

13 SEER MODELS 2A6B3018-060A

2

Features and Benefits

- ◆ **Duration**[™] compressor
- ◆ All aluminum **Spine Fin™** coil
- ◆ Polyslate gray cabinet
- ◆ DuraBase™ base pan won't rust, drains completely
- ◆ Easy-Sess™ service access and refrigerant connections with full coil protection
- Corrosion resistant finish and fasteners
- Internal high/low pressure and temperature protection
- ◆ Liquid line filter drier
- ◆ Easy single side service
- ◆ Demand Defrost Control

- ◆ Compressor Sump Heat all models
- ◆ Easy top and fan removal
- ◆ R-22 refrigerant
- ◆ 5 Year limited warranty on compressor, coil, and 5 years on parts (Residential use)
- ◆ Extended warranties available
- ◆ 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

DATA SUBJECT TO CHANGE WITHOUT NOTICE

Contents

Manufacturing Control

American Standard Heating & Air Conditioning's exclusive control over the design and manufacturing of all major components is unique in the industry. This approach assures us total control over both the quality and reliability of these components. It also allows us to custom match components to deliver the best in split system performance.

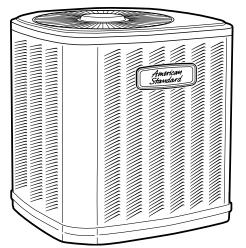
Designing the Details

Careful attention was given to designing the details — from control wiring to the access panels. American Standard Heating & Air Conditioning units feature time-saving color-coded wiring and removable panels which allow complete access to all major components and controls. All outdoor units feature external high and low pressure gauge ports for easy diagnosing and servicing of the unit.

UL Listed

American Standard Heating & Air Conditioning meets or exceeds all nationally recognized agency safety and design standards. Each condensing unit is UL designed, approved, and labeled in accordance to UL Standards, 1995, including approval for use in Canada. Each unit is rated in accordance with ARI Standard 210/240 and 270.

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General Data

Product Specifications

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Model No. ①	2A6B3018A1	2A6B3024A1	2A6B3030A1	2A6B3036A1
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	8	12	13	19
Max Fuse Size (Amps)	15	20	20	30
Compressor	DURATION™	DURATION™	DURATION™	DURATION™
RL Amps - LR Amps	5.9 - 38.6	8.7 - 57.8	9.5 - 63	14.1 - 90.8
Outdoor Fan FL Amps	0.6	1.3	0.9	1.4
Fan HP	1/15	1/4	1/8	1/6
Fan Dia (inches)	19.0	19.0	23.0	27.6
Coil	Spine Fin™	Spine Fin™	Spine Fin™	Spine Fin™
Refrigerant R-22	5/10-LB/OZ	5/11-LB/OZ	6/07-LB/OZ	7/06-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)	37.2 x 26.7 x 30	37.2 x 26.7 x 30	42 x 30.1 x 33	42.4 x 35.1 x 38.7
Weight - Shipping	201	204	239	297
Weight - Net	181	183	211	263
Start Components	YES	YES	YES	YES
Sound Enclosure	NO	NO	NO	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
Extreme Condition Mounting	Kit BAYECMT023	BAYECMT023	BAYECMT023	BAYECMT004
Seacoast Kit	BAYSEAC001	BAYSEAC001	BAYSEAC001	BAYSEAC001
Refrigerant Lineset 5	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)]

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	SOUND POWER	A-W	A-WEIGHTED FULL OCTAVE SOUND POWER LEVEL dB - [dB(A)]							
MODEL	LEVEL [dB(A)]	63	125	250	500	1000	2000	4000	8000	
2A6B3018A1	74	43.5	52.1	57.0	65.5	67.3	66.8	62.1	55.4	
2A6B3024A1	79	51.3	56.1	61.7	71.5	73.1	71.8	64.3	55.8	
2A6B3030A1	79	43.8	58.8	62.2	69.2	72.1	71.4	62.5	56.8	
2A6B3036A1	79	47.1	60.4	67.8	73.5	73.7	71.6	63.8	51.4	
2A6B3042A1	80	48.6	59.9	66.9	73.0	75.2	70.3	64.4	55.2	
2A6B3048A1	78	45.4	58.8	66.1	72.5	72.5	69.8	63.0	52.5	
2A6B3060A1	79	46.7	55.2	66.5	73.5	73.8	71.8	65.8	56.7	

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

② Calculated in accordance with N.E.C. Use only HACR circuit breakers or fuses.

