

# 4SCU20LX

## PRODUCT SPECIFICATIONS

UP TO 20 SEER  
VARIABLE CAPACITY AIR CONDITIONER

FORM NO. 4SCU20LX-100 (09/2015)



**COMFORT SYNC**

COMMUNICATING THERMOSTAT ENABLED

### INSTALLED BY THE BEST

- Specialized training is required for dealers offering the 20LX
- Installer training available through authorized distributors

### COMPRESSOR

- Inverter-driven Scroll Compressor for true variable capacity operation
- R410A refrigerant
- Heavy-duty compressor sound blanket for quiet operation
- Internally protected against high temperature motor overload conditions

### CABINET

- Full metal louvered panels remove easily for coil cleaning and service
- Specialized corner-mounted controls for easy service
- Baked polyester paint finished over galvanized steel for maximum durability
- Removable PVC coated wire fan discharge grill
- 45-degree offset gauge ports for easy service
- Removable service panel for internal access

### COILS

- Enhanced tube-and-fin coil design featuring MHT™ Technology
- Raised coil prevents debris from impeding airflow

### DESIGN

- Designed to perform in temperatures up to 125 degrees F

### COMPONENTS

- Service valves positioned for quick installation and service
- Variable speed condenser fan motor
- Swept wing fan blade for quiet operation
- Factory installed crankcase heater
- Charged for 15 feet of line set
- Requires Comfort Sync™ thermostat and a Comfort Sync™ enabled matching indoor unit

