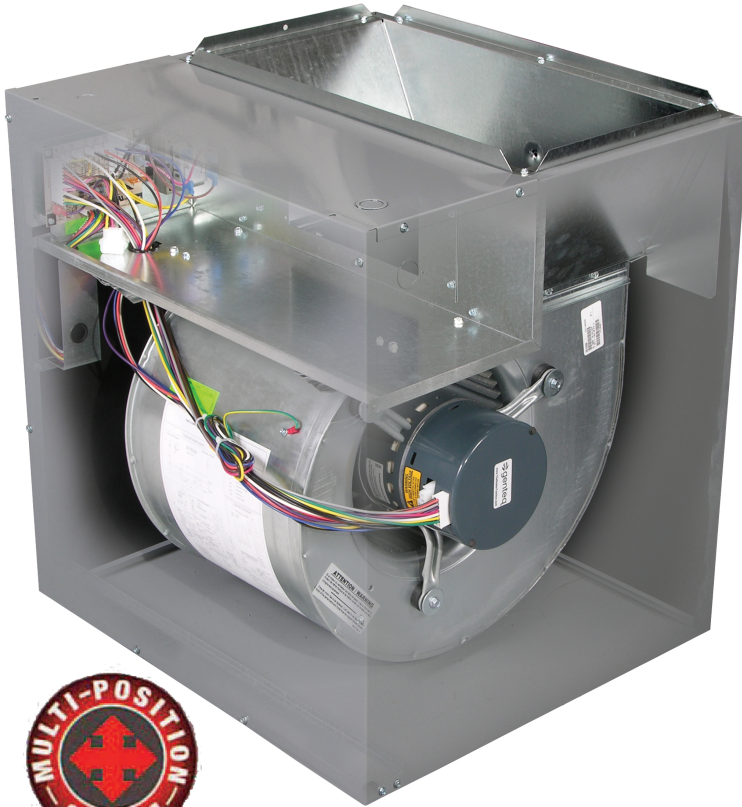


Air Handler



1.5 - 5 tons Air handler with optional electric backup heat



Features

- Variable speed modular blower
- Supports two - stage outdoor units
- Dehumidification Speed: 80% Airflow
- Efficient low continuous fan selection: 50% Airflow
- Upflow, horizontal right or left applications
- Downflow requires sub-base accessory
- Electronic fan control board
- Adjustable Blower time delay
- Accepts 2-stage thermostats
- Matches with AC and HP cased coils
- (Hot water coil may be used, but doesn't match case size)
- 115/208/230-1-60 supply voltage
- Field installed electric heater packages from 5kW-25kW

Service

- Direct drive slide-out blower assembly quality

Quality

- Internally lined with 2 inch turf-skin insulation
- Thermosetting powder coated steel cabinet



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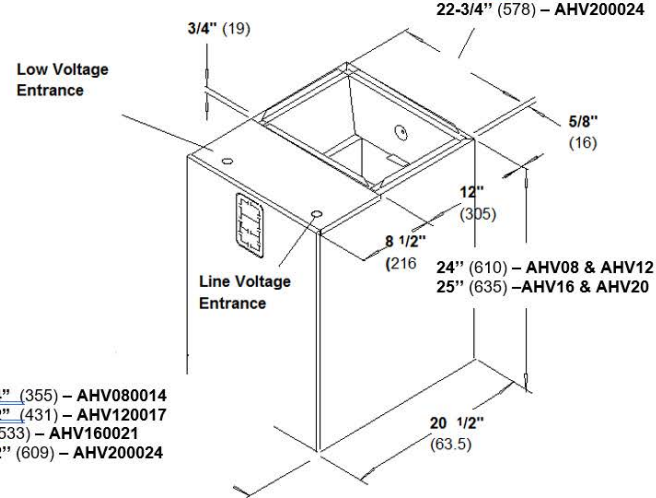
X60064

