

Split System Enhanced Heat Pump

18
seer

4HP18LT Features and Benefits

R4HP18LT-100 (11/2011)

COMPRESSOR

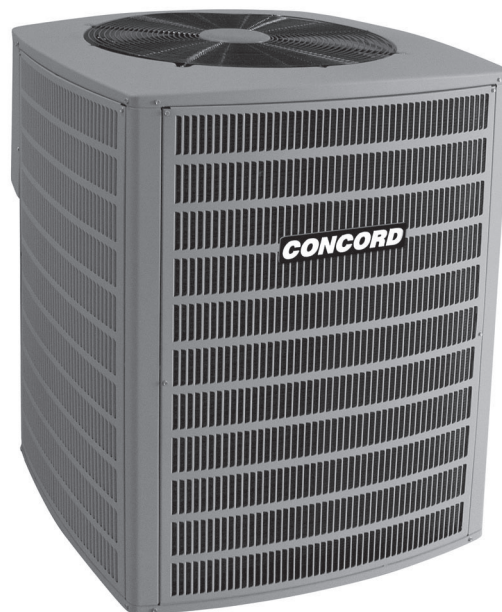
- High-efficiency 2 stage Copeland UltraTech™ scroll compressor
- R410a refrigerant
- Grommet-mounted compressor for quiet operation
- Internally protected against high temperature motor overload conditions
- Heavy-duty compressor sound blanket for quiet operation

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

COMPONENTS

- Bi-flow filter drier factory installed for system protection
- Service valves positioned for quick installation and easy service
- Variable speed condenser fan motor with swept-wing fan blade
- High and low pressure switches factory installed
- Comfort Alert 2™ diagnostics; displaying up to nine fault codes is factory installed
- Trade available components
- Factory installed crank case heater
- QuietShift™ technology during defrost cycle, to control sound



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

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 for terms, conditions and exclusions.

Model Number Guide

4	HP	18	LT	24	P	-	2	A	
4 - R410	Heat Pump	18 - 18 SEER Nominal Highest achievable in product family offering	Louvered Two Stage	24 - 24,000 Btuh Nominal Capacity	P	-	2	A	Minor Revision Code Major Revision Code

Physical and Electrical

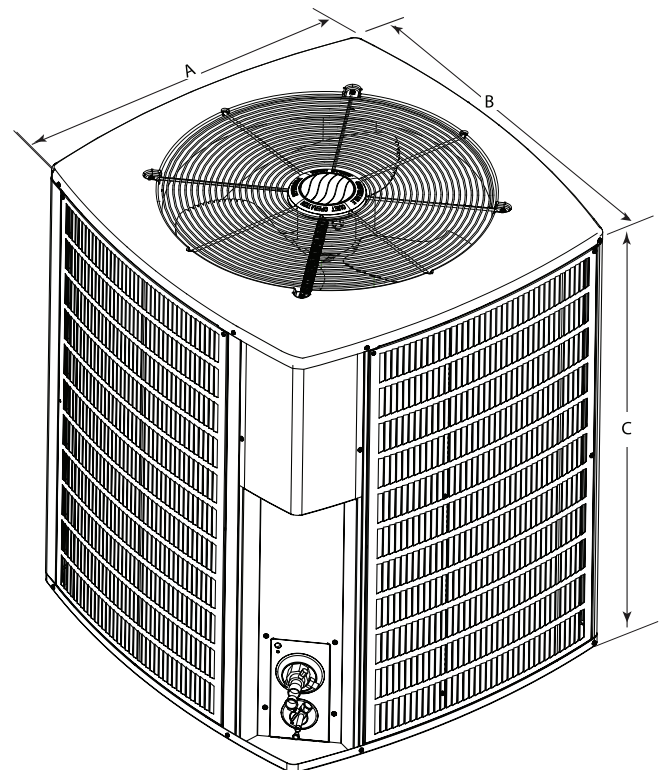
Model	Voltage/Hz/ Phase	Voltage Range	Min. Circuit Amp.	Max. Over current Device (amps)	Compressor		Fan Motor			Refrigerant Line Connections		Refrig. Charge (oz.)	Weight (lbs.)
					Rated Load (amps)	Locked Rotor (amps)	Rated Load (amps)	Rated HP	Nom. RPM	Liquid O.D. (in.)	Vapor O.D. (in.)		
4HP18LT24P-2	230-60/1	216-253	15.6	25	10.2	52	.7	1/3	825	3/8	7/8	300	341
4HP18LT36P-1	230-60/1	216-253	23.7	40	16.6	82	.6	1/3	825	3/8	7/8	283	338
4HP18LT48P-2	230-60/1	216-253	29.3	50	21.1	96	.8	1/3	825	3/8	7/8	262	338
4HP18LT60P-1	230-60/1	216-253	34.4	60	25.6	118	.8	1/3	825	3/8	7/8	274	361

