



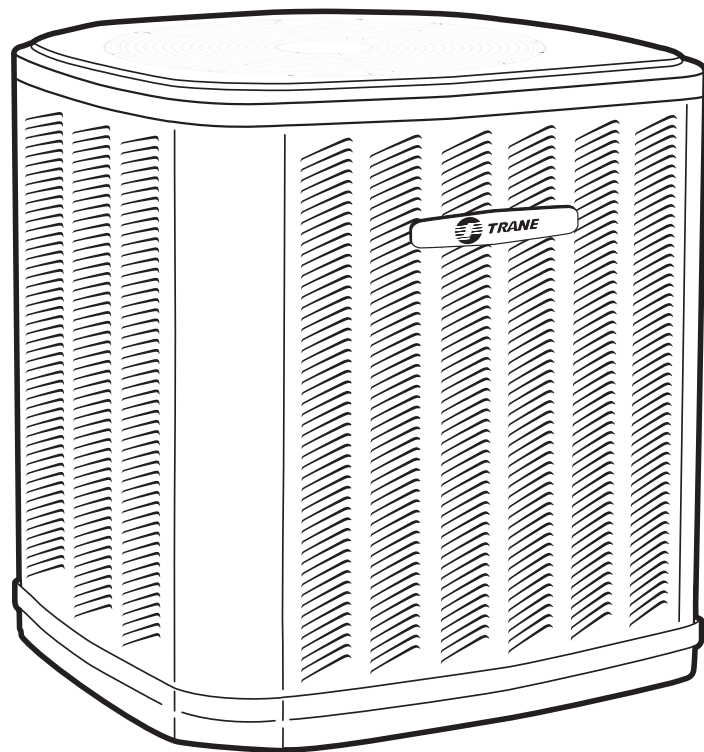
# Split System Heat Pump Product Data

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## Three Phase

4TWA3030A3000C	4TWA3042B4000A
4TWA3030A4000C	4TWA3048A3000C
4TWA3036A3000C	4TWA3048A4000C
4TWA3036A4000C	4TWA3060B3000A
4TWA3042B3000A	4TWA3060B4000A

2½ – 5 Tons





# Features and Benefits

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- 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 and temperature protection
- Liquid line filter-drier
- Polyslate gray cabinet with anthracite gray badge and cap
- Low pressure switch
- High pressure switch
- Compressor Sump Heat
- Demand Defrost Control with Diagnostics
- R-410A refrigerant
- S.E.E.T. design testing
- 100% line run test
- Low ambient cooling to 55°F as shipped
- Low ambient cooling to 30°F with EDC accessory AY28X084
- Low ambient cooling to 0°F with BAY-LOAM103
- **Extended warranties available**

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# General Data

## Product Specifications

Model No. ①	4TWA3030A3000C	4TWA3030A4000C	4TWA3036A3000C	4TWA3036A4000C
Electrical Data V/Ph/Hz ②	200/230/3/60	460/3/60	200/230/3/60	460/3/60
Min Cir Ampacity	11	5	16	7
Max Fuse Size (Amps)	15	15	25	15
Compressor	RECIP	RECIP	SCROLL	SCROLL
RL Amps - LR Amps	7.9 - 54.9	3.9 - 28.0	11.5 - 77	5.1 - 35
Outdoor Fan FL Amps	0.7	0.4	1.3	0.6
Fan HP	1/8	1/8	1/4	1/5
Fan Dia (inches)	23.0	23.0	27.6	27.6
Coil	Spine Fin™	Spine Fin™	Spine Fin™	Spine Fin™
Refrigerant R-410A	6/01-LB/OZ	6/01-LB/OZ	7/15-LB/OZ	7/15-LB/OZ
Line Size - (in.) O.D. Gas ③	3/4	3/4	3/4	3/4
Line Size - (in.) O.D. Liquid ③	3/8	3/8	3/8	3/8
Charge Spec. Subcooling	9°	9°	10°	10°
Dimensions H x W x D (Crated)	42 x 30.1 x 33	42 x 30.1 x 33	42.4 x 35.1 x 38.7	42.4 x 35.1 x 38.7
Weight - Shipping	233	231	264	263
Weight - Net	204	202	229	228
Start Components	NO	NO	NO	NO
Sound Enclosure	NO	NO	NO	NO
Compressor Sump Heat	YES	YES	YES	YES
<b>Optional Accessories: ④</b>				
Anti-short Cycle Timer	TAYASCT501A	TAYASCT501A	TAYASCT501A	TAYASCT501A
Evaporator Defrost Control	AY28X084	AY28X084	AY28X084	AY28X084
Rubber Isolator Kit	BAYISLT101	BAYISLT101	BAYISLT101	BAYISLT101
Snow Leg - Base & Cap 4" High	BAYLEGS002	BAYLEGS002	BAYLEGS002	BAYLEGS002
Snow Leg - 4" Extension	BAYLEGS003	BAYLEGS003	BAYLEGS003	BAYLEGS003
Indoor Fan Delay Kit	BAY24X045	BAY24X045	BAY24X045	BAY24X045
Sound Enclosure	BAYSDEN001	BAYSDEN001	BAYSDEN003	BAYSDEN003
Extreme Condition Mounting Kit	BAYECMT023	BAYECMT023	BAYECMT004	BAYECMT004
Seacoast Kit	BAYSEAC001	BAYSEAC001	BAYSEAC001	BAYSEAC001
Low Ambient Kit	BAYLOAM103	BAYLOAM103	BAYLOAM103	BAYLOAM103
Refrigerant Lineset ⑤	TAYREFLN2*	TAYREFLN2*	TAYREFLN7*	TAYREFLN7*

① Certified in accordance with the Air-Source Unitary Heat Pump equipment certification program which is based on ARI Standard 210/240.

② Calculated in accordance with N.E.C. Only use HACR circuit breakers or fuses.

③ Standard line lengths - 60'. Standard lift - 60' Suction and Liquid line.

