

# Split System Heat Pump Product & Performance Data

XL14i 2TWX4018-060

 $1\frac{1}{2} - 5$  Tons



PUB. NO. 22-1750-05



# Features and Benefits

- Climatuff® compressor
- Efficiency up to 15.25 SEER and 9.6 HSPF
- All aluminum **Spine Fin™** coil
- WeatherGuard™ II top shields unit
- DuraTuff<sup>™</sup> base, fast complete drain, weather proof
- 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<sup>™</sup> cabinet, service access and refrigerant connections with full coil protection
- Demand defrost control with diagnostics
- · Glossy corrosion resistant finish
- Internal compressor pressure/ temperature protection
- 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-22 refrigerant
- · Compressor sump heat
- S.E.E.T. design testing
- 100% line run test
- Low ambient cooling to 55°F as shipped
- Low ambient cooling to 40°F with EDC accessory AY28X084
- Low ambient cooling to 30°F with EDC accessory AY28X084 and TXV
- Extended warranties available



# **Contents**

Features and Benefits	2
General Data	4
Product Specifications	4
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	9
Mechanical Specification Options	11

22-1750-05 3



# **General Data**

#### **Product Specifications**

Model No. 1)	2TWX4018B1	2TWX4024B1	2TWX4030B1	2TWX4036B1
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	8	11	18	21
Max Fuse Size (Amps)	15	15	30	35
Compressor	CLIMATUFF®	CLIMATUFF®	CLIMATUFF® - SCROLL	CLIMATUFF® - SCROLL
RL Amps - LR Amps	6.2 - 45	8.3 - 62	13.5 - 73	16.0 - 88
Outdoor Fan FL Amps	0.60	0.90	1.30	1.30
Fan HP	1/15	1/8	1/6	1/6
Fan Dia (inches)	23	23	27.6	27.6
Coil	Spine Fin™	Spine Fin™	Spine Fin™	Spine Fin™
Refrigerant R-22	7/12-LB/OZ	8/00-LB/OZ	7/10-LB/OZ	8/15-LB/OZ
Line Size - (in.) O.D. Gas 3	5/8	3/4	3/4	7/8
Line Size - (in.) O.D. Liquid ③	1/4	5/16	5/16	3/8
Dimensions H x W x D (Crated)	43.6 x 30.1 x 33	47.6 x 30.1 x 33	45.4 x 35.1 x 38.7	49.4 x 35.1 x 38.7
Weight - Shipping	249	263	276	295
Weight - Net	215	228	232	249
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	BAYECMT004	BAYECMT004
Refrigerant Lineset <sup>5</sup>	TAYREFLN1*	TAYREFLN2*	TAYREFLN2*	TAYREFLN3*

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

### 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	
2TWX4018B1	71	47.8	55.0	60.2	64.3	65.0	61.8	56.8	57.5	
2TWX4024B1	74	48.3	54.1	58.8	63.5	69.7	66.1	59.0	56.6	
2TWX4030B1	73	47.2	59.5	60.6	66.5	67.1	62.3	55.5	51.2	
2TWX4036B1	74	47.8	57.7	64.0	66.4	69.3	61.7	55.0	48.8	
2TWX4042B1	74	50.2	58.8	64.2	65.7	71.0	63.4	56.0	53.1	
2TWX4048B1	74	50.2	58.8	64.2	65.7	71.0	63.4	56.0	53.1	
2TWX4060B1	74	50.6	55.2	62.0	69.3	69.3	65.6	64.7	53.7	

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

22-1750-05

② Calculated in accordance with N.E.C. Only use HACR circuit breakers or fuses.

<sup>3</sup> 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>. (†denotes latest revision)

4 For accessory description and usage, see page 5.

5 \* = 15, 20, 25, 30, 40 and 50 foot lineset available.



# General Data

#### **Product Specifications**

Model No. ①	2TWX4042B1	2TWX4048B1	2TWX4060B1		
Electrical Data V/Ph/Hz 2	208/230/1/60	208/230/1/60	208/230/1/60		
Min Cir Ampacity	2 4	28	3 4		
Max Fuse Size (Amps)	4 0	4 5	5 0		
Compressor	CLIMATUFF® - SCROLL	CLIMATUFF® - SCROLL	CLIMATUFF® - SCROLL		
RL Amps - LR Amps	17.9 - 104	21.2 - 137	25.0 - 148		
Outdoor Fan FL Amps	1.30	1.30	2.80		
Fan HP	1/6	1/6	1/3		
Fan Dia (inches)	27.6	27.6	27.6		
Coil	Spine Fin™	Spine Fin™	Spine Fin™		
Refrigerant R-22	9/10-LB/OZ	10/05-LB/OZ	11/12-LB/OZ		
Line Size - (in.) O.D. Gas 3	7/8	1-1/8	1-1/8		
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	310	314	339		
Weight - Net	261	266	290		
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	TAYREFLN3*	TAYREFLN4*	TAYREFLN4*		

