

Split System Cooling Product & Performance Data

## XL19i

2TTZ9030, 036, 048 & 060C With ComfortLink<sup>™</sup> II and Charge Assist<sup>™</sup> 2½, 3, 4 & 5 Tons



PUB. NO. 22-1746-04



# **Features and Benefits**

- Two **CLIMATUFF™** Compressors
- Efficiency up to 19.50 SEER
- All Aluminum SPINE FIN™ coil
- WEATHERGUARD<sup>™</sup> II top shields unit
- WEATHERGUARD<sup>™</sup> fasteners
- QUICK-SESS™ cabinet, service access and refrigerant connections with full coil protection
- **DURATUFF**<sup>™</sup> base, fast complete drain, weather proof
- **COMFORT**"**R**"<sup>™</sup> mode approved
- ComfortLink™ II System- Only two wire control connection
- Charge Assist<sup>™</sup> 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 motor
- Electronic compressor control
- XL Seacoast shield
- Service valve cover
- R-22 refrigerant
- S.E.E.T. design testing
- 100% line run test
- Low ambient cooling to 55° F as shipped
- Extended warranties available



# Contents

## **Features and Benefits**

## **General Data**

Product Specifications
A-weighted Sound Power Level [dB(A)]
Accessory Description and Usage
ARI Standard Capacity Rating Conditions
Model Nomenclature
Electrical Data

Dimensions

**Mechanical Specification Options** 



# General Data

Model No. 1	2TTZ9030C1	2TTZ9036C1	2TTZ9048C1	2TTZ9060C1
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	18	22	25	37
Max Fuse Size (Amps)	30	35	40	60
Compressor	CLIMATUFF®	CLIMATUFF®	CLIMATUFF®	CLIMATUFF®
1st Stg. RL Amps - LR Amps	6.2 - 45	6.2 - 45	8.4 - 62	8.4 - 62
2nd Stg. RL Amps - LR Amps	12.4 - 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	13/00-LB/OZ	13/00-LB/OZ	14/11-LB/OZ	13/12-LB/OZ
Line Šize - 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.
Weight - Shipping	445	442	454	459
Weight - Net	397	394	406	411
Start Components	YES	YES	YES	YES
Sound Enclosure	YES	YES	YES	YES
Compressor Sump Heat	YES	YES	YES	YES
Optional Accessories: ④				
Rubber Isolator Kit	BAYISLT101	BAYISLT101	BAYISLT101	BAYISLT101
Extreme Condition Mounting Kit	BAYECMT001	BAYECMT001	BAYECMT001	BAYECMT001
Charge Assist™ Tool	BAYCAKT001	BAYCAKT001	BAYCAKT001	BAYCAKT001
Snow/Sand Legs	BAYLEGS002	BAYLEGS002	BAYLEGS002	BAYLEGS002
4" Extension	BAYLEGS003	BAYLEGS003	BAYLEGS003	BAYLEGS003
/ertical Discharge Air Kit	BAYVDTA004	BAYVDTA004	BAYVDTA004	BAYVDTA004
24 Volt Wiring Harness	BAYACHP024A	BAYACHP024A	BAYACHP024A	BAYACHP024A
Refrigerant Lineset 5	TAYREFLN3*	TAYREFLN3*	TAYREFLN4*	TAYREFLN4*

3 Standard line lengths - 80'. Standard lift - 25' Suction and Liquid line. For greater lengths and lifts refer to refrigerant piping software Pub# 32-3312-0<sup>†</sup>. (†denotes latest revision)

For accessory description and usage, see page 5.
\* = 15, 20, 25, 30, 40 and 50 foot lineset available.

SOUND POWER A-WEIGHTED FULL OCTAVE SOUND POWER LEVEL dB - [dB(A)] MODEL LEVEL [dB(A)] 63 125 250 500 1000 2000 4000 8000 2TTZ9030C1 72 52.1 57.7 64.4 65.8 64.6 62.4 57.8 50.5 2TTZ9036C1 74 54.3 57.8 62.3 65.2 67.1 65.9 61.1 51.3 2TTZ9048C1 74 52.1 58.1 66.8 67.2 67.2 63 57.1 52.3 2TTZ9060C1 73 53 60.1 63.8 67.2 66 62.9 58.5 51.6

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

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



## General Data

## Accessory Description and Usage

**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.

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

Charge Assist<sup>™</sup> Tool— Fast accurate charging every time.

## 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 UAC





# Model **Nomenclature**

Outdoor Units	Z 9 ▲ ▲	6 7	00	0	
<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	J				
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					

	Т	U	Y	0	8	0	R	9	۷	3	W	0
Gas Furnaces	1											
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 Spi	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 (I V5 = 3 - 5 Tons, Variable Speed Motor (I	CM)	,										
Minor Design Change ————												

Service Digit - Not Orderable -

**Furnace Coils** 

Air Handlers -	4 <b>T</b>				6	<u>A</u> 1	0	0 0	A
Residential		ÎÎ	Ĩ	<u>ו</u>	Ĩ	ÎÎ		Î	Î
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 ——									
Maior Design Modifications									
Power Supply 1 = Single Phase						1			
Electrical Connection 0 = Pig Tails B = Circuit Breaker D = Pull Disconnect									
Future Option – Factory Installed Heater	Nomin	al KW	Valu	ie —					
Minor Design Modifications									
Unit Parts Identifier									

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 Nominal Capacity Nominal Capacity in 000s of BTUs 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 00 =Cooling only (7 1/2 to 10 ton) Minor Design Change