For Greater lengths and lifts refer to refrigerant piping software Pub# 32-3312-01. (\*denotes latest revision)

④ For accessory description and usage, see page 5.

⑤ \* = 15, 20, 25, 30, 40 and 50 foot lineset available.

MODEL	A-weighted Sound Power Level [dB(A)]								
	SOUND POWER LEVEL [dB(A)]	A-WEIGHTED FULL OCTAVE SOUND POWER LEVEL dB - [dB(A)]							
		63	125	250	500	1000	2000	4000	8000
4TWA3030A3/4	80	46.6	58.2	65.9	69.2	73.5	73.1	62.3	56.5
4TWA3036A3/4	79	46.4	59.6	67.4	74.8	73.8	68.9	61.2	53.4
4TWA3042B3/4	80	47.6	58.3	67.3	74.9	74.9	70.4	62.3	53.0
4TWA3048A3/4	78	47.0	56.5	66.7	73.0	72.8	69.3	62.0	51.4
4TWA3060B3/4	78	45.3	55.1	66.6	73.0	73.5	69.7	63.1	53.9

Note: Tested in accordance with ARI Standard 270.95. (Not listed with ARI)



# General Data

## Product Specifications

Model No. ①	4TWA3042B3000A	4TWA3042B4000A	4TWA3048A3000C	4TWA3048A4000C
Electrical Data V/Ph/Hz ②	200/230/3/60	460/3/60	200/230/3/60	460/3/60
Min Cir Ampacity	18	8	21	9
Max Fuse Size (Amps)	30	15	35	15
Compressor	SCROLL	SCROLL	SCROLL	SCROLL
RL Amps - LR Amps	13.6 - 83	6.1 - 41	16.0 - 91	7.1 - 46
Outdoor Fan FL Amps	0.86	0.60	1.3	0.6
Fan HP	1/5	1/5	1/6	1/5
Fan Dia (inches)	27.6	27.6	27.6	27.6
Coil	Spine Fin™	Spine Fin™	Spine Fin™	Spine Fin™
Refrigerant R-410A	7/07-LB/OZ	7/07-LB/OZ	8/10-LB/OZ	8/10-LB/OZ
Line Size - (in.) O.D. Gas ③	3/4	3/4	7/8	7/8
Line Size - (in.) O.D. Liquid ③	3/8	3/8	3/8	3/8
Charge Spec. Subcooling	8°	8°	10°	10°
Dimensions H x W x D (Crated)	38.4 x 35.1 x 38.7	38.4 x 35.1 x 38.7	46.4 x 35.1 x 38.7	46.4 x 35.1 x 38.7
Weight - Shipping	248	248	277	276
Weight - Net	214	214	241	240
Start Components	NO	NO	NO	NO
Sound Enclosure	NO	NO	NO	NO
Compressor Sump Heat	YES	YES	YES	YES
<b>Optional Accessories: ④</b>				
Anti-short Cycle Timer	TAYASCT501A	TAYASCT501A	TAYASCT501A	TAYASCT501A
Evaporator Defrost Control	AY28X084	AY28X084	AY28X084	AY28X084
Rubber Isolator Kit	BAYISLT101	BAYISLT101	BAYISLT101	BAYISLT101
Snow Leg - Base & Cap 4" High	BAYLEGS002	BAYLEGS002	BAYLEGS002	BAYLEGS002
Snow Leg - 4" Extension	BAYLEGS003	BAYLEGS003	BAYLEGS003	BAYLEGS003
Indoor Fan Delay Kit	BAY24X045	BAY24X045	BAY24X045	BAY24X045
Sound Enclosure	BAYSDEN003	BAYSDEN003	BAYSDEN003	BAYSDEN003
Extreme Condition Mounting Kit	BAYECMT004	BAYECMT004	BAYECMT004	BAYECMT004
Seacoast Kit	BAYSEAC001	BAYSEAC001	BAYSEAC001	BAYSEAC001
Low Ambient Kit	BAYLOAM103	BAYLOAM103	BAYLOAM103	BAYLOAM103
Refrigerant Lineset ⑤	TAYREFLN7*	TAYREFLN7*	TAYREFLN3*	TAYREFLN3*

### Accessory Description and Usage

**Anti-Short Cycle Timer** — Solid state timing device that prevents compressor recycling until five (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** — Five (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.

**Hard Start kit** — Start capacitor and relay to assist compressor motor startup. Use in areas with marginal power supply, on long linesets, low ambient conditions, etc.

**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.

### ARI Standard Capacity Rating Conditions

#### ARI STANDARD 210/240 RATING CONDITIONS —

- (A) Cooling 80°F DB, 67°F WB air entering indoor coil, 95°F DB air entering outdoor coil.
- (B) High Temperature Heating 47°F DB, 43°F WB air entering outdoor coil, 70°F DB air entering indoor coil.
- (C) Low Temperature Heating 17°F DB, 15°F WB air entering outdoor coil, 70°F DB air entering indoor coil.
- (D) Rated indoor airflow for heating is the same as for cooling.

**ARI STANDARD 270 RATING CONDITIONS** — (Noise rating numbers are determined with the unit in cooling operation.) Standard Noise Rating number is at 95°F outdoor air.





