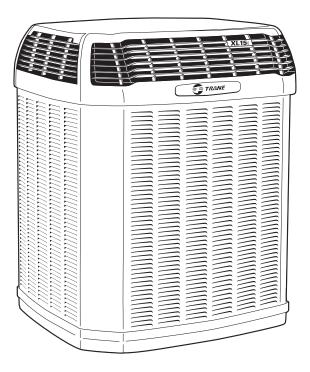


# Split System Heat Pump Product Data

## XL 15i 4TWX5

1½ – 5 Tons





## Features and Benefits

- Climatuff® compressor
- Efficiency up to 16.00 SEER and 9.0 HSPF
- All aluminum **Spine Fin™** coil
- WeatherGuard<sup>™</sup> II top shields unit
- WeatherGuard™ fasteners
- Quick-Sess™ cabinet, service access and refrigerant connections with full coil protection
- DuraTuff™ base, fast complete drain, weather proof
- Comfort-R<sup>™</sup> mode approved
- Glossy corrosion resistant finish
- Internal compressor high/low pressure and temperature protection
- · Compressor sump heat
- Liquid line filter-drier
- Tarpaulin gray cabinet with anthracite gray badge and cap
- · Low pressure switch

- Demand Defrost Control with diagnostics
- High pressure switch
- 018, 024, 030, 060 & 061 ship with start kit
- 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 AY28X084
- Extended warranties available



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## General Data

### **Product Specifications**

Model No. ①	4TWX5018B1	4TWX5024A1	4TWX5030A1	4TWX5036B1						
Electrical Data V/Ph/Hz 2	208/230/1/60	200/230/1/60	200/230/1/60	208/230/1/60						
Min Cir Ampacity	9	17	18							
Max Fuse Size (Amps)	15	20	25	30						
Compressor	CLIMATUFF®	<b>CLIMATUFF®</b>	<b>CLIMATUFF®</b>	<b>CLIMATUFF®</b>						
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	2.8	1.0						
Fan HP	1/8	1/8	1/3	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	9/03-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)	39.1 x 30 x 33	45.4 x 35.1 x 38.7	53.4 x 35.1 x 38.7	44.9 x 35 x 37.9						
Weight - Shipping	225	287	314	293						
Weight - Net	190	242	266	247						
Start Components	YES	YES	YES	YES						
Sound Enclosure	YES	YES	YES	YES						
Compressor Sump Heat	YES	YES	YES	YES						
Optional Accessories: ④										
Anti-short Cycle Timer	TAYASCT501A	TAYASCT501A	TAYASCT501A	TAYASCT501A						
Evaporator Defrost Control A/C	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						
Hard Start Kit Scroll										
Extreme Condition Mounting Kit	BAYECMT004	BAYECMT004	BAYECMT004	BAYECMT004						
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 - 60'. Standard lift - 60' Suction and Liquid line. For Greater lengths and lifts refer to refrigerant piping software Pub# 32-3312-0<sup>†</sup>. (<sup>†</sup>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	A-WEIGHT	ED FULL (	OCTAVE S	OUND POV	VER LEVE	L dB - [dB(	(A)] High S	Stage
WODEL	LEVEL [dB(A)]	63	125	250	500	1000	2000	4000	8000
4TWX5018B	72	49.9	55.8	62.8	66.1	65.8	64.7	58.5	53.5
4TWX5024A	71	47.4	54.1	60.2	62.9	67.4	63.6	57.6	49.9
4TWX5030A	71	49.8	57.1	61	65.8	66.3	63.8	60.3	53.5
4TWX5036B	71	47.5	55.4	58.8	65	65.5	61.9	58.6	47.8
4TWX5042A	71	55.1	51.7	59.7	64.9	66.8	62.9	60.4	45.9
4TWX5048A	73	55.2	53.8	60.8	65.4	68.9	66.6	58.8	47.7
4TWX5049E	72	43.7	51.2	54.5	61	61.5	57.1	51.3	40.7
4TWX5060A	74	52.4	54.9	62.1	66.5	71.4	67.2	60.9	49.6
4TWX5061E	74	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	4TWX5042A1	4TWX5048A1	4TWX5049E1	4TWX5060A1	4TWX5061E1
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	26	30	28	36	36
Max Fuse Size (Amps)	45	50	50	60	60
Compressor	CLIMATUFF® - SCROLL				
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	2.8	1.0	2.8	2.8
Fan HP	1/5	1/3	1/5	1/3	1/3
Fan Dia (inches)	26.6	26.6	27.6	26.6	27.6
Coil	Spine Fin™				
Refrigerant R-410A	12/01-LB/OZ	12/01-LB/OZ	13/10-LB/OZ	12/01-LB/OZ	13/12-LB/OZ
Line Size - (in.) O.D. Gas 3	3/4	7/8	7/8	7/8	7/8
Line Size - (in.) O.D. Liquid ③	3/8	3/8	3/8	3/8	3/8
Dimensions H x W x D (Crated)	53.4 x 35.1 x 38.7	57.4 x 35.1 x 38.7			
Weight - Shipping	346	364	364	365	365
Weight - Net	298	314	314	315	315
Start Components	NO	NO	NO	YES	YES
Sound Enclosure	YES	YES	NO	YES	NO
Compressor Sump Heat	YES	YES	YES	YES	YES
Optional Accessories: ④					
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
Snow Leg - Base & Cap 4" High	n BAYLEGS002	BAYLEGS002	BAYLEGS002	BAYLEGS002	BAYLEGS002
Snow Leg - 4" Extension	BAYLEGS003	BAYLEGS003	BAYLEGS003	BAYLEGS003	BAYLEGS003
Hard Start Kit Scroll	BAYKSKT260	BAYKSKT260	BAYKSKT260		
Extreme Condition Mounting Kit	t BAYECMT004	BAYECMT004	BAYECMT004	BAYECMT004	BAYECMT004
Refrigerant Lineset 5	TAYREFLN7*	TAYREFLN3*	TAYREFLN3*	TAYREFLN3*	TAYREFLN3*

