

*HIGH-EFFICIENCY,  
 VARIABLE-SPEED, INVERTER DRIVEN  
 SPLIT SYSTEM AIR CONDITIONER  
 UP TO 22.5 SEER2  
 2 TO 5 TONS*



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**Standard Features**

- Variable-speed swing and scroll compressors
- High-density compressor sound blanket
- Integrated communicating ComfortBridge™ Technology
- Commissioning and diagnostics via indoor board Bluetooth with the CoolCloud™ phone and tablet application
- Variable-speed DC outdoor fan motor
- Control algorithmic logic
- In communicating mode, only two low-voltage wires to outdoor unit required
- Diagnostic indicator lights, seven-segment LED display, and fault code storage
- Field-selectable boost mode increases compressor speed during unusually high loads
- Field-installed bi-flow filter drier
- Coil and ambient temperature sensors
- AHRI Certified; ETL Listed

**Cabinet Features**

- Heavy-gauge, galvanized-steel cabinet
- Removable grille-style top design compliant with UL 60335-2-40
- Venturi for increased velocity of airflow
- Baked-on powder-paint finish
- 500-hour salt-spray tested
- Wire fan discharge grille
- Steel louver coil guard
- Top and side maintenance access
- Sweat connection service valves with easy access to gauge ports
- Single-panel access to controls with space provided for field-installed accessories
- When properly anchored, meets the 2020 Florida Building Code unit integrity requirements for hurricane-type winds (Anchor bracket kits available.)



Products that are recognized as the Most Efficient of ENERGY STAR® in 2023 prevent greenhouse gas emissions by meeting rigorous energy efficiency performance levels set by the U.S. Environmental Protection Agency.

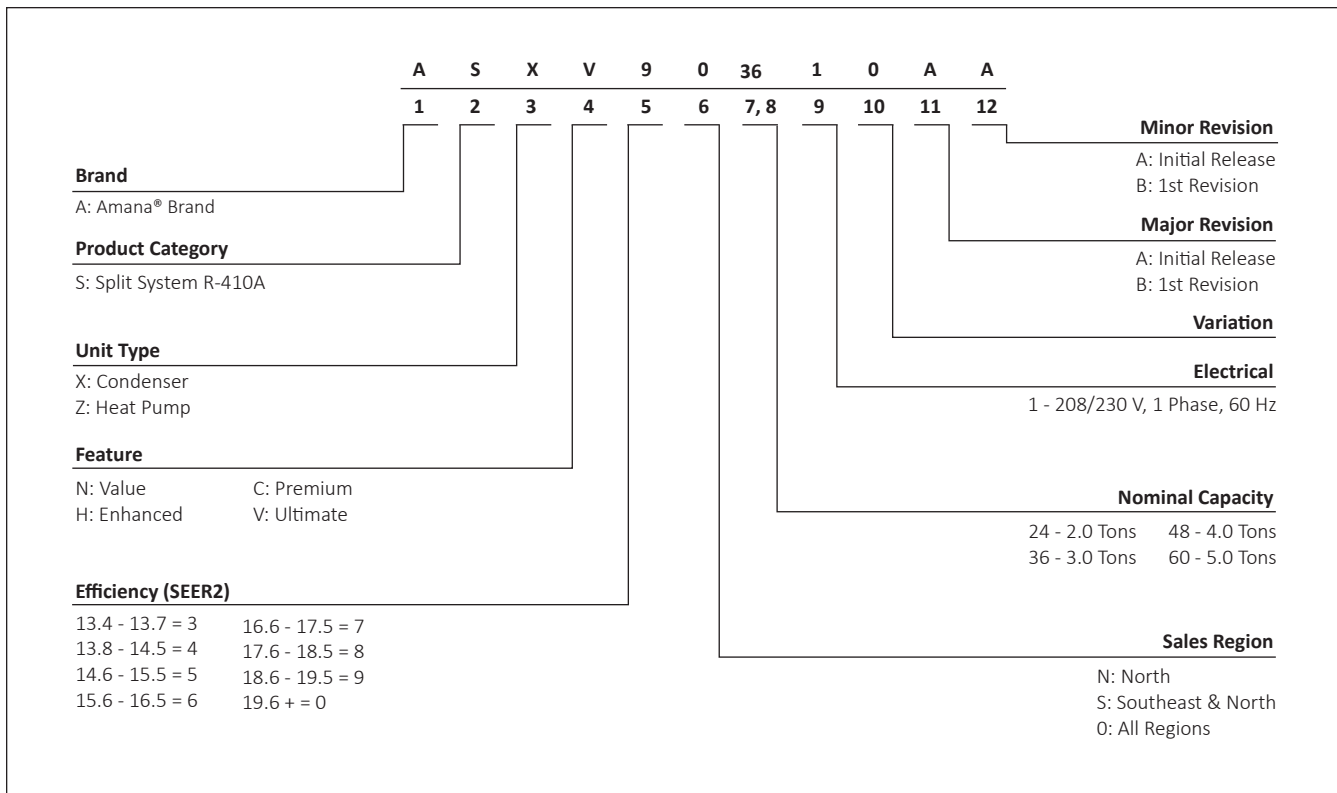
\* Proper sizing and installation of equipment is critical to achieve optimal performance. Split system air conditioners and heat pumps must be matched with appropriate coil components to meet ENERGY STAR criteria. Ask your contractor for details or visit [www.energystar.gov](http://www.energystar.gov).







