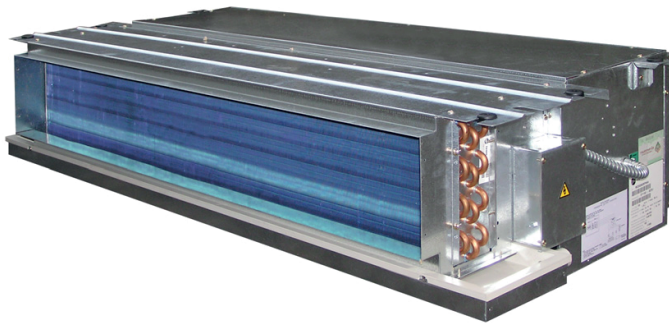




Illusion Split System

**New High Efficiency Split Air Conditioning
(Concealed Type)
1.5 - 5 Tons - R410a - 50 Hz**



Indoor Units

MCDA18DB
MCDA24DB
MCDA30DB
MCDA36DB
MCDB42DB
MCDB48DB
MCDB60DB

Outdoor Units

4TTB6018AA
4TTB6024AA
4TTB6030AA
4TTB6036AA
4TTB6042AD
4TTB6048AD
4TTB6060AD

SSA-PRC012A-EN

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Features and Benefits

Outdoor unit 4TTB

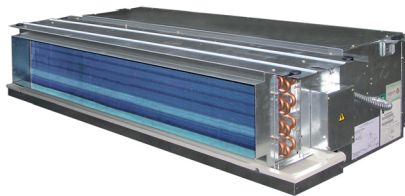
- Scroll compressor
- Efficiency up to 16 S E E R
- All aluminum SPINE FIN™ coil
- WEATHERGUARD™ fasteners
- QUICK-SESS™ cabinet, service access and refrigerant connections with full coil protection
- DURATUFF™ base, fast complete drain, weatherproof
- COMFORT-R™ mode approved
- Glossy corrosion resistant finish
- Internal compressor high/low pressure & temperature protection
- Liquidline filter supplied for field installations
- Polyslategray cabinet with anthracite gray badge and cap
- High pressure control
- Low pressure control
- Service valve cover
- R-410A refrigerant
- S.E.E.T. design testing
- 100% line run test
- Low ambient cooling to 30°F with AY28X079
- Low ambient cooling to 55°F as shipped

Outdoor unit 4TTA

- Scroll compressor
- Efficiency up to 16 S E RE
- All aluminum SPINE FIN™ coil
- WEATHERGUARD™ fasteners
- QUICK-SESS™ cabinet, service access and refrigerant connections with full coil protection
- DURATUFF™ base, fast complete drain, weatherproof
- COMFORT-R™ mode approved
- Glossy corrosion resistant finish
- Internal compressor high/low pressure & temperature protection
- Liquidline filter supplied for field installations
- Polyslategray cabinet with anthracite gray badge and cap
- High pressure control
- Low pressure control
- Service valve cover
- R-410A refrigerant
- S.E.E.T. design testing
- 100% line run test
- Low ambient cooling to 30°F with AY28X079
- Low ambient cooling to 55°F as shipped

Features and Benefits

MCD Concealed Unit



Features:

- Compact Design
- Triple Layer Drain Pan*
- 4 Speed Fan Motor
- Optional Electric Heater

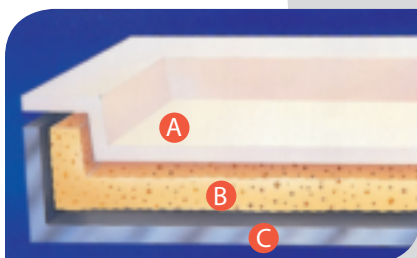
Benefits:

- Flexibility in installation locations.
- Protect against condensate leaks.
- Flexibility in airflow.
- Whisper quiet operation.
- Ease of installation

MCD Air Handler unit

- Complete family of concealed models- available in capacities ranging from 18,000 to 60,000 Btu/h.
- Compact height- only 304 mm. for 18,000 to 24,000 Btu/h models and 408 mm for 30,000 to 60,000 Btu/h
- The MCD Series is very compact for easy installation into tight ceiling locations.
- Triple protection drain pan of three layers provide maximum insulation and water integrity. First, a single piece of galvanized steel; next, a single piece of polystyrene; and finally, a vacuum formed plastic liner.

- A** Plastic
- B** Polystyrene foam
- C** Galvanized sheet



Triple protection drain pan

- Effectively prevents ceiling damage from drain pan leaks
- Decreases chance of mold
- Enhances indoor air quality

Illusion drain pans consist of three layers: a single piece of galvanized sheet, a single piece of polystyrene foam, and a vacuum formed plastic liner. It also features a high-quality, flexible drain hose which is suitable for PVC size.

Features and Benefits

Fan speed:
Four fan levels provide continuous, cool airflow

Temperature setting:
Set temperature range is from 15 °C to 30 °C.

Powercool (turbo) mode:
Cool off quicker (Turbo mode for LCD wired control)

Sleep mode:
Stay comfortable with automatic room temperature adjustment during the night

Econo mode:
Save energy while keeping cool

Dry mode:
provides effective humidity reduction with high efficient cooling capacity.

24 hours programmable timer:
Select on/off times to schedule even more energy and cost savings



Touch wired control
(ACYSTAT160AA cooling only)
(ACYSTAT260AA cool and heat)



LCD wired control
(ACYSTAT110AA cooling only)
(ACYSTAT210AA cool and heat)



LCD wireless remote control



Receiver
(ACYSTAT120AA cooling only)
(ACYSTAT220AA cool and heat)



LCD wireless remote control



Receiver

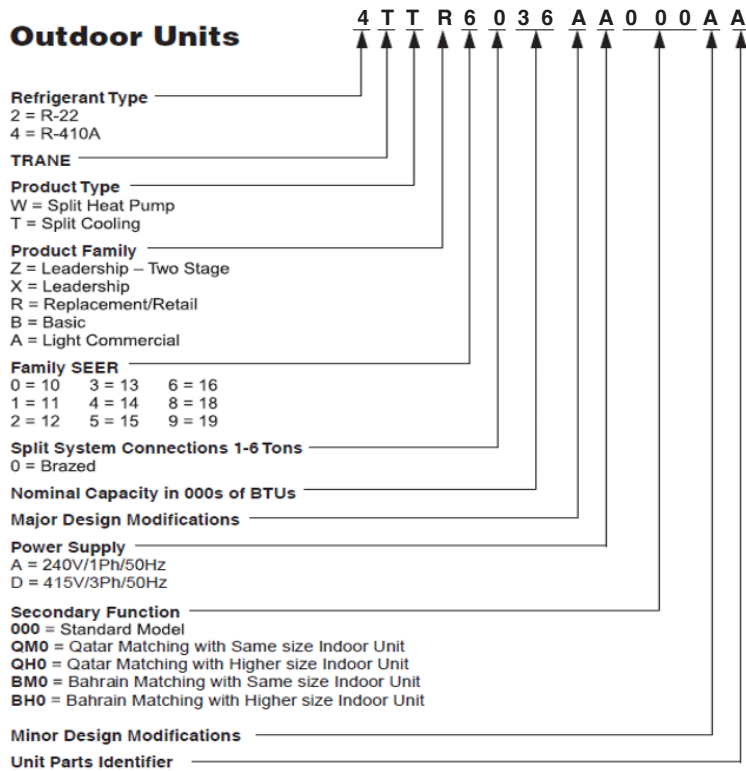
(ACYSTAT170AA Cooling Only)
(ACYSTAT270AA Cool & Heat)

Digital touch-control series

- Choose from wired or wireless control
- Touch-control switch
- Intelligent features add more convenience

Nomenclature

Outdoor Units





Model Nomenclature

M **C** **D** **A** **1** **2** **D** **B** **P** **H** **A** **A**
1 **2** **3** **4** **5** **6** **7** **8** **9** **10** **11** **12**

Digit 1

M = Mini-split

Digit 2

C = Cooling only

Digit 3

D = Concealed

Digit 4- Refrigerant Connection

0 = Sweat type, R22

5 = Flare type, R22

A = Flare type, R410A (12-36)

B = Sweat type, R410A (48-60)

C = Flare type, R407C

D = Sweat type, R407C

Digit 5, 6 – Nominal Capacity

12 = 12 MBH

18 = 18 MBH

24 = 24 MBH

30 = 30 MBH

36 = 36 MBH

48 = 48 MBH

60 = 60 MBH

Digit 7

D = High external static pressure

E = Low external static pressure

Digit 8 – Voltage

B = 220-240/50/1

D = 380 -415/50/3

Digit 9- Electric Heat and Refrigerant

0 = no heat, no return plenum, standard option

5 = no heat, Egat no.5, standard option

C = 1.0 KW electric heat, no return plenum

D = 1.5 KW electric heat, no return plenum

E = 2.0 KW electric heat, no return plenum

F = 2.5 KW electric heat, no return plenum

G = 3.0 KW electric heat, no return plenum

H = 4.0 KW electric heat, no return plenum

I = 4.5 KW electric heat, no return plenum

P = no heat, with return plenum

Q = 1.0 KW electric heat, with return plenum

R = 1.5 KW electric heat, with return plenum

S = 2.0 KW electric heat, with return plenum

T = 2.5 KW electric heat, with return plenum

U = 3.0 KW electric heat, with return plenum

V = 4.0 KW electric heat, with return plenum

W = 4.5 KW electric heat, with return plenum

Digit 10 – Option

0 = No option

H = High Efficiency with Filter

Digit 11

A = Design change A

B = Design change B

Digit 12

A = Service part

General Data

Product Specifications

OUTDOOR UNIT	4TTB6018AA000A	4TTB6024AA000A	4TTB6030AA000A	4TTB6036AA000A
POWER CONNS. — V/PH/Hz ①	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50
MIN. BRCH. CIR. AMPACITY	15	17	18	21
BR CIR PROT RTG — MAX. (AMPS)	25	30	30	35
COMPRESSOR	SCROLL	SCROLL	SCROLL	SCROLL
NO. USED - NO. SPEEDS	1 - 1	1 - 1	1 - 1	1 - 1
VOLTS/PH/Hz	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50
R.L. AMPS ⑥ - L.R. AMPS	10.0 - 52.0	12.1 - 60.0	13.5 - 67.0	16.0 - 87.0
FACTORY INSTALLED				
START COMPONENTS ⑥	NO	NO	NO	NO
INSUL/SOUND BLANKET	NO	NO	NO	NO
COMPRESSOR HEAT	NO	NO	NO	NO
OUTDOOR FAN	PROPELLER	PROPELLER	PROPELLER	PROPELLER
DIA. (IN.) - NO. USED	23 - 1	23 - 1	27.6 - 1	27.6 - 1
TYPE DRIVE - NO. SPEEDS	DIRECT - 1	DIRECT - 1	DIRECT - 1	DIRECT - 1
CFM @ 0.0 IN. W.G. ②	2775	2775	3500	3500
NO. MOTORS - HP	1 - 1/5	1 - 1/5	1 - 1/5	1 - 1/5
MOTOR SPEED R.P.M.	725	725	725	725
VOLTS/PH/Hz	220-230/1/50	200-230/1/50	200-230/1/50	200-230/1/50
F.L. AMPS	1.05	1.05	1.05	1.05
OUTDOOR COIL — TYPE	SPINE FIN™	SPINE FIN™	SPINE FIN™	SPINE FIN™
ROWS - F.P.I.	1 - 24	1 - 24	1 - 24	1 - 24
FACE AREA (SQ. FT.)	16.25	16.25	24.93	24.93
TUBE SIZE (IN.)	3/8	3/8	3/8	3/8
REFRIGERANT	R-410A	R-410A	R-410A	R-410A
REFRIGERANT CONTROL	TXV/Capillary	TXV/Capillary	TXV/Capillary	TXV/Capillary
LBS — R-410A (O.D. UNIT) ③	5 LBS., 18 OZ.	5 LBS., 10 OZ.	7 LBS., 25 OZ.	7 LBS., 33 OZ.
FACTORY SUPPLIED	YES	YES	YES	YES
LINE SIZE - IN. O.D. GAS ④	3/4	3/4	3/4	7/8
LINE SIZE - IN. O.D. LIQ. ④	3/8	3/8	3/8	3/8
CHARGING SPECIFICATION				
TXV SYSTEM CHARGED TO SUBCOOL	10°F	10°F	10°F	10°F
CAPILLARY SYSTEM CHARGED TO SUPERHEAT	10°F	10°F	10°F	10°F
DIMENSIONS	H X W X D	H X W X D	H X W X D	H X W X D
CRATED (IN.)	34 x 30.1 x 33	34 x 30.1 x 33	42.4 x 35.1 x 38.7	42.4 x 35.1 x 38.7
WEIGHT				
SHIPPING (LBS.)	195	196	245	267
NET (LBS.)	167	168	211	233

TUBING INFORMATION						
LINE TYPE		REFRIGERANT TO ADD AT SPECIFIED ADDITIONAL LENGTH				
Suction	Liquid	20 ft	30 ft	40 ft	50 ft	60 ft
3/4"	3/8"	3 oz	9 oz	15 oz	21 oz	27 oz
7/8"	3/8"	3 oz	9 oz	16 oz	22 oz	28 oz

Tubing lengths in excess of sixty (60) feet see application software.

- ① Calculated in accordance with Natl. Elec. Codes. Only use HACR circuit breakers or fuses.
- ② Standard Air — Dry Coil — Outdoor
- ③ This value approximate. For more precise value see unit nameplate.
- ④ Max. linear length 80 ft.; Max. lift - Suction 60 ft.; Max lift - Liquid 60 ft.
For greater length consult refrigerant piping software Pub. No. 32-3312-0* (* denotes latest revision).
- ⑤ This value shown for compressor RLA on the unit nameplate and on this specification sheet is used to compute minimum branch circuit ampacity and max. fuse size. The value shown is the branch circuit selection current.
- ⑥ No means no start components. Yes means quick start kit components. PTC means positive temperature coefficient starter.