TECHNICAL SPECIFICATIONS

Duotec Series

X60064

MODEL NUMBER IDENTIFICATION GUIDE					
	1	2	3.4	5.6	7.8
	AH	V	08	00	14
AH = AIR HANDLER		V = Variable Speed ECM Motor - 115/208/230-1-60		TYPE	
08 = 1200	12 = 1600	16 = 2000	20 = 2000	NOMINAL MAX CFM	
00 = No Electric Heat	FACTORY INSTALLED ELECTRIC HEAT				
14 = 14"	17 = 17.5"	21 = 21"	24 = 24.5"	CABINET WIDTH	

Dimensions and Clearances – in (mm)																					
 <p>14-1/4" (355) – AHV080014 17-1/2" (431) – AHV120017 21" (533) – AHV160021 24-1/2" (609) – AHV200024</p> <p>12-7/16" (316) – AHV080014 15-3/4" (400) – AHV120017 19-1/4" (489) – AHV160021 22-3/4" (578) – AHV200024</p> <p>24" (610) – AHV08 & AHV12 25" (635) – AHV16 & AHV20</p>	<table border="1"> <thead> <tr> <th colspan="2">CLEARANCES</th> </tr> </thead> <tbody> <tr> <td colspan="2">NO HEATERS</td> </tr> <tr> <td>ALL Sides.....</td> <td>0"</td> </tr> <tr> <td>From Supply Duct.....</td> <td>0"</td> </tr> <tr> <td>Recommended Service From Front.....</td> <td>20" (508mm) (Service for blower, filter if installed)</td> </tr> <tr> <td colspan="2">WITH HEATERS</td> </tr> <tr> <td>ALL Sides.....</td> <td>0"</td> </tr> <tr> <td>From First Three Feet of Supply Duct to Combustibles....</td> <td>1" (26mm)</td> </tr> <tr> <td>From Duct after Three Feet</td> <td>0"</td> </tr> <tr> <td>Recommended Service From Front.....</td> <td>20" (508mm) (Service for blower, heaters if installed)</td> </tr> </tbody> </table>	CLEARANCES		NO HEATERS		ALL Sides.....	0"	From Supply Duct.....	0"	Recommended Service From Front.....	20" (508mm) (Service for blower, filter if installed)	WITH HEATERS		ALL Sides.....	0"	From First Three Feet of Supply Duct to Combustibles....	1" (26mm)	From Duct after Three Feet	0"	Recommended Service From Front.....	20" (508mm) (Service for blower, heaters if installed)
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	ALL DIMENSIONS IN INCHES (MM)																				

UNIT SPECIFICATIONS					
	Model Number	AHV080014	AHV120017	AHV160021	AHV200024
Application		Upflow / Downflow / Horizontal *			
Electrical	Volt - Phase - Hz.	120 / 208 / 240 - 1 - 60			
Data**	Minimum Circuit Ampacity	6.5 / 3.8 / 3.3	6.5 / 3.8 / 3.3	9.5 / 5.5 / 4.8	9.5 / 5.5 / 4.8
	Time Delay Fuse (Amps)	15		20 / 15 / 15	
	Maximum Fuse or Breaker Size	15		20 / 15 / 15	
Blower Data	Size	DD10 - 7	DD10 - 8	DD10 - 9	DD10 - 9
	Horsepower - Type	1/2 - ECM	1/2 - ECM	3/4 - ECM	3/4 - ECM
	Full Load Amps	5.2 / 3.0 / 2.6	5.2 / 3.0 / 2.6	7.6 / 4.4 / 3.8	7.6 / 4.4 / 3.8
Transformer	Primary / Secondary - VA	(115-208-230 / 24 - VAC) 40 VA			
Weight	Unit / Shipping Lbs. (Kg.)	54/58 (25/26)	58/62 (26/28)	70/75 (32/34)	73/79 (33/36)

*Accessory subbase kit required for downflow application. ** Disregard if electric heat is added. Refer to Electric Heat table



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TECHNICAL SPECIFICATIONS

Duotec Series

X60064

AHV AIRFLOW DELIVERY (CFM) IN COOLING (EITHER A/C & HP)