COMPANY WITH QUALITY SYSTEM CERTIFIED BY DNV GL ISO 9001

COMPANY WITH ENVIRONMENTAL SYSTEM CERTIFIED BY DNV GL ISO 14001

\* Complete warranty details available from your local dealer or at [www.amana-hac.com](http://www.amana-hac.com). To receive the Lifetime Unit Replacement Limited Warranty (good for as long as you own your home) and 10-Year Parts Limited Warranty, online registration must be completed within 60 days of installation. Additional requirements for annual maintenance are required for the Unit Replacement Limited Warranty. Online registration and some of the additional requirements are not required in California or Quebec. The duration of warranty coverages in Texas differs in some cases.



	ASXV902410A*	ASXV903610A*	ASXV904810A*	ASXV906010A*
<b>CAPACITY AND RATINGS</b>				
Max. Cooling (BTU/h)	22,600	32,800	45,000	52,000
<b>COMPRESSOR</b>				
Type	Swing	Swing	Swing	Scroll
RLA	12.7	18.1	27.6	28.6
<b>CONDENSER FAN MOTOR</b>				
Horsepower (HP)	½	½	½	½
FLA	2.5	2.5	2.5	2.5
<b>REFRIGERATION SYSTEM</b>				
Refrigerant Line Size <sup>1</sup>				
Liquid Line Size ("O.D.)	⅜"	⅜"	⅜"	⅜"
Suction Line Size ("O.D.)	¾"	⅞"	1⅛"	1⅛"
Refrigerant Connection Size				
Liquid Valve Size ("O.D.)	⅜"	⅜"	⅜"	⅜"
Suction Valve Size ("O.D.)	¾"	⅞"	⅞"	⅞"
Valve Connection Type	Front-Seated	Front-Seated	Ball Valve	Ball Valve
Refrigerant Charge	152	154	246	246
Superheat at Service Valve	7-9°F	7-9°F	7-9°F	7-9°F
Subcooling at Service Valve	7-9°F	7-9°F	7-9°F	7-9°F
<b>ELECTRICAL DATA</b>				
Voltage/Phase (60 Hz)	208-230/1	208-230/1	208-230/1	208-230/1
Minimum Circuit Ampacity <sup>2</sup>	15.2	20.6	30.1	31.1
Max. Overcurrent Protection <sup>3</sup>	20	25	35	35
Min / Max Volts	197/253	197/253	197/253	197/253
Electrical Conduit Size	½" or ¾"	½" or ¾"	½" or ¾"	½" or ¾"
<b>EQUIPMENT WEIGHT (LBS)</b>	210	221	321	321
<b>SHIP WEIGHT (LBS)</b>	241	253	353	353
<b>ENERGY STAR® CERTIFIED <sup>^</sup></b>				

**<sup>^</sup> ENERGY STAR NOTES**

- Products that are recognized as the Most Efficient of ENERGY STAR® in 2023 prevent greenhouse gas emissions by meeting rigorous energy efficiency performance levels set by the U.S. Environmental Protection Agency.
- Proper sizing and installation of equipment is critical to achieving optimal performance. Split system air conditioners and heat pumps must be matched with appropriate coil components to meet ENERGY STAR® criteria. Ask your contractor for details or visit [www.energystar.gov](http://www.energystar.gov).
- The [www.energystar.gov](http://www.energystar.gov) website provides up-to-date system combinations certified to meet ENERGY STAR® requirements.

