

# **SUBMITTALS**

# **Altitude Series**

Rev. May 2020









ASH109PRDWA / ASYW09PRDWB
ASH112PRDWA / ASYW12PRDWB
ASH115PRDWA / ASYW15PRDWB
ASH118PRDWA / ASYW18PRDWB
ASH124PRDWA / ASYW24PRDWB





## **Revision History**

**Rev. May 2020 -** Submittal edition release.



# 9000 BTU/HR WALL MOUNTED INVERTER DRIVEN HEAT PUMP SYSTEM ASH109PRDWA / ASYW09PRDWB

Job Name:
Purchaser:
Submitted To:
Construction:
Reference:

Approval:
Date:
Submitted By:
Unit:
Drawing #:

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Electrical Requirement				
Power Supply	208/230V, 1 Phase, 60 HZ			
Operating Voltage Range	187~253 VAC			
Recommended Fuse/Breaker Size	15A			
MCA	11A			

Operating Range					
Cooling   14~115°F (-10~46°C					
Heating	-15~75°F (-26~24°C)				

Cooling Performance				
Rated Cooling Capacity	9,000 BTU			
Cooling Capacity Range	3,200~12,500 BTU			
Rated Power input	620 W			
SEER	23.5			
EER	14.5			
Moisture Removal	3.5 Pt./Hr			

Heating Performance				
Rated Heating Capacity	10,000 BTU			
Heating Capacity Range	3,800~15,600 BTU			
Rated Power Input	680 W			
HSPF	10.5			

Pipe Length	
Minimum Pipe Length	6 ft
Maximum Pipe Length	50 ft
Maximum Pipe Height Difference	33 ft
Connection	1/4"(Discharge) 3/8"(Suction) Flare

### **ACCESSORIES**

### **Remote Controller**

Ships with indoor unit

#### **Wired Controller**

ASYW09PRDWB units are compatible with wired controller ACT17CWA with the interface kit WK-B

#### WiFi

ASYW09PRDWB units are compatible with WiFi USB adapter AWF01RWA  $\,$ 







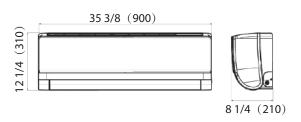


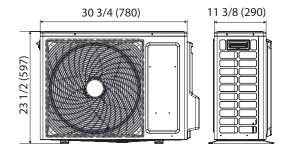


# 9000 BTU/HR WALL MOUNTED INVERTER DRIVEN HEAT PUMP SYSTEM ASH109PRDWA / ASYW09PRDWB

Indoor Unit				
Uncrated Dimension (HxWxD)	12 1/4 x 35 3/8 x 8 1/4 in (310 x 900 x 210 mm)			
Crated (HxWxD)	15 3/4 x 39 x 12 3/8 in (399 x 991 x 313 mm)			
Airflow CFM (Turbo/High/Med/Low/Quiet)	440/410/350/290/265			
Indoor Sound Level dB (Turbo/High/Med/Low/Quiet)	44/40/35/31/23			
Motor Rating (HP)	0.054			
Heat Exchanger Fin Type	Blue Fin			
Weight (Ship/Net)	30.9/25.4 lbs			

Outdoor Unit				
Compressor	DC inverter Driven Rotary			
Uncrated Dimension (HxWxD)	23 1/2 x 30 3/4 x 11 3/8 in (597 x 780 x 290 mm)			
Crated (HxWxD)	26 3/4 x 36 3/8 x 15 1/2 in (680 x 923 x 393 mm)			
Outdoor Sound Rating dB	54			
Heat Exchanger Fin Type	Blue Fin			
Weight (Ship/Net)	90.2/78.3 lbs			
Factory Refrigerant Charge	R-410A (38.8 oz)			





## **HEATING CAPACITY DATA**

	07 11 7 10 1 1 1						
	Indoor Set Temperature						
Outdoor	60°F (16°C) 70°F (21°C)			60°F (16°C)		77°F (25°	C)
Air Temp DB	Maximum Heating Capacity (Btu/h)	Power Usage (w)	Max Heating Capacity (Btu/h)	Power Usage (w)	Max Heating Capacity (Btu/h)	Power Usage (w)	
-15°F (-26°C)	6,250	1,420	6,500	1,600	6,630	1,700	
-4°F (-20°C)	8,170	1,410	8,500	1,550	8,670	1,610	
5°F (-15°C)	9,600	1,520	10,000	1,640	10,200	1,685	
17°F (-8°C)	12,500	1,550	13,000	1,650	13,260	1,690	
47°F (8°C)	15,000	1,390	15,600	1,470	15,900	1,500	

