



**TRANE®**

# Product Bulletin

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## YUKON

Tall Floor Split Systems

3-10 Tons

Cooling Only

MCV Series 50/60 Hz



50 Hz Models  
Cooling Only  
MCV 036 BB  
MCV 048 BB  
MCV 060 BB  
MCV 090 BB  
MCV 120 BB

60 Hz Models  
Cooling Only  
MCV 036 B1  
MCV 048 B1  
MCV 060 B1  
MCV 090 B1  
MCV 120 B1

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June 2011

MCV-SVB01A-EN



# Features and Benefits

## *YUKON – Human Comfort Solution*



### Comfort and Reliability

- Full Range of Capacity.
- Energy Savings.
- Washable Filter.
- Low Maintenance.
- Easy to Service.
- Lower Noise.

### Quality

All major components are individually inspected and tested, and every unit undergoes a run-test prior to shipment from the factory.

### High Efficiency

- Compact in size for easy installation into small spaces.
- Galvanized steel with a powder paint finish for corrosion resistance.
- Synchronous motor for supply grille as standard for better airflow.

### Serviceability

The unit can be easily serviced and minimum area required just only at the front after panel.



Condensing Unit

### TTK Condensing Units Features and Benefits

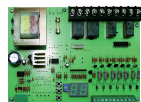
- High efficiency unit with reliable aluminum fin.
- Compact unit size allows for installation in limited or confined spaces.

### Optional

- Blue fin, Copper fin
- Stainless casing
- 45 degree louver



TTA075-120



Micro processor controller



TTA075-120

### 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
- Manifolding single circuit (for TTA150-240).
- Micro processor controller

- Horizontal air discharge (for TTA075-120)
- 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.
- More efficiency at part load.

- Troubleshooting status display helps reduce service time.
- Extend compressor life time by balancing compressor loading.
- Flexible application when vertical space limited.
- Protect coil from delivery damage.



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## System Performance Matrix

### System Performance Matrix : 50 Hz

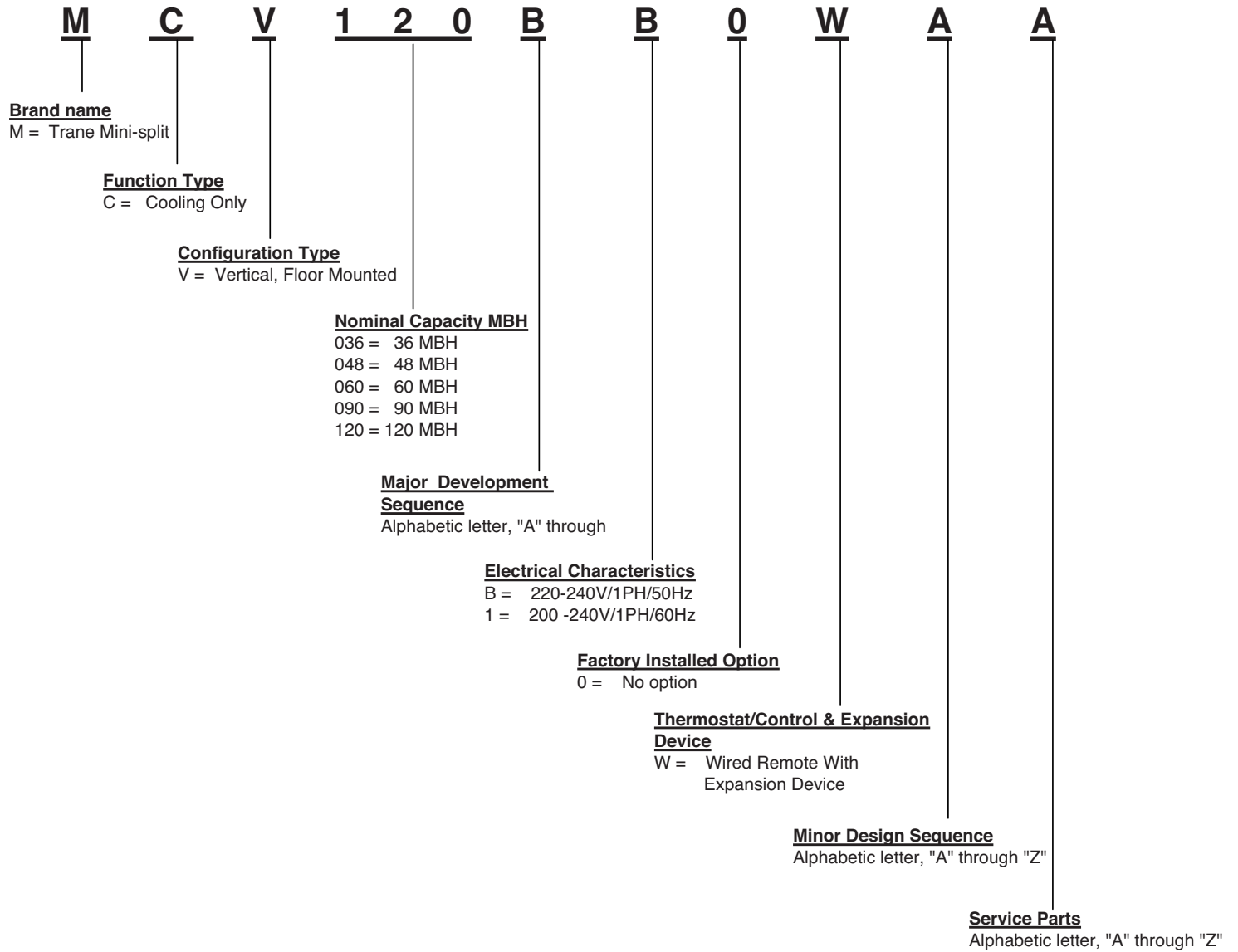
Indoor Unit	Outdoor Unit	Total capacity MBH	Evaporator CFM	Power Input kW
MCV036BB	TTK536QB	37.3	1200	3.96
	TTK536QD	37.0		3.96
MCV048BB	TTK042KD	42.0	1400	4.74
	TTK048KD	50.4		5.32
MCV060BB	TTK060KD	60.0	1600	6.35
MCV090BB	TTA075RD	75.0	2400	8.26
	TTA100RD	100.0		10.44
MCV120BB	TTA120RD	120.0	3200	11.39

### System Performance Matrix : 60 Hz

Indoor Unit	Outdoor Unit	Total capacity MBH	Evaporator CFM	Power Input kW
MCV036B1	TTK536Q1	36.0	1200	3.81
MCV048B1	TTK042K1	42.9	1400	4.75
	TTK048K1	48.0		4.88
MCV060B1	TTK060K1	61.5	1600	6.24
	TTK060K3	61.5		6.13
MCV090B1	TTA075R3	76.9	2400	8.32
	TTA100R3	102.8		10.53
MCV120B1	TTA120R3	126.0	3200	12.55

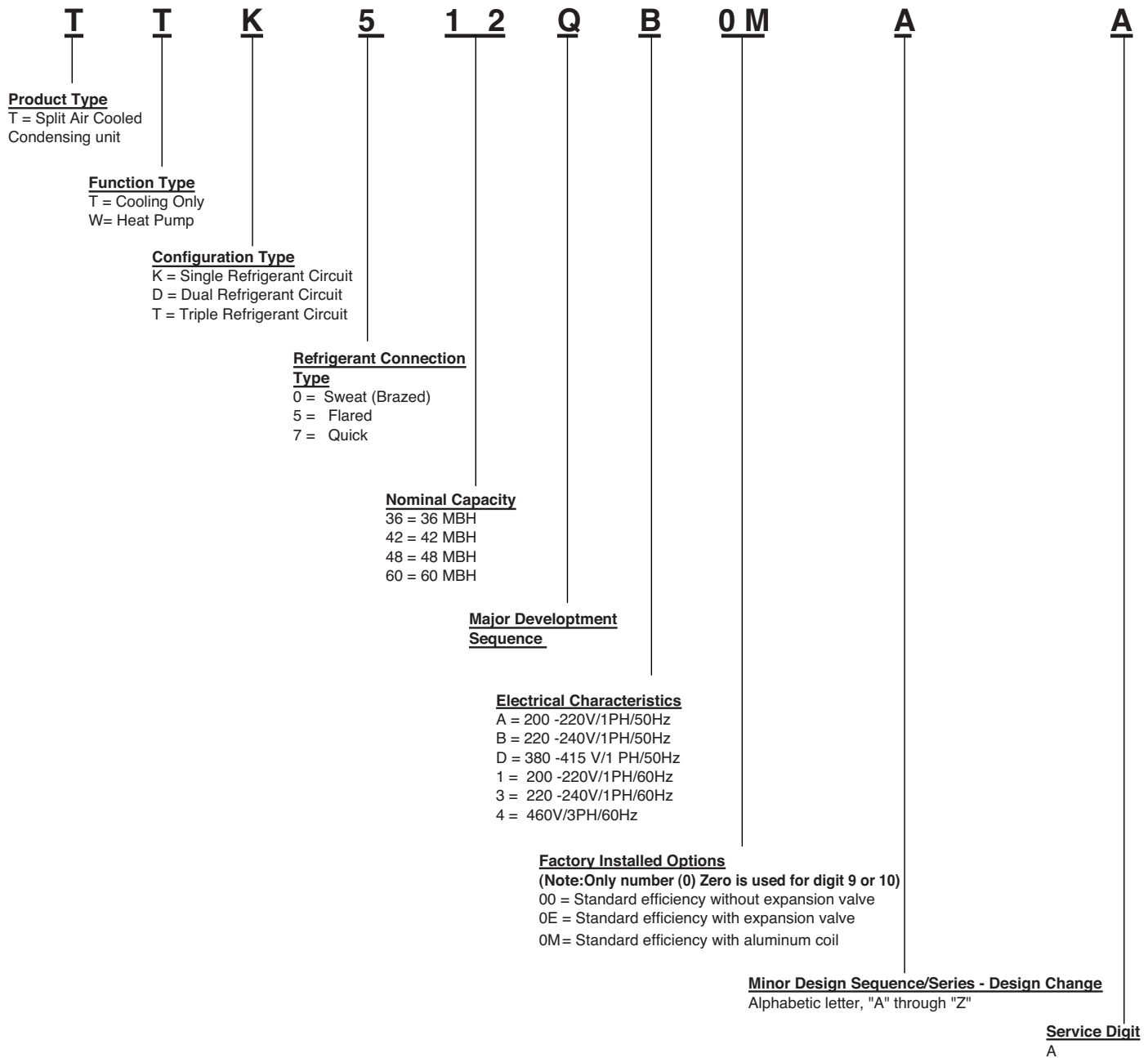


# Model Nomenclature





# Model Nomenclature





# Model Nomenclature

## Air-Cooled Condensing Unit Model Nomenclature

**TTA 120 R D 0 0 Q A**

Product Type

TTA = Cooling Only Condensing Unit

Nominal Gross Cooling Capacity (MBH)

075 = 75 MBH

100 = 100 MBH

120 = 120 MBH

Refrigerant Type

R = R22

Electrical Characteristics

D = 380-415/3/50

3 = 230/3/60

K = 380/3/60

Service Digit

A = First Parts List

Minor Design Sequence

M = First Design Sequence

P = Second Design Sequence

Q = Third Design Sequence

Factory Installed Options # 2

(Special Factory Installed Option)

0 = No Option

E = Copper Fin

F = Blue Fin

Factory Installed Options # 1

(Standard Factory Installed Option)

0 = Vertical discharge w / Service Valve (for TTA075 to 120)

A = Vertical discharge w / Access Valve (for TTA075 to 120)

B = Horizontal discharge w / Service Valve (for TTA075 to 120)

C = Horizontal discharge w / Access Valve (for TTA075 to 120)



# General Data

## General Data Floor Standing Unit, 50 Hz

UNIT MODELS		MCV036BB	MCV048BB	MCV060BB	MCV090BB	MCV120BB	
<b>POWER CONNECTION</b>		V/ph/Hz	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	
<b>MCA<sup>†</sup></b>		A	2.23	2.93	4.28	4.45	5.85
<b>SYSTEM DATA</b>							
Refrigerant Type		R22	R22	R22	R22	R22	
No. Refrigerant Circuits		1	1	1	1	1	
Refrigerant Connection Type		Sweat	Sweat	Sweat	Sweat	Sweat	
Suction Line OD		3/4 (19.05)	7/8 (22.23)	7/8 (22.23)	1-1/8 (28.58)	1-3/8 (34.93)	
Liquid line OD		3/8 (9.53)	3/8 (9.53)	3/8 (9.53)	1/2 (12.7)	1/2 (12.7)	
<b>CASING</b>							
Material		Galvanized & Electro-galvanized Steel					
Color		Light Gray					
Type of Insulation		PE Foam					
<b>COIL</b>							
Face Area		sq ft	3.50	4.50	5.33	6.58	8.63
		(m <sup>2</sup> )	(0.33)	(0.42)	(0.50)	(0.61)	(0.80)
Tube Type		Inner Grooved					
Rows		3	3	4	4	4	
Fin Type		Uncoated Slitted					
Fins per inch		16	16	16	14	16	
Refrigerant Flow Control		Capillary Tube	Capillary Tube	Capillary Tube	Expansion Valve	Expansion Valve	
Drain Connection Size		3/4 (19.05)	3/4 (19.05)	3/4 (19.05)	3/4 (19.05)	3/4 (19.05)	
Drain Connection Type		Flexible Hose					
<b>FAN</b>							
Fan Type		Single Inlet Centrifugal					
No. used		1	1	1	2	2	
Diameter		15 (381)	15 (381)	16 (406)	15 (381)	15 (381)	
Width		7 (178)	7 (178)	7 (178)	7 (178)	7 (178)	
Drive Type		Direct					
<b>MOTOR</b>							
Motor Type		Permanent Split Capacitor					
No. of Motor		1	1	1	2	2	
Motor Power Output		122	211	258	122	211	
No. of Speed		3	3	3	3	3	
Motor Speed		550/450/400	650/550/450	600/550/500	550/450/400	650/550/450	
V/ph/Hz		220/1/50	220/1/50	220/1/50	220/1/50	220/1/50	
RLA/LRA		1.78/1.97	2.34/2.74	3.42/3.90	1.78/1.97	2.34/2.74	
<b>FILTER</b>							
Type		Polypropylene					
No. used		1	1	1	2	2	
<b>DIMENSION (HxWxD)</b>							
Crated (Shipping)		in	81.1x26.8x17.7	81.1x26.8x17.7	81.1x36.6x18.9	81.1x50.4x18.9	81.1x50.4x18.9
		(mm)	(2060x680x450)	(2060x680x450)	(2060x930x480)	(2060x1280x480)	(2060x1280x480)
Uncrated (Net)		in	74.8x23.6x14.6	74.8x23.6x14.6	74.8x33.4x15.7	74.8x47.1x15.7	74.8x47.1x15.7
		(mm)	(1900x600x370)	(1900x600x370)	(1900x848x400)	(1900x1196x400)	(1900x1196x400)
<b>WEIGHT</b>							
Crated (Shipping)		lb (kg)	163 (73.9)	168.5 (76.4)	225.5 (102.3)	325 (147.4)	340.5 (154.4)
Uncrated (Net)		lb (kg)	141.5 (64.2)	147 (67.7)	198 (89.8)	300.5 (136.3)	316 (143.3)

