



# Split System Heat Pump Product & Performance Data

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**XL19i**  
**2TWZ9030, 036, 048 & 060C**  
**with ComfortLink™II and Charge Assist™**

**2½, 3, 4 & 5 Tons**





## Features and Benefits

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- Two **CLIMATUFF™** compressors
- Efficiency up to **17.90 SEER** and **8.8 HSPF**
- All Aluminum **SPINE FIN™** coil
- WEATHERGUARD™ 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"™** mode approved
- COMFORTLINK™II** System-only two wire control connection
- CHARGE ASSIST™**- Fast/accurate charging every time
- Glossy corrosion resistant finish
- Internal compressor high/low pressure & temperature protection
- Start Kit standard
- 50 or 100% capacity modulation
- Compressor sump heat
- Liquid line filter/drier
- Tarpaulin gray cabinet with anthracite gray top
- Low sound with advanced fan system and compressor sound insulator
- Variable speed fan
- Electronic compressor control
- Demand defrost control with diagnostics
- XL Seacoast shield
- Service valve cover
- R-22 refrigerant
- S.E.E.T. design testing
- 100% line run test
- Low ambient cooling to 55° as shipped
- Extended warranties available**

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# General Data

## Product Specifications

Model No. ①	2TWZ9030C1	2TWZ9036C1	2TWZ9048C1	2TWZ9060C1
Electrical Data V/Ph/Hz ②	200/230/1/60	200/230/1/60	200/230/1/60	200/230/1/60
Min Cir Ampacity	19	22	25	37
Max Fuse Size (Amps)	30	35	40	60
Compressor	CLIMATUFF®	CLIMATUFF®	CLIMATUFF®	CLIMATUFF®
1st Stg. RL AMPS - RL AMPS	6.2 - 45	6.2 - 45	8.4 - 62	8.4 - 62
2nd Stg. RL AMPS - RL AMPS	12.6 - 65	15.1 - 85	17.6 - 107	27.7 - 145
Outdoor Fan FL Amps	2.80	2.80	2.80	2.80
Fan HP	1/3	1/3	1/3	1/3
Fan Dia (inches)	27.6	27.6	27.6	27.6
Coil	Spine Fin™	Spine Fin™	Spine Fin™	Spine Fin™
Refrigerant R-22	16/11-LB/OZ	16/11-LB/OZ	15/8-LB/OZ	16/7-LB/OZ
Line Size - (in.) O.D. Gas ③	7/8	7/8	1-1/8	1-1/8
Line Size - (in.) O.D. Liquid ③	3/8	3/8	3/8	3/8
Dimensions H x W x D (Crated)	53.4 x 35.1 x 38.7	53.4 x 35.1 x 38.7	53.4 x 35.1 x 38.7	53.4 x 35.1 x 38.7
Weight - Shipping	453	450	458	465
Weight - Net	405	402	410	417
Start Components	YES	YES	YES	YES
Sound Enclosure	YES	YES	YES	YES
Compressor Sump Heat	YES	YES	YES	YES
<b>Optional Accessories: ④</b>				
Anti-short Cycle Timer	TAYASCT501A	TAYASCT501A	TAYASCT501A	TAYASCT501A
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
Extreme Condition Mounting Kit	BAYECMT001	BAYECMT001	BAYECMT001	BAYECMT001
Vertical Discharge Air Kit Base 4	BAYVDTA004	BAYVDTA004	BAYVDTA004	BAYVDTA004
Auto Charge Solenoid Kit	BAYCAKT001	BAYCAKT001	BAYCAKT001	BAYCAKT001
24 Volt Wiring Harness	BAYACHP024A	BAYACHP024A	BAYACHP024A	BAYACHP024A
Refrigerant Lineset ⑤	TAYREFLN3*	TAYREFLN3*	TAYREFLN4*	TAYREFLN4*

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 - 25' 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.

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

MODEL	SOUND POWER LEVEL [dB(A)]	A-WEIGHTED FULL OCTAVE SOUND POWER LEVEL dB - [dB(A)]							
		63	125	250	500	1000	2000	4000	8000
2TWZ9030C1	75	52.5	58	67.4	65.3	68	65.7	58.9	51.3
2TWZ9036C1	74	51.5	58.9	63.5	66.5	65	67.6	59.5	54.5
2TWZ9048C1	74	50.8	59.2	66.7	66.4	67.2	64.5	61.7	54.9
2TWZ9060C1	76	52.7	58.2	67.2	65.9	69.6	66.4	63.5	55.9

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

# General Data

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## 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.

