



# 13HPP / RHP13

Rooftop Units  
60HZ

## PRODUCT SPECIFICATIONS

Bulletin No. 210634  
October 2014  
Supersedes October 2012

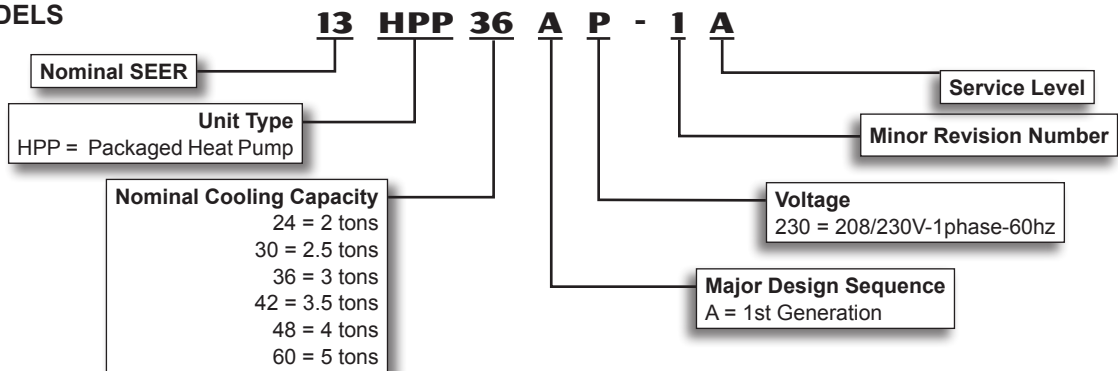


(13HPP Shown)

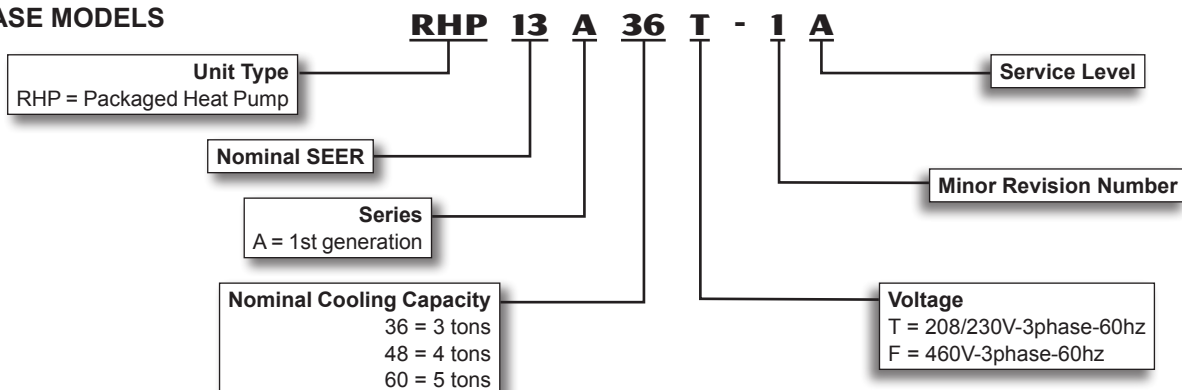
**SEER - 13.00**  
**2 to 5 Tons**  
**Cooling Capacity - 23,000 to 56,000 Btuh**  
**Heating Capacity - 21,600 to 54,000 Btuh**  
**Optional Electric Heat - 5 to 20 kW**

### MODEL NUMBER IDENTIFICATION

#### 1-PHASE MODELS



#### 3-PHASE MODELS



## FEATURES

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### WARRANTY

*NOTE - Warranty below for 13HPP models refers to non-residential applications.*

**Compressor** - Five year limited warranty.

**All other covered components** - One year.

### APPROVALS

AHRI Certified to AHRI Standard 210/240-2008.

ETL listed.

Units are Certified by AHRI.

Packaged unit and components within bonded for grounding to meet safety standards required by ETL.

Optional electric heaters are UL listed for the U.S. and Canada and are rated and tested according to DOE test procedures and FTC labeling regulations.

Each unit test operated at the factory before shipment ensuring dependable operation at start-up.

### APPLICATIONS

Designed for outdoor installations at ground level or rooftop applications.

### SUPPLY AIR BLOWER

#### Direct Drive Blower

Each blower assembly statically and dynamically balanced.

Multi-speed, direct drive blower motor.

Change in blower speed is easily accomplished by simple wiring change on blower motor.

Blower assembly easily removed for servicing.

See Blower Performance tables.

### REFRIGERATION SYSTEM

#### R-410A Refrigerant

Non-chlorine, ozone friendly, R-410A.

Unit pre-charged with refrigerant.

See Specifications table.



#### Indoor and Outdoor Coils

Copper tube with aluminum fin coils.

#### Indoor Coil Drain Pan

Corrosion resistant plastic drain pan.

#### Outdoor Coil Fan

Weather protected heavy duty outdoor coil fan motor with coated steel fan blades for long life.

Internally mounted.

Totally enclosed motor.

Fan guard constructed of corrosion-resistant coated steel.

#### Reversing Valve

4-way interchange reversing valve effects a rapid change in direction of refrigerant flow resulting in quick changeover from cooling to heating and vice versa.

#### High Pressure Switch

Shuts off unit if abnormal operating conditions cause the discharge pressure to rise above setting.

Protects compressor from excessive condensing pressure. Automatic reset.

### CONTROLS

Electronic blower control.

Single pole contactor (13HPP models).

3-Pole Double-Break Contactor (RHP13 models).

Trade available components.

#### Defrost Control

Defrost control furnished as standard equipment.

Gives a defrost cycle for every 30, 60, or 90 minutes (adjustable) of compressor "on" time at outdoor temperatures below 35°F.

