

# 4SCU16LS

## 16 SEER Split System Enhanced Air Conditioning

### Product Specifications

Form No. 4SCU16LS-100 (04/2013)



*Communicating Thermostat enabled*



#### COMPRESSOR

- High-efficiency 2 stage Copeland UltraTech™ scroll compressor
- R410a refrigerant
- Grommet-mounted compressor for quiet operation
- Internally protected against high temperature motor overload conditions
- Heavy-duty compressor sound blanket for quiet operation

#### CABINET

- Full metal louvered panels remove with just two screws per panel for easy coil cleaning and service
- Controls located in corner post for easy installation and service
- Rounded corners for safety and attractive, clean appearance
- Baked polyester paint finish over galvanized steel for maximum durability
- PVC-coated wire fan discharge grille
- External gauge ports for easy service

#### COILS

- Enhanced aluminum fins and copper tubing for higher efficiency and capacity
- Raised coil prevents debris from collecting in bottom of coil and causing loss of airflow

#### DESIGN

- Designed for ambients up to 125°F

#### COMPONENTS

- Service valves positioned for quick installation and easy service
- High and low pressure switches factory installed
- Trade available components
- Factory installed crank case heater
- Charged for 15 ft. of line set
- Thermostat flexibility:
  - works with the Comfort Sync T-Stat (when matched with communicating indoor unit) or a conventional 24V T-Stat
- Self diagnostics saves last 10 fault codes regardless of power interruption

#### WARRANTY

- 10 year limited warranty on compressor, 10 year limited warranty on all parts, extended warranty available\*

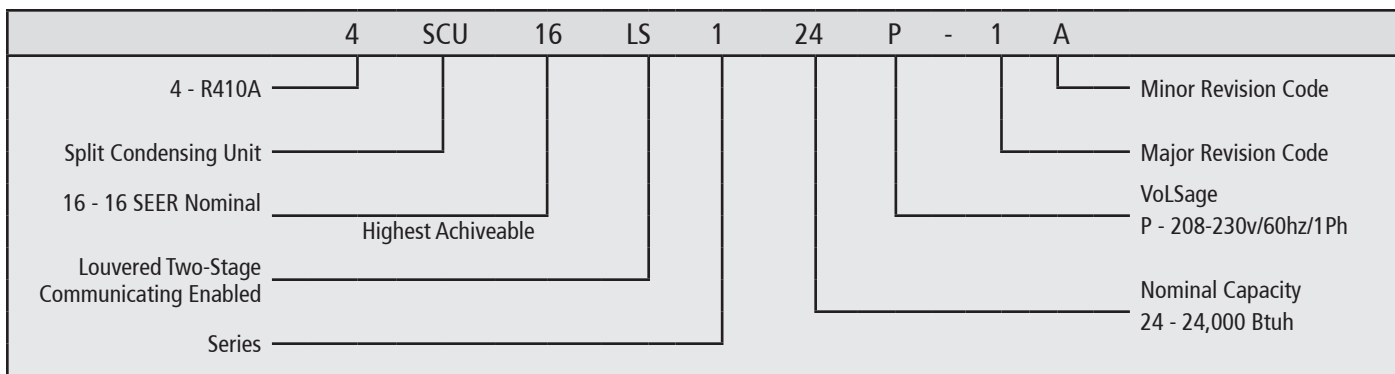
\*Warranty provides for a total of 10 years of limited warranty coverage (Standard 5-year limited parts warranty plus an additional 5-year limited extended parts warranty). Warranty must be registered online within 60 days of installation to qualify for 10-year coverage. Unregistered equipment defaults to 5-year coverage. Lifetime limited heat exchanger warranty applies to registered equipment only (Standard 20 years with no online registration). See full warranty at [www.alliedair.com](http://www.alliedair.com) for terms, conditions and exclusions.



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. Visit [www.energystar.gov](http://www.energystar.gov) for details.



### Model Number Guide



### Physical and Electrical

Model	Voltage/Hz/Phase	Voltage Range	Min. Circuit Amp.	Max. Over current Device (amps)	Compressor		Fan Motor			Refrig. Charge (oz.)	Weight (lbs.)
					Rated Load (amps)	Locked Rotor (amps)	Rated Load (amps)	Rated HP	Nom. RPM		
4SCU16LS124P-1	230/60/1	197 - 253	13.9	20	11.4	52.0	1.1	1/5	1075	117	200
4SCU16LS136P-1	230/60/1	197 - 253	21.9	35	19.0	82.0	1.1	1/6	825	137	230
4SCU16LS148P-1	230/60/1	197 - 253	28.1	45	24.0	96.0	1.1	1/6	825	180	262
4SCU16LS160P-1	230/60/1	197 - 253	33.8	55	26.0	118.0	1.7	1/4	825	214	310