③ 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)

 $[\]textcircled{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	2A6B3042A1	2A6B3048A1	2A6B3060A1
Electrical Data V/Ph/Hz ②	200/230/1/60	200/230/1/60	208/230/1/60
Min Cir Ampacity	21	25	32
Max Fuse Size (Amps)	35	40	50
Compressor	DURATION™	DURATION™	DURATION™ - SCROLL
RL Amps - LR Amps	15.4 - 93.5	18.6 - 93.4	25.0 - 148
Outdoor Fan FL Amps	1.4	1.4	1.2
Fan HP	1/6	1/5	1/5
Fan Dia (inches)	27.6	27.6	27.6
Coil	Spine Fin™	Spine Fin™	Spine Fin™
Refrigerant R-22	9/09-LB/OZ	9/09-LB/OZ	9/08-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)	46.4 x 35.1 x 38.7	46.4 x 35.1 x 38.7	46.4 x 35.1 x 38.7
Weight - Shipping	312	313	314
Weight - Net	277	278	278
Start Components	YES	YES	YES
Sound Enclosure	YES	YES	NO
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
Extreme Condition Mounting Kit	BAYECMT004	BAYECMT004	BAYECMT004
Seacoast Kit	BAYSEAC001	BAYSEAC001	BAYSEAC001
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 —

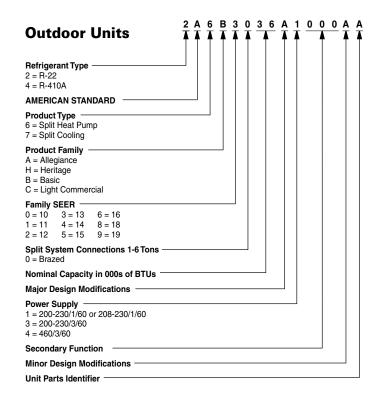
- (A) Cooling 80°F DB, 67°F WB air entering indoor coil, 95°F DB air entering outdoor coil.
- (B) High Temperature Heating 47°F DB, 43°F WB air entering outdoor coil, 70°F DB air entering indoor coil.
- (C) Low Temperature Heating 17°F DB, 15°F WB air entering outdoor coil, 70°F DB air entering indoor coil.
- (D) Rated indoor airflow for heating is the same as for cooling.

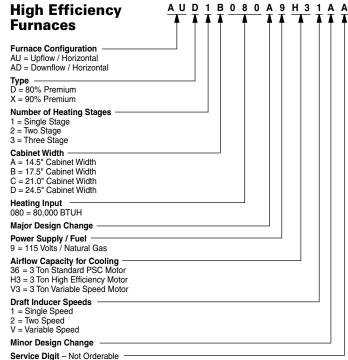
ARI STANDARD 270 RATING CONDITIONS — (Noise rating numbers are determined with the unit in cooling operation.) Standard Noise Rating number is at 95°F outdoor air.

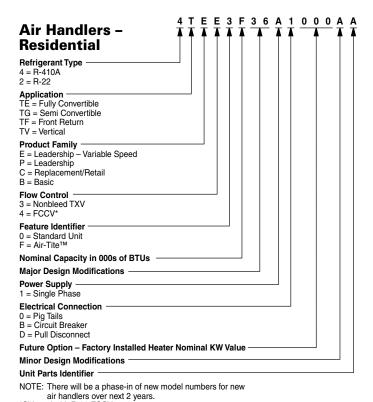


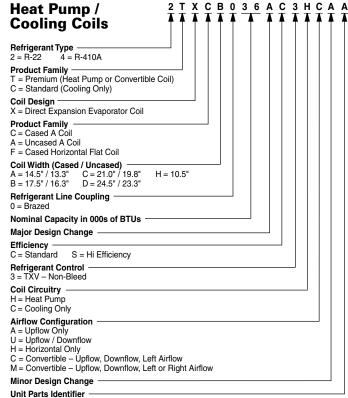


Model Nomenclature









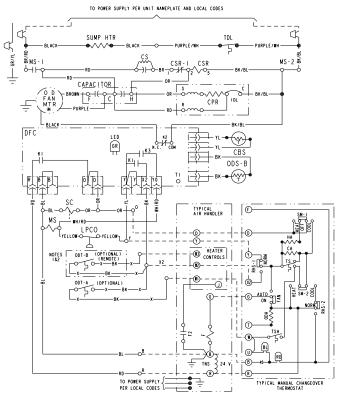
*Shipped with R-22 FCCV

Typical Wiring

SCHEMATIC DIAGRAMS

(SEE LEGEND)