Field-selectable, "quiet shift" setting reduces compressor noise during the defrost cycle.

Sensor mounted on liquid line determines when defrost cycle is required and also when to terminate cycle.

Anti-short cycle, timed-off control incorporated into the board.

#### 24 Volt Transformer

40VA transformer furnished and factory installed in control area.

### Options / Accessories

#### Thermostat

See Thermostat bulletins in Controls section and Lennox Price Book for a complete list of thermostats.

## FEATURES

### **COMPRESSOR**

- Scroll compressor on all models.
- Overload protected.
- Resiliently mounted on rubber mounts.

### **CABINET**

- Conditioned areas insulated with foil faced insulation to minimize heat loss and reduce operating sound levels.
- Powder paint for maximum durability.
- Easy service access.
- Coated steel wire guard provides complete coil protection.
- Interchangeable panels for horizontal to downflow airflow conversion furnished (shipped for horizontal).
- Three-Phase Models Only** - Factory installed wiring harness for optional Economizer allows fast and easy electrical connections.
- Economizer must be field wired when used with single phase models.

### **AIR FILTER (not furnished - required)**

- Filter rails for mounting 1 inch filter are furnished in cabinet. Filter is not furnished and must be field provided.
- See Specifications Table for sizes.

## OPTIONS / ACCESSORIES

### **ROOF CURB**

#### **Roof Curb, Downflow**

- Nailer strip furnished, mates to unit, shipped knocked down. See dimension drawing.

### **ECONOMIZER**

- Downflow or horizontal, parallel gear-driven action return air and outdoor air dampers, plug-in connections to unit, nylon bearings, neoprene seals, 24-volt, fully-modulating, spring return motor, adjustable minimum damper position.
- Barometric relief dampers furnished in downflow economizer.
- NOTE - Downflow economizer is not available for 13HPP48 and 13HPP60 single-phase models.*

### **ELECTRIC HEAT**

- Field install internal to unit cabinet.
- Available in several voltages and kw sizes.
- Helix wound nichrome heating elements exposed directly in air stream resulting in instant heat transfer, low element temperatures and long service life.
- Cutoff limit control provides positive protection in case of excessive temperatures.
- Easy plug-in connections for low voltage control wiring.

### **OUTDOOR AIR DAMPER**

- Manual or motorized. Perforated air intake panel replaces existing duct cover on unit.
- 0 to 25% (fixed)
- Manual outdoor air damper has adjustable damper slide.
- Motorized outdoor air damper has motorized damper assembly with adjustable damper slide.
- Outdoor air hood with cleanable filter included.

### **INSTALLATION CLEARANCES**

	<b>in.</b>	<b>mm</b>
Front (electric heat access)	24	610
Right Side (blower access)	24	610
Left Side (indoor coil access)	24	610
Back	0	0
Top	48	1219

## SPECIFICATIONS - 1-PHASE MODELS

General Data		Model No.	13HPP24A	13HPP30A	13HPP36A	13HPP42A	13HPP48A	13HPP60A
Nominal Tonnage			2	2.5	3	3.5	4	5
<b>Cooling Performance</b>	Total capacity - Btuh		23,000	28,000	34,600	40,000	46,000	56,000
	Total unit watts		2090	2545	3145	3636	4181	5090
	<sup>1</sup> SEER (Btuh/Watt)		13.00	13.00	13.00	13.00	13.00	13.00
	EER (Btuh/Watt)		11.00	11.00	11.00	11.00	11.00	11.00
<b>Heating Performance (High Temp)</b>	Total capacity - Btuh		21,600	27,000	33,600	39,000	44,000	54,000
	Total unit watts		1810	2262	2815	3363	3910	4798
	COP		3.5	3.5	3.5	3.4	3.3	3.3
	HSPF Region IV		7.7	7.7	7.7	7.7	7.7	7.7
<b>Heating Performance (Low Temp)</b>	Total capacity - Btuh		13,000	16,000	20,200	22,400	26,800	34,000
	Total unit watts		1733	2040	2575	2985	3742	4335
	COP		2.2	2.3	2.3	2.2	2.1	2.3
<sup>2</sup> Sound Rating Number (dB)		77	77	77	80	80	80	
<b>Refrigerant</b>	Type		R-410A	R-410A	R-410A	R-410A	R-410A	R-410A
	Charge		5 lbs. 0 oz.	7 lbs. 3 oz.	7 lbs. 6 oz.	8 lbs. 14 oz.	9 lbs. 10 oz.	9 lbs. 6 oz.
<b>Condensate drain size (fpt) - in.</b>		3/4	3/4	3/4	3/4	3/4	3/4	
<b>Outdoor Coil Fan</b>	Motor horsepower		1/4	1/4	1/4	1/3	1/3	1/3
	Diameter - in. & No. of blades		18 - 4	18 - 4	18 - 4	22 - 3	22 - 3	22 - 3
<b>Indoor Blower</b>	Blower wheel size dia. x width - in.		10 x 8	10 x 8	10 x 8	10 x 10	10 x 10	10 x 10
	Motor horsepower		1/2	1/2	1/2	3/4	3/4	3/4
<sup>5</sup> Filter Dimensions (filter and rails not furnished)		(1) 24 x 28 x 1			(1) 30 x 30 x 1			
<b>Net weight of basic unit - lbs.</b>		325	352	352	447	455	455	
<b>Shipping weight of basic unit (1 Pkg.) - lbs.</b>		338	365	365	462	470	470	
<b>Electrical characteristics (60 hz)</b>		208/230V-1ph-60hz						

## ELECTRICAL DATA - 1-PHASE

<b>Line voltage data - 60hz 1 phase</b>	208/230V	208/230V	208/230V	208/230V	208/230V	208/230V	
<sup>3</sup> <b>Maximum overcurrent protection (amps)</b>	30	30	35	45	50	60	
<sup>4</sup> <b>Minimum Circuit Ampacity</b>	21.3	21.3	26.1	30.4	34.7	40.5	
<b>Compressor</b>	Rated load amps	12.8	12.8	16.6	18.3	21.8	26.4
	Locked rotor amps	58.3	64	79	112	117	134
<b>Outdoor Coil Fan Motor</b>	Full load amps	1.2	1.2	1.2	1.7	1.7	1.7
<b>Indoor Blower Motor</b>	Full load amps	4.1	4.1	4.1	5.8	5.8	5.8

NOTE-Extremes of operating range are plus and minus 10% of line voltage.