Sound Ratings

Model No.	Sound Rating dBA
4HP18LT24P-2	72
4HP18LT36P-1	75
4HP18LT48P-2	75
4HP18LT60P-1	75

Dimensions (in.)

Model No.	A	B	C
4HP18LT24P-2	37.66	35.66	44
4HP18LT36P-1	37.66	35.66	44
4HP18LT48P-2	37.66	35.66	44
4HP18LT60P-1	37.66	35.66	44



Cooling Performance with Air Handlers and Furnaces 24, 36, 48

Indoor Model	Indoor Model		Cooling				Heating				CFM	Refrigerant Connection				Refrig. Line Size		Indoor Expansion Device		
												Outdoor		Indoor		Suction	Liquid	Piston²	TXV	
	Evaporator Coil or Air Handler³	Furnace	SEER	EER	ARI Rated Capacity¹	Rated Sensible Capacity	HSPF	47		17		Suction	Liquid	Suction	Liquid					
								Btuh	COP	Btuh	COP									
4HP18LT 24P-2	E(U,C,H)1P49C	EFV16CC	17.0	13.0	24,000	18,500	9.0	22,000	4.0	13,000	2.60	900	7/8	3/8	7/8	3/8	7/8	3/8	NA	H4TXV0
	E(U,C,H)1P49C	95G2UH090CV12	16.5	13.0	24,000	18,500	8.5	22,000	4.0	13,000	2.60	900	7/8	3/8	7/8	3/8	7/8	3/8	NA	H4TXV01
4HP18LT 36P-1	BCS2M48V00NA1P		17.0	12.5	35,000	26,300	8.7	34,000	3.5	22,000	2.70	1,200	7/8	3/8	7/8	3/8	7/8	3/8	NA	H4TXV01
	E(U,C,H)1P62C	EFV16CC	17.0	12.5	35,000	26,300	9.0	34,600	3.5	22,000	2.70	1,200	7/8	3/8	7/8	3/8	7/8	3/8	NA	H4TXV01
	E(U,C,H)1P62C	80G2UH110CV20	17.0	13.0	35,000	26,300	9.0	34,600	3.5	22,000	2.70	1,200	7/8	3/8	7/8	3/8	7/8	3/8	NA	H4TXV01
	E(U,C,H)1P62C	95G1DF090CE16	17.0	13.0	35,000	26,300	9.0	34,600	3.5	22,000	2.70	1,200	7/8	3/8	7/8	3/8	7/8	3/8	NA	H4TXV01
	E(U,C,H)1P62C	95G2DF090CV20	17.0	13.0	35,000	26,300	9.0	34,600	3.5	22,000	2.70	1,200	7/8	3/8	7/8	3/8	7/8	3/8	NA	H4TXV01
	E(U,C,H)1P62C	95G2DF110CV20	17.0	13.0	35,000	26,300	9.0	34,600	3.5	22,000	2.70	1,200	7/8	3/8	7/8	3/8	7/8	3/8	NA	H4TXV01
	E(U,C,H)1P62C	95G1UH090CE16	17.0	13.0	35,000	26,300	9.0	34,600	3.5	22,000	2.70	1,200	7/8	3/8	7/8	3/8	7/8	3/8	NA	H4TXV01
	E(U,C,H)1P62C	95G2UH090CV12	17.0	13.0	35,000	26,300	9.0	34,600	3.5	22,000	2.70	1,200	7/8	3/8	7/8	3/8	7/8	3/8	NA	H4TXV01
	E(U,C,H)1P62C	95G2UH090CV20	17.0	13.0	35,000	26,300	9.0	34,600	3.5	22,000	2.70	1,200	7/8	3/8	7/8	3/8	7/8	3/8	NA	H4TXV01
	E(U,C,H)1P62C	95G2UH090CV20	17.0	13.0	35,000	26,300	9.0	34,600	3.5	22,000	2.70	1,200	7/8	3/8	7/8	3/8	7/8	3/8	NA	H4TXV01
