Introducing

14 SEER

1.5 up to 5 TONS

Residential Split Systems

ComfortStar®

BAR & LUC

10 year Warranty on Compressor*
10 year Warranty on Parts*

If compressor or coil fails within the first 3 years we will replace it with

A NEW UNIT!

* Units must be registered.

10 Year Warranty Compressor

10 Year Warranty Parts

ARI CERTIFIED www.ahridirectory.org

R410a

ETL LISTED US

ENERGY STAR

ComfortStar®

BAR SERIES
14 SEER

Split System Air Conditioner
High Efficiency
R410a

STANDARD FEATURES:

- R410a system
- High efficiency compressor
- Compact design for easy installation and transportation
- Ultra quiet
- Factory installed liquid line filter drier
- Pre-charged R410a good for 25' of lineset
- Brass liquid and suction service valves with sweat connections
- Contactor with lug connections
- Ground lug connection
- T erminal block provided for low voltage connections
- Copper Tube-Aluminum Fin Coil used on all models
- ARI certified
- ETL listed

CABINET FEATURES:

- Heavy gauge galvanized steel with gray powder paint finish
- Fully louvered removable coil guard to protect condenser surface
- Easy access to service valves and electrical connections
- Easy access to fan motor without disconnecting wires

ComfortStar®

13 MODELS

BAR18-14
BAR24-14
BAR30-14
BAR36-14
BAR42-14
BAR48-14
BAR60-14

BAR - COOLING ONLY

14 SEER - High Efficiency - R410a

GENERAL TERMS OF LIMITED WARRANTY

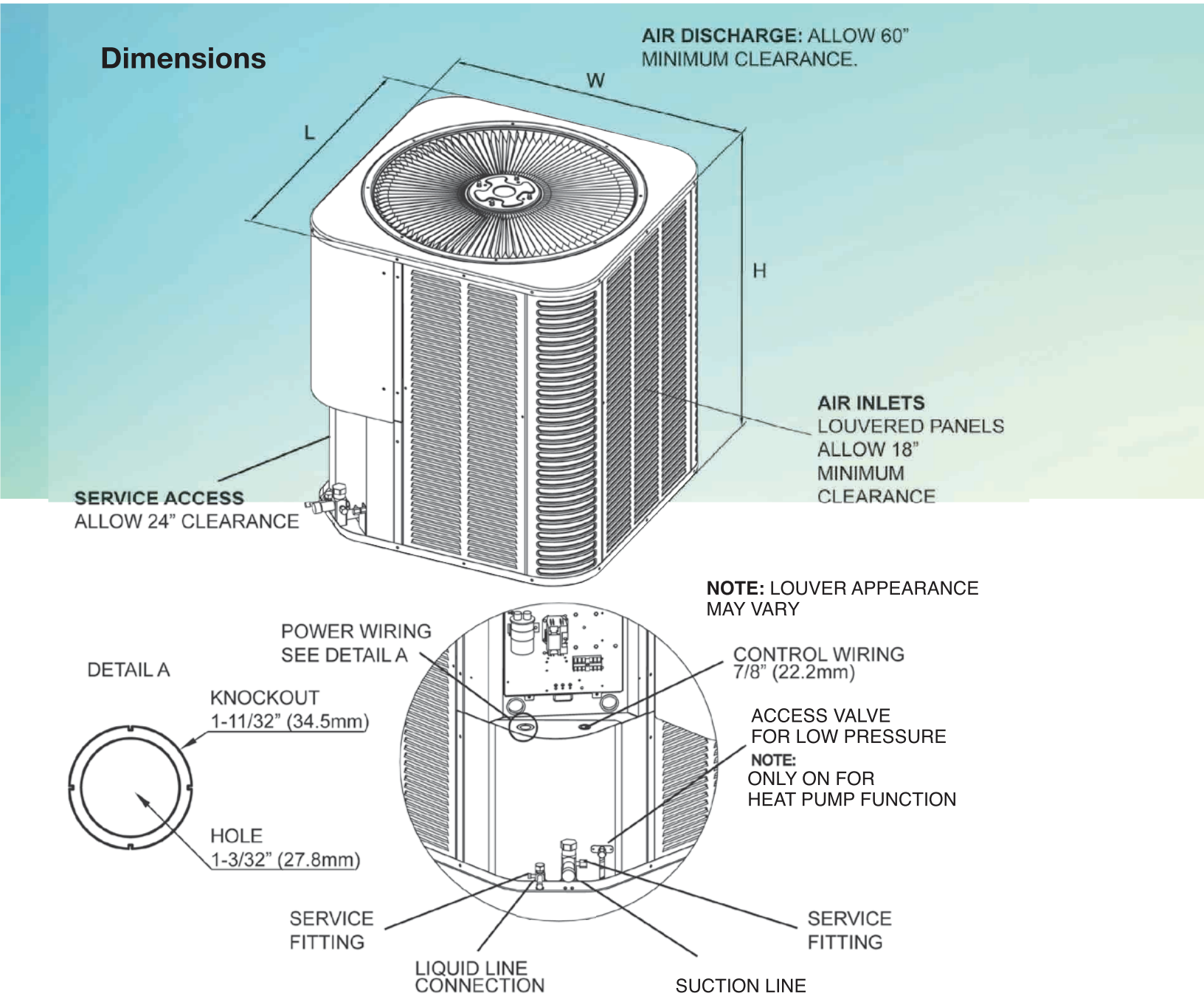
General Terms of Limited Warranty ComfortStar USA warrants that our products conform to the manufacturer specifications and will be free of defects in material and workmanship under normal use and maintenance.