# General Data

## Product Specifications

Model No. <sup>①</sup>	4TWA3060B3000A	4TWA3060B4000A
Electrical Data V/Ph/Hz <sup>②</sup>	200/230/3/60	460/3/60
Min Cir Ampacity	20	10
Max Fuse Size (Amps)	35	15
Compressor	SCROLL	SCROLL
RL Amps - LR Amps	15.6 - 110	7.8 - 52
Outdoor Fan FL Amps	0.86	0.6
Fan HP	1/5	1/5
Fan Dia (inches)	27.6	27.6
Coil	Spine Fin™	Spine Fin™
Refrigerant R-410A	8/14-LB/OZ	8/14-LB/OZ
Line Size - (in.) O.D. Gas <sup>③</sup>	7/8	7/8
Line Size - (in.) O.D. Liquid <sup>③</sup>	3/8	3/8
Charge Spec. Subcooling	8°	8°
Dimensions H x W x D (Crated)	46.4 x 35.1 x 38.7	46.4 x 35.1 x 38.7
Weight - Shipping	280	280
Weight - Net	244	244
Start Components	NO	NO
Sound Enclosure	NO	NO
Compressor Sump Heat	YES	YES
<b>Optional Accessories:</b> <sup>④</sup>		
Anti-short Cycle Timer	TAYASCT501A	TAYASCT501A
Evaporator Defrost Control	AY28X084	AY28X084
Rubber Isolator Kit	BAYISLT101	BAYISLT101
Snow Leg - Base & Cap 4" High	BAYLEGS002	BAYLEGS002
Snow Leg - 4" Extension	BAYLEGS003	BAYLEGS003
Indoor Fan Delay Kit	BAY24X045	BAY24X045
Sound Enclosure	BAYSDEN004	BAYSDEN004
Extreme Condition Mounting Kit	BAYECMT004	BAYECMT004
Seacoast Kit	BAYSEAC001	BAYSEAC001
Low Ambient Kit	BAYLOAM103	BAYLOAM103
Refrigerant Lineset <sup>⑤</sup>	TAYREFLN3*	TAYREFLN3*

① Certified in accordance with the Air-Source Unitary Heat Pump equipment certification program which is based on ARI Standard 210/240.

② Calculated in accordance with N.E.C. Only use HACR circuit breakers or fuses.

③ Standard line lengths - 60'. Standard lift - 60' Suction and Liquid line.

For Greater lengths and lifts refer to refrigerant piping software Pub# 32-3312-0\*. (\*denotes latest revision)

④ For accessory description and usage, see page 5.

⑤ \* = 15, 20, 25, 30, 40 and 50 foot lineset available.



# Model Nomenclature

## Outdoor Units

Refrigerant Type  
4 = R-410A

TRANE

Product Type  
W = Split Heat Pump  
T = Split Cooling

Product Family  
Z = Leadership  
X = Premium  
R = Replacement/Retail  
M or B = Basic  
A = Light Commercial

Family SEER  
0 = 20    3 = 13    6 = 16  
1 = 11    4 = 14    8 = 18  
2 = 12    5 = 15    9 = 19

Split System Connections 1-6 Tons  
0 = Brazed

Nominal Capacity in 000s of BTUs

Major Design Modifications

Power Supply  
1 = 200-230/1/60 or 208-230/1/60  
3 = 200-230/3/60  
4 = 460/3/60

Secondary Function

Minor Design Modifications

Unit Parts Identifier

4 T W A 3 0 3 6 A 3 0 0 0 A A

## Gas Furnaces

Furnace Configuration  
TU = Upflow/Horizontal  
TD = Downflow/Horizontal

Type  
E = 80% Induced Draft Standard  
D = 80% Induced Draft Premium  
C = 90% Condensing Standard  
X = 90% Condensing Premium  
H = 95% Condensing Premium

Number of Heating Stages  
1 = Single Stage  
2 = Two Stage  
M = Modulating

Cabinet Width  
A = 14.5" Cabinet Width  
B = 17.5" Cabinet Width  
C = 21.0" Cabinet Width  
D = 24.5" Cabinet Width

Heating Input in 1000's (BTUH)  
080 = 80,000 BTUH

Major Design Change

Voltage  
9 = 115 Volts / 60 Hertz / Natural Gas  
A = 115 Volts / 50 Hertz / Natural Gas  
C = 115 Volts / Natural Gas with Communicating System Control  
F = 115 Volts / Natural Gas with Integrated Electronic Filter  
D = 115 Volts / Natural Gas with Communicating System Control and Integrated Electronic Filter

Air Capacity for Cooling  
Standard PSC    Variable Speed    High Efficiency  
24 = 2 Tons    V3 = 3 Tons    H3 = 3 Tons  
36 = 3 Tons    V4 = 4 Tons    H4 = 4 Tons  
42 = 3.5 Tons    V5 = 5 Tons    H5 = 5 Tons  
45 = 4 Tons  
48 = 4 Tons  
54 = 5 Tons  
60 = 5 Tons  
72 = 6 Tons

Draft Inducer Speeds  
1 = Single Speed  
2 = Two Speed  
V = Variable Speed

Minor Design Change

Service Digit - Not Orderable

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15  
T U D 1 B 0 8 0 A 9 H 3 1 A A

## Air Handler

Brand  
T = Better  
G = Good

Product Type  
A = Air Handler

Convertability  
M = Multi-poise 4-way  
F = Upflow Front Return, 3-way  
T = 3-way

Product Tier  
2 = Good, Entry Level Feature Set  
4 = Better, Retail Replacement Mid Effy.  
5 = Better, Entry Level High Effy., Multi-Speed  
7 = Best, Retail Replacement High Effy., Variable-Speed  
8 = Best, Retail Ultimate High Effy., Variable-Speed

Major Design Change

No Descriptor  
0 = Air Handler / Coil

Size (Footprint)  
A = 17.5 x 21.5  
B = 21.0 x 21.5  
C = 23.5 x 21.5

Cooling Size: Air Handler or Coil  
0-9 = AH Coil - 1000 BTU's (18, 24, 30, 36, 42, 48, 60)

Airflow Type & Capability  
S = Low Effy PSC, 1-5 - nom. Tonnage (cfm/ton)  
M = Mid Effy Multi-Speed, 1-5 - nom. Tonnage (cfm/ton)  
H = High Effy Multi-Speed, 1-5 - nom. Tonnage (cfm/ton)  
V = High Effy Variable, 1-5 - nom. Tonnage (cfm/ton)

Power Supply  
1 = 208-230/1/60

System Control Type  
S = Standard - 24 VAC  
C = CLII 13.8 VDC

Minor Design Change

Unit Parts Identifier

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15  
G A M 5 A 0 B 3 6 M 3 1 S A A

## Heat Pump/ Cooling Coils

Refrigerant Type  
4 = R-410A

Series  
T = Premium (Heat Pump or Convertible Coil)  
C = Standard (Cooling Only)