<sup>1</sup> Tested and rated in accordance with AHRI Standard 210/240

<sup>2</sup> Wire size should be determined in accordance with National Electrical Codes; extensive wire runs will require larger wire sizes.

<sup>3</sup> Must use time-delay fuses or HACR-type circuit breakers of the same size as noted.

**NOTES**

- Always check the S&R plate for electrical data on the unit being installed.
- Installer will need to supply ⅞" to 1⅛" adapters for suction line connections.
- Unit is charged with refrigerant for 15' of ⅜" liquid line. System charge must be adjusted per Installation Instructions Final Charge Procedure.

EXPANDED COOLING DATA — ASXV902410A\*/CA\*F3137\*6A\* + MBVC1201\*\* -1A\*+TXV AT 100%

Table with columns: IDB, AIRFLOW, 65°F, 75°F, 85°F, 95°F, 105°F, 115°F. Rows include data for 620, 690, and 760 airflows across various conditions.

Table with columns: IDB, AIRFLOW, 65°F, 75°F, 85°F, 95°F, 105°F, 115°F. Rows include data for 620, 690, and 760 airflows across various conditions.

IDB = Entering Indoor Dry Bulb Temperature
High and low pressures are measured at the liquid and suction service valves.
Airflow may vary depending on actual ambient conditions and system operation modes.
Shaded area is ACCA (TVA) conditions
kW = Total system power
Amps = outdoor unit amps (comp.+fan)

















PERFORMANCE DATA FOR STANDARD OPERATING MODE

ASXV902410A* / CA*F3137*6A* + MBVC1201**-1A*+TXV DESIGN SUBCOOLING @ AHRI 95 °F CONDITIONS, 7-9 °F @ THE SERV. Vlv. - 100 % DEMAND				
OUTDOOR TEMP. °F	TOTAL BTU/H	SENSIBLE BTU/H	LATENT BTU/H	TOTAL WATTS
75°	24,200	16,900	7,300	1,360
80°	23,900	17,100	6,800	1,450
85°	23,600	17,200	6,400	1,540
90°	23,100	17,100	6,000	1,640
95°	22,600	17,000	5,600	1,740
100°	22,000	16,700	5,300	1,850
105°	21,300	16,400	4,900	1,960
110°	20,800	16,500	4,300	2,085
115°	20,200	16,600	3,600	2,210
TVA Conditions @ 95° OD DB, 75° ID, 63° ID WB				
95°	21,800	16,600	5,200	1,740

ASXV904810A* / CA*F4961*6D* + MBVC2001**-1A*+TXV DESIGN SUBCOOLING @ AHRI 95°F CONDITIONS, 7-9°F @ THE SERV. Vlv. - 100 % DEMAND				
OUTDOOR TEMP. °F	TOTAL BTU/H	SENSIBLE BTU/H	LATENT BTU/H	TOTAL WATTS
75°	48,300	34,800	13,500	2,870
80°	47,700	34,900	12,800	3,050
85°	47,100	34,900	12,200	3,230
90°	46,100	34,600	11,500	3,430
95°	45,000	34,200	10,800	3,630
100°	43,800	33,700	10,100	3,850
105°	42,500	33,200	9,300	4,070
110°	41,400	33,300	8,100	4,330
115°	40,200	33,400	6,800	4,590
TVA Conditions @ 95° OD DB, 75° ID, 63° ID WB				
95°	43,400	33,400	10,000	3,630

ASXV903610A* / CA*F3743*6D* + MBVC1601**-1A*+TXV DESIGN SUBCOOLING @ AHRI 95 °F CONDITIONS, 7-9 °F @ THE SERV. Vlv. - 100 % DEMAND				
OUTDOOR TEMP. °F	TOTAL BTU/H	SENSIBLE BTU/H	LATENT BTU/H	TOTAL WATTS
75°	35,200	24,600	10,600	2,150
80°	34,800	24,800	10,000	2,290
85°	34,300	25,000	9,300	2,430
90°	33,600	24,800	8,800	2,580
95°	32,800	24,600	8,200	2,730
100°	31,900	24,300	7,600	2,900
105°	31,000	23,900	7,100	3,070
110°	30,200	24,000	6,200	3,270
115°	29,300	24,000	5,300	3,470
TVA Conditions @ 95° OD DB, 75° ID, 63° ID WB				
95°	31,600	24,000	7,600	2,740