<sup>1</sup> AHRI Certified to AHRI Standard 210/240

**Cooling Ratings** - 95°F outdoor air temperature and 80°F db/67°F wb entering indoor coil air.

**High Temperature Heating Ratings** - 47°F db/43°F wb outdoor air temperature and 70°F entering indoor coil air.

**Low Temperature Heating Ratings** - 17°F db/15°F wb outdoor air temperature and 70°F entering indoor coil air.

<sup>2</sup> Sound Rating Number rated in accordance with test conditions included in AHRI Standard 270.

<sup>3</sup> HACR type circuit breaker or fuse.

<sup>4</sup> Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements.

<sup>5</sup> Filters are not furnished and must be field provided.

## SPECIFICATIONS - 3-PHASE MODELS

General Data		Model No.	RHP13A36	RHP13A48	RHP13A60
		Nominal Tonnage	3	4	5
Cooling Performance	Total capacity - Btuh		34,600	46,000	56,000
	<sup>1</sup> SEER (Btuh/Watt)		13.0	13.0	13.0
	EER (Btuh/Watt)		11.0	11.0	11.0
Heating Performance (High Temp)	Total capacity - Btuh		33,600	44,000	54,000
	COP		3.5	3.3	3.3
	HSPF Region IV		7.7	7.7	7.7
Heating Performance (Low Temp)	Total capacity - Btuh		20,200	26,800	34,000
	COP		2.3	2.1	2.3
<sup>2</sup> Sound Rating Number (dB)			79	80	80
Refrigerant	Type		R-410A	R-410A	R-410A
	Charge		7 lbs. 6 oz	9 lbs. 10 oz.	9 lbs. 6 oz.
Condensate drain size (fpt) - in.			3/4	3/4	3/4
Outdoor Coil Fan	Motor horsepower		1/4	1/3	1/3
	Motor rpm		1075	1075	1075
	Diameter - in. & No. of blades		18 - 4	22 - 3	22 - 3
Indoor Blower	Motor horsepower		1/2	3/4	3/4
	Blower wheel size dia. x width - in.		10 x 8	10 x 10	10 x 10
<sup>5</sup> Filter Dimensions (filter not furnished)			(1) 24 x 28 x 1	(1) 30 x 30 x 1	(1) 30 x 30 x 1
Shipping weight of basic unit (1 Pkg.) - lbs.			370	480	480
Electrical characteristics (60 hz)		208/230V-3ph or 460V-3ph			

## ELECTRICAL DATA - 3-PHASE

Line voltage data - 60hz 3 phase	208/230V	208/230V	460V	208/230V	460V
<sup>3</sup> Maximum overcurrent protection (amps)	25	35	15	40	20
<sup>4</sup> Minimum Circuit Ampacity	18.3	24.6	12	27.4	13.9
Compressor	Rated load amps	10.4	13.7	6.2	15.9
	Locked rotor amps	73	83.1	41	110
Outdoor Coil Fan Motor	Full load amps	1.2	1.7	1	1
Indoor Blower Motor	Full load amps	4.1	5.8	3.2	3.2

NOTE-Extremes of operating range are plus and minus 10% of line voltage.

<sup>1</sup> AHRI Certified to AHRI Standard 210/240

**Cooling Ratings** - 95°F outdoor air temperature and 80°F db/67°F wb entering indoor coil air.

**High Temperature Heating Ratings** - 47°F db/43°F wb outdoor air temperature and 70°F entering indoor coil air.

**Low Temperature Heating Ratings** - 17°F db/15°F wb outdoor air temperature and 70°F entering indoor coil air.

<sup>2</sup> Sound Rating Number rated in accordance with test conditions included in AHRI Standard 270.

<sup>3</sup> HACR type circuit breaker or fuse.

<sup>4</sup> Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements.

<sup>5</sup> Filters are not furnished and must be field provided.

## OPTIONS / ACCESSORIES

Item Description	Model Number	Catalog Number	Unit Model No						
			24	30	36	42	48	60	
<b>ELECTRIC HEAT</b>									
<b>1-Phase</b>									
5 kW	208/240V-1ph-60hz	AHSA05A-1	<b>40K65</b>	X	X	X	X	X	X
7 kW	208/240V-1ph-60hz	AHSA07A-1	<b>40K66</b>	X	X	X	X	X	X
10 kW	208/240V-1ph-60hz	AHSA10A-1	<b>40K67</b>	X	X	X	X	X	X
15 kW	208/240V-1ph-60hz	AHSA15A-1	<b>40K68</b>	X	X	X	X	X	X
20 kW	208/240V-1ph-60hz	AHSA20A-1	<b>40K69</b>				X	X	X
<b>3-Phase</b>									
10 kW	208/240V-3ph-60hz	AHSA10B-1	<b>1.821007</b>			X		X	X
	460V-3ph-60hz	AHSA10C-1	<b>1.821014</b>					X	X
15 kW	208/240V-3ph-60hz	AHSA15B-1	<b>1.821008</b>			X		X	X
	460V-3ph-60hz	AHSA15C-1	<b>1.821015</b>					X	X
<b>ECONOMIZER</b>									
Downflow	AECON825-1	<b>1.851395</b>		X	X	X			
	AECON826-1	<b>1.851396</b>					X	<sup>1</sup> X	<sup>1</sup> X
Horizontal	AECON827-1	<b>1.851397</b>		X	X	X			
	AECON828-1	<b>1.851398</b>					X	X	X
<b>OUTDOOR AIR DAMPER</b>									
Manual	ADMPR145-1	<b>1.851274</b>		X	X	X			
	ADMPR166-1	<b>1.851293</b>					X	X	X
Motorized	ADMPR146-1	<b>1.851275</b>		X	X	X			
	ADMPR167-1	<b>1.851294</b>					X	X	X
<b>ROOF CURBS</b>									
	ACURB161-1	<b>1.851299</b>		X	X	X			
	ACURB163-1	<b>1.851300</b>					X	X	X