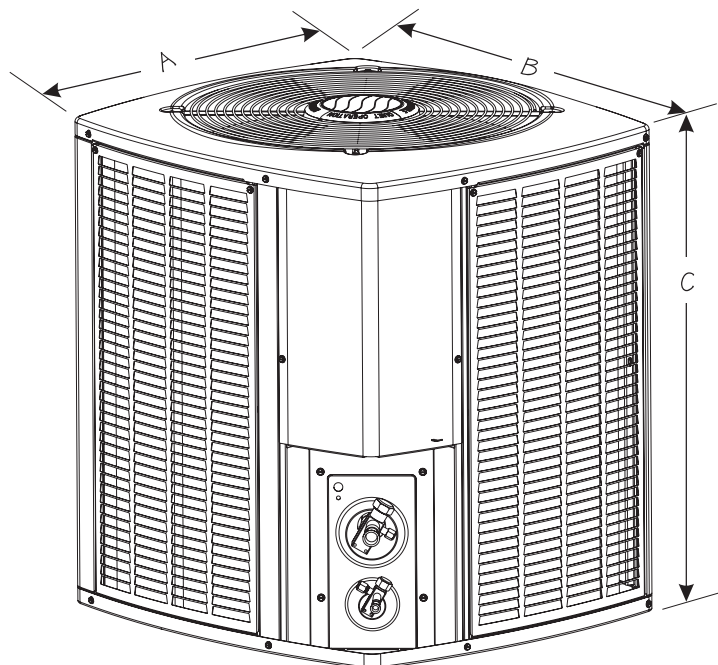
Note: For applications below 230V, use of a Hard Start Kit is recommended.

### Sound Ratings

Model No.	Sound Rating dBA
4SCU16LS124P-1	74
4SCU16LS136P-1	74
4SCU16LS148P-1	76
4SCU16LS160P-1	76

### Dimensions (in.)

Model No.	A	B	C
4SCU16LS124P-1	24-3/4	26-3/4	29-3/4
4SCU16LS136P-1	29-3/8	31-1/4	29-3/4
4SCU16LS148P-1	29-3/8	31-1/4	37-3/4
4SCU16LS160P-1	29-3/8	31-1/4	43-3/4



## Cooling Performance with Evaporator Coils

Outdoor Model	Indoor Model	SEER	EER	AHRI Rated Capacity <sup>1</sup> BTUH	Sensible Rated Capacity	CFM	Refrigerant Connection				Refrigerant Line Size		Indoor Expansion Device	
	Evaporator Coil or Air Handler <sup>3</sup>						Outdoor		Indoor		Suction	Liquid	Piston <sup>2</sup>	TXV
							Suction	Liquid	Suction	Liquid				
4SCU16LS124P-1*	E(U,C,M,H)1P36A,B,C	14.00	11.50	24,000	18,000	800	3/4	3/8	3/4	3/8	3/4	3/8	NA	A4TXV01
4SCU16LS136P-1*	E(U,C,M,H)1P36A,B,C	13.50	11.00	34,400	25,800	1200	3/4	3/8	3/4	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P43B,C	13.50	10.50	34,400	26,300	1200	3/4	3/8	7/8	3/8	7/8	3/8	NA	A4TXV01
4SCU16LS148P-1*	E(U,C)1P62C	13.50	10.50	46,000	34,900	1600	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV02
	E(U,C)1P62D	13.00	10.50	46,000	34,900	1600	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV02
	EH1P62C,D	14.00	11.00	46,500	34,900	1600	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV02
4SCU16LS160P-1*	E(U,C)1P62C	13.50	11.00	57,000	42,800	1800	7/8	3/8	7/8	3/8	1 1/8	3/8	NA	A4TXV02

\* All matches must be with variable speed air systems - The furnace must be able to provide first and second stage air flows, (or only run at high speed)

Note:

<sup>1</sup> Certified in accordance with Unitary Air Conditioner Certification Program, which is based on AHRI Standard 210/240

<sup>2</sup> Required to achieve AHRI rating. If NA (Not Applicable) is in the piston column, then TXV is required

<sup>3</sup> A blower time delay relay is required to achieve AHRI rating. This feature is standard on all Allied Air Enterprises Furnace and AH products

