

ComfortStar®

Air Conditioning & Heating Products



24 VOLT CENTRAL HEAT PUMP SYSTEMS

BAH32 Series

UP TO
15 SEER2



10 YEARS
WARRANTY
COMPRESSOR

10 YEARS
WARRANTY
PARTS



Comfort, it's in our name.

📍 12860 N.W. South River Dr. | Medley, FL 33178

☎ Toll Free: 1-866-524-9898 | 📞 Phone: 1-305-500-9898 | 📠 Fax: 1-305-500-9896

🌐 www.comfortstarusa.com

✉ Email us: info@comfortstarusa.com



24 VOLT CONNECTION
HEAT PUMP SYSTEMS



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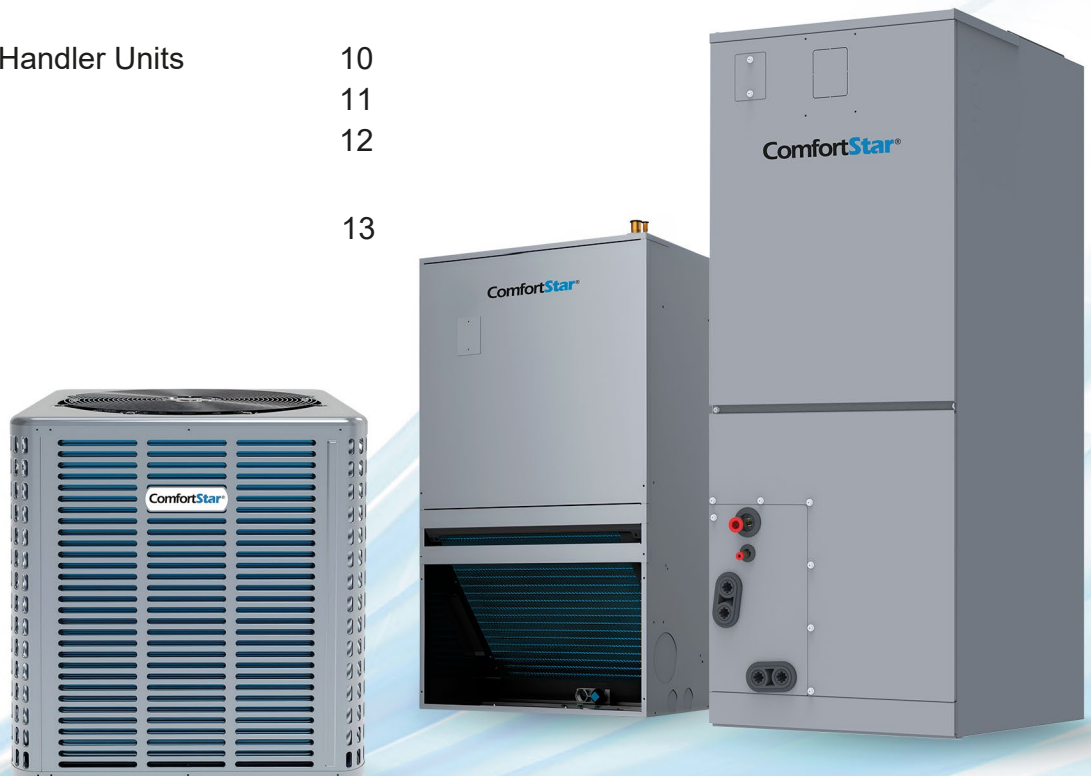
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BAH32 Series

HEAT PUMP
TOP DISCHARGE
CONDENSING UNIT



1.5 Up To 5 Tons

24 VOLT CONNECTION

HEAT PUMP SYSTEMS

Wi Fi OPTIONAL

UP TO
15 SEER2



FEATURES:

- Environmentally friendly R32 refrigerant with a low GWP value.
- Inverter Compressor designed for energy efficiency.
- Features thermal overload protection.
- Service valves with sweat connections and convenient gauge ports.
- Includes factory-installed high-pressure switch.
- AHRI certified and ETL listed
- Compact design enables easy installation, clearance, durability, and maneuverability.
- Features a powder-painted galvanized steel cabinet chassis.
- Equipped with a protective steel louvered coil guard.
- Includes a steel wire axial fan guard.
- An PSC fan motor paired with a uniquely designed fan blade ensures smooth airflow and quieter operation.