#### **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.

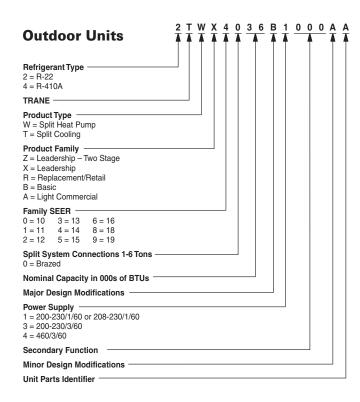


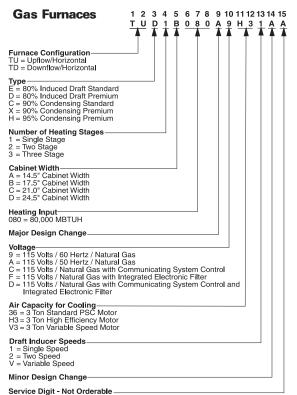


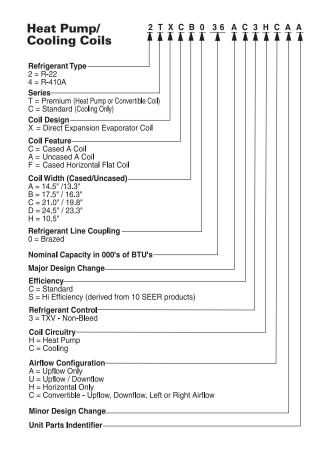
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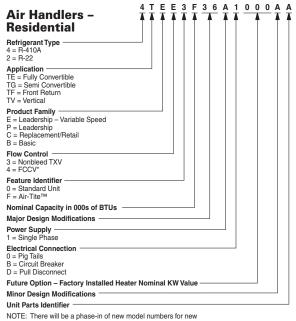


## Model Nomenclature









air handlers over next 2 years.

\*Shipped with R-22 FCCV

6

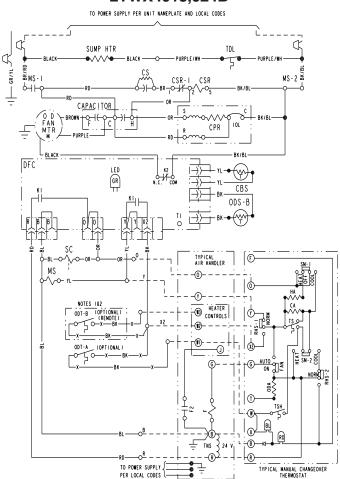


# **Electrical Data**

#### **Schematic Diagrams**

(SEE LEGEND)

#### 2TWX4018,024B



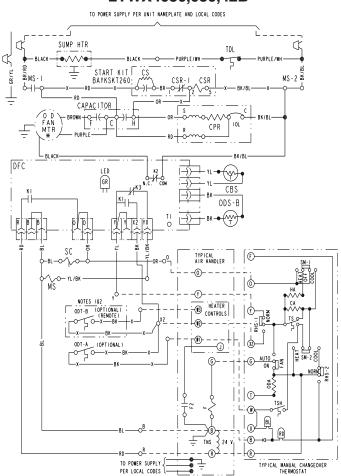
- I. IF ODT-B IS NOT USED, ADD JUMPER BETWEEN W2 & W3 AT AIR MANDLER. IF USED, OOT-B MUST BE MOUNTED REMOTE OF CONTROL BOX IN AM APPROVED WEATHER PROOF ENCLOSUME. IF ODT-AIR IS NOT USED, AND JUMPER BETWEEN WI & W2 AT AIR MANDLER. 3. COM YOUL FOR ELEY Y. FIELD WIRING MUST BE IS AWG MIN.

⚠ 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!

FOR CANADIAN INSTALLATIONS
POUR INSTALLATIONS CANADIENNES
CAUTION: NOT SUITABLE FOR USE ON
SYSTEMS EXCEEDING 150V-TO-GROUND.
ATTENTION: NE CONVIENT PAS AUX
INSTALLATIONS DE PLUS DE 150 V A
LA TERRE.

Printed from D155609REV00.