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





# General Data

## General Data TTK 50 Hz

UNIT MODELS		TTK536QB	TTK536QD	TTK042KD	TTK048KD	TTK060KD
<b>POWER CONNECTION</b>		V/ph/Hz	220-240/1/50	380-415/3/50	380-415/3/50	380-415/3/50
<b>MCA<sup>1,3</sup> A</b>		20.8	8.3	11.0	13.5	13.5
<b>SYSTEM DATA</b>						
Refrigerant Type		R-22	R-22	R-22	R-22	R-22
No. Refrigerant Circuits		1	1	1	1	1
Refrigerant Connection Type		Flare	Flare	Sweat	Sweat	Sweat
Refrigerant Charge	lb (kg)	4.41 (2.00)	4.41 (2.00)	5.06 (2.30)	7.28 (3.30)	8.82 (4.00)
Suction Line OD	in (mm)	3/4 (19.05)	3/4 (19.05)	7/8 (22.23)	7/8 (22.23)	7/8 (22.23)
Liquid line OD	in (mm)	3/8 (9.53)	3/8 (9.53)	3/8 (9.53)	1/2 (12.7)	1/2 (12.7)
<b>COMPRESSOR</b>						
Compressor Type		Rotary	Rotary	Scroll	Scroll	Scroll
No. Used		1	1	1	1	1
V/ph/Hz		220/1/50	380/3/50	380/3/50	380/3/50	380/3/50
RLA/LRA		15.8 / 79.0	5.9 / 43.0	8.0 / 62.0	9.6 / 70.0	9.6 / 82.0
<b>COIL</b>						
Face Area	sq ft (m <sup>2</sup> )	7.29 (0.68)	7.29 (0.68)	7.29 (0.68)	7.08 (0.66)	7.08 (0.66)
Tube Size OD	in (mm)	-	-	5/16 (7.93)	5/16 (7.93)	5/16 (7.93)
Tube Size (W x T x Ch)	(mm x mm x no.)	16 x 1.8 x 18 Aluminum, 18 Channels		-	-	-
Tube Type		Aluminum Uncoated		Inn. Grv.	Inn. Grv.	Inn. Grv.
Rows		-	-	2	3	3
No. of Tube		76	76	-	-	-
Fin Type		Aluminum Uncoated		Uncoated Corrugated		
No. of Refrigerant Path		4	4	-	-	-
Fins per inch		-	-	20	16	20
Refrigerant Flow Control		-	-	-	-	-
<b>FAN</b>						
Fan Type		Propeller	Propeller	Propeller	Propeller	Propeller
No. used		1	1	1	1	1
Diameter	in (mm)	20 (508)	20 (508)	20 (508)	20 (508)	20 (508)
No. of Blade		4	4	4	3	3
Pitch Angle	degree	30	30	30	32	32
Drive Type		Direct	Direct	Direct	Direct	Direct
Nominal Airflow <sup>2</sup>	cfm (cmh)	2130 (3619)	2130 (3619)	2130 (3619)	1903 (3233)	1903 (3233)
<b>MOTOR</b>						
Motor Type		Permanent Split Capacitor				
No. of Motor		1	1	1	1	1
Motor hp	hp (kW)	1/6 (0.102)	1/6 (0.102)	1/6 (0.102)	1/4 (0.165)	1/4 (0.165)
No. of Speed		1	1	1	1	1
Motor Speed	rpm	900	900	900	900	900
V/ph/Hz		220/1/50	220/1/50	220/1/50	220/1/50	220/1/50
RLA/LRA		1.03 / 1.79	1.03 / 1.79	1.03 / 1.79	1.45 / 2.68	1.45 / 2.68
<b>DIMENSION (HxWxD)<sup>4</sup></b>						
Crated (Shipping)	in (mm)				33.8 x 45.0 x 16.9 (858 x 1,144 x 430)	
Uncrated (Net)	in (mm)				31.3 x 40.0 x 14.2 (795 x 1,018 x 360)	
<b>WEIGHT</b>						
Crated (Shipping)	lb (kg)	174.4 (79.1)	174.4 (79.1)	207.7 (94.4)	213.8 (97.0)	224.9 (102.0)
Uncrated (Net)	lb (kg)	158.5 (71.9)	158.5 (71.9)	191.8 (87.2)	191.8 (87.0)	202.8 (92.0)

<sup>1</sup> MCA - Minimum Circuit Ampacity ; calculated as follow : 125 % of compressor R.L.Amps plus the condenser fan motor R.L.Amps.

<sup>2</sup> CFM is rated with standard air-dry coil.

<sup>3</sup> At ARI system rating conditions 80°F-DB/67°F-WB indoor & 95°F-DB outdoor.

<sup>4</sup> For uncrated, outdoor unit's width and depth do not include the size of the mounting feet. Abbreviation H = Height, W = Width, T = Thickness, Ch = Channel



## General Data

### General Data TTA 50 Hz

UNIT MODELS		TTA075RD	TTA100RD	TTA120RD	
<b>POWER CONNECTION</b>		V/ph/Hz	380-415/3/50	380-415/3/50	380-415/3/50
<b>MCA<sup>1</sup></b>		A	18.06	27.29	29.95
<b>SYSTEM DATA</b>					
Refrigerant Type		R22	R22	R22	
No. Refrigerant Circuits		1	1	1	
Refrigerant Connection Type		BRAZE	BRAZE	BRAZE	
Refrigerant Charge		lb (kg)	Holding Charge		
Suction Line OD		in (mm)	1 1/8 (28.6)	1 3/8 (34.9)	1 3/8 (34.9)
Liquid line OD		in (mm)	1/2 (12.7)	1/2 (12.7)	1/2 (12.7)
<b>CASING</b>					
Material		Galvanized & Electro-galvanized Steel			
Color		Light Gray			
Type of Insulation		-			
<b>COMPRESSOR</b>					
Compressor Type		Hermetic Scroll			
No. Used		1	1	1	
V/ph/Hz		380/3/50	380/3/50	380/3/50	
RLA/LRA		13.6 / 98	20.7 / 130	22.9 / 145	
<b>COIL</b>					
Coil Size		(H) in (mm)	32 (813)	36 (914)	36 (914)
		(L) in (mm)	68 (1727)	64 (1626)	80 (2032)
Face Area		sq ft (m <sup>2</sup> )	15.0 (1.40)	16.0 (1.48)	20.0 (1.86)
Tube Size OD		in (mm)	3/8 (9.53)	3/8 (9.53)	3/8 (9.53)
Tube Type		Plain	Inner Groove	Inner Groove	
Rows		2	2	2	
Fin Type		Uncoated Corrugate			
Fins per inch		16	16	16	
Refrigerant Flow Control		-	-	-	
<b>FAN</b>					
Fan Type		Propeller	Propeller	Propeller	
No. used		1	1	1	
Diameter		in (mm)	28 (711)	28 (711)	28 (711)
No. of Blade		4	4	4	
Pitch Angle		degree	29	29	29
Drive Type		Direct	Direct	Direct	
Nominal Airflow <sup>2</sup>		cfm (cmh)	4885 (8300)	5768 (9800)	6828 (11600)
<b>MOTOR</b>					
Motor Type		Three Phase Induction Motor			
No. of Motor		1	1	1	
Motor Output		Watt	290	420	300
No. of Speed		1	1	1	
Motor Speed		rpm	750	830	875
V/ph/Hz		380/3/50	380/3/50	380/3/50	
RLA/LRA		1.06 / 2.27	1.41 / 3.53	1.32 / 2.80	
<b>DIMENSION (HxWxD)</b>					
Uncrated (Net)		mm	1050x950x1060	1050x950x1060	1050x950x1260
<b>WEIGHT</b>					
Uncrated (Net)		kg	164	180	192

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

<sup>2</sup> CFM is rated with standard air-dry coil.



# General Data

## General Data Floor Standing Unit, 60 Hz

UNIT MODELS		MCV036B1	MCV048B1	MCV060B1	MCV090B1	MCV120B1
<b>POWER CONNECTION</b>	V/ph/Hz	200-240/1/60	200-240/1/60	200-240/1/60	200-240/1/60	200-240/1/60
<b>MCA<sup>1</sup></b>	A	2.00	2.75	3.00	4.00	5.50
<b>SYSTEM DATA</b>						
Refrigerant Type		R22	R22	R22	R22	R22
No. Refrigerant Circuits		1	1	1	1	1
Refrigerant Connection Type		Sweat	Sweat	Sweat	Sweat	Sweat
Suction Line OD	in (mm)	3/4 (19.05)	7/8 (28.58)	7/8 (28.58)	1-1/8 (28.58)	1-3/8 (34.93)
Liquid line OD	in (mm)	3/8 (9.53)	3/8 (9.53)	3/8 (9.53)	1/2 (12.7)	1/2 (12.7)
<b>CASING</b>						
Material		Galvanized & Electro-galvanized Steel				
Color		Light Gray				
Type of Insulation		PE Foam				
<b>COIL</b>						
Face Area	sq ft (m <sup>2</sup> )	3.50 (0.33)	4.50 (0.42)	5.33 (0.50)	6.58 (0.61)	8.63 (0.80)
Tube Type		Inner Grooved	Inner Grooved	Inner Grooved	Inner Grooved	Inner Grooved
Rows		3	3	4	4	4
Fin Type		Uncoated Slitted	Uncoated Slitted	Uncoated Slitted	Uncoated Slitted	Uncoated Slitted
Fins per inch		16	16	16	14	16
Refrigerant Flow Control		Capillary Tube	Capillary Tube	Capillary Tube	Expansion Valve	Expansion Valve
Drain Connection Size	in (mm)	3/4 (19.05)	3/4 (19.05)	3/4 (19.05)	3/4 (19.05)	3/4 (19.05)
Drain Connection Type		Flexible Hose	Flexible Hose	Flexible Hose	Flexible Hose	Flexible Hose
<b>FAN</b>						
Fan Type		Single Inlet Centrifugal				
No. used		1	1	1	2	2
Diameter	in (mm)	15 (381)	15 (381)	16 (406)	15 (381)	15 (381)
Width	in (mm)	7 (178)	7 (178)	7 (178)	7 (178)	7 (178)
Drive Type		Direct	Direct	Direct	Direct	Direct
<b>MOTOR</b>						
Motor Type		Permanent Split Capacitor				
No. of Motor		1	1	1	2	2
Motor Power Output	Watt	180	220	260	180	220
No. of Speed		3	3	3	3	3
Motor Speed	rpm	550/500/450	650/550/500	600/550/500	550/500/450	650/550/500
V/ph/Hz		220/1/60	220/1/60	220/1/60	220/1/60	220/1/60
RLA/LRA		1.60/1.84	2.20/2.53	2.40/2.76	1.60/1.84	2.20/2.53
<b>FILTER</b>						
Type		Polypropylene	Polypropylene	Polypropylene	Polypropylene	Polypropylene
No. used		1	1	1	2	2
<b>DIMENSION (HxWxD)</b>						
Crated (Shipping)	in (mm)	81.1x26.8x17.7 (2060x680x450)	81.1x26.8x17.7 (2060x680x450)	81.1x36.6x18.9 (2060x930x480)	81.1x50.4x18.9 (2060x1280x480)	81.1x50.4x18.9 (2060x1280x480)
Uncrated (Net)	in (mm)	74.8x23.6x14.6 (1900x600x370)	74.8x23.6x14.6 (1900x600x370)	74.8x33.4x15.7 (1900x848x400)	74.8x47.1x15.7 (1900x1196x400)	74.8x47.1x15.7 (1900x1196x400)
<b>WEIGHT</b>						
Crated (Shipping)	lb (kg)	163 (73.9)	168.5 (76.4)	225.5 (102.3)	325 (147.4)	340.5 (154.4)
Uncrated (Net)	lb (kg)	141.5 (64.2)	147 (67.7)	198 (89.8)	300.5 (136.3)	316 (143.3)