BAH32 Series

HEAT PUMP TOP DISCHARGE CONDENSING UNIT



UP TO 15 SEER2 1.5 UP TO 5 TONS



24 VOLT CONNECTION HEAT PUMP SYSTEMS

Wi Fi OPTIONAL

Outdoor Unit			BAH32-18-15	BAH32-24-15	BAH32-30-15	BAH32-36-15	BAH32-48-15	BAH32-60-15
Power Supply	Rated Voltage	V, Ph, Hz	208/230V, 1Ph, 60Hz	208/230V, 1Ph, 60Hz	208/230V, 1Ph, 60Hz	208/230V, 1Ph, 60Hz	208/230V, 1Ph, 60Hz	208/230V, 1Ph, 60Hz
Cooling	Capacity	Btu/h	18000	23000	30000	34200	48000	52500
	Input	W	1600	2450	2950	3500	5520	6580
Heating	Capacity	Btu/h	19000	26000	31000	36000	48000	54000
	Input	W	1600	2650	2750	3150	4350	4700
Outdoor Minimum Circuit Ampacity		A	16.0	20.0	22.5	25.0	37.0	42.0
Outdoor Max. Fuse		A	20.0	25.0	25.0	30.0	40.0	50.0
Outdoor Air Flow		CFM	2100	2100	2800	2800	3050	3050
Outdoor Noise Level		dB(A)	38.5	42.0	40.0	50.0	53.0	53.0
Connecting Wiring		AWG	485: AWG 25*3 Shielded, 24V: AWG 20	485: AWG 25*3 Shielded, 24V: AWG 20	485: AWG 25*3 Shielded, 24V: AWG 20	485: AWG 25*3 Shielded, 24V: AWG 20	485: AWG 25*3 Shielded, 24V: AWG 20	485: AWG 25*3 Shielded, 24V: AWG 20
Communication Type			24V / 485	24V / 485	24V / 485	24V / 485	24V / 485	24V / 485
Throttle Type			Capillary	Capillary	Capillary	Capillary	Capillary	Capillary
Outdoor Unit	Dimension (W*D*H)	inch	23-5/8*23-5/8*25	23-5/8*23-5/8*25	29-9/64*29-9/64*25	29-9/64*29-9/64*25	29-9/64*29-9/64*32-7/8	29-9/64*29-9/64*32-7/8
	Packing (W*D*H)	inch	25-63/64*25-63/64* 26-3/16	25-63/64*25-63/64* 26-3/16	30-5/16*30-5/16* 26-3/16	30-5/16*30-5/16* 26-3/16	30-5/16*30-5/16* 34-1/16	30-5/16*30-5/16* 34-1/16
	Net/Gross Weight	lbs	111/118	114/120	140/148	140/148	170/181	170/181
Refrigeration	Type/Charge	oz	R32/65.26	R32/75.84	R32/102.29	R32/102.29	R32/119.93	R32/119.93
	Outdoor Additional Charge	oz/ft	0.52	0.52	0.52	0.52	0.52	0.52
	N.A. Design Pressure	PSI	174/609	174/609	174/609	174/609	174/609	174/609
Refrigerant Pipe	Liquid /Vapor Valve Size	inch	(3/8) / (3/4)	(3/8) / (3/4)	(3/8) / (3/4)	(3/8) / (3/4)	(3/8) / (3/4)	(3/8) / (3/4)
	Max. Refrigerant Pipe Length	ft	98	164	164	246	246	246
	Max. Height Di(Derence	ft	66	82	82	98	98	98
Operation Temperature	Cooling	°F	5-131	5-131	5-131	5-131	5-131	5-131
	Heating	°F	-4-75	-4-75	-4-75	-4-75	-4-75	-4-75