### **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.
- (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.

**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	₩ A	X	5	0	3	6	Â	1	0	0	0	Â	Â
<b>Refrigerant Type</b> 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	<u>T</u> U	<u> </u>	0	8	0	R	9	V	3	W	0
Furnace Configuration — TU = Upflow/Horizontal TD = Downflow/Horizontal											
Type C = Condensing D = Induced Draft E = Electronic Ignition X = Direct Vent Condensing Y = Direct Vent Condensing Variable Spe	eed										
Heating Input MBTUH											
Major Design Change C = Single Stage R = Two Stage All other = Standard System											
Power Supply and Fuel 115 Volt Natural Gas											
Airflow Capacity for Cooling Example: 36 = 3 Tons 400 CFM/Ton 400 x 3 Tons = 1200 CFM V3 = 1 1/2 - 3 Tons, Variable Speed Motor (IC V4 = 2 - 4 Tons, Variable Speed Motor (IC V5 = 3 - 5 Tons, Variable Speed Motor (IC	or (ICM CM)										
Minor Design Change											
Service Digit – Not Orderable –											

### Air Handlers – Residential

noonaonnan	
Refrigerant Type           4 = R-410A           2 = R-22	
Application TE = Fully Convertible TG = Semi Convertible TF = Front Return TV = Vertical	
Product Family E = Leadership - Variable Speed P = Leadership C = Replacement/Retail B = Basic	
Flow Control 3 = Nonbleed TXV 4 = FCCV*	
Feature Identifier 0 = Standard Unit F = Air-Tite™	
Nominal Capacity in 000s of BTUs	
Major Design Modifications	
Power Supply	
Electrical Connection 0 = Pig Tails B = Circuit Breaker D = Pull Disconnect	
Future Option – Factory Installed Heater Nominal K	(W Value
Minor Design Modifications	
Unit Parts Identifier	

 $\frac{X C}{A} \frac{0}{4} \frac{2}{4} \frac{4}{4} \frac{C}{4} \frac{4}{4} \frac{H P}{A} \frac{C}{4} \frac{0}{4}$ **Furnace Coils Refrigerant Type** -T = R-22 R = R-410A C = Cooling only Furnace Coils XA = Uncased "A" Coil Upflow/Downflow XC = Cased Coil Upflow/Downflow/Horizontal XH = Cased Horizontal Only CB = Cased/Brazed Upflow – Cooling Only UB = Uncased/Brazed Upflow – Cooling Only **Coupling** 0 = Braze Product Family C = Universal S = High Efficiency – Nonbleed TXV E = High Efficiency – Bleed TXV A = Upflow Only D = Reverse Airflow Refrigerant Control -2 = Cap Tube 3 = Nonbleed TXV 4 = *Accutron*<sup>™</sup> Flow Control/Check Valve (FCCV) 5 = Bleed TXV HP = Heat Pump

