

Split System Heat Pump Product Data

XL14i 4TWX4018-060

1½ – 5 Tons



PUB. NO. 22-1725-04



Features and Benefits

- Climatuff® compressor
- Efficiency up to 15.0 SEER and 9.85 HSPF
- All aluminum Spine Fin™ coil
- WeatherGuard[™] II top shields unit
- **DuraTuff™** base, fast complete drain, weatherproof
- WeatherGuard[™] fasteners
- XL seacoast shield
- Industry leading appearance
- Tarpaulin gray cabinet with anthracite gray top
- Low sound with advanced fan system and compressor sound insulator
- Quick-Sess™ cabinet, service access and refrigerant connections with full coil protection
- Demand Defrost Control with Diagnostics
- · Glossy corrosion resistant finish
- Internal high/low pressure & temperature protection

- High pressure switch
- 018,024,060 ship with start kit
- · Liquid line filter-drier
- Comfort "R"™ mode approved
- · Easy single side service
- Multi-use liquid and suction line service valves
- Easy top & fan removal
- Full length control and service valve cover
- R-410A refrigerant
- · Compressor sump heat
- 10 year limited warranty on compressor, coil, and internal functional parts (Residential only)
- Extended warranties available
- S.E.E.T. design testing
- 100% line run test
- Low ambient to 40°F with AY28X084, 30°F with TXV



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General Data

Product Specifications								
Model No. ①	4TWX4018B1	4TWX4024B1	4TWX4030B1	4TWX4036B1				
Electrical Data V/Ph/Hz 2	200/230/1/60	200/230/1/60	208/230/1/60	208/230/1/60				
Min Cir Ampacity	10	13	20	21				
Max Fuse Size (Amps)	15	20	30	35				
Compressor	CLIMATUFF®	CLIMATUFF®	CLIMATUFF [®] - SCROLL	CLIMATUFF [®] - SCROLL				
RL Amps - LR Amps	7.2 - 40	9.4 - 63	14.7 - 73	15.4 - 83				
Outdoor Fan FL Amps	0.60	0.90	1.40	1.30				
Fan HP	1/15	1/8	1/6	1/6				
Fan Dia (inches)	23	23	23	27.6				
Coil	Spine Fin™	Spine Fin™	Spine Fin™	Spine Fin™				
Refrigerant R-410A	5/12-LB/OZ	6/10-LB/OZ	6/02-LB/OZ	7/01-LB/OZ				
Line Size - (in.) O.D. Gas ③	1/2	5/8	3/4	3/4				
Line Size - (in.) O.D. Liquid ③	1/4	5/16	5/16	3/8				
Dimensions H x W x D (Crated)	47.6 x 30.1 x 33	51.6 x 30.1 x 33	51.6 x 30.1 x 33	49.4 x 35.1 x 38.7				
Weight - Shipping	256	272	268	298				
Weight - Net	221	235	231	252				
Start Components	YES	YES	NO	NO				
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			BAYKSKT260	BAYKSKT260				
Extreme Condition Mounting Kit	BAYECMT023	BAYECMT023	BAYECMT023	BAYECMT004				
Refrigerant Lineset 5	TAYREFLN5*	TAYREFLN6*	TAYREFLN2*	TAYREFLN7*				

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

Certained in accordance with the AI-Source Orliary Heat Purity Equipment certaination program which is based on a calculated in accordance with N.E.C. Only use HACR circuit breakers or fuses.
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⁺. (⁺denotes latest revision)
For accessory description and usage, see page 5.
* = 15, 20, 25, 30, 40 and 50 foot lineset available.

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

	SOUND POWER	A-WEIGHTED FULL OCTAVE SOUND POWER LEVEL dB - [dB(A)]							
MODEL	LEVEL [dB(A)]	63	125	250	500	1000	2000	4000	8000
4TWX4018B1	74	43.6	50.9	57.8	69.2	64.2	62.6	55.7	48.9
4TWX4024B1	74	47.6	54.8	61.1	68.7	67.9	66.5	62.5	59.5
4TWX4030B1	71	49.2	56.4	59.8	65.2	64.5	61.3	55.0	49.1
4TWX4036B1	72	48.5	60.4	63.7	66.3	64.9	60.5	53.7	47.5
4TWX4042B1	74	50.5	57.7	63.1	67.5	67.5	61.1	56.1	50.0
4TWX4048B1	74	50.5	57.7	63.1	67.5	67.5	61.1	56.1	50.0
4TWX4060B1	74	51.2	55.0	64.5	68.3	70.7	62.8	58.0	51.3

