

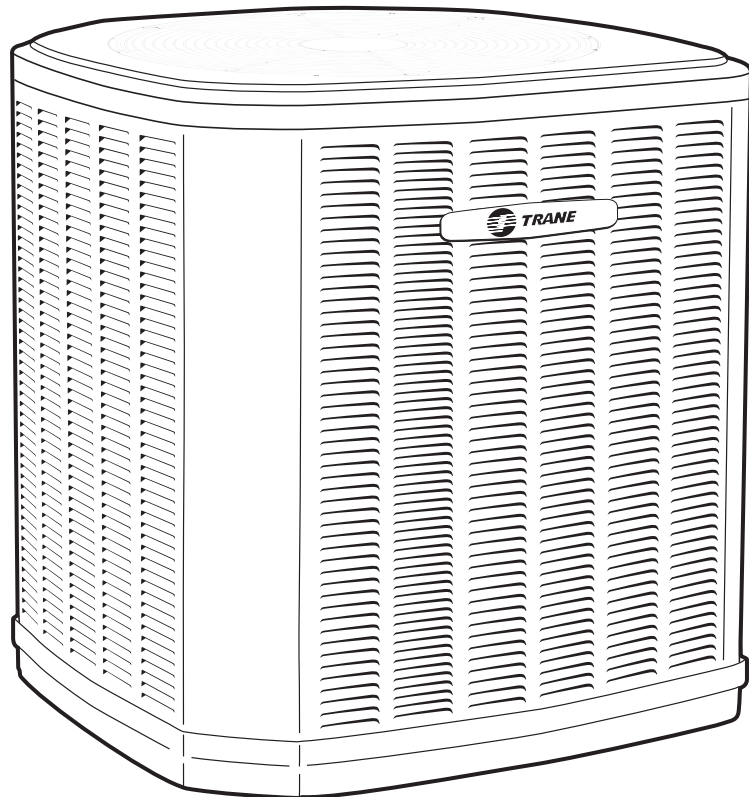


# Split System Heat Pump Product Data

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**XR15 4TWR5**

**1 1/2 - 5 Tons**



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**PUB. NO. 22-1832-09**



## Features and Benefits

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- **CLIMATUFF®** compressor
- Efficiency up to **17.0 SEER** and **9.0 HSPF**
- 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
- 018, 024, 030, 060 & 061 ship with start kit
- Compressor Sump Heat
- Liquid line filter/drier
- Tarpaulin gray cabinet with anthracite gray badge and cap
- High pressure switch
- Demand Defrost with Diagnostics
- Service valve cover
- R-410A refrigerant
- S.E.E.T. design testing
- 100% line run test
- Low ambient cooling to 20°F with AY28X084
- Low ambient cooling to 55°F as shipped
- **Extended warranties available**

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# General Data

## Product Specifications

Model No. ①	4TWR5018G1	4TWR5024E1	4TWR5030E1	4TWR5036G1
Electrical Data V/Ph/Hz ②	208/230/1/60	208/230/1/60	208/230/1/60	208/230/1/60
Min Cir Ampacity	9	12	15	18
Max Fuse Size (Amps)	15	20	25	30
Compressors	CLIMATUFF®	CLIMATUFF®	CLIMATUFF®	CLIMATUFF®
RL AMPS - LR AMPS	6.4 - 38.6	9.5 - 57.8	11.1 - 63	13.2 - 63
Outdoor Fan FL Amps	0.70	0.74	0.74	1.00
Fan HP	1/8	1/8	1/8	1/5
Fan Dia (inches)	23	27.6	27.6	27.5
Coil	Spine Fin™	Spine Fin™	Spine Fin™	Spine Fin™
Refrigerant R-410A	5/14-LB/OZ	7/5-LB/OZ	9/3-LB/OZ	7/13-LB/OZ
Line Size - (in.) O.D. Gas ③	5/8	5/8	3/4	3/4
Line Size - (in.) O.D. Liquid ③	3/8	3/8	3/8	3/8
Dimensions H x W x D (Crated)	34 x 30.1 x 33	38.4 x 35.1 x 38.7	38.4 x 35.1 x 38.7	37.9 x 35 x 37.9
Weight - Shipping	204	255	281	261
Weight - Net	176	222	245	227
Start Components	YES	YES	YES	YES
Sound Enclosure	NO	YES	YES	YES
Compressor Sump Heat	YES	YES	YES	YES
<b>Optional Accessories: ④</b>				
Anti-short Cycle Timer	TAYASCT501A	TAYASCT501A	TAYASCT501A	TAYASCT501A
Evaporator Defrost Control A/C	AY28X084	AY28X084	AY28X084	AY28X084
Rubber Isolator Kit	BAYISLT101	BAYISLT101	BAYISLT101	BAYISLT101
Hard Start Kit Scroll				
Extreme Condition Mounting Kit	BAYECMT004	BAYECMT004	BAYECMT004	BAYECMT004
Snow Leg - Base & Cap 4" High	BAYLEGS002	BAYLEGS002	BAYLEGS002	BAYLEGS002
Snow Leg - 4" Extension	BAYLEGS003	BAYLEGS003	BAYLEGS003	BAYLEGS003
Seacoast Kit	BAYSEAC001	BAYSEAC001	BAYSEAC001	BAYSEAC001
Refrigerant Lineset ⑤	TAYREFLN950	TAYREFLN950	TAYREFLN7*	TAYREFLN7*

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

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

③ Standard line lengths - 80'. 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.