BAH32 Series

HEAT PUMP TOP DISCHARGE
CONDENSING UNIT



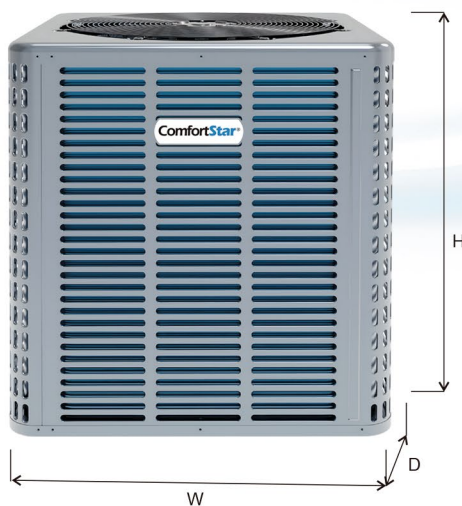
1.5 UP TO 5 TONS

24 VOLT CONNECTION

HEAT PUMP SYSTEMS

UP TO
15 SEER2

Wi Fi OPTIONAL



UNIT DIMENSIONS

Model	Unit Width: "W" Inches	Unit Height: "D" Inches	Unit Depth: "H" Inches
BAH32-18-15	23-5/8	23-5/8	25
BAH32-24-15	23-5/8	23-5/8	25
BAH32-30-15	29-9/64	29-9/64	25
BAH32-36-15	29-9/64	29-9/64	25
BAH32-48-15	29-9/64	29-9/64	32-7/8
BAH32-60-15	29-9/64	29-9/64	32-7/8





LUC32 Series

HIGH EFFICIENCY
AIR HANDLER



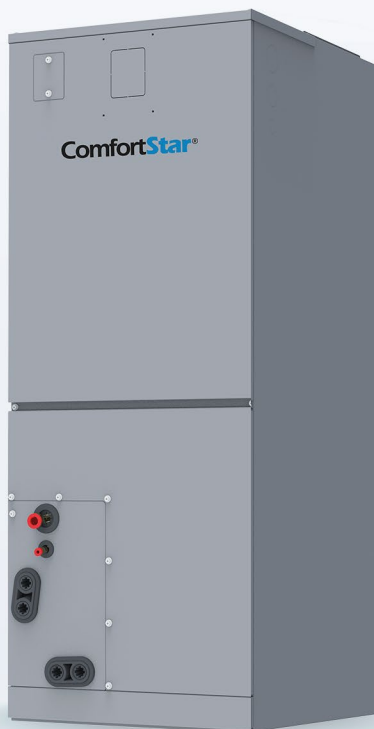
1.5 UP TO 5 TONS

24 VOLT CONNECTION

HEAT PUMP SYSTEMS

UP TO
15 SEER2

Wi Fi OPTIONAL



FEATURES:

- A-shaped coil design for efficient heat transfer and low airflow resistance.
- Foil-faced insulation helps prevent energy loss.
- Factory-sealed cabinet keeps air leakage below 2% at standard pressure.
- Multi-speed blower adjusts to different heating and cooling needs.
- Can be installed in four positions: Upflow, Horizontal Right, Downflow, or Horizontal Left.
- Optional electric heater kits (5 to 20 kW) available, with multiple wiring options.