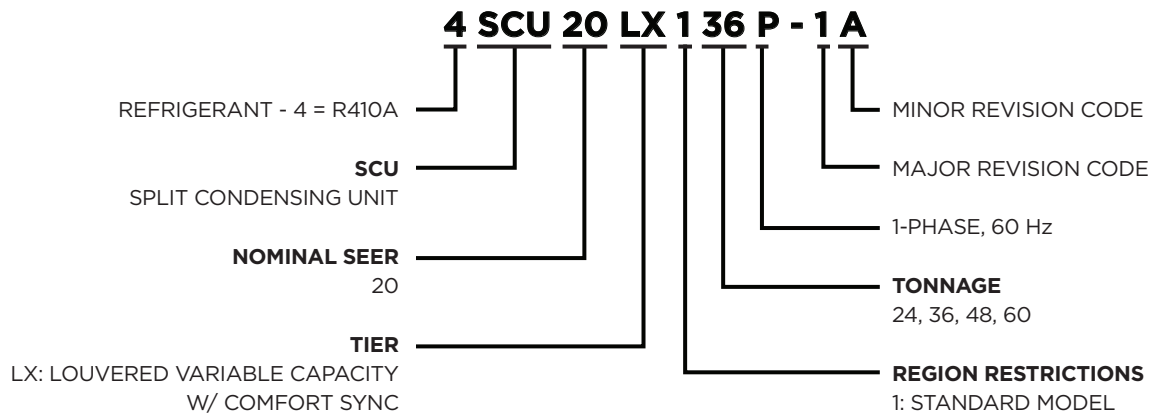
### WARRANTY

- 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.*



**MODEL NUMBER GUIDE**



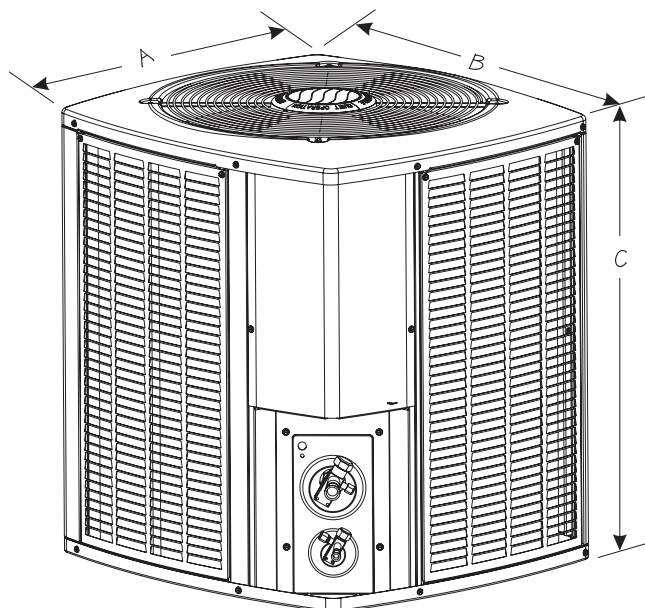
**ELECTRICAL AND PHYSICAL DATA**

Model	Voltage/Hz/ Phase	Voltage Range	Min. Circuit Amp.	Max. Over Current Device (amps)	Compressor		Outdoor Fan Motor			Refrig. Charge (oz.)	Weight (lbs.)
					Rated Load (amps)	Locked Rotor (amps)	Rated Load (amps)	Rated HP	Nom. RPM		
4SCU20LX124P-1	208-230/60/1	197-253	19.1	30	13.0	13	2.8	1/3	VAR. SPD.	113	243
4SCU20LX136P-1	208-230/60/1	197-253	20.6	30	14.2	13	2.8	1/3	VAR. SPD.	134	245
4SCU20LX148P-1	208-230/60/1	197-253	29.1	50	21.0	20	2.8	1/3	VAR. SPD.	154	287
4SCU20LX160P-1	208-230/60/1	197-253	29.3	50	21.2	20	2.8	1/3	VAR. SPD.	207	321

Note:  
Weights listed are unit weights with packaging

**DIMENSIONS (IN.) AND SOUND RATINGS**

Model No.	A	B	C	Sound Rating dBA
4SCU20LX124P-1	37.75	35.75	37.5	65
4SCU20LX136P-1	37.75	35.75	37.5	67
4SCU20LX148P-1	37.75	35.75	43.75	68
4SCU20LX160P-1	37.75	35.75	43.75	69