NOTE - Catalog and model numbers shown are for ordering field installed accessories.

X = Field installed.

<sup>1</sup> Optional for three-phase models only.

## ELECTRIC HEAT DATA

### 1-PHASE

Packaged Unit Model No.	Electric Heat Size		Input		<sup>1</sup> Minimum Circuit Ampacity	<sup>1</sup> Minimum Circuit Ampacity	<sup>2</sup> Maximum Overcurrent Protection	<sup>2</sup> Maximum Overcurrent Protection
	kW	Catalog No.	Volt	kW	Circuit 1	Circuit 2	Circuit 1	Circuit 2
13HPP24A 13HPP30A 13HPP36A	5 kW	40K65	240	5.0	31.2	---	35	---
			208	3.7	27.8	---	30	---
	7 kW	40K66	240	7.0	41.7	---	50	---
			208	5.3	36.8	---	40	---
	10 kW	40K67	240	10.0	57.3	---	60	---
			208	7.5	50.3	---	60	---
15 kW	40K68	240	15.0	57.3	26	60	30	
		208	11.3	50.3	22.5	60	25	
13HPP42A 13HPP48A 13HPP60A	5 kW	40K65	240	5.0	33.3	---	35	---
			208	3.7	29.9	---	30	---
	7 kW	40K66	240	7.0	43.8	---	50	---
			208	5.3	38.9	---	40	---
	10 kW	40K67	240	10.0	59.4	---	60	---
			208	7.5	52.4	---	60	---
	15 kW	40K68	240	15.0	59.4	26	60	30
			208	11.3	52.4	22.5	60	25
20 kW	40K69	240	20.0	59.4	52.1	60	60	
		208	15.0	52.4	45.1	60	50	

### 3-PHASE

RHP13A36	10 kW	1.821007	208	7.5	31.2	35	---	---
			240	10.0	35.2	40	---	---
	15 kW	1.821008	208	11.3	44.2	45	---	---
			240	15.0	50.2	60	---	---
RHP13A48 RHP13A60	10 kW	1.821007	208	7.5	33.3	35	---	---
			240	10.0	37.3	40	---	---
		1.821014	480	10.0	19.0	20	---	---
	15 kW	1.821008	208	11.3	46.3	50	---	---
			240	15.0	52.4	60	---	---
		1.821015	480	15.0	25.8	30	---	---

<sup>1</sup> Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements. Use wires suitable for at least 167°F.

<sup>2</sup> HACR type breaker or fuse.

## COOLING RATINGS

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
13HPP24A	85/72	28,100	0.59	1.60	26,500	0.62	1.89	25,300	0.65	2.10	23,700	0.68	2.33	21,800	0.71	2.31
	80/67	26,500	0.67	1.59	25,000	0.70	1.85	23,000	0.74	2.09	21,400	0.76	2.31	19,100	0.81	2.30
	75/63	25,000	0.71	1.58	22,600	0.74	1.87	20,700	0.76	2.08	19,100	0.81	2.30	17,100	0.85	2.29
	75/57	23,100	1.00	1.56	21,600	1.00	1.84	20,500	1.00	2.05	18,800	1.00	2.27	16,900	1.00	2.25
13HPP30A	85/72	33,700	0.61	1.97	31,900	0.64	2.30	30,500	0.67	2.56	28,200	0.70	2.84	25,900	0.73	2.82
	80/67	32,100	0.68	1.96	29,900	0.72	2.27	28,000	0.75	2.55	25,700	0.79	2.81	22,500	0.84	2.79
	75/63	30,200	0.72	1.95	27,400	0.76	2.28	25,200	0.79	2.53	22,600	0.84	2.79	19,900	0.88	2.77
	75/57	27,900	1.00	1.92	26,200	1.00	2.25	24,900	1.00	2.50	22,500	1.00	2.76	20,000	1.00	2.73
13HPP36A RHP13A36	85/72	41,800	0.61	2.39	39,400	0.63	2.82	37,500	0.65	3.15	35,700	0.68	3.50	33,100	0.70	3.49
	80/67	39,400	0.68	2.37	37,500	0.71	2.80	34,600	0.74	3.14	32,000	0.76	3.47	29,500	0.80	3.43
	75/63	37,100	0.72	2.36	33,900	0.75	2.79	31,500	0.77	3.12	29,400	0.82	3.45	26,200	0.86	3.42
	75/57	34,300	1.00	2.32	32,300	1.00	2.75	30,800	1.00	3.08	28,900	1.00	3.40	26,100	1.00	3.36
13HPP42A	85/72	46,300	0.64	2.69	44,600	0.66	3.22	43,200	0.68	3.64	40,600	0.70	4.06	37,800	0.72	4.10
	80/67	44,000	0.71	2.68	43,200	0.74	3.18	40,000	0.76	3.63	38,000	0.78	3.98	34,000	0.81	4.03
	75/63	42,100	0.74	2.67	39,200	0.77	3.17	36,900	0.79	3.56	33,800	0.83	3.96	30,600	0.87	3.98
	75/57	38,300	1.00	2.63	38,800	1.00	3.15	35,600	1.00	3.56	33,100	1.00	3.94	30,400	1.00	3.95
13HPP48A RHP13A48	85/72	54,400	0.65	3.10	52,100	0.66	3.72	50,200	0.67	4.19	47,200	0.69	4.66	43,500	0.71	4.71
	80/67	51,900	0.71	3.08	49,500	0.73	3.64	46,000	0.76	4.18	43,500	0.78	4.55	38,400	0.80	4.65
	75/63	49,900	0.73	3.06	45,600	0.76	3.64	42,300	0.78	4.09	38,700	0.82	4.55	34,300	0.85	4.60
	75/57	45,200	1.00	3.02	42,800	1.00	3.63	40,900	1.00	4.10	37,900	1.00	4.53	34,200	1.00	4.56
13HPP60A RHP13A60	85/72	68,500	0.60	3.87	64,500	0.62	4.61	61,300	0.63	5.17	57,500	0.65	5.76	52,300	0.66	5.75
	80/67	64,800	0.66	3.83	60,800	0.68	4.49	56,000	0.70	5.09	53,000	0.72	5.62	45,300	0.77	5.61
	75/63	60,900	0.69	3.81	54,500	0.72	4.50	49,600	0.75	5.03	45,800	0.78	5.56	40,500	0.81	5.52
	75/57	56,400	1.00	3.75	52,700	1.00	4.45	49,800	1.00	4.99	45,500	1.00	5.53	40,300	1.00	5.50