Modular Unit Size	Outdoor Unit Size	Single-Stage A/C Cooling		Two-Stage Cooling				Fan Only		
				A/C Cooling - High		A/C Cooling - Low				
		Nominal	Dehum	Nominal	Dehum	Nominal	Dehum	LOW	MED	HI
AHV08	18	600	480	600	480	480	350	350	480	600
	24	800	640	800	640	640	400	400	640	800
	30	1000	800	1000	800	800	500	500	800	1000
	36	1200	960	1200	960	960	600	600	960	1200
AHV12	24	800	640	800	640	640	400	400	640	800
	30	1000	800	1000	800	800	500	500	800	1000
	36	1200	960	1200	960	960	600	600	960	1200
	48	1600	1280	1600	1280	1280	800	800	1280	1600
AHV16	36	1200	960	1200	960	960	600	600	960	1200
	42	1400	1120	1400	1120	1120	700	700	1120	1400
	48	1600	1280	1600	1280	1280	800	800	1280	1600
	60	2000	1600	2000	1600	1600	1000	1000	1600	2000
AHV20	36	1200	960	1200	960	960	600	600	960	1200
	42	1400	1120	1400	1120	1120	700	700	1120	1400
	48	1600	1280	1600	1280	1280	800	800	1280	1600
	60	2000	1600	2000	1600	1600	1000	1000	1600	2000

AHV AIRFLOW DELIVERY (CFM) IN HEAT PUMP HEATING MODE ONLY

Modular Unit Size	Outdoor Unit Size	Tap	Single-Stage HP Heating		Two-Stage Heating			
					HP Heating - High		HP Heating - Low	
			Comfort	Eff	Comfort	Eff	Comfort	Eff
AHV08	18	D	525	600	525	600	420	480
	24	C	700	800	700	800	560	640
	30	B	875	1000	875	1000	700	800
	36	A	1050	1200	1050	1200	840	960
AHV12	24	D	700	800	700	800	560	640
	30	C	875	1000	875	1000	700	800
	36	B	1050	1200	1050	1200	840	960
	48	A	1400	1600	1225	1600	1120	1280
AHV16	36	D	1050	1200	1050	1200	840	960
	42	C	1225	1400	1225	1400	980	1120
	48	B	1400	1600	1400	1600	1120	1280
	60	A	1750	2000	1750	2000	1400	1600
AHV20	36	D	1050	1200	1050	1200	840	960
	42	C	1225	1400	1225	1400	980	1120
	48	B	1400	1600	1400	1600	1120	1280
	60	A	1750	2000	1750	2000	1400	1600

1. The two above tables airflows result with the AC/HP CFM ADJUST select jumper set on NOM.
2. Airflow can be adjusted +15% or -10% by selecting Hi or Lo respectively for all modes except fan only.
3. Airflows shown are valid for systems with total static pressure between 0.1 and 1.2 in. wc.



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Airflow Adjust Table				
MODEL #	AUX HEAT RANGE (KW/CFM)			
VIOLET Wire Selection	A	B	C	D
AHV08	15kw	--	10kw	5kw
AHV12	--	15 thru 20kw	10kw	5kw
AHV16	--	25kw	--	5 thru 20kw
AHV20	--	--	25kw	5 thru 20kw

Outdoor Unit Size				
MODEL #	OUTDOOR UNIT SIZE (kBTU)			
BLUE Wire Selection	A	B	C	D
AHV08	036	030	024	018
AHV12	048	036	030	024
AHV16	060	048	042	036
AHV20	060	048	042	036

AHV Modular CFM (L/s) Range			
Unit Size	Outdoor Unit Size	CFM	L/s
AHV08	18	350 - 1200	165-566
	24		
	30		
	36		
AHV12	24	415 - 1600	196-755
	30		
	36		
	48		
AHV16	36	540 - 2000	255-944
	42		
	48		
	60		
AHV20	36	540 - 2000	255-944
	42		
	48		
	60		

HEAT STRIP STAGING

Single-stage operation	Two-stage capable
EHIA05KN10	EHIA15KB10
EHIA10KN10	EHIA20KB10
EHIA15KB10	EHIA25KB10
EHIA20KB10	
EHIA25KB10	