	Indoor Set Temperature						
Outdoor	70°F (21°C)		75°F (24°	75°F (24°C)		80°F (27°C)	
Air Temp DB	Total Capacity (Btu/h)	Power Usage (w)	Total Capacity (Btu/h)	Power Usage (w)	Total Capacity (Btu/h)	Power Usage (w)	
65°F (18°C)	7,100	470	6,870	440	6,550	410	
75°F (24°C)	8,350	590	8,100	550	7,900	520	
85°F (29°C)	10,300	760	9,800	690	9,300	630	
95°F (35°C)	11,500	870	10,800	790	10,200	727	
105°F (41°C)	10,350	1,080	9,850	980	9,380	900	
115°F (46°C)	8,900	1,060	8,500	970	8,130	890	

<sup>•</sup> Capacity output and power usage are measured approximately at 50% indoor RH.

<sup>•</sup> Capacities are obtained at standard piping length of each outdoor model



# 12000 BTU/HR WALL MOUNTED INVERTER DRIVEN HEAT PUMP SYSTEM ASH112PRDWA / ASYW12PRDWB

Job Name:	
Purchaser:	
Submitted To:	
Construction:	
Reference:	

Approval:	_
Date:	_
Submitted By:	
Unit:	_
Drawing #:	_

Electrical Requirement					
Power Supply	208/230V, 1 Phase, 60 HZ				
Operating Voltage Range	187~253 VAC				
Recommended Fuse/Breaker Size	15A				
MCA	11A				
'					

Operating Range					
Cooling 14-115°F (-10-46°C					
Heating	-15~75°F (-26~24°C)				

Cooling Performance				
Rated Cooling Capacity 12,000 BTU				
Cooling Capacity Range	3,300~15,000 BTU			
Rated Power input	960 W			
SEER	23.0			
EER	12.5			
Moisture Removal	3.9 Pt./Hr			

Heating Performance				
Rated Heating Capacity	13,000 BTU			
Heating Capacity Range	3,900~20,000 BTU			
Rated Power Input	1,500 W			
HSPF	11.0			

Pipe Length	
Minimum Pipe Length	6 ft
Maximum Pipe Length	50 ft
Maximum Pipe Height Difference	33 ft
Connection	1/4"(Discharge) 3/8"(Suction) Flare

### **ACCESSORIES**

### **Remote Controller**

Ships with indoor unit

#### **Wired Controller**

ASYW12PRDWB units are compatible with wired controller ACT17CWA with the interface kit WK-B

#### WiFi

ASYW12PRDWB units are compatible with WiFi USB adapter AWF01RWA  $\,$ 







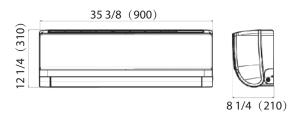


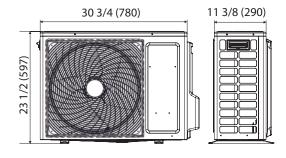


# 12000 BTU/HR WALL MOUNTED INVERTER DRIVEN HEAT PUMP SYSTEM **ASH112PRDWA / ASYW12PRDWB**

Indoor Unit					
Uncrated Dimension (HxWxD)	12 1/4 x 35 3/8 x 8 1/4 in (310 x 900 x 210 mm)				
Crated (HxWxD)	15 3/4 x 39 x 12 3/8 in (399 x 991 x 313 mm)				
Airflow CFM (Turbo/High/Med/Low/Quiet)	610/530/440/410/350				
Indoor Sound Level dB (Turbo/High/Med/Low/Quiet)	45/41/36/32/23				
Motor Rating (HP)	0.054				
Heat Exchanger Fin Type	Blue Fin				
Weight (Ship/Net)	30.9/25.4 lbs				

Outdoor Unit				
Compressor	DC inverter Driven Rotary			
Uncrated Dimension (HxWxD)	23 1/2 x 30 3/4 x 11 3/8 in (597 x 780 x 290 mm)			
Crated (HxWxD)	26 3/4 x 36 3/8 x 15 1/2 in (680 x 923 x 393 mm)			
Outdoor Sound Rating dB	54			
Heat Exchanger Fin Type	Blue Fin			
Weight (Ship/Net)	90.2/78.3 lbs			
Factory Refrigerant Charge	R-410A (38.8 oz)			