## HEATING RATINGS

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
13HPP24A	10,100	1.71	13,000	1.73	15,400	1.71	21,600	1.80	26,200	1.87
13HPP30A	10,700	2.03	16,000	2.04	21,100	2.14	27,000	2.26	32,700	2.33
13HPP36A RHP13A36	15,900	2.53	20,200	2.58	24,900	2.66	33,600	2.82	40,200	2.93
13HPP42A	19,600	2.92	22,400	2.99	26,600	3.20	39,000	3.36	46,800	3.48
13HPP48A RHP13A48	23,900	3.57	26,800	3.74	29,300	3.73	44,000	3.91	52,900	4.08
13HPP60A RHP13A60	25,200	4.30	34,000	4.34	41,200	4.32	54,000	4.78	64,800	5.03



## BLOWER DATA

### 13HPP24A BLOWER PERFORMANCE

#### <sup>1</sup> Horizontal Airflow

External Static Pressure in. w.g.	Air Volume at Specific Blower Taps (cfm)				
	Tap 1 (Fan Only)	Tap 2 (Low Static)	Tap 3 (High Static)	<sup>2</sup> Tap 4 (Low Static Electric Heat)	<sup>2</sup> Tap 5 (High Static Electric Heat)
0.20	640	830	950	900	1060
0.30	460	800	910	870	1030
0.40	370	760	880	830	980
0.50	---	710	840	800	960
0.60	---	640	800	730	930
0.70	---	600	750	690	910
0.80	---	570	700	640	860

NOTE - All air data measured external to unit with dry coil and less filter.

<sup>1</sup> For downflow air volume, add 0.10 in. w.g. to duct static.

<sup>2</sup> Taps 4 and 5 are used with Optional Electric Heat. Refer to Electric Heat nameplate for proper heat tap selection.

### 13HPP30A BLOWER PERFORMANCE

#### <sup>1</sup> Horizontal Airflow

External Static Pressure in. w.g.	Air Volume at Specific Blower Taps (cfm)				
	Tap 1 (Fan Only)	Tap 2 (Low Static)	Tap 3 (High Static)	<sup>2</sup> Tap 4 (Low Static Electric Heat)	<sup>2</sup> Tap 5 (High Static Electric Heat)
0.20	650	1030	1150	1110	1150
0.30	550	1000	1110	1070	1110
0.40	490	970	1080	1040	1080
0.50	430	930	1050	1000	1050
0.60	---	900	1010	970	1010
0.70	---	860	980	950	980
0.80	---	820	960	920	960

NOTE - All air data measured external to unit with dry coil and less filter.

<sup>1</sup> For downflow air volume, add 0.10 in. w.g. to duct static.

<sup>2</sup> Taps 4 and 5 are used with Optional Electric Heat. Refer to Electric Heat nameplate for proper heat tap selection.

### 13HPP36A AND RHP13A36 BLOWER PERFORMANCE

#### <sup>1</sup> Horizontal Airflow

External Static Pressure in. w.g.	Air Volume at Specific Blower Taps (cfm)				
	Tap 1 (Fan Only)	Tap 2 (Low Static)	Tap 3 (High Static)	<sup>2</sup> Tap 4 (Low Static Electric Heat)	<sup>2</sup> Tap 5 (High Static Electric Heat)
0.20	650	1240	1320	1240	1320
0.30	590	1200	1260	1200	1260
0.40	500	1150	1230	1150	1230
0.50	430	1100	1200	1100	1200
0.60	---	1060	1160	1060	1160
0.70	---	1020	1120	1020	1120
0.80	---	980	1080	980	1080

NOTE - All air data measured external to unit with dry coil and less filter.

<sup>1</sup> For downflow air volume, add 0.10 in. w.g. to duct static.

<sup>2</sup> Taps 4 and 5 are used with Optional Electric Heat. Refer to Electric Heat nameplate for proper heat tap selection.