## A-weighted Sound Power Level [dB(A)]

MODEL	SOUND POWER LEVEL [dB(A)]	A-WEIGHTED FULL OCTAVE SOUND POWER LEVEL dB - [dB(A)] High Stage							
		63	125	250	500	1000	2000	4000	8000
4TWR5018G	75	52.3	57.8	62.4	67.2	69.4	67.2	59.6	52.5
4TWR5024E	75	50.3	55	58.6	65.3	69.5	64.5	58.6	50.8
4TWR5030E	75	48.8	55.4	60.1	66.4	67.4	63.9	60.2	53.5
4TWR5036G	75	54.5	55.1	58.3	67	69.8	65.9	59.7	49.1
4TWR5042E	75	55.1	52	59.3	64.9	67.2	63.5	60.4	47.6
4TWR5048E	75	55.6	53.3	59.2	66.7	71.7	67.9	60.7	51.3
4TWR5049E	75	43.7	51.2	54.5	61	61.5	57.1	51.3	40.7
4TWR5060E	75	55.1	53.7	61.1	69.2	73.6	68.7	61.4	50
4TWR5061E	75	33.1	56.2	60.1	64.4	66	59.5	54.2	43.5

Note: Rated in accordance with AHRI Standard 270-2008.



# General Data

## Product Specifications

Model No. ①	4TWR5042E1	4TWR5048E1	4TWR5049E1	4TWR5060E1	4TWR5061E1
Electrical Data V/Ph/Hz ②	208/230/1/60	208/230/1/60	208/230/1/60	208/230/1/60	208/230/1/60
Min Cir Ampacity	27	29	28	35	36
Max Fuse Size (Amps)	45	50	50	60	60
Compressors	CLIMATUFF® · SCROLL	CLIMATUFF® · SCROLL	CLIMATUFF® · SCROL	CLIMATUFF® · SCROLL	CLIMATUFF® · SCROL
RL AMPS - LR AMPS	19.9 - 109	21.8 - 117	21.8 - 117	26.4 - 134	26.4 - 134
Outdoor Fan FL Amps	0.93	0.93	1.00	0.93	2.80
Fan HP	1/5	1/5	1/5	1/5	1/3
Fan Dia (inches)	27.6	27.6	27.6	27.6	27.6
Coil	Spine Fin™	Spine Fin™	Spine Fin™	Spine Fin™	Spine Fin™
Refrigerant R-410A	12/1-LB/OZ	13/9-LB/OZ	13/10-LB/OZ	12/1-LB/OZ	13/12-LB/OZ
Line Size - (in.) O.D. Gas ③	3/4	7/8	7/8	7/8	1-1/8
Line Size - (in.) O.D. Liquid ③	3/8	3/8	3/8	3/8	3/8
Dimensions H x W x D (Crated)	46.4 x 35.1 x 38.7	51 x 35.1 x 38.7	51 x 35.1 x 38.7	51 x 35.1 x 38.7	51 x 35.1 x 38.7
Weight - Shipping	313	331	331	332	332
Weight - Net	277	294	294	295	295
Start Components	NO	NO	NO	YES	YES
Sound Enclosure	YES	YES	NO	YES	NO
Compressor Sump Heat	YES	YES	YES	YES	YES
<b>Optional Accessories: ④</b>					
Anti-short Cycle Timer	TAYASCT501A	TAYASCT501A	TAYASCT501A	TAYASCT501A	TAYASCT501A
Evaporator Defrost Control A/C	AY28X084	AY28X084	AY28X084	AY28X084	AY28X084
Rubber Isolator Kit	BAYISLT101	BAYISLT101	BAYISLT101	BAYISLT101	BAYISLT101
Hard Start Kit Scroll	BAYKSKT260	BAYKSKT260	BAYKSKT260		
Extreme Condition Mounting Kit	BAYECMT004	BAYECMT004	BAYECMT004	BAYECMT004	BAYECMT004
Snow Leg - Base & Cap 4" High	BAYLEGS002	BAYLEGS002	BAYLEGS002	BAYLEGS002	BAYLEGS002
Snow Leg - 4" Extension	BAYLEGS003	BAYLEGS003	BAYLEGS003	BAYLEGS003	BAYLEGS003
Seacoast Kit	BAYSEAC001	BAYSEAC001	BAYSEAC001	BAYSEAC001	BAYSEAC001
Refrigerant Lineset ⑤	TAYREFLN7*	TAYREFLN3*	TAYREFLN3*	TAYREFLN3*	TAYREFLN3*

① Certified in accordance with the Air-Source Unitary Heat Pump Equipment certification program which is based on AHRI 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.