2A6B3018,024,030,036,042A



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
- AT AIR HANDLER. LOW VOLTAGE (24 V.) FIELD WIRING MUST BE 18 AWG MIN.

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

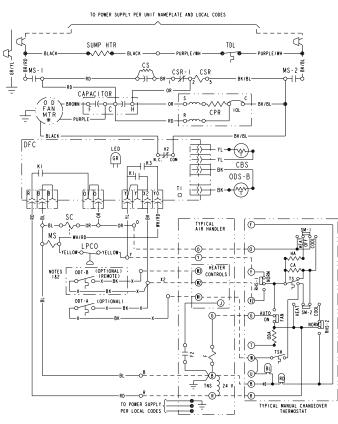
⚠ CAUTION USE COPPER CONDUCTORS ONLY! UNIT TERMINALS ARE NOT DESIGNED TO ACCEPT OTHER TYPES OF CONDUCTORS.

FAILURE TO DO SO MAY CAUSE DAMAGE TO THE EQUIPMENT! FAILURE TO DISCONNECT POWER BEFORE SERVICING CAN CAUSE SEVERE PERSONAL INJURY OR DEATH!

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

Printed from D155595P01

2A6B3048A



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 18 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

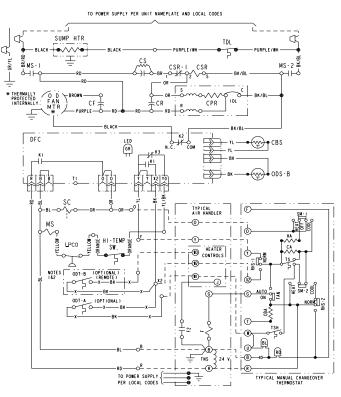
CAUTION: NOT SUITABLE FOR USE ON SYSTEMS EXCEEDING 150V-TO-GROUND ATTENTION: NE CONVIENT PAS AUX INSTALLATIONS DE PLUS DE 150 V A LA TERRE.

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Typical Wiring

SCHEMATIC DIAGRAMS

2A6B3060A



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 18 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!

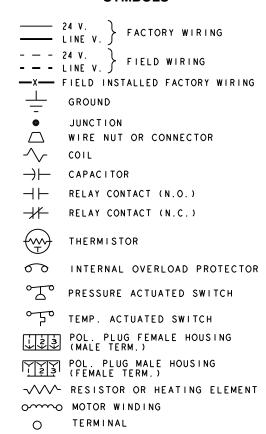
FOR CANADIAN INSTALLATIONS POUR INSTALLATIONS CANADIENNES CAUTION: NOT SUITABLE FOR USE ON SYSTEMS EXCEEDING 150V-TO-GROUND ATTENTION: NE CONVIENT PAS AUX INSTALLATIONS DE PLUS DE 150 V A LA TERRE

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LEGEND

COLOR OF WIRE BK/BL BLACK WIRE WITH BLUE MARKER COLOR OF MARKER YL YELLOW BLACK OR ORANGE ВК ВL BLUE RD RED GR GREEN PURPLE ΒR BROWN WΗ WHITE PR