General Data

Product Specifications

OUTDOOR UNIT	4TTA6042AD000A	4TTA6048AD000A	4TTA6060AD000A
POWER CONNS. — V/PH/Hz ①	380-415/3/50	380-415/3/50	380-415/3/50
MIN. BRCH. CIR. AMPACITY	12	12	14
BR CIR PROT RTG — MAX. (AMPS)	21	21	25
COMPRESSOR	SCROLL	SCROLL	SCROLL
NO. USED - NO. SPEEDS	1 - 1	1 - 1	1 - 1
VOLTS/PH/Hz	380-415/3/50	380-415/3/50	380-415/3/50
R.L. AMPS ② - L.R. AMPS	6.9 - 52.0	7.6 - 51.5	8.9 - 67.1
FACTORY INSTALLED			
START COMPONENTS ③	NO	NO	NO
INSUL/SOUND BLANKET	NO	NO	NO
COMPRESSOR HEAT	NO	NO	NO
OUTDOOR FAN	PROPELLER	PROPELLER	PROPELLER
DIA. (IN.) - NO. USED	27.6 - 1	27.6 - 1	27.6 - 1
TYPE DRIVE - NO. SPEEDS	DIRECT - 1	DIRECT - 1	DIRECT - 1
CFM @ 0.0 IN. W.G. ④	4050	4400	4400
NO. MOTORS - HP	1 - 1/5	1 - 1/5	1 - 1/5
MOTOR SPEED R.P.M.	725	725	725
VOLTS/PH/Hz	200-230/1/50	200-230/1/50	200-230/1/50
F.L. AMPS	1.05	1.05	1.05
OUTDOOR COIL — TYPE	SPINE FIN™	SPINE FIN™	SPINE FIN™
ROWS - F.P.I.	1 - 24	1 - 24	1 - 24
FACE AREA (SQ. FT.)	4TTA6042AD000A 24.8	30.79	30.79
TUBE SIZE (IN.)	3/8	3/8	3/8
REFRIGERANT	R-410A	R-410A	R-410A
REFRIGERANT CONTROL	TXV/Capillary	TXV/Capillary	TXV/Capillary
LBS — R-410A (O.D. UNIT) ⑤	7 LBS., 33 OZ.	8 LBS., 13 OZ.	9 LBS., 14 OZ.
FACTORY SUPPLIED	YES	YES	YES
LINE SIZE - IN. O.D. GAS ⑥	7/8	7/8	7/8
LINE SIZE - IN. O.D. LIQ. ⑥	3/8	3/8	3/8
CHARGING SPECIFICATION			
TXV SYS CHGD TO SUBCOOL	10°F	10°F	10°F
CAPILLARY SYS CHGD TO SUPERHEAT	10°F	10°F	10°F
DIMENSIONS	H X W X D	H X W X D	H X W X D
CRATED (IN.)	42.4 X 35.1 X 38.7	51 X 35.1 X 38.7	51 X 35.1 X 38.7
WEIGHT			
SHIPPING (LBS.)	266	306	327
NET (LBS.)	232	256	277

TUBING INFORMATION						
LINE TYPE		REFRIGERANT TO ADD AT SPECIFIED ADDITIONAL LENGTH				
Suction	Liquid	20 ft	30 ft	40 ft	50 ft	60 ft
3/4"	3/8"	3 oz	9 oz	15 oz	21 oz	27 oz
7/8"	3/8"	3 oz	9 oz	16 oz	22 oz	28 oz

Tubing lengths in excess of sixty (60) feet see application software.

- ① Calculated in accordance with Natl. Elec. Codes. Only use HACR circuit breakers or fuses.
- ② Standard Air — Dry Coil — Outdoor
- ③ This value approximate. For more precise value see unit nameplate.
- ④ Max. linear length 80 ft.; Max. lift - Suction 60 ft.; Max lift - Liquid 60 ft. For greater length consult refrigerant piping software Pub. No. 32-3312-0* (* denotes latest revision).
- ⑤ This value shown for compressor RLA on the unit nameplate and on this specification sheet is used to compute minimum branch circuit ampacity and max. fuse size. The value shown is the branch circuit selection current.
- ⑥ No means no start components. Yes means quick start kit components. PTC means positive temperature coefficient starter.

SOUND POWER LEVEL								
Model	A-Weighted Sound Power Level [dB(A)]	Full Octave Sound Power [dB]						
		125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
4TTB6018A	72	68	67	71	67	61	55	50
4TTB6024A	72	68	67	71	67	61	55	50
4TTB6030A	75	68	67	70	74	62	55	49
4TTB6036A	75	68	67	70	74	62	55	49
4TTA6042A	75	68	67	70	74	62	55	49
4TTA6048A	75	68	67	70	74	62	55	49
4TTA6060A	75	68	67	70	74	62	55	49

Note: Rated in accordance with AHRI Standard 270–2008



General Data 4TTA/4TTB

Accessory Description and Usage

Anti-Short Cycle Timer - Solid state timing device that prevents compressor recycling until 5 minutes have elapsed after satisfying call or power interruptions. Use in area with questionable power delivery, commercial applications, long lineset, etc.

Evaporator Defrost Control — SPST Temperature actuated switch that cycles the condenser off as indoor coil reaches freeze-up conditions. Used for low ambient cooling to 30°F with TXV.

Rubber Isolators — 5 large rubber donuts to isolate condensing unit from transmitting energy into mounting frame or pad. Use on any application where sound transmission needs to be minimized.

Extreme Condition Mount Kit — Bracket kits to securely mount condensing unit to a frame or pad without removing any panels. Use in areas with high winds, or on commercial roof tops, etc.

AHRI Standard Capacity Rating Conditions

AHRI STANDARD 210/240 RATING CONDITIONS —
(A) Cooling 80°F DB, 67°F WB air entering indoor coil, 95°F DB air entering outdoor coil.



General Data/MCD 50 Hz

UNIT MODELS		MCDA18DBPHBA MCDA18DBTHBA ¹	MCDA24DBPHBA MCDA24DBUHBA ¹	MCDA30DBPHBA MCDA30DBVHBA ¹	MCDA36DBPHBA MCDA36DBWHBA ¹
POWER CONNECTION	V/ph/Hz	220-240/1/50		220-240/1/50	
MCA	A	1.0		1.8	
SYSTEM DATA					
	Refrigerant Type	R410A		R410A	
	No. Refrigerant Circuits	1		1	
	Refrigerant Connection Type	Flare		Flare	
	Suction Line OD	in (mm)	3/4 (19.05)	3/4 (19.05)	7/8 (22.23)
	Liquid line OD	in (mm)	3/8 (9.53)	3/8 (9.53)	3/8 (9.53)
CASING					
	Material	Galvanized steel/Unpainted			
	Type of insulation / Thickness	Fiber glass (12.7 mm.)			
	Insulation density	Kg./m ³	40	40	40
COIL					
	Coil Size (HxL)	in ²	8 x 31	8 x 38	8 x 36
		(mm) ²	203.2 x 787.4	203.2 x 965.2	(203.2 x 914.4)
	Face Area	sq ft (m ²)	2.1 (0.20)	2.1 (0.20)	2.33 (0.216)
	Coil Size (HxL)	in	8" x 38"	8" x 38"	8" x 42"
	Tube Size OD	in (mm)	3/8 (9.53)	3/8 (9.53)	3/8 (9.53)
	Tube Type	Inn. Grv.		Inn. Grv.	Plain
	Rows	4		4	4
	Fin Type	Precoated Slit		Precoated Slit	Precoated Slit
	Fins per inch	20		20	16
	Refrigerant Flow Control	Capillary Tube		Capillary Tube	Capillary Tube
	Drain Connection Size	in (mm)	1/2 (12.7)	1/2 (12.7)	1/2 (12.7)
	Drain Connection Type				
ELECTRIC HEATER DATA¹ (for electric heater option only)					
	Heater Rating	kW	2.5	3.0	4 (2 elements)
	Heater RLA	11.4		13.6	18.2
FAN					
	Fan Type	Centrifugal		Centrifugal	Centrifugal
	No. used	2		2	2
	Diameter	in (mm)	6 (144.0)	7 (164)	8 (203.2)
	Width	in (mm)	8 (201)	8 (201)	9 (228.6)
	Drive Type	Direct		Direct	Direct
	Nominal Airflow ²	cfm (cmh)			
MOTOR					
	Motor Type				
	No. of Motor	1		1	1
	Motor Model	KDE2G4016		KDE2G4016	8557LVS-A17
	Motor Power	kW	0.087	0.087	0.185
	No. of Speed	4		4	4
	Motor Speed	rpm		1100/1200/1300/1400	720/792/868/900
	Power Input	kW		0.179	0.32
	Power Supply	V/ph/Hz		220/1/50	220-240/1/50
	RLA/LRA	0.82/1.86		0.82/1.86	1.45/3.05
FILTER					
	Type	Aluminium Filter		Aluminium Filter	Aluminium Filter
	No. used	2		2	2
	Size (WxLxD)	in ³	10.5x20.0x1.0	10.5x20.0x1.0	13.7 x 21.8 x 1.0
		(mm ³)	(267x510x25.4)	(267x510x25.4)	(350 x 556 x 25.4)
CONTROL DEVICE					
	Anti-Recycle Time	No		No	No
	Thermostat	No		No	No
DIMENSION (HxWxD)					
	Crated (Shipping)	in ³	-	-	-
		(mm) ³	-	-	-
	Crated (Shipping)**	in ³	13.2 x 51.6 x 22.1	13.2 x 51.6 x 22.1	18.9 x 51.9 x 30.6
		(mm) ³	(335 x 1311 x 562)	(335 x 1311 x 562)	(479 x 1317 x 778)
	Uncrated (Net)	in ³	-	-	-
		(mm) ³	-	-	-
	Uncrated (Net)**	in ³	11.9 x 49.2 x 21.1	11.9 x 49.2 x 21.1	16 x 49.2 x 28.5
		(mm) ³	(304 x 1251 x 538)	(304 x 1251 x 538)	(408 x 1251 x 724)
WEIGHT					
	Crated (Shipping)	lb (kg)	82 (37.2)	82 (37.2)	73 (32.73)
	Crated (Shipping) ¹	lb (kg)	86 (39.2)	86 (39.2)	77 (34.73)
	Uncrated (Net)	lb (kg)	79 (35.8)	79 (35.8)	64 (29.09)
	Uncrated (Net) ¹	lb (kg)	83 (37.8)	83 (37.8)	68 (31.09)

- Note**
- 1) MCA - Minimum Circuit Ampacity ; calculated as follow : 125 % of motor R.L.Amps
 - 2) ¹ Model with electric heater has alphabetic letter T or Z in the ninth digit.
 - 3) Test at Free blow (0.0 in.Wg ESP) / Dry coil / Using ARI standard 270-84 as a reference for test set up.



General Data/MCD 50 Hz

UNIT MODELS		MCDB42DBPHBA MCDB42DBXHBA ¹	MCDB48DBPHBA MCDB48DBYHBA ¹	MCDB60DBPHBA MCDB60DBZHBA ¹	
POWER CONNECTION		V/ph/Hz	220-240/1/50	220-240/1/50	220-240/1/50
MCA		A	3.9	3.9	3.9
SYSTEM DATA					
	Refrigerant Type		R410A	R410A	R410A
	No. Refrigerant Circuits		1	1	1
	Refrigerant Connection Type		Sweat	Sweat	Sweat
	Suction Line OD	in (mm)	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)
CASING					
	Material		Galvanized steel/Unpainted		
	Type of insulation / Thickness		Fiber glass (12.7 mm.)		
	Insulation density	Kg./m ³	40	40	40
COIL					
	Coil Size (HxL)	in ²	8 x 42	8 x 42	3.50 (0.33)
		(mm) ²	(203.2 x 1066.8)	(203.2 x 1066.8)	14" x 42"
	Face Area	sq ft (m ²)	3.50 (0.33)	3.50 (0.33)	3/8 (9.53)
	Coil Size (HxL)	in	14" x 36"	14" x 42"	14" x 42"
	Tube Size OD	in (mm)	3/8 (9.53)	3/8 (9.53)	3/8 (9.53)
	Tube Type		Plain	Inn. Grv.	Inn. Grv.
	Rows		4	4	4
	Fin Type		Precoated Slit	Precoated Slit	Precoated Slit
	Fins per inch		18	15	20
	Refrigerant Flow Control		Capillary Tube	Capillary Tube	Capillary Tube
	Drain Connection Size	in (mm)	1/2 (12.7)	1/2 (12.7)	1/2 (12.7)
	Drain Connection Type				
ELECTRIC HEATER DATA¹ (for electric heater option only)					
	Heater Rating	kW	5.5 (2 elements)	6 (2 elements)	7 (2 elements)
	Heater RLA		25.0	27.2	31.8
FAN					
	Fan Type		Centrifugal	Centrifugal	Centrifugal
	No. used		2	2	2
	Diameter	in (mm)	8 (203.2)	8 (203.2)	8 (203.2)
	Width	in (mm)	9 (228.6)	9 (228.6)	9 (228.6)
	Drive Type		Direct	Direct	Direct
	Nominal Airflow ²	cfm (cmh)			
MOTOR					
	Motor Type				
	No. of Motor		1	1	1
	Motor Model		8555NVA-A28S	8555NVA-A28S	8555NVA-A28S
	Motor Power	kW	0.365	0.365	0.365
	No. of Speed		4	4	4
	Motor Speed	rpm	845/995/1100/1195	845/995/1100/1195	845/995/1100/1195
	Power Input	kW	0.667	0.667	0.667
	Power Supply	V/ph/Hz	220-240/1/50	220-240/1/50	220-240/1/50
	RLA/LRA		3.09/4.74	3.09/4.74	3.09/4.74
FILTER					
	Type		Aluminium Filter	Aluminium Filter	Aluminium Filter
	No. used		2	2	2
	Size (WxLxD)	in ³	13.7 x 18.8 x 1.0	13.7 x 21.8 x 1.0	13.7 x 21.8 x 1.0
		(mm) ³	(350 x 478 x 25.4)	(350 x 556 x 25.4)	(350 x 556 x 25.4)
CONTROL DEVICE					
	Anti-Recycle Time		No	No	No
	Thermostat		No	No	No
DIMENSION (HxWxD)					
	Crated (Shipping)	in ³	-	-	-
		(mm) ³	-	-	-
	Crated (Shipping)**	in ³	18.9 x 46.0 x 30.6	19.3 x 51.9 x 30.8	19.3 x 51.9 x 30.8
		(mm) ³	(479 x 1168 x 778)	(490 x 1317 x 782)	(490 x 1317 x 782)
	Uncrated (Net)	in ³	-	-	-
		(mm) ³	-	-	-
	Uncrated (Net)**	in ³	16 x 43.2 x 29.9	16 x 49.2 x 29.8	16 x 49.2 x 29.8
		(mm) ³	(408 x 1098 x 759)	(408 x 1251 x 759)	(408 x 1251 x 759)
WEIGHT					
	Crated (Shipping)	lb (kg)	117 (51.3)	140 (63.7)	140 (63.7)
	Crated (Shipping) ¹	lb (kg)	113 (53.3)	147 (66.7)	147 (66.7)
	Uncrated (Net)	lb (kg)	103 (46.8)	130 (59)	130 (59)
	Uncrated (Net) ¹	lb (kg)	107 (48.8)	137 (52)	137 (52)

- Note**
- 1) MCA - Minimum Circuit Ampacity ; calculated as follow : 125 % of motor R.L.Amps
 - 2) ¹ Model with electric heater has alphabetic letter T or Z in the ninth digit.
 - 3) Test at Free blow (0.0 in.Wg ESP) / Dry coil / Using ARI standard 270-84 as a reference for test set up.