### **HEATING CAPACITY DATA**

			Indoor Set Tem	r Set Temperature			
Outdoor	60°F (16°C)		70°F (21°C)		77°F (25°C)		
Air Temp DB	Maximum Heating Capacity (Btu/h)	Power Usage (w)	Max Heating Capacity (Btu/h)	Power Usage (w)	Max Heating Capacity (Btu/h)	Power Usage (w)	
-15°F (-26°C)	7,200	1,560	7,500	1,720	7,650	1,850	
-4°F (-20°C)	9,600	1,570	10,000	1,700	10,200	1,795	
5°F (-15°C)	12,500	1,680	13,000	1,800	13,300	1,890	
17°F (-8°C)	14,400	1,890	15,000	2,020	15,300	2,110	
47°F (8°C)	19,230	1,520	20,000	1,600	20,400	1,650	

	Indoor Set Temperature					
Outdoor	70°F (21°C)		75°F (24°C)		80°F (27°C)	
Air Temp DB	Total Capacity (Btu/h)	Power Usage (w)	Total Capacity (Btu/h)	Power Usage (w)	Total Capacity (Btu/h)	Power Usage (w)
65°F (18°C)	9,500	660	9,150	610	8,650	560
75°F (24°C)	10,500	780	10,200	710	9,850	650
85°F (29°C)	12,100	1,080	12,300	1,010	11,540	890
95°F (35°C)	13,800	1,400	13,125	1,270	12,500	1,110
105°F (41°C)	12,600	1,490	12,000	1,360	11,500	1,200
115°F (46°C)	10,500	1,270	10,000	1,170	9,550	1,090

<sup>•</sup> Capacity output and power usage are measured approximately at 50% indoor RH.

<sup>•</sup> Capacities are obtained at standard piping length of each outdoor model



Approval:

# 15000 BTU/HR WALL MOUNTED INVERTER DRIVEN HEAT PUMP SYSTEM **ASH115PRDWA / ASYW15PRDWB**

Job Name:
Purchaser:
Submitted To:
Construction:
Reference:

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Date:
Submitted By:
Unit:
Drawing #:

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Electrical Requirement				
Power Supply	208/230V, 1 Phase, 60 HZ			
Operating Voltage Range	187~253 VAC			
Recommended Fuse/Breaker Size	20A			
MCA	14A			

Operating Ran	ge
Cooling	14~115°F (-10~46°C)
Heating	-15~75°F (-26~24°C)

Cooling Performance				
Rated Cooling Capacity	15,000 BTU			
Cooling Capacity Range	5,400~24,000 BTU			
Rated Power input	1,200 W			
SEER	21.5			
EER	12.5			
Moisture Removal	4.1 Pt./Hr			

Heating Performance				
Rated Heating Capacity	16,000 BTU			
Heating Capacity Range	4,000~26,000 BTU			
Rated Power Input	1,700 W			
HSPF	10.5			

Pipe Length	
Minimum Pipe Length	6 ft
Maximum Pipe Length	83 ft
Maximum Pipe Height Difference	50 ft
Connection	1/4"(Discharge) 1/2"(Suction) Flare

### **ACCESSORIES**

### **Remote Controller**

Ships with indoor unit

#### **Wired Controller**

ASYW15PRDWB units are compatible with wired controller ACT17CWA with the interface kit WK-B

#### WiFi

ASYW15PRDWB units are compatible with WiFi USB adapter AWF01RWA  $\,$ 







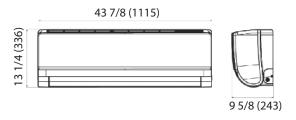


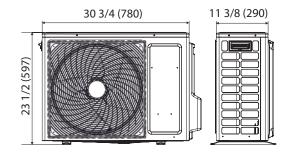


# 15000 BTU/HR WALL MOUNTED INVERTER DRIVEN HEAT PUMP SYSTEM **ASH115PRDWA / ASYW15PRDWB**

Indoor Unit				
Uncrated Dimension (HxWxD)	13 1/4 x 43 7/8 x 9 5/8 in (336 x 1115 x 243 mm)			
Crated (HxWxD)	16 1/2 x 47 1/2 x 13 1/2 in (418 x 1206 x 342 mm)			
Airflow CFM (Turbo/High/Med/Low/Quiet)	710/650/560/440/410			
Indoor Sound Level dB (Turbo/High/Med/Low/Quiet)	48/46/42/36/34			
Motor Rating (HP)	0.094			
Heat Exchanger Fin Type	Blue Fin			
Weight (Ship/Net)	43.2/35.3 lbs			