4HP18LT 48P-1	BCS2M48V00NA1P		15.5	11.5	47,000	34,800	9.0	45,000	3.3	28,600	2.50	1,550	7/8	3/8	7/8	3/8	1 1/8	3/8	NA	H4TXV03
	E(U,C,H)1P62C	EFV16CC	16.0	12.0	47,000	34,800	9.0	45,000	3.3	28,600	2.50	1,550	7/8	3/8	7/8	3/8	1 1/8	3/8	NA	H4TXV03
	E(U,C,H)1P62D	EFV20DC	16.0	12.0	47,000	34,800	8.5	45,000	3.3	28,600	2.50	1,600	7/8	3/8	7/8	3/8	1 1/8	3/8	NA	H4TXV03
	E(U,C,H)1P62C	80G1DF110CE20	16.0	12.0	47,000	34,800	8.5	44,000	3.3	28,600	2.50	1,550	7/8	3/8	7/8	3/8	1 1/8	3/8	NA	H4TXV03
	E(U,C,H)1P62C	80G1UH090CE20	16.0	12.0	47,000	34,800	8.5	44,000	3.3	28,600	2.50	1,550	7/8	3/8	7/8	3/8	1 1/8	3/8	NA	H4TXV03
	E(U,C,H)1P62C	80G1UH110CE20	16.0	12.0	47,000	34,800	8.5	44,000	3.3	28,600	2.50	1,550	7/8	3/8	7/8	3/8	1 1/8	3/8	NA	H4TXV03
	E(U,C,H)1P62C	80G2UH110CV20	16.0	12.0	47,000	34,800	9.0	44,000	3.3	28,600	2.50	1,550	7/8	3/8	7/8	3/8	1 1/8	3/8	NA	H4TXV03
	E(U,C,H)1P62C	95G1DF090CE16	16.0	12.0	47,000	34,800	8.5	44,000	3.3	28,600	2.50	1,550	7/8	3/8	7/8	3/8	1 1/8	3/8	NA	H4TXV03
	E(U,C,H)1P62C	95G1DF110CE20	16.0	12.0	47,000	34,800	8.5	44,000	3.3	28,600	2.50	1,550	7/8	3/8	7/8	3/8	1 1/8	3/8	NA	H4TXV03
	E(U,C,H)1P62C	95G2DF090CV20	16.0	12.0	47,000	34,800	8.5	44,000	3.3	28,600	2.50	1,550	7/8	3/8	7/8	3/8	1 1/8	3/8	NA	H4TXV03
	E(U,C,H)1P62C	95G2DF110CV20	16.0	12.0	47,000	34,800	8.5	44,000	3.3	28,600	2.50	1,550	7/8	3/8	7/8	3/8	1 1/8	3/8	NA	H4TXV03
	E(U,C,H)1P62C	95G1UH090CE16	16.0	12.0	47,000	34,800	8.5	44,000	3.3	28,600	2.50	1,550	7/8	3/8	7/8	3/8	1 1/8	3/8	NA	H4TXV03
	E(U,C,H)1P62C	95G1UH110CE20	16.0	12.0	47,000	34,800	8.5	44,000	3.3	28,600	2.50	1,550	7/8	3/8	7/8	3/8	1 1/8	3/8	NA	H4TXV03
	E(U,C,H)1P62C	95G2UH090CV20	16.0	12.0	47,000	34,800	8.5	44,000	3.3	28,600	2.50	1,550	7/8	3/8	7/8	3/8	1 1/8	3/8	NA	H4TXV03
	E(U,C,H)1P62C	95G2UH110CV20	16.0	12.0	47,000	34,800	8.5	44,000	3.3	28,600	2.50	1,550	7/8	3/8	7/8	3/8	1 1/8	3/8	NA	H4TXV03
	E(U,C,H)1P62D	95G2UH135DV20	16.0	12.0	47,000	34,800	8.5	45,000	3.3	28,600	2.50	1,550	7/8	3/8	7/8	3/8	1 1/8	3/8	NA	H4TXV03

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 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 60