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



General Data

Product Specifications

Model No. ①	4TWX4042B1	4TWX4048B1	4TWX4060B1
Electrical Data V/Ph/Hz 2	208/230/1/60	208/230/1/60	208/230/1/60
Min Cir Ampacity	25	30	36
Max Fuse Size (Amps)	40	50	60
Compressor	CLIMATUFF [®] - SCROLL	CLIMATUFF [®] - SCROLL	CLIMATUFF® - SCROLL
RL Amps - LR Amps	19.2 - 104	23.1 - 134	27.6 - 158
Outdoor Fan FL Amps	1.30	1.30	1.30
Fan HP	1/6	1/6	1/6
Fan Dia (inches)	27.6	27.6	27.6
Coil	Spine Fin™	Spine Fin™	Spine Fin™
Refrigerant R-410A	7/04-LB/OZ	9/11-LB/OZ	11/02-LB/OZ
Line Size - (in.) O.D. Gas ③	3/4	7/8	7/8
Line Size - (in.) O.D. Liquid ③	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
Weight - Shipping	314	320	358
Weight - Net	266	272	310
Start Components	NO	NO	YES
Sound Enclosure	YES	YES	YES
Compressor Sump Heat	YES	YES	YES
Optional Accessories: ④			
Anti-short Cycle Timer	TAYASCT501A	TAYASCT501A	TAYASCT501A
Evaporator Defrost Control A/C	AY28X084	AY28X084	AY28X084
Rubber Isolator Kit	BAYISLT101	BAYISLT101	BAYISLT101
Snow Leg - Base & Cap 4" High	BAYLEGS002	BAYLEGS002	BAYLEGS002
Snow Leg - 4" Extension	BAYLEGS003	BAYLEGS003	BAYLEGS003
Hard Start Kit Scroll	BAYKSKT260	BAYKSKT260	
Extreme Condition Mounting Kit	BAYECMT004	BAYECMT004	BAYECMT004
Refrigerant Lineset 5	TAYREFLN7*	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.

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.





Model **Nomenclature**

Outdoor Units	$\begin{array}{c} 4 \\ \hline \mathbf{A} \\ \hline$
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	
1 = 200-230/1/60 or 208-230/1/60 3 = 200-230/3/60 4 = 460/3/60	
Secondary runction	
Minor Design Modifications	

Gas Furnaces $\xrightarrow{T} U$ \xrightarrow{Y} $\xrightarrow{\Phi}$ $\xrightarrow{\Phi}$	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 Speed						
Heating Input MBTUH 080 = 80,000 BTUH						
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, Varible Speed Motor (ICM) V4 = 2 - 4 Tons, Varible Speed Motor (ICM) V5 = 3 - 5 Tons, Varible Speed Motor (ICM)						
Minor Design Change ————————————————————————————————————						

Air Handlers – $4 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ $	1
Refrigerant Type	
Application	
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 KW Value	
Minor Design Modifications	
Unit Parts Identifier	

Service Digit - Not Orderable - $\frac{\mathbf{X} \quad \mathbf{C}}{\mathbf{A}} \quad \frac{\mathbf{0}}{\mathbf{A}} \quad \frac{\mathbf{2} \quad \mathbf{4}}{\mathbf{A}} \quad \frac{\mathbf{C}}{\mathbf{A}}$ $\frac{4}{4} \stackrel{H}{=} \frac{P}{4} \stackrel{C}{=} \frac{C}{4}$ 0 Т **Furnace Coils** Refrigerant Type T = R-22R = 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
- 4 = AccutronTM Flow Control/Check Valve (FCCV) 5 = Bleed TXV
- HP = Heat Pump -
- 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

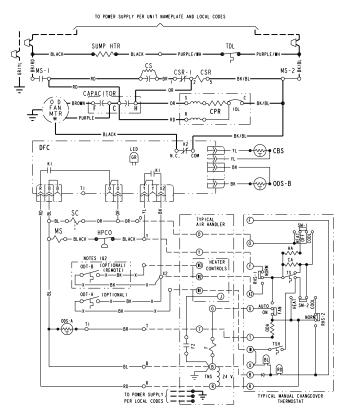


Electrical Data

Schematic Diagrams

(SEE LEGEND)