Outdoor Unit				
Compressor	DC inverter Driven Rotary			
Uncrated Dimension (HxWxD)	27 1/2 x 35 x 13 7/8 in (697 x 890 x 353 mm)			
Crated (HxWxD)	30 3/4 x 41 1/8 x 18 1/8 in (780 x 1046 x 460 mm)			
Outdoor Sound Rating dB	55			
Heat Exchanger Fin Type	Blue Fin			
Weight (Ship/Net)	117.5/100.3 lbs			
Factory Refrigerant Charge	R-410A (52.2 oz)			





### **HEATING CAPACITY DATA**

	07 11 7 10 11 1						
	Indoor Set Temperature						
Outdoor	60°F (16°C) 70°F (21°C)				77°F (25°	C)	
Air Temp DB	Maximum Heating Capacity (Btu/h)	Power Usage (w)	Max Heating Capacity (Btu/h)	Power Usage (w)	Max Heating Capacity (Btu/h)	Power Usage (w)	
-15°F (-26°C)	9,600	1,670	10,000	1,800	10,200	1,890	
-4°F (-20°C)	11,500	1,920	12,000	2,050	12,300	2,140	
5°F (-15°C)	15,300	2,330	16,000	2,470	16,400	2,560	
17°F (-8°C)	16,300	2,220	17,000	2,340	17,400	2,410	
47°F (8°C)	24,800	2,450	26,000	2,600	26,500	2,660	

	Indoor Set Temperature					
Outdoor	70°F (21°C)		) 75°F (24°C)		80°F (27°C)	
Air Temp DB	Total Capacity (Btu/h)	Power Usage (w)	Total Capacity (Btu/h)	Power Usage (w)	Total Capacity (Btu/h)	Power Usage (w)
65°F (18°C)	12,400	850	11,800	790	11,300	740
75°F (24°C)	14,300	1,080	13,650	990	13,000	910
85°F (29°C)	16,800	1,540	16,000	1,360	15,200	1,210
95°F (35°C)	18,200	1,810	17,300	1,620	16,500	1,465
105°F (41°C)	16,600	1,850	15,800	1,690	15,100	1,560
115°F (46°C)	13,800	1,650	13,100	1,520	12,500	1,410

<sup>•</sup> Capacity output and power usage are measured approximately at 50% indoor RH.

<sup>•</sup> Capacities are obtained at standard piping length of each outdoor model



# 18000 BTU/HR WALL MOUNTED INVERTER DRIVEN HEAT PUMP SYSTEM **ASH118PRDWA / ASYW18PRDWB**

Job Name:	
Purchaser:	
Submitted To:	
Construction:	
Reference:	

Approval:
Date:
Submitted By:
Unit:
Drawing #:

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Electrical Requirement					
Power Supply	208/230V, 1 Phase, 60 HZ				
Operating Voltage Range	187~253 VAC				
Recommended Fuse/Breaker Size	20A				
MCA	14A				

Operating Range				
Cooling	14~115°F (-10~46°C)			
Heating	-15~75°F (-26~24°C)			

Cooling Performance				
Rated Cooling Capacity	17,000 BTU			
Cooling Capacity Range	5,400~26,500 BTU			
Rated Power input	1,360 W			
SEER	21.0			
EER	12.5			
Moisture Removal	4.3 Pt./Hr			

Heating Performance					
Rated Heating Capacity	22,000 BTU				
Heating Capacity Range	4,000~30,000 BTU				
Rated Power Input	2,100 W				
HSPF	10.5				

Pipe Length	
Minimum Pipe Length	6 ft
Maximum Pipe Length	83 ft
Maximum Pipe Height Difference	50 ft
Connection	1/4"(Discharge) 1/2"(Suction) Flare

### **ACCESSORIES**

### **Remote Controller**

Ships with indoor unit

#### **Wired Controller**

ASYW18PRDWB units are compatible with wired controller ACT17CWA with the interface kit WK-B

