant Control		CAP.TUBE	EXPANSION VALVE	EXPANSION VALVE
Drain Conn. Size	in	STEEL PIPE 1" MPT.	STEEL PIPE 1" MPT.	STEEL PIPE 1" MPT.
No. of Refrigerant Circuit		1	1	1
INDOOR FAN-TYPE		Centrifugal Type, Belt-Adjustable Drive		
Dia x Width	in	10x10	10x10	10x8
No. Used		1	1	2
Nominal	cfm	2,000	2,500	3,400
No. Motors	hp	1-3/4	1-1	1-2
Motors Speed	rpm	1,400	1,450	1,450
Volts/Ph/Hz.		380-415/3/50	380-415/3/50	380-415/3/50
F.L.Amps-L.R.	A	1.4-5.2	1.8-10.0	3.3-19.0
FILTER-TYPE		Aluminium/Washable Filter		
(No.)-Size x Thk.	mm	(2)-520x440x25	(2)-600x440x25	(3)-520x440x25
Ref. Line Connection		Braze	Braze	Braze
Suction Line Size (each)	in	1 1/8	1 1/8	1 3/8
Liquid Line Size (each)	in	3/8	1/2	1/2
DIMENSIONS HxWxD				
Crated	mm	673x1,410x970	673x1,410x970	673x1,778x970
Uncrated	mm	520x1,312x841	520x1,312x841	521x1,680x841
WEIGHT				
Net Weight	kg	86.7	91.3	135.4

General Data

General Data - Air Handler Units

INDOOR UNIT MODEL		TWE 120 AD	TWE 180 BD	TWE 240 BD
POWER CONS-V/Ph/Hz		380-415/3/50	380-415/3/50	380-415/3/50
INDOOR COIL-TYPE		PLATE FIN	PLATE FIN	PLATE FIN
Row/FPI		3/12	3/12	3/12
Face Area	sq.ft	11.2	16.3	21.6
Tube Size	in	3/8	3/8	3/8
Refrigerant Control		EXPANSION VALVE	EXPANSION VALVE	EXPANSION VALVE
Drain Conn. Size	in	1" PLASTIC FEMALE PIPE	1" PLASTIC FEMALE PIPE	1" PLASTIC FEMALE PIPE
No. of Refrigerant Circuit		1	2	2
INDOOR FAN-TYPE		Centrifugal Type, Belt-Adjustable Drive		
Dia x Width	in	15x15	15x15	15x15
No. Used		1	2	2
Nominal CFM		4,000	6,000	8,000
No. Motors-HP		1-2	1-3	1-5
Motors Speed RPM.		1,450	1,450	1,450
Volts/Ph/Hz.		380-415/3/50	380-415/3/50	380-415/3/50
F.L.Amps-L.R.Amps.		3.3-19.0	4.8-28.0	7.5-50.0
FILTER-TYPE		Aluminium/Washable Filter		
(No.)-Size x Thk.	mm	(4)-406x635x25	(4)-727x528x25	(4)-815x572x25
Ref. Line Connection		Braze	Braze	Braze
Suction Line Size (each)	in	1 3/8	1 3/8	1 3/8
Liquid Line Size (each)	in	1/2	1/2	1/2
DIMENSIONS HxWxD				
Crated	mm	1,651x1,702x724	1,867x2,108x794	1,943x2,413x858
Uncrated	mm	1,523x1,613x635	1,751x2,019x702	1,824x2,305x773
WEIGHT				
Net Weight	kg	190	313	372

Application Considerations

Clearance Requirements

The recommended clearances identified with unit dimensions should be maintained to assure adequate serviceability, maximum capacity and peak operating efficiency. Actual clearances which appear inadequate should be reviewed with the local Trane Representative.

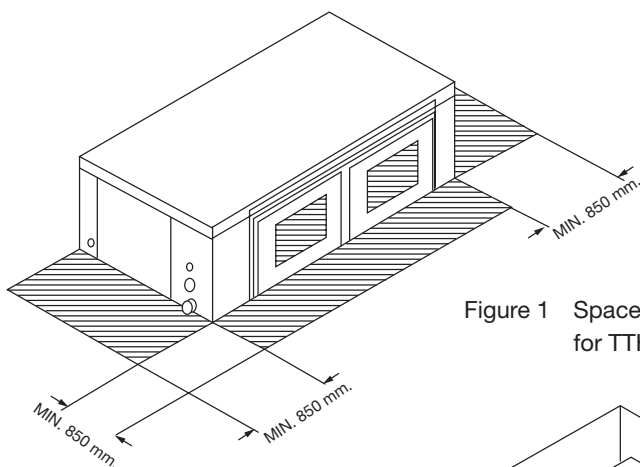


Figure 1 Space requirement for TTH model

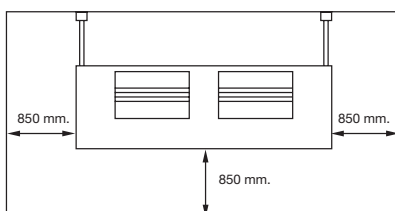


Figure 2 Space requirement for TWE model - Horizontal Type

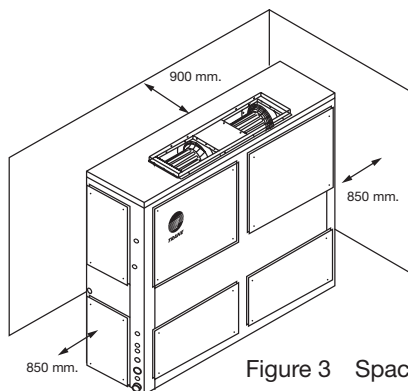


Figure 3 Space requirement for TWE model - Vertical Type

Recommended Interconnecting Lines - Condensing Units

Model	Length of Interconnecting Line (feet)							
	0-20		21-40		41-60		61-80	
	Liq.	Suct.	Liq.	Suct.	Liq.	Suct.	Liq.	Suct.
TTA075RD00	1/2	1 1/8	1/2	1 1/8	1/2	1 1/8	1/2	1 1/8
TTA100RD00	1/2	1 1/8	1/2	1 1/8	1/2	1 1/8	1/2	1 3/8
TTA120RD00	1/2	1 1/8	1/2	1 1/8	1/2	1 1/8	1/2	1 3/8
TTA150RD00 ¹	1/2	1 1/8	1/2	1 1/8	1/2	1 1/8	1/2	1 1/8
TTA200RD00 ¹	1/2	1 1/8	1/2	1 1/8	1/2	1 1/8	1/2	1 3/8
TTA240RD00 ¹	1/2	1 1/8	1/2	1 1/8	1/2	1 1/8	1/2	1 3/8
TTA150RD0G	5/8	1 5/8	5/8	1 5/8	5/8	1 5/8	5/8	1 5/8
TTA200RD0G	5/8	1 5/8	5/8	1 5/8	5/8	1 5/8	5/8	1 5/8
TTA240RD0G	5/8	1 5/8	5/8	1 5/8	5/8	1 5/8	3/4	1 5/8

Notes: 1. TTA150-240 RD00 are required for dual circuits.
2. For line lengths over 80 linear feet and 15 feet liquid line riser, consult your local Trane representative.

System Performance Data

Table 1 Gross Cooling Capacities (MBH) - TTK060KD Condensing Unit with TTH060BD Air Handler Unit

		Ambient Temperature (F)																							
CFM Airflow	Enter Dry Bulb (F)	85						95						105						115					
		Entering Wet Bulb (F)																							
		61	67	73	61	67	73	61	67	73	61	67	73	61	67	73	61	67	73	61	67	73	61	67	73
		MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC
1600	75	52.4	37.8	59.1	31.8	66.3	24.3	50.3	36.6	56.9	30.7	64.0	23.5	48.0	35.4	54.4	29.5	61.4	22.6	45.6	34.1	51.8	28.2	58.7	21.7
	80	52.4	43.0	59.2	37.1	66.4	30.8	50.3	41.9	57.0	36.0	64.0	29.7	48.0	40.6	54.5	34.8	61.5	28.5	45.6	39.4	51.9	33.5	58.7	27.3
	85	52.4	48.2	59.2	42.3	66.5	36.1	50.3	47.1	57.0	41.2	64.1	35.0	48.0	45.9	54.5	40.0	61.5	33.8	45.7	44.7	51.9	38.8	58.8	32.6
	90	53.3	53.3	59.3	47.6	66.5	41.4	51.6	51.6	57.0	46.5	64.2	40.3	49.9	49.9	54.5	45.2	61.6	39.1	48.0	48.0	51.9	44.0	58.8	37.9
1800	75	54.1	39.3	60.9	33.0	68.2	25.1	51.9	38.4	58.6	31.8	65.8	24.3	49.5	37.2	56.1	30.6	63.1	23.4	46.9	35.9	53.3	29.3	60.3	22.4
	80	54.1	45.3	61.0	38.7	68.3	31.8	51.9	44.1	58.7	37.6	65.8	30.7	49.5	42.9	56.1	36.4	63.2	29.5	46.9	41.6	53.4	35.1	60.3	28.3
	85	54.2	51.0	61.0	44.5	68.4	37.6	51.9	49.9	58.7	43.3	65.9	36.5	49.7	48.7	56.1	42.1	63.2	35.3	47.4	47.4	53.4	40.8	60.4	34.1
	90	55.8	55.8	61.1	50.2	68.4	43.4	54.0	54.0	58.7	49.1	66.0	42.2	52.1	52.1	56.1	47.8	63.3	41.1	50.2	50.2	53.4	46.6	60.4	39.9
2000	75	55.5	41.3	62.4	34.0	69.8	25.8	53.2	40.1	60.0	32.9	67.3	25.0	50.7	38.8	57.4	31.6	64.5	24.0	48.1	37.5	54.6	30.3	61.6	22.9
	80	55.6	47.5	62.5	40.3	69.9	32.7	53.2	46.3	60.1	39.1	67.3	31.6	50.7	45.0	57.5	37.9	64.6	30.4	48.1	43.7	54.6	36.6	61.6	29.2
	85	55.7	53.7	62.6	46.5	69.9	38.9	53.5	52.6	60.1	45.3	67.4	37.8	51.2	51.2	57.5	44.1	64.6	36.7	49.2	49.2	54.6	42.8	61.7	35.4
	90	58.0	58.0	62.7	52.6	70.1	45.2	56.1	56.1	60.2	51.5	67.5	44.1	54.2	54.2	57.5	50.3	64.7	42.9	52.1	52.1	54.7	49.0	61.7	41.7
2200	75	56.8	42.8	63.7	35.0	71.1	26.4	54.4	41.6	61.3	33.8	68.5	25.6	51.8	40.3	58.6	32.6	65.7	24.5	49.1	39.0	55.7	31.3	62.7	23.2
	80	56.8	49.5	63.8	41.7	71.2	33.5	54.4	48.3	61.4	40.5	68.6	32.4	51.8	47.0	58.6	39.3	65.8	31.2	49.1	45.6	55.7	38.0	62.8	30.0
	85	57.1	56.2	63.9	48.4	71.3	40.2	54.9	54.9	61.4	47.2	68.7	39.1	52.9	52.9	58.7	45.9	65.8	37.9	50.7	50.7	55.7	44.6	62.8	36.7
	90	59.9	59.9	64.0	54.9	71.5	47.0	58.0	58.0	61.4	53.8	68.8	45.8	56.0	56.0	58.7	52.6	65.9	44.6	53.8	53.8	55.7	51.3	62.8	43.4
2400	75	57.8	44.3	64.8	35.9	72.2	27.0	55.4	43.1	62.3	34.7	69.6	26.0	52.7	41.7	59.6	33.5	66.8	24.8	49.9	40.4	56.6	32.2	63.7	23.5
	80	57.9	51.4	64.9	43.0	72.3	34.3	55.5	50.1	62.4	41.9	69.7	33.2	52.7	48.8	59.6	40.6	66.8	32.0	50.0	47.5	56.6	39.3	63.7	30.7
	85	58.4	58.4	65.0	50.1	72.5	41.5	56.5	56.5	62.5	48.9	69.8	40.3	54.4	54.4	59.7	47.7	66.9	39.1	52.2	52.2	56.7	46.4	63.8	37.9
	90	61.7	61.7	65.2	57.1	72.7	48.6	59.7	59.7	62.5	56.0	69.9	47.5	57.6	57.6	59.7	54.8	66.9	46.2	55.4	55.4	56.7	53.4	63.8	45.0

1. Dry coil condition. Total Gross Cooling Capacity (MBh) shown to the left is not applicable. In this case the Sensible Heat Capacity (SHC) is the total capacity.

All capacities shown are gross and have not considered indoor fan heat.

To obtain net cooling capacities subtract indoor fan heat

MBH = Total Gross Cooling Capacity

SHC = Sensible Heat Capacity

Table 2 Gross Cooling Capacities (MBH) - TTA075RD Condensing Unit with TTH075BD Air Handler Unit

		Ambient Temperature (F)																							
		85						95						105						115					
CFM Airflow	Enter Dry Bulb (F)	Entering Wet Bulb (F)																							
		61		67		73		61		67		73		61		67		73		61		67		73	
		MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC
2000	75	67.2	47.9	75.7	40.6	85.0	31.2	63.2	45.7	71.4	40.6	80.4	29.6	58.7	43.3	66.7	36.1	75.4	27.8	53.9	40.8	61.6	33.7	69.9	25.9
	80	67.3	54.3	75.8	47.1	85.1	39.5	63.2	52.1	71.5	44.9	80.5	37.3	58.8	49.7	66.8	42.6	75.4	35.1	54.0	47.2	61.7	40.1	70.0	32.7
	85	67.3	60.6	75.9	53.5	85.2	45.9	63.2	58.4	71.5	51.3	80.6	43.8	58.8	56.0	66.8	49.0	75.5	41.5	54.3	53.7	61.7	46.5	70.0	39.2
	90	67.8	67.2	76.0	59.9	85.3	52.4	64.4	64.5	71.6	57.7	80.6	50.2	61.0	61.0	66.9	55.4	75.6	48.0	57.3	57.4	61.7	52.9	70.1	45.6
2250	75	69.3	50.1	78.0	42.1	87.5	32.2	65.1	47.8	73.5	39.8	82.7	30.5	60.5	45.4	68.7	37.5	77.4	28.7	55.5	42.8	63.3	35.0	71.7	26.8
	80	69.4	57.0	78.1	49.1	87.6	40.7	65.2	54.8	73.6	46.8	82.8	38.5	60.6	52.3	68.7	44.5	77.5	36.2	55.5	49.8	63.4	42.0	71.8	33.8
	85	69.6	63.9	78.3	56.1	87.7	50.9	65.3	61.7	73.7	53.8	82.9	45.6	60.8	59.4	68.8	51.5	77.6	43.3	56.4	56.5	63.4	49.0	71.9	40.9
	90	70.7	70.7	78.4	63.0	87.9	54.8	67.4	67.4	73.8	60.8	83.0	52.6	63.8	63.8	68.9	58.4	77.7	50.3	59.9	59.9	63.5	55.9	71.9	47.9
2500	75	71.2	52.1	80.0	43.4	89.6	34.0	66.8	49.8	75.4	41.1	84.6	31.4	62.1	47.3	70.3	38.7	79.2	29.6	56.8	44.7	64.8	36.2	73.2	27.2
	80	71.3	59.6	80.2	51.0	89.8	41.9	66.9	57.3	75.4	48.7	84.7	39.6	62.1	54.8	70.4	46.3	79.2	37.3	56.8	52.2	64.8	43.8	73.3	34.9
	85	71.5	67.0	80.3	58.5	89.9	49.5	67.1	64.8	75.6	56.2	84.8	47.2	62.7	62.6	70.4	53.8	79.3	44.9	58.5	58.5	64.9	51.3	73.4	42.5
	90	73.4	73.4	80.5	65.9	90.1	57.1	69.9	69.9	75.7	63.6	85.0	54.8	66.2	66.2	70.5	61.3	79.5	52.5	62.1	62.1	64.9	58.8	73.5	50.0
2750	75	72.8	54.0	81.7	44.6	91.4	34.0	68.3	51.6	76.9	42.3	86.2	32.2	63.4	49.1	71.7	39.8	80.6	30.1	54.9	46.5	66.0	37.3	74.5	27.7
	80	73.0	61.9	81.9	52.7	91.6	42.9	68.4	59.6	77.0	50.4	86.3	40.7	63.4	57.1	71.8	47.9	80.7	38.3	58.0	54.5	66.1	45.4	74.6	35.8
	85	73.2	69.9	82.0	60.7	91.7	51.1	68.8	67.7	77.1	58.4	86.5	48.8	64.5	64.6	71.9	55.9	80.8	46.4	60.4	60.4	66.1	53.4	74.7	43.9
	90	75.9	75.8	82.3	68.6	92.0	59.2	72.2	72.2	77.3	66.3	86.7	56.9	68.4	68.4	72.0	63.9	81.0	54.5	64.1	64.2	66.2	61.4	74.8	52.0
3000	75	74.2	55.8	83.2	45.7	93.0	34.8	69.5	53.3	78.3	43.4	87.6	32.9	64.5	50.8	72.9	40.9	81.9	30.5	59.0	48.1	67.1	38.3	75.7	28.2
	80	74.4	64.2	83.4	54.3	93.1	43.9	69.7	61.8	78.4	52.0	87.8	41.6	64.5	59.3	73.0	49.5	82.0	39.2	59.1	56.7	67.1	46.9	75.8	36.7
	85	74.8	72.7	83.6	62.8	93.4	52.5	70.3	70.4	78.6	60.4	87.9	50.2	66.4	66.3	73.1	58.0	82.1	47.8	62.0	62.0	67.2	55.4	75.8	45.3
	90	78.1	78.1	83.9	71.2	93.7	61.2	74.3	74.4	78.8	68.8	88.2	58.9	70.3	70.3	73.2	66.4	82.3	56.4	65.9	65.9	67.3	63.9	75.9	53.9