**COOLING PERFORMANCE WITH AIR HANDLERS AND FURNACES**

Outdoor Model	Indoor Model	Furnace	SEER	EER	AHRI Rated Capacity <sup>1</sup> BTUH	Sensible Rated Capacity	CFM High	CFM Med	CFM Low	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				
4SCU20LX124P-1	BCE4M30S		20.00	14.00	24000	18000	800	500	375	3/4	3/8	3/4	3/8	3/4	3/8	NA	A4TXV01
	BCE4M36S		20.00	14.50	24000	18000	800	500	375	3/4	3/8	3/4	3/8	3/4	3/8		
	E*1P36A+TDR+TXV	A80US2V070A12	20.00	14.50	24000	18000	800	500	375	3/4	3/8	3/4	3/8	3/4	3/8		
	E*1P29A+TDR+TXV	A80US2V070A12	20.00	14.00	24000	18000	800	500	375	3/4	3/8	3/4	3/8	3/4	3/8		
	E*1P29B+TDR+TXV	A80US2V090B12	20.00	14.50	24000	18000	800	500	375	3/4	3/8	3/4	3/8	3/4	3/8		
	E*1P36A+TDR+TXV	A80US2V090B12	20.00	14.50	24000	18000	800	500	375	3/4	3/8	3/4	3/8	3/4	3/8		
	E*1P36B+TDR+TXV	A80US2V090B12	20.00	14.50	24000	18000	800	500	375	3/4	3/8	3/4	3/8	3/4	3/8		
	E*1P29A+TDR+TXV	A80US2V090B12	20.00	14.00	24000	18000	800	500	375	3/4	3/8	3/4	3/8	3/4	3/8		
	E*1P36A+TDR+TXV	A96US2V045B12	20.00	14.50	24000	18000	800	500	375	3/4	3/8	3/4	3/8	3/4	3/8		
	E*1P36B+TDR+TXV	A96US2V045B12	20.00	14.50	24000	18000	800	500	375	3/4	3/8	3/4	3/8	3/4	3/8		
	E*1P29A+TDR+TXV	A96US2V045B12	20.00	14.00	24000	18000	800	500	375	3/4	3/8	3/4	3/8	3/4	3/8		
	E*1P29B+TDR+TXV	A96US2V045B12	20.00	14.00	24000	18000	800	500	375	3/4	3/8	3/4	3/8	3/4	3/8		
	E*1P29B+TDR+TXV	A96US2V070B12	20.00	14.50	24000	18000	800	500	375	3/4	3/8	3/4	3/8	3/4	3/8		
	E*1P36A+TDR+TXV	A96US2V070B12	20.00	14.50	24000	18000	800	500	375	3/4	3/8	3/4	3/8	3/4	3/8		
	E*1P36B+TDR+TXV	A96US2V070B12	20.00	14.50	24000	18000	800	500	375	3/4	3/8	3/4	3/8	3/4	3/8		
	E*1P29A+TDR+TXV	A96US2V070B12	20.00	14.00	24000	18000	800	500	375	3/4	3/8	3/4	3/8	3/4	3/8		
	E*1P29B+TDR+TXV	A97USMV070B12	20.00	14.50	24000	18000	800	500	375	3/4	3/8	3/4	3/8	3/4	3/8		
	E*1P36A+TDR+TXV	A97USMV070B12	20.00	14.50	24000	18000	800	500	375	3/4	3/8	3/4	3/8	3/4	3/8		
	E*1P36B+TDR+TXV	A97USMV070B12	20.00	14.50	24000	18000	800	500	375	3/4	3/8	3/4	3/8	3/4	3/8		
	E*1P29A+TDR+TXV	A97USMV070B12	20.00	14.00	24000	18000	800	500	375	3/4	3/8	3/4	3/8	3/4	3/8		
4SCU20LX136P-1	E*1P43B+TDR+TXV	A80US2V090B12	20.00	14.00	35400	25500	1250	720	550	7/8	3/8	3/4	3/8	7/8	3/8	NA	A4TXV02
	E*1P36B+TDR+TXV	A80US2V090B12	20.00	13.50	35200	25500	1250	720	550	7/8	3/8	3/4	3/8	7/8	3/8		
	E*1P48B+TDR+TXV	A80US2V090B12	20.00	13.50	34800	25500	1250	720	550	7/8	3/8	3/4	3/8	7/8	3/8		
	E*1P43B+TDR+TXV	A80US2V090B16	20.00	14.00	35400	25500	1250	720	550	7/8	3/8	3/4	3/8	7/8	3/8		
	E*1P36B+TDR+TXV	A80US2V090B16	20.00	13.50	35000	25500	1250	720	550	7/8	3/8	3/4	3/8	7/8	3/8		
	E*1P48B+TDR+TXV	A80US2V090B16	20.00	13.50	34800	25500	1250	720	550	7/8	3/8	3/4	3/8	7/8	3/8		
	E*1P36B+TDR+TXV	A96US2V045B12	20.00	13.00	34800	25500	1250	720	550	7/8	3/8	3/4	3/8	7/8	3/8		
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	E*1P36B+TDR+TXV	A96US2V070B12	20.00	13.00	35000	25500	1250	720	550	7/8	3/8	7/8	3/8	7/8	3/8		
	E*1P43B+TDR+TXV	A96US2V070B12	20.00	13.00	35200	25500	1250	720	550	7/8	3/8	7/8	3/8	7/8	3/8		
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	E*1P43C+TDR+TXV	A96US2V090C12	20.00	13.50	35400	25500	1250	720	550	7/8	3/8	7/8	3/8	7/8	3/8		
	E*1P48C+TDR+TXV	A96US2V090C12	20.00	13.50	34800	25500	1250	720	550	7/8	3/8	7/8	3/8	7/8	3/8		
	E*1P50C+TDR+TXV	A96US2V090C12	20.00	13.50	35200	25500	1250	720	550	7/8	3/8	7/8	3/8	7/8	3/8		
	E*1P43C+TDR+TXV	A96US2V090C16	20.00	14.00	35400	25500	1250	720	550	7/8	3/8	7/8	3/8	7/8	3/8		
	E*1P48C+TDR+TXV	A96US2V090C16	20.00	13.50	34800	25500	1250	720	550	7/8	3/8	7/8	3/8	7/8	3/8		
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	E*1P43C+TDR+TXV	A96US2V110C16	20.00	14.00	35400	25500	1250	720	550	7/8	3/8	7/8	3/8	7/8	3/8		
	E*1P43C+TDR+TXV	A96US2V110C20	20.00	14.00	35400	25500	1250	720	550	7/8	3/8	7/8	3/8	7/8	3/8		
E*1P43C+TDR+TXV	A96US2V110C20	20.00	13.50	34800	25500	1250	720	550	7/8	3/8	7/8	3/8	7/8	3/8			
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Note:

1. Certified in accordance with Unitary Air Conditioner Certification Program, which is based on AHRI Standard 210/240
2. Required to achieve AHRI rating. If NA (Not Applicable) is in the piston column, then TXV is required.
3. A blower time delay relay is standard on all Allied Air Enterprises furnace and AH products.