#### WiFi

ASYW18PRDWB units are compatible with WiFi USB adapter AWF01RWA  $\,$ 







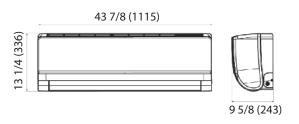


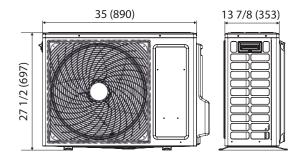


# 18000 BTU/HR WALL MOUNTED INVERTER DRIVEN HEAT PUMP SYSTEM **ASH118PRDWA / ASYW18PRDWB**

Indoor Unit				
Uncrated Dimension (HxWxD)	13 1/4 x 43 7/8 x 9 5/8 in (336 x 1115 x 243 mm)			
Crated (HxWxD)	16 1/2 x 47 1/2 x 13 1/2 in (418 x 1206 x 342 mm)			
Airflow CFM (Turbo/High/Med/Low/Quiet)	710/650/560/440/410			
Indoor Sound Level dB (Turbo/High/Med/Low/Quiet)	48/46/42/36/34			
Motor Rating (HP)	0.094			
Heat Exchanger Fin Type	Blue Fin			
Weight (Ship/Net)	43.2/35.3 lbs			

Outdoor Unit				
Compressor	DC inverter Driven Rotary			
Uncrated Dimension (HxWxD)	27 1/2 x 35 x 13 7/8 in (697 x 890 x 353 mm)			
Crated (HxWxD)	30 3/4 x 41 1/8 x 18 1/8 in (780 x 1046 x 460 mm)			
Outdoor Sound Rating dB	55			
Heat Exchanger Fin Type	Blue Fin			
Weight (Ship/Net)	117.5/100.3 lbs			
Factory Refrigerant Charge	R-410A (52.2 oz)			





### **HEATING CAPACITY DATA**

	07 11 7 10 11 1					
	Indoor Set Temperature					
Outdoor	60°F (16°C)		oor 60°F (16°C) 70°F (21°C)		77°F (25°C)	
Air Temp DB	Maximum Heating Capacity (Btu/h)	Power Usage (w)	Max Heating Capacity (Btu/h)	Power Usage (w)	Max Heating Capacity (Btu/h)	Power Usage (w)
-15°F (-26°C)	11,500	2,020	12,000	2,150	12,200	2,210
-4°F (-20°C)	13,400	2,210	14,000	2,350	14,300	2,420
5°F (-15°C)	16,300	2,490	17,000	2,620	17,300	2,690
17°F (-8°C)	18,200	2,460	19,000	2,590	19,400	2,660
47°F (8°C)	28,800	2,870	30,000	3,000	30,600	3,070

	Indoor Set Temperature					
Outdoor	70°F (21°C)		75°F (24°C)		80°F (27°C)	
Air Temp DB	Total Capacity (Btu/h)	Power Usage (w)	Total Capacity (Btu/h)	Power Usage (w)	Total Capacity (Btu/h)	Power Usage (w)
65°F (18°C)	13,600	940	13,000	870	12,700	830
75°F (24°C)	16,000	1,220	15,300	1,120	14,600	1,037
85°F (29°C)	18,700	1,630	17,800	1,470	17,000	1,340
95°F (35°C)	20,400	2,110	19,400	1,880	18,500	1,690
105°F (41°C)	18,400	2,090	17,500	1,910	16,550	1,750
115°F (46°C)	15,600	1,870	14,800	1,710	14,100	1,590

- Capacity output and power usage are measured approximately at 50% indoor RH.
- Capacities are obtained at standard piping length of each outdoor model



## 24000 BTU/HR WALL MOUNTED INVERTER DRIVEN HEAT PUMP SYSTEM **ASH124PRDWA / ASYW24PRDWB**

Job Name:
Purchaser:
Submitted To:
Construction:
Reference:

nitted To:	Submitted By:
truction:	Unit:
rence:	Drawing #:
	Electrical Requirement
	208/230V 1 Phase



### **ACCESSORIES**

### **Remote Controller**

Ships with indoor unit

#### **Wired Controller**

ASYW24PRDWB units are compatible with wired controller ACT17CWA with the interface kit WK-B

#### WiFi

ASYW24PRDWB units are compatible with WiFi USB adapter AWF01RWA

Electrical Requirement				
Power Supply	208/230V, 1 Phase, 60 HZ			
Operating Voltage Range	187~253 VAC			
Recommended Fuse/Breaker Size	30A			
MCA	20A			