### Cooling Performance with Air Handlers and Furnaces 24

Outdoor Model	Indoor Model		SEER	EER	AHRI Rated Capacity <sup>1</sup> BTUH	Sensible Rated Capacity	CFM	Refrigerant Connection				Refrigerant Line Size		Indoor Expansion Device	
	Evaporator Coil or Air Handler <sup>3</sup>	Variable Speed Furnace						Outdoor		Indoor		Suction	Liquid	Piston <sup>2</sup>	TXV
								Suction	Liquid	Suction	Liquid				
4SCU16LS 124P-1	BCS2M24@00NA1P		15.5	12.5	24,000	18,000	800	3/4	3/8	3/4	3/8	3/4	3/8	NA	A4TXV01
	BCS2M36@00NA1P		15.5	12.5	24,000	18,000	800	3/4	3/8	7/8	3/8	3/4	3/8	NA	A4TXV01
	E(U,C,M,H)1P36B	EFV08BC	15.5	12.5	24,000	18,000	800	3/4	3/8	3/4	3/8	3/4	3/8	NA	A4TXV01
	E(U,M,H)1P29B	EFV08BC	15.5	12.0	24,000	18,000	800	3/4	3/8	3/4	3/8	3/4	3/8	NA	A4TXV01
	E(U,C,M,H)1P29A	A80DF1E045A12	15.0	12.0	24,000	18,000	800	3/4	3/8	3/4	3/8	3/4	3/8	NA	A4TXV01
	E(U,C,M,H)1P36A	A80DF1E045A12	15.0	12.5	24,000	18,000	800	3/4	3/8	3/4	3/8	3/4	3/8	NA	A4TXV01
	E(U,C,M,H)1P29B	A80DF1E070B12	14.5	11.5	24,000	18,000	800	3/4	3/8	3/4	3/8	3/4	3/8	NA	A4TXV01
	E(U,C,M,H)1P36B	A80DF1E070B12	14.5	12.0	24,000	18,000	800	3/4	3/8	3/4	3/8	3/4	3/8	NA	A4TXV01
	E(U,C,M,H)1P29A	A80+2V070A12	16.0	12.5	24,000	18,000	800	3/4	3/8	3/4	3/8	3/4	3/8	NA	A4TXV01
	E(U,C,M,H)1P36A	A80+2V070A12	15.5	12.5	24,000	18,000	800	3/4	3/8	3/4	3/8	3/4	3/8	NA	A4TXV01
	E(U,C,M,H)1P36B	A80+2V090B16	15.5	12.5	24,000	18,000	800	3/4	3/8	3/4	3/8	3/4	3/8	NA	A4TXV01
	E(U,M,H)1P29B	A80+2V090B16	16.0	12.5	24,000	18,000	800	3/4	3/8	3/4	3/8	3/4	3/8	NA	A4TXV01
	E(U,C,M,H)1P29A	A80UH1E045A12*	15.5	12.0	24,000	18,000	800	3/4	3/8	3/4	3/8	3/4	3/8	NA	A4TXV01
	E(U,C,M,H)1P36A	A80UH1E045A12*	15.0	12.5	24,000	18,000	800	3/4	3/8	3/4	3/8	3/4	3/8	NA	A4TXV01
	E(U,C,M,H)1P29B	A80UH1E070B12*	15.0	12.0	24,000	18,000	800	3/4	3/8	3/4	3/8	3/4	3/8	NA	A4TXV01
	E(U,C,M,H)1P36B	A80UH1E070B12*	14.5	12.0	24,000	18,000	800	3/4	3/8	3/4	3/8	3/4	3/8	NA	A4TXV01
	E(U,C,M,H)1P29A	A80#2V070A12	16.0	12.5	24,000	18,000	800	3/4	3/8	3/4	3/8	3/4	3/8	NA	A4TXV01
	E(U,C,M,H)1P36A	A80#2V070A12	15.0	12.5	24,000	18,000	800	3/4	3/8	3/4	3/8	3/4	3/8	NA	A4TXV01
	E(U,C,M,H)1P36B	A80#2V090B12	15.5	12.5	24,000	18,000	800	3/4	3/8	3/4	3/8	3/4	3/8	NA	A4TXV01
	E(U,M,H)1P29B	A80#2V090B12	16.0	12.5	24,000	18,000	800	3/4	3/8	3/4	3/8	3/4	3/8	NA	A4TXV01
	E(U,C,M,H)1P36B	A80#2V090B16	15.5	12.5	24,000	18,000	800	3/4	3/8	3/4	3/8	3/4	3/8	NA	A4TXV01
	E(U,M,H)1P29B	A80#2V090B16	16.0	12.5	24,000	18,000	800	3/4	3/8	3/4	3/8	3/4	3/8	NA	A4TXV01
	E(U,C,M,H)1P29B	A95DF1E045B12S	15.0	12.0	24,000	18,000	800	3/4	3/8	3/4	3/8	3/4	3/8	NA	A4TXV01
	E(U,C,M,H)1P36B	A95DF1E045B12S	15.0	12.0	24,000	18,000	800	3/4	3/8	3/4	3/8	3/4	3/8	NA	A4TXV01
	E(U,C,M,H)1P29B	A95DF2V045B12S	16.0	12.5	24,000	18,000	800	3/4	3/8	3/4	3/8	3/4	3/8	NA	A4TXV01
	E(U,C,M,H)1P36B	A95DF2V045B12S	15.5	12.5	24,000	18,000	800	3/4	3/8	3/4	3/8	3/4	3/8	NA	A4TXV01
	E(U,C,M,H)1P29B	A95UH1E045B12S	15.0	12.0	24,000	18,000	800	3/4	3/8	3/4	3/8	3/4	3/8	NA	A4TXV01
	E(U,C,M,H)1P36B	A95UH1E045B12S	15.0	12.0	24,000	18,000	800	3/4	3/8	3/4	3/8	3/4	3/8	NA	A4TXV01

+ DF or DS  
# UH or US  
@ V or S

Note:

<sup>1</sup> Certified in accordance with Unitary Air Conditioner Certification Program, which is based on AHRI Standard 210/240

<sup>2</sup> Required to achieve AHRI rating. If NA (Not Applicable) is in the piston column, then TXV is required