Coil Design  
X = Direct Expansion Evaporator Coil

Coil Feature  
C = Cased A Coil  
A = Uncased A Coil  
F = Cased Horizontal Flat Coil

Coil Width (Cased/Uncased)  
A = 14.5" / 13.3"  
B = 17.5" / 16.3"  
C = 21.0" / 19.8"  
D = 24.5" / 23.3"  
H = 10.5"

Refrigerant Line Coupling  
0 = Brazed

Nominal Capacity in 1000's (BTUH)

Major Design Change

Efficiency  
C = Standard  
S = Hi Efficiency (derived from 10 SEER products)

Refrigerant Control  
3 = TXV - Non-Bleed

Coil Circuitry  
H = Heat Pump  
C = Cooling

Airflow Configuration  
A = Upflow Only  
U = Upflow / Downflow  
H = Horizontal Only  
C = Convertible - Upflow, Downflow, Left or Right Airflow

Minor Design Change

Service Digit - Not Orderable

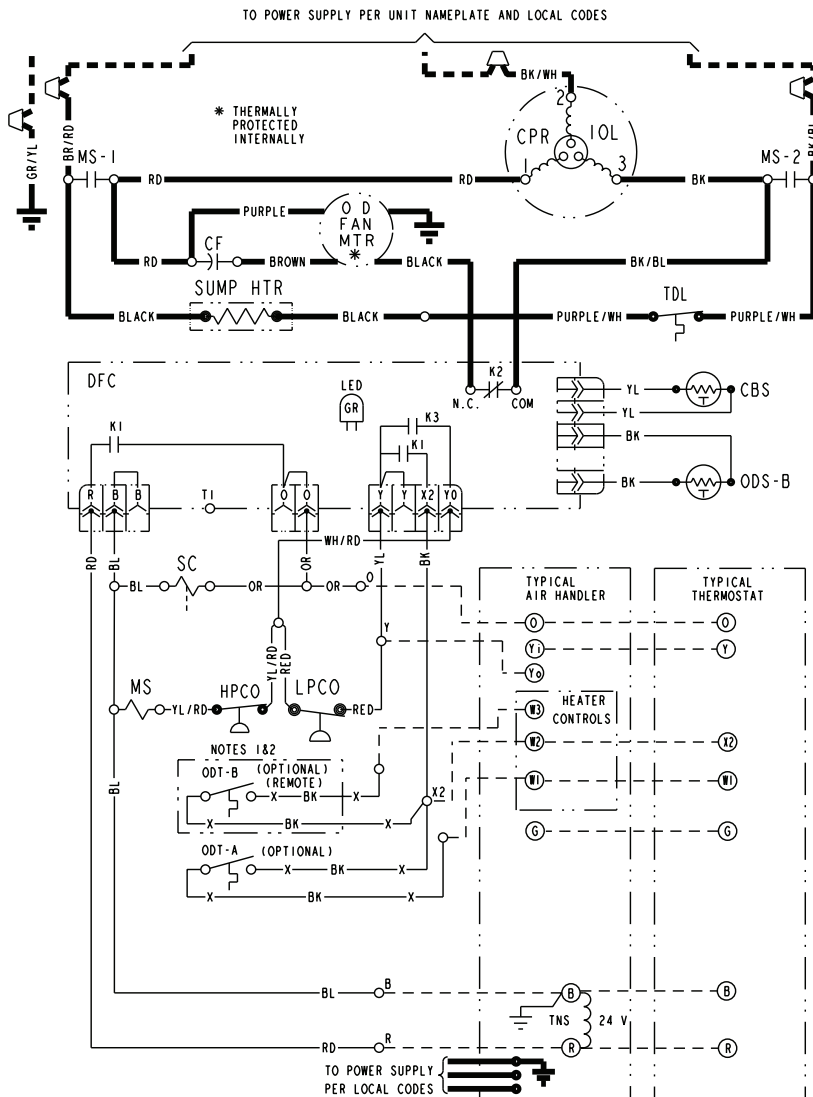
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4 T X C B 0 3 6 A C 3 H C A A



# Electrical Data

## Schematic Diagrams (SEE LEGEND)

### 4TWA3030A3000C



CA	COOLING ANTICIPATOR	LPCO	LOW PRESSURE CUTOFF SW.
CBS	COIL BOTTOM SENSOR	MS	COMPRESSOR MOTOR CONTACTOR
CF	FAN CAPACITOR	ODA	OUTDOOR ANTICIPATOR
CN	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
IOI	INTERNAL OVERLOAD PROTECTOR	TSH	HEATING THERMOSTAT

<p><b>⚠ WARNING</b> 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><b>⚠ CAUTION</b> 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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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

**NOTES:**

- 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.
- IF ODT-A IS NOT USED, ADD JUMPER BETWEEN W1 & W2 AT AIR HANDLER.
- 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.