**24 Volt Wiring Harness** — Used to wire a communicating outdoor unit to an existing 24 Volt indoor section.

**Charge Assist™ Solenoid Kit** — fast/accurate charging every time.

**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.

## 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.



ARI Standard  
210/240 UHP

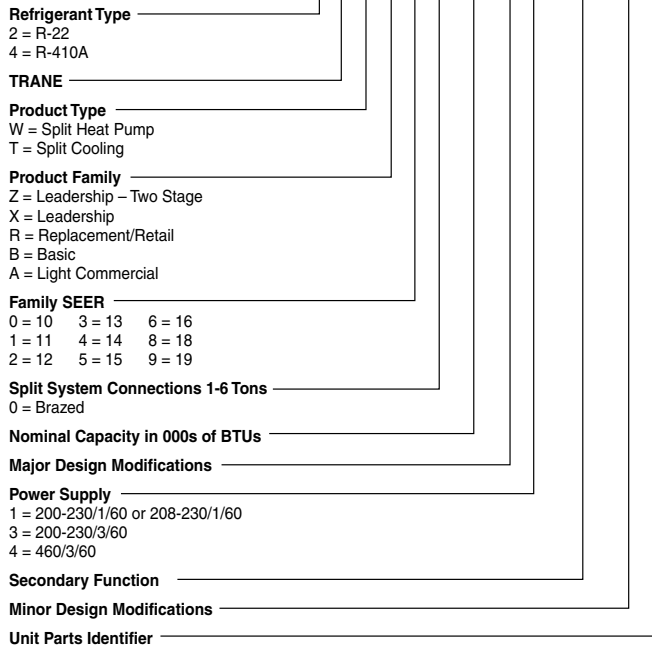




# Model Nomenclature

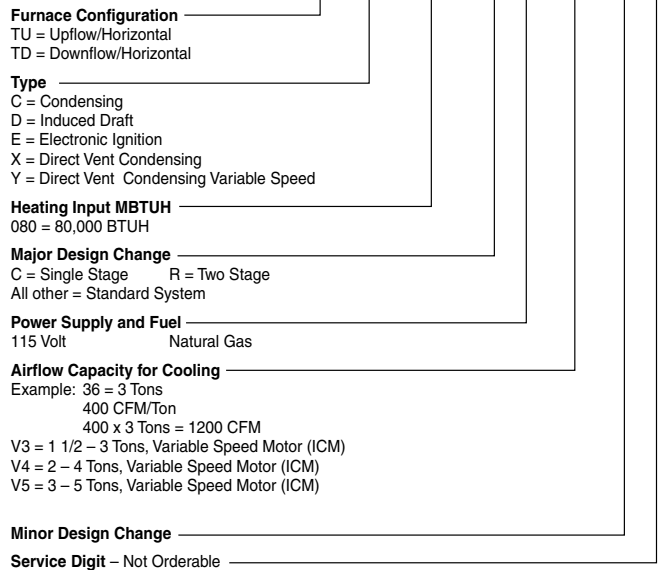