# General Data

## 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.

**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.

## 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.

**AHRI 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.





# Model Nomenclature

## Outdoor Units

4 T W R 5 0 3 6 E 1 0 0 0 A A

- Refrigerant Type**
  - 2 = R-22
  - 4 = R-410A
- TRANE**
- Product Type**
  - W = Split Heat Pump
  - T = Split Cooling
- Product Family**
  - Z = Leadership – Two Stage
  - X = Leadership
  - R = Replacement/Retail
  - B = Basic
  - A = Light Commercial
- Family SEER**
  - 0 = 10    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**

## Gas Furnaces

T U D 2 B 0 8 0 A C V 3 2 A A

- 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
  - 3 = Three Stage
- Cabinet Width**
  - A = 14.5" Cabinet Width
  - B = 17.5" Cabinet Width
  - C = 21.0" Cabinet Width
  - D = 24.5" Cabinet Width
- Heating Input**
  - 080 = 80,000 MBTUH
- 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**
  - 36 = 3 Ton Standard PSC Motor
  - H3 = 3 Ton High Efficiency Motor
  - V3 = 3 Ton Variable Speed Motor
- Draft Inducer Speeds**
  - 1 = Single Speed
  - 2 = Two Speed
  - V = Variable Speed
- Minor Design Change**
- Service Digit - Not Orderable**

## Air Handlers – Residential

4 T E E 3 F 3 6 A 1 0 0 0 A A

- Refrigerant Type**
  - 4 = R-410A
- Application**
  - TE = Fully Convertible
  - TG = Semi Convertible
  - TF = Front Return
- Product Family**
  - E = Leadership – Variable Speed
  - P = Leadership
  - C = Replacement/Retail
  - B = Basic
- Flow Control**
  - 0 = No Flow Control
  - 3 = Nonbleed TXV
- Feature Identifier**
  - 0 = Standard Unit
  - F = Air-Tite™
- Nominal Capacity in 1000's (BTUH)**
- Major Design Change**
- Power Supply**
  - 1 = Single Phase
- Electrical Connection**
  - 0 = Pig Tails
  - B = Circuit Breaker
  - D = Pull Disconnect
- Future Option – Factory Installed Heater Nominal KW Value**
- Minor Design Modifications**
- Unit Parts Identifier**

NOTE: There will be a phase-in of new model numbers for new air handlers over next 2 years.

## Coils – Residential

4 T X C B 0 0 1 C C 3 H C A A

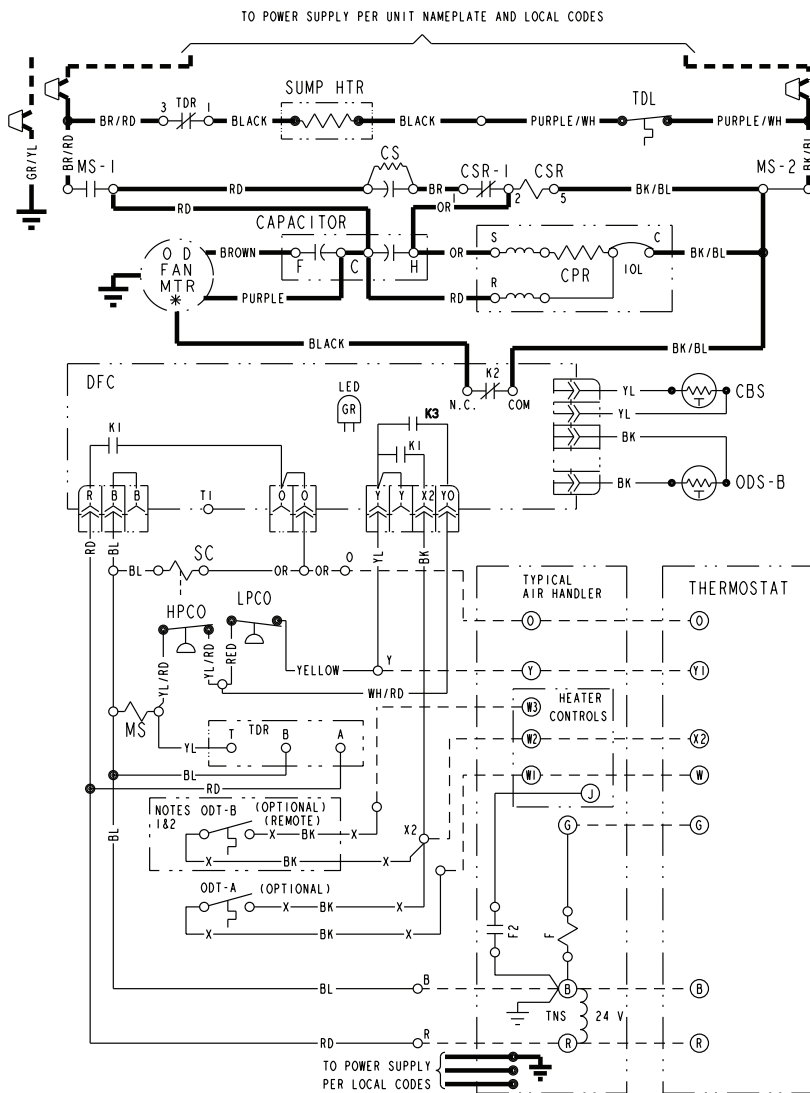
- Refrigerant Type**
  - 4 - R410A
- Product Family**
  - T - Premium (Heat Pump or Convertible Coil)
  - X - Direct Expansion Evaporator Coil
- Coil Design**
  - C - Cased A Coil
  - A - Uncased A Coil
  - F - Cased Horizontal Flat Coil
- Coil Width (Cased/Uncased)**
  - A - 14.5" / 13.3"
  - B - 17.5" / 16.3"
  - C - 21.0" / 19.8"
  - D - 24.5" / 23.3"
  - H - 10.5"
- Refrigerant Line Coupling**
  - 0 - Brazed
- Model Number Distinguisher**
- 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
- Airflow Configuration**
  - A - Upflow Only
  - U - Upflow / Downflow
  - H - Horizontal Only
  - C - Convertible - Upflow, Downflow, Left or Right Airflow
- Minor Design Change**
- Unit Parts Identifier**