Before proceeding with installation, refer to installation instructions packaged with each model, as well as complying with all federal, state, provincial, and local codes, regulations and practices.

For complete details of the limited warranty, including applicable terms and conditions, see your local distributor or contact the manufacturer for a copy.

Model Number Identification
BAR - Cooling Only
18 Capacity 18,000 (Btu/h)
14 SEER

Dimensions



Dimensional Data	Dimensions (inches)			Refrigerant Connection Service Valve Size	
Unit Model (Btu/h)	"H" in (mm)	"W" in (mm)	"L" in (mm)	Liquid	Suction
1 1/2Ton	24 15/16	21 7/8"	21 7/8"	3/8	3/4
2Ton	24 15/16"	21 7/8"	21 7/8"	3/8	3/4
2 1/2Ton	24 15/16"	29 1/8"	29 1/8"	3/8	3/4
3Ton	24 15/16"	29 1/8"	29 1/8"	3/8	3/4
3 1/2Ton	33 3/16"	29 1/8"	29 1/8"	3/8	3/4
4Ton	33 3/1"6	29 1/8"	29 1/8"	3/8	7/8
5Ton	33 3/16"	29 1/8"	29 1/8"	3/8	7/8

LUC | 1 1/2 - 5 Ton

14 SEER

Three-speed, Multi-position
Air Handler

ALEGRIA 10 YEAR WARRANTY COMPRESSOR

ALEGRIA 10 YEAR WARRANTY PARTS

Model			LUC18-14	LUC24-14	LUC30-14	LUC36-14	LUC42-14	LUC48-14	LUC60-14
Power supply		V/Ph/Hz	208~230V/1N/60Hz	208~230V/1N/60Hz	208~230V/1N/60Hz	208~230V/1N/60Hz	208~230V/1N/60Hz	208~230V/1N/60Hz	208~230V/1N/60Hz
Cooling	Capacity	Btu/h	18000	24000	30000	34500	42000	48000	56500
	SEER	Btu/h.W	14.00	14.00	14.00	14.00	14.00	14.00	14.00
Indoor external static pressure		Pa	25	25	37	37	37	50	50
Throttle type			Orifice	Orifice	Orifice	Orifice	TXV	TXV	TXV
Indoor coil	Number of row		3(row)×2(piece)	4(row)×2(piece)	4(row)×2(piece)	4(row)×2(piece)	4(row)×2(piece)	5(row)×2(piece)	5(row)×2(piece)
	Tube pitch(a)xrow pitch(b)	in	0.83×0.53	0.83×0.53	0.83×0.53	0.83×0.53	0.83×0.53	0.83×0.53	0.83×0.53
	Fin spacing	in	1/16	1/16	1/16	1/16	1/16	1/16	1/16
	Fin material		Hydrophilic	Hydrophilic	Hydrophilic	Hydrophilic	Hydrophilic	Hydrophilic	Hydrophilic
	Tube outside diameter	in	Φ 0.276	Φ 0.276	Φ 0.276	Φ 0.276	Φ 0.276	Φ 0.276	Φ 0.276
	Tube material		inner grooved	inner grooved	inner grooved	inner grooved	inner grooved	inner grooved	inner grooved
	Coil length x height x width	in	17 7/16×14 7/8×1 37/64	17 7/16×16 17/32×2 7/64	17 7/16×16 17/32×2 7/64	17 7/16×16 17/32×2 7/64	17 7/16×16 17/32×2 7/64	19 27/32×21 1/2×2 5/8	19 27/32×21 1/2×2 5/8
	Number of circuit		6	8	8	8	8	12	12
Indoor fan motor	Type		AC	AC	AC	AC	AC	AC	AC
	Input	W	180	206	288	398	463	578	578
	Output	W	100	135	180	220	270	300	300
	Capacitor	μF	6	6	6	10	10	12	12
	Speed (Hi/Me/Lo)	rpm	440/390/340	570/530/490	670/600/530	805/730/690	839/723/610	920/870/820	920/870/820
Blower	Diameter	in	12 5/16	12 5/16	12 5/16	12 5/16	12 5/16	12 5/16	12 5/16
	Width	in	12 29/32	12 29/32	12 29/32	12 29/32	12 29/32	12 29/32	12 29/32
Indoor air flow		CFM	723/610/500	938/804/738	1204/1060/919	1376/1235/1161	1562/1385/1208	1695/1574/1434	1695/1574/1434
Indoor noise level		dB(A)	40	42	48	51	54	55	55
Indoor dimension	Unit (WxHxD)	in	19.70×45.70×22.05	19.70×45.70×22.05	19.70×45.70×22.05	19.70×45.70×22.05	19.70×45.70×22.05	22.05×53.11×24.45	22.05×53.11×24.45
	Packing (WxHxD)	in	22.40×47.50×24.90	22.40×47.50×24.90	22.40×47.50×24.90	22.40×47.50×24.90	22.40×47.50×24.90	24.80×54.76×27.32	24.80×54.76×27.32