Approval:

Date: \_\_\_\_\_

Operating Range				
Cooling 14~115°F (-10~46				
Heating	-15~75°F (-26~24°C)			

Cooling Performance				
Rated Cooling Capacity 22,000 BTU				
Cooling Capacity Range	6,400~30,000 BTU			
Rated Power Input	1,760 W			
SEER	20.0			
EER	12.5			
Moisture Removal	7.0 Pt./Hr			

Heating Performance				
Rated Heating Capacity	27,600 BTU			
Heating Capacity Range	6,200~36,000 BTU			
Rated Power Input	2,630 W			
HSPF	10.0			

Pipe Length					
Minimum Pipe Length	6 ft				
Maximum Pipe Length	83 ft				
Maximum Pipe Height Difference	50 ft				
Connection	1/4"(Discharge) 1/2"(Suction) Flare				







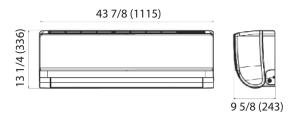


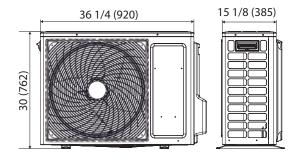


# 24000 BTU/HR WALL MOUNTED INVERTER DRIVEN HEAT PUMP SYSTEM ASH124PRDWA / ASYW24PRDWB

Indoor Unit					
Uncrated Dimension (HxWxD)	13 1/4 x 43 7/8 x 9 5/8 in (336 x 1115 x 243 mm)				
Crated (HxWxD)	16 1/2 x 47 1/2 x 13 1/2 in (418 x 1206 x 342 mm)				
Airflow CFM (Turbo/High/Med/Low/Quiet)	710/650/560/440/410				
Indoor Sound Level dB (Turbo/High/Med/Low/Quiet)	49/47/42/36/34				
Motor Rating (HP)	0.094				
Heat Exchanger Fin Type	Blue Fin				
Weight (Ship/Net)	45.4/37.5 lbs				

Outdoor Unit					
Compressor	DC inverter Driven Rotary				
Uncrated Dimension (HxWxD)	30 x 36 1/4 x 15 1/8 in (762 x 920 x 385 mm)				
Crated (HxWxD)	33 1/4 x 42 3/4 x 19 1/8 in (843 x 1085 x 487 mm)				
Outdoor Sound Rating dB	57				
Heat Exchanger Fin Type	Blue Fin				
Weight (Ship/Net)	149.5/130.1 lbs				
Factory Refrigerant Charge	R-410A (74.1 oz)				





## **HEATING CAPACITY DATA**

			Indoor Set Tem	nperature			
Outdoor	60°F (16°C)		tdoor 60°F (16°C) 70°F (21°C)		77°F (25°C)		
Air Temp DB	Maximum Heating Capacity (Btu/h)	Power Usage (w)	Max Heating Capacity (Btu/h)	Power Usage (w)	Max Heating Capacity (Btu/h)	Power Usage (w)	
-15°F (-26°C)	13,500	2,950	14,000	3,110	14,300	3,230	
-4°F (-20°C)	14,400	3,120	15,000	3,310	15,300	3,430	
5°F (-15°C)	19,250	3,090	20,000	3,250	20,400	3,340	
17°F (-8°C)	25,000	3,480	26,000	3,650	26,500	3,740	
47°F (8°C)	34,600	3,920	36,000	4,100	36,700	4,190	

	Indoor Set Temperature					
Outdoor	70°F (21°C)		70°F (21°C) 75°F (24°C)		80°F (27°C)	
Air Temp DB	Total Capacity (Btu/h)	Power Usage (w)	Total Capacity (Btu/h)	Power Usage (w)	Total Capacity (Btu/h)	Power Usage (w)
65°F (18°C)	17,600	1,270	16,700	1,170	15,900	1,090
75°F (24°C)	20,100	1,540	19,100	1,410	18,200	1,310
85°F (29°C)	23,400	2,090	22,300	1,910	21,200	1,760
95°F (35°C)	25,400	2,570	24,100	2,310	23,000	2,130
105°F (41°C)	23,300	2,490	22,200	2,340	21,100	2,200
115°F (46°C)	19,250	2,190	18,400	2,080	17,500	1,970

- Capacity output and power usage are measured approximately at 50% indoor RH.
- Capacities are obtained at standard piping length of each outdoor model