# Electrical Data

## Schematic Diagrams

### 4TWR5024, 030



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	TS	HEATING-COOLING THERMOSTAT
HPCO	HIGH PRESSURE CUTOUT SW.	TNS	TRANSFORMER
IOL	INTERNAL OVERLOAD PROTECTOR	TSH	HEATING THERMOSTAT
		TDR	TIME DELAY RELAY

<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.

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.**

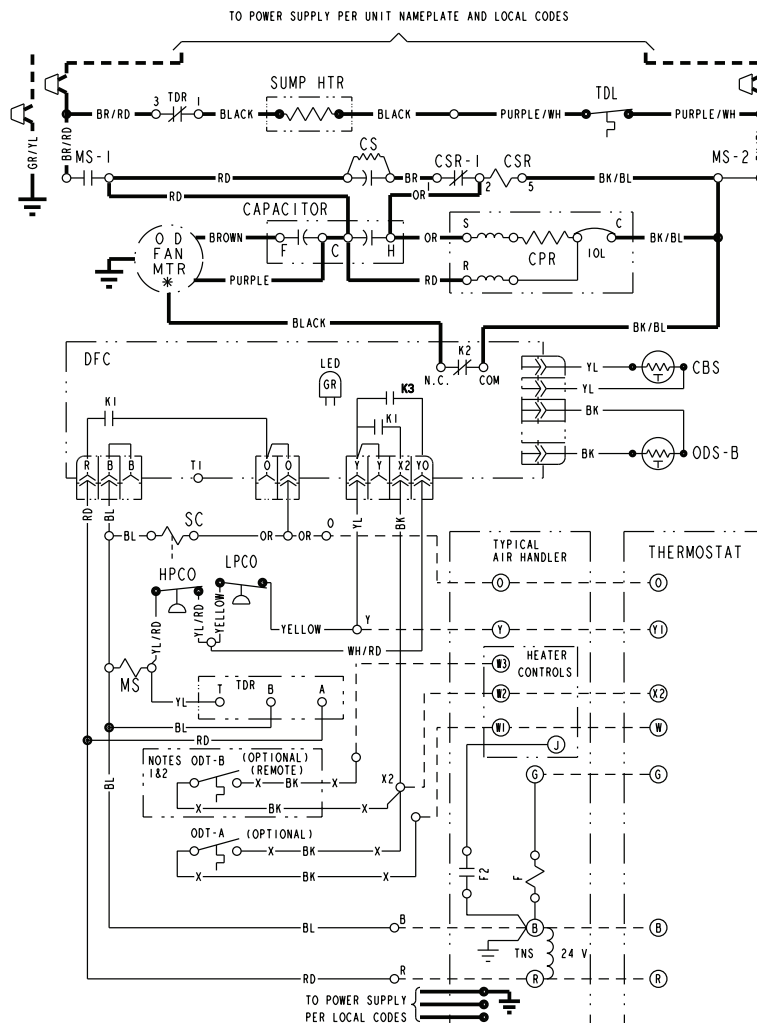
TDR relay cycles sump heat off during compressor operation and delays energizing the sump heat for 30 mins after "Y" call is removed.



# Electrical Data

## Schematic Diagrams

### 4TWR5018, 036



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	ODT	OUTDOOR TEMPERATURE THERMOSTAT
CPR	COMPRESSOR	ODS	OUTDOOR FAN THERMOSTAT
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
IOL	INTERNAL OVERLOAD PROTECTOR	TSH	HEATING THERMOSTAT
		TDR	TIME DELAY RELAY

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

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.