Performance Data

Fan coil Airflow (CFM) versus. External Static Pressure (in.wg)

Table 5 - Indoor Fan performance

SPEED	MCDA18DBPHBA					
	AIR FLOW (CFM)					
	200	300	400	500	600	700
LOW	0.26	0.13	0.00			
MED	0.30	0.21	0.10	0.00		
HIGH	0.33	0.26	0.17	0.07	0.00	
EXTRA HIGH	0.38	0.33	0.23	0.14	0.05	0.00

SPEED	MCDA24DBPHBA							
	AIR FLOW (CFM)							
	200	300	400	500	600	700	800	900
LOW	0.28	0.07	0.00					
MED	0.42	0.31	0.12	0.00				
HIGH	0.51	0.46	0.33	0.18	0.01	0.00		
EXTRA HIGH	0.58	0.51	0.44	0.37	0.29	0.19	0.07	0.00

SPEED	MCDA30DBPHBA							
	AIR FLOW (CFM)							
	300	400	500	600	700	800	900	1000
LOW	0.41	0.35	0.28	0.21	0.13	0.05	0.00	
MED	0.43	0.37	0.31	0.24	0.17	0.09	0.01	0.00
HIGH	0.45	0.39	0.33	0.27	0.19	0.12	0.04	0.00
EXTRA HIGH	0.47	0.41	0.36	0.30	0.24	0.16	0.07	0.00

SPEED	MCDA36DBPHBA									
	AIR FLOW (CFM)									
	200	300	400	500	600	700	800	900	1000	1100
LOW	0.32	0.24	0.08	0.00						
MED	0.47	0.42	0.35	0.33	0.20	0.09	0.00			
HIGH	0.58	0.55	0.53	0.49	0.47	0.38	0.29	0.16	0.00	
EXTRA HIGH	0.66	0.64	0.59	0.57	0.54	0.49	0.40	0.31	0.19	0.00



Performance Data

Fan coil Airflow (CFM) versus. External Static Pressure (in.wg)

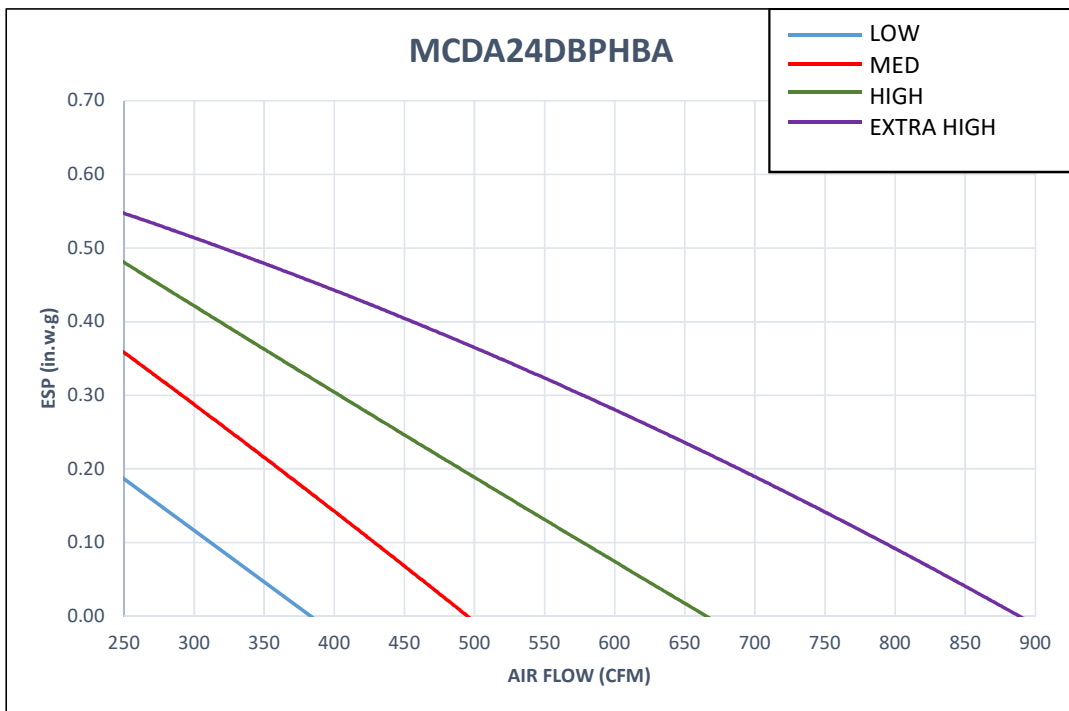
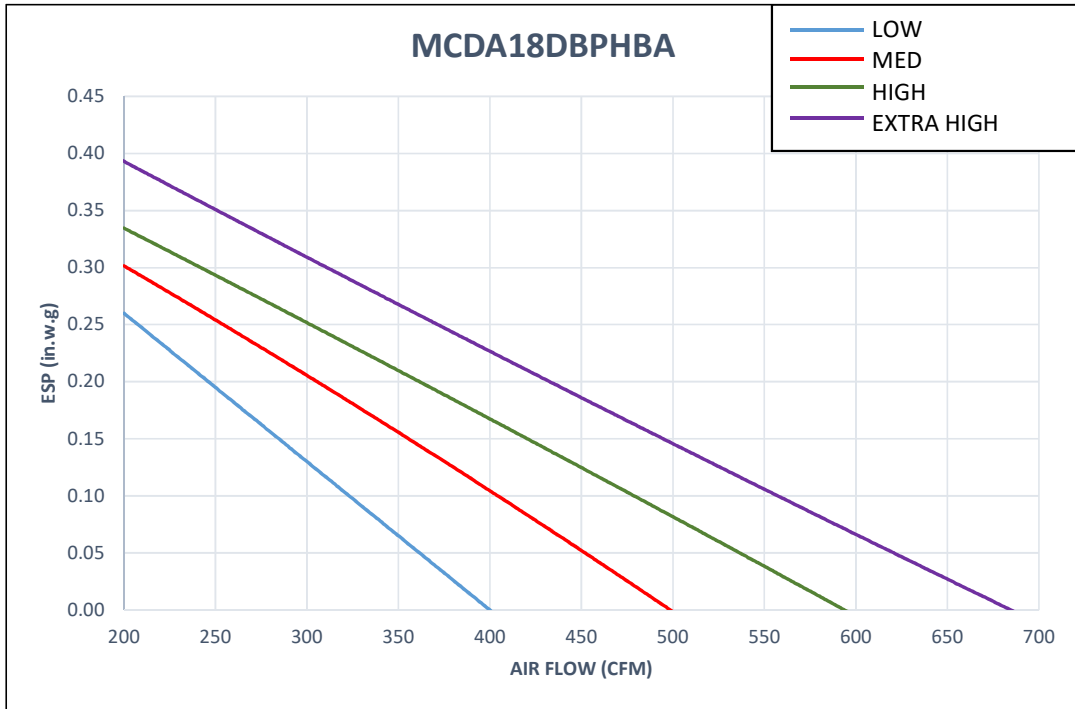
Indoor Fan Performance Table

SPEED	MCDB42DBPHBA							
	AIR FLOW (CFM)							
	800	900	1000	1100	1200	1300	1400	1500
LOW	0.36	0.30	0.21	0.09	0.00			
MED	0.46	0.44	0.36	0.24	0.14	0.03	0.00	
HIGH	0.52	0.49	0.44	0.32	0.23	0.10	0.02	0.00
EXTRA HIGH	0.59	0.52	0.44	0.36	0.28	0.18	0.09	0.00

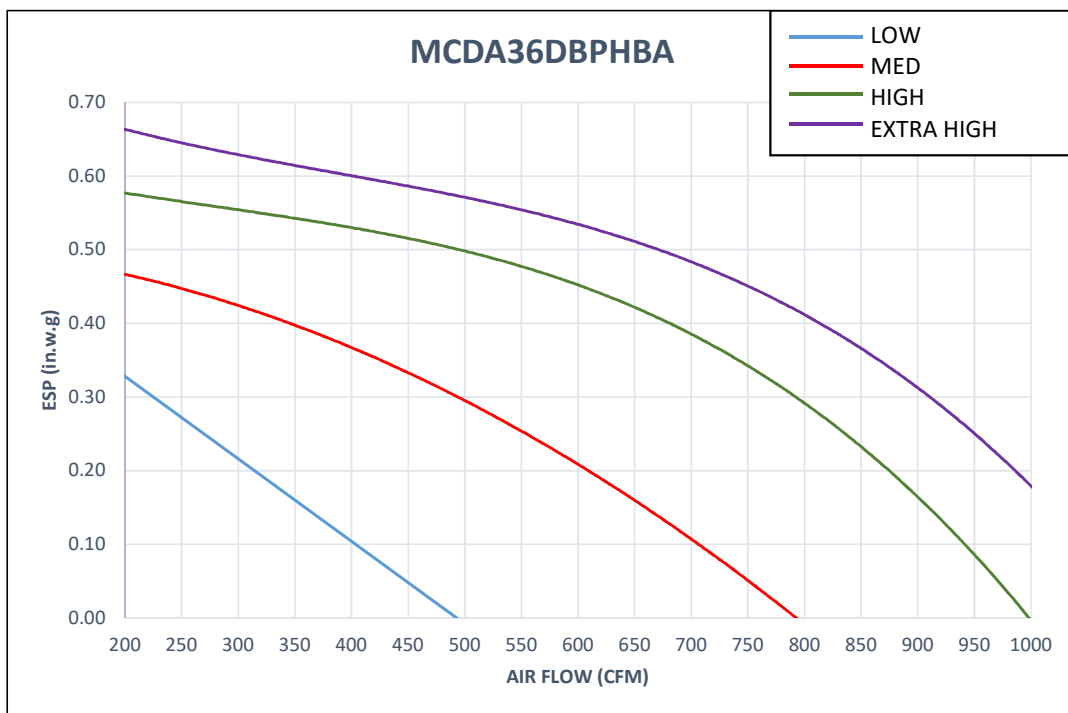
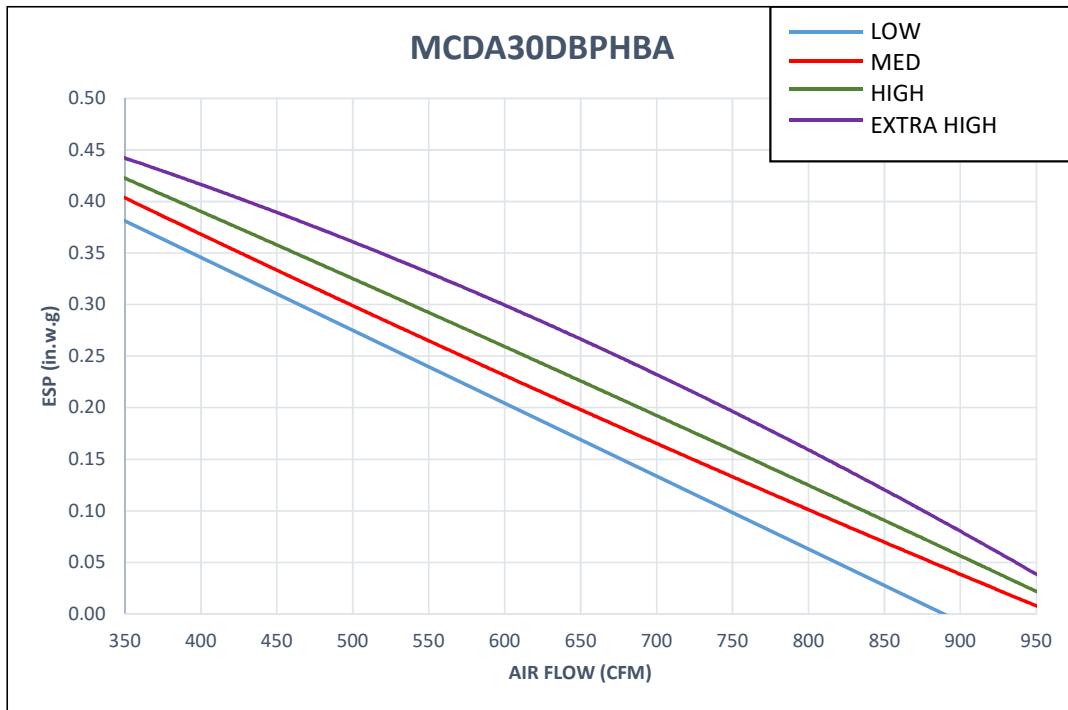
SPEED	MCDB48DBPHBA								
	AIR FLOW (CFM)								
	1000	1100	1200	1300	1400	1500	1600	1700	1800
LOW	0.31	0.27	0.18	0.06	0.00				
MED	0.43	0.38	0.32	0.25	0.17	0.08	0.00		
HIGH	0.50	0.45	0.38	0.32	0.24	0.16	0.06	0.00	
EXTRA HIGH	0.59	0.53	0.46	0.39	0.32	0.24	0.15	0.07	0.00

SPEED	MCDB60DBPHBA							
	AIR FLOW (CFM)							
	1000	1100	1200	1300	1400	1500	1600	1700
LOW	0.29	0.21	0.11	0.00				
MED	0.43	0.35	0.27	0.19	0.08	0.00		
HIGH	0.47	0.41	0.34	0.27	0.18	0.09	0.00	
EXTRA HIGH	0.55	0.48	0.41	0.34	0.25	0.16	0.08	0.00