ASXV906010A* / CA*F4961*6D* + MBVC2001**-1A*+TXV DESIGN SUBCOOLING @ AHRI 95 °F CONDITIONS, 7-9 °F @ THE SERV. Vlv. - 100% DEMAND				
OUTDOOR TEMP. °F	TOTAL BTU/H	SENSIBLE BTU/H	LATENT BTU/H	TOTAL WATTS
75°	55,800	39,600	16,200	3,320
80°	55,100	39,700	15,400	3,530
85°	54,400	39,700	14,700	3,740
90°	53,200	39,400	13,800	3,965
95°	52,000	39,000	13,000	4,190
100°	50,600	38,400	12,200	4,445
105°	49,100	37,800	11,300	4,700
110°	42,200	33,900	8,300	4,350
115°	35,200	29,900	5,300	4,000
TVA Conditions @ 95° OD DB, 75° ID, 63° ID WB				
95°	50,100	38,100	12,000	4,200

ASXV902410A* / CA*F3137*6A* + MBVC1201**-1A*+TXV DESIGN SUBCOOLING @ AHRI 95 °F CONDITIONS, 7-9 °F @ THE SERV. VLV. - BOOST MODE				
OUTDOOR TEMP. °F	TOTAL BTU/H	SENSIBLE BTU/H	LATENT BTU/H	TOTAL WATTS
75°	25,700	17,500	8,200	1,550
80°	25,400	17,600	7,800	1,700
85°	25,100	17,600	7,500	1,750
90°	24,600	17,500	7,100	1,900
<b>95°</b>	<b>24,000</b>	<b>17,300</b>	<b>6,700</b>	<b>1,950</b>
100°	23,400	17,100	6,300	2,100
105°	22,700	16,800	5,900	2,200
110°	22,100	16,900	5,200	2,400
115°	19,800	14,300	5,500	2,300
TVA CONDITIONS @ 95° OD DB, 75° ID, 63° ID WB				
95°	23,100	17,100	6,000	1,700

ASXV904810A* / CA*F4961*6D* + MBVC2001**-1A*+TXV DESIGN SUBCOOLING @ AHRI 95 °F CONDITIONS, 7-9 °F @ THE SERV. VLV. - BOOST MODE				
OUTDOOR TEMP. °F	TOTAL BTU/H	SENSIBLE BTU/H	LATENT BTU/H	TOTAL WATTS
75°	51,500	35,500	16,000	3,350
80°	50,900	35,800	15,100	3,600
85°	50,200	36,100	14,100	3,800
90°	49,100	35,800	13,300	4,000
<b>95°</b>	<b>48,000</b>	<b>35,500</b>	<b>12,500</b>	<b>4,250</b>
100°	46,700	35,000	11,700	4,500
105°	45,300	34,400	10,900	4,800
110°	44,100	34,600	9,500	5,100
115°	40,100	29,300	10,800	4,600
TVA CONDITIONS @ 95° OD DB, 75° ID, 63° ID WB				
95°	46,000	34,500	11,500	4,100