**FOR CANADIAN INSTALLATIONS  
POUR INSTALLATIONS CANADIENNES**

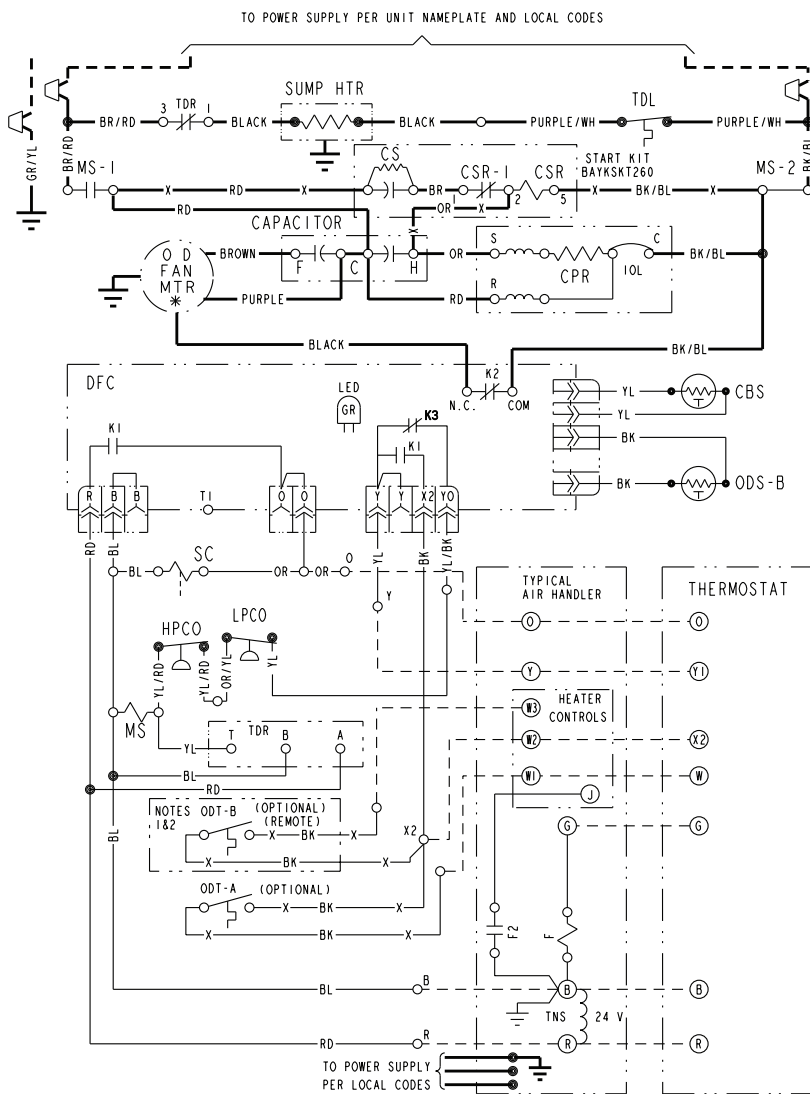
**CAUTION: NOT SUITABLE FOR USE ON SYSTEMS EXCEEDING 150V-TO-GROUND.  
ATTENTION: NE CONVIENT PAS AUX INSTALLATIONS DE PLUS DE 150 V A LA TERRE.**



# Electrical Data

## Schematic Diagrams

### 4TWR5042



- |      |                             |      |                            |
|------|-----------------------------|------|----------------------------|
| 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 |
| IOL  | INTERNAL OVERLOAD PROTECTOR | TSH  | HEATING THERMOSTAT         |
|      |                             | TDR  | TIME DELAY RELAY           |

<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.

**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.**

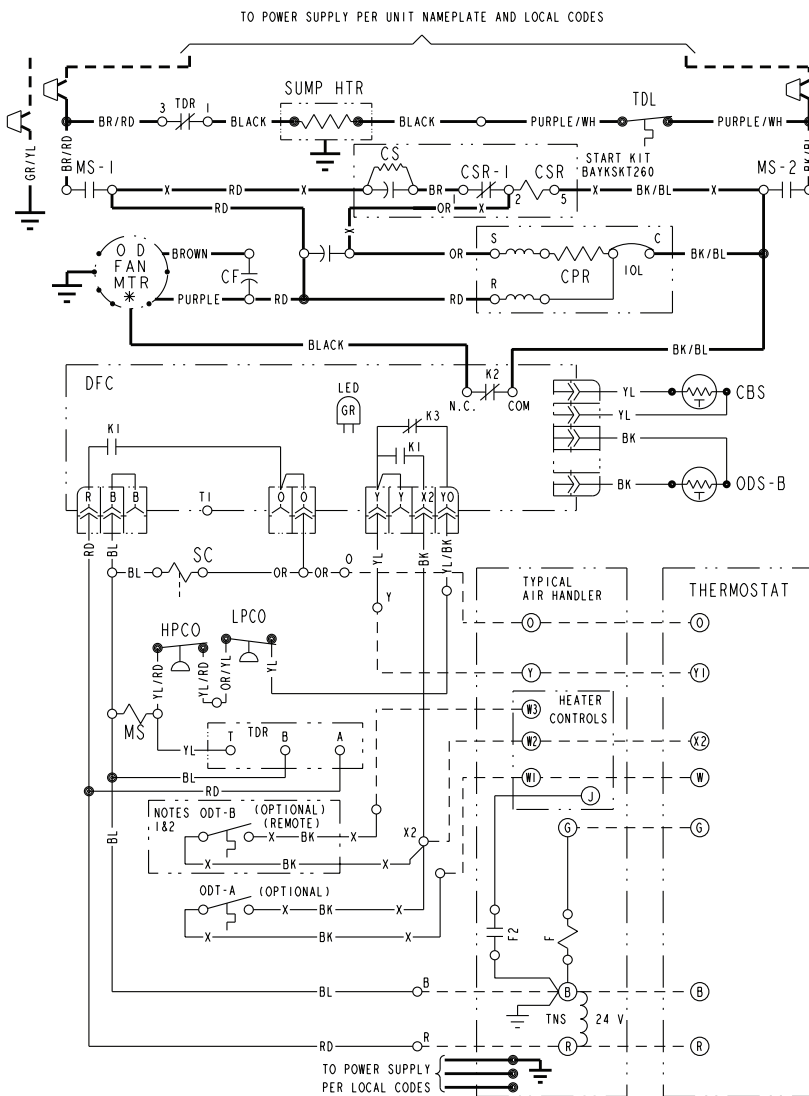
TDR relay cycles sump heat off during compressor operation and delays energizing the sump heat for 30 mins after "Y" call is removed.