#### 2TWX4030,036,42B



- 1. IF ODT-B IS NOT USED, ADD JUMPER BETWEEN WZ & W3
  AT AIR HANDLER.
  IF USED, OOT-B MUST BE MOUNTED REMOTE OF CONTROL
  BOX IN AN APPROVED WEATHER PROOF ENCLOSURE.
  2. OF IN OTAL SON JUSEP, DE WELTER WI B WZ
  AT AIR HANDLER.
  3. COW VOLTAGE (24 V.) FIELD WIRING MUST BE IS AWG MIN.

**△** WARNING △ CAUTION
USE COPPER CONDUCTORS ONLY! HAZARDOUS VOLTAGE! UNIT TERMINALS ARE NOT DESIGNED TO ACCEPT OTHER TYPES OF CONDUCTORS. FAILURE TO DO SO MAY CAUSE DAMAGE TO THE EQUIPMENT!

FOR CANADIAN INSTALLATIONS
POUR INSTALLATIONS CANADIENNES
CAUTION: NOT SUITABLE FOR USE ON
SYSTEMS EXCEEDING 150V-TO-GROUND.
ATTENTION: NE CONVIENT PAS AUX
INSTALLATIONS DE PLUS DE 150 V A
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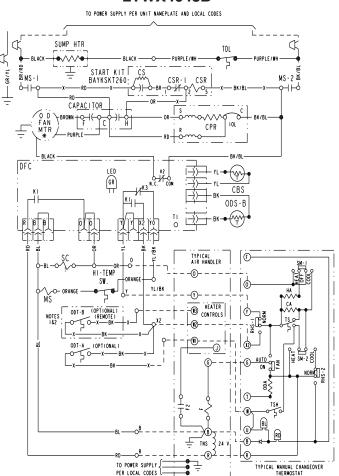
# **Electrical Data**

#### **Schematic Diagrams**

(SEE LEGEND)

4

#### 2TWX4048B



#### NOTES:

- IF OOT-B IS NOT USED, ADD JUMPER BETWEEN W2 & W3 AT AIR HANDLER.

  IF USED, OOT-B MUST BE MOUNTED REMOTE OF CONTROL BOX IN AN APPROVED WEATHER PROOF ENCLOSURE.

  IF OOT-A IS NOT USED, ADD JUMPER BETWEEN WI & W2 AT AIR HANDLER.

  IF OOT-BUT ON THE (24 V.) FIELD WIRING MUST BE IS ANG MIN.

<u>∧</u> WARNING HAZARDOUS VOLTAGE! DISCONNECT ALL ELECTRIC POWEF INCLUDING REMOTE DISCONNECTS BEFORE SERVICING.

△ 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!

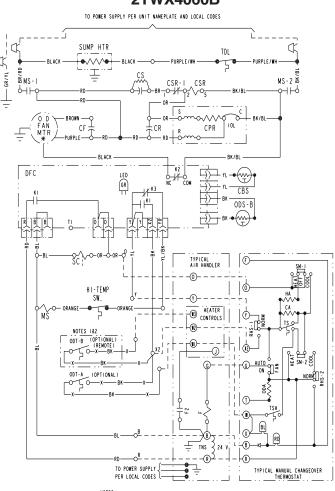
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FOR CANADIAN INSTALLATIONS POUR INSTALLATIONS CANADIENNES

CAUTION: NOT SUITABLE FOR USE ON
SYSTEMS EXCEEDING 150V-TO-GROUND.
ATTENTION: NE CONVIENT PAS AUX
INSTALLATIONS DE PLUS DE 150 V A

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#### 2TWX4060B



- 1. IF ODT-B IS NOT USED, ADD JUMPER BETWEEN W2 & W3 AT AIR MANDLER. IF USED, OOT-B MUST BE MOUNTED REMOTE OF CONTROL BOX IN AM APPROVED WEATHER PROOF ENCLOSUME. 2. IF ODT-AI IS NOT USED, AND JUMPER BETWEEN W1 & W2 AT AIR MANDLER. 3. COM YOUL FOR ELEY V.) FIELD WIRING MUST BE IB AWG MIN.

HAZARDOUS VOLTAGE! DISCONNECT ALL ELECTRIC POWER INCLUDING REMOTE DISCONNECTS BEFORE SERVICING.

⚠ 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!