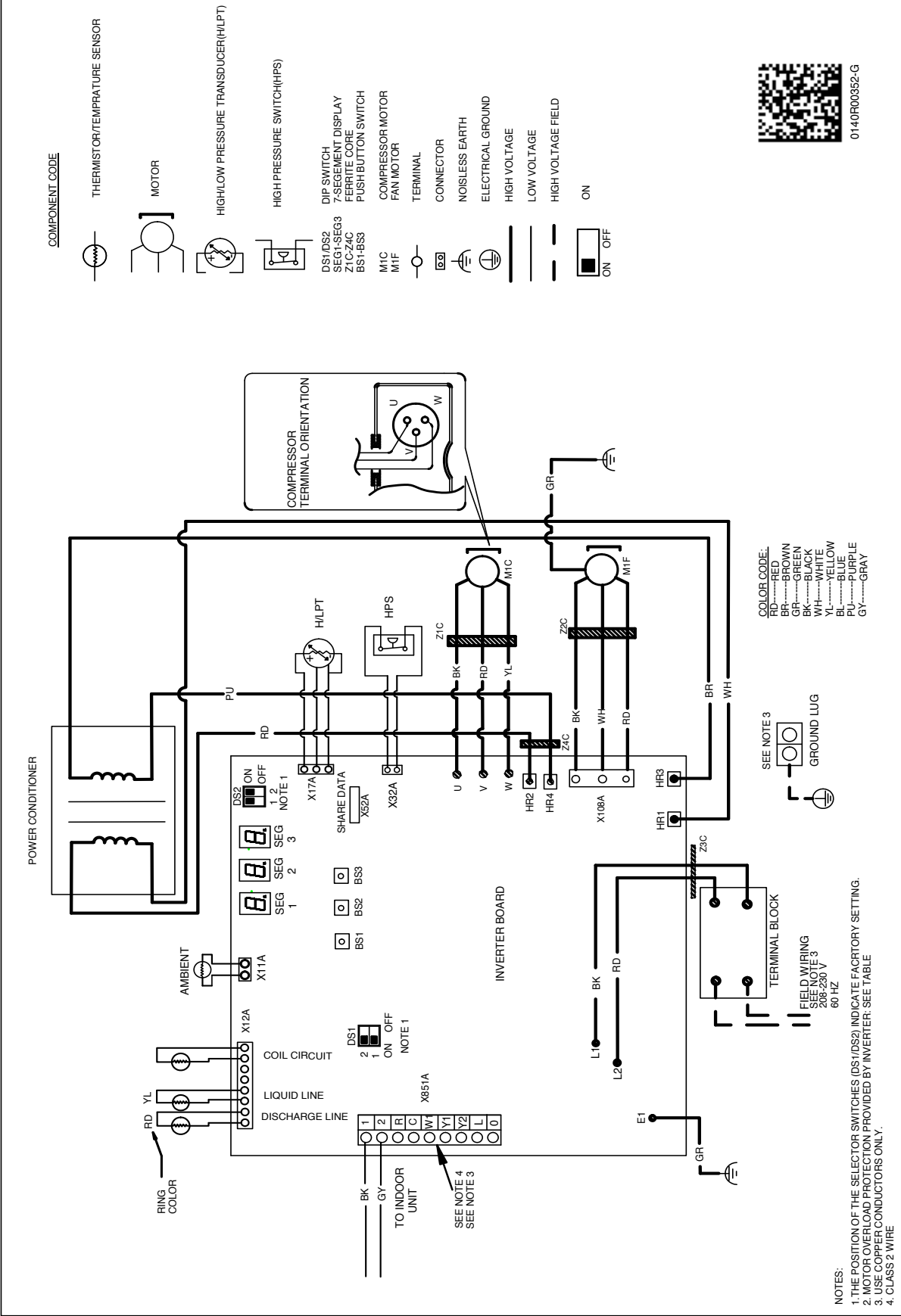
ASXV903610A* / CA*F3743*6D* + MBVC1601**-1A*+TXV DESIGN SUBCOOLING @ AHRI 95 °F CONDITIONS, 7-9 °F @ THE SERV. VLV. - BOOST MODE				
OUTDOOR TEMP. °F	TOTAL BTU/H	SENSIBLE BTU/H	LATENT BTU/H	TOTAL WATTS
75°	38,600	27,000	11,600	2,450
80°	38,100	27,200	10,900	2,600
85°	37,600	27,400	10,200	2,800
90°	36,800	27,200	9,600	3,000
<b>95°</b>	<b>36,000</b>	<b>27,000</b>	<b>9,000</b>	<b>3,150</b>
100°	34,700	26,400	8,300	3,300
105°	33,600	25,600	8,000	3,400
110°	32,400	24,700	7,700	3,600
115°	29,700	22,600	7,100	3,600
TVA CONDITIONS @ 95° OD DB, 75° ID, 63° ID WB				
95°	34,200	26,600	7,600	2,800

ASXV906010A* / CA*F4961*6D* + MBVC2001**-1A*+TXV DESIGN SUBCOOLING @ AHRI 95 °F CONDITIONS, 7-9 °F @ THE SERV. VLV. - BOOST MODE				
OUTDOOR TEMP. °F	TOTAL BTU/H	SENSIBLE BTU/H	LATENT BTU/H	TOTAL WATTS
75°	61,100	42,200	18,900	3,800
80°	60,400	42,300	18,100	4,100
85°	59,600	42,300	17,300	4,300
90°	58,300	42,000	16,300	4,600
<b>95°</b>	<b>57,000</b>	<b>41,600</b>	<b>15,400</b>	<b>4,850</b>
100°	55,100	40,300	14,800	5,300
105°	49,300	36,000	13,300	4,900
110°	42,000	30,700	11,300	4,500
115°	34,700	25,400	9,300	4,200
TVA CONDITIONS @ 95° OD DB, 75° ID, 63° ID WB				
95°	53,800	40,500	13,300	4,700