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Outdoor Model	Indoor Model		SEER	EER	AHRI Rated Capacity <sup>1</sup> BTUH	Sensible Rated Capacity	CFM	Refrigerant Connection				Refrigerant Line Size		Indoor Expansion Device	
	Evaporator Coil or Air Handler <sup>3</sup>	Variable Speed Furnace						Outdoor		Indoor		Suction	Liquid	Piston <sup>2</sup>	TXV
								Suction	Liquid	Suction	Liquid				
4SCU16LS 124P-1	E(U,C,M,H)1P29B	A95UH1E070B12S	14.5	11.5	24,000	18,000	800	3/4	3/8	3/4	3/8	3/4	3/8	NA	A4TXV01
	E(U,C,M,H)1P36B	A95UH1E070B12S	14.5	12.0	24,000	18,000	800	3/4	3/8	3/4	3/8	3/4	3/8	NA	A4TXV01
	E(U,C,M,H)1P29B	A95UH2V045B12S	16.0	12.5	24,000	18,000	800	3/4	3/8	3/4	3/8	3/4	3/8	NA	A4TXV01
	E(U,C,M,H)1P36B	A95UH2V045B12S	15.5	12.5	24,000	18,000	800	3/4	3/8	3/4	3/8	3/4	3/8	NA	A4TXV01
	E(U,C,M,H)1P29B	A95UH2V070B12S	16.0	12.5	24,000	18,000	800	3/4	3/8	3/4	3/8	3/4	3/8	NA	A4TXV01
	E(U,C,M,H)1P36B	A95UH2V070B12S	15.5	12.5	24,000	18,000	800	3/4	3/8	3/4	3/8	3/4	3/8	NA	A4TXV01
	E(U,C,M,H)1P36C	A95UH2V090C12S	15.5	12.5	24,000	18,000	800	3/4	3/8	3/4	3/8	3/4	3/8	NA	A4TXV01
	E(U,C,M,H)1P36B	A96DFMV070B12 A97DSMV070B12	15.5	12.5	24,000	18,000	800	3/4	3/8	3/4	3/8	3/4	3/8	NA	A4TXV01
	E(U,M,H)1P29B	A96DFMV070B12 A97DSMV070B12	16.0	12.0	24,000	18,000	800	3/4	3/8	3/4	3/8	3/4	3/8	NA	A4TXV01
	E(U,C,M,H)1P36B	A96UHMV070B12 A97USMV070B12	15.5	12.5	24,000	18,000	800	3/4	3/8	3/4	3/8	3/4	3/8	NA	A4TXV01
	E(U,M,H)1P29B	A96UHMV070B12 A97USMV070B12	16.0	12.5	24,000	18,000	800	3/4	3/8	3/4	3/8	3/4	3/8	NA	A4TXV01
	E(U,C,M,H)1P36C	A96UHMV090C12 A97USMV090C12	15.5	12.5	24,000	18,000	800	3/4	3/8	3/4	3/8	3/4	3/8	NA	A4TXV01
	E(U,C,M,H)1P36B	LBR,LUF*****V14	15.5	12.5	24,000	18,000	800	3/4	3/8	3/4	3/8	3/4	3/8	NA	A4TXV01
	E(U,C,M,H)1P36B	LHF,LHR,LUF*****V12	15.5	12.5	24,000	18,000	800	3/4	3/8	3/4	3/8	3/4	3/8	NA	A4TXV01
	E(U,C,M,H)1P36B	LUF,LBF,LBR*****V14	15.5	12.5	24,000	18,000	800	3/4	3/8	3/4	3/8	3/4	3/8	NA	A4TXV01
4SCU16LS 136P-1	BCS2M36@00NA1P		16.0	12.0	34,400	25,800	1200	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P36B	EFV12BC	15.5	11.5	34,400	25,800	1200	7/8	3/8	3/4	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P43B	EFV12BC	16.0	11.5	34,400	26,200	1200	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P36A	A80DF1E045A12	15.5	11.5	34,400	25,800	1200	7/8	3/8	3/4	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P36B	A80DF1E070B12	16.0	11.5	34,400	25,800	1200	7/8	3/8	3/4	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P43B	A80DF1E070B12	15.0	11.0	34,400	25,800	1200	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P36B	A80DF1E090B16	15.0	12.0	34,400	25,800	1200	7/8	3/8	3/4	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P43B	A80DF1E090B16	15.0	11.5	34,400	25,800	1200	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P36B	A80+2V090B16	15.5	12.0	34,400	25,800	1200	7/8	3/8	3/4	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P43B	A80+2V090B16	16.0	11.5	34,400	25,800	1200	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P36C	A80+2V110C20	16.0	12.0	34,400	25,800	1200	7/8	3/8	3/4	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P43C	A80+2V110C20	16.0	12.0	34,400	25,800	1200	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P36A	A80UH1E045A12*	15.5	11.5	34,400	25,800	1200	7/8	3/8	3/4	3/8	7/8	3/8	NA	A4TXV01

+ DF or DS  
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@ V or S

Note:

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### Cooling Performance with Air Handlers and Furnaces 36