4TWX4018B



NOTES

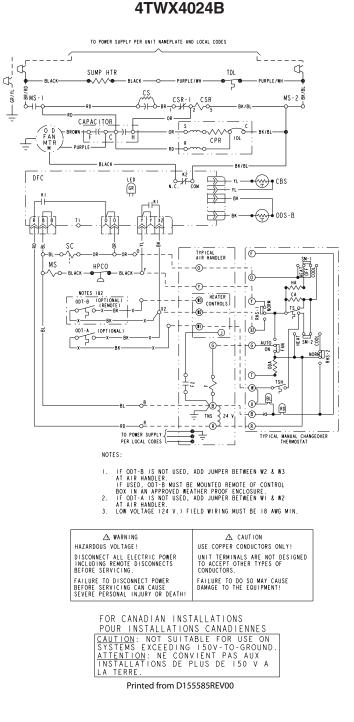
- IF ODT-B IS NOT USED, ADD JUMPER BETWEEN W2 & W3 AT AIR HANDLER. IF USED, ODT-B MUST BE MOUNTED REMOTE OF CONTROL BOX IN AN APPROVED WEATHER PROOF ENCLOSURE. IF ODT-A IS NOT USED, ADD JUMPER BETWEEN WI & W2 AT AIR HANDLER. LOW VOLTAGE (24 V.) FIELD WIRING MUST BE I8 AWG MIN. Ι.
- 2.
- 3.

\		△ CAUTION USE COPPER CONDUCTORS ONLY!
DISCONNECT ALL ELE INCLUDING REMOTE D BEFORE SERVICING.		UNIT TERMINALS ARE NOT DESIGNED TO ACCEPT OTHER TYPES OF CONDUCTORS.
FAILURE TO DISCONN BEFORE SERVICING C SEVERE PERSONAL IN	AN CAUSE	FAILURE TO DO SO MAY CAUSE DAMAGE TO THE EQUIPMENT!

FOR CANADIAN INSTALLATIONS POUR INSTALLATIONS CANADIENNES <u>CAUTION:</u> NOT SUITABLE FOR USE ON SYSTEMS EXCEEDING ISOV-TO-GROUND <u>ATTENTION:</u> NE CONVIENT PAS AUX INSTALLATIONS DE PLUS DE ISO V A

LA TERRE

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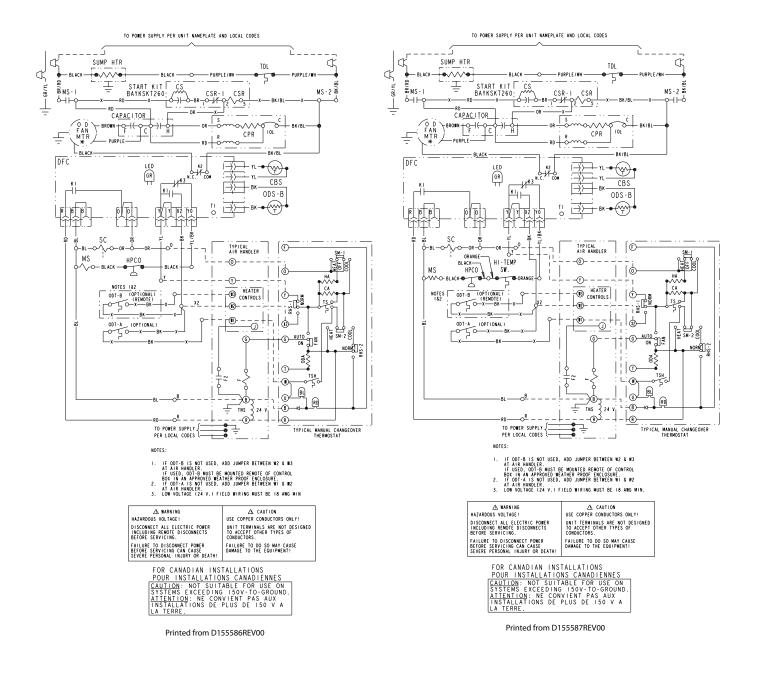
Electrical Data

Schematic Diagrams

(SEE LEGEND)

4TWX4030, 36, 42B

4TWX4048B





Electrical Data

Schematic Diagrams

LEGEND

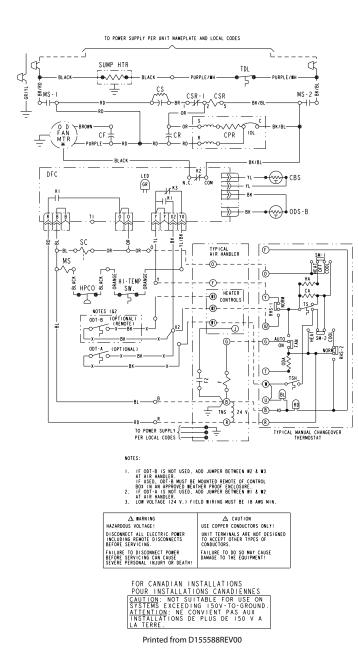
~	COLOR OF WIRE BK/BL BLACK WIRE WITH BLUE MARKER COLOR OF MARKER								
ΒŔ	/BL BL	ACK	WIRE WITH	BLUE	MARKER				
	4 COLOF	R OF	MARKER						
ΒK	BLACK	OR	ORANGE	ΥL	YELLOW				
ΒL	BLUE	RD	RED	GR	GREEN				
ΒR	BROWN	WΗ	WHITE	ΡR	PURPLE				