Comfort... it´s in our name

ComfortStar®

R410a

BAR | Cooling only

14 SEER

Comfort... it´s in our name

ALEGRIA 10 YEAR WARRANTY COMPRESSOR

ALEGRIA 10 YEAR WARRANTY PARTS

Model			BAR18-14	BAR24-14	BAR30-14	BAR36-14	BAR42-14	BAR48-14	BAR60-14
OUTDOOR POWER SUPPLY		V/Ph/Hz	230V/1Ph/60Hz	230V/1Ph/60Hz	230V/1Ph/60Hz	230V/1Ph/60Hz	230V/1Ph/60Hz	230V/1Ph/60Hz	230V/1Ph/60Hz
Cooling	Capacity	Btu/h	18000	24000	30000	34500	42000	46000	56500
	Input	W	1475	1960	2460	2830	3450	4088	4920
	EER	Btu/h.W	11.70	12.20	11.70	11.70	11.70	11.20	11.20
	SEER (AHRI Certified)	Btu/h.W	14	14	14	14	14	14	14
Max. input consumption		W	1843.75	2450.00	3075.00	3537.50	4312.50	5110.00	6150.00
Max. current		A	8.44	11.21	14.07	16.19	19.74	23.39	28.15
Compressor	Brand		HITACHI	HITACHI	HITACHI	HITACHI	LG	LG	LG
	Model		ASL145DG-C7EU	ASH201DG-C8LU1L	ASH239DG-C8DU	ASH280DG-C8DU	ABG036KAC	ABG042KAC	ABG051KAC
	Type		rotary	rotary	rotary	rotary	scroll	scroll	scroll
	Capacity	W	4240	5970	7055	8260	10551	12309	14974
	Input	W	1390	1950	2290	2700	3429	3962	4722
	Rated current(RLA)	A	6.10	8.70	10.20	11.90	15.2	17.3	21.0
	Locked rotor Amp(LRA)	A	33	44	56	60	112	108	128
	Thermal protector	uf	40	40	55.00	70	45	70	70
	Refrigerant oil	ml	480	570	570	570	1280	1280	1280
Outdoor fan motor	Type		PSC	PSC	PSC	PSC	PSC	PSC	PSC
	Input	W	145.00	178.00	178.00	207.00	207.00	510.00	510.00
		HP	0.19	0.24	0.24	0.28	0.28	0.68	0.68
	Output	W	60(0.08)	85(0.11)	85(0.11)	110(0.15)	110(0.15)	230(0.31)	230(0.31)
		HP	0.08	0.11	0.11	0.15	0.15	0.31	0.31
	Current	A	0.66	0.81	0.81	0.94	0.94	2.32	2.32
	Capacitor	μF	6	6	6	6	6	12	12
	Speed	rpm	870	970	970	850	850	1095	1095
Outdoor air flow		CFM	1500	1700	1900	2800	4000	4000	4000
Outdoor noise level		dB(A)	57	60	60	60	60	63	63
Outdoor dimension	Unit (WxHxD)	in	21-7/8× 24-15/16×21-7/8	21-7/8× 24-15/16×21-7/8	21-7/8× 24-15/16×21-7/	29-1/8× 24-15/16×29-1/8	29-1/8× 33-3/16×29-1/8	29-1/8x 33-3/16x29-1/8	29-1/8x 33-3/16x29-1/8
		mm	554×633×554	554×633×554	554×633×554	740×633×740	740×843×740	740x843x740	740x843x740
	Packing (WxHxD)	in	22-9/10×2 6-1/4×22-9/10	22-9/10× 26-1/4×22-9/10	22-9/10× 26-1/4×22-9/10	30-1/5× 26-1/4××30-1/5	30-1/5× 34-1/2×30-1/5	30-1/5x 34-1/2x30-1/5	30-1/5x 34-1/2x30-1/5
		mm	582×667×582	582×667×582	582×667×582	768×667×768	768×877×768	768x877x768	768x877x768
RefrigerantType			R410A	R410A	R410A	R410A	R410A	R410A	R410A
Refrigerant pipe	Liquid side	in	Φ3/8	Φ3/8	Φ3/8	Φ3/8	Φ3/8	Φ3/8	Φ3/8
	Gas side	in	Φ3/4	Φ3/4	Φ3/4	Φ3/4	Φ3/4	Φ7/8	Φ7/8
	Max. refrigerant pipe length	ft	65 39/64	65 39/64	65 39/64	65 39/64	65 39/64	65 39/64	65 39/64
	Max. difference in level	ft	32 13/16	32 13/16	32 13/16	32 13/16	32 13/16	32 13/16	32 13/16
Design pressure		MPa	4.0/1.2	4.0/1.2	4.0/1.2	4.0/1.2	4.0/1.2	4.0/1.2	4.0/1.2
Max pressure		MPa	4.20	4.20	4.20	4.20	4.20	4.20	4.20
Outdoor weight	N.W.	Kg	46	52	58	71	83	84	94
		Lb	101	115	128	157	183	185	207
	G.W.	Kg	48	54	61	74	87	89	98
		Lb	106	119	134	163	192	196	216