LUC32 Series

HIGH EFFICIENCY AIR HANDLER



UP TO 15 SEER2 1.5 UP TO 5 TONS



24 VOLT CONNECTION HEAT PUMP SYSTEMS

Wi Fi OPTIONAL

Indoor Unit			LUC32-18-15	LUC32-24-15	LUC32-30-15	LUC32-36-15	LUC32-48-15	LUC32-60-15
Power Supply	Rated Voltage	V, Ph, Hz	208/230V, 1Ph, 60Hz	208/230V, 1Ph, 60Hz	208/230V, 1Ph, 60Hz	208/230V, 1Ph, 60Hz	208/230V, 1Ph, 60Hz	208/230V, 1Ph, 60Hz
Cooling	Capacity	Btu/h	18000	23000	30000	34200	48000	52500
Heating	Capacity	Btu/h	19000	26000	31000	36000	48000	54000
Indoor Minimum Circuit Ampacity		A	2.1	2.3	2.9	2.9	4.6	7.0
Indoor Max. Fuse		A	3.0	3.0	3.0	3.0	6.0	10.0
Indoor Air Flow (H/L)		CFM	680/400	850/680	1100/600	1100/600	1450/1100	1740/750
Indoor Noise Level (H/L)		dB(A)	38.5/34	42/38	40/36	50/42.5	53/46	53/46
N.A. Design Pressure		PSI	174/609	174/609	174/609	174/609	174/609	174/609
Indoor Unit	Dimension (W×D×H)	inch	17-33/64×21-1/32×45	17-33/64×21-1/32×45	21-1/32×21-1/32×49-7/32	21-1/32×21-1/32×49-7/32	24-31/64×21-1/32×53-3/16	24-31/64×21-1/32×53-3/16
	Packing (W×D×H)	inch	26-37/64×20-55/64×46-17/64	26-37/64×20-55/64×46-17/64	24-13/32×26-37/64×50-13/64	24-13/32×26-37/64×50-13/64	27-7/8×26-37/64×54-9/64	27-7/8×26-37/64×54-9/64
	Net/Gross Weight	lbs	112/126	115/128	142/157	142/157	172/191	164/183
Refrigerant Piping	Liquid Side/Gas Side	inch	(3/8) / (3/4)	(3/8) / (3/4)	(3/8) / (3/4)	(3/8) / (3/4)	(3/8) / (3/4)	(3/8) / (3/4)
Connecting Wiring		AWG	485: AWG 25*3 Shielded, 24V: AWG 20	485: AWG 25*3 Shielded, 24V: AWG 20	485: AWG 25*3 Shielded, 24V: AWG 20	485: AWG 25*3 Shielded, 24V: AWG 20	485: AWG 25*3 Shielded, 24V: AWG 20	485: AWG 25*3 Shielded, 24V: AWG 20
Communication Type			24V / 485	24V / 485	24V / 485	24V / 485	24V / 485	24V / 485
Throttle Type			Piston	Piston	Piston	Piston	Piston	Piston
Setting Temp. Range		°F	62-90	62-90	62-90	62-90	62-90	62-90

BAH32 & LUC32 Series

CONDENSING UNIT
+ AIR HANDLER SYSTEMS

UP TO **15** SEER2



24 VOLT CONNECTION HEAT PUMP SYSTEMS

Wi Fi OPTIONAL

Outdoor Unit			BAH32-18-15	BAH32-24-15	BAH32-30-15	BAH32-36-15	BAH32-48-15	BAH32-60-15
Indoor Unit			LUC32-18-15	LUC32-24-15	LUC32-30-15	LUC32-36-15	LUC32-48-15	LUC32-60-15
Power Supply	Rated Voltage	V, Ph, Hz	208/230V, 1Ph, 60Hz	208/230V, 1Ph, 60Hz	208/230V, 1Ph, 60Hz	208/230V, 1Ph, 60Hz	208/230V, 1Ph, 60Hz	208/230V, 1Ph, 60Hz
Cooling	Capacity	Btu/h	18000	23000	30000	34200	48000	52500
	SEER2	Btu/h/W	15.0	15.0	15.0	15.0	15.0	15.0
	EER2	Btu/h/W	10.5	9.8	10.0	9.5	8.7	8.0
Heating	Capacity	Btu/h	19000	26000	31000	36000	48000	54000
	HSPF2-5	Btu/h/W	8.4	8.1	8.5	8.0	8.4	8.5
Indoor Max. Fuse		A	3.0	3.0	3.0	3.0	6.0	10.0
Indoor Air Flow (H/L)		CFM	680/400	850/680	1100/600	1100/600	1450/1100	1740/750
Indoor Noise Level (H/L)		dB(A)	38.5/34	42/38	40/36	50/42.5	53/46	53/46
N.A. Design Pressure		PSI	174/609	174/609	174/609	174/609	174/609	174/609
Indoor Unit	Dimension (W×D×H)	inch	17-33/64×21-1/32×45	17-33/64×21-1/32×45	21-1/32×21-1/32×49-7/32	21-1/32×21-1/32×49-7/32	24-31/64×21-1/32×53-3/16	24-31/64×21-1/32×53-3/16
	Packing Dimension (W×D×H)	inch	26-37/64×20-55/64×46-17/64	26-37/64×20-55/64×46-17/64	24-13/32×26-37/64×50-13/64	24-13/32×26-37/64×50-13/64	27-7/8×26-37/64×54-9/64	27-7/8×26-37/64×54-9/64
	Net /Gross Weight	lbs	112/126	115/128	142/157	142/157	172/191	164/183
Refrigerant Piping	Liquid Side/Gas Side	inch	(3/8) / (3/4)	(3/8) / (3/4)	(3/8) / (3/4)	(3/8) / (3/4)	(3/8) / (3/4)	(3/8) / (3/4)
Connecting Wiring		AWG	485: AWG 25*3 Shielded, 24V: AWG 20	485: AWG 25*3 Shielded, 24V: AWG 20	485: AWG 25*3 Shielded, 24V: AWG 20	485: AWG 25*3 Shielded, 24V: AWG 20	485: AWG 25*3 Shielded, 24V: AWG 20	485: AWG 25*3 Shielded, 24V: AWG 20
Communication Type			24V / 485	24V / 485	24V / 485	24V / 485	24V / 485	24V / 485
Throttle Type			Piston	Piston	Piston	Piston	Piston	Piston
Setting Temp. Range		°F	62-90	62-90	62-90	62-90	62-90	62-90