System Performance Data

Table 3 Gross Cooling Capacities (MBH) - TTA100RD Condensing Unit with TTH100BD Air Handler Unit

CFM Airflow		Ambient Temperature (F)																							
		85						95						105						115					
		Enter Dry Bulb (F)		61		67		73		61		67		73		61		67		73		61		67	
		Entering Wet Bulb (F)		61		67		73		61		67		73		61		67		73		61		67	
		MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC
2720	75	90.2	67.0	100.0	54.6	110.7	40.7	86.8	65.2	96.4	52.9	106.8	39.3	83.1	63.4	92.5	51.1	102.5	37.8	79.2	61.4	88.3	49.1	98.1	46.6
	80	90.3	76.9	100.2	64.7	110.8	52.0	86.9	75.2	96.5	63.0	106.9	50.3	83.2	73.3	92.6	61.2	102.6	48.5	79.3	71.4	88.3	59.2	98.1	46.6
	85	90.9	87.0	100.4	74.9	111.0	62.1	87.6	85.4	96.7	73.1	107.0	60.4	84.2	83.7	92.7	71.2	102.7	58.6	80.5	80.5	88.5	69.3	98.1	56.8
	90	93.7	93.7	100.6	84.7	111.3	72.3	91.0	91.0	96.8	82.9	107.2	71.5	88.0	88.0	92.8	81.1	102.9	68.8	84.8	84.8	88.6	79.2	98.3	66.9
3060	75	92.5	70.2	102.3	56.5	113.1	41.7	88.9	68.3	98.6	54.8	109.0	40.3	85.1	66.4	94.5	52.9	104.6	38.8	81.0	64.4	90.2	51.0	100.0	48.2
	80	92.6	80.9	102.6	67.6	113.2	53.6	89.0	79.2	98.8	65.9	109.1	51.9	85.2	77.3	94.6	64.0	104.7	50.1	81.2	75.4	90.3	62.0	100.0	48.2
	85	93.6	92.1	102.8	78.5	113.5	64.7	89.9	89.9	98.9	76.8	109.3	63.0	86.8	86.8	94.7	74.9	104.9	61.2	83.5	83.5	90.3	73.0	100.1	59.3
	90	97.5	97.5	103.1	89.3	113.9	75.9	94.5	94.5	99.1	87.6	109.6	74.1	91.4	91.4	95.0	85.8	105.1	72.3	88.0	88.0	90.7	83.9	100.3	70.4
3400	75	94.3	73.0	104.3	58.3	104.8	42.7	90.6	71.2	100.4	56.5	110.8	41.3	86.7	69.3	96.2	54.6	106.3	39.5	82.5	67.2	91.7	52.7	101.6	49.6
	80	94.6	84.6	104.6	70.3	115.2	55.1	90.9	82.9	100.6	68.5	111.0	53.4	87.0	81.1	96.4	66.6	106.4	51.5	83.0	79.2	91.8	64.6	101.6	49.6
	85	95.8	95.8	104.8	82.0	115.6	67.2	92.8	92.8	100.8	80.1	111.3	65.4	89.6	89.6	96.5	78.4	106.7	63.6	86.1	86.1	91.9	76.4	101.7	61.7
	90	100.7	100.7	105.2	93.6	116.0	79.2	97.6	97.6	101.2	91.9	111.6	77.5	94.3	94.3	97.0	90.2	106.9	75.6	90.8	90.8	92.6	88.3	101.9	73.7
3740	75	95.9	75.6	106.0	60.0	116.6	43.6	92.1	73.8	101.9	58.2	112.4	41.8	88.1	71.9	97.6	56.3	107.7	40.0	83.8	69.9	93.0	54.3	102.9	51.0
	80	96.3	88.2	106.3	72.9	116.9	56.5	92.6	86.5	102.2	71.0	112.5	54.8	88.6	84.7	97.8	69.1	107.9	52.9	84.6	82.8	93.2	67.1	102.9	51.0
	85	98.5	98.5	106.6	85.2	117.4	69.5	95.4	95.4	102.4	83.5	112.9	67.7	92.0	92.0	98.0	81.6	108.2	65.9	88.4	88.4	93.3	79.7	103.1	63.9
	90	103.6	103.6	107.1	97.7	117.6	82.1	100.4	100.4	103.0	96.1	113.1	80.3	96.9	96.9	98.8	94.4	108.3	78.5	93.2	93.2	94.3	92.6	103.3	76.6
4080	75	87.5	78.1	107.4	61.5	118.0	44.1	93.5	76.3	103.3	59.7	113.7	42.3	89.3	74.4	98.9	57.8	109.0	40.5	84.9	72.4	94.1	55.8	104.0	52.3
	80	97.9	91.5	107.8	75.3	118.3	57.9	94.1	89.9	103.6	73.4	113.9	56.1	90.2	88.1	99.1	71.5	109.1	54.3	85.6	85.6	94.3	69.5	104.0	52.3
	85	100.9	100.9	108.1	88.3	118.9	71.7	97.6	97.6	103.8	86.6	114.3	69.9	94.2	94.2	99.3	84.7	109.5	68.0	90.5	90.5	94.5	82.8	104.3	66.1
	90	106.1	106.1	108.8	101.7	119.2	84.9	102.8	102.8	104.7	100.1	114.6	83.2	99.2	99.2	100.4	98.4	109.7	81.3	95.4	95.4	95.5	95.5	104.5	79.4

1. Dry coil condition. Total Gross Cooling Capacity (MBh) shown to the left is not applicable. In this case the Sensible Heat Capacity (SHC) is the total capacity.

All capacities shown are gross and have not considered indoor fan heat.

To obtain net cooling capacities subtract indoor fan heat

MBH = Total Gross Cooling Capacity

SHC = Sensible Heat Capacity

Table 4 Gross Cooling Capacities (MBH) - TTA120RD Condensing Unit with TWE120AD Air Handler Unit

CFM Airflow		Ambient Temperature (F)																							
		85						95						105						115					
		Enter Dry Bulb (F)		Entering Wet Bulb (F)				61		67		73		61		67		73		61		67		73	
61	67	73	61	67	73	61	67	73	61	67	73	61	67	73	61	67	73	61	67	73	61	67	73		
MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC		
3200	75	107.4	80.1	119.5	65.4	132.6	48.7	103.7	90.1	115.4	63.4	128.2	47.2	99.2	75.9	110.9	61.3	123.4	45.5	94.5	73.5	105.9	59.0	118.1	43.6
	80	107.6	92.0	119.8	77.6	132.7	62.3	103.7	90.1	115.6	75.9	128.4	60.4	99.3	87.9	111.0	73.5	123.5	58.6	94.6	85.5	106.0	71.2	118.2	56.2
	85	108.4	104.2	120.2	89.8	133.1	74.6	104.7	102.4	115.9	87.8	128.6	72.7	100.7	100.4	111.2	85.6	123.7	70.6	96.3	96.3	106.1	83.3	118.4	68.5
	90	112.1	112.1	120.4	101.6	133.6	86.9	109.0	109.0	116.0	99.6	129.0	84.9	105.4	105.4	111.3	97.5	124.0	83.0	101.6	101.6	106.3	95.3	118.6	80.7
3600	75	110.3	84.0	122.4	67.8	135.5	50.0	106.2	95.0	118.1	65.8	131.0	48.4	101.7	79.7	113.4	63.6	126.0	46.7	96.8	77.3	108.3	61.3	120.6	44.8
	80	110.5	97.0	122.8	81.2	135.7	64.4	106.4	95.0	118.4	79.2	131.2	62.5	101.9	92.8	113.6	77.0	126.2	60.4	97.1	90.5	108.4	74.7	120.7	58.2
	85	108.9	110.5	123.0	94.3	136.3	77.9	107.6	107.6	118.6	92.3	131.6	75.9	104.0	104.0	113.8	90.2	126.5	73.8	100.1	100.1	108.5	87.9	120.9	71.6
	90	116.7	116.7	123.5	107.3	136.8	91.3	113.4	113.4	119.0	105.3	132.0	89.3	109.7	109.7	114.1	103.2	126.8	87.2	105.7	105.7	109.0	101.0	121.2	85.0
4000	75	112.6	87.5	124.9	70.0	137.8	51.1	108.8	99.6	120.4	68.0	133.3	49.5	103.7	83.2	115.6	65.8	128.2	47.7	98.6	80.8	110.3	63.5	122.6	45.5
	80	113.0	101.6	125.3	84.6	138.2	66.3	108.8	99.6	120.8	82.5	133.5	64.3	104.0	102.0	115.8	80.3	128.4	62.3	99.4	95.3	110.5	77.9	122.8	60.1
	85	114.7	114.7	125.6	98.6	138.9	80.9	111.3	111.3	121.0	96.6	134.1	79.0	107.5	107.5	116.0	94.4	128.8	76.8	103.4	103.4	110.6	92.2	123.0	74.6
	90	120.8	120.8	126.1	112.6	139.5	95.5	117.3	117.3	121.6	110.7	134.5	93.5	113.4	113.4	116.7	108.7	129.1	91.4	109.3	109.3	111.5	106.6	123.3	89.1
4400	75	114.6	90.8	126.9	72.1	139.7	52.1	111.0	104.1	122.4	70.0	135.2	50.4	105.5	86.5	117.4	67.8	130.0	48.3	100.3	84.1	111.9	65.5	124.5	46.2
	80	115.2	106.0	127.5	87.7	140.4	68.1	111.0	104.1	122.8	85.6	135.5	66.1	106.3	102.0	117.7	83.4	130.2	64.0	101.5	99.8	112.2	81.0	124.5	61.8
	85	118.1	118.1	127.8	102.6	141.1	83.8	114.5	114.5	123.1	100.6	136.1	81.8	110.6	110.6	117.9	98.5	130.7	79.7	106.4	106.4	112.4	96.2	124.9	77.5
	90	124.4	124.4	128.6	117.8	141.4	98.9	120.7	120.7	124.0	115.9	136.4	97.0	116.7	116.7	119.0	113.9	130.9	94.9	112.4	112.4	113.8	111.9	125.0	92.8
4800	75	116.4	93.9	128.7	74.0	141.3	52.9	112.9	108.3	124.1	71.9	136.7	51.0	107.0	89.6	118.9	69.7	131.5	48.9	101.7	87.2	113.4	67.4	125.9	46.8
	80	117.3	110.2	129.0	90.3	142.2	69.8	112.9	108.3	124.5	88.6	137.3	67.8	108.3	106.3	119.3	86.4	131.9	65.7	102.8	102.8	113.7	84.0	126.0	63.4
	85	121.1	121.1	129.8	106.4	143.1	86.6	117.4	117.4	124.9	104.4	138.0	84.6	113.4	113.4	119.6	102.3	132.4	82.4	109.0	109.0	113.9	100.1	126.4	80.1
	90	127.6	127.6	130.8	122.7	143.5	102.4	123.8	123.8	126.1	120.9	138.3	100.5	119.7	119.7	121.2	118.9	132.7	98.5	115.2	115.2	115.3	115.4	126.7	96.3

System Performance Data

Table 5 Gross Cooling Capacities (MBH) - TTA150RD Condensing Unit with TWE180BD Air Handler Unit

		Ambient Temperature (F)																							
CFM Airflow	Enter Dry Bulb (F)	85						95						105						115					
		Entering Wet Bulb (F)																							
		61	67	73	61	67	73	61	67	73	61	67	73	61	67	73	61	67	73	61	67	73	61	67	73
		MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC
4000	75	139.9	98.2	156.8	83.9	175.3	64.3	134.9	95.3	151.4	81.1	169.7	62.3	129.2	92.1	145.5	78.0	163.4	60.0	123.1	88.8	139.1	74.8	156.6	57.6
	80	140.0	110.5	156.9	96.3	175.5	81.3	135.0	107.6	151.5	93.4	169.8	78.6	129.3	104.4	145.6	90.4	163.5	75.6	123.1	101.1	139.2	87.2	156.7	72.5
	85	140.1	122.8	157.0	108.6	175.6	93.8	135.0	119.9	151.6	105.8	169.9	91.0	129.3	116.7	145.7	102.7	163.7	88.1	123.2	113.3	139.2	99.5	156.8	85.0
	90	140.2	135.0	157.2	121.0	175.8	106.2	135.3	132.3	151.7	118.1	170.1	103.4	130.2	129.4	145.8	115.0	163.8	100.5	125.1	125.1	139.3	111.8	156.9	97.4
4500	75	144.7	102.7	161.9	86.9	180.9	66.5	139.4	99.7	156.3	84.0	174.9	64.4	133.5	96.5	150.2	80.9	168.4	62.1	127.0	93.0	143.4	77.5	161.2	59.6
	80	144.8	116.1	162.1	100.4	181.1	84.0	139.5	113.1	156.5	97.5	175.1	81.1	133.5	109.9	150.3	94.4	168.5	78.1	127.1	106.4	143.5	91.1	161.4	74.9
	85	144.9	129.5	162.2	113.9	181.2	97.6	139.5	126.5	156.6	111.0	175.2	94.7	133.6	123.3	150.4	107.9	168.6	91.7	127.2	119.8	143.6	104.5	161.5	88.5
	90	145.6	143.0	162.4	127.4	181.4	111.1	140.7	140.5	156.7	124.4	175.4	108.3	135.9	135.9	150.4	121.3	168.7	105.2	130.9	130.9	143.6	118.0	161.6	102.1
5000	75	148.7	106.8	166.3	89.6	185.6	68.4	143.2	103.7	160.5	86.6	179.4	66.3	137.1	100.4	154.1	83.4	172.6	64.0	130.4	96.9	147.1	80.1	165.2	61.5
	80	148.9	121.3	166.5	104.2	185.8	86.3	143.3	118.3	160.6	101.2	179.5	83.4	137.2	115.0	154.2	98.0	172.7	80.4	130.5	111.4	147.2	91.1	165.3	77.1
	85	149.1	135.7	166.7	118.8	185.9	101.0	143.4	132.7	160.8	115.8	179.7	98.1	137.2	129.4	154.3	112.6	172.8	95.0	130.6	125.9	147.3	109.2	165.4	91.8
	90	150.4	150.4	166.9	133.3	186.2	115.6	146.1	146.1	161.0	130.3	179.9	112.7	141.2	141.2	154.4	173.0	173.0	109.7	136.0	136.0	147.3	123.7	165.5	106.4
5500	75	152.2	110.6	170.1	92.0	189.6	70.2	146.5	107.5	164.1	89.0	183.2	68.0	140.2	104.1	157.5	85.8	176.2	65.7	133.3	100.6	150.3	82.4	168.5	63.1
	80	152.4	126.1	170.3	107.7	189.8	88.4	146.7	123.0	164.2	104.7	183.4	85.5	140.3	119.7	157.6	101.4	176.3	82.4	133.4	116.1	150.4	98.0	168.6	79.1
	85	152.7	141.5	170.6	123.3	190.0	104.2	146.8	138.4	164.4	120.3	183.5	101.2	140.5	135.2	157.7	117.0	176.4	98.1	134.0	131.9	150.4	113.6	168.8	94.9
	90	155.6	155.6	170.8	138.7	190.3	119.9	151.0	151.0	164.6	135.7	183.8	116.9	146.0	146.0	157.8	132.5	176.6	113.8	140.6	140.6	150.5	129.1	168.9	110.5
6000	75	155.4	114.1	173.4	94.3	193.0	71.8	149.4	111.0	167.2	91.2	186.5	69.7	143.0	107.6	160.4	88.0	179.3	67.3	135.9	104.0	153.0	84.5	171.4	64.2
	80	155.6	130.6	173.6	110.9	193.2	90.4	149.6	127.5	167.4	107.9	186.7	87.5	143.0	124.1	160.5	104.6	179.4	84.3	135.9	120.5	153.1	101.2	171.5	81.0
	85	155.8	146.9	174.0	127.6	193.5	107.1	149.8	143.9	167.6	124.5	186.8	104.2	143.6	140.8	160.7	121.2	179.6	101.0	137.1	137.1	153.2	117.8	171.7	97.7
	90	160.3	160.3	174.3	143.9	193.9	123.9	155.5	155.5	167.8	140.9	187.2	120.9	150.4	150.4	160.8	137.6	179.8	117.7	144.8	144.8	153.3	134.2	171.8	114.4

1. Dry coil condition. Total Gross Cooling Capacity (MBh) shown to the left is not applicable. In this case the Sensible Heat Capacity (SHC) is the total capacity.

