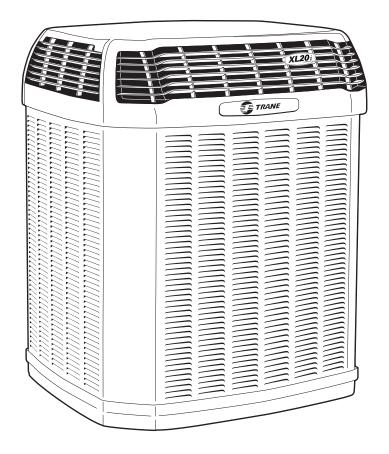


# Split System Cooling Product Data

## **XL20i**

4TTZ0024, 036, 048 & 060 with ComfortLink<sup>™</sup> II and Charge Assist<sup>™</sup>

2, 3, 4 & 5 Tons





## Features and Benefits

- Two CLIMATUFF® compressors deliver 50% and 100% capacity modulation
- Efficiency up to 20 SEER
- All aluminum SPINE FIN™ coil
- WEATHERGUARD™ II top shields unit
- WEATHERGUARD<sup>™</sup> fasteners
- QUICK-SESS<sup>™</sup> 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<sup>™</sup> 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
- Electronic compressor control

- 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
- XL Seacoast shield
- Service valve cover
- R-410A 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	2
General Data Product Specifications	<b>4</b>
A-weighted Sound Power Level [dB(A)]	4
Accessory Description and Usage	5
ARI Standard Capacity Rating Conditions	5
Model Nomenclature	6
Electrical Data	7
Dimensions	10
Mechanical Specification Options	11



## General Data

### **Product Specifications**

Model No. ①	4TTZ0024A1	4TTZ0036B1	4TTZ0048B1	4TTZ0060A1			
Electrical Data V/Ph/Hz 2	200/230/1/60	208/230/1/60	200/230/1/60	200/230/1/60			
Vin Cir Ampacity 14		19	26	31			
Max Fuse Size (Amps)	20	30	40	50			
Compressors	2 - CLIMATUFF®	2 - CLIMATUFF®	2 - CLIMATUFF®	2 - CLIMATUFF®			
RL AMPS - LR AMPS	8.7 - 58	13.2 - 60.0	18.6 - 93.4	22.8 - 128.7			
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)	27.5	27.6	27.6 27.6				
Coil	Spine Fin™	Spine Fin™	Spine Fin™	Spine Fin™			
Refrigerant R-410A	10/10-LB/OZ	10/8-LB/OZ	15/7-LB/OZ	13/15-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			
Dimensions H x W x D (Crated)	57.4 x 35.1 x 38.7						
Weight - Shipping	385	385	470	470			
Weight - Net	335	335	420	420			
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			
Snow Leg - Base & Cap 4" High	BAYLEGS002	BAYLEGS002	BAYLEGS002	BAYLEGS002			
Snow Leg - 4" Extension	BAYLEGS003	BAYLEGS003	BAYLEGS003	BAYLEGS003			
Extreme Condition Mounting Kit	BAYECMT023	BAYECMT004	BAYECMT004	BAYECMT004			
Vertical Discharge Air Kit Base 4	BAYVDTA003	BAYVDTA004	BAYVDTA004	BAYVDTA004			
Auto Charge Solenoid Kit	BAYCAKT001	BAYCAKT001	BAYCAKT001	BAYCAKT001			
24 Volt Wiring Harness	BAYACHP024A	BAYACHP024A	BAYACHP024A	BAYACHP024A			
Refrigerant Lineset 5	TAYREFLN7*	TAYREFLN7*	TAYREFLN3*	TAYREFLN3*			

Certified in accordance with the Air-Source Unitary Heat Pump Equipment certification program which is based on AHRI Standard 210/240.
 Calculated in accordance with N.E.C. Only use HACR circuit breakers or fuses.
 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 accordance with a durate a page 5.

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

MODEL		POWER [dB(A)]	A-WEIGH	ITED FULI	OCTAVE	SOUND P	OWER LEV	/EL dB - [c	IB(A)] Hig	h Stage
MODEL	Low Stage Overall	High Stage Overall	63	125	250	500	1000	2000	4000	8000
4TTZ0024A1	59	68	44.8	54.4	60.5	57.7	61.4	61.9	55	49.1
4TTZ0036B1	67	72	50.8	55.3	64.6	67.8	64.3	63.2	57.6	51.5
4TTZ0048B1	68	76	51.3	56	68.3	71.3	65.6	69	58.9	49.6
4TTZ0060A1	70	76	51.4	59.8	67.3	68	69.6	70.1	61	51.5

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

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



### **Accessory Description and Usage**

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

Charge Assist<sup>™</sup> 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.