SYMBOLS

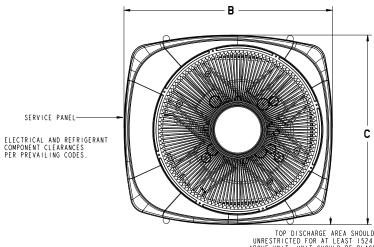


CA	COOLING ANTICIPATOR	LPC0	LOW PRESSURE CUTOUT SW.
CBS	COIL BOTTOM SENSOR	MS	COMPRESSOR MOTOR CONTACTOR
CF	FAN CAPACITOR	ODA	OUTDOOR ANTICIPATOR
CN	WIRE CONNECTOR	OF T	OUTDOOR FAN THERMOSTAT
CPR	COMPRESSOR	ODS	OUTDOOR TEMPERATURE SENSOR
CR	RUN CAPACITOR	ODT	OUTDOOR THERMOSTAT
CS	STARTING CAPACITOR	RHS	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
HA	HEATING ANTICIPATOR	TNS	TRANSFORMER
HPCO	HIGH PRESSURE CUTOUT SW.	TS	HEATING-COOLING THERMOSTAT
10L	INTERNAL OVERLOAD PROTECTOR	TSH	HEATING THERMOSTAT

Dimensional Data

2A6B3 OUTLINE DRAWING

NOTE: ALL DIMENSIONS ARE IN MM (INCHES).



TOP DISCHARGE AREA SHOULD BE UNRESTRICTED FOR AT LEAST 1524 (5 FEET) ABOVE UNIT. UNIT SHOULD BE PLACED SO ROOF RUN-OFF WATER DOES NOT POUR DIRECTLY ON UNIT, AND SHOULD BE AT LEAST 305 (12") FROM WALL AND ALL SURROUNDING SHUBBERTY ON TWO SIDES. OTHER TWO SIDES UNRESTRICTED.

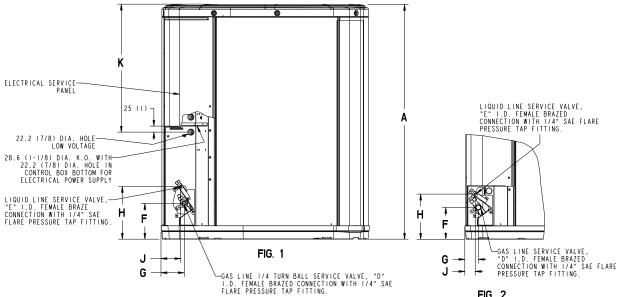


FIG.	2
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MODELS	BASE	FIG.	Α	В	С	D	Е	F	G	Н	J	K
2A6B3018A	2	2	832 (32-3/4)	724 (28-1/2)	651 (25-5/8)	5/8	1/4	127 (5)	57 (2-1/4)	181 (7-1/8)	44 (1-3/4)	457 (18)
2A6B3024A	2	1	832 (32-3/4)	724 (28-1/2)	651 (25-5/8)	3/4	5/16	137 (5-3/8)	65 (2-5/8)	210 (8-1/4)	57 (2-1/4)	457 (18)
2A6B3030A	3	1	933 (36-3/4)	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)	508 (20)
2A6B3036A	4	1	943 (37-1/8)	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)	508 (20)
2A6B3042A	4	1	1045 (41-1/8)	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)	508 (20)
2A6B3048A	4	1	1045 (41-1/8)	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)	508 (20)
2A6B3060A	4	1	1045 (41-1/8)	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)	508 (20)

From Dwg. D153074 Rev. 10

Mechanical Specifications

General

These models 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 shall be UL listed. 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 finish on all louvered panels. Corrosion and weatherproof CMBP-G30 DuraBase™ base.

Refrigerant Controls

Refrigeration system controls include condenser fan and compressor contactor. High and low pressure controls are inherent to the compressor. Unit also has low pressure switch. Another standard feature is the liquid line drier.

Compressor

The Duration™ compressor features internal over temperature and pressure protector, dipped hermetic motor and sump heater. Other features include: roto lock suction and discharge refrigerant connections, centrifugal oil pump, and low vibration and noise. The Duration™ compressor features a 5-year limited warranty.

Condenser Coil

The Spine Fin™ coil shall be continuously wrapped, corrosion resistant all aluminum with minimum brazed joints. This coil is seamless aluminum glued to a continuous aluminum fin. Coils are lab tested to withstand 2,000 pounds of pressure per square inch.

Low Ambient Cooling

As shipped, 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 — Heat/cooling (manual and automatic changeover). Subbase 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° F.

DATA SUBJECT TO CHANGE WITHOUT NOTICE

Notes

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

Technical Literature - Printed in U.S.A.

American Standard Heating & Air Conditioning Troup Highway Tyler, TX 75711-9010