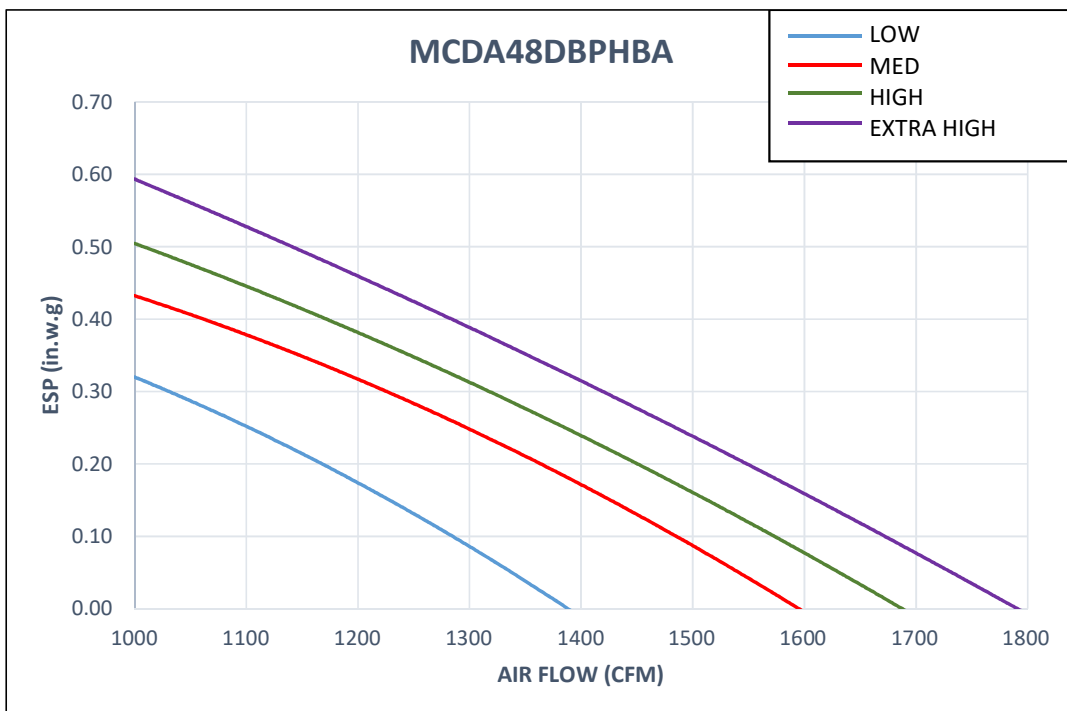
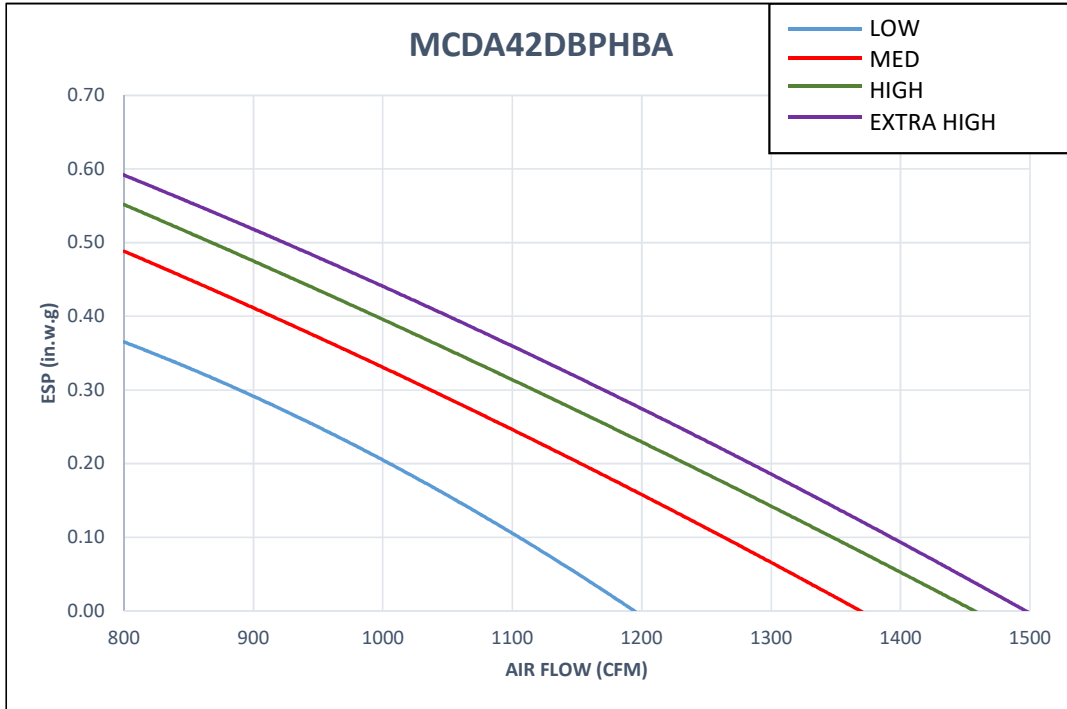
Fan Performance Data



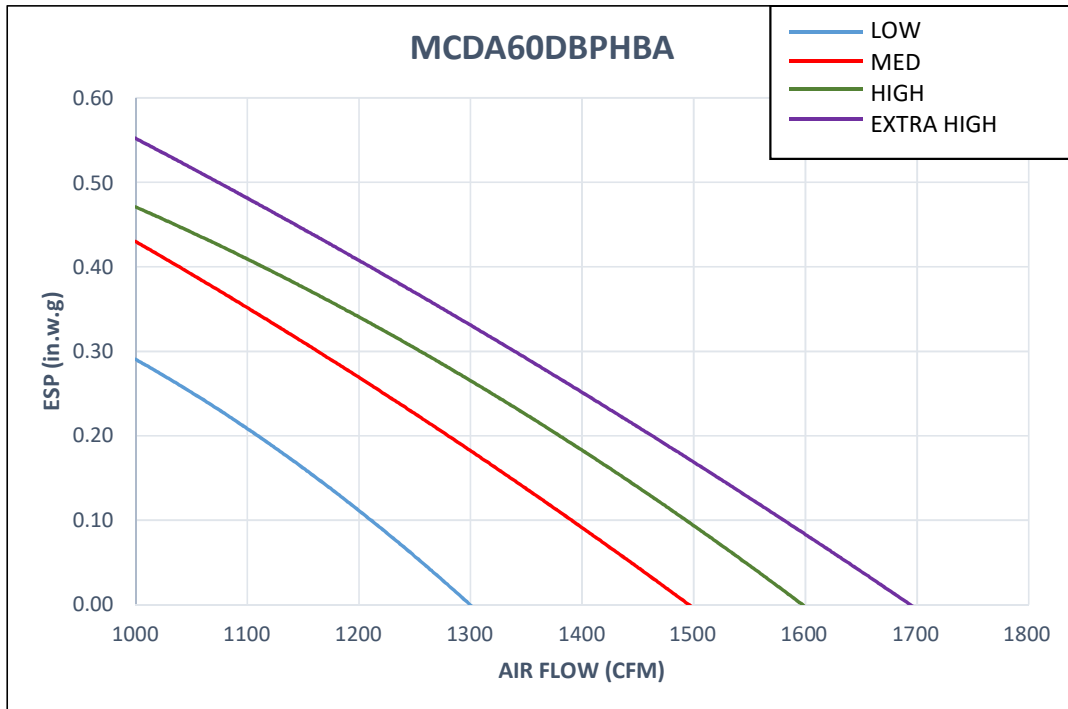
Fan Performance Data



Fan Performance Data



Fan Performance Data





Performance Data Cooling

4TTB6018AA WITH MCDA18 AT 475 CFM ** NET CAPACITY IN BTU/H X 1000

Outdoor Model		4TTB6018AA000AA						
Indoor Model		MCDA18DBPHBA						
Airflow		475						
Values At ARI Rating Conditions		Correction Factors - Other Airflows						
Total Net Capacity	19,400 Btu/hr			Airflow		450	500	
Airflow	475 CFM			Total Capacity		0.99	1.01	
Compressor Power	1,300 Watts			Sensible Capacity		1.00	1.01	
Indoor Fan Power	110 Watts			Compressor kW		1.00	1.00	
Outdoor Fan Power	165 Watts							
CoP	3.60							
EER	12.30							
Rated with 25 Feet 3/4 Vapor Line 3/8 Liquid Line								
O.D.D.B.	I.D.W.B.	TOTAL CAPACITY				SENSIBLE CAPACITY (ID DB)		POWER kW
		80.6	72	75	78	80		
85	59	17.46	13.53	14.93	16.25	17.12	1.41	
85	63	18.83	11.42	12.90	14.32	15.35	1.41	
85	67	20.49	9.44	10.89	12.32	13.28	1.41	
95	59	16.67	13.02	14.44	15.84	16.52	1.58	
95	63	17.87	10.95	12.40	13.97	14.87	1.58	
95	67	19.42	8.96	10.42	11.86	12.82	1.58	
105	63	16.86	10.49	12.02	13.42	14.38	1.76	
105	67	18.34	8.47	9.92	11.38	12.34	1.77	
105	71	19.85	6.44	7.90	9.34	10.31	1.77	
115	63	15.74	10.08	11.48	12.90	13.83	1.98	
115	67	17.11	7.92	9.40	10.94	11.90	1.98	
115	71	18.63	5.93	7.40	8.84	9.88	1.99	
120	63	15.14	9.77	11.23	12.62	13.63	2.10	
120	67	16.53	7.68	9.14	10.69	11.67	2.10	
120	71	17.96	5.67	7.13	8.58	9.56	2.10	
125	63	14.50	9.51	10.93	12.36	13.41	2.23	
125	67	15.88	7.44	8.94	10.42	11.37	2.23	
125	71	17.29	5.42	6.86	8.30	9.29	2.23	
Tested Performance @ UAE.S 5010 - 5 :2019								
Condition	Voltage	OD-DB	ID-WB	ID-DB	Capacity	KW	EER	
T1	230		66.2	80.6	19.42	1.57	12.41	
T3	230	114.8	66.2	84.2	17.42	1.98	8.79	
Performance at selected design conditions Dry coil condition (Total Capacity = Sensible Capacity) Total capacity, compressor kW and app. dew point valid only for wetcoil All temperatures in Degree F								

4TTB6024AA WITH MCDA24 AT 780 CFM ** NET CAPACITY IN BTU/H X 1000

Outdoor Model		4TTB6024AA000AA						
Indoor Model		MCDA24DBPHBA						
Airflow		780						
Values At ARI Rating Conditions		Correction Factors - Other Airflows						
Total Net Capacity	23,600 Btu/hr			Airflow		740	820	
Airflow	780 CFM			Total Capacity		0.99	1.01	
Compressor Power	1,498 Watts			Sensible Capacity		0.99	1.01	
Indoor Fan Power	220 Watts			Compressor kW		1.00	1.00	
Outdoor Fan Power	165 Watts							
CoP	3.80							
EER	12.55							
Rated with 25 Feet 3/4 Vapor Line 3/8 Liquid Line								
O.D.D.B.	I.D.W.B.	TOTAL CAPACITY				SENSIBLE CAPACITY (ID DB)		POWER kW
		80.6	72	75	78	80		
85	59	22.54	18.67	20.76	21.98	22.54	1.41	
85	63	22.99	15.23	17.63	20.17	21.58	1.41	
85	67	24.95	11.95	14.33	16.67	18.26	1.41	
95	59	21.52	18.07	20.02	20.98	21.52	1.58	
95	63	21.81	14.74	17.17	19.52	20.94	1.58	
95	67	23.55	11.37	13.75	16.11	17.70	1.58	
105	63	20.57	14.04	16.67	18.84	20.19	1.76	
105	67	22.11	10.75	13.17	15.53	17.13	1.77	
105	71	23.98	7.42	9.84	12.20	13.83	1.77	
115	63	19.30	13.64	15.91	18.08	19.16	1.98	
115	67	20.57	10.11	12.53	14.86	16.63	1.98	
115	71	22.36	6.83	9.28	11.61	13.18	1.99	
120	63	18.65	13.23	15.57	17.72	18.60	2.10	
120	67	19.79	9.81	12.17	14.77	16.29	2.10	
120	71	21.54	6.48	8.93	11.29	12.97	2.10	
125	63	17.98	12.90	15.20	17.40	17.98	2.23	
125	67	18.98	9.48	12.04	14.39	15.93	2.23	
125	71	20.67	6.20	8.60	11.04	12.64	2.23	
Tested Performance @ UAE.S 5010 - 5 :2019								
Condition	OD-DB	Voltage	ID-WB	ID-DB	Capacity	KW	EER	
T1	95	230	66.2	80.6	23.55	1.88	12.55	
T3	114.8	230	66.2	84.2	20.53	2.31	8.89	
Performance at selected design conditions Dry coil condition (Total Capacity = Sensible Capacity) Total capacity, compressor kW and app. dew point valid only for wetcoil All temperatures in Degree F								



Performance Data Cooling

4TTB6030AA WITH MCDA30 AT 820 CFM ** NET CAPACITY IN BTU/H X 1000

Outdoor Model	4TTB6030AA000AA	
Indoor Model	MCDA30DBPHBA	
Airflow	820	
Values At ARI Rating Conditions	Correction Factors - Other Airflows	
Total Net Capacity	28,200 Btu/hr	Airflow 780 860
Airflow	820 CFM	Total Capacity 0.99 1.01
Compressor Power	1,810 Watts	Sensible Capacity 0.99 1.01
Indoor Fan Power	220 Watts	Compressor kW 1.00 1.00
Outdoor Fan Power	350 Watts	
CoP	3.50	
EER	11.85	

Rated with 25 Feet 3/4 Vapor Line 3/8 Liquid Line

O.D.D.B.	I.D.W.B.	TOTAL CAPACITY		SENSIBLE CAPACITY (ID DB)			POWER kW
		80.6	72	75	78	80	
85	59	26.00	20.83	23.27	25.26	26.00	2.16
85	63	27.24	17.30	19.82	22.31	24.04	2.16
85	67	29.76	13.93	16.41	18.90	20.55	2.17
95	59	24.85	20.16	22.50	24.21	24.86	2.37
95	63	25.77	16.61	19.13	21.75	23.33	2.37
95	67	28.13	13.13	15.70	18.15	19.89	2.38
105	63	24.22	15.99	18.59	21.00	22.54	2.61
105	67	26.40	12.40	14.95	17.45	19.17	2.62
105	71	28.72	8.99	11.53	13.97	15.67	2.62
115	63	22.56	15.33	17.76	20.17	21.78	2.89
115	67	24.53	11.66	14.26	16.82	18.52	2.89
115	71	26.80	8.20	10.70	13.25	14.92	2.90
120	63	21.69	14.84	17.37	19.80	21.10	3.04
120	67	23.60	11.34	13.83	16.47	18.12	3.04
120	71	25.79	7.80	10.35	12.87	14.52	3.05
125	63	20.92	14.44	16.91	19.49	20.70	3.21
125	67	22.63	10.92	13.58	16.02	17.71	3.21
125	71	24.75	7.37	9.95	12.52	14.14	3.21

Tested Performance @ UAE.S 5010 - 5 :2019

Condition	Voltage	OD-DB	ID-WB	ID-DB	Capacity	KW	EER
T1	230	95	66.2	80.6	28.15	2.39	11.80
T3	230	114.8	66.2	84.2	24.44	2.83	8.65

Performance at selected design conditions
 Dry coil condition (Total Capacity = Sensible Capacity)
 Total capacity, compressor kW and app. dew point valid only for wetcoil
 All temperatures in Degree F