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



# General Data

## General Data TTK 60 Hz

UNIT MODELS		TTK536Q1	TTK042K1	TTK048K1	TTK060K1	TTK060K3
<b>POWER CONNECTION</b>	V/ph/Hz	220-240/1/60	220-240/1/60	220-240/1/60	220-240/3/60	220-240/3/60
<b>MCA<sup>1,3</sup> A</b>		20.1	31.6	00.0	00.0	00.0
<b>SYSTEM DATA</b>						
Refrigerant Type		R-22	R-22	R-22	R-22	R-22
No. Refrigerant Circuits		1	1	1	1	1
Refrigerant Connection Type		Flare	Flare	Sweat	Sweat	Sweat
Refrigerant Charge	lb (kg)	4.41 (2.00)	8.14 (3.70)	10.34 (4.70)	10.34 (4.70)	11.44 (5.20)
Suction Line OD	in (mm)	3/4 (19.05)	3/4 (19.05)	7/8 (22.23)	7/8 (22.23)	7/8 (22.23)
Liquid line OD	in (mm)	3/8 (9.53)	3/8 (9.53)	3/8 (9.53)	1/2 (12.7)	1/2 (12.7)
<b>COMPRESSOR</b>						
Compressor Type		Rotary	Scroll	Scroll	Scroll	Scroll
No. Used		1	1	1	1	1
V/ph/Hz		220/1/60	220/1/60	220/1/60	220/1/60	220/3/60
RLA/LRA		15.1 / 81.0	24.3 / 131.0	24.3 / 131.0	30.1 / 175.0	20.7 / 128.0
<b>COIL</b>						
Face Area	sq ft (m <sup>2</sup> )	7.29 (0.68)	7.29 (0.68)	7.29 (0.68)	7.08 (0.66)	7.08 (0.66)
Tube Size OD	in (mm)	-	5/16 (7.93)	5/16 (7.93)	5/16 (7.93)	5/16 (7.93)
Tube Size (W x T x Ch)	(mm x mm x no.)	16 x 1.8 x 18	-	-	-	-
Tube Type		Aluminum	Inn. Grv.	Inn. Grv.	Inn. Grv.	Inn. Grv.
Rows		-	2	3	3	3
No. of Tube		76	-	-	-	-
Fin Type		Uncoated	-	Uncoated Corrugated	-	-
No. of Refrigerant Path		4	-	-	-	-
Fins per inch		-	20	16	20	20
Refrigerant Flow Control		-	-	-	-	-
<b>FAN</b>						
Fan Type		Propeller	Propeller	Propeller	Propeller	Propeller
No. used		1	1	1	1	1
Diameter	in (mm)	20 (508)	20 (508)	20 (508)	20 (508)	20 (508)
No. of Blade		4	4	3	3	3
Pitch Angle	degree	30	32	30	32	32
Drive Type		Direct	Direct	Direct	Direct	Direct
Nominal Airflow <sup>2</sup>	cfm (cmh)	2130 (3619)	2130 (3619)	1903 (3233)	1903 (3233)	1903 (3233)
<b>MOTOR</b>						
Motor Type		Permanent Split Capacitor				
No. of Motor		1	1	1	1	1
Motor hp	hp (kW)	1/6 (0.104)	1/6 (0.104)	1/4 (0.165)	1/4 (0.165)	1/4 (0.165)
No. of Speed		1	1	1	1	1
Motor Speed	rpm	900	900	900	900	900
V/ph/Hz		220/1/60	220/1/60	220/1/60	220/1/60	220/1/60
RLA/LRA		1.25 / 1.53	1.25 / 1.53	0.00 / 0.00	0.00 / 0.00	0.00 / 0.00
<b>DIMENSION (HxWxD)<sup>4</sup></b>						
Crated (Shipping)	in (mm)	33.8 x 45.0 x 16.9 (858 x 1,144 x 430)				
Uncrated (Net)	in (mm)	31.3 x 40.0 x 14.2 (795 x 1,018 x 360)				
<b>WEIGHT</b>						
Crated (Shipping)	lb (kg)	174.4 (79.1)	194.9 (88.6)	213.8 (97.0)	224.9 (102.0)	224.9 (102.0)
Uncrated (Net)	lb (kg)	158.5 (71.9)	179.1 (81.4)	179.1 (81.4)	202.8 (92.0)	202.8 (92.0)

<sup>1</sup> MCA - Minimum Circuit Ampacity ; calculated as follow : 125 % of compressor R.L.Amps plus the condenser fan motor R.L.Amps.

<sup>2</sup> CFM is rated with standard air-dry coil.

<sup>3</sup> At ARI system rating conditions 80°F-DB/67°F-WB indoor & 95°F-DB outdoor.

<sup>4</sup> For uncrated, outdoor unit's width and depth do not include the size of the mounting feet.  
Abbreviation H = Height, W = Width, T = Thickness, Ch = Channel



# General Data

## General Data TTA 60 Hz

UNIT MODELS		TTA075R3	TTA100R3	TTA120R3	
<b>POWER CONNECTION</b>		V/ph/Hz	230/3/60	230/3/60	230/3/60
<b>MCA<sup>1</sup></b>		A	33.3	44.0	55.1
<b>SYSTEM DATA</b>					
Refrigerant Type			R22	R22	R22
No. Refrigerant Circuits			1	1	1
Refrigerant Connection Type			BRAZE	BRAZE	BRAZE
Refrigerant Charge		lb (kg)		Holding Charge	
Suction Line OD		in (mm)	1 1/8 (28.6)	1 3/8 (34.9)	1 3/8 (34.9)
Liquid line OD		in (mm)	1/2 (12.7)	1/2 (12.7)	1/2 (12.7)
<b>CASING</b>					
Material			Galvanized & Electro-galvanized Steel		
Color			Light Gray		
Type of Insulation			-		
<b>COMPRESSOR</b>					
Compressor Type			Hermetic Scroll		
No. Used			1	1	1
V/ph/Hz			230/3/60	230/3/60	230/3/60
RLA/LRA			25 / 164	33.6 / 231	42 / 239
<b>COIL</b>					
Coil Size		(H) in (mm)	32 (813)	36 (914)	36 (914)
		(L) in (mm)	68 (1727)	64 (1626)	80 (2032)
Face Area		sq ft (m <sup>2</sup> )	15.0 (1.40)	16.0 (1.48)	20.0 (1.86)
Tube Size OD		in (mm)	3/8 (9.53)	3/8 (9.53)	3/8 (9.53)
Tube Type			Plain	Inner Groove	Inner Groove
Rows			2	2	2
Fin Type			Uncoated Corrugate		
Fins per inch (fpf)			16 (192)	16 (192)	16 (192)
Refrigerant Flow Control			-	-	-
<b>FAN</b>					
Fan Type			Propeller	Propeller	Propeller
No. used			1	1	1
Diameter		in (mm)	28 (711)	28 (711)	28 (711)
No. of Blade			4	4	4
Pitch Angle		degree	29	29	29
Drive Type			Direct	Direct	Direct
Nominal Airflow <sup>2</sup>		cfm (cmh)	4885 (8300)	5768 (9800)	6828 (11600)
<b>MOTOR</b>					
Motor Type			Three Phase Induction Motor		
No. of Motor			1	1	1
Motor Output		Watt	250	352	521
No. of Speed			1	1	1
Motor Speed		rpm	750	820	925
V/ph/Hz			230/3/60	230/3/60	230/3/60
RLA/LRA			2.00 / 3.03	2.00 / 3.5	2.59 / 5.5
<b>DIMENSION (HxWxD)</b>					
Uncrated (Net)		mm	1050x950x1060	1050x950x1060	1050x950x1260
<b>WEIGHT</b>					
Uncrated (Net)		kg	164	180	192

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

<sup>2</sup> CFM is rated with standard air-dry coil.



# System Performance Data

## TTK536QB WITH MCV036BB AT 1200 CFM GROSS CAPACITY IN BTU/H x 1000

OUTDOOR D.B.	I.D. W.B.	GROSS CAP.	SENS. CAP. AT ENTERING D.B. TEMP.				COMPR. KW	
			72	74	76	78		
85	61	34.30	24.65	26.83	28.85	30.83	32.02	2.93
	65	37.03	20.42	22.55	24.62	26.75	28.80	3.06
	67	38.46	18.19	20.29	22.42	24.46	26.59	3.11
	71	41.30	13.59	15.74	17.77	19.97	22.02	3.24
95	61	33.35	24.32	26.34	28.48	30.24	32.00	3.18
	65	35.96	20.02	22.06	24.22	26.27	28.40	3.31
	67	37.30	17.73	19.87	21.96	24.06	26.15	3.38
	71	40.10	13.24	15.28	17.43	19.47	21.68	3.51
105	61	31.97	23.40	25.49	27.47	29.16	30.83	3.47
	65	34.55	19.19	21.26	23.38	25.42	27.54	3.60
	67	35.92	16.98	19.01	21.13	23.18	25.31	3.67
	71	38.47	14.52	14.58	16.62	18.77	20.81	3.82
115	61	30.61	22.75	24.78	26.62	28.35	29.81	3.76
	65	33.05	18.49	20.60	22.64	24.75	26.79	3.90
	67	34.32	16.25	18.43	20.40	22.54	24.58	3.97
	71	36.89	11.82	13.85	15.92	18.03	20.11	4.11

\* Dry coil condition (Gross Capacity = Sensible Capacity)  
Gross Capacity and Comp. KW are valid only for Wet Coil

Performance at the Rating Conditions of 80/67 & 95 F  
GROSS CAPACITY: 37.3 MBH  
AIRFLOW: 1200 CFM  
SYSTEM POWER: 3961 WATTS  
NOM. SYSTEM AMPS: 21.96 AMPS

## TTK536QD WITH MCV036BB AT 1200 CFM GROSS CAPACITY IN BTU/H x 1000

OUTDOOR D.B.	I.D. W.B.	GROSS CAP.	SENS. CAP. AT ENTERING D.B. TEMP.				COMPR. KW	
			72	74	76	78		
85	61	34.03	24.45	26.61	28.61	30.58	31.76	2.93
	65	36.74	20.25	22.37	24.43	26.54	28.57	3.06
	67	38.15	18.04	20.13	22.24	24.27	26.38	3.11
	71	40.97	13.48	15.62	17.63	19.81	21.84	3.24
95	61	33.08	24.13	26.13	28.25	30.00	31.75	3.18
	65	35.67	19.86	21.89	24.03	26.06	28.17	3.31
	67	37.00	17.59	19.71	21.79	23.86	25.94	3.38
	71	39.78	13.14	15.16	17.29	19.31	21.50	3.51
105	61	31.71	23.21	25.29	27.25	28.93	30.58	3.47
	65	34.28	19.04	21.09	23.19	25.21	27.32	3.60
	67	35.63	16.85	18.86	20.96	23.00	25.11	3.67
	71	38.16	14.41	14.47	16.49	18.62	20.64	3.82
115	61	30.36	22.56	24.58	26.41	28.12	29.57	3.76
	65	32.78	18.34	20.44	22.46	24.56	26.58	3.90
	67	34.04	16.12	18.29	20.24	22.36	24.38	3.97
	71	36.59	11.73	13.74	15.80	17.89	19.94	4.11

\* Dry coil condition (Gross Capacity = Sensible Capacity)  
Gross Capacity and Comp. KW are valid only for Wet Coil

Performance at the Rating Conditions of 80/67 & 95 F  
GROSS CAPACITY: 37 MBH  
AIRFLOW: 1200 CFM  
SYSTEM POWER: 3961 WATTS  
NOM. SYSTEM AMPS: 9.86 AMPS



# System Performance Data

## TTK536Q1 WITH MCV036B1 AT 1200 CFM GROSS CAPACITY IN BTU/H x 1000

OUTDOOR D.B.	I.D. W.B.	GROSS CAP.	SENS. CAP. AT ENTERING D.B. TEMP.					COMPR. KW
			72	74	76	78	80	
85	61	33.11	23.79	25.89	27.84	29.76	30.90	2.83
	65	35.74	19.71	21.76	23.76	25.82	27.80	2.95
	67	37.12	17.55	19.58	21.64	23.61	25.67	3.00
	71	39.86	13.11	15.19	17.15	19.27	21.25	3.13
95	61	32.18	23.48	25.42	27.49	29.19	30.89	3.07
	65	34.70	19.32	21.29	23.38	25.35	27.41	3.19
	67	36.00	17.11	19.18	21.20	23.22	25.24	3.26
	71	38.70	12.78	14.75	16.82	18.79	20.92	3.39
105	61	30.85	22.58	24.61	26.51	28.15	29.75	3.35
	65	33.35	18.52	20.52	22.56	24.53	26.58	3.48
	67	34.67	16.39	18.35	20.40	22.38	24.43	3.54
	71	37.13	14.02	14.08	16.04	18.11	20.08	3.68
115	61	29.54	21.96	23.91	25.70	27.36	28.77	3.62
	65	31.89	17.84	19.88	21.85	23.89	25.86	3.76
	67	33.12	15.68	17.79	19.69	21.75	23.72	3.83
	71	35.60	11.41	13.37	15.37	17.41	19.40	3.96

\* Dry coil condition (Gross Capacity = Sensible Capacity)  
Gross Capacity and Comp. KW are valid only for Wet Coil

Performance at the Rating Conditions of 80/67 & 95 F  
GROSS CAPACITY: 36 MBH  
AIRFLOW: 1200 CFM  
SYSTEM POWER: 3811 WATTS  
NOM. SYSTEM AMPS: 21.22 AMPS

## TTK042KD WITH MCV048BB AT 1400 CFM GROSS CAPACITY IN BTU/H x 1000

OUTDOOR D.B.	I.D. W.B.	GROSS CAP.	SENS. CAP. AT ENTERING D.B. TEMP.					COMPR. KW
			72	74	76	78	80	
85	61	38.63	28.08	30.56	32.85	35.11	36.46	3.50
	65	41.70	23.25	25.68	28.04	30.47	32.80	3.64
	67	43.30	20.71	23.11	25.53	27.86	30.28	3.71
	71	46.51	15.47	17.93	20.24	22.74	25.08	3.86
95	61	37.55	27.70	30.00	32.44	34.44	36.45	3.80
	65	40.49	22.80	25.13	27.59	29.91	32.34	3.95
	67	42.00	20.19	22.63	25.01	27.40	29.78	4.03
	71	45.15	15.08	17.40	19.85	22.17	24.69	4.19
105	61	36.00	26.65	29.04	31.28	33.21	35.11	4.14
	65	38.91	21.86	24.21	26.63	28.95	31.36	4.30
	67	40.45	19.34	21.65	24.07	26.40	28.83	4.38
	71	43.32	16.54	16.61	18.93	21.37	23.69	4.55
115	61	34.47	25.91	28.22	30.32	32.29	33.95	4.48
	65	37.21	21.05	23.46	25.78	28.19	30.51	4.65
	67	38.64	18.50	20.99	23.23	25.67	27.99	4.73
	71	41.54	13.46	15.78	18.13	20.54	22.90	4.90

\* Dry coil condition (Gross Capacity = Sensible Capacity)  
Gross Capacity and Comp. KW are valid only for Wet Coil