From Dwg. D157076P01

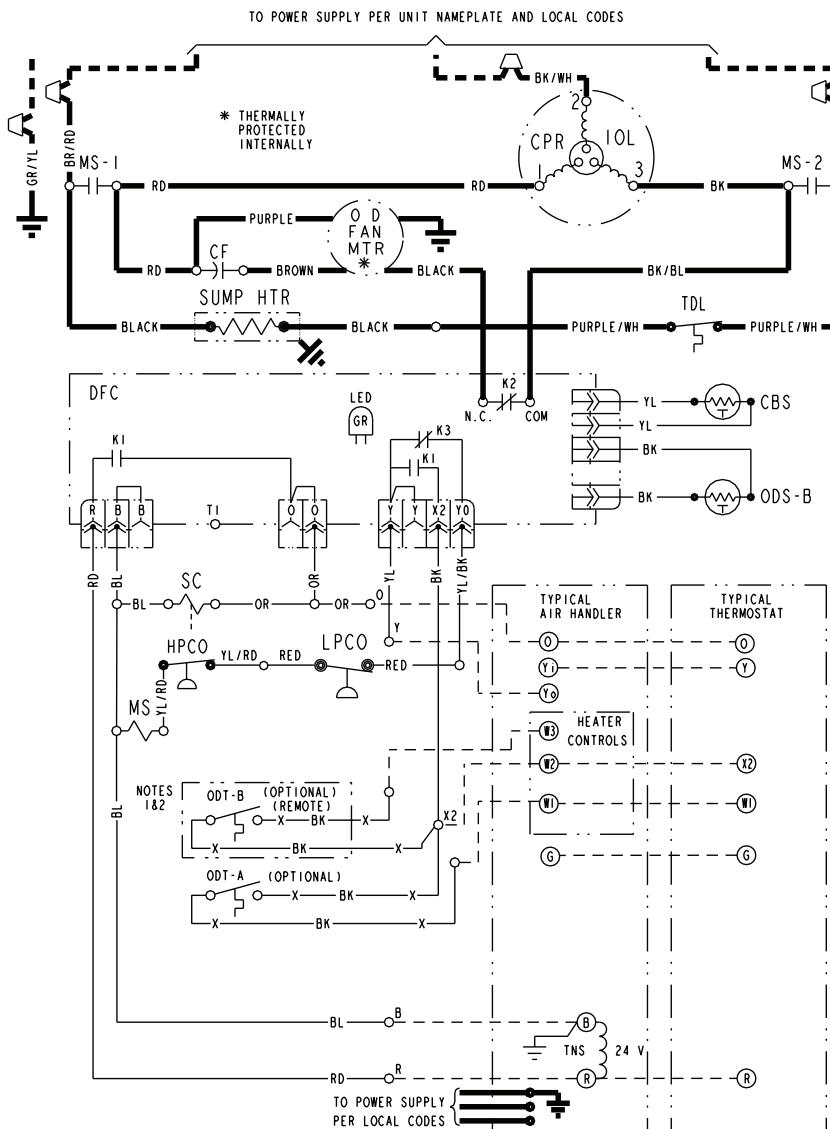


# Electrical Data

## Schematic Diagrams

(SEE LEGEND)

### 4TWA3036A3000C, 4TWA3048A3000C



CA	COOLING ANTICIPATOR	LPCO	LOW PRESSURE CUTOFF SW.
CBS	COIL BOTTOM SENSOR	MS	COMPRESSOR MOTOR CONTACTOR
CF	FAN CAPACITOR	ODA	OUTDOOR ANTICIPATOR
CN	WIRE CONNECTOR	OFT	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	TMS	TRANSFORMER
HPCO	HIGH PRESSURE CUTOFF SW.	TS	HEATING-COOLING THERMOSTAT
IOL	INTERNAL OVERLOAD PROTECTOR	TSH	HEATING THERMOSTAT

<p><b>⚠ WARNING</b> 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><b>⚠ CAUTION</b> 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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← 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

**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.

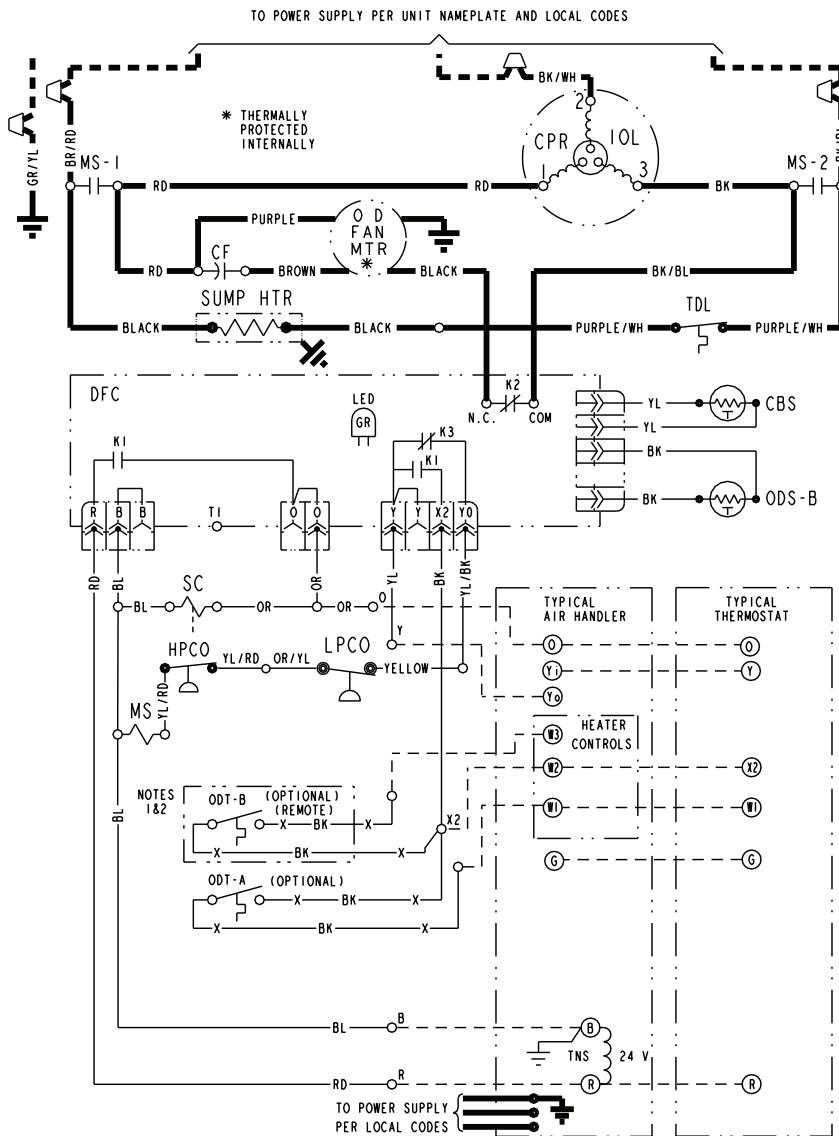
From Dwg. D157063P02



# Electrical Data

## Schematic Diagrams (SEE LEGEND)

### 4TWA3042B3000A, 4TWA3060B3000A



CA	COOLING ANTICIPATOR	LPCO	LOW PRESSURE CUTOUT SW.
CBS	COIL BOTTOM SENSOR	MS	COMPRESSOR MOTOR CONTACTOR
CF	FAN CAPACITOR	ODA	OUTDOOR ANTICIPATOR
CN	WIRE CONNECTOR	OFT	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 CUTOUT SW.	TS	HEATING-COOLING THERMOSTAT
IOI	INTERNAL OVERLOAD PROTECTOR	TSH	HEATING THERMOSTAT

<p><b>⚠ WARNING</b> 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><b>⚠ CAUTION</b> 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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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

- NOTES:
- 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.
  - IF ODT-A IS NOT USED, ADD JUMPER BETWEEN W1 & W2 AT AIR HANDLER.
  - 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.