4TTB6036AA WITH MCDA36 AT 915 CFM ** NET CAPACITY IN BTU/H X 1000

Outdoor Model	4TTB6036AA000AA	
Indoor Model	MCDA36DBPHBA	
Airflow	915	
Values At ARI Rating Conditions	Correction Factors - Other Airflows	
Total Net Capacity	33,800 Btu/hr	Airflow 870 960
Airflow	915 CFM	Total Capacity 0.99 1.01
Compressor Power	2,270 Watts	Sensible Capacity 0.98 1.02
Indoor Fan Power	195 Watts	Compressor kW 1.00 1.00
Outdoor Fan Power	400 Watts	
CoP	3.46	
EER	11.80	

Rated with 25 Feet 3/4 Vapor Line 3/8 Liquid Line

O.D.D.B.	I.D.W.B.	TOTAL CAPACITY		SENSIBLE CAPACITY (ID DB)			POWER kW
		80.6	72	75	78	80	
85	59	30.84	24.32	27.11	29.67	30.84	2.56
85	63	32.96	20.54	23.29	26.11	27.89	2.57
85	67	35.74	16.42	19.25	22.06	24.10	2.57
95	59	29.40	23.39	26.12	28.61	29.40	2.85
95	63	31.05	19.67	22.40	25.20	27.02	2.86
95	67	33.76	15.59	18.32	21.39	23.29	2.86
105	63	29.09	18.73	21.52	24.29	26.08	3.18
105	67	31.66	14.76	17.72	20.50	22.37	3.19
105	71	34.43	10.66	13.53	16.32	18.31	3.19
115	63	27.00	17.82	20.60	23.33	25.22	3.55
115	67	29.43	13.95	16.77	19.64	21.40	3.56
115	71	32.05	9.77	12.62	15.64	17.57	3.56
120	63	25.98	17.32	20.05	22.97	24.67	3.76
120	67	28.32	13.51	16.27	19.08	20.98	3.77
120	71	30.84	9.32	12.47	15.32	17.08	3.77
125	63	24.96	16.79	19.59	22.46	24.08	3.99
125	67	27.18	12.94	15.79	18.59	20.47	3.99
125	71	29.56	8.97	11.99	14.75	16.55	3.99

Tested Performance @ UAE.S 5010 - 5 :2019

Condition	OD-DB	Voltage	ID-WB	ID-DB	Capacity	KW	EER
T1	95	230	66.2	80.6	33.76	2.86	11.80
T3	114.8	230	66.2	84.2	30.97	3.59	8.63

Performance at selected design conditions
 Dry coil condition (Total Capacity = Sensible Capacity)
 Total capacity, compressor kW and app. dew point valid only for wetcoil
 All temperatures in Degree F



Performance Data Cooling

4TTA6042AD WITH MCDB42 AT 1140 CFM ** NET CAPACITY IN BTU/H X 1000

Outdoor Model		4TTA6042AD000AA					
Indoor Model		MCDB42DBPHBA					
Airflow		1140					
Values At ARI Rating Conditions		Correction Factors - Other Airflows					
Total Net Capacity	41,000 Btu/hr			Airflow		1080	1200
Airflow	1,140 CFM			Total Capacity		0.99	1.01
Compressor Power	2,770 Watts			Sensible Capacity		0.99	1.01
Indoor Fan Power	190 Watts			Compressor kW		1.00	1.00
Outdoor Fan Power	390 Watts						
CoP	3.58						
EER	12.25						
Rated with 25 Feet 3/4 Vapor Line 3/8 Liquid Line							
O.D.D.B.	I.D.W.B.	TOTAL CAPACITY		SENSIBLE CAPACITY (ID DB)			POWER kW
		80.6	72	75	78	80	
85	59	38.16	30.40	33.74	36.98	38.16	3.01
85	63	40.31	25.28	28.97	32.44	34.68	3.02
85	67	43.36	20.18	23.87	27.35	29.55	3.03
95	59	36.53	29.33	32.77	35.68	36.53	3.33
95	63	38.19	24.48	28.03	31.53	33.71	3.34
95	67	41.15	19.21	22.78	26.51	28.84	3.36
105	63	35.99	23.48	27.09	30.42	32.64	3.72
105	67	38.82	18.27	22.03	25.56	27.88	3.73
105	71	41.91	13.19	16.81	20.29	22.62	3.76
115	63	33.66	22.42	25.91	29.29	31.72	4.14
115	67	36.35	17.43	21.02	24.55	26.83	4.16
115	71	39.22	12.22	15.72	19.28	21.80	4.18
120	63	32.48	21.94	25.37	28.84	31.04	4.37
120	67	35.05	16.95	20.48	24.04	26.28	4.39
120	71	37.88	11.67	15.33	18.96	21.47	4.41
125	63	31.32	21.31	24.81	28.39	30.34	4.62
125	67	33.78	16.40	19.96	23.47	25.73	4.64
125	71	36.52	11.14	15.05	18.50	20.82	4.66
Tested Performance @ UAE.S 5010 - 5 :2019							
Condition	OD-DB	Voltage	ID-WB	ID-DB	Capacity	KW	EER
T1	95	400	66.2	80.6	41.11	3.37	12.20
T3	114.8	400	66.2	84.2	30.97	3.59	8.62
Performance at selected design conditions Dry coil condition (Total Capacity = Sensible Capacity) Total capacity, compressor kW and app. dew point valid only for wetcoil All temperatures in Degree F							

4TTA6048AD WITH MCDB48 AT 1450 CFM ** NET CAPACITY IN BTU/H X 1000

Outdoor Model		4TTA6048AD000AA					
Indoor Model		MCDB48DBPHBA					
Airflow		1450					
Values At ARI Rating Conditions		Correction Factors - Other Airflows					
Total Net Capacity	46,000 Btu/hr			Airflow		1380	1520
Airflow	1,450 CFM			Total Capacity		0.99	1.01
Compressor Power	3,010 Watts			Sensible Capacity		1.00	1.02
Indoor Fan Power	545 Watts			Compressor kW		1.00	1.00
Outdoor Fan Power	250 Watts						
CoP	3.56						
EER	12.10						
Rated with 25 Feet 1-1/8 Vapor Line 3/8 Liquid Line							
O.D.D.B.	I.D.W.B.	TOTAL CAPACITY		SENSIBLE CAPACITY (ID DB)			POWER kW
		80.6	72	75	78	80	
85	59	43.68	35.32	39.68	42.65	43.68	3.40
85	63	45.03	28.36	33.09	37.99	41.00	3.41
85	67	48.33	21.73	26.49	31.13	34.27	3.43
95	59	41.75	34.14	38.07	40.75	41.75	3.76
95	63	42.77	27.30	31.99	36.95	39.83	3.76
95	67	45.84	20.67	25.47	29.97	33.24	3.78
105	63	40.27	26.49	31.16	35.64	38.52	4.16
105	67	43.05	19.65	24.31	28.88	32.19	4.18
105	71	46.34	12.70	17.60	22.20	25.32	4.21
115	63	37.72	25.39	29.92	34.39	36.97	4.61
115	67	40.31	18.32	23.11	27.96	31.08	4.63
115	71	43.38	11.74	16.45	21.01	24.07	4.66
120	63	36.53	24.76	29.37	33.72	36.19	4.86
120	67	38.90	17.62	22.82	27.46	30.60	4.88
120	71	41.84	11.27	15.86	20.39	23.61	4.91
125	63	35.23	24.13	28.64	32.97	35.06	5.13
125	67	37.37	17.50	22.20	27.00	29.83	5.15
125	71	40.14	10.54	15.29	20.12	23.30	5.18
Tested Performance @ UAE.S 5010 - 5 :2019							
Condition	OD-DB	Voltage	ID-WB	ID-DB	Capacity	KW	EER
T1	95	400	66.2	80.6	45.90	3.81	12.05
T3	114.8	400	66.2	84.2	40.06	4.61	8.69
Performance at selected design conditions Dry coil condition (Total Capacity = Sensible Capacity) Total capacity, compressor kW and app. dew point valid only for wetcoil All temperatures in Degree F							



Performance Data Cooling

4TTA6060AD WITH MCDB60 AT 1525 CFM ** NET CAPACITY IN BTU/H X 1000

Outdoor Model			4TTA6060AD000AA
Indoor Model			MCDB60DBPHBA
Airflow			1525
Values At ARI Rating Conditions			Correction Factors - Other Airflows
Total Net Capacity	53,000	Btu/hr	Airflow 1330 1470
Airflow	1,400	CFM	Total Capacity 0.99 1.01
Compressor Power	3,725	Watts	Sensible Capacity 1.00 1.03
Indoor Fan Power	500	Watts	Compressor kW 1.00 1.00
Outdoor Fan Power	215	Watts	
CoP	3.50		
EER	11.95		

Rated with 25 Feet 1-1/8 Vapor Line 3/8 Liquid Line

O.D.D.B.	I.D.W.B.	TOTAL CAPACITY		SENSIBLE CAPACITY (ID DB)			POWER
		80.6	72	75	78	80	kW
85	59	48.95	38.18	42.71	47.12	48.95	3.95
85	63	51.82	31.97	36.43	40.92	43.97	3.97
85	67	55.68	25.12	29.42	33.82	37.43	4.00
95	59	46.78	36.84	41.46	45.45	46.78	4.38
95	63	49.13	30.49	35.10	39.59	42.59	4.40
95	67	52.94	23.79	28.07	33.14	36.15	4.43
105	63	46.11	29.12	33.68	38.17	41.29	4.88
105	67	49.90	22.59	27.29	31.82	34.93	4.92
105	71	53.87	16.04	20.49	24.93	28.19	4.96
115	63	43.13	27.63	32.28	37.01	39.93	5.43
115	67	46.69	21.39	25.97	30.45	33.43	5.47
115	71	50.39	14.67	19.26	24.12	27.05	5.51
120	63	41.50	26.96	31.44	36.16	38.99	5.72
120	67	44.99	20.73	25.20	29.75	32.78	5.76
120	71	48.67	14.05	18.80	23.33	26.37	5.81
125	63	39.80	26.15	30.82	35.30	38.23	6.03
125	67	43.23	19.97	24.41	28.99	31.99	6.07
125	71	46.78	13.26	18.14	22.65	25.67	6.12

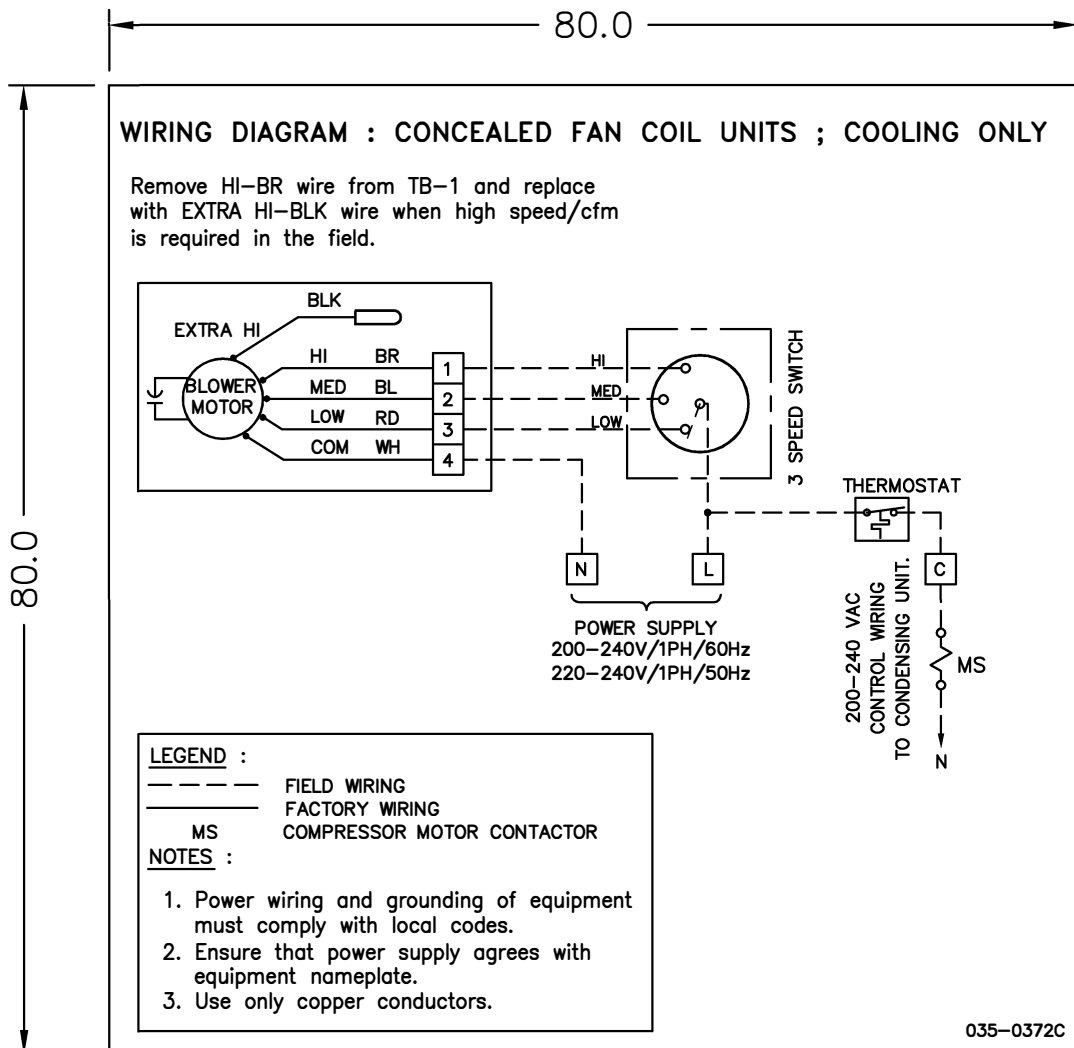
Tested Performance @ UAE.S 5010 - 5 :2019

Condition	OD-DB	Voltage	ID-WB	ID-DB	Capacity	KW	EER
T1	95	95	66.2	80.6	52.99	4.44	11.93
T3	114.8	114.8	66.2	84.2	46.45	5.40	8.61