Performance at the Rating Conditions of 80/67 & 95 F  
GROSS CAPACITY: 42 MBH  
AIRFLOW: 1400 CFM  
SYSTEM POWER: 4736 WATTS  
NOM. SYSTEM AMPS: 11.42 AMPS



# System Performance Data

## TTK042K1 WITH MCV048B1 AT 1400 CFM GROSS CAPACITY IN BTU/H x 1000

OUTDOOR D.B.	I.D. W.B.	GROSS CAP.	SENS. CAP. AT ENTERING D.B. TEMP.				COMPR. KW	
			72	74	76	78		80
85	61	39.45	28.68	31.21	33.56	35.87	37.24	3.59
	65	42.59	23.75	26.23	28.64	31.12	33.50	3.74
	67	44.23	21.16	23.60	26.08	28.46	30.93	3.81
	71	47.50	15.80	18.31	20.67	23.23	25.61	3.97
95	61	38.35	28.29	30.64	33.13	35.18	37.23	3.90
	65	41.36	23.29	25.67	28.18	30.55	33.03	4.06
	67	42.90	20.62	23.12	25.55	27.98	30.42	4.14
	71	46.12	15.41	17.78	20.27	22.64	25.21	4.30
105	61	36.77	27.22	29.66	31.95	33.92	35.86	4.25
	65	39.74	22.33	24.73	27.20	29.57	32.03	4.41
	67	41.31	19.76	22.11	24.58	26.97	29.44	4.50
	71	44.25	16.89	16.97	19.34	21.83	24.20	4.67
115	61	35.21	26.46	28.82	30.97	32.98	34.68	4.60
	65	38.01	21.50	23.97	26.33	28.80	31.16	4.78
	67	39.47	18.90	21.44	23.73	26.22	28.59	4.86
	71	42.43	13.75	16.11	18.52	20.98	23.39	5.03

\* Dry coil condition (Gross Capacity = Sensible Capacity)  
Gross Capacity and Comp. KW are valid only for Wet Coil

Performance at the Rating Conditions of 80/67 & 95 F  
GROSS CAPACITY: 42.9 MBH  
AIRFLOW: 1400 CFM  
SYSTEM POWER: 4751 WATTS  
NOM. SYSTEM AMPS: 27.72 AMPS

## TTK048KD WITH MCV048BB AT 1400 CFM GROSS CAPACITY IN BTU/H x 1000

OUTDOOR D.B.	I.D. W.B.	GROSS CAP.	SENS. CAP. AT ENTERING D.B. TEMP.				COMPR. KW	
			72	74	76	78		80
85	61	46.35	32.74	35.63	38.31	40.95	42.52	3.85
	65	50.04	27.12	29.95	32.70	35.53	38.25	4.00
	67	51.96	24.16	26.95	29.77	32.49	35.32	4.08
	71	55.81	18.04	20.91	23.60	26.52	29.24	4.25
95	61	45.06	32.30	34.98	37.83	40.17	42.50	4.17
	65	48.59	26.59	29.30	32.17	34.88	37.71	4.34
	67	50.40	23.54	26.39	29.17	31.95	34.73	4.43
	71	54.18	17.59	20.30	23.15	25.85	28.79	4.60
105	61	43.20	31.08	33.86	36.48	38.73	40.94	4.55
	65	46.69	25.49	28.23	31.05	33.76	36.57	4.72
	67	48.54	22.56	25.24	28.07	30.79	33.61	4.81
	71	51.98	19.29	19.37	22.08	24.92	27.63	5.00
115	61	41.36	30.21	32.90	35.36	37.65	39.59	4.92
	65	44.65	24.55	27.36	30.06	32.88	35.58	5.11
	67	46.37	21.58	24.48	27.09	29.93	32.64	5.20
	71	49.85	15.70	18.40	21.15	23.95	26.70	5.39

\* Dry coil condition (Gross Capacity = Sensible Capacity)  
Gross Capacity and Comp. KW are valid only for Wet Coil

Performance at the Rating Conditions of 80/67 & 95 F  
GROSS CAPACITY: 50.4 MBH  
AIRFLOW: 1400 CFM  
SYSTEM POWER: 5317 WATTS  
NOM. SYSTEM AMPS: 13.00 AMPS





# System Performance Data

## TTK048K1 WITH MCV048B1 AT 1400 CFM GROSS CAPACITY IN BTU/H x 1000

OUTDOOR D.B.	I.D. W.B.	GROSS CAP.	SENS. CAP. AT ENTERING D.B. TEMP.				COMPR. KW	
			72	74	76	78		80
85	61	44.14	31.18	33.94	36.49	39.00	40.50	3.71
	65	47.66	25.83	28.52	31.14	33.84	36.43	3.86
	67	49.49	23.01	25.66	28.35	30.94	33.63	3.93
	71	53.15	17.18	19.91	22.47	25.26	27.85	4.09
95	61	42.91	30.76	33.32	36.03	38.25	40.48	4.02
	65	46.27	25.32	27.91	30.64	33.22	35.92	4.18
	67	48.00	22.42	25.13	27.78	30.43	33.07	4.27
105	61	41.14	29.60	32.25	34.74	36.89	38.99	4.39
	65	44.47	24.28	26.89	29.57	32.15	34.83	4.55
	67	46.22	21.48	24.04	26.73	29.32	32.01	4.64
115	61	49.51	18.37	18.45	21.03	23.74	26.32	4.82
	61	39.39	28.77	31.34	33.67	35.86	37.71	4.74
	65	42.53	23.38	26.06	28.63	31.31	33.89	4.93
	67	44.16	20.55	23.32	25.80	28.51	31.09	5.01
	71	47.47	14.95	17.52	20.14	22.81	25.43	5.19

\* Dry coil condition (Gross Capacity = Sensible Capacity)  
Gross Capacity and Comp. KW are valid only for Wet Coil

Performance at the Rating Conditions of 80/67 & 95 F  
GROSS CAPACITY: 48 MBH  
AIRFLOW: 1400 CFM  
SYSTEM POWER: 4878 WATTS  
NOM. SYSTEM AMPS: 27.8 AMPS

## TTK060KD WITH MCV060BB AT 1600 CFM GROSS CAPACITY IN BTU/H x 1000

OUTDOOR D.B.	I.D. W.B.	GROSS CAP.	SENS. CAP. AT ENTERING D.B. TEMP.				COMPR. KW	
			72	74	76	78		80
85	61	55.18	38.86	42.30	45.48	48.61	50.47	4.56
	65	59.57	32.19	35.55	38.82	42.18	45.40	4.75
	67	61.86	28.67	31.99	35.34	38.57	41.92	4.84
	71	66.44	21.42	24.82	28.01	31.48	34.71	5.03
95	61	53.64	38.34	41.52	44.90	47.68	50.45	4.95
	65	57.84	31.56	34.78	38.18	41.41	44.76	5.15
	67	60.00	27.95	31.33	34.62	37.92	41.22	5.25
105	61	64.50	20.88	24.09	27.47	30.69	34.17	5.45
	61	51.42	36.89	40.19	43.30	45.98	48.60	5.39
	65	55.58	30.26	33.51	36.86	40.07	43.41	5.60
115	67	57.78	26.77	29.97	33.32	36.55	39.90	5.70
	71	61.88	22.89	22.99	26.21	29.58	32.80	5.93
	61	49.24	35.86	39.06	41.97	44.70	47.00	5.83
	65	53.16	29.14	32.48	35.69	39.02	42.23	6.06
	67	55.20	25.61	29.06	32.16	35.53	38.75	6.16
	71	59.34	18.64	21.84	25.10	28.43	31.69	6.38

\* Dry coil condition (Gross Capacity = Sensible Capacity)  
Gross Capacity and Comp. KW are valid only for Wet Coil

Performance at the Rating Conditions of 80/67 & 95 F  
GROSS CAPACITY: 60 MBH  
AIRFLOW: 1600 CFM  
SYSTEM POWER: 6349 WATTS  
NOM. SYSTEM AMPS: 15.18 AMPS



# System Performance Data

## TTK060K1 WITH MCV060B1 AT 1600 CFM GROSS CAPACITY IN BTU/H x 1000

OUTDOOR D.B.	I.D. W.B.	GROSS CAP.	SENS. CAP. AT ENTERING D.B. TEMP.				COMPR. KW	
			72	74	76	78 80		
85	61	56.6	39.8	43.4	46.6	49.8	51.7	4.8
	65	61.1	33.0	36.4	39.8	43.2	46.5	5.0
	67	63.4	29.4	32.8	36.2	39.5	43.0	5.1
	71	68.1	22.0	25.4	28.7	32.3	35.6	5.3
95	61	55.0	39.3	42.6	46.0	48.9	51.7	5.2
	65	59.3	32.3	35.7	39.1	42.4	45.9	5.4
	67	61.5	28.6	32.1	35.5	38.9	42.3	5.5
	71	66.1	21.4	24.7	28.2	31.5	35.0	5.7
105	61	52.7	37.8	41.2	44.4	47.1	49.8	5.7
	65	57.0	31.0	34.4	37.8	41.1	44.5	5.9
	67	59.2	27.4	30.7	34.2	37.5	40.9	6.0
	71	63.4	23.5	23.6	26.9	30.3	33.6	6.2
115	61	50.5	36.8	40.0	43.0	45.8	48.2	6.1
	65	54.5	29.9	33.3	36.6	40.0	43.3	6.4
	67	56.6	26.3	29.8	33.0	36.4	39.7	6.5
	71	60.8	19.1	22.4	25.7	29.1	32.5	6.7

\* Dry coil condition (Gross Capacity = Sensible Capacity)  
Gross Capacity and Comp. KW are valid only for Wet Coil

Performance at the Rating Conditions of 80/67 & 95 F  
GROSS CAPACITY: 60 MBH  
AIRFLOW: 1600 CFM  
SYSTEM POWER: 6349 WATTS  
NOM. SYSTEM AMPS: 15.2 AMPS

## TTK060K3 WITH MCV060B1 AT 1400 CFM GROSS CAPACITY IN BTU/H x 1000

OUTDOOR D.B.	I.D. W.B.	GROSS CAP	SENS. CAP. AT ENTERING D.B. TEMP.				COMPR. KW	
			72	74	76	78 80		
85	61	56.8	40.8	44.4	47.7	51.0	53.0	4.69
	65	61.4	33.8	37.3	40.7	44.3	47.6	4.88
	67	63.7	30.1	33.6	37.1	40.5	44.0	4.97
	71	68.4	22.5	26.0	29.4	33.0	36.4	5.18
95	61	55.2	40.2	43.6	47.1	50.0	53.0	5.09
	65	59.6	33.1	36.5	40.1	43.5	47.0	5.29
	67	61.8	29.3	32.9	36.3	39.8	43.3	5.40
	71	66.4	21.9	25.3	28.8	32.2	35.9	5.61
105	61	53.0	38.7	42.2	45.4	48.3	51.0	5.55
	65	57.3	31.8	35.2	38.7	42.1	45.6	5.76
	67	59.5	28.1	31.4	35.0	38.4	41.9	5.86
	71	63.7	24.0	24.1	27.5	31.0	34.4	6.10
115	61	50.7	37.6	41.0	44.0	46.9	49.3	6.00
	65	54.8	30.6	34.1	37.5	41.0	44.3	6.23
	67	56.9	26.9	30.5	33.8	37.3	40.7	6.34
	71	61.1	19.6	22.9	26.3	29.8	33.3	6.57

\* Dry coil condition (Gross Capacity = Sensible Capacity)  
Gross Capacity and Comp. KW are valid only for Wet Coil

Performance at the Rating Conditions of 80/67 & 95 F  
GROSS CAPACITY: 61.8 MBH  
AIRFLOW: 1400 CFM  
SYSTEM POWER: 6128 WATTS  
NOM. SYSTEM AMPS: 24.4 AMPS



# System Performance Data

## TTA075RD WITH MCV090BB AT 2000 CFM GROSS CAPACITY IN BTU/H x 1000

OUTDOOR D.B.	I.D. W.B.	GROSS CAP.	SENS. CAP. AT ENTERING D.B. TEMP.				COMPR. KW	
			72	74	76	78		80
85	61	68.97	49.50	53.87	57.92	61.91	64.28	6.05
	65	74.46	41.00	45.28	49.44	53.72	57.82	6.30
	67	77.33	36.52	40.74	45.01	49.12	53.39	6.41
	71	83.05	27.28	31.61	35.68	40.10	44.21	6.68
95	61	67.05	48.84	52.89	57.19	60.73	64.26	6.56
	65	72.30	40.20	44.30	48.63	52.74	57.02	6.83
	67	75.00	35.60	39.90	44.10	48.30	52.50	6.97
	71	80.63	26.59	30.68	34.99	39.08	43.52	7.24
105	61	64.28	46.98	51.19	55.15	58.56	61.90	7.15
	65	69.48	38.54	42.69	46.94	51.03	55.29	7.42
	67	72.23	34.10	38.17	42.43	46.55	50.82	7.56
	71	77.35	29.16	29.28	33.38	37.68	41.77	7.86
115	61	61.55	45.67	49.74	53.46	56.93	59.86	7.74
	65	66.45	37.12	41.37	45.45	49.70	53.79	8.04
	67	69.00	32.62	37.01	40.96	45.25	49.35	8.18
	71	74.18	23.74	27.81	31.97	36.21	40.37	8.47

\* Dry coil condition (Gross Capacity = Sensible Capacity)  
Gross Capacity and Comp. KW are valid only for Wet Coil

Performance at the Rating Conditions of 80/67 & 95 F  
GROSS CAPACITY: 75 MBH  
AIRFLOW: 2000 CFM  
SYSTEM POWER: 8261 WATTS  
NOM. SYSTEM AMPS: 18.22 AMPS