# Electrical Data

## Schematic Diagrams

### 4TWR5048



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	TNS	TRANSFORMER
HPCO	HIGH PRESSURE CUTOFF SW.	TS	HEATING-COOLING THERMOSTAT
IOL	INTERNAL OVERLOAD PROTECTOR	TSH	HEATING THERMOSTAT
		TDR	TIME DELAY RELAY

<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.

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.**

TDR relay cycles sump heat off during compressor operation and delays energizing the sump heat for 30 mins after "Y" call is removed.

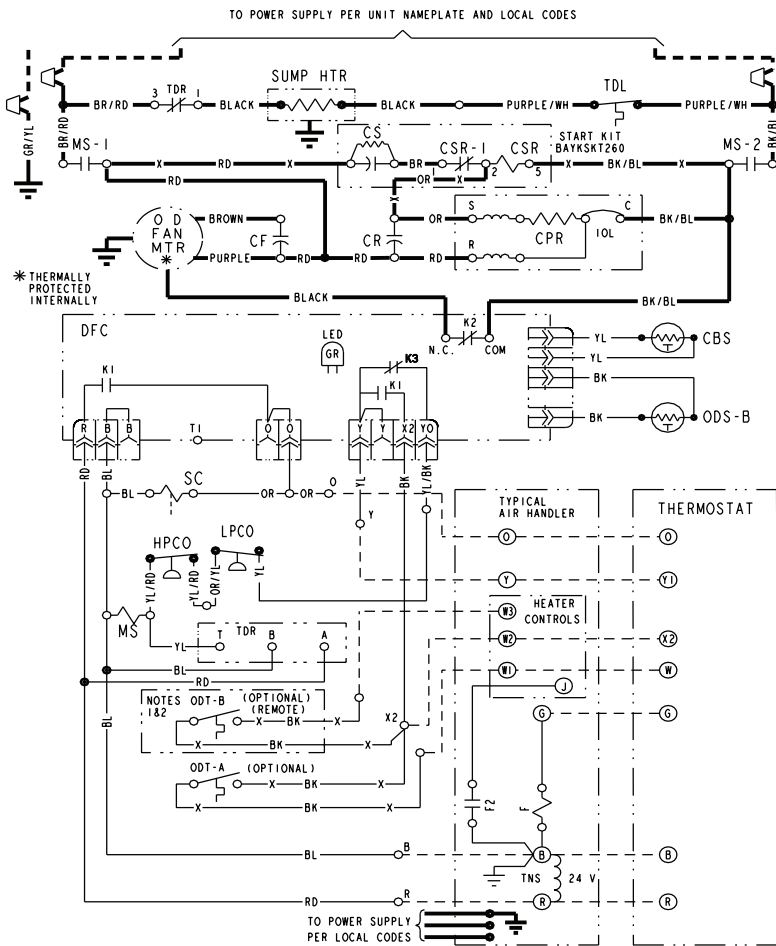


# Electrical Data

## Schematic Diagrams

(SEE LEGEND)

### 4TWR5049E



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	OF T	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
		TDR	TIME DELAY RELAY

<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.

FOR CANADIAN INSTALLATIONS  
POUR INSTALLATIONS CANADIENNES

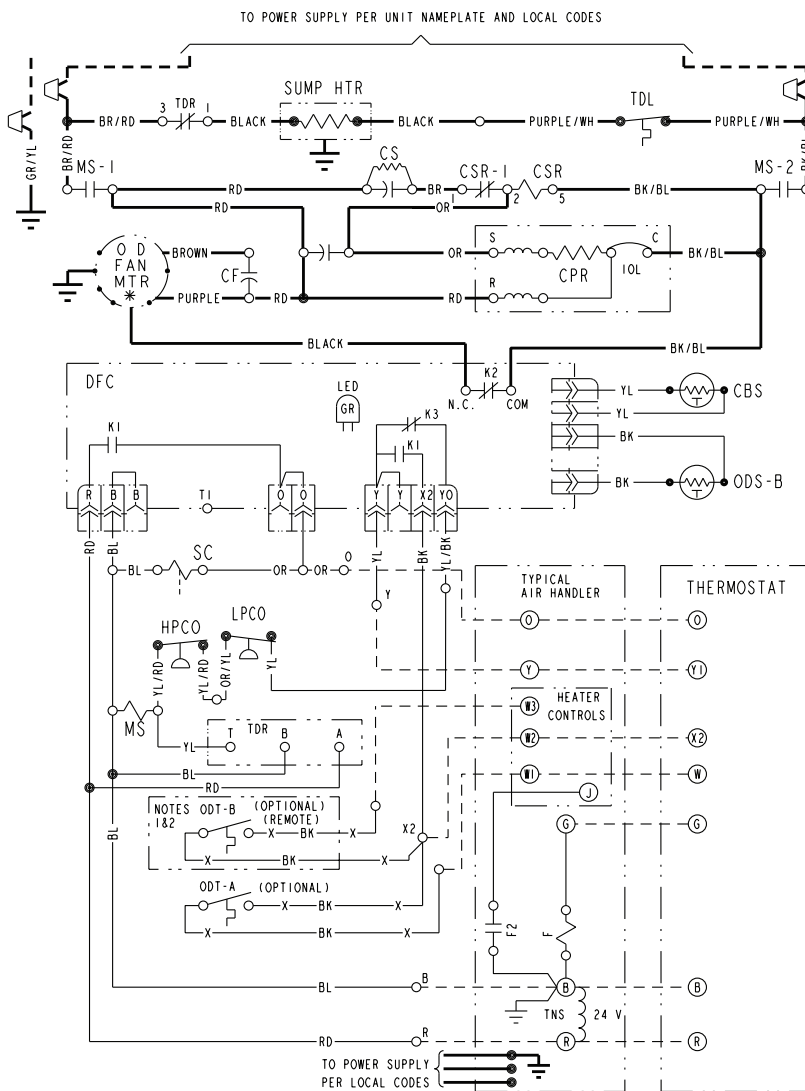
**CAUTION:** NOT SUITABLE FOR USE ON SYSTEMS EXCEEDING 150V-TO-GROUND.  
**ATTENTION:** NE CONVIENT PAS AUX INSTALLATIONS DE PLUS DE 150 V A LA TERRE.