## BLOWER DATA

### 13HPP42A BLOWER PERFORMANCE

#### <sup>1</sup> Horizontal Airflow

External Static Pressure in. w.g.	Air Volume at Specific Blower Taps (cfm)				
	Tap 1 (Fan Only)	Tap 2 (Low Static)	Tap 3 (High Static)	<sup>2</sup> Tap 4 (Low Static Electric Heat)	<sup>2</sup> Tap 5 (High Static Electric Heat)
0.20	780	1450	1650	1510	1650
0.30	690	1370	1570	1430	1570
0.40	610	1280	1510	1380	1510
0.50	540	1200	1440	1290	1440
0.60	---	1120	1360	1220	1360
0.70	---	1060	1260	1150	1260
0.80	---	990	1160	1090	1160

NOTE - All air data measured external to unit with dry coil and less filter.

<sup>1</sup> For downflow air volume, add 0.10 in. w.g. to duct static.

<sup>2</sup> Taps 4 and 5 are used with Optional Electric Heat. Refer to Electric Heat nameplate for proper heat tap selection.

### 13HPP48A AND RHP13A48 BLOWER PERFORMANCE

#### <sup>1</sup> Horizontal Airflow

External Static Pressure in. w.g.	Air Volume at Specific Blower Taps (cfm)				
	Tap 1 (Fan Only)	Tap 2 (Low Static)	Tap 3 (High Static)	<sup>2</sup> Tap 4 (Low Static Electric Heat)	<sup>2</sup> Tap 5 (High Static Electric Heat)
0.20	860	1650	1800	1650	1800
0.30	760	1600	1750	1600	1750
0.40	690	1550	1690	1550	1690
0.50	640	1500	1630	1500	1630
0.60	---	1440	1570	1440	1570
0.70	---	1370	1470	1370	1470
0.80	---	1290	1330	1290	1330

NOTE - All air data measured external to unit with dry coil and less filter.

<sup>1</sup> For downflow air volume, add 0.10 in. w.g. to duct static.

<sup>2</sup> Taps 4 and 5 are used with Optional Electric Heat. Refer to Electric Heat nameplate for proper heat tap selection.

### 13HPP60A AND RHP13A60 BLOWER PERFORMANCE

#### <sup>1</sup> Horizontal Airflow

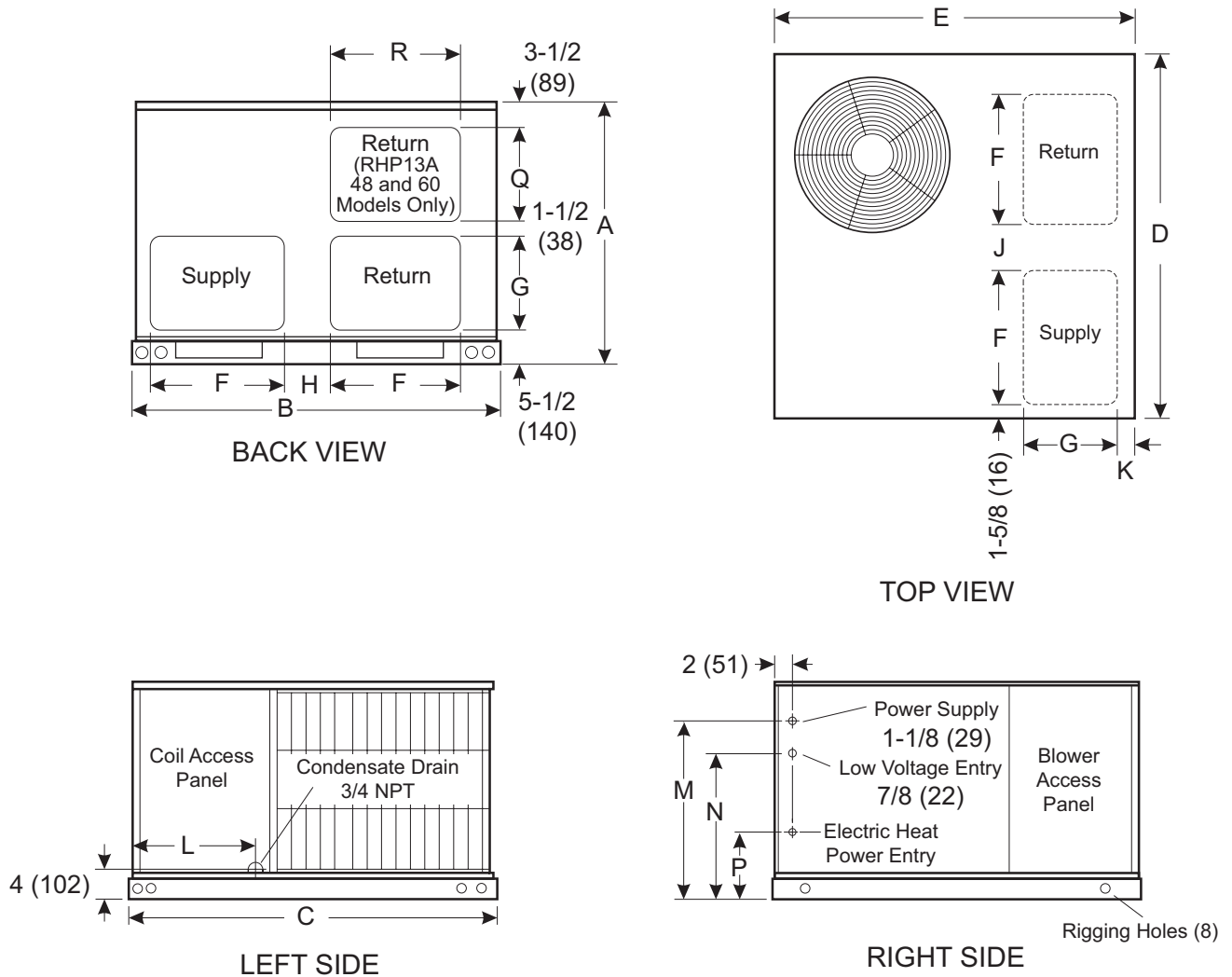
External Static Pressure in. w.g.	Air Volume at Specific Blower Taps (cfm)				
	Tap 1 (Fan Only)	Tap 2 (Low Static)	Tap 3 (High Static)	<sup>2</sup> Tap 4 (Low Static Electric Heat)	<sup>2</sup> Tap 5 (High Static Electric Heat)
0.20	1000	1820	1950	1820	1950
0.30	900	1790	1910	1790	1910
0.40	800	1730	1860	1730	1860
0.50	750	1670	1800	1670	1800
0.60	---	1630	1700	1630	1700
0.70	---	1530	1560	1530	1560
0.80	---	1380	1360	1380	1360

NOTE - All air data measured external to unit with dry coil and less filter.