## TTA075R3 WITH MCV090B1 AT 2000 CFM GROSS CAPACITY IN BTU/H x 1000

OUTDOOR D.B.	I.D. W.B.	GROSS CAP.	SENS. CAP. AT ENTERING D.B. TEMP.				COMPR. KW	
			72	74	76	78		80
85	61	71.0	51.0	55.5	59.7	63.8	66.2	6.11
	65	76.7	42.2	46.6	50.9	55.3	59.6	6.36
	67	79.6	37.6	42.0	46.4	50.6	55.0	6.48
	71	85.5	28.1	32.6	36.7	41.3	45.5	6.75
95	61	69.1	50.3	54.5	58.9	62.5	66.2	6.63
	65	74.5	41.4	45.6	50.1	54.3	58.7	6.90
	67	77.3	36.7	41.1	45.4	49.7	54.1	7.04
	71	83.0	27.4	31.6	36.0	40.3	44.8	7.31
105	61	66.2	48.4	52.7	56.8	60.3	63.8	7.23
	65	71.6	39.7	44.0	48.4	52.6	57.0	7.50
	67	74.4	35.1	39.3	43.7	47.9	52.3	7.65
	71	79.7	30.0	30.2	34.4	38.8	43.0	7.95
115	61	63.4	47.0	51.2	55.1	58.6	61.7	7.82
	65	68.4	38.2	42.6	46.8	51.2	55.4	8.12
	67	71.1	33.6	38.1	42.2	46.6	50.8	8.26
	71	76.4	24.4	28.6	32.9	37.3	41.6	8.56

\* Dry coil condition (Gross Capacity = Sensible Capacity)  
Gross Capacity and Comp. KW are valid only for Wet Coil

Performance at the Rating Conditions of 80/67 & 95 F  
GROSS CAPACITY: 77.3 MBH  
AIRFLOW: 2000 CFM  
SYSTEM POWER: 8319 WATTS  
NOM. SYSTEM AMPS: 30.2 AMPS



## System Performance Data

### TTA100RD WITH MCV090BB AT 2000 CFM GROSS CAPACITY IN BTU/H x 1000

OUTDOOR D.B.	I.D. W.B.	GROSS CAP.	SENS. CAP. AT ENTERING D.B. TEMP.				COMPR. KW	
			72	74	76	78		80
85	61	91.97	62.23	67.72	72.81	77.82	80.81	7.78
	65	99.29	51.54	56.92	62.15	67.53	72.69	8.11
	67	103.10	45.91	51.21	56.58	61.75	67.12	8.26
	71	110.73	34.29	39.74	44.85	50.41	55.58	8.60
95	61	89.40	61.40	66.49	71.90	76.34	80.78	8.45
	65	96.40	50.53	55.69	61.14	66.30	71.68	8.79
	67	100.00	44.75	50.16	55.44	60.72	66.00	8.97
	71	107.50	33.43	38.57	43.99	49.13	54.71	9.32
105	61	85.71	59.06	64.35	69.33	73.61	77.82	9.21
	65	92.64	48.45	53.66	59.01	64.16	69.51	9.56
	67	96.30	42.87	47.98	53.35	58.52	63.89	9.74
	71	103.14	36.66	36.81	41.96	47.37	52.52	10.12
115	61	82.06	57.42	62.54	67.20	71.57	75.25	9.96
	65	88.60	46.66	52.00	57.14	62.48	67.62	10.35
	67	92.00	41.01	46.53	51.49	56.89	62.04	10.53
	71	98.90	29.84	34.97	40.19	45.52	50.75	10.90

\* Dry coil condition (Gross Capacity = Sensible Capacity)  
Gross Capacity and Comp. KW are valid only for Wet Coil

Performance at the Rating Conditions of 80/67 & 95 F  
GROSS CAPACITY: 100 MBH  
AIRFLOW: 2000 CFM  
SYSTEM POWER: 10436 WATTS  
NOM. SYSTEM AMPS: 25.67 AMPS

### TTA100R3 WITH MCV090B1 AT 2000 CFM GROSS CAPACITY IN BTU/H x 1000

OUTDOOR D.B.	I.D. W.B.	GROSS CAP.	SENS. CAP. AT ENTERING D.B. TEMP.				COMPR. KW	
			72	74	76	78		80
85	61	94.7	64.1	69.8	75.0	80.2	83.2	7.99
	65	102.3	53.1	58.6	64.0	69.6	74.9	8.32
	67	106.2	47.3	52.8	58.3	63.6	69.1	8.47
	71	114.1	35.3	40.9	46.2	51.9	57.2	8.82
95	61	92.1	63.2	68.5	74.1	78.6	83.2	8.67
	65	99.3	52.0	57.4	63.0	68.3	73.8	9.02
	67	103.0	46.1	51.7	57.1	62.5	68.0	9.20
	71	110.7	34.4	39.7	45.3	50.6	56.4	9.56
105	61	88.3	60.8	66.3	71.4	75.8	80.2	9.45
	65	95.4	49.9	55.3	60.8	66.1	71.6	9.81
	67	99.2	44.2	49.4	54.9	60.3	65.8	9.99
	71	106.2	37.8	37.9	43.2	48.8	54.1	10.39
115	61	84.5	59.1	64.4	69.2	73.7	77.5	10.22
	65	91.3	48.1	53.6	58.9	64.4	69.7	10.62
	67	94.8	42.2	47.9	53.0	58.6	63.9	10.80
	71	101.9	30.7	36.0	41.4	46.9	52.3	11.19

\* Dry coil condition (Gross Capacity = Sensible Capacity)  
Gross Capacity and Comp. KW are valid only for Wet Coil

Performance at the Rating Conditions of 80/67 & 95 F  
GROSS CAPACITY: 103 MBH  
AIRFLOW: 2000 CFM  
SYSTEM POWER: 10525 WATTS  
NOM. SYSTEM AMPS: 38.80 AMPS



# System Performance Data

## TTA120RD WITH MCV120BB AT 2400 CFM GROSS CAPACITY IN BTU/H x 1000

OUTDOOR D.B.	I.D. W.B.	GROSS CAP.	SENS. CAP. AT ENTERING D.B. TEMP.			COMPR. KW		
			72	74	76			
85	61	110.36	74.67	81.27	87.38	93.39	96.98	8.54
	65	119.14	61.85	68.30	74.58	81.04	87.23	8.89
	67	123.72	55.09	61.46	67.90	74.10	80.55	9.06
	71	132.88	41.15	47.69	53.82	60.49	66.69	9.43
95	61	107.28	73.68	79.78	86.28	91.61	96.94	9.26
	65	115.68	60.64	66.83	73.37	79.56	86.01	9.64
	67	120.00	53.70	60.19	66.53	72.86	79.20	9.84
	71	129.00	40.12	46.29	52.79	58.96	65.66	10.22
105	61	102.85	70.87	77.22	83.20	88.34	93.38	10.10
	65	111.17	58.14	64.39	70.82	76.99	83.41	10.48
	67	115.56	51.44	57.58	64.02	70.23	76.67	10.68
	71	123.76	43.99	44.18	50.35	56.84	63.02	11.10
115	61	98.48	68.90	75.04	80.64	85.88	90.31	10.93
	65	106.32	55.99	62.40	68.57	74.98	81.15	11.35
	67	110.40	49.21	55.84	61.79	68.27	74.45	11.55
	71	118.68	35.81	41.96	48.23	54.63	60.90	11.96

\* Dry coil condition (Gross Capacity = Sensible Capacity)  
Gross Capacity and Comp. KW are valid only for Wet Coil

Performance at the Rating Conditions of 80/67 & 95 F  
GROSS CAPACITY: 120 MBH  
AIRFLOW: 2400 CFM  
SYSTEM POWER: 11388 WATTS  
NOM. SYSTEM AMPS: 28.78 AMPS

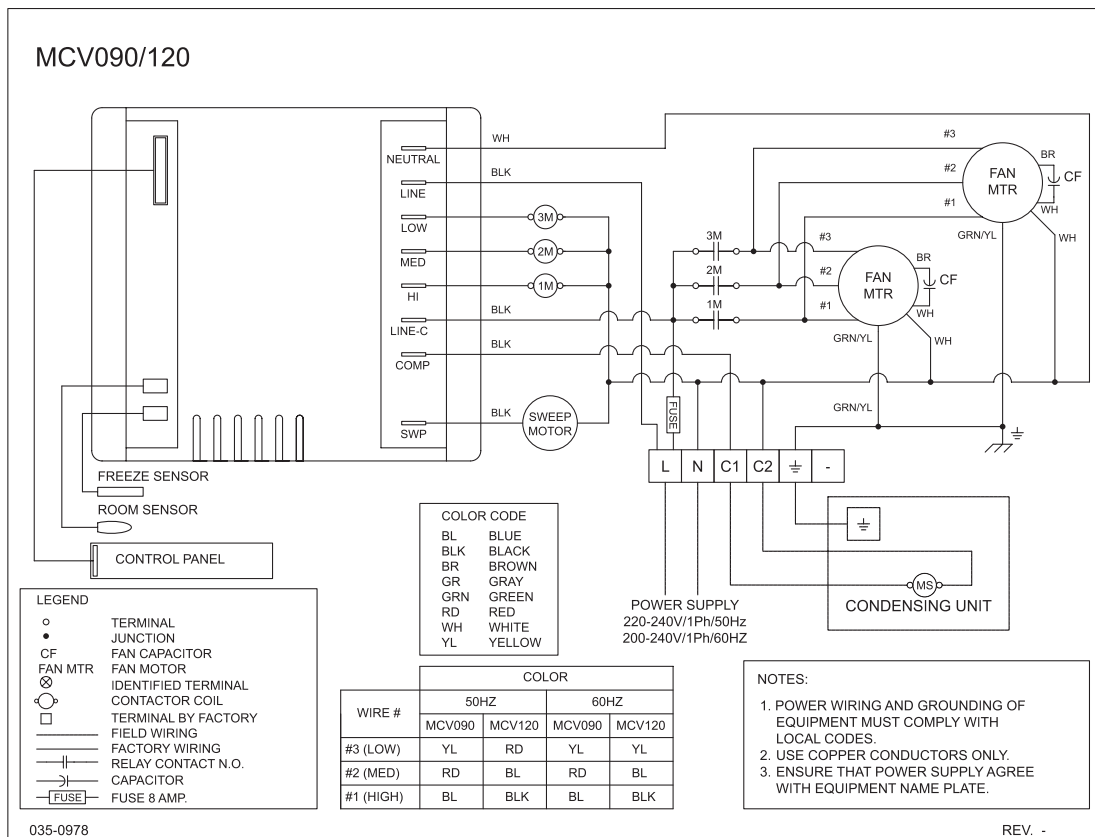
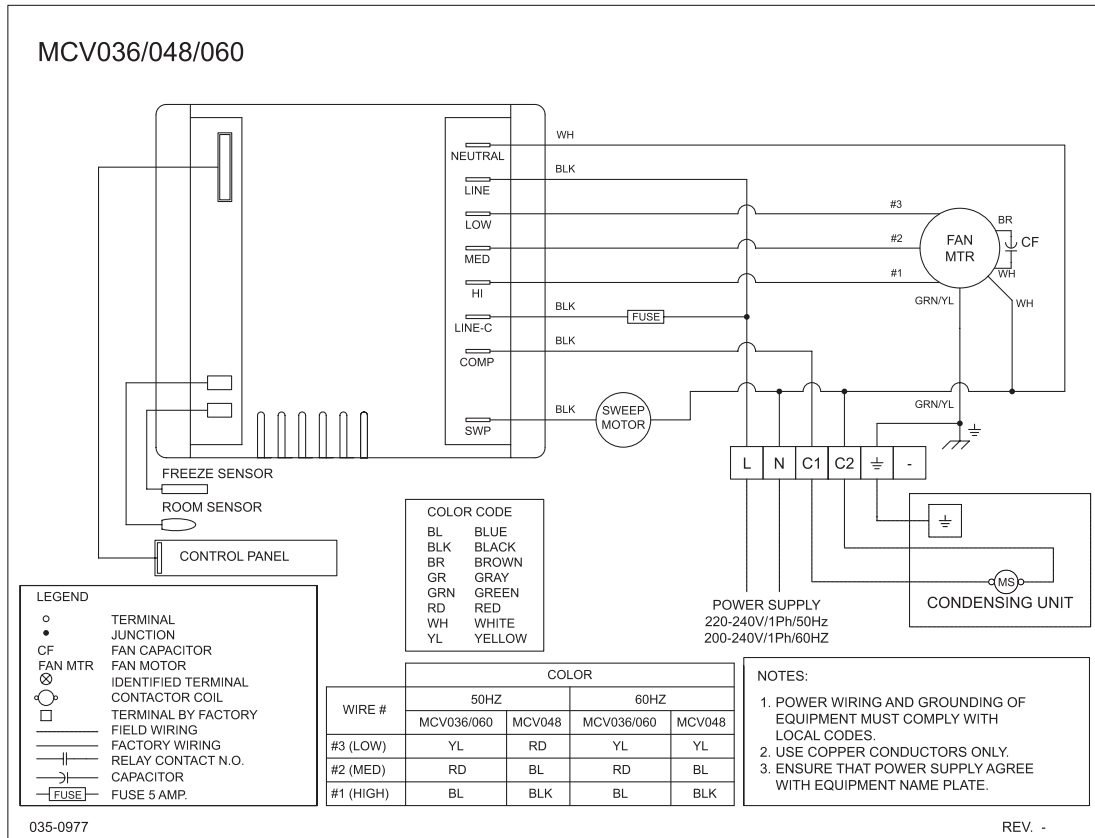
## TTA120R3 WITH MCV120B1 AT 2400 CFM GROSS CAPACITY IN BTU/H x 1000

OUTDOOR D.B.	I.D. W.B.	GROSS CAP.	SENS. CAP. AT ENTERING D.B. TEMP.			COMPR. KW		
			72	74	76			
85	61	113.7	76.9	83.7	90.0	96.2	99.9	9.46
	65	122.7	63.7	70.4	76.8	83.5	89.8	9.85
	67	127.4	56.7	63.3	69.9	76.3	83.0	10.04
	71	136.9	42.4	49.1	55.4	62.3	68.7	10.45
95	61	110.5	75.9	82.2	88.9	94.4	99.8	10.27
	65	119.2	62.5	68.8	75.6	81.9	88.6	10.68
	67	123.6	55.3	62.0	68.5	75.0	81.6	10.90
	71	132.9	41.3	47.7	54.4	60.7	67.6	11.33
105	61	105.9	73.0	79.5	85.7	91.0	96.2	11.19
	65	114.5	59.9	66.3	72.9	79.3	85.9	11.62
	67	119.0	53.0	59.3	65.9	72.3	79.0	11.84
	71	127.5	45.3	45.5	51.9	58.5	64.9	12.31
115	61	101.4	59.1	64.4	69.2	73.7	77.5	10.22
	65	109.5	57.7	64.3	70.6	77.2	83.6	12.58
	67	113.7	50.7	57.5	63.6	70.3	76.7	12.80
	71	122.2	36.7	43.2	49.7	56.3	62.7	13.25