All capacities shown are gross and have not considered indoor fan heat.

To obtain net cooling capacities subtract indoor fan heat

MBH = Total Gross Cooling Capacity

SHC = Sensible Heat Capacity

Table 6 Gross Cooling Capacities (MBH) - TTA200RD Condensing Unit with TWE240BD Air Handler Unit

		Ambient Temperature (F)																							
CFM Airflow	Enter Dry Bulb (F)	85						95						105						115					
								Entering Wet Bulb (F)																	
		61		67		73		61		67		73		61		67		73		61		67		73	
		MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC
5320	75	177.7	125.4	198.8	106.5	222.0	81.5	171.9	122.2	185.9	103.3	215.4	79.1	165.5	118.6	185.8	99.8	208.1	76.5	158.6	114.8	178.5	96.1	200.3	73.8
	80	177.9	141.6	199.0	122.7	222.2	103.0	172.0	138.3	192.8	119.5	215.6	99.8	165.6	134.7	186.0	116.0	208.3	96.4	158.6	130.9	178.6	112.3	200.4	92.9
	85	178.0	157.6	199.2	138.9	222.5	119.3	172.1	154.3	192.9	135.6	215.8	116.1	165.7	150.7	186.1	132.1	208.5	112.7	158.6	146.9	178.7	128.5	200.6	109.1
	90	178.5	173.6	199.4	155.1	222.7	135.6	173.1	170.7	193.1	151.8	215.9	132.3	167.1	167.1	186.2	148.3	208.6	128.9	161.7	161.7	178.8	144.6	200.7	125.4
5980	75	183.5	131.1	205.1	110.3	228.7	84.1	177.4	127.7	198.6	106.9	221.7	81.7	170.7	124.1	191.5	103.4	214.1	79.1	163.4	120.2	183.8	99.6	205.9	76.3
	80	183.7	148.7	205.2	128.0	228.9	106.3	177.5	145.3	198.7	124.6	221.9	103.0	170.8	141.7	191.6	121.1	214.3	99.6	163.5	137.8	183.9	117.3	206.1	95.9
	85	183.9	166.1	205.5	145.6	229.1	124.1	177.7	162.8	198.9	142.3	222.1	120.8	170.9	159.1	191.7	138.7	214.5	117.3	163.5	155.3	184.0	134.9	206.2	113.7
	90	185.4	184.1	205.9	163.3	229.4	141.8	179.9	179.9	199.2	159.9	222.3	138.5	174.6	174.6	191.9	156.3	214.6	135.0	168.9	168.9	184.1	152.5	206.3	131.4
6650	75	188.4	136.4	210.3	113.6	234.2	86.5	182.1	132.9	203.6	110.2	227.1	84.1	175.1	129.2	196.2	106.6	216.2	81.4	167.5	125.2	188.2	102.8	210.7	78.5
	80	188.7	155.4	210.6	132.8	234.5	109.2	182.3	151.9	203.8	129.4	227.3	105.9	175.2	148.2	196.4	125.7	219.4	102.4	167.6	144.2	188.3	121.9	210.8	98.7
	85	189.0	174.0	211.0	151.9	234.8	128.4	182.5	170.6	204.0	148.5	227.5	125.1	175.3	167.0	196.5	144.8	219.6	121.6	168.1	163.3	188.4	140.9	211.0	117.9
	90	192.0	192.0	211.2	170.7	235.3	147.6	186.9	186.9	204.3	167.3	227.8	144.3	181.3	181.3	196.7	163.7	219.8	140.7	175.3	175.3	188.6	159.9	211.1	137.0
7310	75	192.7	141.2	214.8	119.6	239.0	88.7	186.1	137.7	207.9	113.3	231.6	86.2	178.9	133.9	200.3	109.6	223.5	83.5	171.1	129.9	192.1	105.7	214.7	80.6
	80	193.0	161.4	215.2	137.2	239.3	111.9	186.3	157.9	208.1	133.8	231.8	108.5	179.0	154.2	200.4	130.1	223.7	105.0	171.2	150.2	192.2	126.2	214.8	101.2
	85	193.4	181.4	215.7	157.8	239.6	132.5	183.6	178.0	208.5	154.2	232.1	129.1	179.7	174.6	200.7	150.5	223.9	125.5	172.4	171.0	192.3	146.6	215.0	121.8
	90	198.4	198.4	216.0	177.7	240.3	153.1	193.0	193.0	208.8	174.3	232.6	149.7	187.3	187.3	200.9	170.6	224.2	146.1	181.1	181.1	192.5	166.8	215.2	142.3
7980	75	196.7	141.2	218.8	119.6	243.0	90.7	189.6	142.2	211.6	116.1	235.5	88.2	182.2	138.3	203.8	112.4	227.2	85.5	174.2	134.3	195.4	108.5	218.1	81.6
	80	196.8	167.1	219.2	141.4	243.3	114.3	189.9	163.6	211.9	137.9	235.8	111.0	182.4	159.9	204.0	134.2	227.4	107.4	174.3	155.8	195.5	130.2	218.3	103.6
	85	197.3	188.4	219.8	163.3	243.9	136.3	190.7	185.2	212.3	159.7	236.1	132.9	183.7	181.8	204.3	155.9	227.6	129.2	176.5	176.5	195.7	152.0	218.4	125.4
	90	204.2	204.2	220.3	184.3	244.7	158.2	198.6	198.6	212.7	180.8	236.7	154.8	192.6	192.6	204.6	177.2	228.0	151.1	186.2	186.2	195.9	173.3	218.7	147.2

System Performance Data

Table 7 Gross Cooling Capacities (MBH) - TTA240RD Condensing Unit with TWE240BD Air Handler Unit

		Ambient Temperature (F)																							
		85						95						105						115					
CFM Airflow	Enter Dry Bulb (F)	61		67		73		61		67		73		61		67		73		61		67		73	
		MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC
		61		67		73		61		67		73		61		67		73		61		67		73	
6400	75	210.5	148.3	236.3	126.6	264.6	97.2	203.8	144.5	229.3	122.9	256.9	94.5	196.5	140.4	221.5	118.8	248.5	91.5	188.5	136.0	212.9	114.5	239.3	88.3
	80	210.7	167.2	236.5	145.6	264.8	122.8	204.2	183.1	229.5	141.8	257.1	119.1	196.7	159.2	221.6	137.8	248.7	125.3	188.6	154.8	213.1	133.5	239.5	110.9
	85	210.9	185.9	236.7	164.5	265.0	141.8	204.2	182.1	229.6	160.7	257.4	138.2	196.8	178.0	221.8	156.7	248.9	134.2	188.7	173.6	213.2	152.4	239.6	130.0
	90	211.6	204.6	237.1	183.4	265.3	160.8	205.3	201.2	229.9	179.6	257.6	157.1	198.7	197.6	222.0	175.6	249.1	153.2	191.7	191.7	213.3	171.2	239.8	148.9
7200	75	217.4	154.9	243.9	131.0	272.6	100.4	210.5	151.0	236.5	127.2	264.6	97.7	202.8	146.8	228.3	123.0	255.8	94.6	194.4	142.3	219.3	118.6	246.1	91.3
	80	217.8	175.5	244.1	151.7	272.9	126.6	210.7	171.6	236.7	147.9	264.8	122.8	203.0	167.3	228.4	143.7	256.0	118.8	194.5	162.8	219.4	139.3	246.3	114.5
	85	218.1	195.8	244.4	172.3	273.1	147.4	211.0	191.9	236.9	168.4	265.1	143.6	203.1	187.7	228.6	164.3	256.2	139.5	194.6	183.2	219.6	159.9	246.4	135.2
	90	219.7	216.6	244.8	192.9	273.4	168.1	213.4	213.3	237.2	189.0	265.3	164.3	206.9	206.9	228.9	184.8	256.3	160.2	200.3	200.3	219.8	180.4	246.6	155.9
8000	75	223.4	161.0	250.3	135.0	279.4	103.4	216.2	157.0	242.6	131.1	271.1	100.6	208.2	152.7	234.0	126.8	261.9	97.5	199.5	148.1	224.7	122.3	251.8	94.1
	80	223.8	183.2	250.5	157.3	279.7	130.1	216.7	201.0	242.8	153.3	271.3	126.2	208.4	174.9	234.2	149.1	262.1	122.1	199.6	170.2	224.8	144.6	252.0	117.7
	85	224.2	204.9	251.0	179.5	279.9	152.4	216.7	201.0	243.1	175.6	271.6	148.6	208.6	196.7	234.4	171.3	267.5	149.0	200.1	192.4	225.0	166.8	252.2	140.0
	90	226.9	226.9	251.2	201.5	280.4	174.8	221.1	221.1	243.3	197.6	271.8	170.9	214.8	214.8	234.6	193.3	267.8	172.8	207.9	207.9	225.1	188.8	252.3	162.3
8800	75	228.6	166.7	255.8	138.6	285.2	106.1	221.1	162.6	247.8	134.6	276.6	103.3	212.8	158.2	238.9	130.3	267.1	100.1	203.8	153.5	229.3	125.7	256.7	96.7
	80	229.0	190.2	256.1	162.4	285.5	133.2	221.4	186.1	248.0	158.4	276.9	129.3	213.0	181.8	239.1	154.1	267.3	125.1	203.9	177.1	229.4	149.5	256.9	120.7
	85	229.5	213.4	256.6	186.3	285.8	157.1	221.8	209.4	248.4	182.2	277.1	153.2	213.7	205.3	239.4	177.9	267.5	149.0	205.2	201.1	229.6	173.3	257.1	144.5
	90	234.5	234.5	257.0	209.5	286.4	181.0	228.5	228.5	248.7	205.6	277.5	177.1	221.9	221.9	239.7	201.3	267.8	172.8	214.7	214.7	229.9	196.7	257.3	168.3
9600	75	233.2	171.9	260.5	141.9	290.3	108.7	225.4	167.8	252.3	137.9	281.4	105.8	216.9	163.3	243.2	133.5	271.7	102.5	207.6	158.6	233.3	128.9	261.0	98.0
	80	233.6	196.7	260.9	167.2	290.6	136.1	225.8	192.7	252.6	163.2	281.7	132.1	217.1	188.3	243.4	158.8	271.9	127.9	207.8	183.5	233.4	154.2	261.2	123.4
	85	234.2	221.4	261.6	192.6	290.9	161.5	226.6	217.6	253.1	188.4	281.9	157.5	218.5	213.6	243.8	184.0	272.1	153.2	210.0	209.4	233.7	179.4	261.3	148.7
	90	241.4	241.4	262.1	217.1	291.6	186.9	235.1	235.1	253.5	213.1	282.5	182.9	228.3	228.3	244.1	208.7	272.5	178.6	220.8	220.8	234.0	204.1	261.6	174.0

1. Dry coil condition. Total Gross Cooling Capacity (MBH) shown to the left is not applicable. In this case the Sensible Heat Capacity (SHC) is the total capacity.

All capacities shown are gross and have not considered indoor fan heat.

To obtain net cooling capacities subtract indoor fan heat

MBH = Total Gross Cooling Capacity

SHC = Sensible Heat Capacity

Fan Performance Data

5 Tons

Table 8 Evaporator Fan Performance 5 Tons TTH060B - Air Handler

		External Static Pressure (Inches of Water Gauge)																										
		0.1"		0.2"		0.3"		0.4"		0.5"		0.6"		0.7"		0.8"		0.9"		1.0"		1.1"		1.2"				
CFM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
0.75 HP Standard Motor																												
1600	670	.28	724	.32	776	.36	826	.40	876	.44	924	.49	972	.53	1018	.58	-	-	-	-	-	-	-	-	-	-	-	-
1800	731	.39	780	.43	827	.48	873	.52	918	.56	962	.61	1006	.66	1049	.71	1091	.75	1132	.80	1172	.85	-	-	-	-	-	-
2000	790	.51	836	.56	879	.61	921	.64	963	.69	1003	.73	1043	.80	1083	.85	1122	.90	1161	.96	1199	1.01	1237	1.06	1275	1.11	1312	1.16
2200	865	.68	907	.73	947	.78	986	.83	1024	.88	1061	.94	1099	.99	1135	1.04	1171	1.10	1207	1.16	1243	1.20	1278	1.27	1314	1.32	1350	1.37
2400	-	-	986	.91	1005	.97	1042	1.03	1077	1.08	1112	1.14	1147	1.20	1181	1.26	1214	1.32	1248	1.38	1281	1.44	1314	1.50	1347	1.56	1380	1.62
1 HP or 2 HP Oversize Motor																												

NOTE:

Fan motor heat (MBh) = 3.15 x BHP

Trane's factory supplied motors in commercial equipment are definite purpose motors specifically designed and tested to operate reliably and continuously at all catalog conditions.

Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

Trane's factory supplied this standard product rated at 2000 CFM, and 0.3 inches of water for external static pressure.



Fan Performance Data

6 Tons

Table 9 Evaporator Fan Performance 6 Tons TTH075B - Air Handler

		External Static Pressure (Inches of Water Gauge)																								
		0.1"		0.2"		0.3"		0.4"		0.5"		0.6"		0.7"		0.8"		0.9"		1.0"		1.1"		1.2"		
CFM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1 HP Standard Motor																										
2000	741	.46	790	.52	836	.56	879	.61	921	.65	963	.69	1003	.75	1043	.80	1083	.85	1122	.90	1161	.96	1199	1.01		
2250	801	.62	847	.68	890	.73	930	.78	969	.84	1008	.88	1045	.95	1081	.99	1117	1.05	1153	1.10	1189	1.61	1224	1.20		
2500	856	.81	908	.86	948	.91	987	.94	1024	.98	1059	1.12	1094	1.18	1128	1.23	1161	1.29	1195	1.35	1227	1.42	1260	1.47		
2750	944	.98	984	1.10	1022	1.20	1058	1.27	1093	1.30	1126	1.40	1158	1.47	1190	1.53	1221	1.61	1252	1.66	1282	1.72	1312	1.80		
3000	1013	1.36	1051	1.44	1087	1.51	1121	1.59	1154	1.65	1185	1.72	1217	1.80	1246	1.87	1276	1.94	-	-	-	-	-	-		
2 HP Oversize Motor																										

NOTE:

Fan motor heat (MBh) = 3.15 x BHP

Trane's factory supplied motors in commercial equipment are definite purpose motors specifically designed and tested to operate reliably and continuously at all catalog conditions.

Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

Trane's factory supplied this standard product rated at 2500 CFM, and 0.3 inches of water for external static pressure.

Fan Performance Data

8 Tons

Table 10 Evaporator Fan Performance 8 Tons TTH100B - Air Handler

External Static Pressure (Inches of Water Gauge)																									
0.1"			0.2"		0.3"		0.4"		0.5"		0.6"		0.7"		0.8"		0.9"		1.0"		1.1"		1.2"		
CFM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	
2 HP Standard Motor																									
2700	694	.54	747	.60	797	.67	845	.73	891	.80	936	.87	980	.95	1023	1.02	1065	1.10	1107	1.17	-	-	-	-	
3000	752	.72	800	.79	846	.86	891	.93	934	1.02	972	1.09	1016	1.17	1056	1.26	1095	1.33	1133	1.42	1171	1.50	1209	1.59	
3400	844	1.00	888	1.08	929	1.16	970	1.25	1009	1.33	1048	1.42	1086	1.57	1122	1.60	1158	1.68	1193	1.78	1228	1.86	-	-	
3700	881	1.20	922	1.32	962	1.40	1000	1.50	1038	1.58	1075	1.68	1110	1.77	1145	1.87	1179	1.96	-	-	-	-	-	-	
4000	947	.56	985	1.65	1022	1.75	1058	1.85	1093	1.95	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

NOTE:

Fan motor heat (MBh) = 3.15 x BHP

Trane's factory supplied motors in commercial equipment are definite purpose motors specifically designed and tested to operate reliably and continuously at all catalog conditions.

Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

Trane's factory supplied this standard product rated at 3400 CFM, and 0.3 inches of water for external static pressure.



Fan Performance Data

10 Tons

Table 11 Evaporator Fan Performance 10 Tons TWE120A - Air Handler

External Static Pressure (Inches of Water Gauge)																							
		0.1"		0.2"		0.3"		0.4"		0.5"		0.6"		0.7"		0.8"		0.9"		1.0"		1.2"	
CFM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	
					2 HP Standard Motor																		
3200	-	-	-	-	570	.67	603	.75	636	.83	670	.91	703	1.00	736	1.08	756	1.14	784	1.20	838	1.32	
3400	-	-	560	.71	592	.79	623	.88	652	.95	685	1.04	716	1.12	743	1.18	762	1.24	790	1.30	844	1.43	
3600	557	.77	583	.84	613	.92	643	1.01	667	1.07	700	1.16	730	1.23	750	1.27	768	1.34	797	1.41	850	1.55	
3800	579	.94	605	1.01	634	1.09	663	1.18	683	1.24	710	1.29	738	1.37	762	1.42	785	1.49	813	1.56	861	1.72	
4000	602	1.11	628	1.17	656	1.26	683	1.36	698	1.40	720	1.43	747	1.50	773	1.58	801	1.64	829	1.71	872	1.89	
4200	626	1.23	651	1.31	677	1.40	703	1.48	714	1.53	741	1.59	765	1.66	790	1.72	815	1.81	841	1.90	888	2.08	
4400	649	1.36	647	1.45	689	1.53	723	1.62	729	1.65	761	1.76	784	1.81	807	1.87	830	1.98	852	2.09	904	2.27	
4700	669	1.52	792	1.62	714	1.69	735	1.77	747	1.82	782	1.92	798	1.99	815	2.06	837	2.18	862	2.29	922	2.45	
4800	689	1.69	711	1.79	729	1.85	746	1.92	764	1.98	802	2.09	812	2.17	822	2.24	844	2.39	872	2.48	939	2.64	
3HP Oversized																							

NOTE:

Fan motor heat (MBh) = 3.15 x BHP

Trane's factory supplied motors.in commercial equipment are definite purpose motors specifically designed and tested to operate reliably and continuously at all catalog conditions.

Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure, Our product's warranty will not be affected.

Trane's factory supplied this standard product rated at 4000 CFM, and 0.5 inches of water for external static pressure.

(Continued)

External Static Pressure (Inches of Water Gauge)												
	1.4"		1.6"		1.8"		2.0"		2.2"		2.4"	
CFM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2 HP Standard Motor							3 HP Oversized Motor					
3200	890	1.49	942	1.66	1001	1.84	1051	2.03	1106	2.24	1162	2.44
3400	895	1.59	948	1.80	1009	1.98	1057	2.17	1111	2.37	1165	2.57
3600	900	1.69	954	1.94	1016	2.13	1065	2.31	1115	2.51	1167	2.70
3800	911	1.87	959	2.15	1024	2.35	1070	2.54	1120	2.73	1169	2.92
4000	922	2.04	965	2.36	1031	2.57	1077	2.76	1124	2.95	-	-
4200	941	2.29	984	2.54	1039	2.73	1083	2.91	-	-	-	-
4400	960	2.53	1003	2.71	1047	2.89	-	-	-	-	-	-
4600	979	2.67	1020	2.86	-	-	-	-	-	-	-	-
4800	997	2.80	-	-	-	-	-	-	-	-	-	-

Fan Performance Data

15 Tons

Table 12 Evaporator Fan Performance 15 Tons TWE180B - Air Handler

External Static Pressure (Inches of Water Gauge)																							
0.1"			0.2"		0.3"		0.4"		0.5"		0.6"		0.7"		0.8"		0.9"		1.0"		1.2"		
CFM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	
3 HP Standard Motor																							
4500	637	1.40	662	1.44	687	1.49	701	1.53	717	1.58	732	1.63	747	1.64	754	1.65	782	1.67	817	1.76	873	1.96	
4800	642	1.42	667	1.51	692	1.54	706	1.63	722	1.64	737	1.65	752	1.66	767	1.68	795	1.73	831	1.82	887	2.02	
5100	647	1.45	672	1.52	697	1.57	713	1.66	726	1.68	740	1.70	761	1.72	783	1.77	811	1.85	843	1.96	900	2.19	
5400	652	1.47	677	1.54	702	1.60	719	1.69	730	1.72	742	1.75	469	1.78	798	1.87	827	1.98	856	2.09	914	2.37	
5700	653	1.48	679	1.56	706	1.67	725	1.75	741	1.80	758	1.84	786	1.92	815	2.02	843	2.14	872	2.27	932	2.57	
6000	655	1.49	681	1.59	709	1.74	731	1.80	752	1.87	771	1.94	803	2.05	861	2.17	860	2.29	889	2.44	950	2.78	
6300	658	1.51	687	1.63	716	1.79	741	1.89	765	1.98	792	2.09	823	2.22	853	2.35	883	2.49	913	2.64	974	2.96	
6600	663	1.54	693	1.68	723	1.84	750	1.97	778	2.09	811	2.42	843	2.39	875	2.53	906	2.69	936	2.84	997	3.15	
6900	670	1.62	700	1.77	735	1.98	767	2.15	799	2.29	832	2.44	865	2.61	900	2.79	934	2.98	967	3.16	1019	3.48	
7200	677	1.70	707	1.86	747	2.12	785	2.33	819	2.49	853	2.65	888	2.83	926	3.05	963	3.27	997	3.49	1041	3.81	
5HP Oversized																							

NOTE:

Fan motor heat (MBh) = 3.15 x BHP

Trane's factory supplied motors in commercial equipment are definite purpose motors specifically designed and tested to operate reliably and continuously at all catalog conditions.

Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure, Our product's warranty will not be affected.

Trane's factory supplied this standard product rated at 6000 CFM, and 0.5 inches of water for external static pressure.

(Continued)

External Static Pressure (Inches of Water Gauge)												
	1.4"		1.6"		1.8"		2.0"		2.2"		2.4"	
CFM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3 HP Standard Motor							5 HP Oversized Motor					
4500	929	2.19	986	2.46	1035	2.74	1084	3.01	1132	3.28	-	-
4800	943	2.29	999	2.56	1046	2.83	1095	3.11	1143	3.38	-	-
5100	957	2.48	1012	2.76	1058	3.04	1105	3.31	1152	3.57	-	-
5400	972	2.67	1024	2.96	1070	3.24	1116	3.51	-	-	-	-
6000	1008	3.11	1052	3.39	1096	3.68	1138	3.69	-	-	-	-
6300	1025	3.30	1069	3.61	1113	3.92	1152	4.21	-	-	-	-
6600	1042	3.49	1087	3.83	1130	4.16	-	-	-	-	-	-
6900	1063	3.81	1107	4.15	1146	4.49	-	-	-	-	-	-
7200	1085	4.14	1127	4.47	-	-	-	-	-	-	-	-



Fan Performance Data

20 Tons

Table 13 Evaporator Fan Performance 20 Tons TWE240B - Air Handler

External Static Pressure (Inches of Water Gauge)																							
		0.1"		0.2"		0.3"		0.4"		0.5"		0.6"		0.7"		0.8"		0.9"		1.0"		1.2"	
CFM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	
5 HP Standard Motor																							
6400	-	-	-	-	570	1.41	612	1.57	654	1.70	696	1.83	743	2.06	781	2.25	808	2.40	835	2.55	883	2.86	
6800	-	-	-	-	596	1.58	635	1.74	677	1.90	722	2.08	762	2.29	794	2.46	820	2.61	846	2.76	894	3.07	
7200	-	-	573	1.58	615	1.75	657	1.92	700	2.09	747	2.33	781	2.52	806	2.66	831	2.81	856	2.96	904	3.29	
7600	-	-	603	1.84	651	1.98	694	2.15	731	2.38	766	2.57	795	2.74	819	2.88	844	3.02	869	3.17	919	3.55	
8000	585	1.97	633	2.11	686	2.21	730	2.39	761	2.66	785	2.81	809	2.95	832	3.09	857	3.23	899	3.37	933	3.80	
8400	619	2.20	657	2.35	710	2.54	752	2.73	778	2.94	801	3.09	823	3.23	848	3.39	873	3.55	899	3.71	947	4.14	
8800	652	2.43	680	2.60	733	2.86	773	3.07	794	3.22	816	3.36	837	3.50	863	3.68	889	3.86	915	4.04	960	4.47	
9200	682	2.76	723	2.98	760	3.19	790	3.37	811	3.52	834	3.68	858	3.84	884	4.01	909	4.20	932	4.40	975	4.83	
9600	711	3.08	766	3.36	787	3.52	807	3.67	828	3.82	852	3.99	878	4.17	904	4.35	929	4.53	949	4.75	990	5.20	
																				7.5HP Oversized Motor			

NOTE:

Fan motor heat (MBh) = 3.15 x BHP

Trane's factory supplied motors in commercial equipment are definite purpose motors specifically designed and tested to operate reliably and continuously at all catalog conditions.

Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

Trane's factory supplied this standard product rated at 8000 CFM, and 0.5 inches of water for external static pressure.

(Continued)

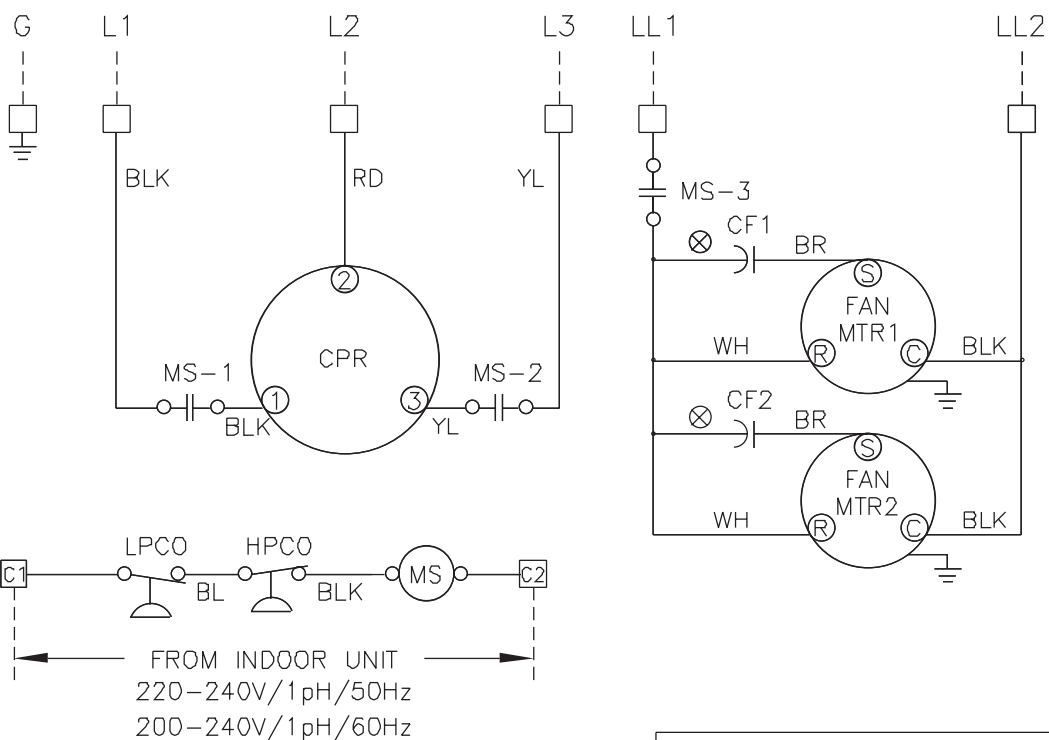
External Static Pressure (Inches of Water Gauge)																
		1.4"		1.6"		1.8"		2.0"		2.2"		2.4"		2.6"		
CFM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP		
5 HP Standard Motor							7.5 HP Oversized Motor									
6400	930	3.16	976	3.52	1021	3.89	1066	4.26	1111	4.62	1156	4.99	1201	5.36		
6800	941	3.40	986	3.78	1030	4.16	1075	4.55	1119	4.93	1164	5.31	-	-		
7200	951	3.65	995	4.04	1039	4.44	1083	4.48	1127	5.23	1171	5.63	-	-		
7600	963	3.94	1007	4.34	1050	4.75	1093	5.16	1136	5.57	1179	5.98	-	-		
8000	975	4.23	1018	4.65	1060	5.07	1103	5.49	1145	5.91	1187	6.34	-	-		
8400	989	4.92	1032	5.01	1074	5.44	1117	5.87	1159	6.31	1200	6.73	-	-		
8800	1002	4.92	1045	5.36	1087	5.81	1130	6.26	1172	6.70	-	-	-	-		
9200	1016	5.28	1058	5.73	1099	6.17	1141	6.62	1182	7.07	-	-	-	-		
9600	1030	5.65	1071	6.09	1111	6.54	1152	6.99	1192	7.43	-	-	-	-		

Condensing Unit Wiring

TTK048-060KD (EXPORT)

380-415/3/50
220-240/3/60
460/3/60

220-240/1/50
200-240/1/60



LEGEND

CPR	COMPRESSOR
CF1, 2	FAN CAPACITOR
FAN MTR1, 2	FAN MOTOR
HPCO	HIGH PRESSURE CUT-OUT
LPCO	LOW PRESSURE CUT-OUT
MS	COMPRESSOR MOTOR CONTACTOR
○	TERMINAL
⊗	JUNCTION
○	IDENTIFIED TERMINAL
□	COIL
□	TERMINAL BOARD BY OTHERS
□	TERMINAL BOARD BY FACTORY
---	FIELD WIRING
---	FACTORY WIRING
	RELAY CONTACT N.O.
	CAPACITOR
⏏	PRESSURE SENSING SWITCH

NOTES:

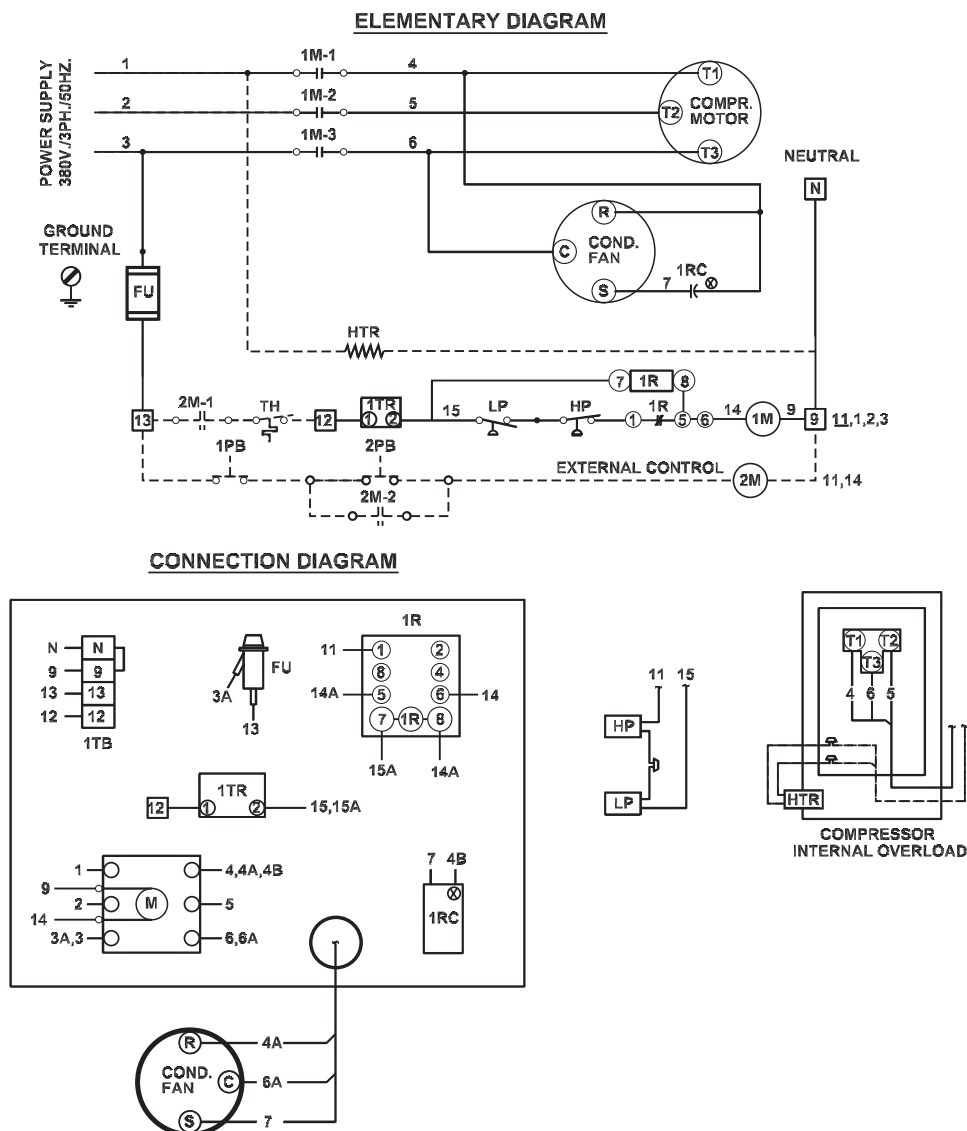
1. POWER WIRING AND GROUNDING OF EQUIPMENT MUST COMPLY WITH LOCAL CODES.
2. USE COPPER CONDUCTORS ONLY.
3. THREE PHASE CONDENSING UNITS REQUIRE TWO POWER SUPPLY SOURCES AS SHOWN.