Outdoor Model	Indoor Model		SEER	EER	AHRI Rated Capacity <sup>1</sup> BTUH	Sensible Rated Capacity	CFM	Refrigerant Connection				Refrigerant Line Size		Indoor Expansion Device	
	Evaporator Coil or Air Handler <sup>3</sup>	Variable Speed Furnace						Outdoor		Indoor		Suction	Liquid	Piston <sup>2</sup>	TXV
								Suction	Liquid	Suction	Liquid				
4SCU16LS 136P-1	E(U,C,M,H)1P36B	A80UH1E070B12*	15.0	11.5	34,400	25,800	1200	7/8	3/8	3/4	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P43B	A80UH1E070B12*	15.5	11.5	34,400	25,800	1200	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P36B	A80UH1E090B16*	15.0	12.0	34,400	25,800	1200	7/8	3/8	3/4	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P43B	A80UH1E090B16*	15.0	11.5	34,400	25,800	1200	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P36A	A80#2V070A12	15.5	11.5	34,400	25,800	1200	7/8	3/8	3/4	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P36B	A80#2V090B12	16.0	12.0	34,400	25,800	1200	7/8	3/8	3/4	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P43B	A80#2V090B12	15.5	11.5	34,400	25,800	1200	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P36B	A80#2V090B16	15.5	11.5	34,400	25,800	1200	7/8	3/8	3/4	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P43B	A80#2V090B16	16.0	11.5	34,400	25,800	1200	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P36C	A80#2V090C20	16.0	12.0	34,400	25,800	1200	7/8	3/8	3/4	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P43C	A80#2V090C20	15.5	11.0	34,400	25,800	1200	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P43C	A80#2V110C20	16.0	12.0	34,400	25,800	1200	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P36B	A95DF1E070B16S	15.5	12.0	34,400	25,800	1200	7/8	3/8	3/4	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P43B	A95DF1E070B16S	16.0	11.5	34,400	25,800	1200	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P36C	A95DF1E090C16S	15.0	12.0	34,400	25,800	1200	7/8	3/8	3/4	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P43C	A95DF1E090C16S	15.5	11.5	34,400	25,800	1200	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P36B	A95DF2V045B12S	15.5	11.5	34,400	25,800	1200	7/8	3/8	3/4	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P43B	A95DF2V045B12S	16.0	11.5	34,400	25,800	1200	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P36B	A95DF2V070B16S	15.0	11.5	34,400	25,800	1200	7/8	3/8	3/4	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P43B	A95DF2V070B16S	16.0	11.5	34,400	25,800	1200	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P36C	A95DF2V090C20S	15.5	11.5	34,400	25,800	1200	7/8	3/8	3/4	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P43C	A95DF2V090C20S	16.0	11.5	34,400	25,800	1200	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P36C	A95DF2V110C20S	15.5	11.5	34,400	25,800	1200	7/8	3/8	3/4	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P43C	A95DF2V110C20S	16.0	11.5	34,400	25,800	1200	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P36B	A95UH1E070B12S	15.5	11.5	34,400	25,800	1200	7/8	3/8	3/4	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P43B	A95UH1E070B12S	15.5	11.0	34,400	25,800	1200	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P36C	A95UH1E090C16S	15.0	12.0	34,400	25,800	1200	7/8	3/8	3/4	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P43C	A95UH1E090C16S	15.5	11.5	34,400	25,800	1200	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV01

+ DF or DS  
# UH or US  
© V or S

**Note:**

<sup>1</sup> Certified in accordance with Unitary Air Conditioner Certification Program, which is based on AHRI Standard 210/240

<sup>2</sup> Required to achieve AHRI rating. If NA (Not Applicable) is in the piston column, then TXV is required

<sup>3</sup> A blower time delay relay is required to achieve AHRI rating. This feature is standard on all Allied Air Enterprises Furnace and AH products

### Cooling Performance with Air Handlers and Furnaces 36

Outdoor Model	Indoor Model		SEER	EER	AHRI Rated Capacity <sup>1</sup> BTUH	Sensible Rated Capacity	CFM	Refrigerant Connection				Refrigerant Line Size		Indoor Expansion Device	
	Evaporator Coil or Air Handler <sup>3</sup>	Variable Speed Furnace						Outdoor		Indoor		Suction	Liquid	Piston <sup>2</sup>	TXV
								Suction	Liquid	Suction	Liquid				
4SCU16LS 136P-1	E(U,C,M,H)1P36B	A95UH2V045B12S	15.5	11.5	34,400	25,800	1200	7/8	3/8	3/4	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P43B	A95UH2V045B12S	16.0	11.5	34,400	25,800	1200	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P36B	A95UH2V070B12S	15.5	11.5	34,400	25,800	1200	7/8	3/8	3/4	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P43B	A95UH2V070B12S	16.0	11.5	34,400	25,800	1200	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P36C	A95UH2V090C12S	15.5	11.5	34,400	25,800	1200	7/8	3/8	3/4	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P43C	A95UH2V090C12S	16.0	11.5	34,400	25,800	1200	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P36C	A95UH2V090C16S	15.5	11.5	34,400	25,800	1200	7/8	3/8	3/4	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P43C	A95UH2V090C16S	16.0	11.5	34,400	25,800	1200	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P36C	A95UH2V090C20S	15.5	11.5	34,400	25,800	1200	7/8	3/8	3/4	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P43C	A95UH2V090C20S	16.0	11.5	34,400	25,800	1200	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P36C	A95UH2V110C16S	15.5	11.5	34,400	25,800	1200	7/8	3/8	3/4	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P43C	A95UH2V110C16S	16.0	11.5	34,400	25,800	1200	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P36B	A96DFMV070B12 A97DSMV070B12	15.5	11.5	34,400	25,800	1200	7/8	3/8	3/4	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P43B	A96DFMV070B12 A97DSMV070B12	16.0	11.5	34,400	25,800	1200	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P36C	A96DFMV090C16 A97DSMV090C16	16.0	12.0	34,400	25,800	1200	7/8	3/8	3/4	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P43C	A96DFMV090C16 A97DSMV090C16	16.0	11.5	34,400	25,800	1200	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P36C	A96DFMV090C20 A97DSMV090C20	16.0	12.0	34,400	25,800	1200	7/8	3/8	3/4	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P43C	A96DFMV090C20 A97DSMV090C20	16.0	11.5	34,400	25,800	1200	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P36C	A96DFMV110C20 A97DSMV110C20	16.0	12.0	34,400	25,800	1200	7/8	3/8	3/4	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P43C	A96DFMV110C20 A97DSMV110C20	16.0	11.5	34,400	25,800	1200	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV01
E(U,C,M,H)1P36B	A96UHMV070B12 A97USMV070B12	16.0	11.5	34,400	25,800	1200	7/8	3/8	3/4	3/8	7/8	3/8	NA	A4TXV01	
E(U,C,M,H)1P43B	A96UHMV070B12 A97USMV070B12	16.0	11.5	34,400	25,800	1200	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV01	
E(U,C,M,H)1P36C	A96UHMV090C12 A97USMV090C12	16.0	12.0	34,400	25,800	1200	7/8	3/8	3/4	3/8	7/8	3/8	NA	A4TXV01	
E(U,C,M,H)1P43C	A96UHMV090C12 A97USMV090C12	16.0	11.5	34,400	25,800	1200	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV01	