Outdoor Model	Indoor Model		Cooling				Heating				CFM	Refrigerant Connection				Refrig. Line Size		Indoor Expansion Device		
												Outdoor		Indoor		Suction	Liquid	Piston ²	TXV	
	Evaporator Coil or Air Handler ²	Furnaces	SEER	EER	ARI Rated Capacity ¹	Rated Sensible Capacity	HSPF	47		17		Suction	Liquid	Suction	Liquid					
Btuh								COP	Btuh	COP										
4HP18LT 60P-2	BCS2M60V00NA1P		15.5	11.0	56,000	42,000	9.0	55,000	3.5	37,000	2.50	1,800	7/8	3/8	7/8	3/8	1 1/8	3/8	NA	H4TXV03
	E(U,C,H)1P62C	EFV16CC	15.0	11.0	56,000	42,000	9.0	55,000	3.5	37,000	2.50	1,800	7/8	3/8	7/8	3/8	1 1/8	3/8	NA	H4TXV03
	E(U,C,H)1P62D	EFV20DC	15.0	11.0	56,000	42,000	9.0	56,000	3.5	37,000	2.50	1,800	7/8	3/8	7/8	3/8	1 1/8	3/8	NA	H4TXV03
	E(U,C,H)1P62C	80G1DF110CE20	15.0	11.0	56,000	42,000	9.0	55,000	3.5	37,000	2.50	1,800	7/8	3/8	7/8	3/8	1 1/8	3/8	NA	H4TXV03
	E(U,C,H)1P62C	80G1UH090CE20	15.0	11.0	56,000	42,000	9.0	55,000	3.5	37,000	2.50	1,900	7/8	3/8	7/8	3/8	1 1/8	3/8	NA	H4TXV03
	E(U,C,H)1P62C	80G1UH110CE20	15.0	11.0	56,000	42,000	9.0	55,000	3.5	37,000	2.50	1,900	7/8	3/8	7/8	3/8	1 1/8	3/8	NA	H4TXV03
	E(U,C,H)1P62D	80G1UH135DE20	14.5	11.0	56,000	42,000	9.0	56,000	3.5	37,000	2.50	1,800	7/8	3/8	7/8	3/8	1 1/8	3/8	NA	H4TXV03
	E(U,C,H)1P62C	80G2UH110CV20	15.0	11.0	56,000	42,000	9.0	55,000	3.5	37,000	2.50	1,800	7/8	3/8	7/8	3/8	1 1/8	3/8	NA	H4TXV03
	E(U,C,H)1P62C	95G1DF110CE20	15.0	11.0	56,000	42,000	9.0	55,000	3.5	37,000	2.50	1,900	7/8	3/8	7/8	3/8	1 1/8	3/8	NA	H4TXV03
	E(U,C,H)1P62C	95G2DF090CV20	15.0	11.0	56,000	42,000	9.0	55,000	3.5	37,000	2.50	1,800	7/8	3/8	7/8	3/8	1 1/8	3/8	NA	H4TXV03
	E(U,C,H)1P62C	95G2DF110CV20	15.0	11.0	56,000	42,000	9.0	55,000	3.5	37,000	2.50	1,800	7/8	3/8	7/8	3/8	1 1/8	3/8	NA	H4TXV03
	E(U,C,H)1P62C	95G1UH110CE20	15.0	11.0	56,000	42,000	9.0	55,000	3.5	37,000	2.50	1,900	7/8	3/8	7/8	3/8	1 1/8	3/8	NA	H4TXV03
	E(U,C,H)1P62D	95G1UH135DE20	14.5	11.0	56,000	42,000	9.0	56,000	3.5	37,000	2.50	1,800	7/8	3/8	7/8	3/8	1 1/8	3/8	NA	H4TXV03
	E(U,C,H)1P62C	95G2UH090CV20	15.0	11.0	56,000	42,000	9.0	55,000	3.5	37,000	2.50	1,800	7/8	3/8	7/8	3/8	1 1/8	3/8	NA	H4TXV03
	E(U,C,H)1P62C	95G2UH110CV20	15.0	11.0	56,000	42,000	9.0	55,000	3.5	37,000	2.50	1,800	7/8	3/8	7/8	3/8	1 1/8	3/8	NA	H4TXV03
	E(U,C,H)1P62D	95G2UH135DV20	15.0	11.0	56,000	42,000	9.0	56,000	3.5	37,000	2.50	1,800	7/8	3/8	7/8	3/8	1 1/8	3/8	NA	H4TXV03