## SOUND POWER LEVELS

TONNAGE	SPEED	TOTAL UNIT SOUND RATING (dBA)	OCTAVE BAND SPECTRUM FREQUENCY (Hz) ANALYSIS (dBS)						
			125	250	500	1000	2000	4000	8000
2-Ton	Maximum	71	61.3	62.8	67.0	63.6	63.3	65.3	57.2
3-Ton	Maximum	74	61.9	64.6	68.9	67.4	69.1	64.6	55.2
4-Ton	Maximum	75	70.3	72.8	71.0	69.0	67.6	68.0	61.5
5-Ton	Maximum	75	71.2	66.5	74.2	69.1	68.4	62.0	53.2

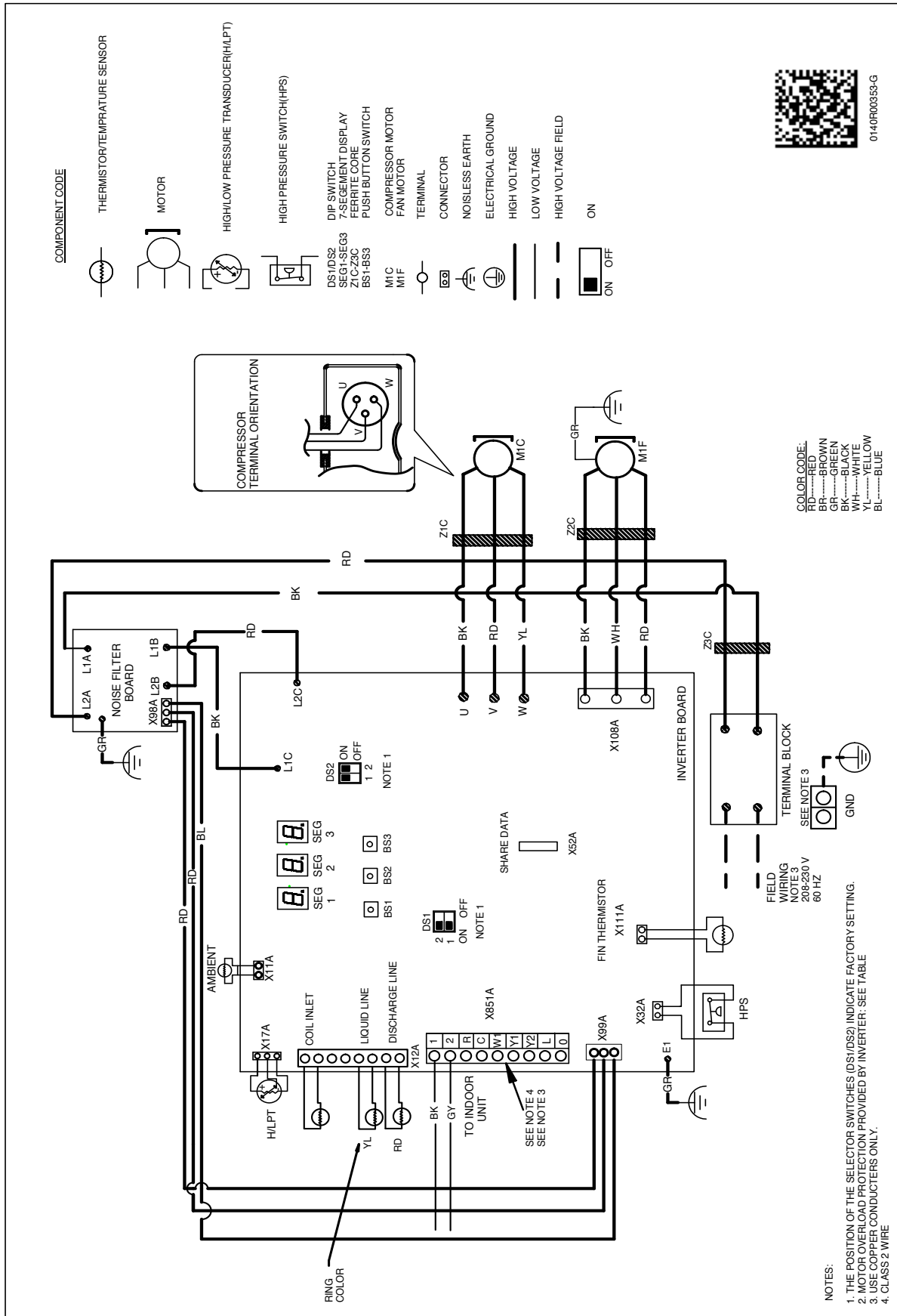
**Note:** Tested in accordance with AHRI Standard 270.