Т

00 = Cooling only (7 1/2 to 10 ton)

#### Minor Design Change

Service Digit - Not Orderable -

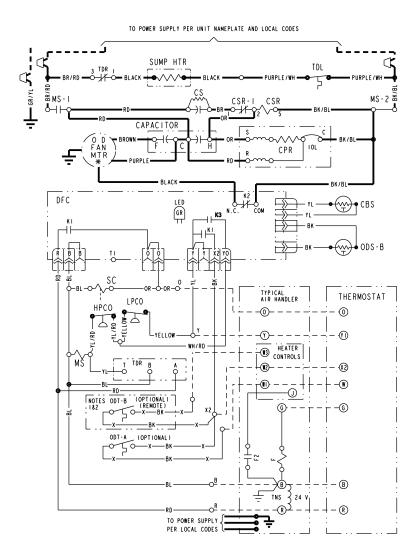
NOTE: There will be a phase-in of new model numbers for new air handlers over next 2 years. \*Shipped with R-22 FCCV



### **Schematic Diagrams**

(SEE LEGEND)

### 4TWX5018, 036B



CBS COIL BOTTOM SENSOR CF FAN CAPACITOR CN WIRE CONNECTOR CP COMPERSSOR CR RUN CAPACITOR CS STARTING CAPACITOR CS STARTING CAPACITOR CS 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 NATICIPATOR OFT OUTDOOR FAN THERMOSTAT DOS OUTDOOR THERMOSTAT RNS RESISTANCE HEAT SWITCH SC SWITCHOYER VALVE SOLENOID SW SYSTEM '0'N-OFF' SWITCH TOL DISCHARGE LINE THERMOSTAT TIS TRANSFORMER TS HEATING-COOLING THERMOSTAT TSH HEATING-THERMOSTAT TSH HEATING-THERMOSTAT TSH HEATING-THERMOSTAT TSH HEATING-THERMOSTAT
A 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!	△ 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!
<ul> <li>COLOR OF MA BK BLACK OR O BL BLUE RD RE BR BROWN WH WH</li> <li>NOTES:</li> <li>I f ODT-B IS NOT USEL AT AIR HANDLER IF USED. ODT-B WIST BOX IN AN APPROVED</li> <li>IF ODT-A IS NOT USEL AT AIR HANDLER.</li> <li>LOW VOLTAGE (24 V.)</li> <li>FOR CANADIAN I POUR INSTALLAT</li> <li>CAUTION: NOT SL SYSTEMS EXCEED ATTENTION: NOT SL</li> </ul>	RE WITH BLUE MARKER RKER RANGE YL YELLOW D GR GREEN ITE PR PURPLE D, ADD JUMPER BETWEEN W2 & W3 BE MOUNTED REMOTE OF CONTROL WEATHER PROOF ENCLOSURE D, ADD JUMPER BETWEEN WI & W2 FIELD WIRING MUST BE I8 AWG MIN.

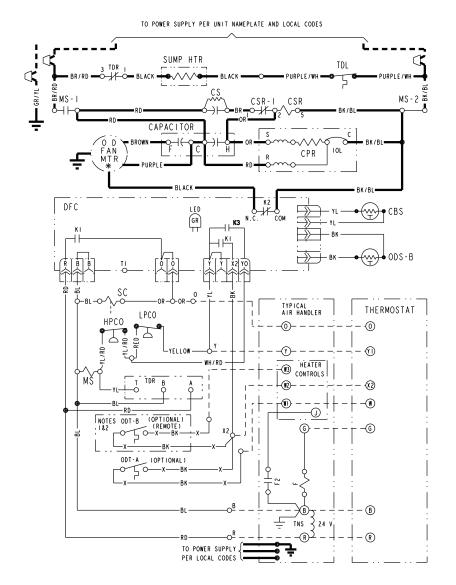
#### PRINTED FROM D156994P01



### **Schematic Diagrams**

(SEE LEGEND)