+ DF or DS  
# UH or US  
@ V or S

Note:

<sup>1</sup> Certified in accordance with Unitary Air Conditioner Certification Program, which is based on AHRI Standard 210/240

<sup>2</sup> Required to achieve AHRI rating. If NA (Not Applicable) is in the piston column, then TXV is required

<sup>3</sup> A blower time delay relay is required to achieve AHRI rating. This feature is standard on all Allied Air Enterprises Furnace and AH products

### Cooling Performance with Air Handlers and Furnaces 36, 48

Outdoor Model	Indoor Model		SEER	EER	AHRI Rated Capacity <sup>1</sup> BTUH	Sensible Rated Capacity	CFM	Refrigerant Connection				Refrigerant Line Size		Indoor Expansion Device	
	Evaporator Coil or Air Handler <sup>3</sup>	Variable Speed Furnace						Outdoor		Indoor		Suction	Liquid	Piston <sup>2</sup>	TXV
								Suction	Liquid	Suction	Liquid				
4SCU16LS 136P-1	E(U,C,M,H)1P36C	A96UHMV090C16 A97USMV090C16	16.0	12.0	34,400	25,800	1200	7/8	3/8	3/4	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P43C	A96UHMV090C16 A97USMV090C16	16.0	11.5	34,400	25,800	1200	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P36C	A96UHMV110C20 A97USMV110C20	16.0	12.0	34,400	25,800	1200	7/8	3/8	3/4	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P43C	A96UHMV110C20 A97USMV110C20	16.0	11.5	34,400	25,800	1200	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P36B	LBR,LUF*****V14	15.0	11.0	34,400	25,800	1200	7/8	3/8	3/4	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P43B	LBR,LUF*****V14	15.0	11.5	34,400	26,200	1200	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P36B	LHF,LHR,LUF*****V12	15.0	11.0	34,400	25,800	1200	7/8	3/8	3/4	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P43B	LHF,LHR,LUF*****V12	15.0	11.5	34,400	26,200	1200	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P36B	LUF,LBF,LBR*****V14	15.0	11.5	35,000	26,200	1200	7/8	3/8	3/4	3/8	7/8	3/8	NA	A4TXV01
E(U,C,M,H)1P43B	LUF,LBF,LBR*****V14	15.0	11.0	34,400	26,200	1200	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV01	
4SCU16LS 148P-1	BCS2M48@00NA1P		15.0	12.0	46,000	34,900	1600	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV02
	E(U,C,H)1P62C	EFV16CC	14.5	11.0	46,500	34,900	1600	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV02
	E(U,C)1P62D	EFV20DC	14.5	11.0	46,500	34,900	1600	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV02
	E(U,C,H)1P62C	A80DF1E110C20	14.5	11.5	46,500	34,900	1600	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV02
	E(U,C,H)1P62C	A80+2V110C20	15.5	11.5	46,500	34,900	1600	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV02
	E(U,C,H)1P62C	A80UH1E090C20*	14.5	11.0	46,500	34,900	1600	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV02
	E(U,C,H)1P62C	A80UH1E110C20*	14.5	11.0	46,500	34,900	1600	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV02
	E(U,C,H)1P62C	A80#2V090C20	15.0	11.0	46,500	34,900	1600	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV02
	E(U,C,H)1P62C	A80#2V110C20	15.0	11.0	46,500	34,900	1600	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV02
	E(U,C)1P62D	A80#2V135D20	15.0	11.0	46,500	34,900	1600	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV02
	E(U,C,H)1P62C	A95DF2V090C20S	15.0	11.0	46,500	34,900	1600	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV02
	E(U,C,H)1P62C	A95DF2V110C20S	15.0	11.0	46,500	34,900	1600	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV02
	E(U,C,H)1P62C	A95UH1E110C20S	14.5	11.0	46,500	34,900	1600	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV02
E(U,C,H)1P62C	A95UH2V090C16S	15.0	11.0	46,500	34,900	1600	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV02	