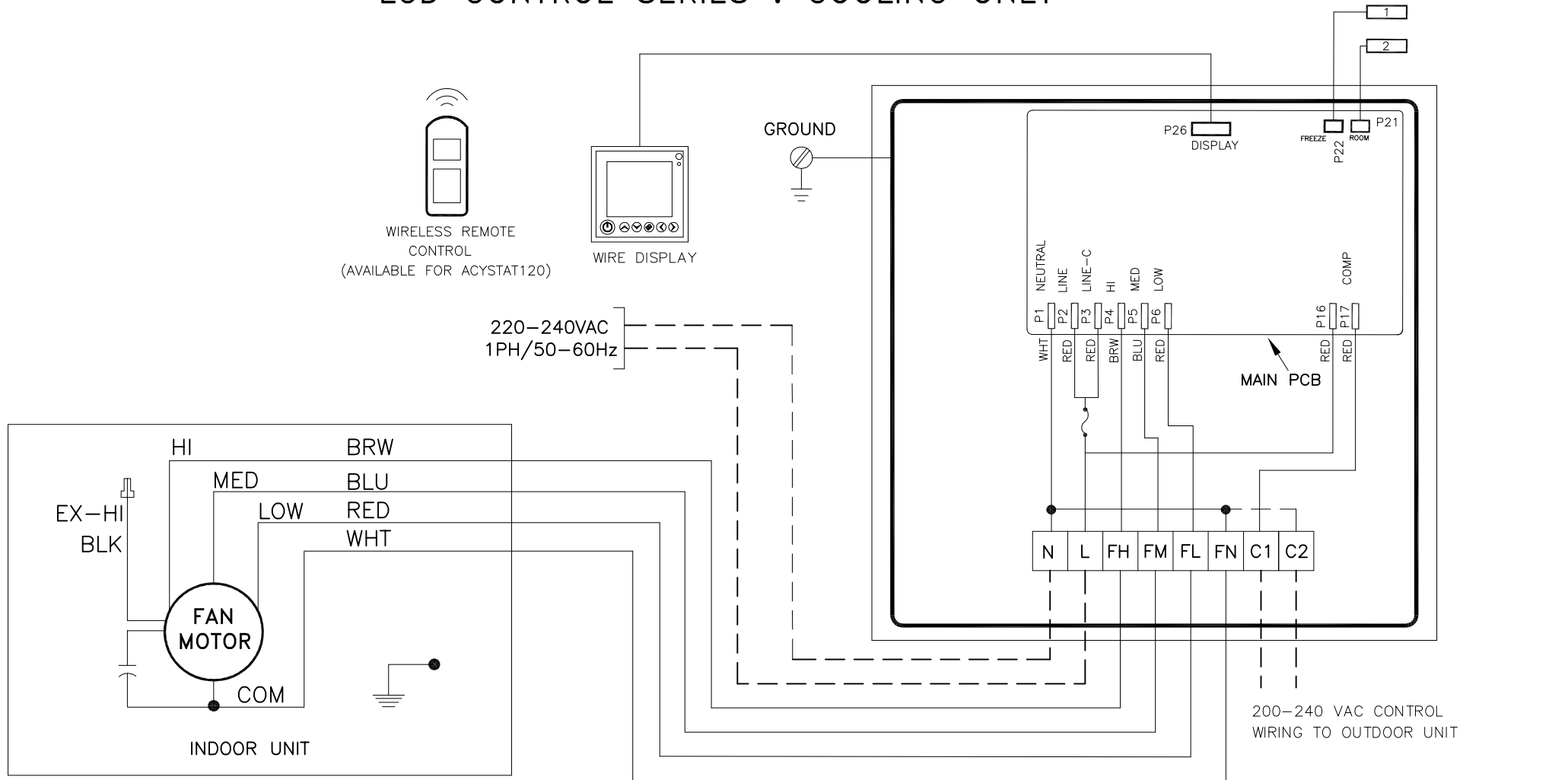
Performance at selected design conditions
 Dry coil condition (Total Capacity = Sensible Capacity)
 Total capacity, compressor kW and app. dew point valid only for wetcoil
 All temperatures in Degree F

MCD Wiring Diagram

COOLING ONLY
MCDA18-36
MCDB42-60



WIRING DIAGRAM LCD CONTROL SERIES : COOLING ONLY



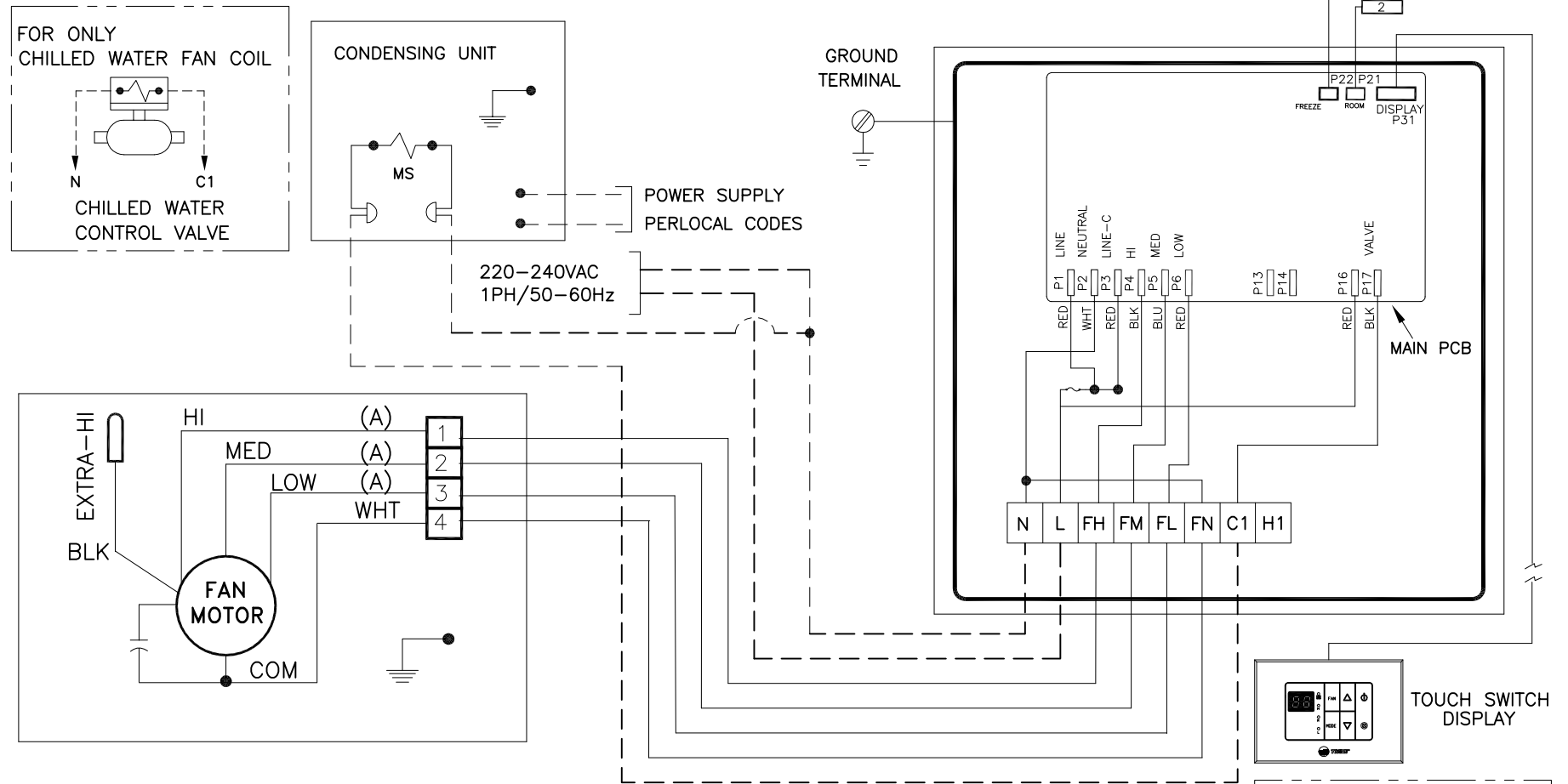
NOTES :

1. Power wiring and grounding of equipment must comply with local codes.
2. Ensure that power supply agrees with equipment nameplate.
3. Use only copper conductors.
4. Total fan motor running amperes must not exceed 2.25 AMPS.
5. Total amperes must not exceed 5.0 AMPS. (resistive)
2.25 AMPS. (inductive)

LEGEND :

- FACTORY WIRING
- FIELD WIRING
- FUSE 3 AMP.

WIRING DIAGRAM TOUCH CONTROL SERIES : COOLING ONLY



1. FREEZE SENSOR LOCATED ON EVAPORATOR COIL
2. TEMPERATURE SENSOR LOCATED IN RETURN AIR STREAM

(A) DETEALS(MOTOR WIRE COLORS)

MODELS	HI	MED	LOW
3 SPEED*	BLACK	BLUE	RED
4 SPEED	BROWN	BLUE	RED

*EXTRA-HI is unavailable for 3 speed models.

NOTES :

1. Power wiring and grounding of equipment must comply with local codes.
2. Ensure that power supply agrees with equipment nameplate.
3. Use only copper conductors.
4. Total fan motor running amperes must not exceed 5 AMPS.
5. In each terminal, total amperes must not exceed
 - 10 AMPS. (resistive)
 - 5 AMPS. (inductive)

***REMOTE CONTROL COOLING ONLY FOR WIRELESS MODEL ONLY ACYSTAT170AA**

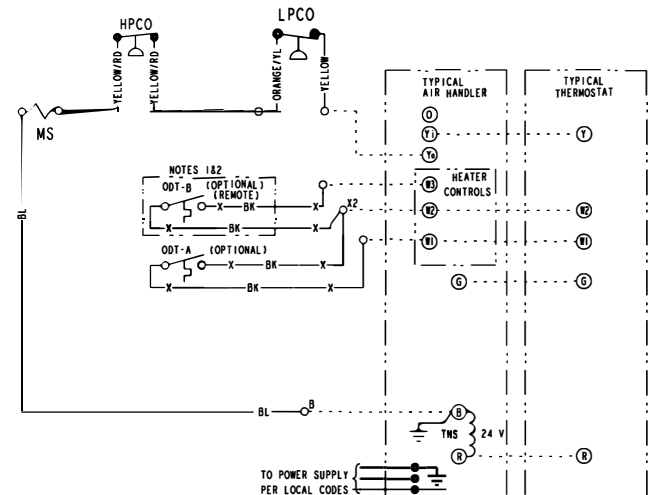
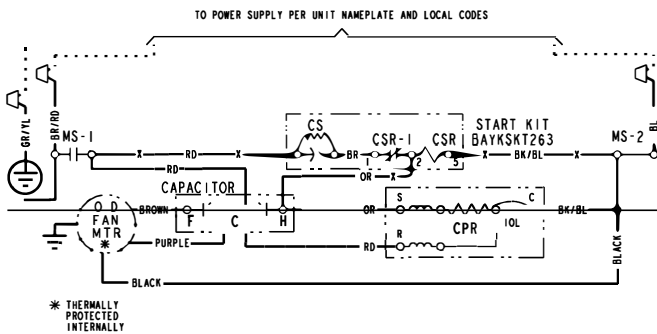
LEGEND :

- FACTORY WIRING
- FIELD WIRING

Electrical Data

Schematic Diagrams

4TTB6018AA, 4TTB6024AA, 4TTB6030AA, 4TTB6036AA



FOR CANADIAN INSTALLATIONS
POUR INSTALLATIONS CANADIENNES

CAUTION: NOT SUITABLE FOR USE ON SYSTEMS EXCEEDING 150V-TO-GROUND.
ATTENTION: NE CONVIENT PAS AUX INSTALLATIONS DE PLUS DE 150 V A LA TERRE.

- NOTES:
1. IF ODT-B IS NOT USED, ADD JUMPER BETWEEN W2 & W3 AT AIR HANDLER. IF USED, ODT-B MUST BE MOUNTED REMOTE OF CONTROL BOX IN AN APPROVED WEATHER PROOF ENCLOSURE.
 2. IF ODT-A IS NOT USED, ADD JUMPER BETWEEN W1 & W2 AT AIR HANDLER.
 3. LOW VOLTAGE (24 V.) FIELD WIRING MUST BE 18 AWG MIN.

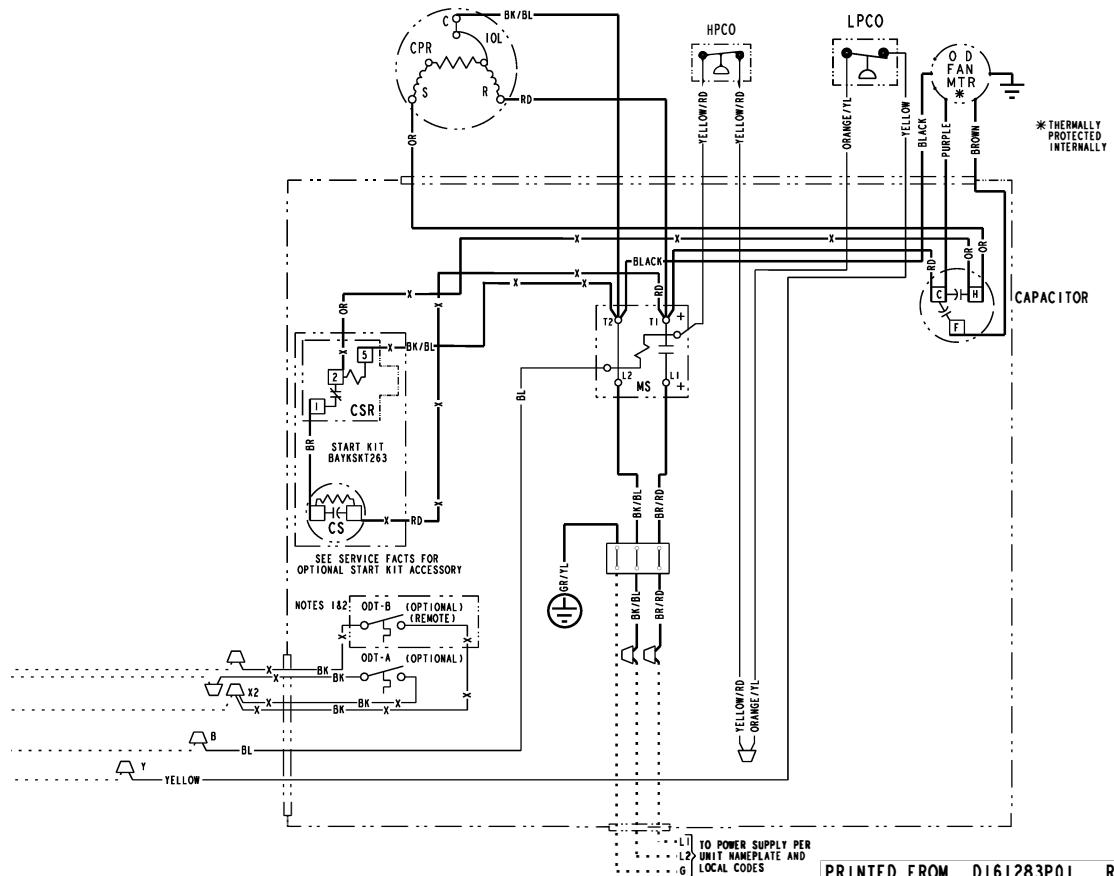
OUTDOOR TEMP (°F)	FIXED ORIFICE SUPERHEAT CHARGING TABLE											
	INDOOR WB TEMP (°F)											
	54	56	58	60	62	64	66	68	70	72	74	76
70	7	10	13	16	19	21	24	27	30	33	36	39
75	-	8	11	14	17	19	22	25	28	31	34	37
80	-	-	5	8	11	13	16	19	22	25	28	31
85	-	-	-	-	8	11	14	17	20	23	26	29
90	-	-	-	-	5	8	11	14	17	20	23	26
95	-	-	-	-	-	8	11	14	17	20	23	26
100	-	-	-	-	-	-	8	11	14	17	20	23
105	-	-	-	-	-	-	5	8	11	14	17	20
110	-	-	-	-	-	-	-	8	11	14	17	20
115	-	-	-	-	-	-	-	-	8	11	14	17
120	-	-	-	-	-	-	-	-	5	8	11	14

USING A DIGITAL PSYCHROMETER, MEASURE THE RETURN AIR WET-BULB TEMPERATURE AT THE UNIT JUST BEFORE THE COIL. ALSO MEASURE THE OUT-DOOR DRY-BULB TEMPERATURE. USE THESE TEMPERATURES TO LOCATE THE TARGET SUPERHEAT ON THE CHARGING TABLE. DO NOT ATTEMPT TO CHARGE THE SYSTEM IF THESE CONDITIONS FALL OUTSIDE OF THIS CHARGING TABLE. ADD REFRIGERANT TO DECREASE TOTAL SUPERHEAT. REMOVE REFRIGERANT TO INCREASE TOTAL SUPERHEAT. ALWAYS ALLOW 10 TO 15 MINUTES OF OPERATION AFTER ANY REFRIGERANT OR AIR FLOW CHANGE PRIOR TO DETERMINING THE FINAL SUPERHEAT.