### 4TWX5024A



CA COOLING ANTICIPATOR CBS COIL BOTTOM SENSOR CF FAN CAPACITOR CN WIRE CONNECTOR CP COMPRESSOR CR RUN CAPACITOR CS STARTING CAPACITOR CS 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 OFT OUTDOOR FANTICIPATOR ODS OUTDOOR THUPERATURE SINSOR ODT OUTDOOR THUPERATURE SINSOR ODT OUTDOOR THUPERATURE SINSOR MS STRISTANCE HAT SWITCH SC SWITCHOVER VALVE SOLENOID SW SYSTEM 'O'N-OFF'S SWITCH TOL DISCHARGE LINE THERMOSTAT TS TRANSFORME TS HEATING 'COOLING THERMOSTAT TSH HEATING 'COOLING THERMOSTAT TSH HEATING THEAD'S
∆ WARNING	△ CAUTION
HAZARDOUS VOLTAGE!	USE COPPER CONDUCTORS ONLY!
DISCONNECT ALL ELECTRIC POWER INCLUDING REMOTE DISCONNECTS BEFORE SERVICING.	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!
4 COLOR OF MA BK BLACK OR C BL BLUE RD RE	RE WITH BLUE MARKER .RKER DRANGE YL YELLOW
NOTES:	
AT AIR HANDLER. IF USED, ODT-B MUST BOX IN AN APPROVED 2. IF ODT-A IS NOT USE AT AIR HANDLER.	D, ADD JUMPER BETWEEN W2 & W3 BE MOUNTED REMOTE OF CONTROL WEATHER PROOF ENCLOSURE. D, ADD JUMPER BETWEEN WI & W2 FIELD WIRING MUST BE 18 AWG MIN.
CAUTION: NOT SU SYSTEMS EXCEED ATTENTION: NE (	NSTALLATIONS TIONS CANADIENNES JITABLE FOR USE ON ING 150V-TO-GROUND. CONVIENT PAS AUX SE PLUS DE 150 V A
	on and delays ener-
gizing the sump hea	at for 30 mins after

"Y" call is removed.

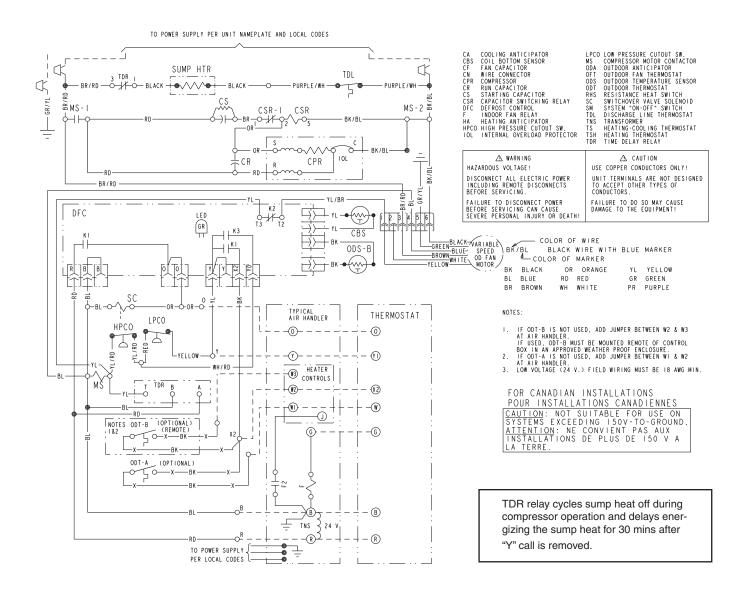
#### PRINTED FROM D156126P01



### Schematic Diagrams

(SEE LEGEND)

### 4TWX5030A



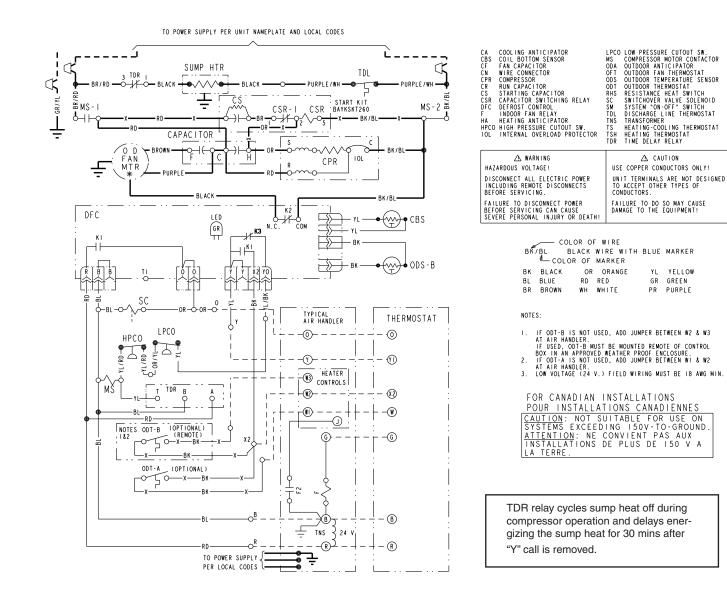
#### PRINTED FROM D154971P01



### **Schematic Diagrams**

(SEE LEGEND)