**COOLING PERFORMANCE WITH AIR HANDLERS AND FURNACES**

Outdoor Model	Indoor Model	Furnace	SEER	EER	AHRI Rated Capacity <sup>1</sup> BTUH	Sensible Rated Capacity	CFM High	CFM Med	CFM Low	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				
<b>4SCU20LX136P-1</b>	BCE4M36S		20.00	13.00	34400	25500	1250	720	550	7/8	3/8	7/8	3/8	7/8	3/8	NA	HA4TXV02
	E*1P48B+TDR+TXV	A97USMV070B12	20.00	13.00	34600	25500	1250	720	550	7/8	3/8	7/8	3/8	7/8	3/8		
	E*1P43C+TDR+TXV	A97USMV090C12	20.00	13.50	35400	25500	1250	720	550	7/8	3/8	7/8	3/8	7/8	3/8		
	E*1P48C+TDR+TXV	A97USMV090C12	20.00	13.50	34800	25500	1250	720	550	7/8	3/8	7/8	3/8	7/8	3/8		
	E*1P50C+TDR+TXV	A97USMV090C12	20.00	13.50	35200	25500	1250	720	550	7/8	3/8	7/8	3/8	7/8	3/8		
	E*1P43C+TDR+TXV	A97USMV090C16	20.00	14.00	35400	25500	1250	720	550	7/8	3/8	7/8	3/8	7/8	3/8		
	E*1P48C+TDR+TXV	A97USMV090C16	20.00	13.50	34800	25500	1250	720	550	7/8	3/8	7/8	3/8	7/8	3/8		
	E*1P50C+TDR+TXV	A97USMV090C16	20.00	13.50	35200	25500	1250	720	550	7/8	3/8	7/8	3/8	7/8	3/8		
	E*1P43C+TDR+TXV	A97USMV110C20	20.00	14.00	35400	25500	1250	720	550	7/8	3/8	7/8	3/8	7/8	3/8		
	E*1P48C+TDR+TXV	A97USMV110C20	20.00	13.50	34800	25500	1250	720	550	7/8	3/8	7/8	3/8	7/8	3/8		
<b>4SCU20LX148P-1</b>	BCE4M48S		20.00	13.00	46000	33500	1580	1050	830	7/8	3/8	7/8	3/8	7/8	3/8	NA	HA4TXV03
	BCE4M60S		20.00	13.00	46500	33500	1580	1050	830	7/8	3/8	7/8	3/8	7/8	3/8		
	E*1P43B+TDR+TXV	A80US2V090B16	19.00	12.00	45500	33500	1580	1050	830	7/8	3/8	7/8	3/8	7/8	3/8		
	E*1P48B+TDR+TXV	A80US2V090B16	19.00	12.00	45000	33500	1580	1050	830	7/8	3/8	7/8	3/8	7/8	3/8		
	E*1P48C+TDR+TXV	A80US2V090B16	19.00	12.00	45000	33500	1580	1050	830	7/8	3/8	7/8	3/8	7/8	3/8		
	E*1P43C+TDR+TXV	A80US2V090C20	19.00	12.50	46000	33500	1580	1050	830	7/8	3/8	7/8	3/8	7/8	3/8		
	E*1P49C+TDR+TXV	A80US2V090C20	19.00	12.50	46500	33500	1580	1050	830	7/8	3/8	7/8	3/8	7/8	3/8		
	E*1P50C+TDR+TXV	A80US2V090C20	19.00	12.50	45500	33500	1580	1050	830	7/8	3/8	7/8	3/8	7/8	3/8		
	E*1P48C+TDR+TXV	A80US2V090C20	18.50	12.00	45000	33500	1580	1050	830	7/8	3/8	7/8	3/8	7/8	3/8		
	E*1P43C+TDR+TXV	A80US2V110C20	19.00	12.50	46000	33500	1580	1050	830	7/8	3/8	7/8	3/8	7/8	3/8		
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	E*1P43C+TDR+TXV	A96US2V090C16	19.00	12.00	45500	33500	1580	1050	830	7/8	3/8	7/8	3/8	7/8	3/8		
	E*1P43C+TDR+TXV	A96US2V110C16	19.50	12.50	46000	33500	1580	1050	830	7/8	3/8	7/8	3/8	7/8	3/8		
	E*1P43C+TDR+TXV	A97USMV090C16	19.50	12.50	46000	33500	1580	1050	830	7/8	3/8	7/8	3/8	7/8	3/8		
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	E*1P50C+TDR+TXV	A97USMV090C20	19.00	12.20	45500	33500	1580	1050	830	7/8	3/8	7/8	3/8	7/8	3/8		
	E*1P48C+TDR+TXV	A97USMV090C20	18.50	12.00	45000	33500	1580	1050	830	7/8	3/8	7/8	3/8	7/8	3/8		