COLOR CODE

BL	BLUE
BLK	BLACK
BR	BROWN
GR	GRAY
OR	ORANGE
RD	RED
WH	WHITE
YL	YELLOW

Condensing Unit Wiring

TTA 075, 100, 120 RD00



LEGEND

FU	FUSE 5 AMP.
HP	CONTROL, HIGH PRESS.
LP	CONTROL, LOW PRESS.
1M	CONTACTOR, COMP.
1R	RELAY, CONTROL LOCKOUT
1RC	CAPACITOR, RUN, FAN MOTORS.
HTR	HEATER, CRANKCASE.
2M	CONTACTOR, EVAP. BLOWER MOTOR
TH	THERMOSTAT
1TB	1TB-TERMINAL BLOCK CONTROL CIRCUIT
---	FACTORY WIRING & DEVICES BY MFR.
---	FIELD WIRING (OPTION)
⊗	IDENTIFIED TERMINALS ON CAPACITORS
1TR	RELAY, TIME DELAY 3 MIN.
1PB, 2PB	SWITCH PUSH BUTTON

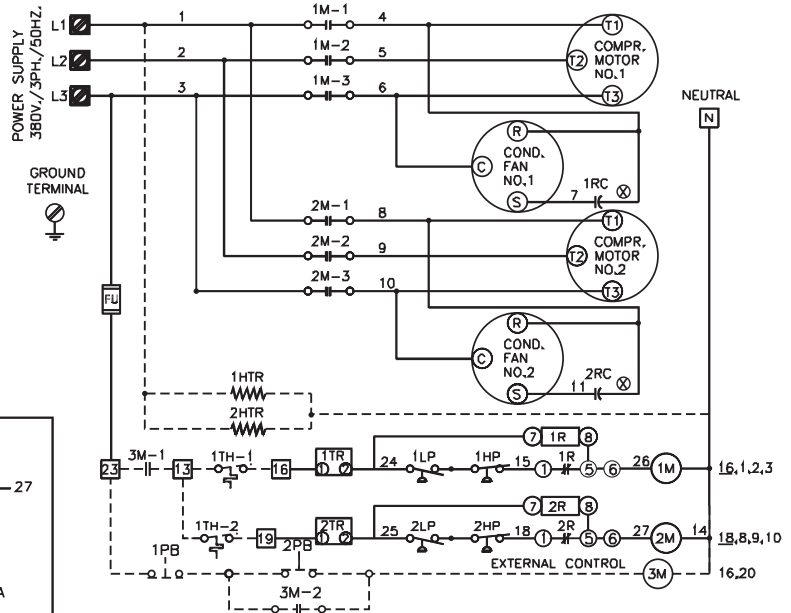
NOTES

- 1 ALL FIELD WIRING TO BE IN ACCORDANCE WITH NATIONAL ELECTRIC CODE (N.E.C.) CANADIAN ELECTRIC CODE AND/OR LOCAL STATE AND CITY CODES. PROVIDE DISCONNECTS FOR ALL POWER SUPPLIES.
- 2 DRAWING PRACTICES AND SYMBOLS ARE IN ACCORDANCE WITH AIR CONDITIONING & REFRIGERATION INSTITUTE (ARI) GRAPHIC ELECTRICAL STANDARDS.
- 3 NUMBERS ALONG LEFT SIDE OF ELEMENTARY DIAGRAM DESIGNATE LINE IDENTIFICATION. NUMBERS ALONG RIGHT SIDE ARE LOCATIONS OF RELAY CONTACTS.
- 4 COMPONENT TERMINAL MARKINGS ARE INDICATED BY ENCIRCLED NUMBERS AND/OR LETTERS.
- 5 NUMBERS ON VERTICAL & HORIZONTAL LINE ARE CIRCUIT IDENTIFICATION.
- 6 MOTORS ARE INHERENTLY PROTECTED.
- 7 THIS UNIT TO BE USED WITH EVAPORATORS OPERATING WITHIN A TEMPERATURE RANGE OF 32°F TO 53.5°F.

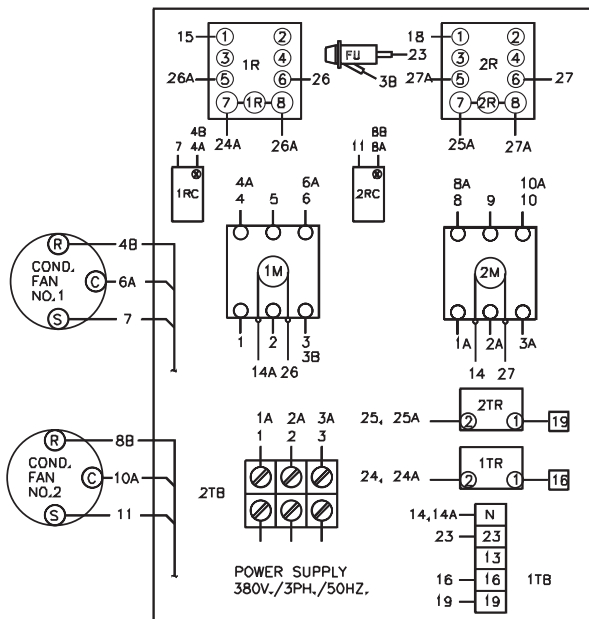
Condensing Unit Wiring

TTA 150, 200, 240 RD00 (Dual circuit)

ELEMENTARY DIAGRAM



CONNECTION DIAGRAM



DEC 18,00

LEGEND

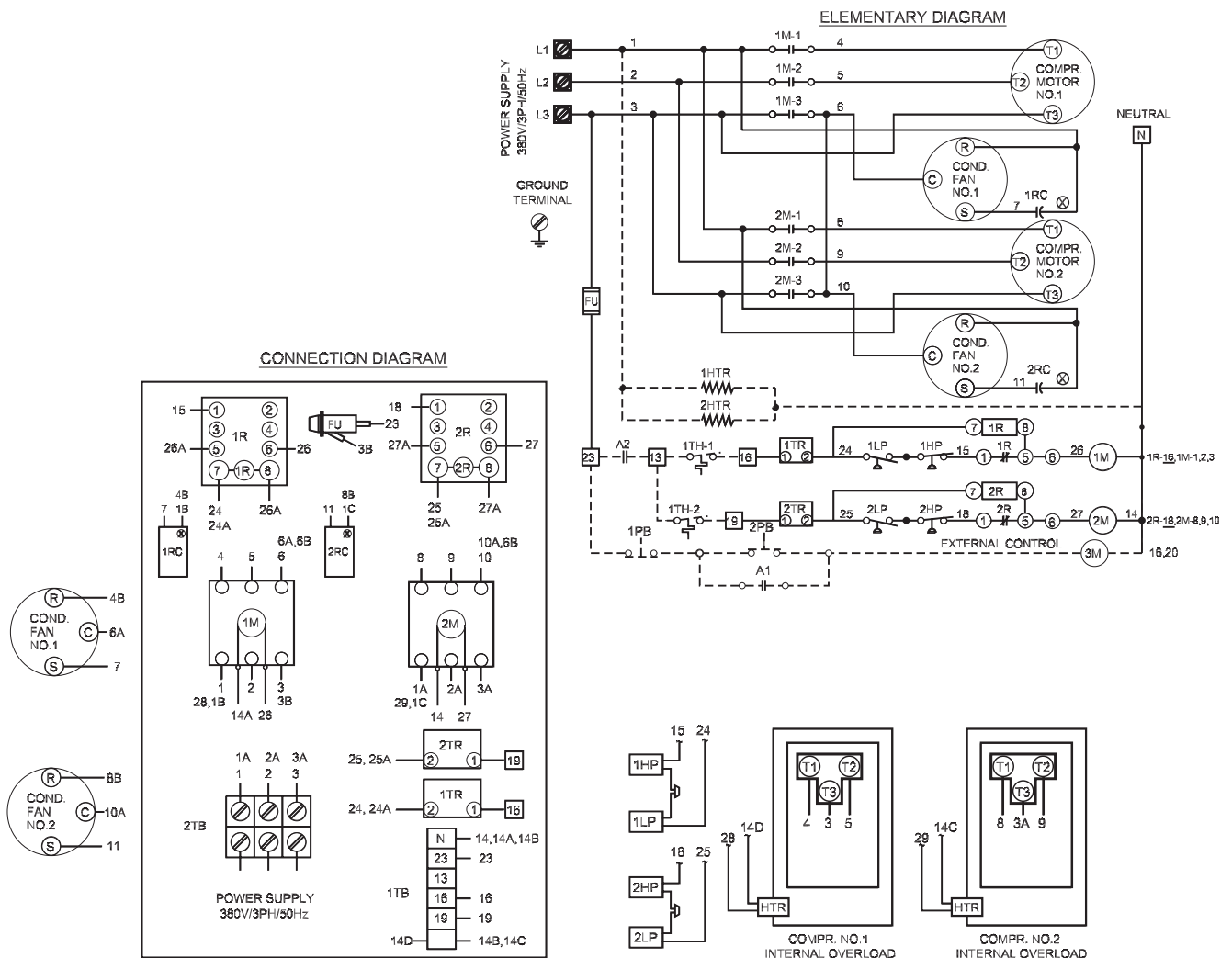
- FU FUSE 5 AMP.
- 1HP,2HP CONTROL,HIGH PRESS.
- 1LP,2LP CONTROL,LOW PRESS.
- 1M,2M CONTACTOR,COMPR.
- 1R,2R RELAY,CONTROL LOCKOUT
- 1RC,2RC CAPACITOR,RUN,FAN MOTORS.
- 1HTR,2HTR HEATER,CRANKCASE.
- 1TR RELAY,TIME DELAY 3 MIN.
- 2TR RELAY,TIME DELAY 4.5 MIN.
- 3M CONTACTOR,EVAP.BLOWER MOTOR
- 1PB,2PB SWITCH,PUSH BOTTON
- 1TH THERMOSTAT 2 STAGES.
- 1TB-TERMINAL BLOCK CONTROL CIRCUIT
- 2TB-TERMINAL BLOCK HIGH VOLTAGE
- FACTORY WIRING & DEVICES BY MFR.
- FIELD WIRING (OPTION)
- ⊗ IDENTIFIED TERMINALS ON CAPACITORS

NOTES

- 1 ALL FIELD WIRING TO BE IN ACCORDANCE WITH NATIONAL ELECTRIC CODE (N.E.C.) CANADIAN ELECTRIC CODE AND/OR LOCAL STATE AND CITY CODES. PROVIDE DISCONNECTS FOR ALL POWER SUPPLIES.
- 2 DRAWING PRACTICES AND SYMBOLS ARE IN ACCORDANCE WITH AIR CONDITIONING & REFRIGERATION INSTITUTE (ARI) GRAPHIC ELECTRICAL STANDARDS.
- 3 NUMBERS ALONG LEFT SIDE OF ELEMENTARY DIAGRAM DESIGNATE LINE IDENTIFICATION. NUMBERS ALONG RIGHT SIDE ARE LOCATIONS OF RELAY CONTACTS.
- 4 COMPONENT TERMINAL MARKINGS ARE INDICATED BY ENCIRCLED NUMBERS AND/OR LETTERS.
- 5 NUMBERS ON VERTICAL & HORIZONTAL LINE ARE CIRCUIT IDENTIFICATION.
- 6 MOTORS ARE INHERENTLY PROTECTED.
- 7 THIS UNIT TO BE USED WITH EVAPORATORS OPERATING WITH IN A TEMPERATURE RANGE OF 32°F TO 53.5°F.

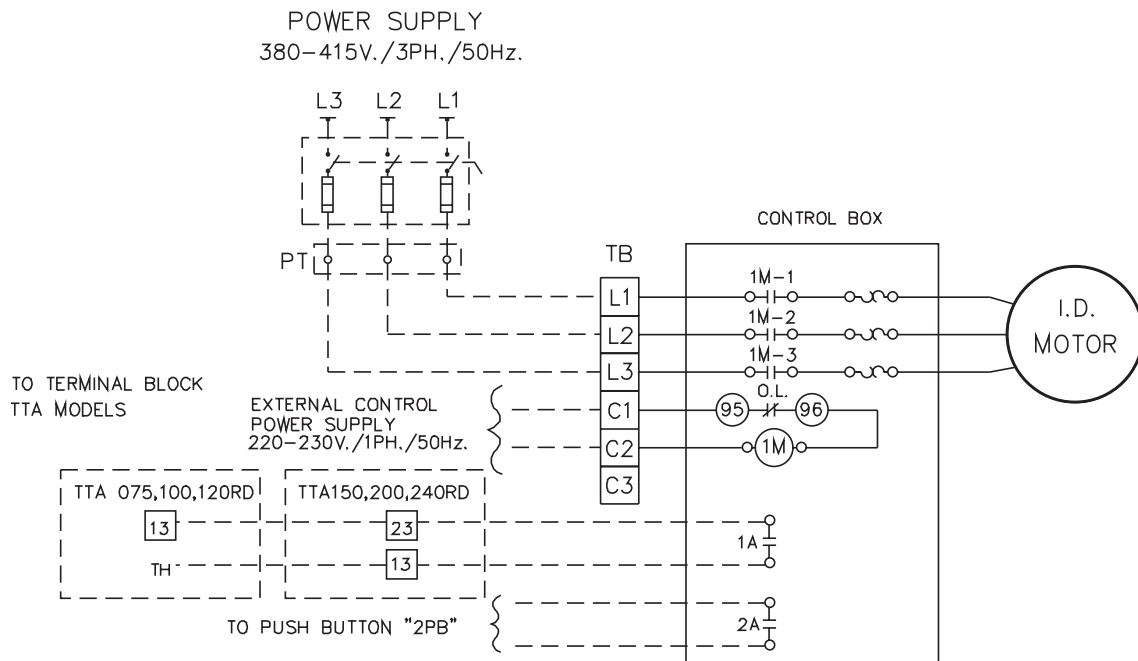
Condensing Unit Wiring

TTA 150, 200, 240 RD0G (Manifold compressor)



Air Handler Unit Wiring

TTH060-100/TWE120-240 (EXPORT)



LEGEND	
DEVICE DESIGNATION	DESCRIPTION
1M	CONTACTOR BLOWER MOTOR.
TB	TERMINAL BLOCK
1A,2A	AUXILIARY N.O. CONTACT
TH	THERMOSTAT
2PB	SWITCH PUSH BUTTON
—	FACTORY WIRING & DEVICE BY MFR.
- - -	FIELD WIRING
ID. MOTOR	INDUCTION MOTOR
PT	POWER TERMINAL
—□—	FUSE

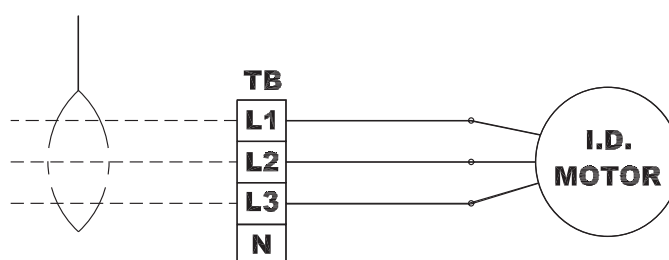
NOTES

1. ALL FIELD WIRING TO BE IN ACCORDANCE WITH NATIONAL ELECTRIC CODE (N.E.C.) CANADIAN ELECTRIC CODE AND/OR LOCAL STATE AND CITY CODES. PROVIDE DISCONNECTS FOR ALL POWER SUPPLIES.
2. DRAWING PRACTICES AND SYMBOLS ARE IN ACCORDANCE WITH AIR CONDITIONING & REFRIGERATION INSTITUTE (ARI) GRAPHIC ELECTRICAL STANDARDS.
3. COMPONENT TERMINAL MARKINGS ARE INDICATED BY ENCIRCLED NUMBERS AND/OR LETTERS.
4. NUMBERS ON VERTICAL & HORIZONTAL LINE ARE CIRCUIT IDENTIFICATION.
5. THIS UNIT TO BE USED WITH EVAPORATORS OPERATING WITH IN A TEMPERATURE RANGE OF 32°F TO 53.5°F.