\* Dry coil condition (Gross Capacity = Sensible Capacity)  
Gross Capacity and Comp. KW are valid only for Wet Coil

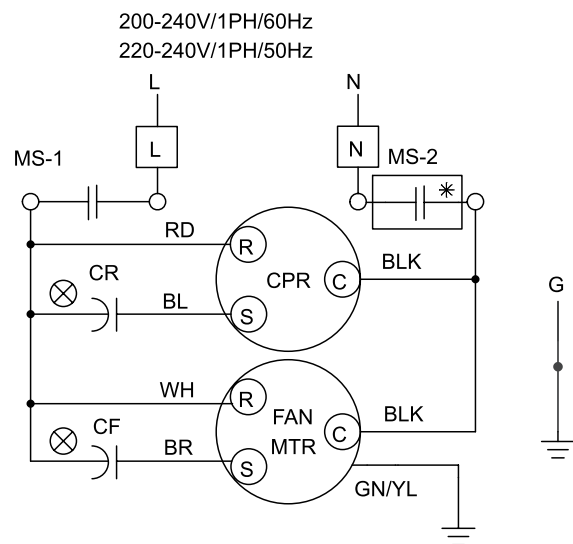
Performance at the Rating Conditions of 80/67 & 95 F  
GROSS CAPACITY: 123 MBH  
AIRFLOW: 2400 CFM  
SYSTEM POWER: 12552 WATTS  
NOM. SYSTEM AMPS: 49.00 AMPS

# MCV Wiring Diagram



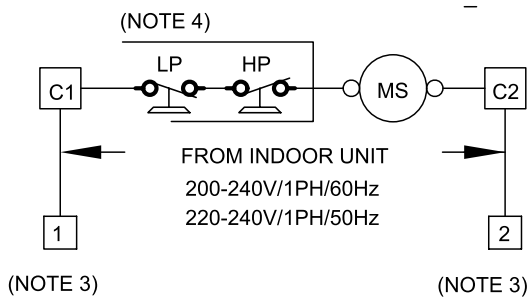
# TTK Wiring Diagram

## TTK512PB-530PB/P1 TTK536KB/K1



### LEGEND

CPR	COMPRESSOR
CF	FAN CAPACITOR
CR	COMPRESSOR RUN CAPACITOR
FAN MTR	FAN MOTOR
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
⊖	LOW PRESSURE SENSOR
⊕	HIGH PRESSURE SENSOR



### COLOR CODE

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

\* APPLY FOR DOUBLE POLE CONTACTOR ONLY  
(FOR SINGLE POLE CONTACTOR, CONNECT ELECTRIC LINE FROM COMPRESSOR-C AND FAN MOTOR-C DIRECT TO TERMINAL-N)

### NOTES:

1. POWER WIRING AND GROUNDING OF EQUIPMENT MUST COMPLY WITH LOCAL CODES.
2. USE COPPER CONDUCTORS ONLY.
3. TERMINALS AND [1] ARE [2] LOCATED ON INDOOR TERMINAL BOARD OF INDOOR UNITS.
4. HIGH & LOW PRESSURE SENSOR AVAILABLE IN OPTION MODEL.

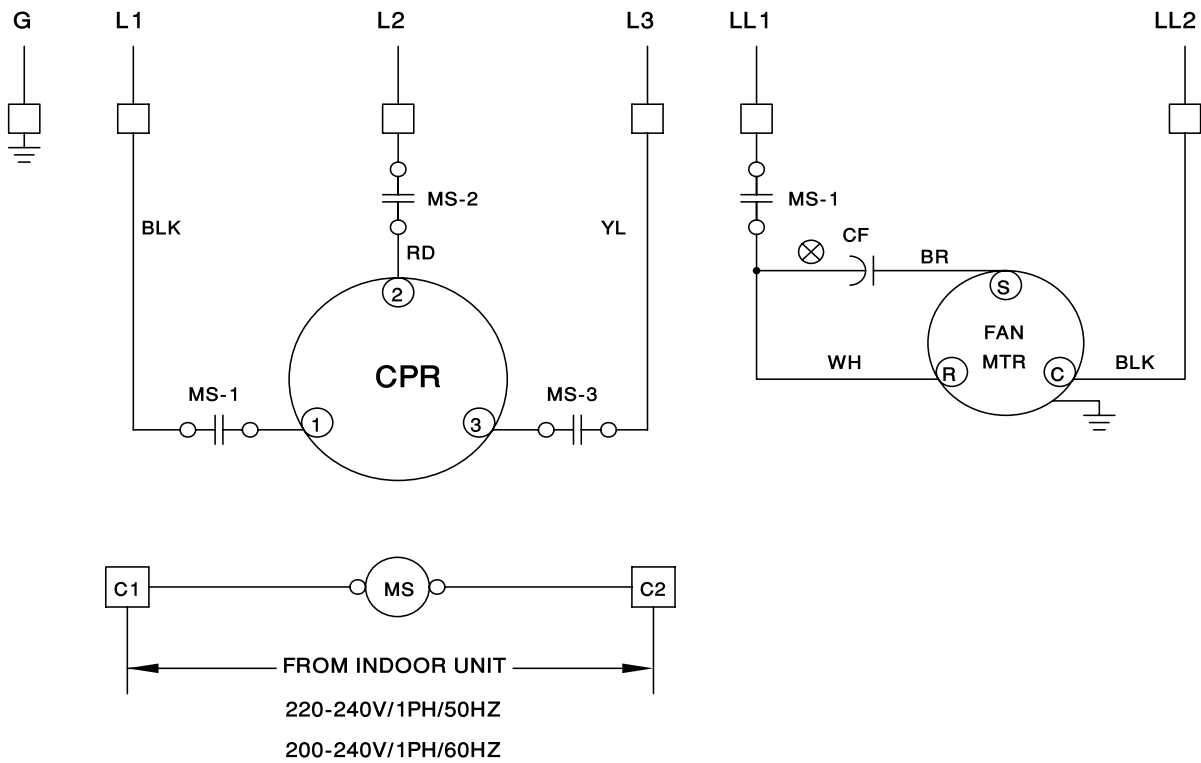


# TTK Wiring Diagram

## TTK536-042KD/K4

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

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



### LEGEND

CPR	COMPRESSOR
CF	FAN CAPACITOR
FAN MTR	FAN MOTOR
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

### NOTES:

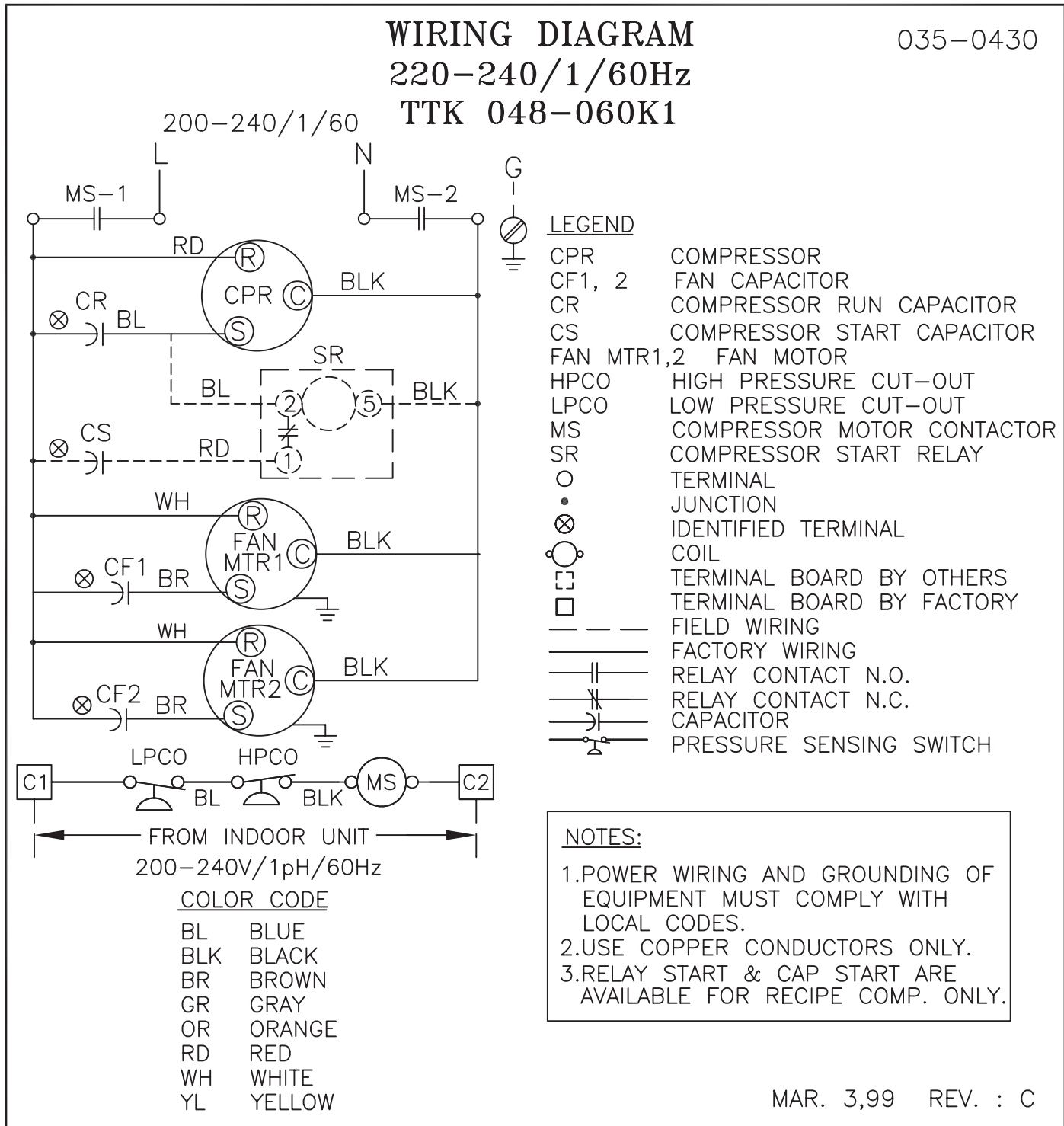
1. POWER WIRING AND GROUNDING OF EQUIPMENT MUST COMPLY WITH LOCAL CODES.
2. USE COPPER CONDUCTORS ONLY.
3. THREE PHASE CONDENSING UNITS REQUIRE TWO POWER SUPPLY SOURCES AS SHOWN.

### COLOR CODE

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



# TTK Wiring Diagram



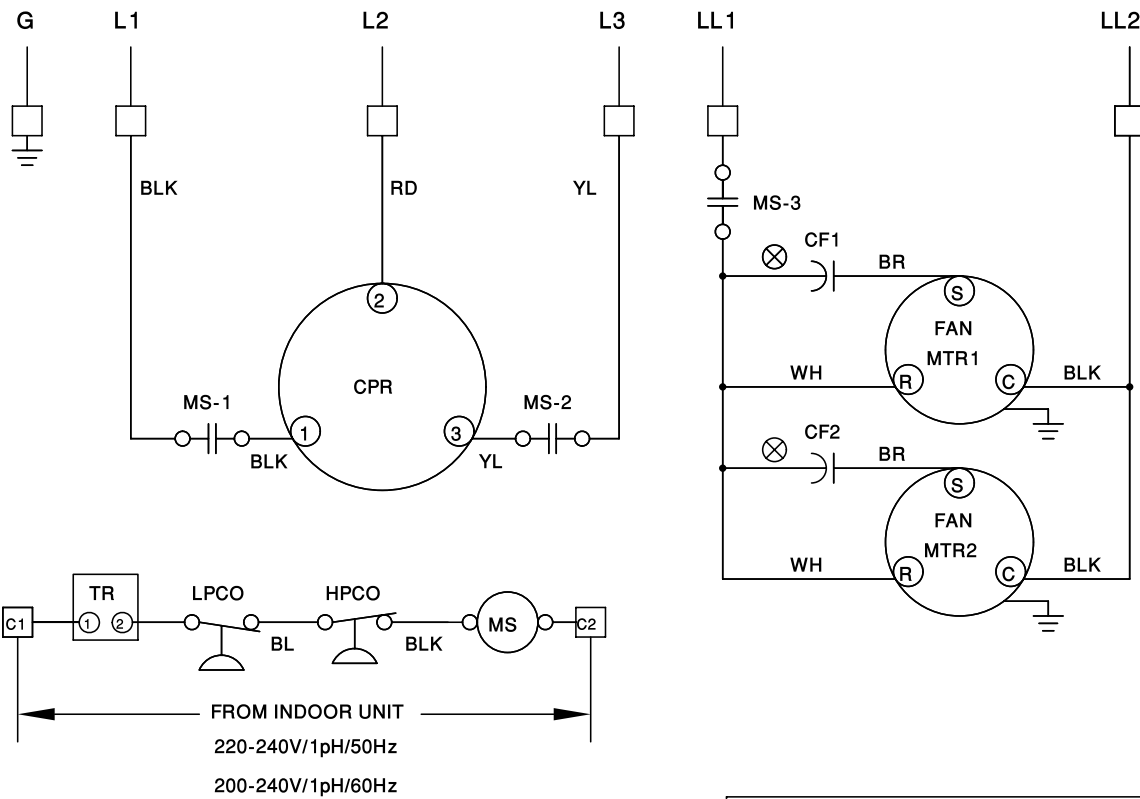


# TTK Wiring Diagram

## TTK048-060KD/K4 TTK060K3

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
TR	RELAY TIME DELAY 3.5 MIN
○	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.