## Outdoor Units

2 T W Z 9 0 3 6 C 1 0 0 0 A A



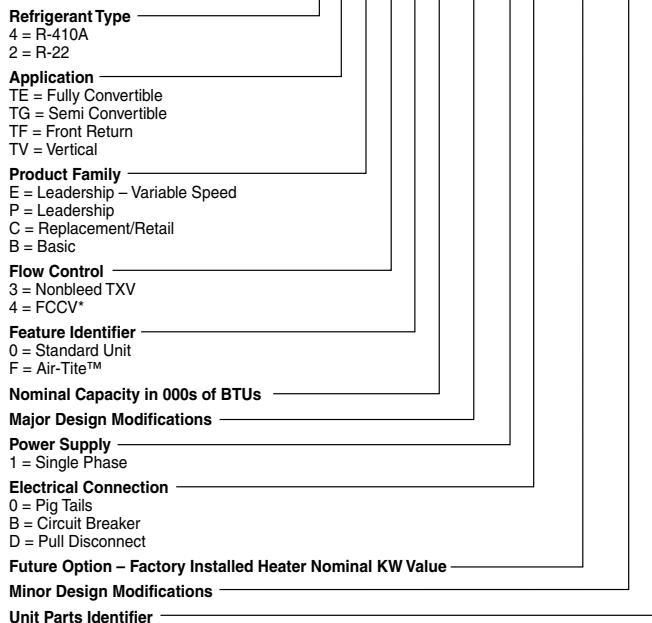
## Gas Furnaces

T U Y 0 8 0 R 9 V 3 W 0



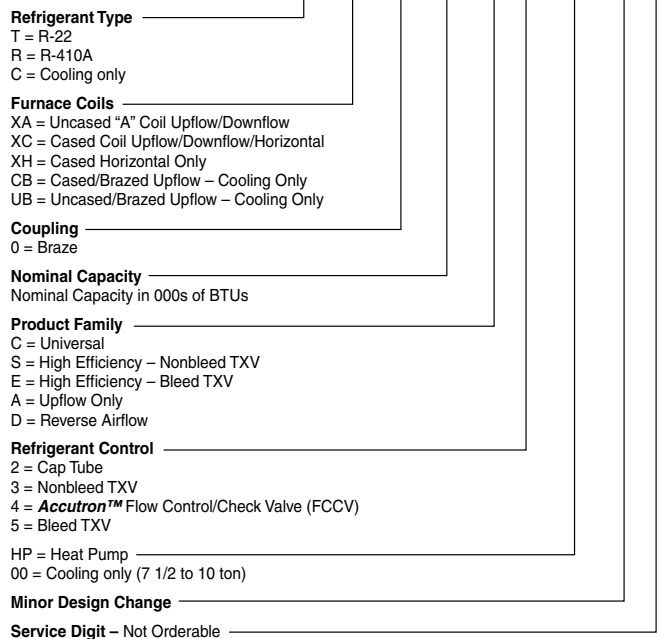
## Air Handlers – Residential

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



## Furnace Coils

T X C 0 2 4 C 4 H P C 0



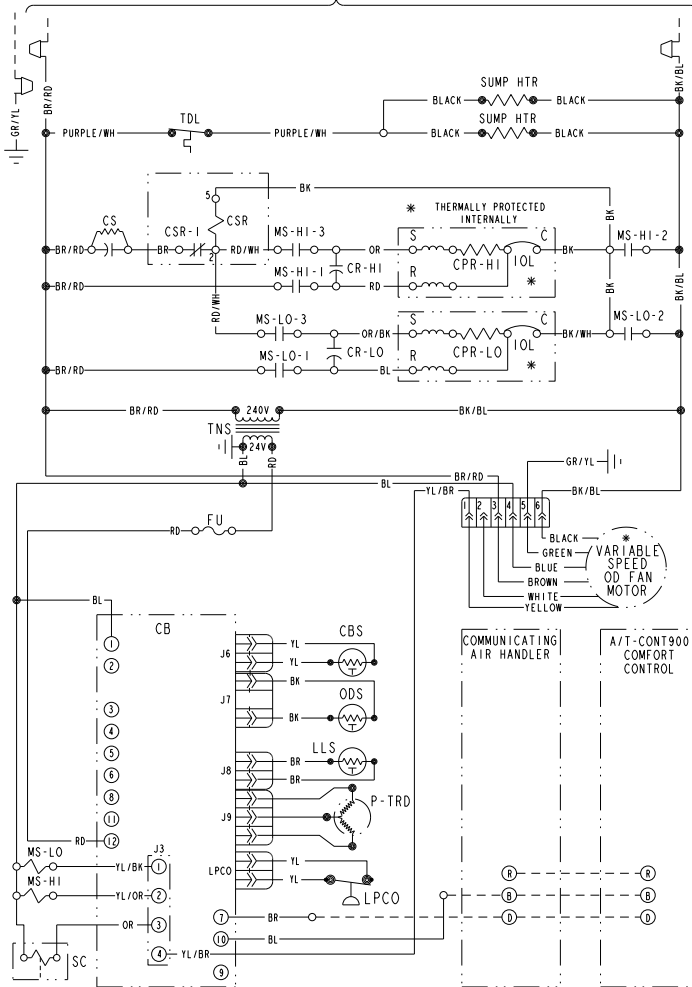
NOTE: There will be a phase-in of new model numbers for new air handlers over next 2 years.  
\*Shipped with R-22 FCCV