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 furnaces 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
4HP18LT24-2	CG95C*****V16C/E(U,C,M,H)1P49C EFV16CC/E(U,C,M,H)1P49C	85/72	32,900	.68	1.34	30,200	.70	1.64	28,100	.72	1.87	26,500	.73	2.04	24,900	.74	2.22
		80/67	30,200	.76	1.31	27,200	.77	1.61	24,500	.78	1.84	23,800	.79	2.02	22,900	.80	2.19
		75/63	28,500	.79	1.29	25,900	.79	1.59	23,900	.79	1.82	22,400	.79	2.00	20,800	.79	2.17
4HP18LT36-1	CG95C*****V116C/E(U,C,H)1P62C CG80C*****V20C EFV16CC/E(U,C,H)1P62C	85/72	46,500	.65	2.10	43,200	.67	2.54	40,700	.69	2.88	38,800	.70	3.14	36,900	.72	3.41
		80/67	42,800	.73	2.06	39,700	.74	2.50	35,500	.75	2.84	34,500	.76	3.10	33,800	.77	3.36
		75/63	40,400	.76	2.03	37,100	.76	2.47	34,600	.76	2.81	32,700	.76	3.07	30,800	.76	3.33
4HP18LT48-2	CG95C*****V20D/E(U,C,H)1P62D CG80C*****V20D/E(U,C,H)1P62D EFV20DC/E(U,C,H)1P62D	85/72	61,400	.64	3.01	55,900	.67	3.55	51,700	.70	3.96	48,500	.72	4.27	45,200	.74	4.59
		80/67	56,400	.71	2.95	51,300	.74	3.49	47,500	.76	3.90	44,500	.78	4.22	41,500	.79	4.53
		75/63	53,400	.75	2.91	47,900	.76	3.45	44,000	.77	3.86	41,000	.78	4.17	38,000	.79	4.49
4HP18 LT60-1	CG95C*****V20D/E(U,C,H)1P62D CG80C*****V20D/E(U,C,H)1P62D EFV20DC/E(U,C,H)1P62D	85/72	72,600	.62	3.85	66,600	.64	4.60	62,000	.66	5.17	58,500	.67	5.60	54,900	.69	6.04
		80/67	66,800	.70	3.77	61,200	.71	4.52	56,000	.72	5.00	53,700	.73	5.53	50,400	.74	5.97
		75/63	62,900	.73	3.72	57,100	.73	4.47	52,700	.73	5.03	49,300	.73	5.47	45,900	.73	5.91

Heating Performance Extended Ratings

Outdoor Model	Indoor Model	Outdoor Temp - DB/WB °F									
		0/0		17/15		35/33		47/43		62/56	
		Btuh	kW	Btuh	kW	Btuh	kW	Btuh	kW	Btuh	kW
4HP18LT24-2	E(U,C,M,H)1P49C E(U,C,M,H)1P43B/EFV08B	7,800	1.40	14,000	1.51	20,400	1.63	23,500	1.71	30,100	1.81
4HP18LT36-1	E(U,C,H)1P62C E(U,C,M,H)1P62C/EFV16C	14,500	2.17	22,300	2.39	30,000	2.62	35,000	2.77	41,800	2.96
4HP18LT48-2	E(U,C,H)1P62D E(U,C,M,H)1P62D/EFV20D	20,000	3.00	29,400	3.34	39,500	3.70	46,200	3.94	54,500	4.24
4HP18LT60-1	E(U,C,H)1P62D E(U,C,M,H)1P62D/EFV10D	24,900	4.06	36,700	4.59	49,100	5.15	57,500	5.53	67,900	6.00

Accessories

Kit Number	Description	Used with
45F08	Compressor Low Ambient Cut-Off	All 4HP18LT's
93G35	Freezestat (3/8" & 5/8")	All 4HP18LT's
10J42	Hard Start Kit	4HP18LT24-36
81J69	Hard Start Kit	4HP18LT48-60
54M89	Low Ambient Kit	All 4HP18LT's
ASTAT503	Outdoor Thermostat	All 4HP18LT's
ADFSTAT504	Discharge Tempering Thermostat	All 4HP18LT's
1.851363	TXV kit H4TXV01	4HP18LT24-36
1.851365	TXV kit H4TXV03	4HP18LT48-60
85W66	Relay Kit - Constant Torque	All Constant Torque Furnaces

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



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