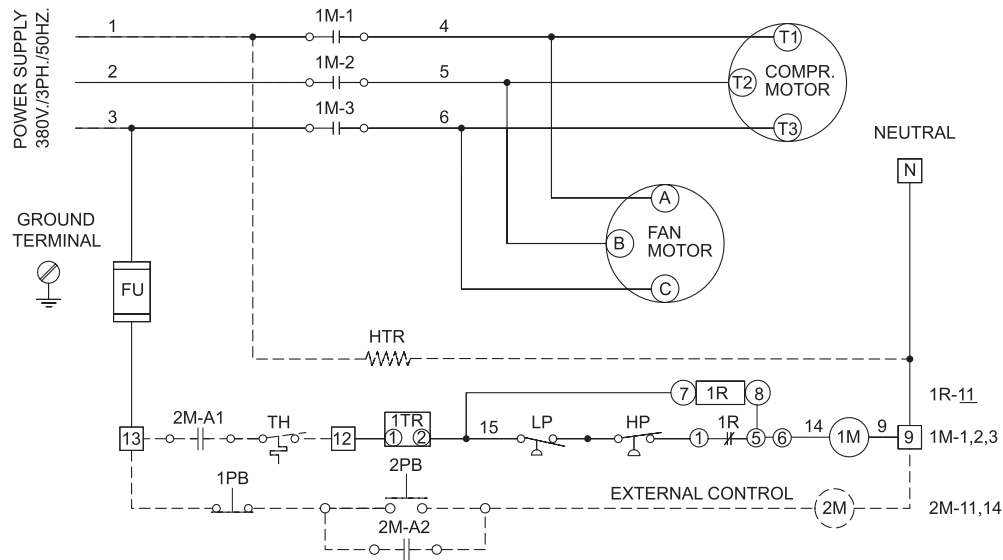
### COLOR CODE

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

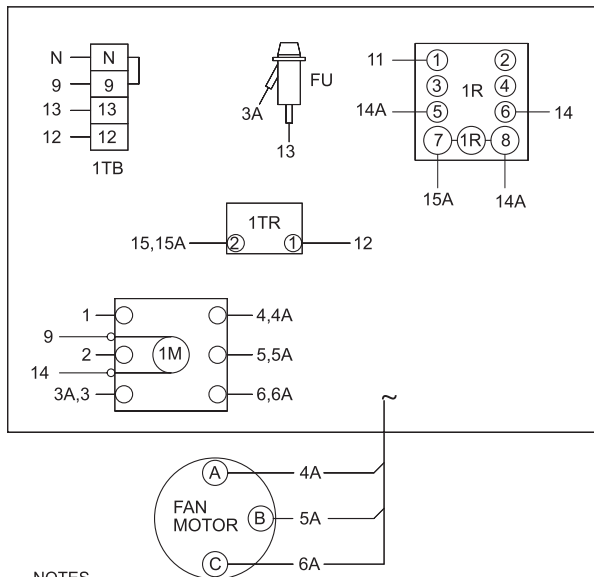
# TTA Wiring Diagram

TTA 075, 100, 120 RD

## ELEMENTARY DIAGRAM



## CONNECTION DIAGRAM



### NOTES

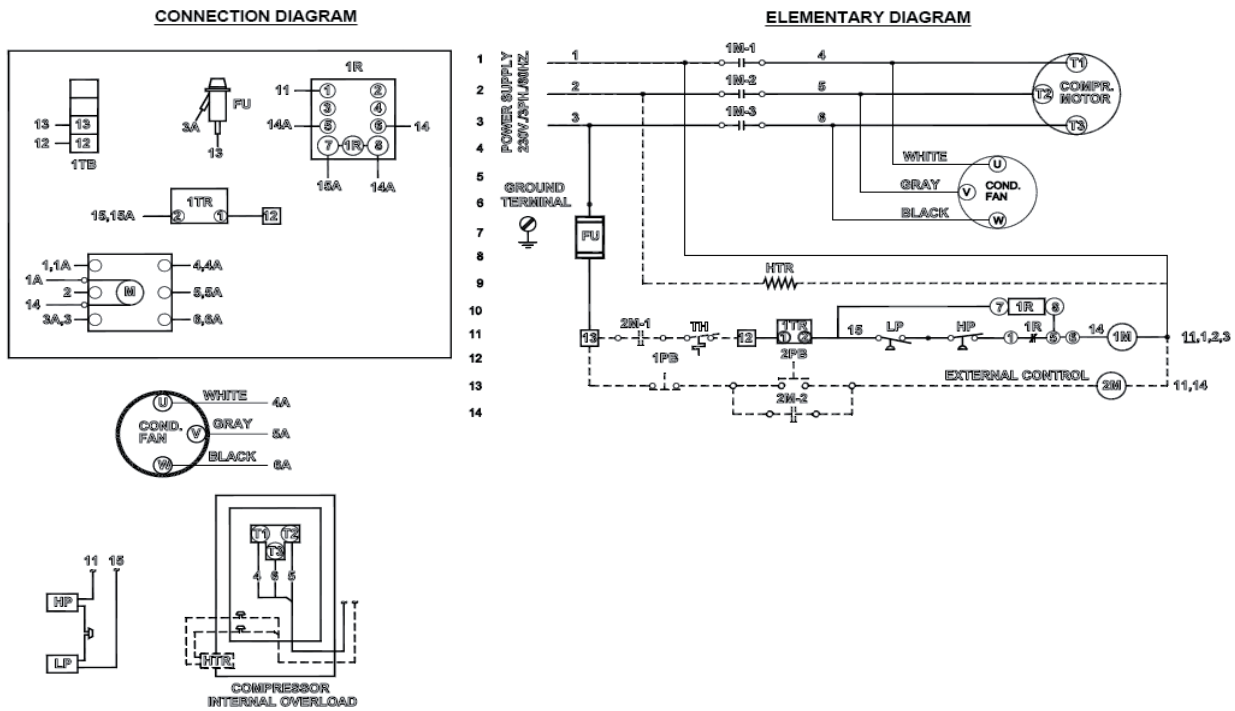
- 1 ALL FIELD WIRING TO BE IN ACCORDANCE WITH NATIONAL ELECTRIC CODE (N.E.C.) CANADIAN ELECTRIC CODE AND/OR LOCAL STATE AND CITY CODES. PROVIDE DISCONNECTS FOR ALL POWER SUPPLIES.
- 2 DRAWING PRACTICES AND SYMBOLS ARE IN ACCORDANCE WITH AIR CONDITIONING & REFRIGERATION INSTITUTE (ARI) GRAPHIC ELECTRICAL 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.

### LEGEND

- FU FUSE 5 AMP.
- HP CONTROL, HIGH PRESS. (OPEN : 398 PSIG, CLOSE : 313 PSIG)
- LP CONTROL, LOW PRESS. (OPEN : 27 PSIG, CLOSE : 46 PSIG)
- 1M CONTACTOR, COMPRESSOR
- 1R RELAY, CONTROL LOCKOUT
- HTR HEATER, CRANKCASE.
- 2M CONTACTOR, EVAP. BLOWER MOTOR
- TH THERMOSTAT
- 1TB-TERMINAL BLOCK CONTROL CIRCUIT
- FACTORY WIRING & DEVICES BY MFR.
- - - - FIELD WIRING (OPTION)
- 1TR RELAY, TIME DELAY 3 MIN.
- 1PB, 2PB SWITCH PUSH BUTTON
- A1, A2 AUXILIARY CONTACT(N.O.) OF 2M

# TTA Wiring Diagram

TTA 075, 100, 120 R300



## NOTES

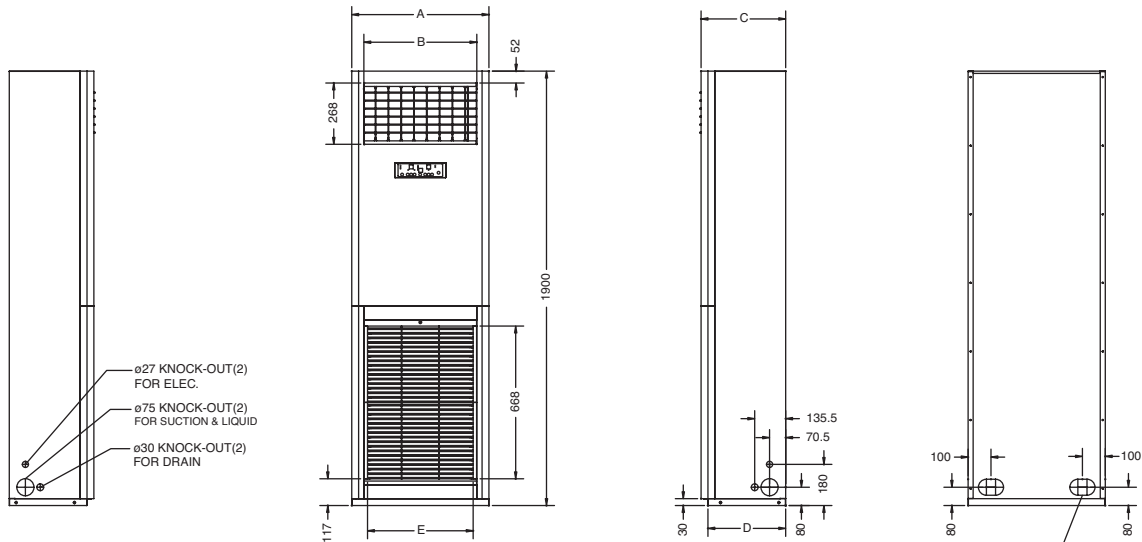
- 1 ALL FIELD WIRING TO BE IN ACCORDANCE WITH NATIONAL ELECTRIC CODE (N.E.C.) CANADIAN ELECTRIC CODE AND/OR LOCAL STATE AND CITY CODES. PROVIDE DISCONNECTS FOR ALL POWER SUPPLIES.
- 2 DRAWING PRACTICES AND SYMBOLS ARE IN ACCORDANCE WITH AIR CONDITIONING & REFRIGERATION INSTITUTE (ARI) GRAPHIC ELECTRICAL 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.

## LEGEND

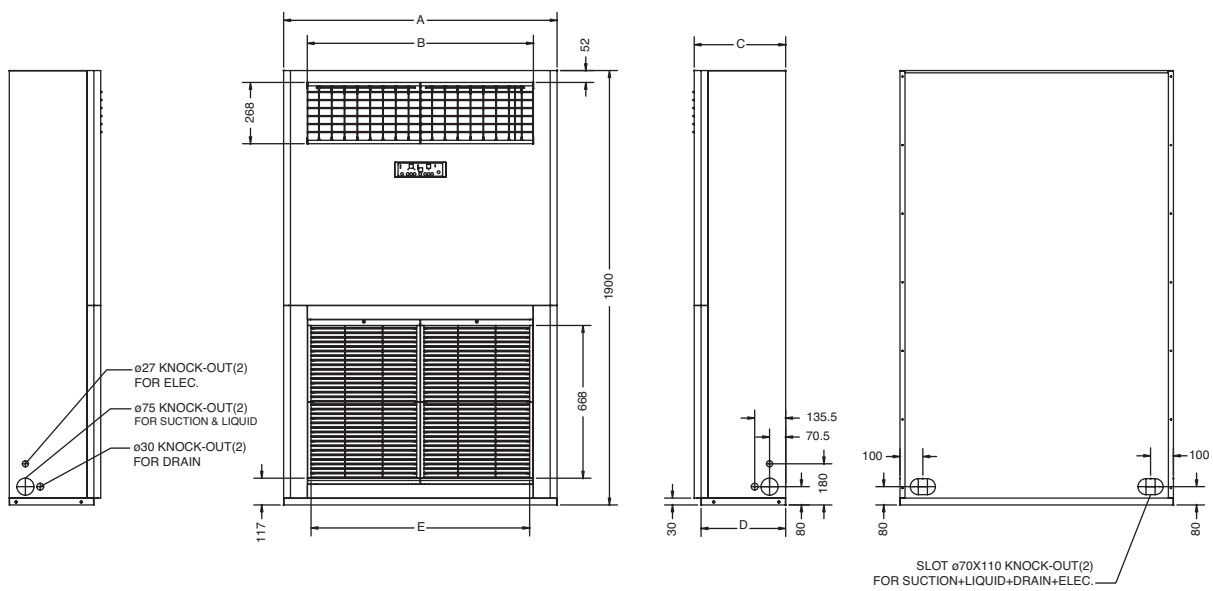
- FU FUSE 5 AMP.
- HP CONTROL, HIGH PRESS.  
(OPEN : 398 PSIG, CLOSE : 310 PSIG)
- LP CONTROL, LOW PRESS.  
(OPEN : 27 PSIG, CLOSE : 45.5 PSIG)
- 1M CONTACTOR, COMPR
- 1R RELAY, CONTROL LOCKOUT
- 1RC CAPACITOR, RUN, FAN MOTORS.
- HTR HEATER, CRANKCASE.
- 2M CONTACTOR, EVAP, BLOWER MOTOR
- TH THERMOSTAT
- 1A, 2A AUXILIARY N.O. CONTACT
- 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