# Electrical Data

## Schematic Diagrams (SEE LEGEND)

### 2TWZ9030C

TO POWER SUPPLY PER UNIT NAMEPLATE AND LOCAL CODES



NOTES:

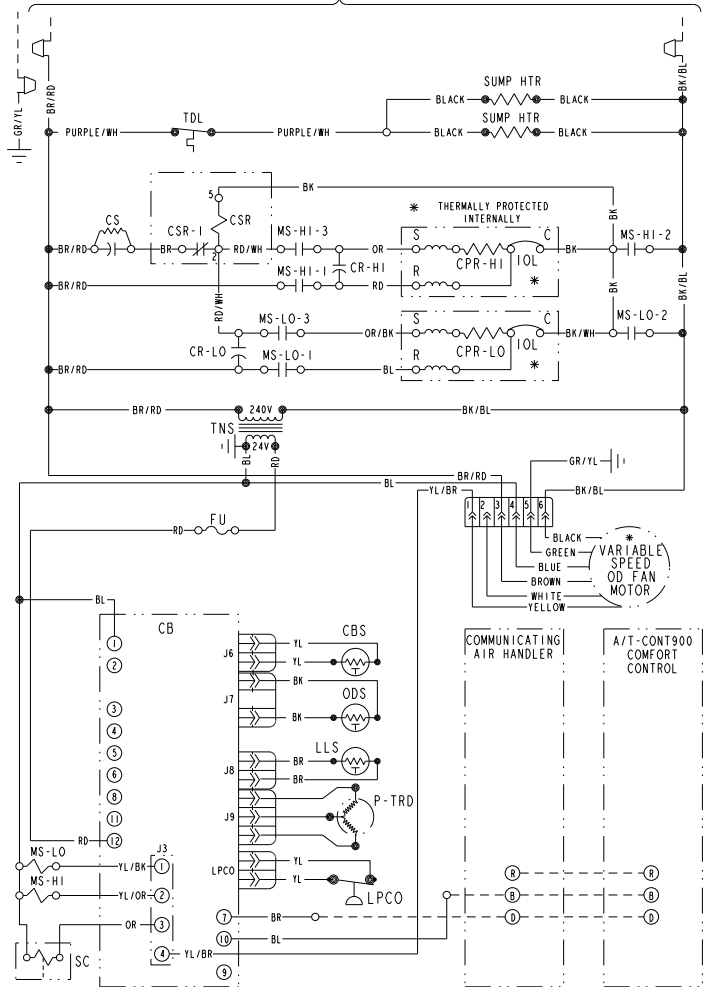
1. LOW VOLTAGE FIELD WIRING MUST BE 18 AWG MIN.

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

### 2TWZ9036,048,060C

TO POWER SUPPLY PER UNIT NAMEPLATE AND LOCAL CODES



NOTES:

1. LOW VOLTAGE FIELD WIRING MUST BE 18 AWG MIN.

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



# Electrical Data

## Schematic Diagrams

### LEGEND

	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		

### SYMBOLS

	24 V.	}	FACTORY WIRING
	LINE V.		
	24 V.	}	FIELD WIRING
	LINE V.		
	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		