LUC32 Series

HIGH EFFICIENCY
AIR HANDLER

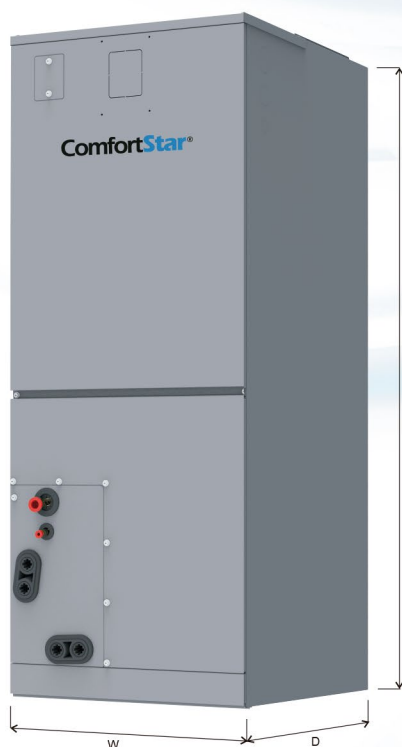


1.5 UP TO 5 TONS

24 VOLT CONNECTION

HEAT PUMP SYSTEMS

Wi Fi OPTIONAL



UP TO 15 SEER2

UNIT DIMENSIONS

Model	Unit Width: "W" inches	Unit Height: "D" inches	Unit Depth: "H" Inches
LUC32-18-15	17-33/64	21-1/32	45
LUC32-24-15	17-33/64	21-1/32	45
LUC32-30-15	21-1/32	21-1/32	49-7/32
LUC32-36-15	21-1/32	21-1/32	49-7/32
LUC32-48-15	24-31/64	21-1/32	53-3/16
LUC32-60-15	24-31/64	21-1/32	53-3/16





CWM32 Series

FRONT RETURN
AIR HANDLER



1.5 Up To 3 Tons

24 VOLT CONNECTION

HEAT PUMP SYSTEMS

Wi Fi OPTIONAL

UP TO
15 SEER2



FEATURES:

- Direct-drive, multi-speed motors for adjusting air volume during heating or cooling.
 - Multi-speed PSC motor
- Includes a thermoplastic drain pan with primary and secondary drain connections at the bottom.
- Equipped with a built-in filter rack.
- Includes a wall-hanging bracket.
- Offers the option of front or bottom return.
- Optional heating elements available in 5kW, 7.5kW, and 10kW.
- Features an all-aluminum coil.
- AHRI listed and ETL listed.