<sup>1</sup> For downflow air volume, add 0.10 in. w.g. to duct static.

<sup>2</sup> Taps 4 and 5 are used with Optional Electric Heat. Refer to Electric Heat nameplate for proper heat tap selection.

## DIMENSIONS - INCHES (MM)



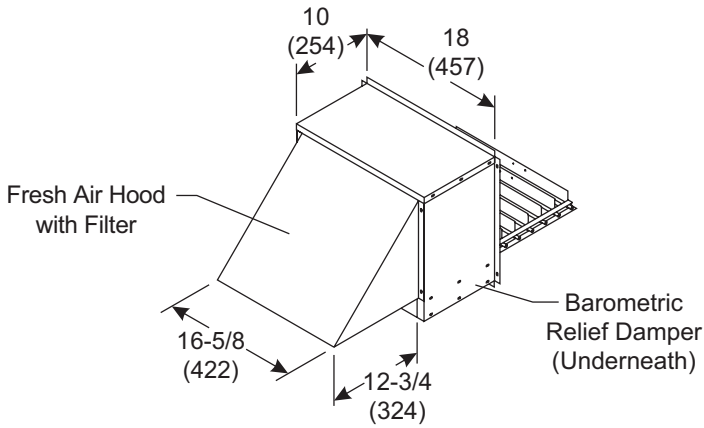
Model No.	A		B		C		D		E		F		G		H	
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
13HPP24A 13HPP30A 13HPP36A RHP13A36	32-1/2	826	46-1/2	1181	46-1/2	1181	45-5/8	1159	45-5/8	1159	17-1/2	445	11-1/2	292	4	102
13HPP42A 13HPP48A 13HPP60A RHP13A48 RHP13A60	34-1/2	876	55-1/2	1410	50-1/2	1283	54-5/8	1387	49-5/8	1260	21-1/2	546	12	305	6-1/4	159

Model No.	J		K		L		M		N		P		Q		R	
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
13HPP24A 13HPP30A 13HPP36A RHP13A36	4	102	1-3/4	44	15-5/8	397	27-3/4	705	24-7/8	632	9-3/4	248	---	---	---	---
13HPP42A 13HPP48A 13HPP60A RHP13A48 RHP13A60	5-5/8	143	2-3/8	60	17-1/8	435	29-3/4	756	26-7/8	683	15-1/2	394	12	305	21-1/2	546

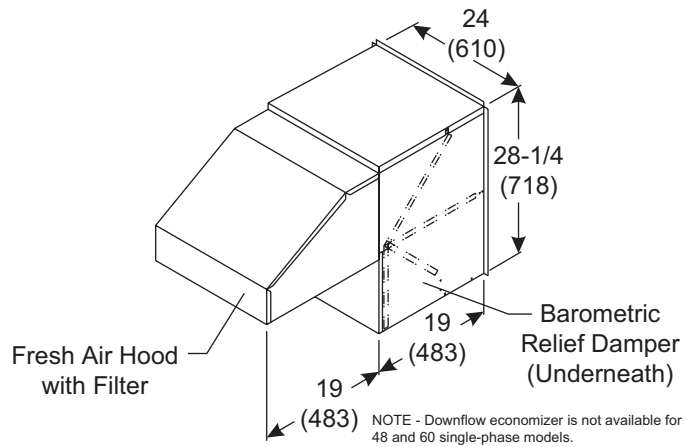
# ACCESSORIES DIMENSIONS - INCHES (MM)