**Low Ambient Cooling** — For low ambient cooling below 55° see Application Guide SSC-APG005-EN.

### 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 $\frac{4}{4} \stackrel{T}{\underline{A}} \stackrel{T}{\underline{A}} \stackrel{Z}{\underline{A}} \stackrel{0}{\underline{A}} \stackrel{0}{\underline{A}} \stackrel{3}{\underline{A}} \stackrel{6}{\underline{A}} \stackrel{A}{\underline{A}} \stackrel{1}{\underline{A}} \stackrel{0}{\underline{A}} \stackrel{0}{\underline{A}} \stackrel{A}{\underline{A}} \stackrel{A}{\underline{A}$
Refrigerant Type
TRANE
Product Type           W = Split Heat Pump           T = Split Cooling
Product Family
Family SEER           0 = 10         3 = 13         6 = 16           1 = 14         4 = 14         8 = 18           2 = 12         5 = 15         9 = 19
Split System Connections 1-6 Tons
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         1         2         3         4         5         6         7         8         9         10         11         12         13         14         15           T         U         D         1         B         0         A         9         H         3         1         A         A           I         I         I         I         I         B         0         A         9         H         3         1         A         A
Furnace Configuration       TU = Upflow/Horizontal       TD = Downflow/Horizontal
Type
Number of Heating Stages
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)
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
Draft Inducer Speeds 1 = Single Speed 2 = Two Speed V = Variable Speed
Minor Design Change

Service Digit - Not Orderable -

Air Handler $\begin{bmatrix} 1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 1011 & 12 & 13 & 14 & 15 \\ \hline G & A & M & 5 & A & 0 & B & 3 & 6 & M & 3 & 1 & S & A & A \\ \hline A & A & A & A & A & A & A & A & A & A$
Brand
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 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 Efty PSC, 1-5 - nom. Tonnage (cfm/ton) M Mid Efty Multi-Speed, 1-5 - nom. Tonnage (cfm/ton) H = High Efty Multi-Speed, 1-5 - nom. Tonnage (cfm/ton) V = High Efty Variable, 1-5 - nom. Tonnage (cfm/ton)
Power Supply
System Control Type           S = Standard - 24 VAC           C = CLII 138 VDC
Minor Design Change
Unit Parts Identifier

Heat Pump/ 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
<b>Cooling Coils</b> $4 \stackrel{\text{T}}{\ } \stackrel{\text{X}}{\ } \stackrel{\text{C}}{\ } \stackrel{\text{B}}{\ } \stackrel{0}{\ } \stackrel{36}{\ } \stackrel{\text{A}}{\ } \stackrel{\text{C}}{\ } \stackrel{3}{\ } \stackrel{\text{H}}{\ } \stackrel{\text{C}}{\ } \stackrel{\text{A}}{\ } \stackrel{\text{A}$
Refrigerant Type
Series
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"
0 = Brazed
Nominal Capacity in 1000's (BTUH)
Major Design Change
Efficiency C = Standard S = Hi Efficiency (derived from 10 SEER products)
Befrigerant 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
Complex Digit. Not Ordership