SYMBOLS

24 V. LINE V. } FACTORY WIRING 24 V. LINE V. } FIELD WIRING
-X FIELD INSTALLED FACTORY WIRING
GROUND
● JUNCTION △ WIRE NUT OR CONNECTOR -√√- COIL
RELAY CONTACT (N.C.)
THE RMISTOR
00 INTERNAL OVERLOAD PROTECTOR
of pressure actuated switch
TEMP. ACTUATED SWITCH
(MALE TERM.)
POL. PLUG MALE HOUSING
OMOTOR WINDING
O TERMINAL

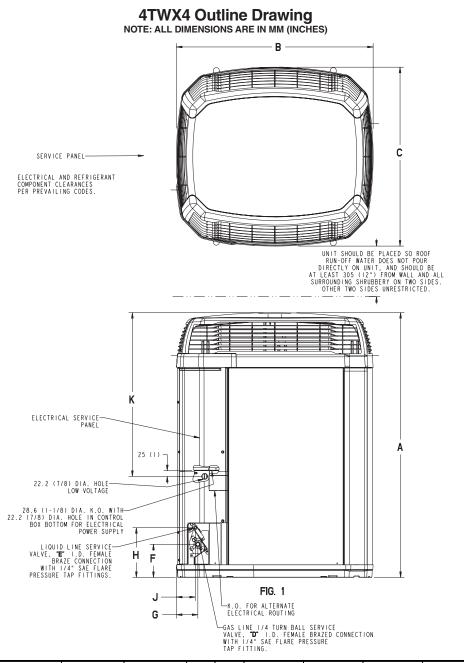
СА	COOLING ANTICIPATOR	LPCO	LOW PRESSURE CUTOUT SW.
CBS	COIL BOTTOM SENSOR	MS	COMPRESSOR MOTOR CONTACTOR
CF	FAN CAPACITOR	ODA	OUTDOOR ANTICIPATOR
CN	WIRE CONNECTOR	OF T	OUTDOOR FAN THERMOSTAT
CPR	COMPRESSOR	ODS	OUTDOOR TEMPERATURE SENSOR
CR	RUN CAPACITOR	ODT	OUTDOOR THERMOSTAT
CS	STARTING CAPACITOR	RHS	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
НA	HEATING ANTICIPATOR	TNS	TRANSFORMER
HPCO	HIGH PRESSURE CUTOUT SW.	ΤS	HEATING-COOLING THERMOSTAT
IOL	INTERNAL OVERLOAD PROTECTOR	ΤSΗ	HEATING THERMOSTAT

4TWX4060B





Dimensions



MODELS	BASE	Α	В	С	D	Е	F	G	н	J	к
4TWX4018B	3	1118 (44)	829 (32-5/8)	756 (29-3/4)	1/2	1/4	143 (5-5/8)	92 (3-5/8)	210 (8-1/4)	79 (3-1/8)	692 (27-1/4)
4TWX4024B	3	1219 (48)	829 (32-5/8)	756 (29-3/4)	5/8	5/16	143 (5-5/8)	92 (3-5/8)	210 (8-1/4)	79 (3-1/8)	692 (27-1/4)
4TWX4030B	3	1219 (48)	829 (32-5/8)	756 (29-3/4)	3/4	5/16	143 (5-5/8)	92 (3-5/8)	210 (8-1/4)	79 (3-1/8)	692 (27-1/4)
4TWX4036B	4	1165 (45-7/8)	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)
4TWX4042B	4	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)
4TWX4048B 4TWX4060B	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)	730 (28-3/4)

From Dwg. 21D152635 Rev. 11



Mechanical Specification Options

General

The 4TWX4 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 ARI certified. The unit is UL listed. 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[®] compressor features a 10 year limited warranty, 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 and has a 10 year limited warranty.

Low Ambient Cooling

As manufactured, this unit has a cooling capability to 55°F. The addition of an evaporator defrost control permits operation to 40°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.



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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.

02/10