TDR relay cycles sump heat off during compressor operation and delays energizing the sump heat for 30 mins after "Y" call is removed.

# Electrical Data

## Schematic Diagrams

### 4TWR5060



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
IOL	INTERNAL OVERLOAD PROTECTOR	TSH	HEATING THERMOSTAT
		TDR	TIME DELAY RELAY

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

**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.

**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.**

**TDR relay cycles sump heat off during compressor operation and delays energizing the sump heat for 30 mins after "Y" call is removed.**

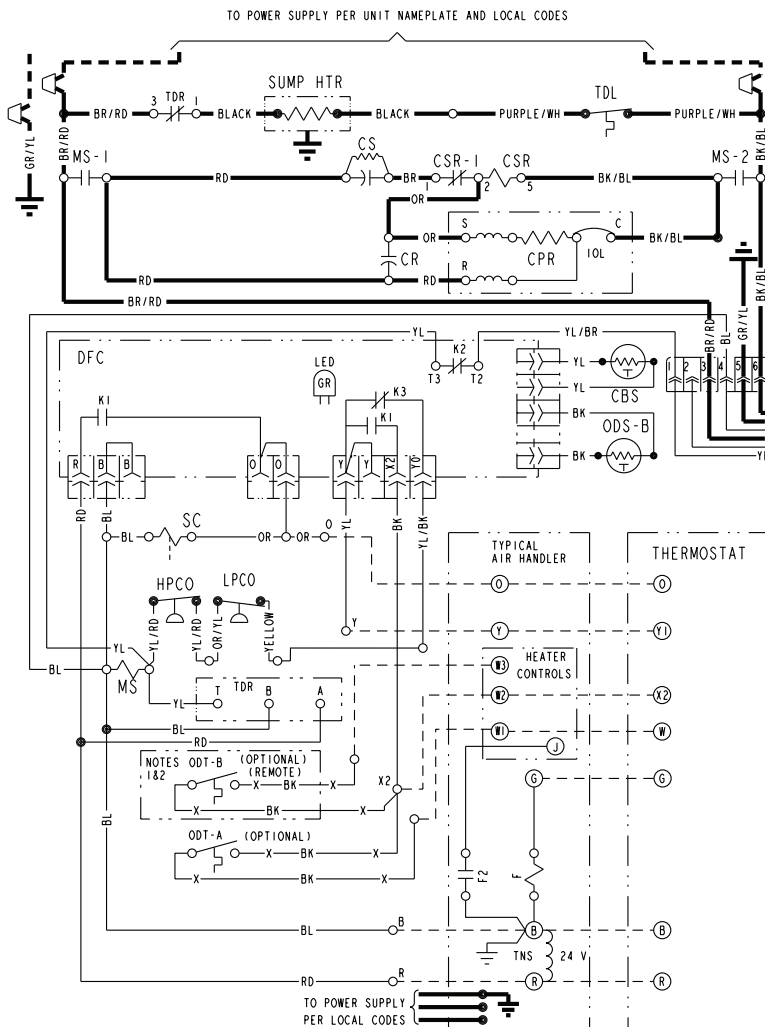


# Electrical Data

## Schematic Diagrams

(SEE LEGEND)

### 4TWR5061E



- |                                 |                                |
|---------------------------------|--------------------------------|
| 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 CAPACITOR        | 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         |
|                                 | TDR TIME DELAY RELAY           |