Air Handler Unit Wiring

TTH060-100/TWE120-240 (DOMESTIC)

**POWER SUPPLY
380V./3PH./50HZ.**

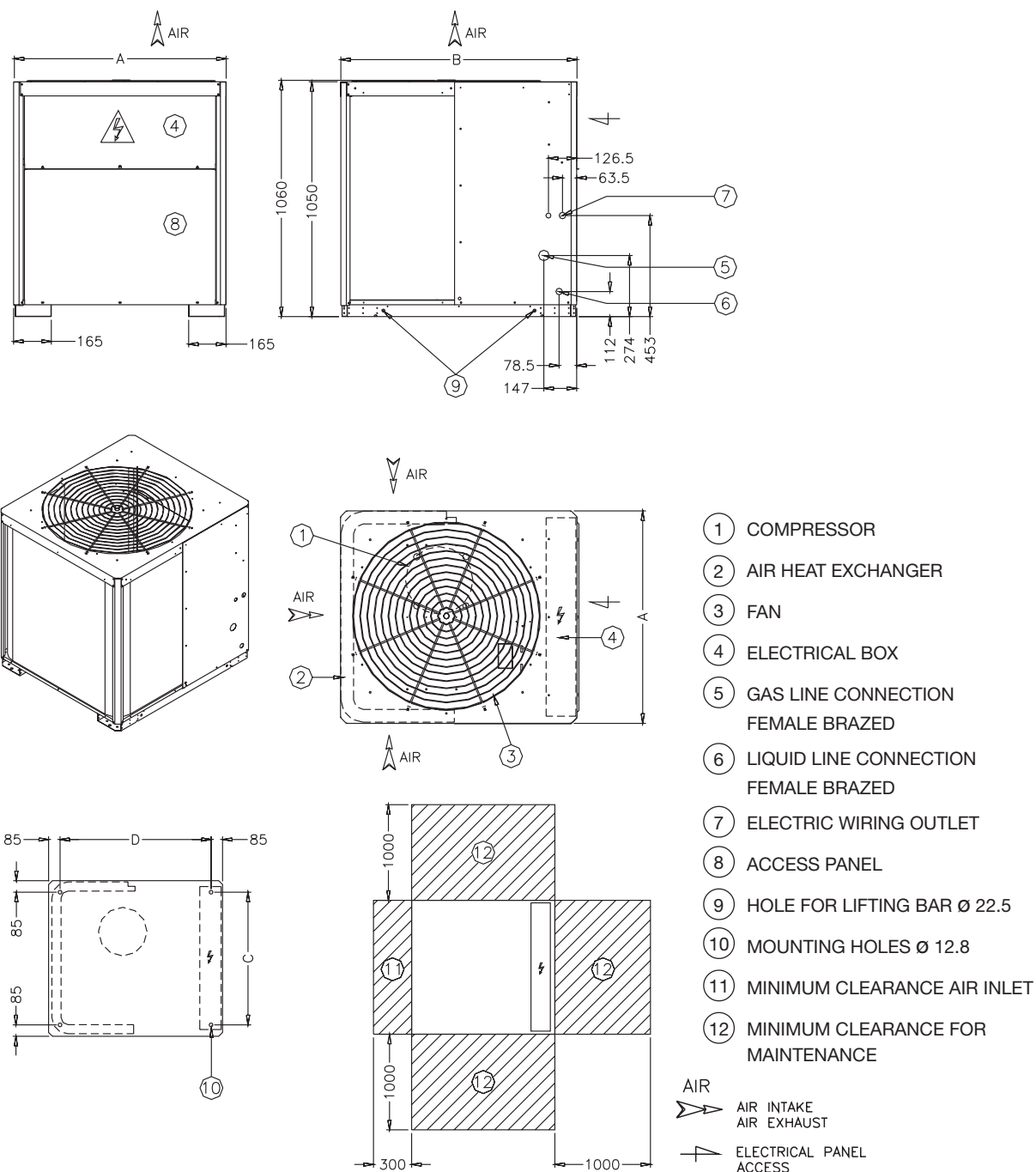


LEGEND	
DEVICE DESIGNATION	DESCRIPTION
TB	TERMINAL BLOCK
_____	FACTORY WIRING & DEVICE BY MFR.
-----	FIELD WIRING
ID. MOTOR	INDUCTION MOTOR 380V. 3PH. 50HZ.

Caution : Disconnect the power supply before opening the control box or servicing.

Condensing Unit Dimensional Data

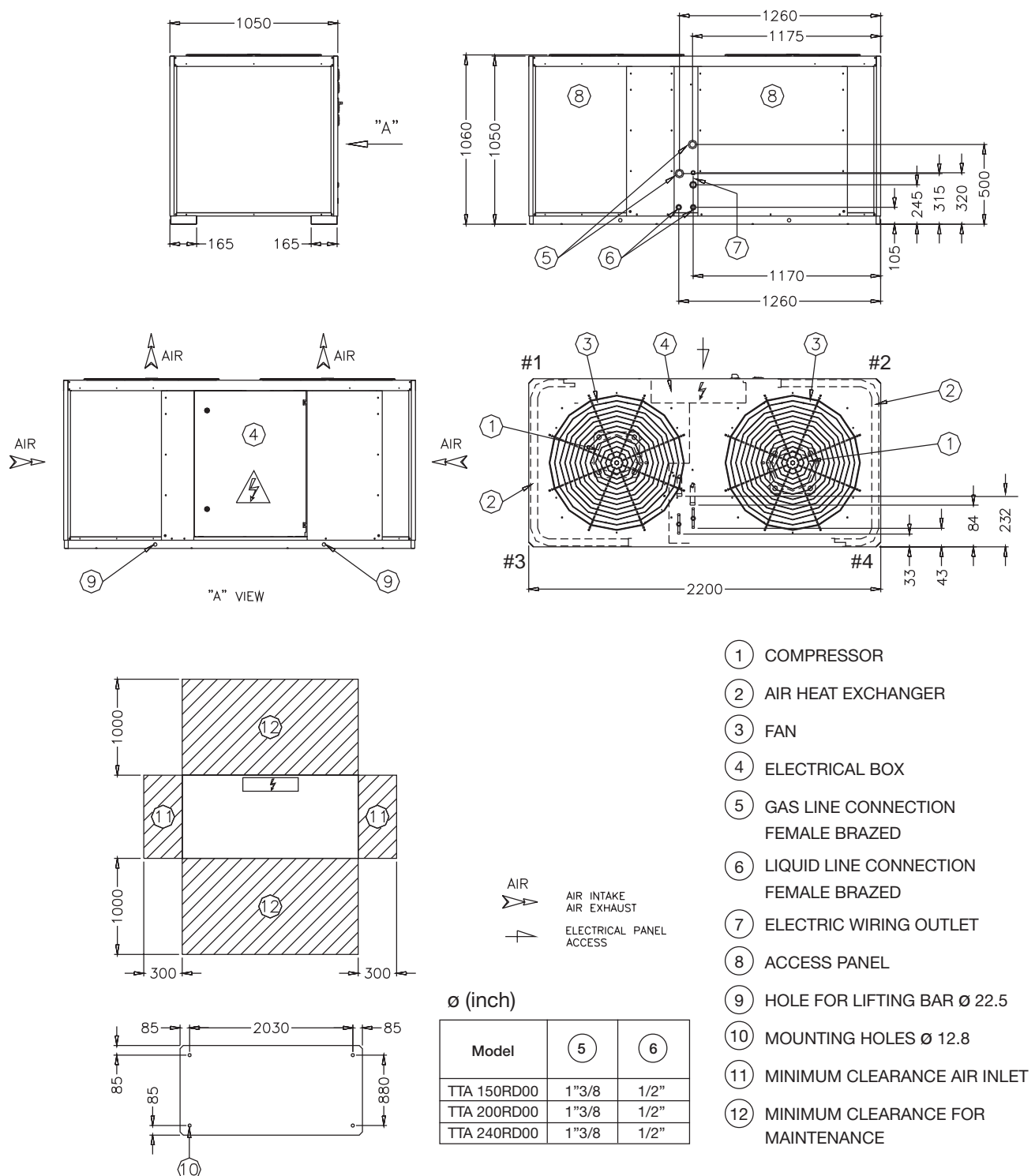
TTA 075-100-120 RD00



Model	Dimension (mm)				ø (Inch)	
	A	B	C	D	ø 5	ø 6
TTA 075	950	1060	778	888	1"1/8	1/2"
TTA 100	950	1060	778	888	1"3/8	1/2"
TTA 120	1050	1260	878	1088	1"3/8	1/2"

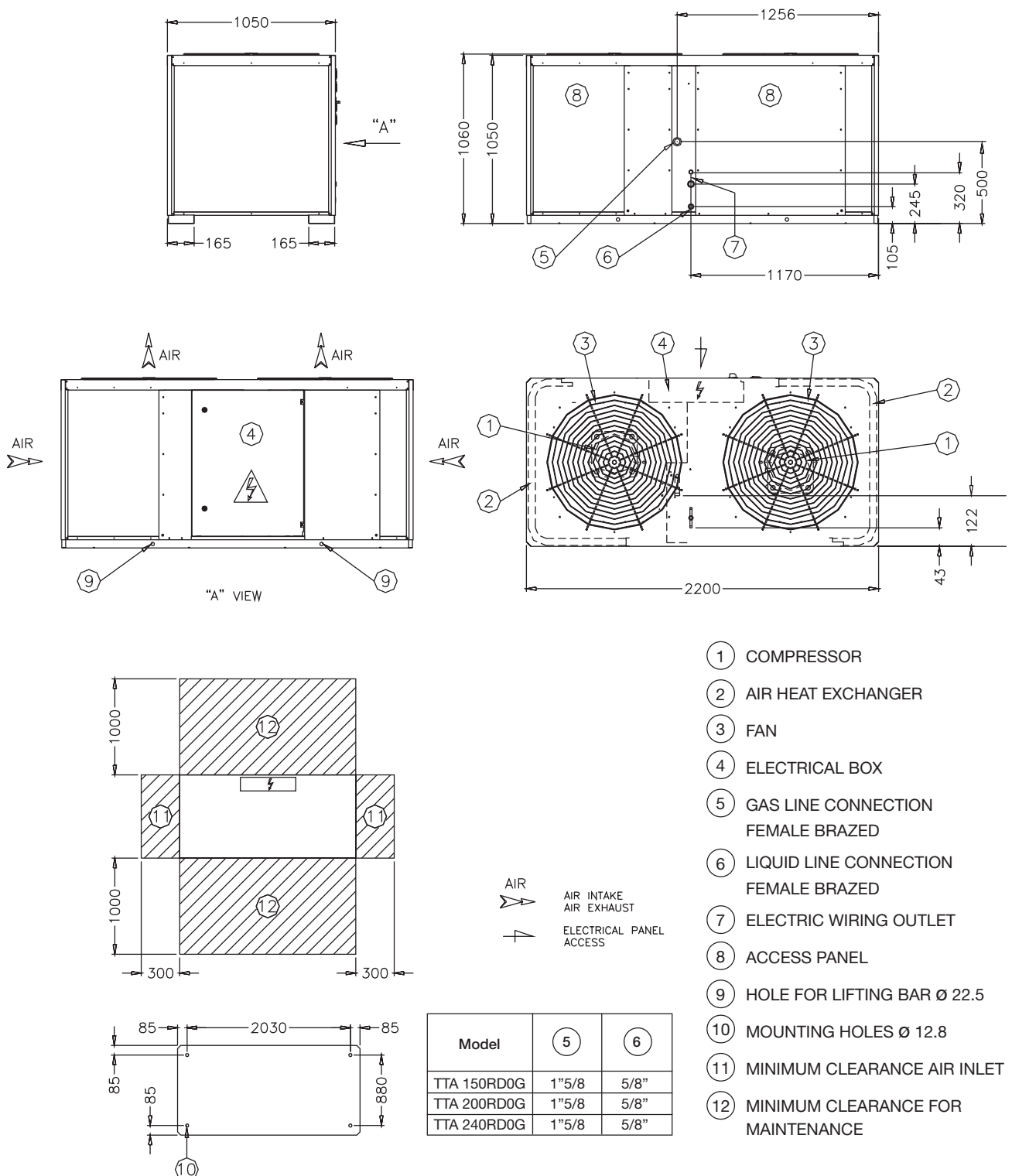
Condensing Unit Dimensional Data

TTA 150-200-240 RD00 (Dual circuit)



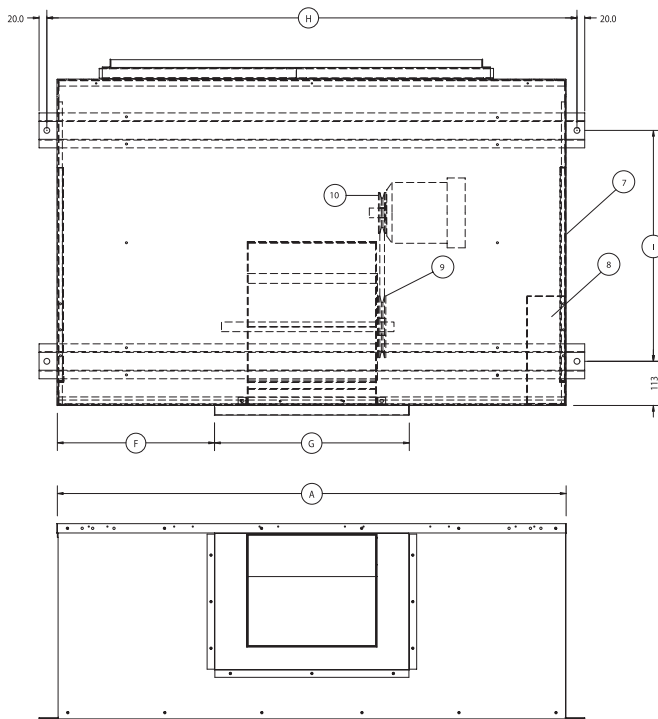
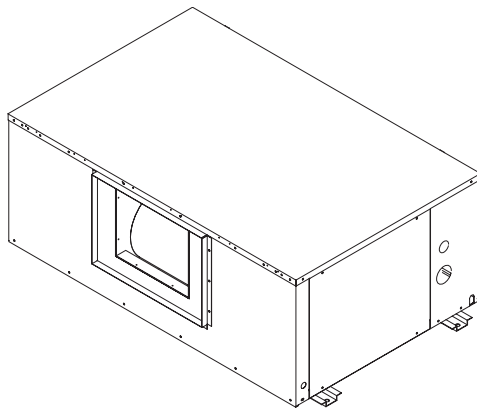
Condensing Unit Dimensional Data

TTA 150-200-240 RD0G (Manifold compressor)