CWM32 Series

FRONT RETURN AIR HANDLER



UP TO 15 SEER2 1.5 UP TO 3 TONS



24 VOLT CONNECTION HEAT PUMP SYSTEMS

Wi Fi OPTIONAL

Indoor Unit			CWM32-18-15	CWM32-24-15	CWM32-30-15	CWM32-36-15
Power Supply	Rated Voltage	V, Ph, Hz	208/230V, 1Ph, 60Hz	208/230V, 1Ph, 60Hz	208/230V, 1Ph, 60Hz	208/230V, 1Ph, 60Hz
Cooling	Capacity	Btu/h	18000	23000	30000	34200
Heating	Capacity	Btu/h	19000	26000	31000	36000
Indoor Minimum Circuit Ampacity		A	2.1	2.1	2.6	2.6
Indoor Max. Fuse		A	15.0	15.0	15.0	15.0
Indoor Air Flow (H/L)		CFM	605/512	796/660	965/766	1160/930
Indoor Noise Level (H/L)		dB(A)	49	52	49	52
N.A. Design Pressure		PSI	174/609	174/609	174/609	174/609
Indoor Unit	Dimension (W×D×H)	inch	20-25/32×15-13/64 ×36-1/32	20-25/32×15-13/64 ×36-1/32	22-1/8×19-1/16 ×39-41/64	22-1/8×19-1/16 ×39-41/64
	Packing (W×D×H)	inch	23-15/64×17-23/32 ×39-11/64	23-15/64×17-23/32 ×39-11/64	24-21/64×21-9/64 ×42-53/64	24-21/64×21-9/64 ×42-53/64
	Net/Gross Weight	lbs	88/95	88/95	108/121	108/121
Refrigerant Piping	Liquid Side/Gas Side	inch	(3/8) / (3/4)	(3/8) / (3/4)	(3/8) / (3/4)	(3/8) / (3/4)
Connecting Wiring		AWG	485: AWG 25*3 Shielded, 24V: AWG 20	485: AWG 25*3 Shielded, 24V: AWG 20	485: AWG 25*3 Shielded, 24V: AWG 20	485: AWG 25*3 Shielded, 24V: AWG 20
Communication Type			24V / 485	24V / 485	24V / 485	24V / 485
Throttle Type			Piston	Piston	Piston	Piston
Setting Temp. Range		°F	62-90	62-90	62-90	62-90

BAH32 & CWM32 Series

CONDENSING UNIT
+ AIR HANDLER SYSTEMS

UP TO **15** SEER2



24 VOLT CONNECTION

HEAT PUMP SYSTEMS

Wi Fi OPTIONAL

Outdoor Unit			BAH32-18-15	BAH32-24-15	BAH32-30-15	BAH32-36-15
Indoor Unit			CWM32-18-15	CWM32-24-15	CWM32-30-15	CWM32-36-15
Power Supply	Rated Voltage	V, Ph, Hz	208/230V, 1Ph, 60Hz	208/230V, 1Ph, 60Hz	208/230V, 1Ph, 60Hz	208/230V, 1Ph, 60Hz
Cooling	Capacity	Btu/h	18000	23000	30000	34200
	SEER2	Btu/h/W	15.0	15.0	15.0	15.0
	EER2	Btu/h/W	10.0	9.5	9.5	9.0
Heating	Capacity	Btu/h	19000	26000	31000	36000
	HSPF2-5	Btu/h/W	8.2	8.0	7.8	7.6
Indoor Max. Fuse		A	15.0	15.0	15.0	15.0
Indoor Air Flow (H/L)		CFM	605/512	796/660	965/766	1160/930
Indoor Noise Level (H/L)		dB(A)	49	52	49	52
N.A. Design Pressure		PSI	174/609	174/609	174/609	174/609
Indoor Unit	Dimension (W×D×H)	inch	20-25/32×15-13/64×36-1/32	20-25/32×15-13/64×36-1/32	22-1/8×19-1/16×39-41/64	22-1/8×19-1/16×39-41/64
	Packing Dimension (W×D×H)	inch	23-15/64×17-23/32×39-11/64	23-15/64×17-23/32×39-11/64	24-21/64×21-9/64×42-53/64	24-21/64×21-9/64×42-53/64
	Net /Gross Weight	lbs	88/95	88/95	108/121	108/121
Refrigerant Piping	Liquid Side/Gas Side	inch	(3/8) / (3/4)	(3/8) / (3/4)	(3/8) / (3/4)	(3/8) / (3/4)
Connecting Wiring		AWG	485: AWG 25*3 Shielded, 24V: AWG 20	485: AWG 25*3 Shielded, 24V: AWG 20	485: AWG 25*3 Shielded, 24V: AWG 20	485: AWG 25*3 Shielded, 24V: AWG 20
Communication Type			24V / 485	24V / 485	24V / 485	24V / 485
Throttle Type			Piston	Piston	Piston	Piston
Setting Temp. Range		°F	62-90	62-90	62-90	62-90