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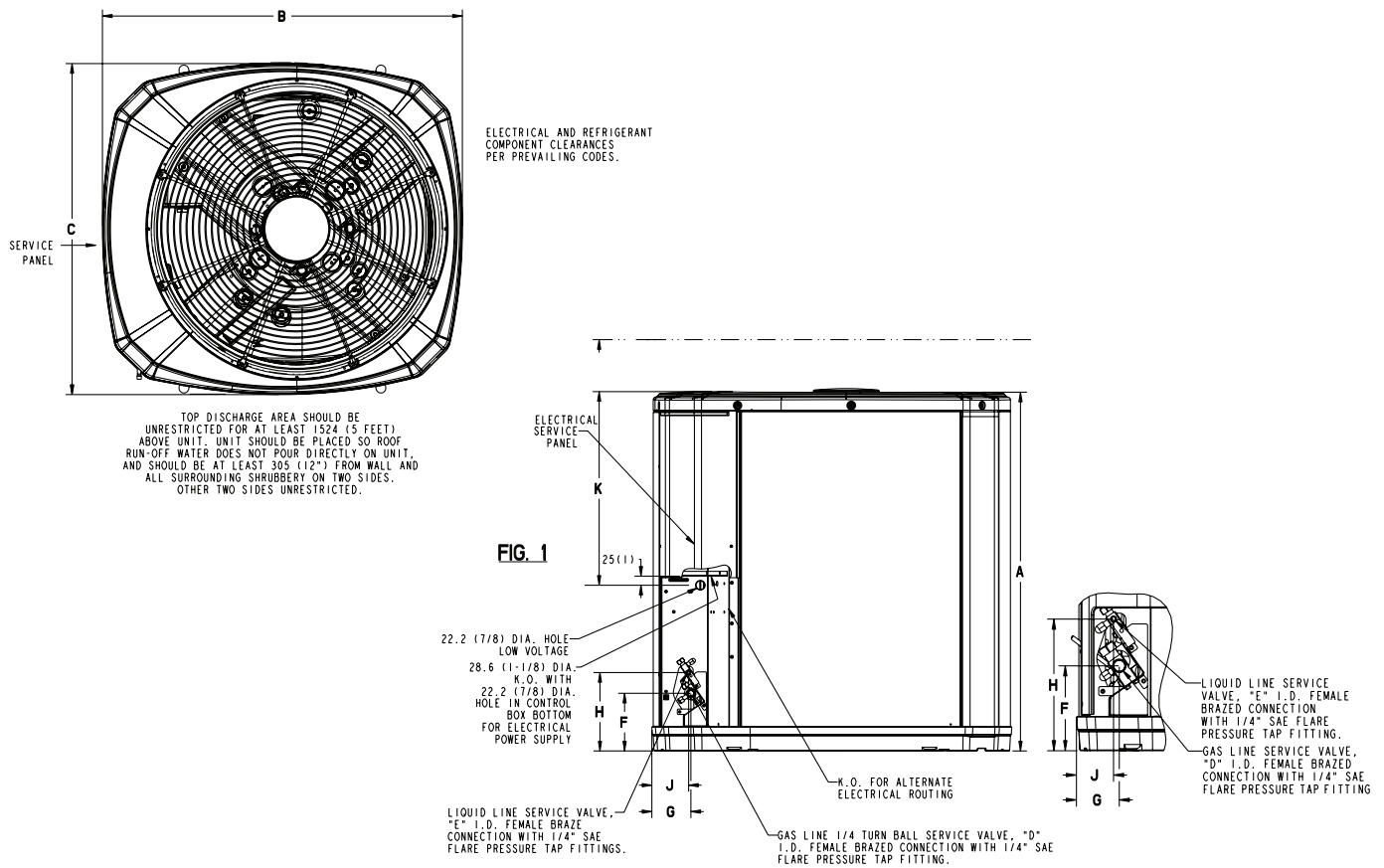
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POUR INSTALLATIONS CANADIENNES**  
 CAUTION: NOT SUITABLE FOR USE ON SYSTEMS EXCEEDING 150V-TO-GROUND.  
 ATTENTION: NE CONVIENT PAS AUX INSTALLATIONS DE PLUS DE 150 V A LA TERRE.

TDR relay cycles sump heat off during compressor operation and delays energizing the sump heat for 30 mins after "Y" call is removed.

# Dimensions

## 4TWR5 Outline Drawing

Note: All dimensions are in MM (Inches).



MODELS	BASE	A	B	C	D	E	F	G	H	J	K
4TWR5018G	4	730 (28-3/4)	829 (32-5/8)	756 (29-3/4)	5/8	3/8	143 (5-5/8)	92 (3-5/8)	210 (8-1/4)	79 (3-1/8)	508 (20)
4TWR5024E	4	841 (33-1/8)	946 (37-1/4)	870 (34-1/4)	5/8	3/8	152 (6)	98 (3-7/8)	219 (8-5/8)	86 (3-3/8)	508 (20)
4TWR5030E	4	1045 (41 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)
4TWR5036G	4	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)
4TWR5042E	4	1045 (41 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)
4TWR5048E	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)	508 (20)
4TWR5049E	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)	508 (20)
4TWR5060E	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)	508 (20)
4TWR5061E	4	1147 (45 1/8)	946 (37-1/4)	870 (34-1/4)	1-1/8	3/8	152 (6)	98 (3-7/8)	219 (8-5/8)	86 (3-3/8)	508 (20)

# Mechanical Specification Options

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## General

The 4TWR5 is fully charged from the factory for up to 15 feet of piping. This unit is designed to operate at outdoor ambient temperatures as high as 115°F. Cooling capacities are matched with a wide selection of air handlers and furnace coils that are AHRI certified. The unit is certified to UL 1995. Exterior is designed for outdoor application.

## 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 weather-proof 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. A factory installed liquid line drier is standard.

## Compressor

The Climatuff® compressor features internal over temperature and pressure protection 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 with TXV permits low ambient cooling to 20° F.

## Accessories

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



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