### 4TWX5042A



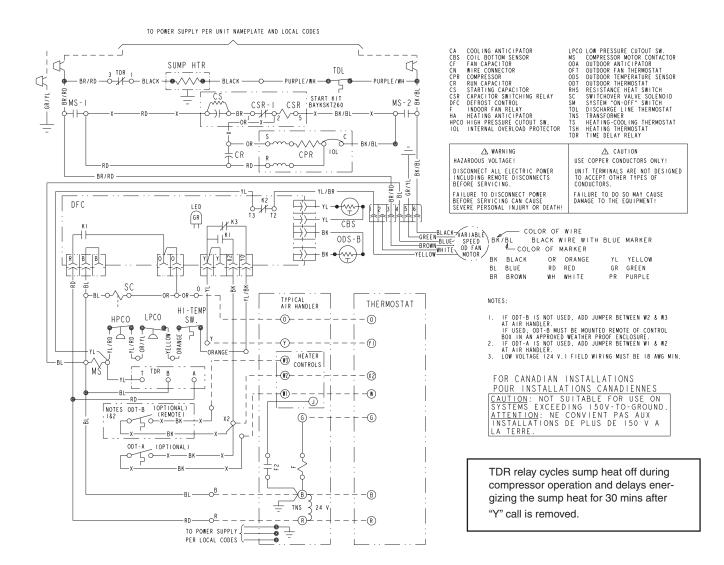
#### PRINTED FROM D156131P02



### Schematic Diagrams

(SEE LEGEND)

### 4TWX5048A



#### PRINTED FROM D154973P01

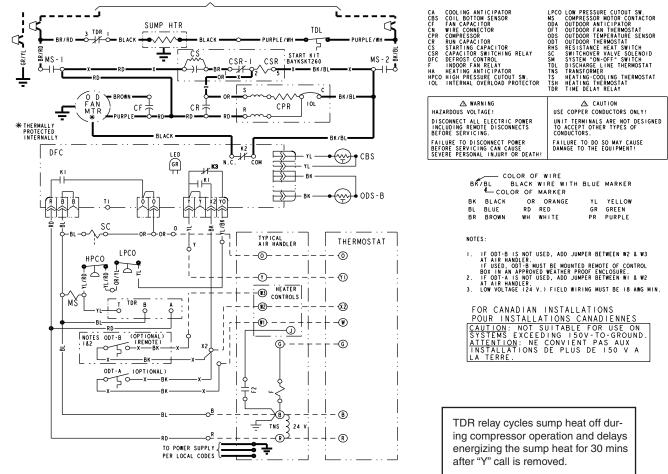


### **Schematic Diagrams**

(SEE LEGEND)

### 4TWX5049E

TO POWER SUPPLY PER UNIT NAMEPLATE AND LOCAL CODES



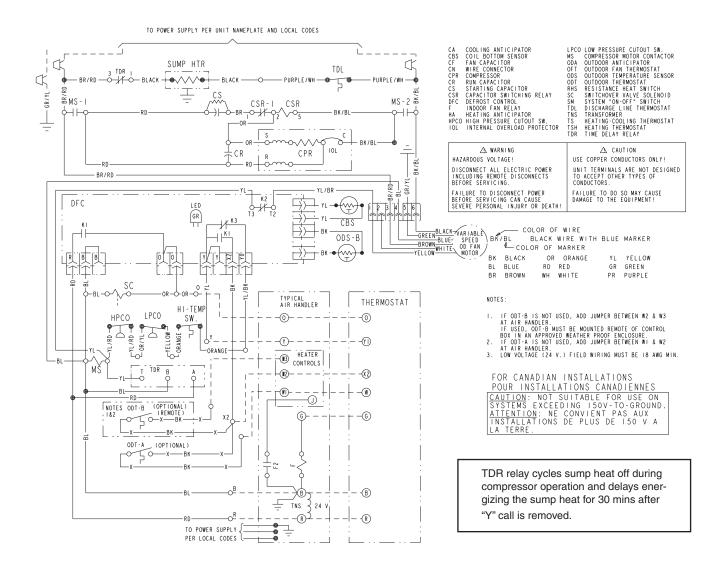
#### PRINTED FROM D156976P01 REV. 00



### Schematic Diagrams

(SEE LEGEND)