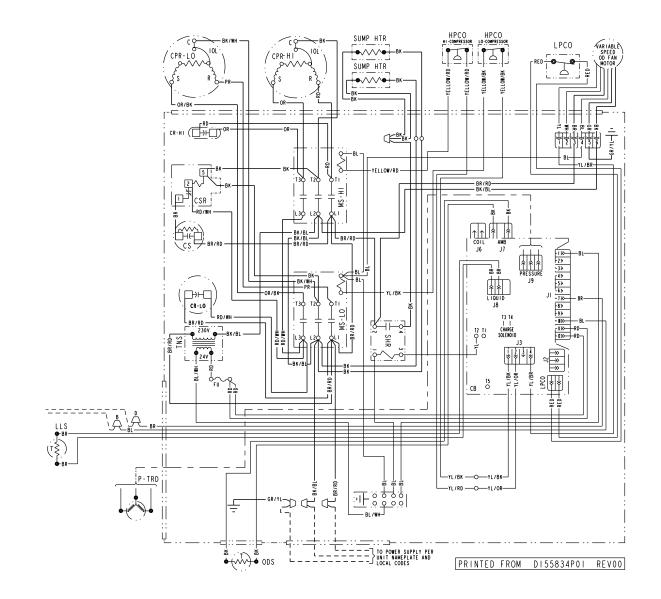
Service Digit - Not Orderable



## Electrical Data

### Schematic Diagrams (SEE LEGEND)

### 4TTZ0024, 4TTZ0036, 4TTZ0048, 4TTZ0060

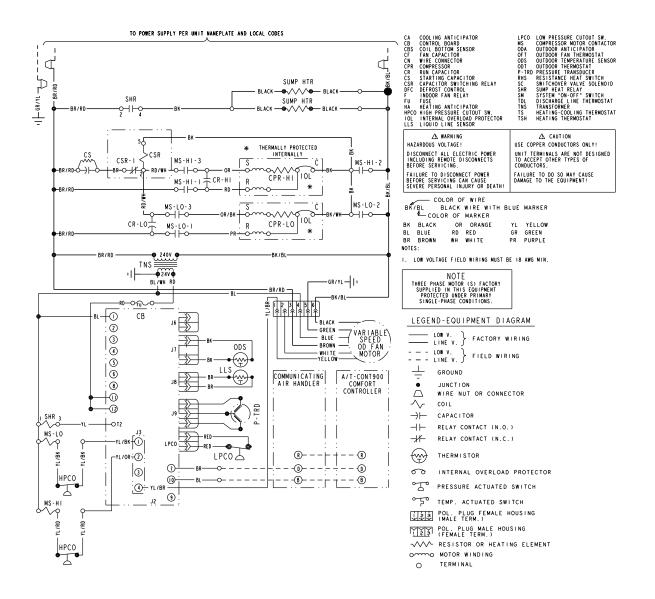




## Electrical Data

### Schematic Diagrams (SEE LEGEND)

### 4TTZ0024, 4TTZ0036, 4TTZ0048, 4TTZ0060



Printed from D155834P01 Rev 00



## Electrical Data

### **Schematic Diagrams**

### LEGEND

~	COLOR OF WIRE BK/BL BLACK WIRE WITH BLUE MARKER COLOR OF MARKER									
ΒŔ	/BL	BLACK	WIRE WIT	H BLUE	MARKER					
	4_ COL	OR OF	MARKER							
ВΚ	BLACK	OR	ORANGE	ΥL	YELLOW					
BL	BLUE	RD	RED	GR	GREEN					
BR	BROWN	WH	WHITE	PR	PURPLE					

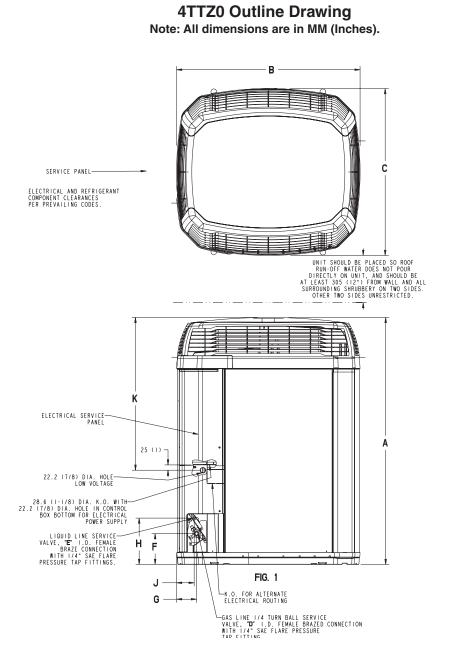
### SYMBOLS

24 V. LINE V. } FACTORY WIRING
- $-$ 24 V. - $ -$ LINE V. FIELD WIRING
-x - FIELD INSTALLED FACTORY WIRING
GROUND
JUNCTION
WIRE NUT OR CONNECTOR
-)- CAPACITOR
→
THERMISTOR
00 INTERNAL OVERLOAD PROTECTOR
T PRESSURE ACTUATED SWITCH
F TEMP. ACTUATED SWITCH
POL. PLUG FEMALE HOUSING (MALE TERM.)
POL. PLUG MALE HOUSING
OMOTOR WINDING
O TERMINAL

CA	COOLING ANTICIPATOR	LPCO	LOW PRESSURE CUTOUT SW.
CBS	COIL BOTTOM SENSOR	MS	COMPRESSOR MOTOR CONTACTOR
ĊĒ	FAN CAPACITOR	ODA	OUTDOOR ANTICIPATOR
ČŇ	WIRE CONNECTOR	<b>OF T</b>	OUTDOOR FAN THERMOSTAT
ČPR	COMPRESSOR	ODS	OUTDOOR TEMPERATURE SENSOR
ČR	RUN CAPACITOR	ÖDŤ	OUTDOOR THERMOSTAT
ĊS	STARTING CAPACITOR	RHS	RESISTANCE HEAT SWITCH
ĊŚR	CAPACITOR SWITCHING RELAY	SC	SWITCHOVER VALVE SOLENOID
DFC	DEFROST CONTROL	ŚM	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
10L	INTERNAL OVERLOAD PROTECTOR	TSH	HEATING THERMOSTAT



## **Dimensions**



MODELS	BASE	А	В	с	D	Е	F	G	н	J	к
4TTZ0024A	4	1369 (53 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)	1035 (40 3/4)
4TTZ0036B 4TTZ0048B 4TTZ0060A	4	1369 (53 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)	1035 (40 3/4)

From Dwg. D152635 Rev. 15



## Mechanical Specification Options

#### General

The 4TTZ0 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 shall be certified to UL 1995. Exterior is designed for outdoor application.

#### ComfortLink<sup>™</sup> II

This outdoor unit contains the ComfortLink™ II digital communication with 2 wire connection to outdoor 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 and low pressure switches. High and low pressure controls are inherent to the compressor. A factory installed liquid line drier is standard.

#### Compressor

Two Climatuff<sup>®</sup> compressors deliver 50% or 100% capacity modulation and feature 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.

#### Low Ambient Cooling

As manufactured, this unit has a cooling capability to 55°F. For low ambient cooling below 55° see Application Guide SSC-APG005-EN.

#### **Comfort Control**

ComfortLlnk<sup>™</sup> II Control with Plug-n-Play set up and 3 wire connection.







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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.

04/12