+ DF or DS  
# UH or US  
@ V or S

**Note:**

<sup>1</sup> Certified in accordance with Unitary Air Conditioner Certification Program, which is based on AHRI Standard 210/240

<sup>2</sup> Required to achieve AHRI rating. If NA (Not Applicable) is in the piston column, then TXV is required

<sup>3</sup> A blower time delay relay is required to achieve AHRI rating. This feature is standard on all Allied Air Enterprises Furnace and AH products



Cooling Performance with Air Handlers and Furnaces 48, 60

Outdoor Model	Indoor Model		SEER	EER	AHRI Rated Capacity <sup>1</sup> BTUH	Sensible Rated Capacity	CFM	Refrigerant Connection				Refrigerant Line Size		Indoor Expansion Device	
	Evaporator Coil or Air Handler <sup>3</sup>	Variable Speed Furnace						Outdoor		Indoor		Suction	Liquid	Piston <sup>2</sup>	TXV
								Suction	Liquid	Suction	Liquid				
4SCU16LS 148P-1	E(U,C,H)1P62C	A96DFMV110C20 A97DSMV110C20	15.0	11.0	46,500	34,900	1600	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV02
	E(U,C,H)1P62C	A96UHMV090C16 A97USMV090C16	15.0	11.0	46,500	34,900	1600	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV02
	E(U,C,H)1P62C	A96UHMV090C20 A97USMV090C20	15.5	11.0	46,500	34,900	1600	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV02
	E(U,C,H)1P62C	A96UHMV110C20 A97USMV110C20	15.5	11.0	46,500	34,900	1600	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV02
	E(U,C)1P62D	A96UHMV135D20 A97USMV135D20	15.0	11.0	46,000	34,900	1600	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV02
	E(U,C)1P62C	LUF****V20	14.5	11.0	46,500	34,900	1600	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV02
4SCU16LS 160P-1	BCS2M60@00NA1P		15.0	11.0	57,000	42,800	1800	7/8	3/8	7/8	3/8	1 1/8	3/8	NA	A4TXV02
	E(U,C)1P60D	EFV20DC	14.6	11.0	57,000	42,800	1800	7/8	3/8	7/8	3/8	1 1/8	3/8	NA	A4TXV02
	E(U,C)1P62D	EFV20DC	15.0	11.0	57,000	42,800	1800	7/8	3/8	7/8	3/8	1 1/8	3/8	NA	A4TXV02
	E(U,C,H)1P62C	A80DF1E110C20	15.0	11.5	57,000	42,800	1800	7/8	3/8	7/8	3/8	1 1/8	3/8	NA	A4TXV02
	E(U,C,H)1P62C	A80+2V110C20	15.0	11.0	57,000	42,800	1800	7/8	3/8	7/8	3/8	1 1/8	3/8	NA	A4TXV02
	E(U,C,H)1P62C	A80UH1E090C20*	15.0	11.0	57,000	42,800	1800	7/8	3/8	7/8	3/8	1 1/8	3/8	NA	A4TXV02
	E(U,C,H)1P62C	A80UH1E110C20*	15.0	11.0	57,000	42,800	1800	7/8	3/8	7/8	3/8	1 1/8	3/8	NA	A4TXV02
	E(U,C,H)1P62C	A80#2V090C20	14.5	11.0	57,000	42,800	1800	7/8	3/8	7/8	3/8	1 1/8	3/8	NA	A4TXV02
	E(U,C,H)1P62C	A80#2V110C20	14.5	11.0	57,000	42,800	1800	7/8	3/8	7/8	3/8	1 1/8	3/8	NA	A4TXV02
	E(U,C)1P62D	A80#2V135D20	14.5	11.0	57,000	42,800	1800	7/8	3/8	7/8	3/8	1 1/8	3/8	NA	A4TXV02
	E(U,C,H)1P62C	A95DF1E110C20S	14.5	10.5	57,000	42,800	1800	7/8	3/8	7/8	3/8	1 1/8	3/8	NA	A4TXV02
	E(U,C,H)1P62C	A95DF2V090C20S	14.5	11.0	57,000	42,800	1800	7/8	3/8	7/8	3/8	1 1/8	3/8	NA	A4TXV02
	E(U,C,H)1P62C	A95DF2V110C20S	15.0	11.0	57,000	42,800	1800	7/8	3/8	7/8	3/8	1 1/8	3/8	NA	A4TXV02
	E(U,C,H)1P62C	A95UH1E110C20S	14.5	10.5	57,000	42,800	1800	7/8	3/8	7/8	3/8	1 1/8	3/8	NA	A4TXV02
	E(U,C,H)1P62C	A95UH2V090C20S	15.0	11.0	57,000	42,800	1800	7/8	3/8	7/8	3/8	1 1/8	3/8	NA	A4TXV02
	E(U,C,H)1P62C	A95UH2V110C20S	15.0	11.0	57,000	42,800	1800	7/8	3/8	7/8	3/8	1 1/8	3/8	NA	A4TXV02
	E(U,C,H)1P62D	A95UH2V135D20S	15.0	11.0	57,000	42,800	1800	7/8	3/8	7/8	3/8	1 1/8	3/8	NA	A4TXV02
	E(U,C,H)1P62C	A96DFMV090C20 A97DSMV090C20	14.5	11.0	57,000	42,800	1800	7/8	3/8	7/8	3/8	1 1/8	3/8	NA	A4TXV02
	E(U,C,H)1P62C	A96DFMV110C20 A97DSMV110C20	14.5	11.0	57,000	42,800	1800	7/8	3/8	7/8	3/8	1 1/8	3/8	NA	A4TXV02
	E(U,C,H)1P62C	A96UHMV090C20 A97USMV090C20	15.0	11.0	57,000	42,800	1800	7/8	3/8	7/8	3/8	1 1/8	3/8	NA	A4TXV02
E(U,C,H)1P62C	A96UHMV110C20 A97USMV110C20	15.0	11.0	57,000	42,800	1800	7/8	3/8	7/8	3/8	1 1/8	3/8	NA	A4TXV02	
E(U,C)1P62D	A96UHMV135D20 A97USMV135D20	15.0	11.0	57,000	42,800	1800	7/8	3/8	7/8	3/8	1 1/8	3/8	NA	A4TXV02	