## ECONOMIZER DAMPERS - DOWNFLOW

FOR 24, 30 AND 36 MODELS

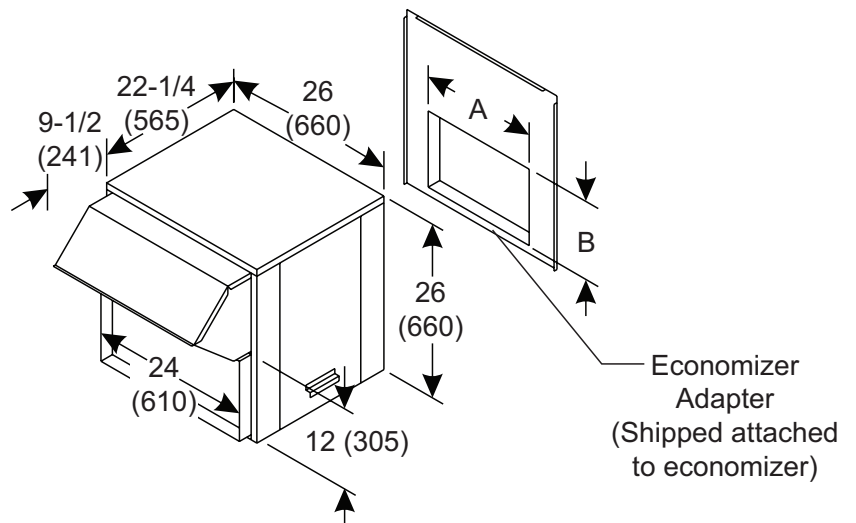


FOR 42, 48 AND 60 MODELS



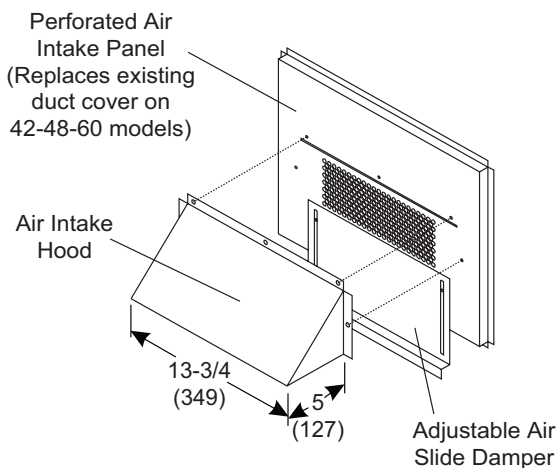
## ECONOMIZER DAMPERS - HORIZONTAL

Model No.	A		B	
	in	mm	in	mm
24, 30, 36	17-5/8	448	11-1/2	292
42, 48, 60	21-3/4	552	12-1/4	311

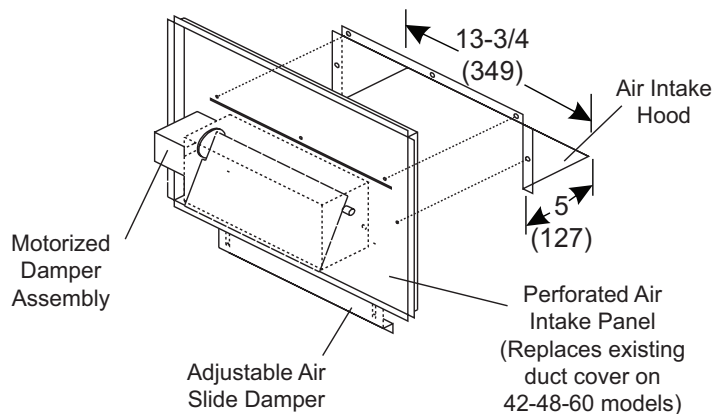


## FRESH AIR DAMPERS

MANUAL

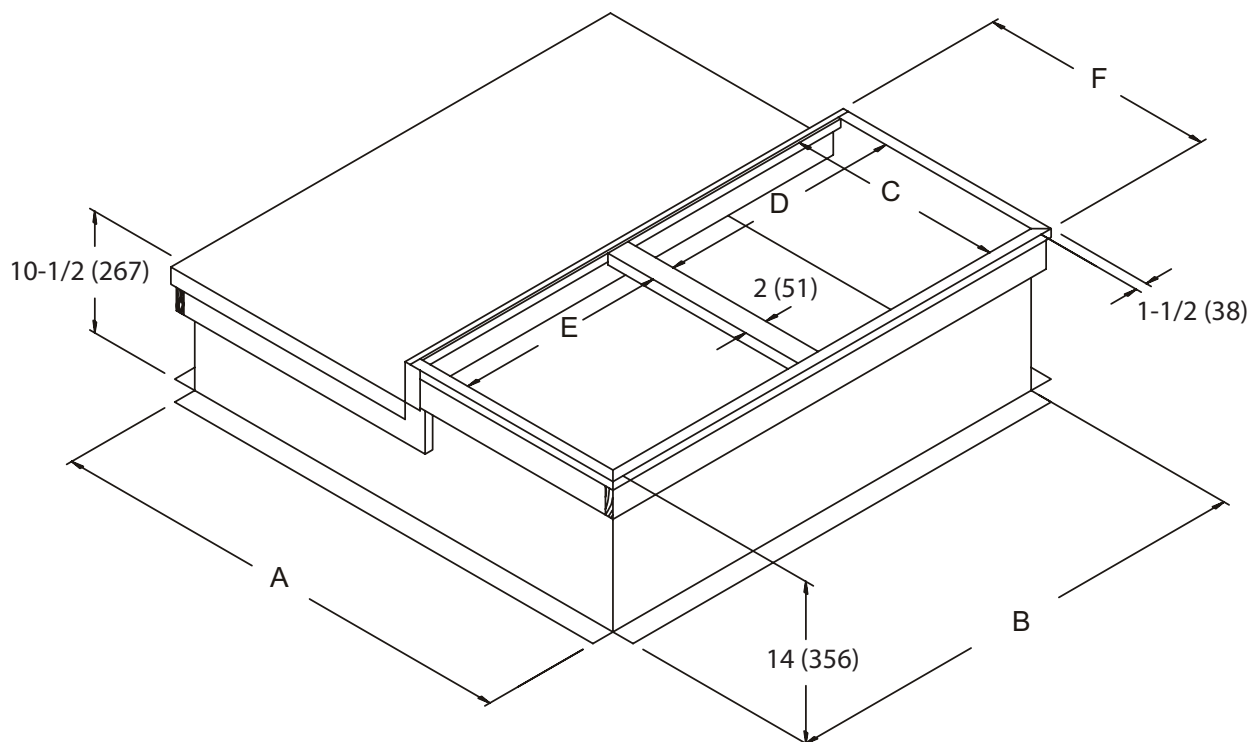


MOTORIZED



## ACCESSORIES DIMENSIONS - INCHES (MM)

### ROOF CURB



Model No.	A		B		C		D		E		F	
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
13HPP24A 13HPP30A 13HPP36A RHP13A36	40	1016	40	1016	17-1/2	445	20	508	18	457	21-1/2	546
13HPP42A 13HPP48A 13HPP60A RHP13A48 RHP13A60	44-1/8	1121	49	1245	18	457	23-1/2	597	23-1/2	597	23	584





## REVISIONS

Sections	Description of Change
Accessories Dimensions	Revised "C" dimension for roof curb.



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