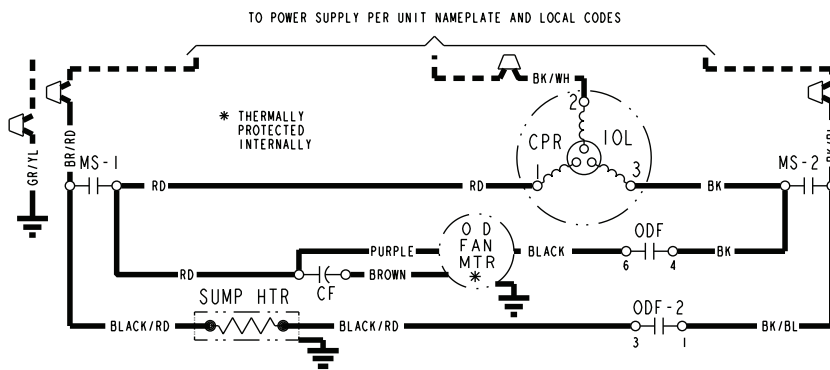
From Dwg. D157392P01

# Electrical Data

## Schematic Diagrams

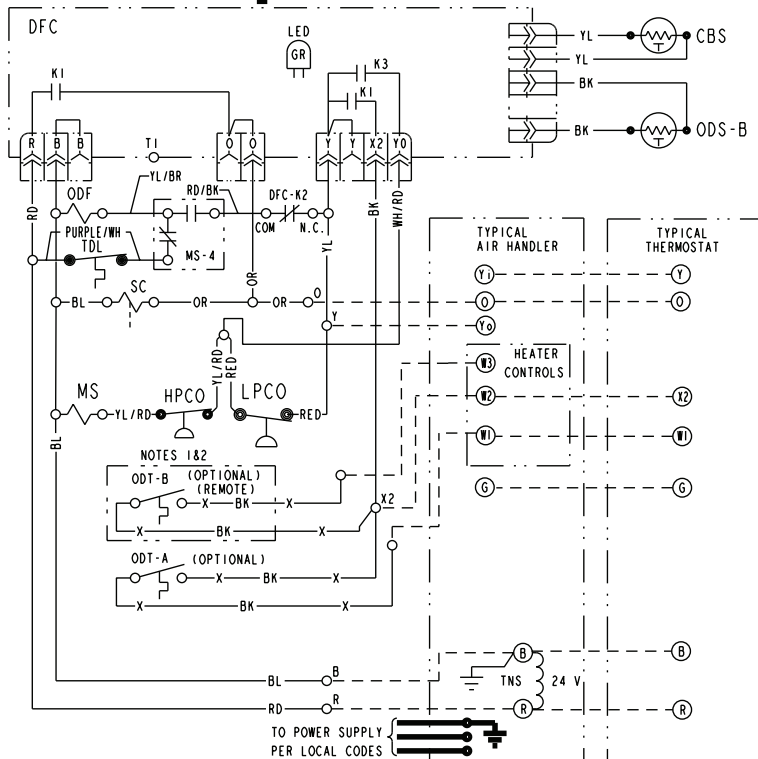
(SEE LEGEND)

### 4TWA3030A4000C



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

<p><b>⚠ WARNING</b> 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><b>⚠ CAUTION</b> 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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COLOR OF WIRE	
BK/BL	BLACK WIRE WITH BLUE MARKER
COLOR OF MARKER	
BK	BLACK
BL	BLUE
BR	BROWN
OR	ORANGE
RD	RED
WH	WHITE
YL	YELLOW
GR	GREEN
PR	PURPLE

NOTES:

- 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.
- IF ODT-A IS NOT USED, ADD JUMPER BETWEEN W1 & W2 AT AIR HANDLER.
- 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.