CWM32 Series

FRONT RETURN
AIR HANDLER



1.5 Up To 3 Tons

24 VOLT CONNECTION

HEAT PUMP SYSTEMS

Wi Fi OPTIONAL

UP TO
15 SEER2



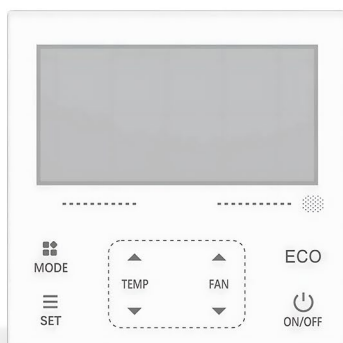
UNIT DIMENSIONS

Model	Unit Width: "W" Inches	Unit Height: "D" Inches	Unit Depth: "H" Inches
CWM32-18-15	20-25/32	15-13/64	36-1/32
CWM32-24-15	20-25/32	15-13/64	36-1/32
CWM32-30-15	22-1/8	19-1/16	39-41/64
CWM32-36-15	22-1/8	19-1/16	39-41/64



CONTROLS

Wi Fi OPTIONAL



Part No. CW32-WIFI:

Features of with WI-FI & Programmable:

- Cooling, Heating, Fan, and Dehumidify Modes
- Adjustable Temperature and Fan Speed
- On/Off Timer
- Built-in Wi-Fi for Smart Control
- Weekly Scheduling via Smart Life App
- System Info and Settings Check
- Error Code Display
- Remote Receiver Range: Works with wired connections up to 100 meters.
- Smartphone Control: Download the "Smart Life" app to control the unit from your phone.



Part No. LDSK32A:

Features of Leakage Detector Sensor Kit:

- 24V Signal Input from Thermostat
- 24V Signal Output to Indoor and Outdoor Units
- Communication Port for Refrigerant Leakage Detector
- Built-in Alarm: LED light and buzzer alert for system issues.

Model	Wired Control with Wi-Fi & Programmable	Leakage Detector Sensor Kit
	 CW32-WIFI	 LDSK32A
LUC32	Optional	/
CWM32	Optional	/
BAH32	/	Optional

MATCH UP TABLES BAH32 SERIES



Indoor Unit	Outdoor Unit	Cooling Capacity (Btu/h)	EER2 (Btu/h/W)	SEER2 (Btu/h/W)	Heating Capacity (Btu/h)	HSPF2 (Btu/h/W)
LUC32-18-15	BAH32-18-15	18000	10.5	15.0	19000	8.4
LUC32-24-15	BAH32-24-15	23000	9.8	15.0	26000	8.1
LUC32-30-15	BAH32-30-15	30000	10.0	15.0	31000	8.5
LUC32-36-15	BAH32-36-15	34200	9.5	15.0	36000	8.0
LUC32-48-15	BAH32-48-15	48000	8.7	15.0	48000	8.4
LUC32-60-15	BAH32-60-15	52500	8.0	15.0	54000	8.5



Indoor Unit	Outdoor Unit	Cooling Capacity (Btu/h)	EER2 (Btu/h/W)	SEER2 (Btu/h/W)	Heating Capacity (Btu/h)	HSPF2 (Btu/h/W)
CWM32-18-15	BAH32-18-15	18000	10.0	15.0	19000	8.2
CWM32-24-15	BAH32-24-15	23000	9.5	15.0	26000	8.0
CWM32-30-15	BAH32-30-15	30000	9.5	15.0	31000	7.8
CWM32-36-15	BAH32-36-15	34200	9.0	15.0	36000	7.6



ComfortStar®

Air Conditioning & Heating Products

 **STAR PRO™**
SERIES
INVERTER



Comfort, it's in our name.

www.comfortstarusa.com | Email us: info@comfortstarusa.com

Toll Free: 1-866-524-9898 | Phone: 1-305-500-9898 | Fax: 1-305-500-9896

BAH32SERIES/2025