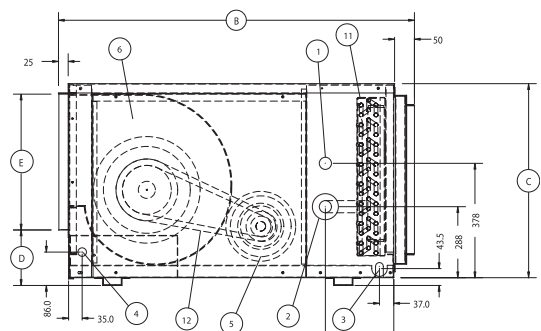


Air Handler Unit Dimensional Data

TTH 060-075 BD



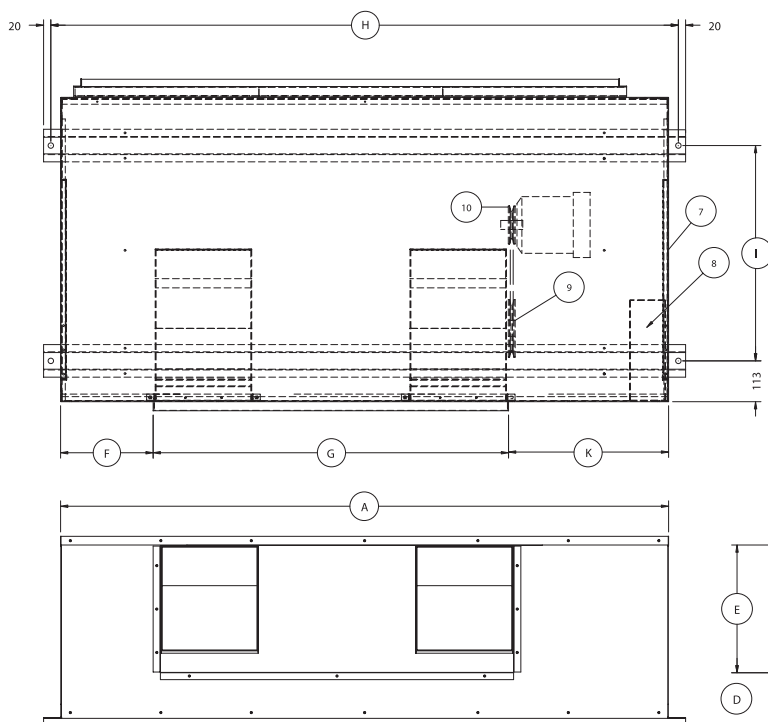
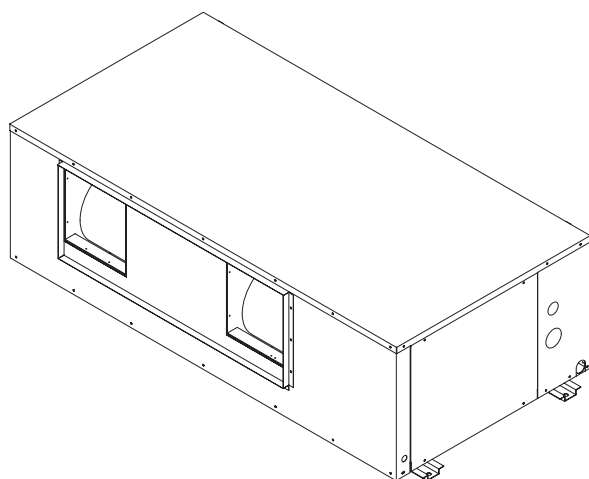
- ① LIQUID LINE Ø 3/8" FOR TTH060
LIQUID LINE Ø 1/2" FOR TTH075
- ② SUCTION LINE Ø 1 1/8"
- ③ DRAIN TUBE Ø 1"
- ④ HOLE FOR POWER WIRING Ø 7/8" KO.
- ⑤ MOTOR
- ⑥ BLOWER
- ⑦ ACCESS PANEL
- ⑧ ELECTRICAL BOX
- ⑨ FAN PULLEY
- ⑩ MOTOR PULLEY
- ⑪ EVAPORATOR COIL
- ⑫ BELT



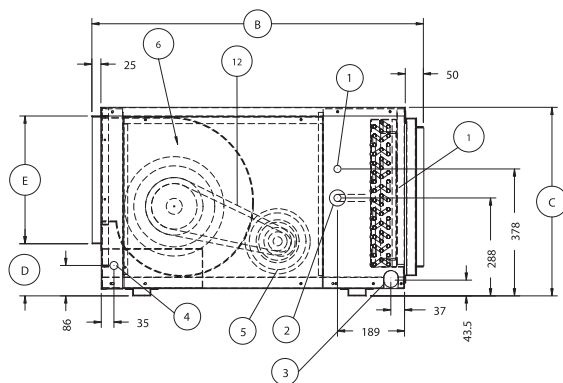
Model	Dimension (mm)								
	A	B	C	D	E	F	G	H	I
TTH 060	1312	916	520	143	352	405	502	1366	595
TTH 075	1312	916	520	143	352	405	502	1366	595

Air Handler Unit Dimensional Data

TTH 100 BD



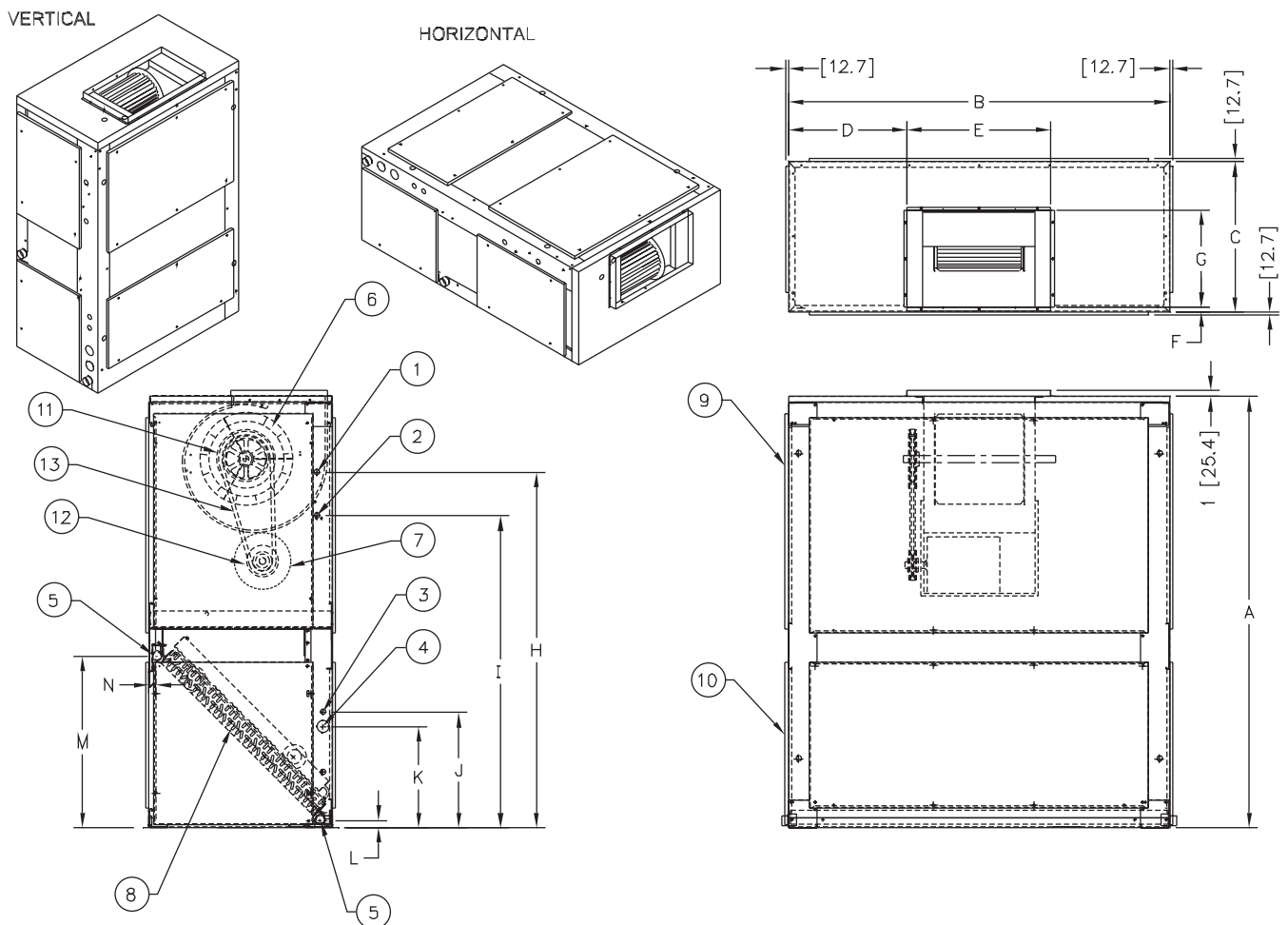
- ① LIQUID LINE Ø 1/2" FOR TTH100
- ② SUCTION LINE Ø 1 3/8"
- ③ DRAIN TUBE Ø 1"
- ④ HOLE FOR POWER WIRING Ø 7/8" KO.
- ⑤ MOTOR
- ⑥ BLOWER
- ⑦ ACCESS PANEL
- ⑧ ELECTRICAL BOX
- ⑨ FAN PULLEY
- ⑩ MOTOR PULLEY
- ⑪ EVAPORATOR COIL
- ⑫ BELT



Model	Dimension (mm)									
	A	B	C	D	E	F	G	H	I	K
TTH 100	1680	916	521	144	353	294	946	1734	595	440

Air Handler Unit Dimensional Data

TWE 120 AD



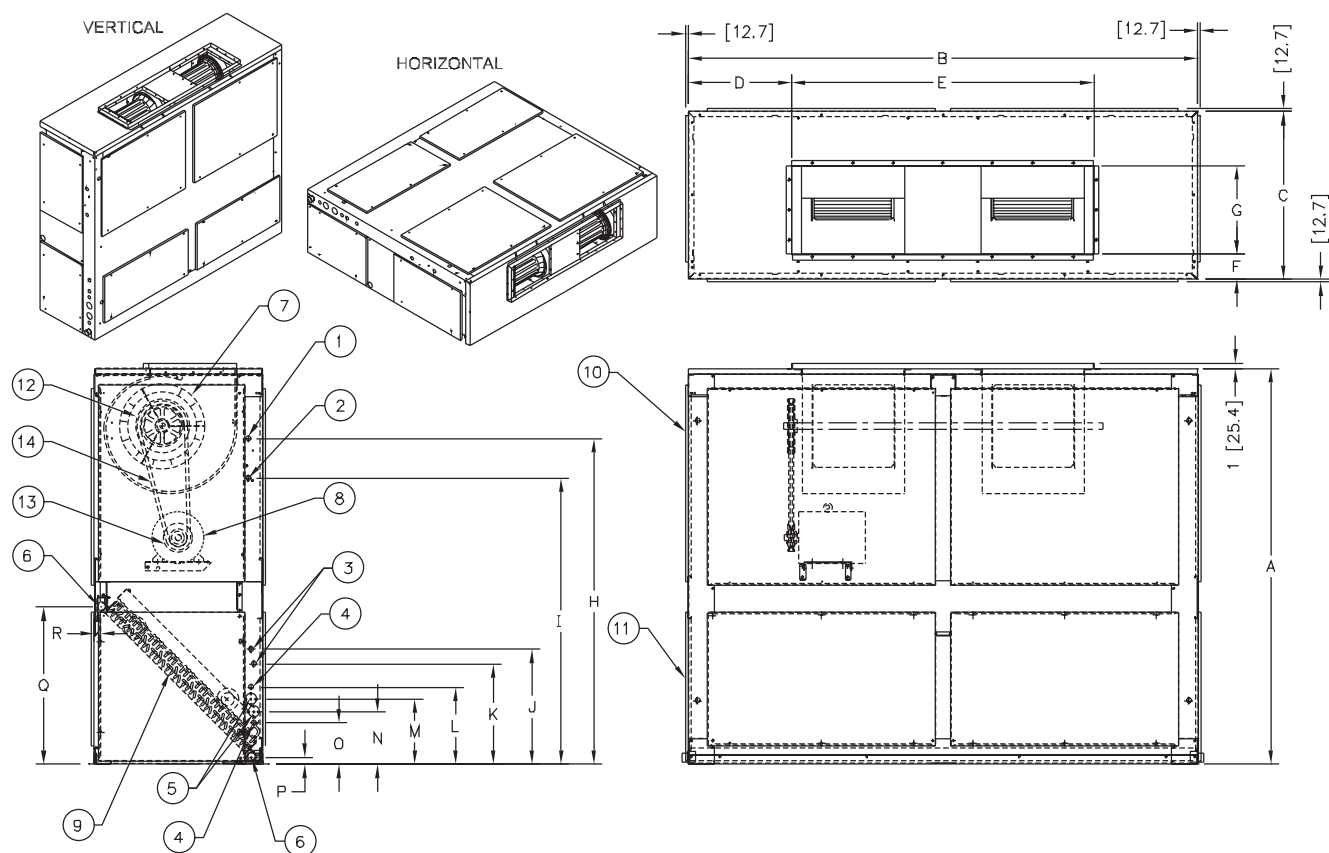
- | | | |
|--------------------------------|-------------------------|-----------------------|
| ① LOW VOLTAGE ENTRANCE Ø 7/8" | ⑤ DRAIN CONNECTION Ø 1" | ⑨ ACCESS PANEL |
| ② HIGH VOLTAGE ENTRANCE Ø 7/8" | ⑥ BLOWER | ⑩ FILTER ACCESS PANEL |
| ③ LIQUID LINE Ø 7/8" | ⑦ MOTOR | ⑪ PULLEY FAN |
| ④ SUCTION LINE Ø 2" | ⑧ EVAPORATOR COIL | ⑫ BULLEY MOTOR |
| | | ⑬ BELT |

Model	Dimension (mm)						
	A	B	C	D	E	F	G
TWE 120	1522.5	1613	635	503	606.5	20.5	408

Model	Dimension (mm)						
	H	I	J	K	L	M	N
TWE 120	1200	1017.5	465.3	404.9	30	578	281.5

Air Handler Unit Dimensional Data

TWE 180-240 BD



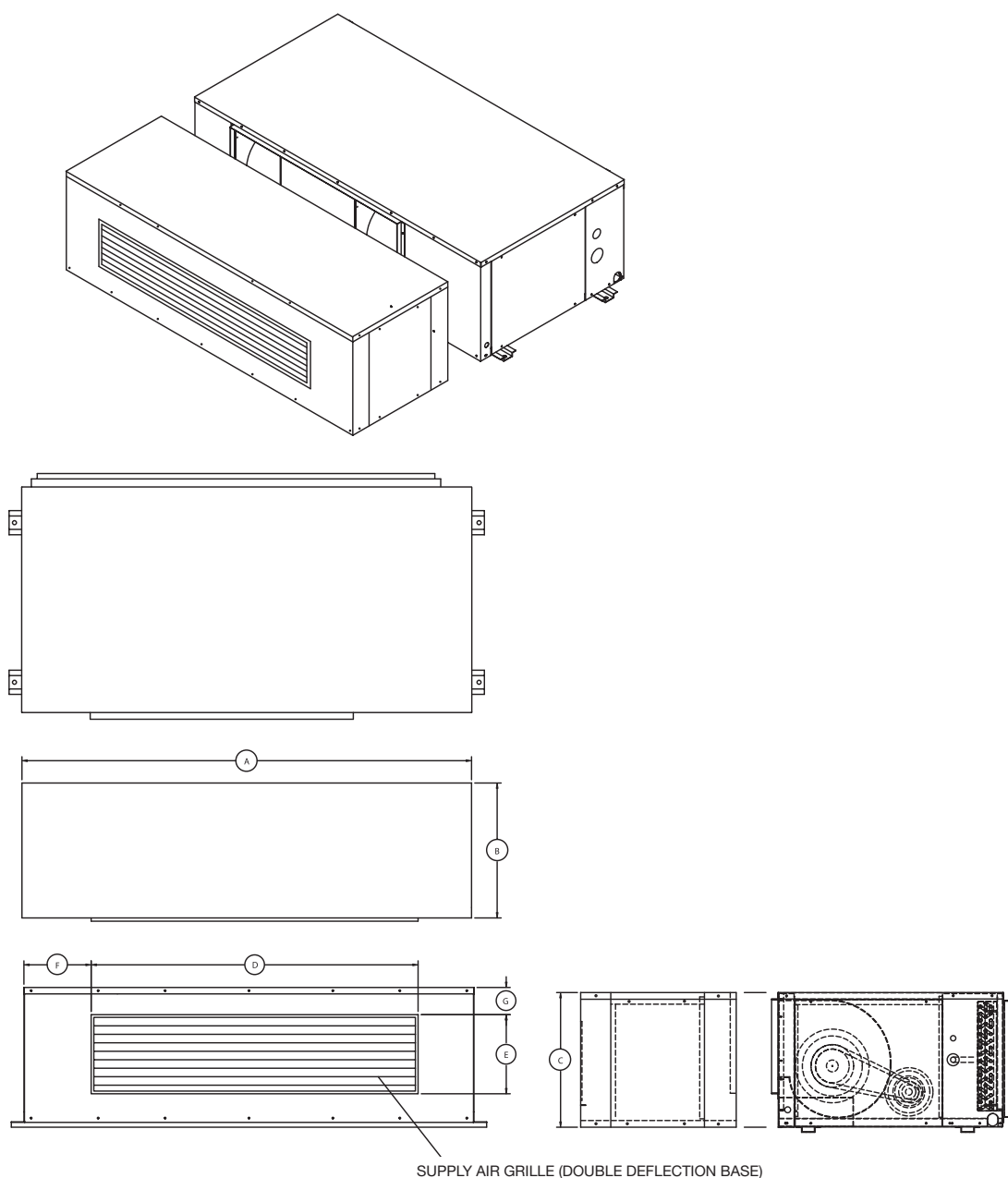
- | | | |
|--------------------------------|-------------------------|-----------------------|
| ① LOW VOLTAGE ENTRANCE Ø 7/8" | ⑥ DRAIN CONNECTION Ø 1" | ⑪ FILTER ACCESS PANEL |
| ② HIGH VOLTAGE ENTRANCE Ø 7/8" | ⑦ BLOWER | ⑫ PULLEY FAN |
| ③ LIQUID LINE Ø 7/8" | ⑧ MOTOR | ⑬ BULLEY MOTOR |
| ④ HOLE FOR TXV BULB Ø 7/8" | ⑨ EVAPORATOR COIL | ⑭ BELT |
| ⑤ SUCTION LINE Ø 2" | ⑩ ACCESS PANEL | |