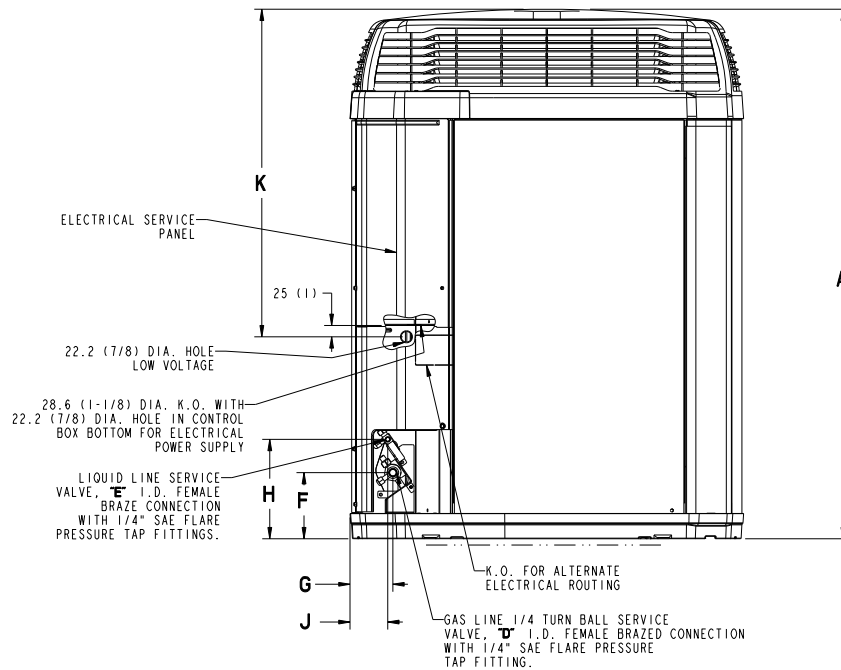
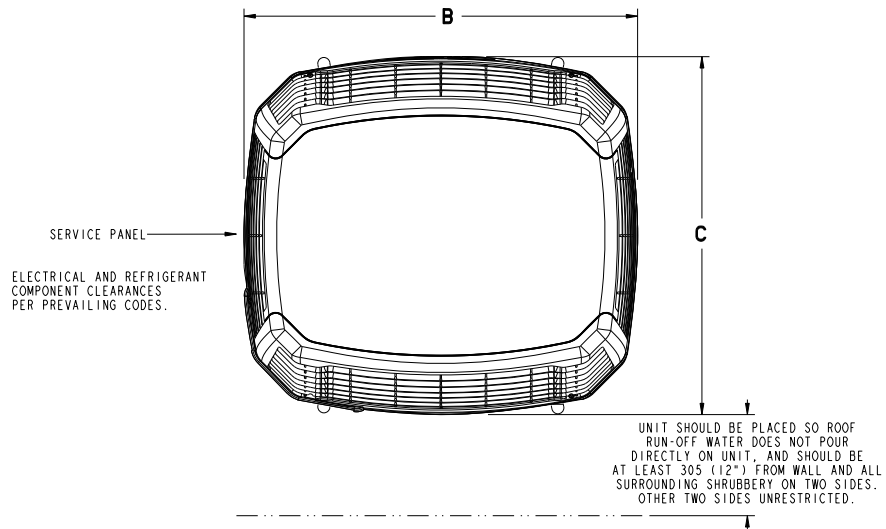
CA	COOLING ANTICIPATOR	LPCO	LOW PRESSURE CUTOUT SW.
CBS	COIL BOTTOM SENSOR	MS	COMPRESSOR MOTOR CONTACTOR
CF	FAN CAPACITOR	ODA	OUTDOOR ANTICIPATOR
CN	WIRE CONNECTOR	OFT	OUTDOOR FAN THERMOSTAT
CPR	COMPRESSOR	ODS	OUTDOOR TEMPERATURE SENSOR
CR	RUN CAPACITOR	ODT	OUTDOOR THERMOSTAT
CS	STARTING CAPACITOR	RHS	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



# Dimensions

## 2TWZ9 Outline Drawing

NOTE: ALL DIMENSIONS ARE IN MM (INCHES)



MODELS	BASE	A	B	C	D	E	F	G	H	J	K
2TWZ9030C	4	1267 (49-7/8)	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)	933 (36-3/4)
2TWZ9036C	4	1267 (49-7/8)	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)	933 (36-3/4)
2TWZ9048C	4	1267 (49-7/8)	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)	933 (36-3/4)
2TWZ9060C	4	1267 (49-7/8)	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)	33 (36-3/4)



# Mechanical Specification Options

## General

The 2TWZ9 is fully charged from the factory for matched indoor section and 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 A.R.I. certified. The unit is certified to UL 1995. Exterior is designed for outdoor application.

## ComfortLink™II

This outdoor unit contains the ComfortLink™II digital communication with 2 wire connection to outdoor and Plug-n-Play set up.

## Charge Assist™

The Charge Assist™ indicates system Charge Status.

## Casing

Unit casing is constructed of heavy gauge, G60 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, 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® compressor features internal over temperature and pressure protection and total dipped hermetic motor. Other features include: roto lock suction and discharge refrigerant connections, 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.

## Comfort Control

ComfortLink™II Control with Plug-n-Play set up and 3 wire connection.



ARI Standard  
210/240 UHP



Trane  
A business of  
American Standard Companies  
[www.trane.com](http://www.trane.com)

Literature Order Number

04/09

File Number

Supersedes

Stocking Location

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