**WARNING**

High Voltage: Disconnect all power before servicing or installing this unit. Multiple power sources may be present. Failure to do so may cause property damage, personal injury, or death.

Wiring is subject to change. Always refer to the wiring diagram or the unit for the most up-to-date wiring.



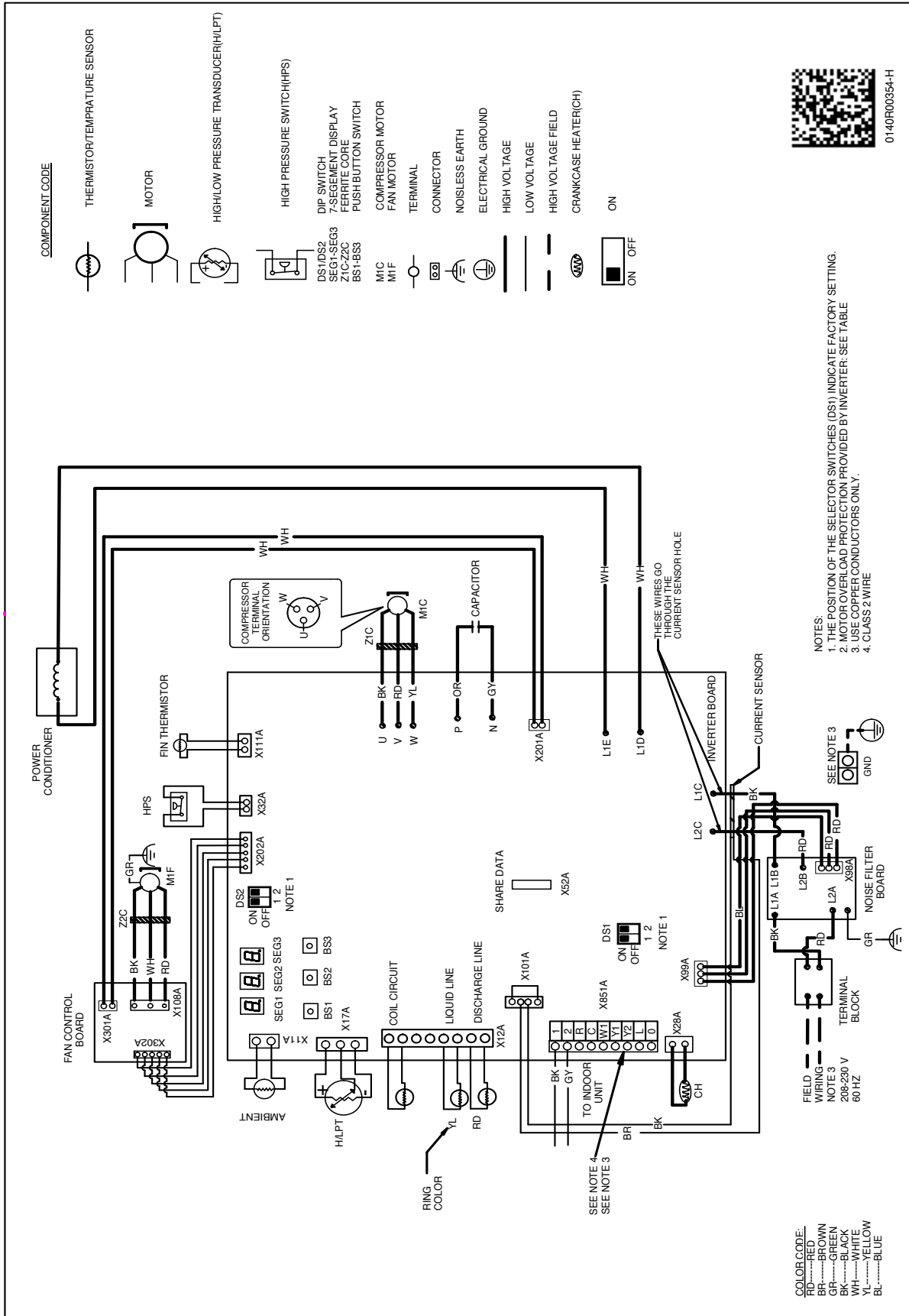
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**WARNING**