Model	Dimension (mm)								
	A	B	C	D	E	F	G	H	I
TWE 180	1751	2019.0	702	314.5	1394	44.5	409.5	1429	1248
TWE 240	1824	2349.5	773	478.0	1394	113.0	411.0	1502	1319

Model	Dimension (mm)								
	J	K	L	M	N	O	P	Q	R
TWE 180	492.0	335	265	217.5	152.5	105.0	30	652.5	29
TWE 240	528.5	373	267	217.5	154.0	106.5	32	724.0	32

Air Handler Unit Dimensional Data

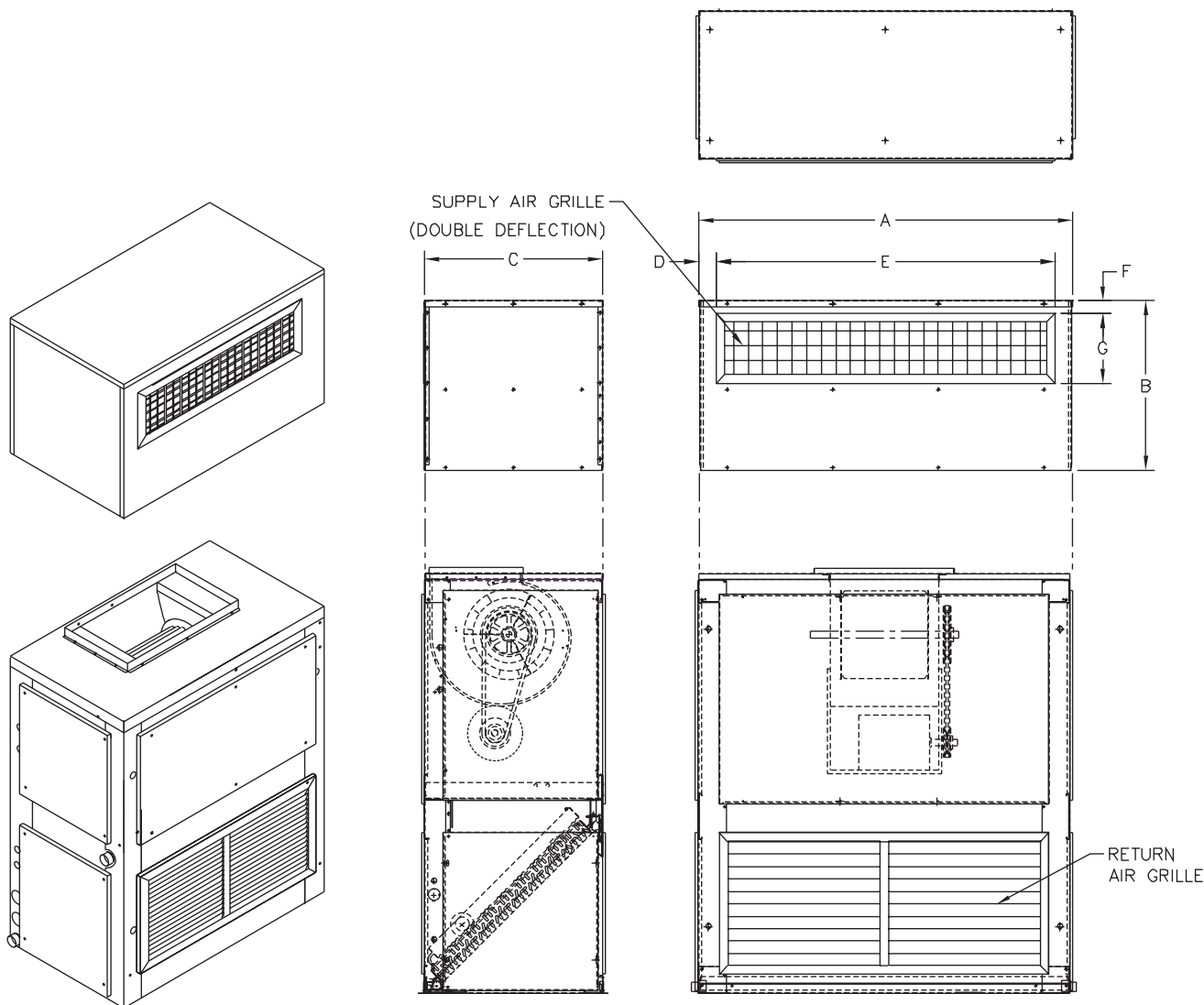
TTH 060-100 BD With Plenum (Option)



Model	Dimension (mm)						
	A	B	C	D	E	F	G
TTH 060	1312	499	503	762	305	275	100.5
TTH 075	1312	499	503	965	305	173.5	100.5
TTH 100	1680	499	503	1270	305	205	100

Air Handler Unit Dimensional Data

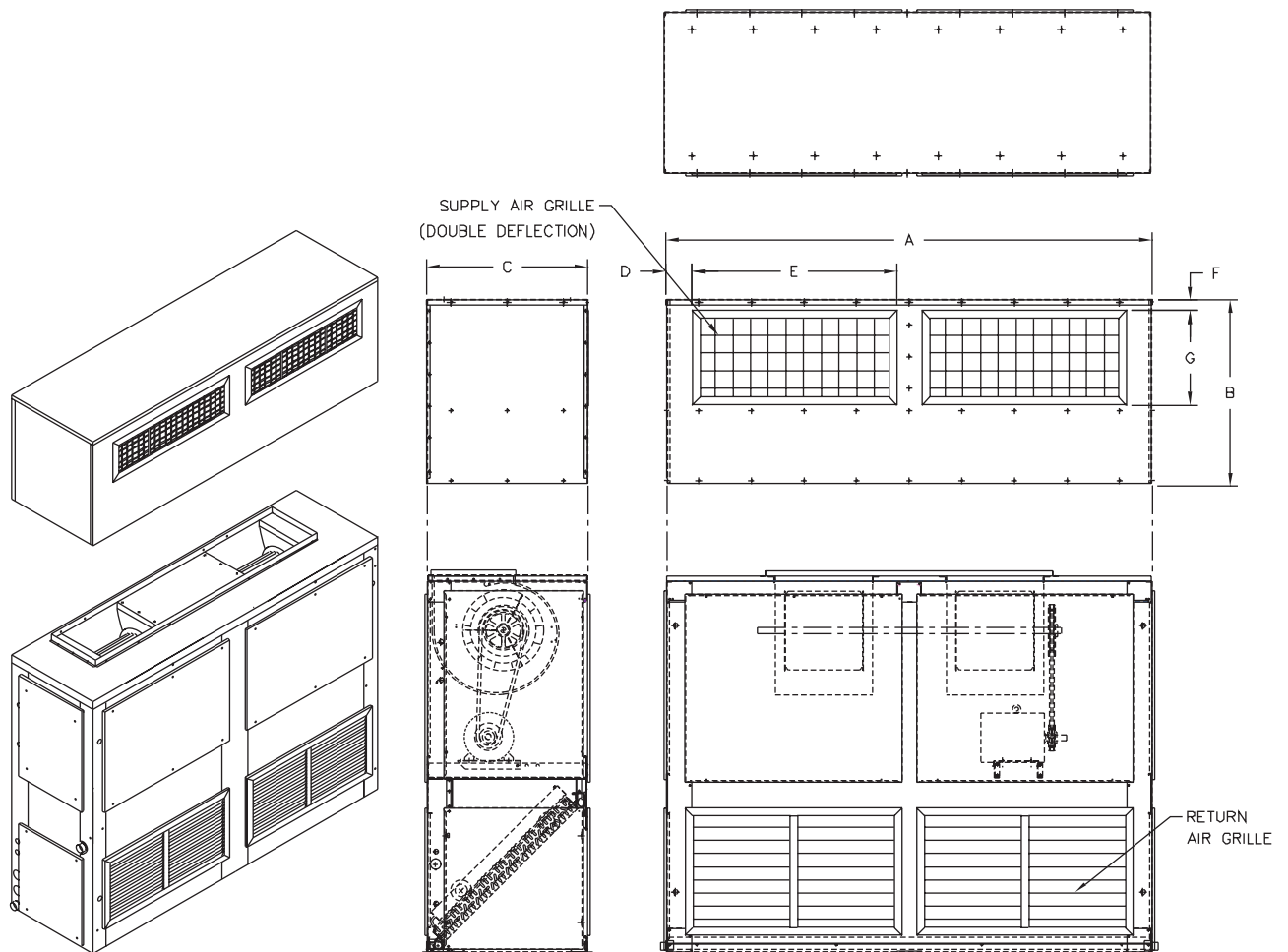
TWE 120 AD With Plenum (Option)



Model	Dimension (mm)						
	A	B	C	D	E	F	G
TWE 120	1624.3	735.3	644.1	76.7	1473.2	53.3	304.8

Air Handler Unit Dimensional Data

TWE 180-240 BD With Plenum (Option)



Model	Dimension (mm)						
	A	B	C	D	E	F	G
TWE 180	2027.9	887.7	710.7	77.2	889.0	53.3	406.4
TWE 240	2358.4	887.7	781.6	128	990.6	53.3	457.2

Mechanical Specification

Condensing Units

General

Unit shall be assembled on heavy gauge steel mounting/lifting rails and shall be weather proofed. Units shall include a hermetic scroll compressor (s), slit fin condenser coil, fans and motors, controls and fully charge of R-22. Operating range shall be between 120°F and 35°F in cooling as standard from the factory. Units rated in accordance with ARI Standard 210 and 270.

Casing

Unit casing shall be constructed of 18 gauge zinc coated heavy gauge, galvanized steel. Exterior surfaces shall be cleaned, phosphatized and finished with a polyester powder painting and weather-resistant baked enamel finish. Units surface shall be tested 500 hours in salt spray test. Units shall have removable end panels which allow access to all major components and controls.

Refrigeration System

Single compressor

TTK060, TTA075, TTA100 and TTA120 model shall have a single refrigeration circuit with an integral subcooling circuit. A refrigeration filter drier shall be provided as standard for TTA models. The TTK060, TTA075, TTA100 and TTA120 shall have both a liquid line and suction gas line service valve with gauge port and one direct drive hermetic scroll compressor with centrifugal oil pump providing positive lubrication to moving parts. Motor shall be suction gas-cooled and shall have a voltage utilization range of plus or minus 10 percent of nameplate voltage.

Internal temperature and current-sensitive motor overloads shall be included for maximum protection. Scroll type compressor shall provide inherently low vibration and noise by having no suction and discharge valves. External high and low pressure cutout devices shall be provided.

Refrigeration System

Dual Compressor

TTA150, 200, and 240 RD00 shall have two separate and independent refrigeration circuits. Each refrigeration circuit shall have an integral subcooling circuit. A refrigeration filter drier shall be provided as standard for TTA models. TTA150, TTA200 and TTA240 shall have two direct drive hermetic scroll compressors with centrifugal oil pump and provide positive lubrication to all moving parts. Motor shall be suction gas-cooled and shall have a voltage utilization range of plus or minus 10 percent of nameplate voltage. Internal temperature and current-sensitive motor overloads shall be included for maximum protection. External high and low pressure cutout devices shall be provided.

Refrigeration System (Optional)

Manifolded Compressor

TTA150, 200, and 240 RD0G units shall have a single refrigeration circuit with an integral subcooling circuit. A refrigeration filter drier shall be provided as standard. Units shall have both a liquid line and suction gas line service valve with gauge port.

The units shall have two scroll compressors manifolded together. Motor shall be suction gas-cooled and shall have a voltage utilization range of plus or minus 10 percent of nameplate voltage.

Condenser Coil

Coil shall be internally finned of smooth bore 3/8" copper tubes mechanically bonded to configured aluminum plate fin as standard. Factory pressure and leak tested to 375 psig air pressure. For coil protection is optional.

Condenser Fan and Motor (s)

Direct-drive, statically and dynamically balanced 28 inch propeller fan (s) with aluminum blades and electrocoated steel hubs shall be used in draw-through vertical discharge position. Either permanently lubricated totally enclosed or open construction motors shall be provided and shall have built in current and thermal overload protection. Motor (s) shall have either ball or sleeve bearing type.

Controls

Condensing units shall be completely factory wired with necessary controls and contractor pressure lugs or terminal block for power wiring. Control wiring shall be 220 volt control circuit which includes fusing. Units shall provide external location for mounting a fused disconnect device.

Time Delay Relay

Shall prevent compressors in single and dual compressor unit from coming on line simultaneously. Timer shall be 220 volt, with three minutes timing period for single compressor. Timer will be three minutes and four and a half minutes for dual circuit in the first and second compressor, respectively.

Accessories

Copper fin/Blue fin shall protect corrosion on sea coast application.

Mechanical Specification

Air Handling Units

General

Air handler units shall be completely factory assembled including coil, condensate drain pan, fan motor(s), filters and controls in an insulated casing that can be applied in vertical or horizontal in the case of TWE120, TWE180 and TWE240 or dedicated horizontal in the case of TTH060, TTH075 and TTH100. Units shall be rated and tested in accordance with ARI standard 210.

Casing

Units casing shall be constructed of zinc coated, heavy gauge, galvanized steel. Exterior surfaces shall be cleaned, phosphatized and finished with a polyester powder painted and weather resistant baked enamel finish. Casing is completely insulated with fire-retardant, permanent, odorless glass fiber material. Knockouts shall be provided for unit electrical power and refrigerant piping connections.

Refrigeration System

The TTH060, TTH075, TTH100 and TWE120 units shall have a single refrigeration circuit and the TWE 180 and TWE240 units shall have dual refrigeration circuits. Each refrigeration circuit is controlled by a factory installed with the expansion device.

Evaporator coil

Configured aluminum fin surface shall be mechanically boned to 3/8" internally enhanced copper tubing and factory pressure and leak tested at 375 psig. Coil is arranged for draw through airflow and shall provide condensate drain pan constructed of removable plastic for TWE models, galvanized steel with rubber insulator, polyester powder painted and weather-resistant baked enamel finish drain pan for TTH models.

Evaporator Fan

Double inlet, double width, forward curved, centrifugal-type fan (s) with adjustable belt drive shall be standard. Thermal overload protection shall be standard on motor. Fan and motor bearings shall be permanently lubricated. Oversized motors shall be available as an option for high static application.

Controls

Magnetic evaporator fan contactor, 220 voltage terminal strip, check valve (s), and single point power entry shall be included. All necessary controls shall be factory-installed and wired.

Filters

One inch, aluminium washable filters shall be standard on air handlers. Filters shall be accessible from the side coil access panel. Filter rack can be field converted to two inch capability for TWE120A, TWE180B, and TWE240B

Accessories

Oversized Motors

Field installed oversized motors shall be available for high static pressure applications.

Discharge Plenum

Accessory discharge plenums shall be available for free blow.

Return Air Grille (For TWE model only)

Accessory return air grille shall be provided for free return air application.



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Supersedes	SSA5-PRC 002-EN-0703
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Since The Trane Company has a policy of continuous product and product data improvement, it reserves the right to change design and specifications without notice.