LEGEND-EQUIPMENT DIAGRAM

- 24 V. } FACTORY WIRING
- 24 V. } FIELD WIRING
- X- FIELD INSTALLED FACTORY WIRING
- ⊥ GROUND
- JUNCTION
- WIRE NUT OR CONNECTOR
- ⌞ COIL
- ⌋ CAPACITOR
- ⌈ RELAY CONTACT (N.O.)
- ⌋ RELAY CONTACT (N.C.)
- ⊕ THERMISTOR
- ⌞ INTERNAL OVERLOAD PROTECTOR
- ⌋ PRESSURE ACTUATED SWITCH
- ⌈ TEMP. ACTUATED SWITCH
- ⌈ POL. PLUG FEMALE HOUSING (MALE TERM.)
- ⌋ POL. PLUG MALE HOUSING (FEMALE TERM.)
- ⌈ RESISTOR OR HEATING ELEMENT
- ⌋ MOTOR WINDING
- TERMINAL

Electrical Data



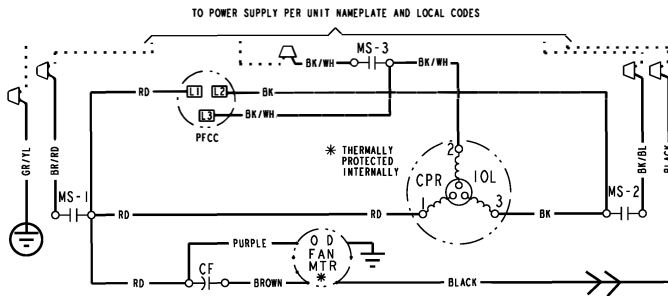
- | | | | |
|-----------------|-----------------------------|----|--------|
| COLOR OF WIRE | | | |
| BK/BL | BLACK WIRE WITH BLUE MARKER | | |
| COLOR OF MARKER | | | |
| BK | BLACK | OR | ORANGE |
| BL | BLUE | RD | RED |
| BR | BROWN | WH | WHITE |
| YL | YELLOW | GR | GREEN |
| | | PR | PURPLE |
-
- | | | | |
|------|-----------------------------|------|----------------------------|
| CA | COOLING ANTICIPATOR | LPCO | LOW PRESSURE CUTOFF SW. |
| CBS | COIL BOTTOM SENSOR | MS | COMPRESSOR MOTOR CONTACTOR |
| CF | FAN CAPACITOR | ODA | OUTDOOR ANTICIPATOR |
| CM | WIRE CONNECTOR | ODT | OUTDOOR FAN THERMOSTAT |
| CPR | COMPRESSOR | ODS | OUTDOOR TEMPERATURE SENSOR |
| CR | RUN CAPACITOR | ODT | OUTDOOR THERMOSTAT |
| CS | STARTING CAPACITOR | RHS | RESISTANCE HEAT SWITCH |
| CSR | CAPACITOR SWITCHING RELAY | SC | SWITCHOVER VALVE SOLENOID |
| DFC | DEFROST CONTROL | SM | SYSTEM "ON-OFF" SWITCH |
| F | INDOOR FAN RELAY | TDL | DISCHARGE LINE THERMOSTAT |
| HA | HEATING ANTICIPATOR | TNS | TRANSFORMER |
| HPCO | HIGH PRESSURE CUTOFF SW. | TS | HEATING-COOLING THERMOSTAT |
| IOL | INTERNAL OVERLOAD PROTECTOR | TSH | HEATING THERMOSTAT |
| ACR | A/C RECTIFIER | R | ODT SUMP RESISTOR |
| | | SHR | SUMP HEATER RELAY |

<p>⚠ WARNING HAZARDOUS VOLTAGE! DISCONNECT ALL ELECTRIC POWER INCLUDING REMOTE DISCONNECTS BEFORE SERVICING. FAILURE TO DISCONNECT POWER BEFORE SERVICING CAN CAUSE SEVERE PERSONAL INJURY OR DEATH!</p>	<p>⚠ CAUTION USE COPPER CONDUCTORS ONLY! UNIT TERMINALS ARE NOT DESIGNED TO ACCEPT OTHER TYPES OF CONDUCTORS. FAILURE TO DO SO MAY CAUSE DAMAGE TO THE EQUIPMENT!</p>
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Electrical Data

Schematic Diagrams

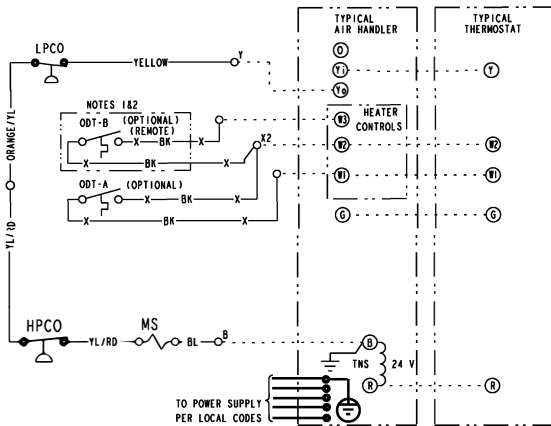
4TTA6042AD, 4TTA6048AD, 4TTA6060AD



FIXED ORIFICE SUPERHEAT CHARGING TABLE

OUTDOOR TEMP (°F)	INDOOR WB TEMP (°F)											
	54	56	58	60	62	64	66	68	70	72	74	76
	SUPERHEAT (°F)											
70	7	10	13	16	19	21	24	27	30	33	36	39
75	-	6	9	12	15	18	21	24	28	31	34	37
80	-	-	5	8	12	14	18	21	25	28	31	35
85	-	-	-	-	8	11	15	19	22	26	30	32
90	-	-	-	-	5	9	13	16	20	24	27	30
95	-	-	-	-	-	6	10	14	18	22	25	28
100	-	-	-	-	-	-	8	12	15	20	23	27
105	-	-	-	-	-	-	5	9	13	17	22	26
110	-	-	-	-	-	-	-	6	11	15	20	25
115	-	-	-	-	-	-	-	-	8	14	18	23
120	-	-	-	-	-	-	-	-	5	11	16	22

USING A DIGITAL PSYCHROMETER, MEASURE THE RETURN AIR WET-BULB TEMPERATURE AT THE UNIT JUST BEFORE THE COIL. ALSO MEASURE THE OUT-DOOR DRY-BULB TEMPERATURE. USE THESE TEMPERATURES TO LOCATE THE TARGET SUPERHEAT ON THE CHARGING TABLE. DO NOT ATTEMPT TO CHARGE THE SYSTEM IF THESE CONDITIONS FALL OUTSIDE OF THIS CHARGING TABLE. ADD REFRIGERANT TO DECREASE TOTAL SUPERHEAT. REMOVE REFRIGERANT TO INCREASE TOTAL SUPERHEAT. ALWAYS ALLOW 10 TO 15 MINUTES OF OPERATION AFTER ANY REFRIGERANT OR AIR FLOW CHANGE PRIOR TO DETERMINING THE FINAL SUPERHEAT.



NOTES:

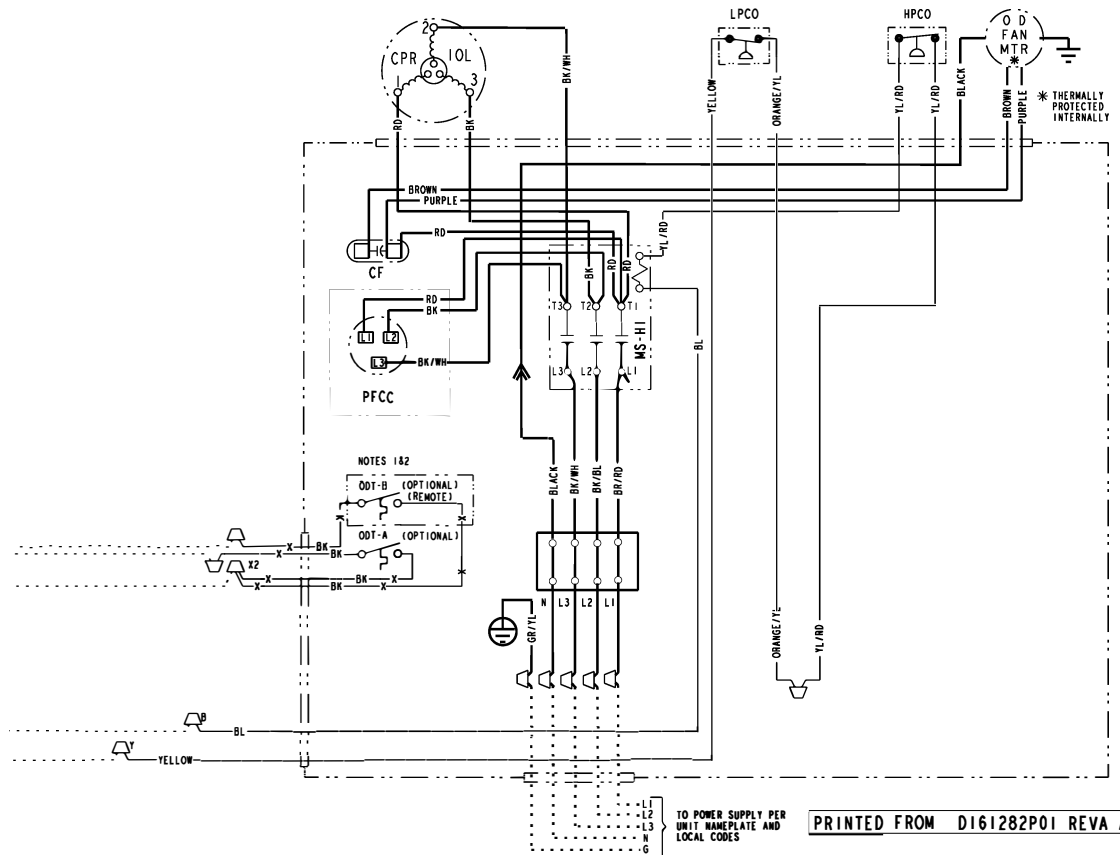
1. IF ODT-B IS NOT USED, ADD JUMPER BETWEEN W2 & W3 AT AIR HANDLER. IF USED, ODT-B MUST BE MOUNTED REMOTE OF CONTROL BOX IN AN APPROVED WEATHER PROOF ENCLOSURE.
2. IF ODT-A IS NOT USED, ADD JUMPER BETWEEN W1 & W2 AT AIR HANDLER.
3. LOW VOLTAGE (24 V.) FIELD WIRING MUST BE 18 AWG MIN.

NOTE
THREE PHASE MOTOR (S) FACTORY SUPPLIED IN THIS EQUIPMENT PROTECTED UNDER PRIMARY SINGLE-PHASE CONDITIONS.

LEGEND-EQUIPMENT DIAGRAM

- 24 V. LINE V. } FACTORY WIRING
- - - 24 V. LINE V. } FIELD WIRING
- ⊕ GROUND
- JUNCTION
- ⊖ WIRE NUT OR CONNECTOR
- ⊖ COIL
- ⊖ CAPACITOR
- ⊖ RELAY CONTACT (N.O.)
- ⊖ RELAY CONTACT (N.C.)
- ⊖ THERMISTOR
- ⊖ INTERNAL OVERLOAD PROTECTOR
- ⊖ PRESSURE ACTUATED SWITCH
- ⊖ TEMP. ACTUATED SWITCH
- ⊖ POL. PLUG FEMALE HOUSING (MALE TERM.)
- ⊖ POL. PLUG MALE HOUSING (FEMALE TERM.)
- ⊖ RESISTOR OR HEATING ELEMENT
- ⊖ MOTOR WINDING
- ⊖ TERMINAL
- ⊖ SINGLE INLINE CONNECTION
- ⊖ PFCC - POWER FACTOR CORRECTION CAPACITOR