# MCV Dimensional Data

## MCV036/048/060



## MCV090/120



### FOR EXPORT MODEL (50/60Hz)

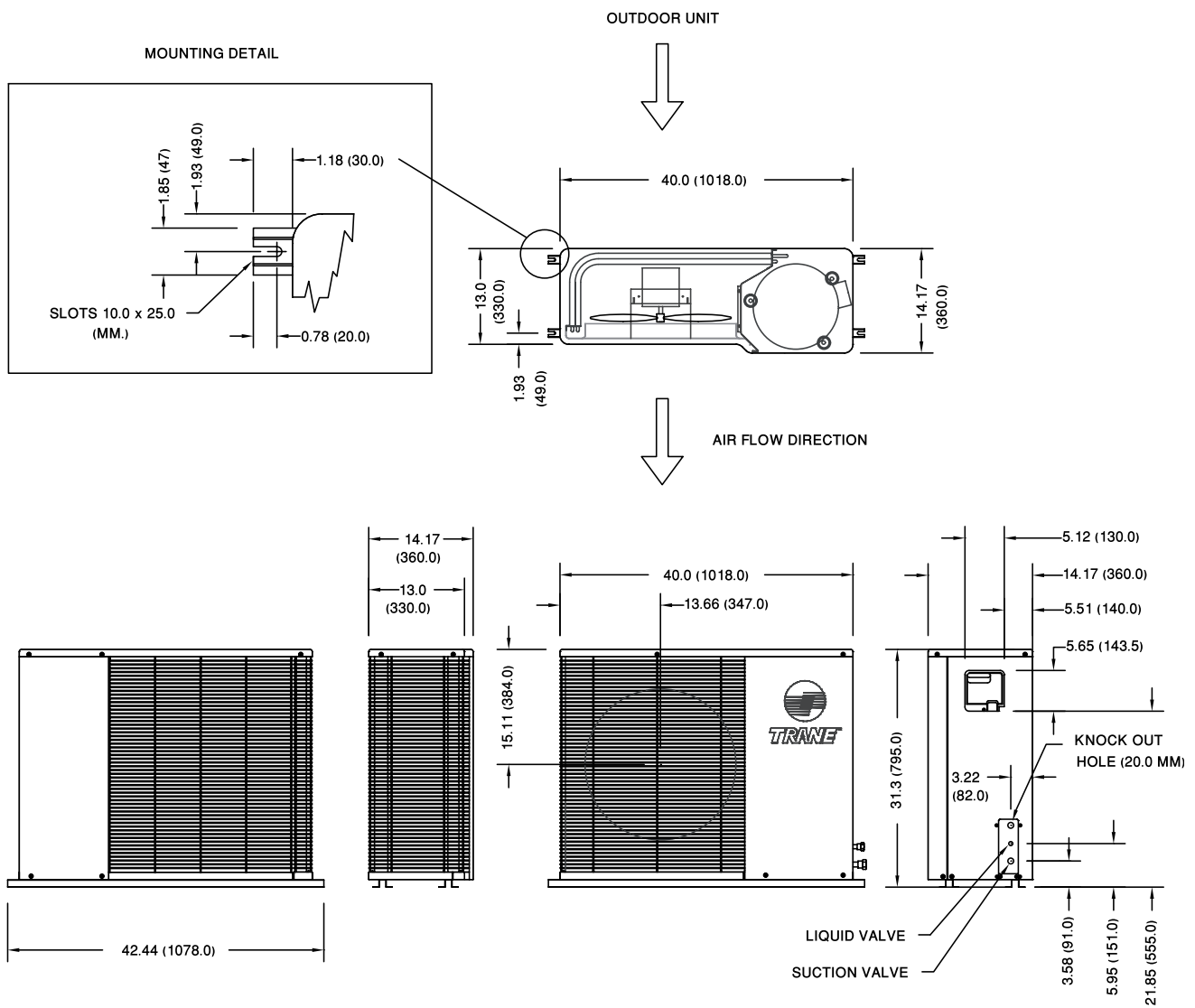
MODEL	A	B	C	D	E	LIQUID SIZE	SUCTION SIZE	CONNECTION TYPE
MCV036	600	494	370	340	462	3/8"	3/4"	BRAZE
MCV048	600	494	370	340	462	3/8"	1-1/8"	BRAZE
MCV060	848	742	400	370	710	3/8"	1-1/8"	BRAZE
MCV090	1196	989	400	370	954	1/2"	1-1/8"	BRAZE
MCV120	1196	989	400	370	954	1/2"	1-3/8"	BRAZE

NOTE : ALL DIMENSIONS ARE IN MILLIMETER.



# TTK Dimensional Data

TTK530-536KB (50 Hz)  
 TTK536-042KD (50 Hz)  
 TTK536 K1 (60 Hz)  
 TTK042K1 (60Hz)

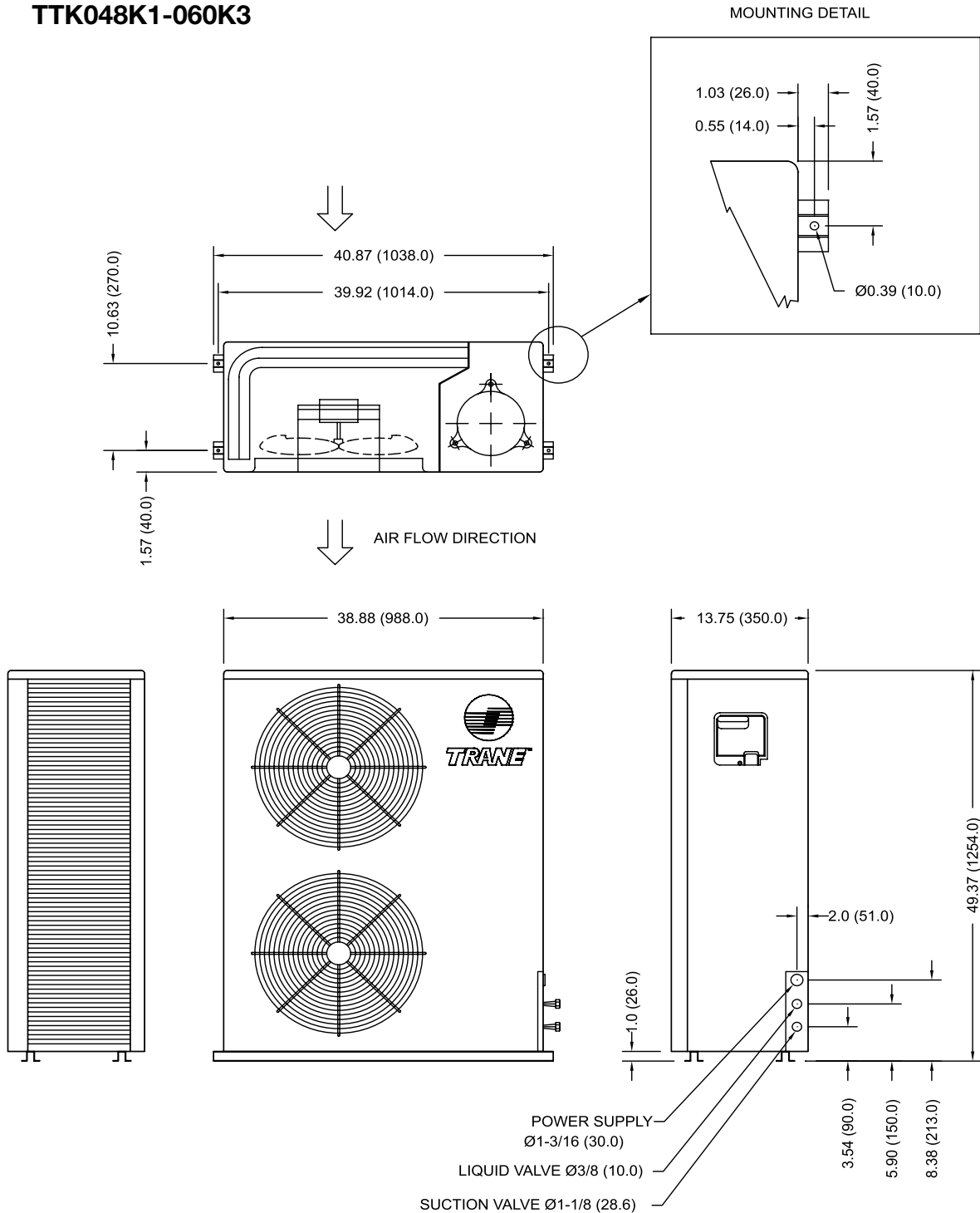


MODEL	REFRIG. LINE DIA.	
	LIQUID	SUCTION
TTK530KB	3/8 (9.5) 5/8 (15.9)	
TTK536KB/KD TTK536K1/K4	3/8 (9.5) 3/4 (19.1)	
TTK042KD/K4	3/8 (9.5) 7/8 (22.2)	

**NOTE** 1) SUCTION AND LIQUID VALVES ARE FLARE TYPE CONNECTIONS  
 2) DIMENSIONS : INCHES (MILIMETERS) ; 1 in = 25.40 mm

# TTK Dimensional Data

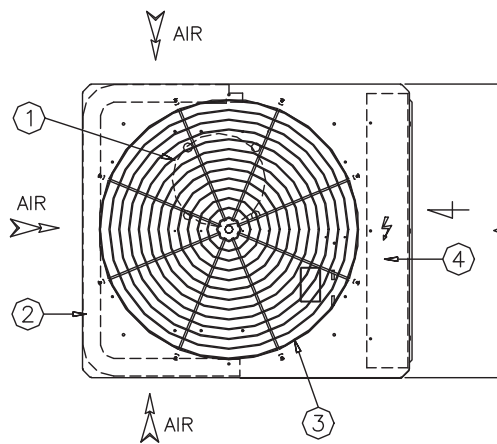
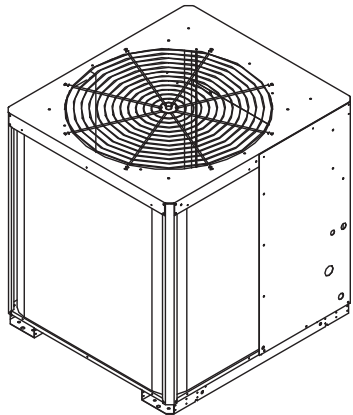
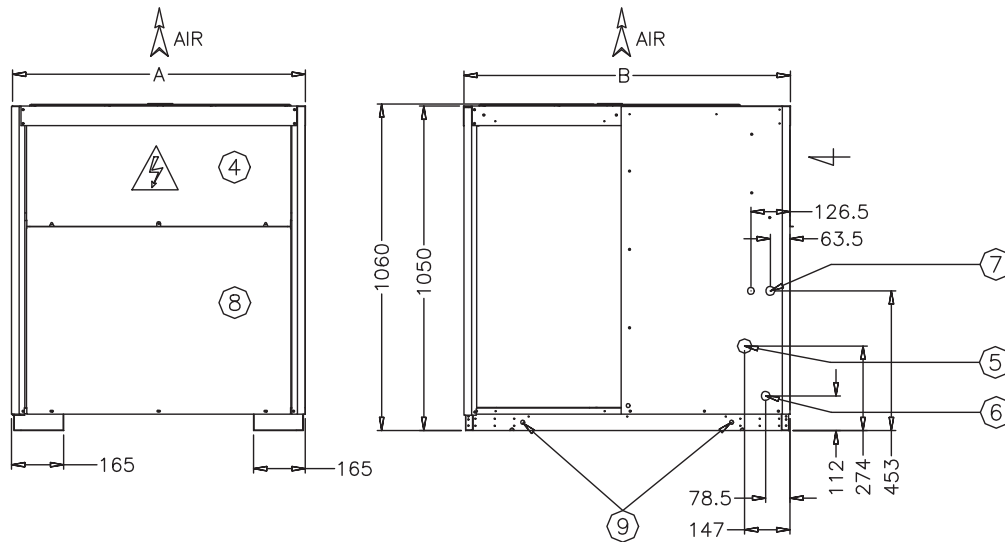
**TTK048-060KD (50 Hz)**  
**TTK048K1-060K3**



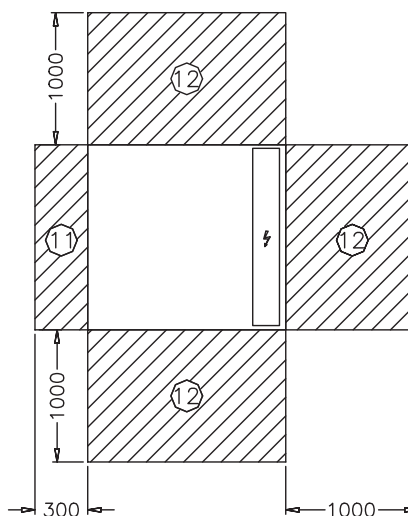
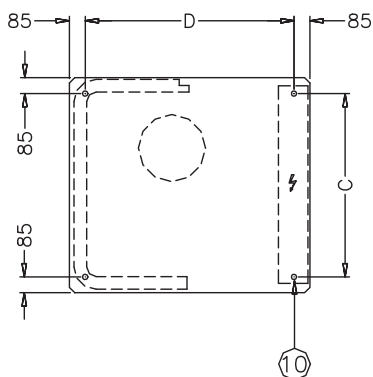
- NOTE**
- 1) SUCTION AND LIQUID VALVE ARE SWEAT TYPE CONNECTIONS.
  - 2) DIMENSIONS : INCHES (MILIMETERS) 1 IN. = 25.40 MM.
  - 3) THE ABOVE MODELS UTILIZE RECIPROCATING COMPRESSORS

# TTA Dimensional Data

## TTA075-120RD / R3 VERTICA DISCHARGE



- ① COMPRESSOR
  - ② AIR HEAT EXCHANGER
  - ③ FAN
  - ④ ELECTRICAL BOX
  - ⑤ GAS LINE CONNECTION FEMALE BRAZED
  - ⑥ LIQUID LINE CONNECTION FEMALE BRAZED
  - ⑦ ELECTRIC WIRING OUTLET
  - ⑧ ACCESS PANEL
  - ⑨ HOLE FOR LIFTING BAR  $\varnothing$  22.5
  - ⑩ MOUNTING HOLES  $\varnothing$  12.8
  - ⑪ MINIMUM CLEARANCE AIR INLET
  - ⑫ MINIMUM CLEARANCE FOR MAINTENANCE
- AIR  $\blacktriangleright$  AIR INTAKE  
 $\blacktriangleleft$  AIR EXHAUST
- $\nabla$  ELECTRICAL PANEL ACCESS



MODEL	DIMENSION (mm.)				$\varnothing$ (inch.)	
	A	B	C	D	$\varnothing$ ⑤	$\varnothing$ ⑥
TTA075RD/R3	950	1060	778	888	1 1/8"	1/2"
TTA100RD/R3	950	1060	778	888	1 3/8"	1/2"
TTA120RD/R3	950	1060	778	888	1 3/8"	1/2"





# Notes

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# Notes

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# Notes

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Trane  
[www.trane.com](http://www.trane.com)

For more information, contact your local district office

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Literature Order Number: MCV-SVB01A-EN

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Date: Jun 2011

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Supersedes: Mar 2011

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Stocking Location: None

Trane has a policy of continuous product and product data improvement and reserves the right to change design and specifications without notice.