+ DF or DS  
# UH or US  
@ V or S

**Note:**

<sup>1</sup> Certified in accordance with Unitary Air Conditioner Certification Program, which is based on AHRI Standard 210/240

<sup>2</sup> Required to achieve AHRI rating. If NA (Not Applicable) is in the piston column, then TXV is required

<sup>3</sup> A blower time delay relay is required to achieve AHRI rating. This feature is standard on all Allied Air Enterprises Furnace and AH products

### Cooling Performance Extended Ratings

Outdoor Model	Indoor Model	Indoor Temp DB/WB °F	Outdoor Temp - DB°F														
			65			82			95			105			115		
			Btuh	S/T	kW	Btuh	S/T	kW	Btuh	S/T	kW	Btuh	S/T	kW	Btuh	S/T	kW
4SCU16LS 124P-1	E(U,C,M,H)1P36B/EFV08B	85/72	27,000	.67	1.43	26,500	.68	1.70	25,000	.72	1.93	23,600	.73	2.38	22,200	.76	2.59
		80/67	26,000	.70	1.40	25,500	.71	1.67	24,000	.75	1.90	22,600	.76	2.35	21,200	.79	2.56
		75/63	25,000	.73	1.37	24,500	.74	1.64	23,000	.78	1.87	21,600	.79	2.32	20,200	.82	2.53
4SCU16LS 136P-1	E(U,C,M,H)1P43B/EFV12B	85/72	40,200	.66	1.76	38,200	.68	2.31	36,400	.69	2.98	35,000	.71	3.28	33,000	.74	3.69
		80/67	39,200	.69	1.73	37,200	.71	2.28	35,400	.72	2.95	34,000	.74	3.25	32,000	.77	3.66
		75/63	38,200	.72	1.70	36,200	.74	2.25	34,400	.75	2.92	33,000	.77	3.22	31,000	.80	3.63
4SCU16LS 148P-1	E(U,C)1P62C/EFV16C	85/72	55,400	.68	2.93	52,000	.71	3.43	49,500	.72	3.89	48,000	.73	4.23	45,800	.75	5.53
		80/67	53,400	.71	2.90	50,000	.74	3.40	47,500	.75	3.86	46,000	.76	4.20	43,800	.78	5.50
		75/63	51,400	.74	2.87	48,000	.77	3.37	45,500	.78	3.83	44,000	.79	4.17	41,800	.81	5.47
4SCU16LS 160P-1	E(U,C)1P62D/EFV20D	85/72	61,000	.64	3.82	60,000	.65	4.49	59,000	.68	5.11	55,000	.69	5.66	52,000	.72	6.30
		80/67	59,000	.67	3.79	58,000	.68	4.46	57,000	.71	5.08	53,000	.72	5.63	50,000	.75	6.27
		75/63	57,000	.70	3.76	56,000	.71	4.43	55,000	.74	5.05	51,000	.75	5.60	48,000	.78	6.24

\* All ratings are with required indoor variable speed matches.  
 Extended data shown is actual for models listed and typical for all AHRI matches.

## Accessories

Kit Number	Description	Used with
45F08	Compressor Low Ambient Cut-off	All 4SCU16LS's
93G35	Freezestats (3/8")	All 4SCU16LS's
39H29	Freezestats (1/2")	All 4SCU16LS's
50A93	Freezestats (5/8")	All 4SCU16LS's
47J27	Time Off Control	All 4SCU16LS's
67K90	Crank Case Heater	All 4SCU16LS's
63W22	Hard Start Kit 2 - 3 ton	4SCU16LS 124
63W23		4SCU16LS 136
10J42	Hard Start Kit 4 - 5 ton	4SCU16LS 148
63W24		4SCU16LS 160
34M72	Low Ambient	All 4SCU16LS's
85W66	Relay Kit- Constant Torque	All Constant Torque Furnaces

All specifications and illustrations  
subject to change without notice  
and without incurring obligations.