From Dwg. D157077P01

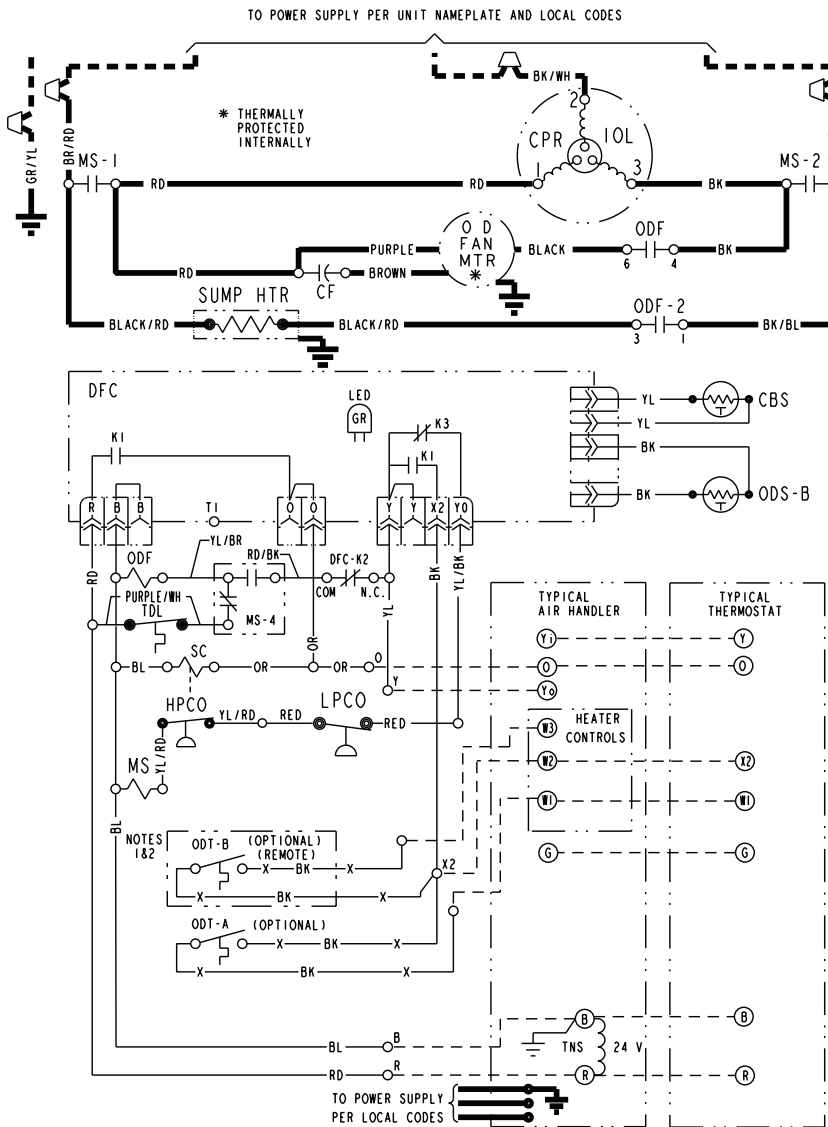


# Electrical Data

## Schematic Diagrams

(SEE LEGEND)

### 4TWA3036A4000C, 4TWA3048A4000C



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

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

- NOTES:
- 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.
  - IF ODT-A IS NOT USED, ADD JUMPER BETWEEN W1 & W2 AT AIR HANDLER.
  - 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.

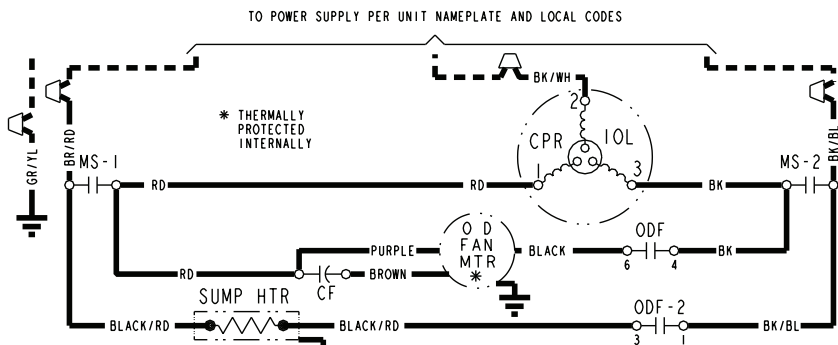
From Dwg. D157078P01



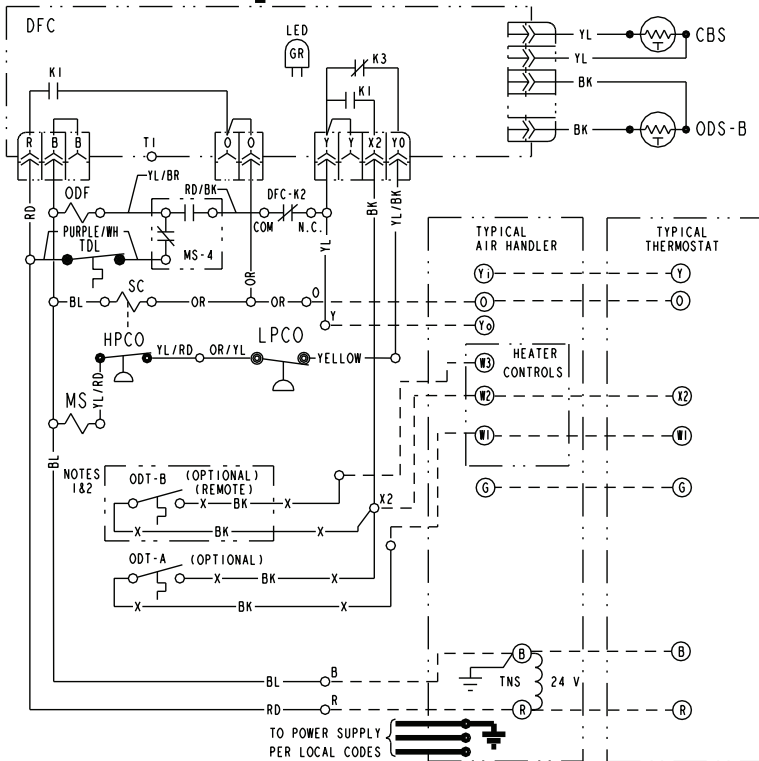
# Electrical Data

## Schematic Diagrams (SEE LEGEND)

### 4TWA3042B4000A 4TWA3060B4000A



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



<p><b>⚠ WARNING</b> 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><b>⚠ CAUTION</b> 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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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

- NOTES:
- 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.
  - IF ODT-A IS NOT USED, ADD JUMPER BETWEEN W1 & W2 AT AIR HANDLER.
  - LOW VOLTAGE (24 V.) FIELD WIRING MUST BE 18 AWG MIN.