FOR CANADIAN INSTALLATIONS
POUR INSTALLATIONS CANADIENNES

[CAUTION: NOT SUITABLE FOR USE ON
SYSTEMS EXCEEDING 150V-TO-GROUND.
ATTENTION: NE CONVIENT PAS AUX
INSTALLATIONS DE PLUS DE 150 V A

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# 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.
- - - LINE V.
               FIELD WIRING
      FIELD INSTALLED FACTORY WIRING
       GROUND
  0
       JUNCTION
       WIRE NUT OR CONNECTOR
       COIL
\rightarrow\vdash
       CAPACITOR
\dashv\vdash
       RELAY CONTACT (N.O.)
RELAY CONTACT (N.C.)
THERMISTOR
00
       INTERNAL OVERLOAD PROTECTOR
       PRESSURE ACTUATED SWITCH
       TEMP. ACTUATED SWITCH
       POL. PLUG FEMALE HOUSING (MALE TERM.)
POL. PLUG MALE HOUSING
-VV- RESISTOR OR HEATING ELEMENT
OMOTOR WINDING
     TERMINAL
```

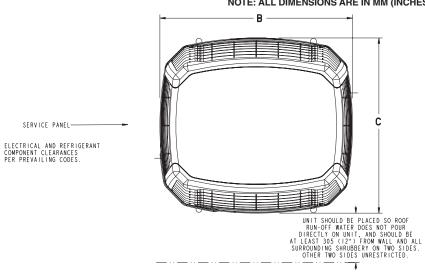
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CA COOLING ANTICIPATOR
CBS COIL BOTTOM SENSOR
CF FAN CAPACITOR
CN WIRE CONNECTOR
CR RUN CAPACITOR
CS STARTING CAPACITOR
CS STARTING CAPACITOR
CS CAPACITOR
COLOR
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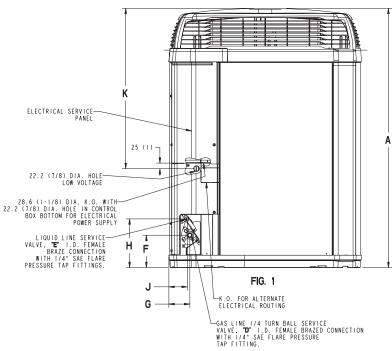


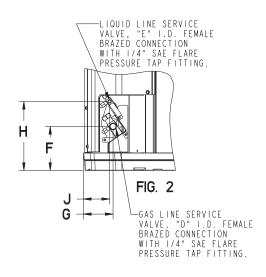
## **Dimensions**

#### 2TWX4 Outline Drawing

NOTE: ALL DIMENSIONS ARE IN MM (INCHES)







				TAF FITTING.								
MODELS	BASE	FIG.	Α	В	С	D	E	F	G	Н	J	K
2TWX4018B	3	2	1016 (40)	829 (32-5/8)	756 (29-3/4)	5/8	1/4	143 (5-5/8)	92 (3-5/8)	210 (8-1/4)	79 (3-1/8)	692 (27-1/4)
2TWX4024B	3	2	1118 (44)	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)
2TWX4030B	4	1	1064 (41-7/8)	946 (37-1/4)	870 (34-1/4)	3/4	5/16	152 (6)	98 (3-7/8)	219 (8-5/8)	86 (3-3/8)	730 (28-3/4)
2TWX4036B	4	1	1165 (45-7/8)	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)
2TWX4042B	4	1	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)
2TWX4048B	4	1	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)
2TWX4060B	4	1	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)

10 22-1750-05



# **Mechanical Specification Options**

#### General

The 2TWX4 shall be fully charged from the factory for matched indoor section and up to 15 feet of piping. This unit must be designed to operate at outdoor ambient temperatures as high as 115°F. Cooling capacities shall be matched with a wide selection of air handlers and furnace coils that are ARI certified. The unit is certified to UL 1995. Exterior must be designed for outdoor application.

#### Casing

Unit casing is constructed of heavy gauge, galvanized steel and painted with a weather-resistant powder paint.
Corrosion and weatherproof CMBP-G30 DuraTuff<sup>TM</sup> base.

#### **Refrigerant Controls**

Refrigeration system controls include condenser fan and compressor contactor. High and low pressure controls are inherent to the compressor. Another standard feature is the liquid line dryer.

#### Compressor

The Climatuff® compressor features internal over temperature and pressure protector, total dipped hermetic motor and thermostatically controlled sump heater. Other features include: roto lock suction and discharge refrigeration connections, centrifugal oil pump, and low vibration and noise.

#### **Condenser Coil**

The Spine Fin<sup>™</sup> coil shall be continuously wrapped, corrosion resistant all aluminum with minimum brazed joints. This

coil is 3/8 inch O.D. seamless aluminum glued to a continuous aluminum fin. Coils are lab tested to withstand 2,000 pounds of pressure per square inch. 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 permits operation to 40°F. The addition of an evaporator defrost control with TXV permits low ambient cooling to 30°F.

#### Accessories

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

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

**Outdoor Thermostat** — Supplemental heat outdoor ambient lockout from 46 to  $-10^{\circ}$ F.





22-1750-05 11