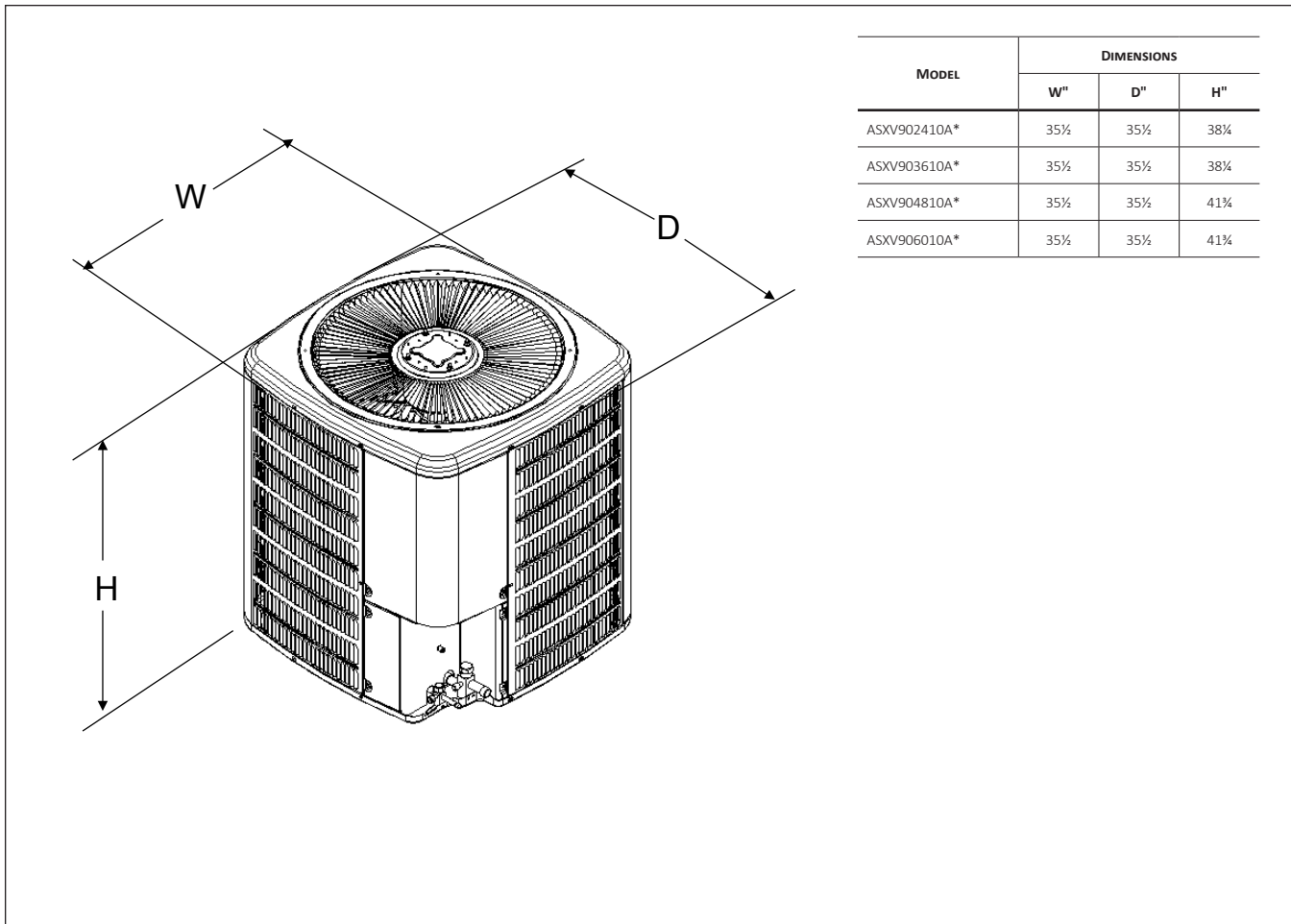
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Wiring is subject to change. Always refer to the wiring diagram or the unit for the most up-to-date wiring.





## DIMENSIONS



## ACCESSORIES

MODEL	DESCRIPTION	ASXV902410A*	ASXV903610A*	ASXV904810A*	ASXV906010A*
ABK-20	Anchor Bracket Kit <sup>9</sup>	X	X	X	X
TXV-V24	TXV Kit	X			
TXV-V36	TXV Kit		X		
TXV-V48	TXV Kit			X	
TXV-V60	TXV Kit				X

<sup>9</sup> Contains 20 brackets; four brackets needed to anchor unit to pad

**All AHRI system ratings are accessible in the System Configurator tool via PartnerLink.**