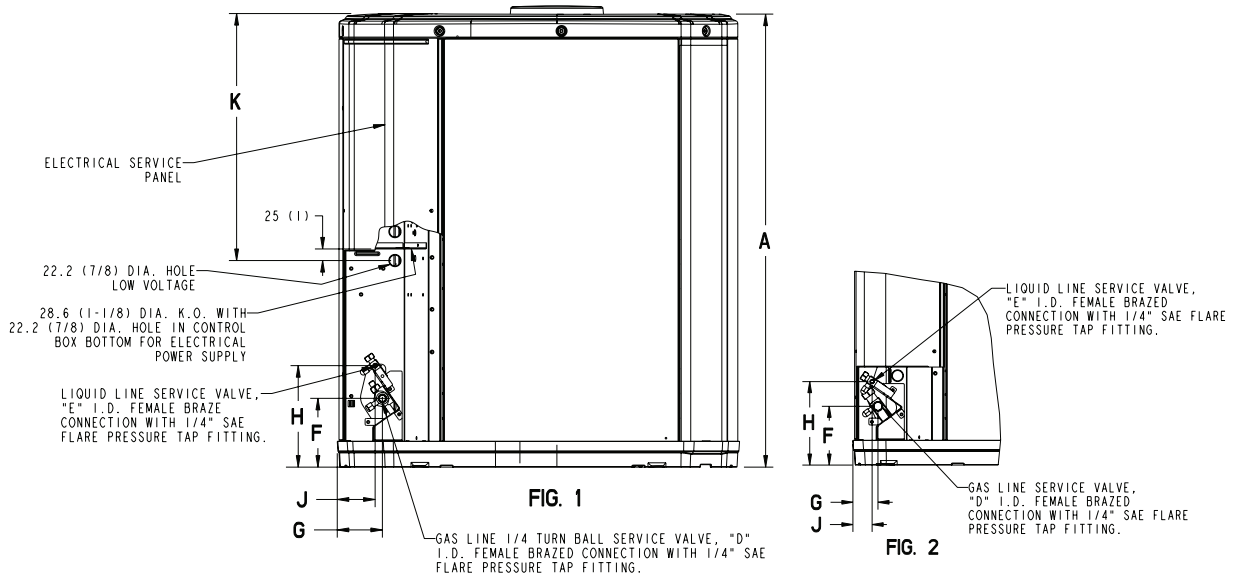
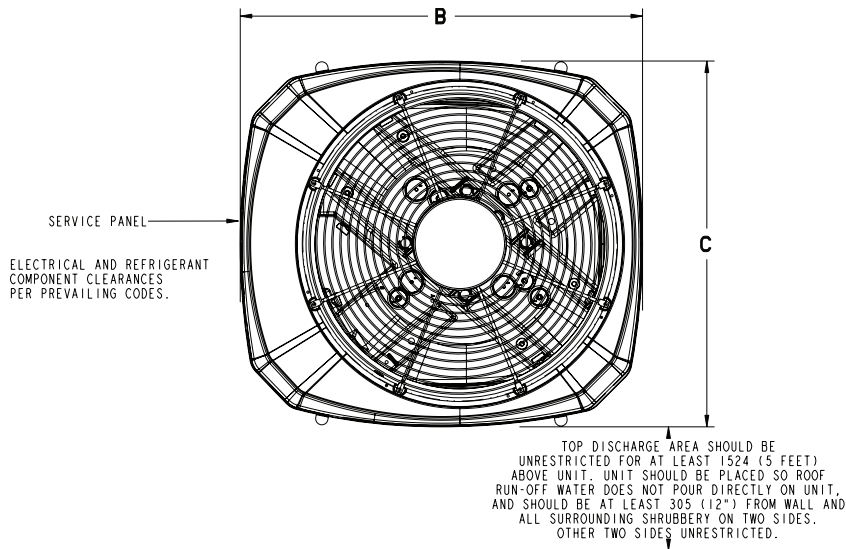
**NOTE**  
THREE PHASE MOTOR (S) FACTORY SUPPLIED IN THIS EQUIPMENT PROTECTED UNDER PRIMARY SINGLE-PHASE CONDITIONS.

From Dwg. D157393P01

# Dimensions

## 4TWA3 Outline Drawing

NOTE: ALL DIMENSIONS ARE IN MM (INCHES)



MODELS	BASE	FIG.	A	B	C	D	E	F	G	H	J	K
4TWA3030A	3	1	933 (36-3/4)	829 (32-5/8)	756 (29-3/4)	3/4	3/8	143 (5-5/8)	92 (3-5/8)	210 (8-1/4)	79 (3-1/8)	508 (20)
4TWA3036A	4	1	943 (37-1/8)	946 (37-1/4)	870 (34-1/4)	3/4	3/8	152 (6)	98 (3-7/8)	219 (8-5/8)	86 (3-3/8)	508 (20)
4TWA3042B	4	1	841 (33-1/8)	946 (37-1/4)	870 (34-1/4)	3/4	3/8	152 (6)	98 (3-7/8)	219 (8-5/8)	86 (3-3/8)	508 (20)
4TWA3048A	4	1	1045 (41-1/8)	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)	508 (20)
4TWA3060B	4	1	1045 (41-1/8)	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)	508 (20)

From Dwg. D153074

# Mechanical Specification Options

## General

The 4TWA3 shall be fully charged from the factory for matched indoor section and up to 15 feet of piping. This unit must be designed to operate at outdoor ambient temperatures as high as 115°F. Cooling capacities shall be matched with a wide selection of air handlers and furnace coils that are ARI certified. The unit is certified to UL 1995. Exterior must be designed for outdoor application.

## Casing

Unit casing is constructed of heavy gauge, galvanized steel and painted with a weather-resistant powder paint. Corrosion and weatherproof CMBP-G30 base.

## Refrigerant Controls

Refrigeration system controls include condenser fan and compressor contactor. High and low pressure controls are inherent to the compressor. Another standard feature is the liquid line dryer.

## Compressor

The compressor features internal over temperature and pressure protector and total dipped hermetic motor. 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.

## Low Ambient Cooling

As manufactured, this unit has a cooling capability to 55°F. The addition of an evaporator defrost control permits operation to 30°F. The addition of a low ambient kit permits low ambient cooling to 0°F.

## Accessories

**Thermostats** — Heating/Cooling (manual and automatic changeover). Sub-base to match thermostat and locking thermostat cover.

## Evaporator Defrost Control —

See Low Ambient Cooling.



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