	E*1P43C+TDR+TXV	A97USMV110C20	19.50	12.50	46000	33500	1580	1050	830	7/8	3/8	7/8	3/8	7/8	3/8		
	E*1P48C+TDR+TXV	A97USMV110C20	19.00	12.50	46500	33500	1580	1050	830	7/8	3/8	7/8	3/8	7/8	3/8		
	E*1P49C+TDR+TXV	A97USMV110C20	19.00	12.50	46500	33500	1580	1050	830	7/8	3/8	7/8	3/8	7/8	3/8		
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	Evaporator Coil or Air Handler <sup>3</sup>									Outdoor		Indoor		Suction	Liquid	Piston <sup>2</sup>	TXV
										Suction	Liquid	Suction	Liquid				
<b>4SCU20LX160P-1</b>	BCE4M60S		19.00	13.00	57000	41500	1800	1135	890	7/8	3/8	7/8	3/8	1 1/8	3/8	NA	H4TXV03
	E*1P49C+TDR+TXV	A80US2V090C20	19.00	13.00	57000	41500	1800	1135	890	7/8	3/8	7/8	3/8	1 1/8	3/8		
	E*1P62C+TDR+TXV	A80US2V090C20	19.00	13.00	58000	41500	1800	1135	890	7/8	3/8	7/8	3/8	1 1/8	3/8		
	E*1P62C+TDR+TXV	A80US2V110C20	19.00	13.00	58000	41500	1800	1135	890	7/8	3/8	7/8	3/8	1 1/8	3/8		
	E*1P49C+TDR+TXV	A80US2V110C20	19.00	12.50	57000	41500	1800	1135	890	7/8	3/8	7/8	3/8	1 1/8	3/8		
	E*1P60D+TDR+TXV	A80US2V135D20	19.00	13.00	57000	41500	1800	1135	890	7/8	3/8	7/8	3/8	1 1/8	3/8		
	E*1P62D+TDR+TXV	A80US2V135D20	19.00	13.00	57500	41500	1800	1135	890	7/8	3/8	7/8	3/8	1 1/8	3/8		
	E*1P62C+TDR+TXV	A97USMV090C20	19.00	12.75	58000	41500	1800	1135	890	7/8	3/8	7/8	3/8	1 1/8	3/8		
	E*1P49C+TDR+TXV	A97USMV090C20	19.00	12.50	56500	41500	1800	1135	890	7/8	3/8	7/8	3/8	1 1/8	3/8		
	E*1P62C+TDR+TXV	A97USMV110C20	19.00	13.00	58000	41500	1800	1135	890	7/8	3/8	7/8	3/8	1 1/8	3/8		
	E*1P49C+TDR+TXV	A97USMV110C20	19.00	12.50	56500	41500	1800	1135	890	7/8	3/8	7/8	3/8	1 1/8	3/8		
	E*1P62D+TDR+TXV	A97USMV135D20	19.00	13.00	57500	41500	1800	1135	890	7/8	3/8	7/8	3/8	1 1/8	3/8		
	E*1P60D+TDR+TXV	A97USMV135D20	19.00	12.50	56500	41500	1800	1135	890	7/8	3/8	7/8	3/8	1 1/8	3/8		

Note:

1. Certified in accordance with Unitary Air Conditioner Certification Program, which is based on AHRI Standard 210/240
2. Required to achieve AHRI rating. If NA (Not Applicable) is in the piston column, then TXV is required.
3. A blower time delay relay is standard on all Allied Air Enterprises furnace and AH products.

**ACCESSORIES**

Description	Where Used	Kit Number
TXV Kit	4SCU20LX124	A4TXV01
	4SCU20LX136	A4TXV02
	4SCU20LX148 - 4SCU20LX160	H4TXV03
Freezestat	3/8 tubing	93G35
Crankcase Heater	All models	Factory Installed
Sound Cover	All models	Factory Installed
Loss of Charge Kit	All models	Factory Installed
Comfort Sync™ Wi-Fi Thermostat	All models	1.841197
Comfort Sync™ Zoning Controller	All models	1.851399
Comfort Sync™ In-Zone Sensor	All models	1.8514
Discharge Temperature Sensor	All models	88K38



1-800-448-5872

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