### 4TWX5060A



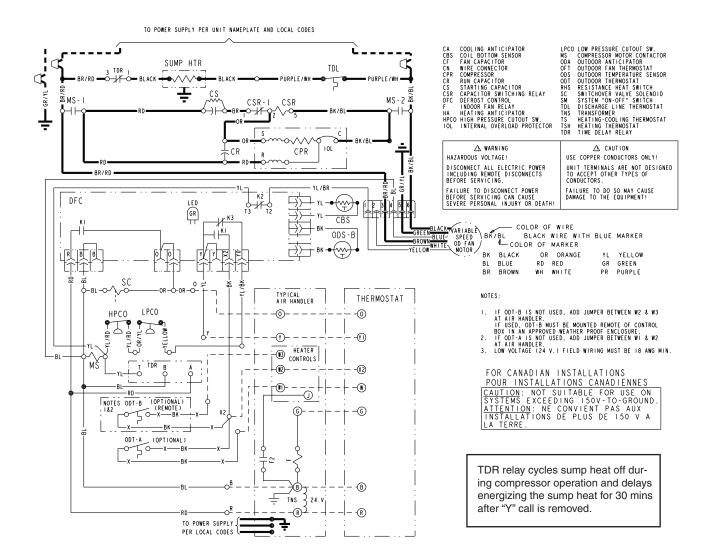
#### PRINTED FROM D154974P01



### **Schematic Diagrams**

(SEE LEGEND)

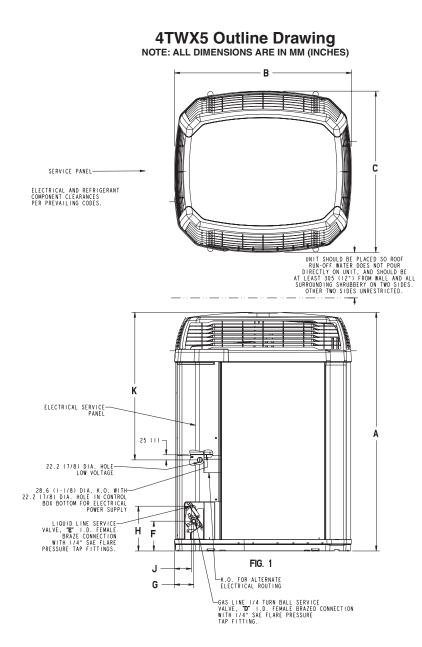
### 4TWX5061E



#### PRINTED FROM D154974P02 REV. 00



## **Dimensions**



MODELS	BASE	FIG.	A	В	С	D	E	F	G	н	J	К
4TWX5018B	4	1	933 (36-3/4)	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)
4TWX5024A	4	1	1064 (41-7/8)	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)	730 (28-3/4)
4TWX5030A	4	1	1267 (49-7/8)	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)	730 (28-3/4)
4TWX5036B	4	1	1064 (41-7/8)	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)	730 (28-3/4)
4TWX5042A	4	1	1267 (49-7/8)	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)	730 (28-3/4)
4TWX5048A	4	1	1369 (53-7/8)	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)	730 (28-3/4)
4TWX5049E	4	1	1369 (53-7/8)	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)	730 (28-3/4)
4TWX5060A	4	1	1369 (53-7/8)	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)	730 (28-3/4)
4TWX5061E	4	1	1369 (53-7/8)	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)	730 (28-3/4)

## Mechanical Specification Options

#### General

The 4TWX5 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 weatherproof CMBP-G30 DuraTuff™ base.

#### **Refrigerant Controls**

Refrigeration system controls include condenser fan, compressor contactor and high pressure switch. High and low pressure controls are inherent to the compressor. A factory installed liquid line drier is standard.

#### Compressor

The Climatuff<sup>®</sup> 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 30°F.

#### Accessories

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

**Evaporator Defrost Control** — See Low Ambient Cooling.





06/11



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