Condensing Unit Refrigerant Line Set Information

Suction line Sizing

Unit Size		1 1/2Ton	2Ton	2 1/2Ton	3Ton	3 1/2Ton	4Ton	5Ton
Suction Line Connection Size	standard	3/4" I.D.	3/4" I.D.	3/4" I.D.	3/4" I.D.	3/4" I.D.	7/8" I.D.	7/8" I.D.
Suction Line Run- Feet	optional	5/8"	5/8"	5/8"	5/8"	5/8"	3/4"	1 1/8"
Capactiy Factor								
25'	standard	1.00	1.00	1.00	1.00	1.00	1.00	0.99
	optional	1.00	1.00	1.00	1.00	1.00	1.00	1.00
50'	standard	0.98	0.98	0.98	0.99	0.98	0.98	0.98
	optional	0.97	0.97	0.97	0.97	0.98	0.98	0.99
100'	standard	0.95	0.95	0.96	0.97	0.97	0.97	0.94
	optional	0.94	0.94	0.94	0.94	0.95	0.95	0.98
150'	standard	0.92	0.92	0.93	0.96	0.96	0.96	0.90
	optional	0.90	0.90	0.90	0.90	0.91	0.92	0.97

Notes: * Standard size
Using suction line larger than shown in chart will result in poor oil return and is not recommended.

Liquid line Sizing

System Capacity	Liquid Line Connection Size (inch I.D.)	Compressor Type	Line Size Connection and Line Size (inch I.D.)	Liquid Line Size Outdoor Unit above or below indoor coil					
				Total Equivalent Length- Feet					
				25	50	75	100	125	150
				Maximum Vertical Separation- Feet					
1 1/2Ton	3/8"	Rotary	3/8*	25	30	30	27	24	20
2Ton	3/8"	Rotary	3/8*	25	30	30	24	20	15
2 1/2Ton	3/8"	Rotary	3/8*	25	30	30	22	17	10
3Ton	3/8"	Rotary	5/16	25	50	37	22	7	N/a
			3/8*	25	50	68	63	58	53
3 1/2Ton	3/8"	Scroll	5/16	25	23	4	N/A	N/A	N/A
			3/8*	25	50	43	36	30	24
4Ton	3/8"	Scroll	3/8*	25	46	38	30	22	15
			1/2	25	50	56	55	53	52
5Ton	3/8"	Scroll	3/8*	25	50	56	44	32	20
			1/2	25	50	75	81	79	76

Notes: * Standard size
N/A Application not recommended