Electrical Data



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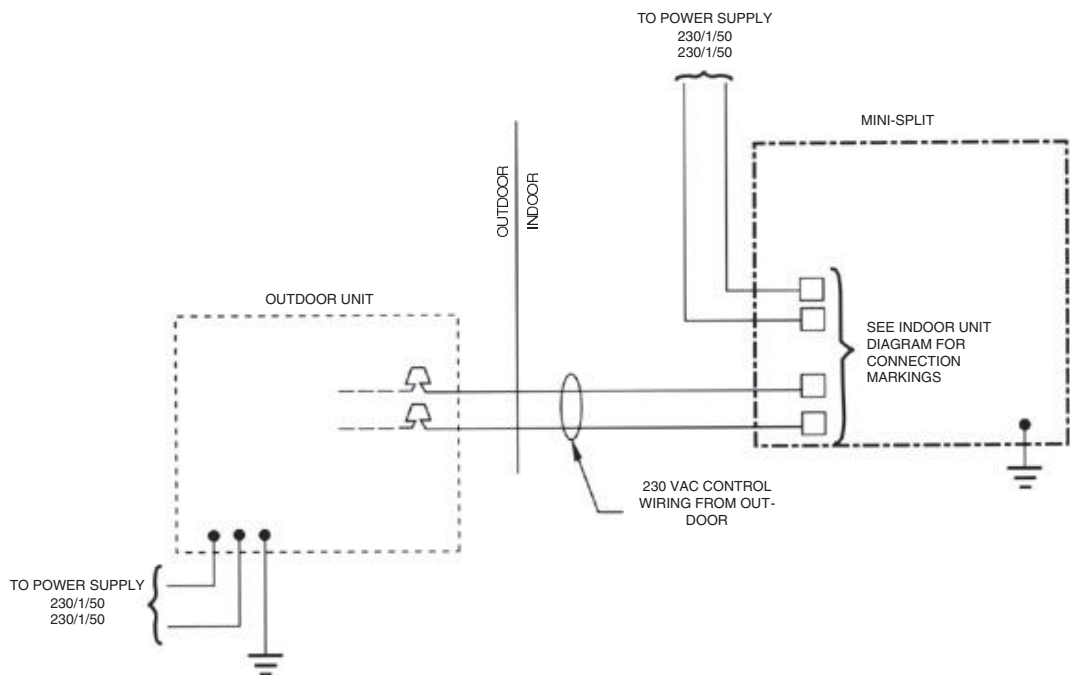
——— COLOR OF WIRE
 BK/BL BLACK WIRE WITH BLUE MARKER
 ——— COLOR OF MARKER
 BK BLACK OR ORANGE YL YELLOW
 BL BLUE RD RED GR GREEN
 BR BROWN WH WHITE PR PURPLE

- CA COOLING ANTICIPATOR
- CBS COIL BOTTOM SENSOR
- CF FAN CAPACITOR
- CN WIRE CONNECTOR
- CPR COMPRESSOR
- CR RUN CAPACITOR
- CS STARTING CAPACITOR
- CSR CAPACITOR SWITCHING RELAY
- DFC DEFROST CONTROL
- F INDOOR FAN RELAY
- HA HEATING ANTICIPATOR
- HPCO HIGH PRESSURE CUTOUT SW.
- IOL INTERNAL OVERLOAD PROTECTOR
- LPCO LOW PRESSURE CUTOUT SW.
- MS COMPRESSOR MOTOR CONTACTOR
- ODA OUTDOOR ANTICIPATOR
- ODT OUTDOOR FAN THERMOSTAT
- ODS OUTDOOR TEMPERATURE SENSOR
- ODT OUTDOOR THERMOSTAT
- RHS RESISTANCE HEAT SWITCH
- SC SWITCHOVER VALVE SOLENOID
- SW SYSTEM "ON-OFF" SWITCH
- IDL DISCHARGE LINE THERMOSTAT
- TNS TRANSFORMER
- TS HEATING-COOLING THERMOSTAT
- TSH HEATING THERMOSTAT
- PFCC POWER FACTOR CORRECTION CAPACITOR

<p>⚠ WARNING HAZARDOUS VOLTAGE! DISCONNECT ALL ELECTRIC POWER INCLUDING REMOTE DISCONNECTS BEFORE SERVICING. FAILURE TO DISCONNECT POWER BEFORE SERVICING CAN CAUSE SEVERE PERSONAL INJURY OR DEATH!</p>	<p>⚠ CAUTION USE COPPER CONDUCTORS ONLY! UNIT TERMINALS ARE NOT DESIGNED TO ACCEPT OTHER TYPES OF CONDUCTORS. FAILURE TO DO SO MAY CAUSE DAMAGE TO THE EQUIPMENT!</p>
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Electrical Data

4TTB / 4TTA / MCD

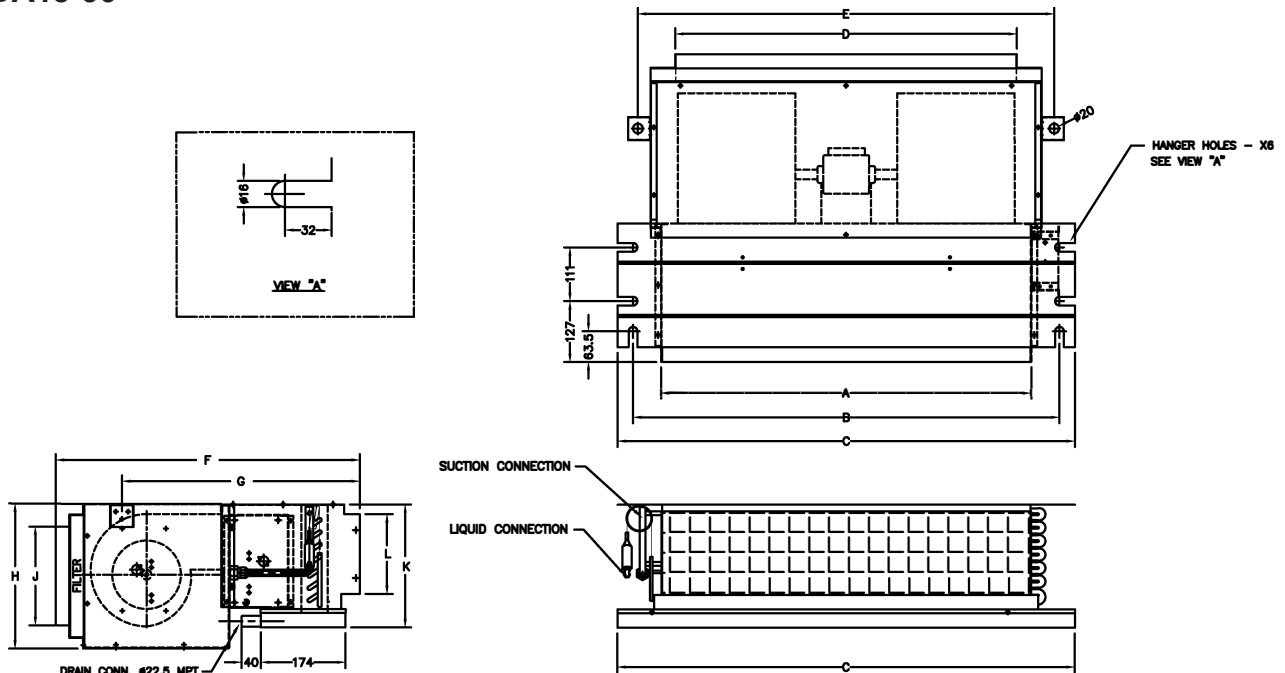


NOTES :

1. POWER WIRING AND GROUNDING OF EQUIPMENT MUST COMPLY WITH LOCAL CODES.
2. INSURE THAT POWER SUPPLY AGREES WITH EQUIPMENT NAME PLATE.
3. USE ONLY COPPER CONDUCTORS.

MCD Dimensional Data

OUTLINE DIMENSION MCDA18-36

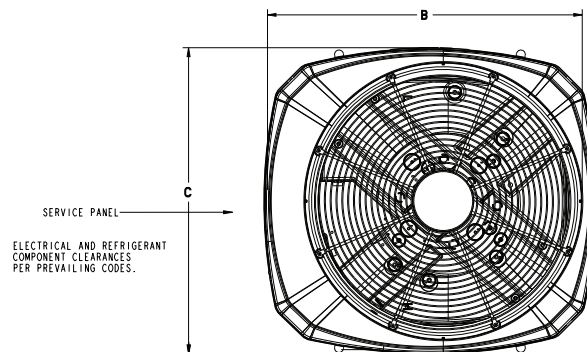


Model	All External Dimensions are in Millimeters (mm.)											Refrig. Line Conn. Sizes (SWEAT TYPE)		Refrig. Line Conn. Sizes (FLARE TYPE)		Number Of	
	A	B	C	D	E	F	G	H	J	K	L	Liquid	Suction	Liquid	Suction	Fan(s)	Motor(s)
	MCDA18DB	972	1022	1251	919	1077	538	440	304	221	258	193	-	-	3/8"(9.52)	3/4"(19.05)	2
MCDA24DB	972	1022	1251	919	1077	538	440	304	221	258	193	-	-	3/8"(9.52)	3/4"(19.05)	2	1
MCDA30DB	1069	1187	1251	1005	1166	724	577	394	302	258	165	-	-	3/8"(9.52)	3/4"(19.05)	2	1
MCDA36DB	916	1034	1098	851	1013	762	615	394	302	408	352	-	-	3/8"(9.52)	7/8"(22.23)	2	1
MCD842DB	916	1034	1098	851	1013	762	615	394	302	408	352	3/8"(9.52)	7/8"(22.23)	-	-	2	1
MCD848DB	1069	1187	1251	1005	1166	762	615	394	302	408	352	3/8"(9.52)	7/8"(22.23)	-	-	2	1
MCD860DB	1069	1187	1251	1005	1166	762	615	394	302	408	352	3/8"(9.52)	7/8"(22.23)	-	-	2	1

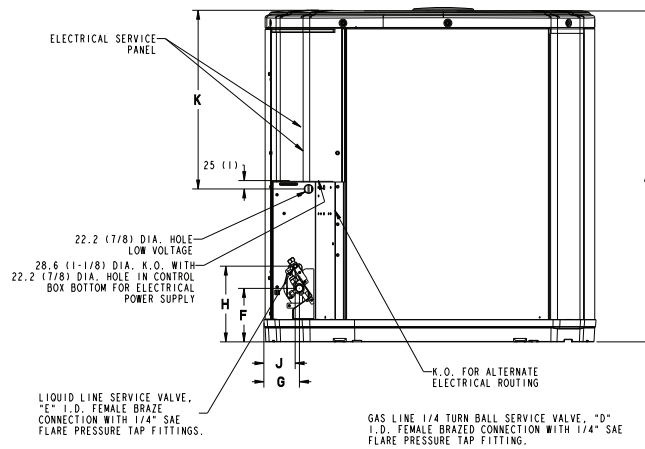
Dimensions

4TTB3 Outline Drawing

Note: All dimensions are in MM (Inches).



TOP DISCHARGE AREA SHOULD BE UNRESTRICTED FOR AT LEAST 1524 (5 FEET) ABOVE UNIT. UNIT SHOULD BE PLACED SO ROOF RUN-OFF WATER DOES NOT POUR DIRECTLY ON UNIT, AND SHOULD BE AT LEAST 305 (12") FROM WALL AND ALL SURROUNDING SHRUBBERY ON TWO SIDES. OTHER TWO SIDES UNRESTRICTED.



Model	Base	A	B	C	D	E	F	G	H	J	K
4TTB6018A	3	730 (28-3/4)	829 (32-5/8)	756 (29-3/4)	3/4	3/8	127 (5)	76 (3)	197 (7-3/4)	60 (2-3/8)	508 (20)
4TTB6024A	3	730 (28-3/4)	829 (32-5/8)	756 (29-3/4)	3/4	3/8	127 (5)	76 (3)	197 (7-3/4)	60 (2-3/8)	508 (20)
4TTB6030A	4	943 (37-1/8)	946 (37-1/4)	870 (34-1/4)	3/4	3/8	143 (5-5/8)	98 (3-7/8)	219 (8-5/8)	86 (3-3/8)	508 (20)
4TTB6036A	4	943 (37-1/8)	946 (37-1/4)	870 (34-1/4)	3/4	3/8	143 (5-5/8)	98 (3-7/8)	219 (8-5/8)	86 (3-3/8)	508 (20)
4TTB6042A	4	943 (37-1/8)	946 (37-1/4)	870 (34-1/4)	3/4	3/8	143 (5-5/8)	98 (3-7/8)	219 (8-5/8)	86 (3-3/8)	508 (20)
4TTB6048A	4	1147 (45-1/8)	946 (37-1/4)	870 (34-1/4)	7/8	3/8	152 (6)	98 (3-7/8)	219 (8-5/8)	86 (3-3/8)	813 (32)
4TTB6060A	4	1147 (45-1/8)	946 (37-1/4)	870 (34-1/4)	7/8	3/8	152 (6)	98 (3-7/8)	219 (8-5/8)	86 (3-3/8)	813 (32)



Mechanical Specifications - 4TTB

General

The 4TTB3 is fully charged from the factory for up to 25 feet of piping. This unit is designed to operate at outdoor ambient temperatures as high as 125°F. Cooling capacities are matched with a wide selection of air handlers and furnace coils that are **tested in accordance to AHRI and UL 1995.**

Casing

Unit casing is constructed of heavy gauge, G90 galvanized steel and painted with a weather-resistant powder paint on all louvers, panels, pre-paint on all other panels. Corrosion and weatherproof CMBP-G30 DuraTuff™ base.

Refrigerant Controls

Refrigeration system controls include condenser fan and compressor contactor. High and low pressure controls are inherent to the compressor. Liquid line drier is shipped separately with the unit for field installation.

Compressor

The Scroll compressor features internal over temperature and pressure protection and total dipped hermetic motor and thermostatically controlled sump/ crankcase heater. Other features include: centrifugal oil pump and low vibration and noise.

Condenser Coil

The outdoor coil provides low airflow resistance and efficient heat transfer. The coil is protected on all four sides by louvered panels.

Optional Accessories:

Low Ambient Cooling

As manufactured, this unit has a cooling capability to 55°F. The addition of an evaporator defrost control with TXV permits low ambient cooling to 30°

Accessories

Thermostats — Cooling only and heat/cooling (manual and automatic changeover). Sub-base to match thermostat and locking thermostat cover.



Mechanical Specifications - 4TTA

General

The 4TTA3 is fully charged from the factory for up to 25 feet of piping. This unit is designed to operate at outdoor ambient temperatures as high as 125°F. Cooling capacities are matched with a wide selection of air handlers and furnace coils that are **tested in accordance to AHRI and UL 1995.**

Casing

Unit casing is constructed of heavy gauge, G90 galvanized steel and painted with a weather-resistant powder paint on all louvers, panels, prepaint on all other panels. Corrosion and weatherproof CMBP-G30 DuraTuff™ base.

Refrigerant Controls

Refrigeration system controls include condenser fan and compressor contactor. High and low pressure controls are inherent to the compressor. Liquid line drier is shipped separately with the unit for field installation.

Compressor

The Scroll compressor features internal over temperature and pressure protection and total dipped hermetic motor and thermostatically controlled sump/ crankcase heater . Other features include: centrifugal oil pump and low vibration and noise.

Condenser Coil

The outdoor coil provides low airflow resistance and efficient heat transfer. The coil is protected on all four sides by louvered panels.

Optional Accessories:

Low Ambient Cooling

As manufactured, this unit has a cooling capability to 55°F. The addition of an evaporator defrost control with TXV permits low ambient cooling to 30° F.

Accessories

Thermostats — Cooling only and heat/cooling (manual and automatic changeover). Sub-base to match thermostat and locking thermostat cover.



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