Т

 $\frac{\mathbf{X} \quad \mathbf{C}}{\mathbf{A}} \quad \frac{\mathbf{0}}{\mathbf{A}} \quad \frac{\mathbf{2}}{\mathbf{A}} \quad \frac{\mathbf{4}}{\mathbf{A}} \quad \frac{\mathbf{H}}{\mathbf{A}} \quad \frac{\mathbf{P}}{\mathbf{A}} \quad \frac{\mathbf{C}}{\mathbf{A}} \quad \frac{\mathbf{0}}{\mathbf{A}}$ 

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



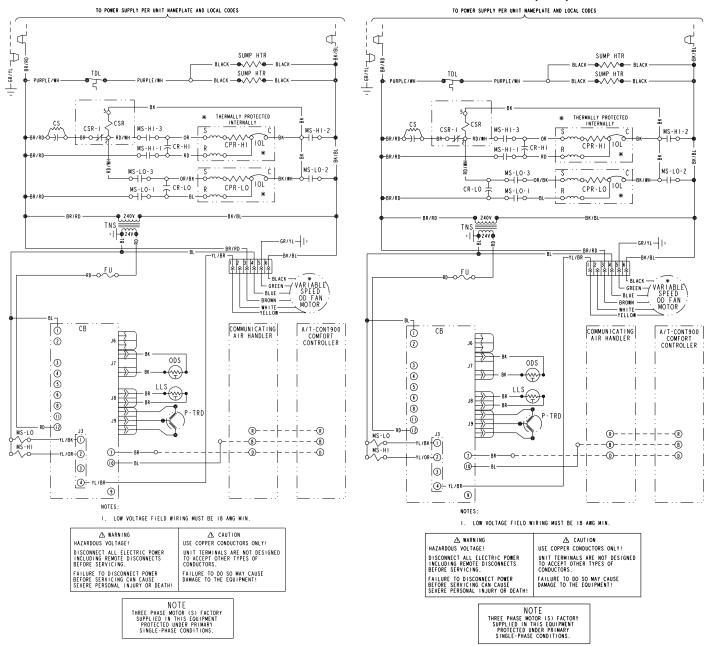
Electrical Data

2TTZ9030C

## SCHEMATIC DIAGRAMS

(SEE LEGEND)

### 2TTZ9036,048,060C



Printed from D154651P05 Rev 04



# Electrical Data

## SCHEMATIC DIAGRAMS

## LEGEND

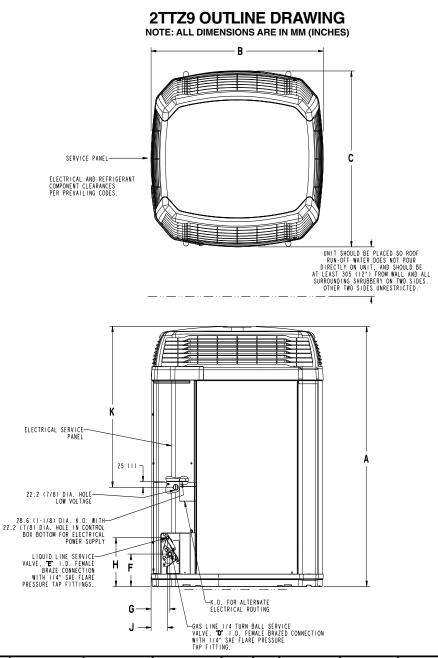
	COL	OR OI	F WIRE		
ΒŔ	/BL B	LACK	F WIRE WIRE WITH MARKER	BLUE	MARKER
	4_ COLO	R OF	MARKER		
ВΚ	BLACK	OR	ORANGE	ΥL	YELLOW
ΒL	BLUE	RD	RED	GR	GREEN
BR	BROWN	WΗ	WHITE	PR	PURPLE

### SYMBOLS

I	24 V. LINE V. } FACTORY WIRING 24 V. } FIELD WIRING
- <u>-</u> - I	LINE V. J FIELD WIRING
	GROUND
0	JUNCTION
$\square$	WIRE NUT OR CONNECTOR
~~	COIL
$\rightarrow \vdash$	CAPACITOR
$\dashv\vdash$	RELAY CONTACT (N.O.)
- <b> /</b>	RELAY CONTACT (N.C.)
	THERMISTOR
00	INTERNAL OVERLOAD PROTECTOR
oTo	PRESSURE ACTUATED SWITCH
مح ہ	TEMP. ACTUATED SWITCH
	POL. PLUG FEMALE HOUSING (MALE TERM.)
	POL. PLUG MALE HOUSING (FEMALE TERM.)
$\sim\sim\sim\sim$	RESISTOR OR HEATING ELEMENT
00000	MOTOR WINDING
0	TERMINAL



## **Dimensions**



MODELS	BASE	А	В	С	D	Е	F	G	Н	J	К
2TTZ9030C	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)
2TTZ9036C	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)
2TTZ9048C	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)
2TTZ9060C	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)

Printed from D152635 Rev. 14



# Mechanical Specification/Options

### General

The 2TTZ9 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<sup>™</sup> II

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

#### Charge Assist<sup>™</sup>

The Charge Assist<sup>™</sup> 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 weatherproof CMBP-G30 DuraTuff<sup>™</sup> 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 a 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  $55^{\circ}$ F.

### **Comfort Control**

ComfortLink<sup>™</sup> II Control with 3 wire connection to indoor unit and Plug-n-Play set up.

04/09



Trane A business of American Standard Companies www.trane.com

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