Electric heater	Description	Used with AHV model
EHIA00KN10	No heat kit	08, 12, 16, 20
EHIA05KN10	5kw 1-phase w/T.B	08, 12, 16, 20
EHIA10KN10	10kw 1-phase w/T.B	08, 12, 16, 20
EHIA15KB10	15kw 1-phase w/C.B	08, 12, 16, 20
EHIA20KB10	20kw 1-phase w/C.B	12, 16, 20
EHIA25KB10	25kw 1-phase w/C.B	16, 20

T.B: terminal block
C.B: circuit breaker

Electric heater	Voltage	Total heat KW		1 st Stage kw (w1)		2 nd Stage kw (w2)	
		208V	240V	208V	240V	208V	240V
EHIA05KN10	208-240/1/60	3.6	4.8	3.6	4.8	-	-
EHIA10KN10		7.2	9.6	7.2	9.6	-	-
EHIA15KB10		10.8	14.4	7.2	9.6	3.6	4.8
EHIA20KB10		14.4	19.2	7.2	9.6	7.2	9.6
EHIA25KB10		18	24	7.2	9.6	10.8	14.4



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TECHNICAL SPECIFICATIONS

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Technical Data With Electric Heater

Heater Model	Voltage	Circuit	Heater KW	Heater Amps	AHV08 & AHV12 - 1/2 HP MOTOR				AHV16 & AHV20 - 3/4 HP MOTOR				Recommended *	
					Motor Amps	FLA	MCA	MOP	Motor Amps	FLA	MCA	MOP	Wire Size	Ground Size
EHIA05KN	240	Single	4.8	20.0	2.6	22.6	28.3	30	3.8	23.8	29.8	30	10	10
	208	Single	3.6	17.3	3.0	20.3	25.4	30	4.4	21.7	27.1	30	10	10
EHIA10KN	240	Single	9.6	40.0	2.6	42.6	53.3	60	3.8	43.8	54.8	60	6	10
	208	Single	7.2	34.7	3.0	37.7	47.1	50	4.4	39.1	48.8	50	8	10
EHIA15KB	240	Single	14.4	60.0	2.6	62.6	78.3	80	3.8	63.8	79.8	80	4	8
	240	Mult. 1	9.6	40.0	2.6	42.6	53.3	60	3.8	43.8	54.8	60	6	10
	240	Mult. 2	4.8	20.0	0	20.0	25.0	25	0	20.0	25.0	25	12	10
	208	Single	10.8	51.9	3.0	54.9	68.7	70	4.4	56.3	70.4	80	4	8
	208	Mult. 1	7.2	34.6	3.0	37.6	47.0	50	4.4	39.0	48.8	50	8	10
	208	Mult. 2	3.6	17.3	0.0	17.3	21.6	25	0	17.3	21.6	25	12	10
EHIA20KB	240	Single	19.2	80.0	2.6	82.6	103.3	110	3.8	83.8	104.8	110	2	6
	240	Mult. 1	9.6	40.0	2.6	42.6	53.3	60	3.8	43.8	54.8	60	6	10
	240	Mult. 2	9.6	40.0	0.0	40.0	50.0	50	0	40.0	50.0	50	8	10
	208	Single	14.4	69.2	3.0	72.2	90.3	100	4.4	73.6	92.0	100	3	8
	208	Mult. 1	7.2	34.6	3.0	37.6	47.0	50	4.4	39.0	48.8	50	8	10
	208	Mult. 2	7.2	34.6	0.0	34.6	43.3	45	0	34.6	43.3	45	8	10
EHIA25KB	240	Single	24	100.0	-	-	-	-	3.8	103.8	129.8	150	0	6
	240	Mult. 1	9.6	40.0	-	-	-	-	3.8	43.8	54.8	60	6	10
	240	Mult. 2	9.6	40.0	-	-	-	-	0	40.0	50.0	50	8	10
	240	Mult. 3	4.8	20.0	-	-	-	-	0	20.0	25.0	25	12	10
	208	Single	18	86.5	-	-	-	-	4.4	90.9	113.7	125	1	6
	208	Mult. 1	7.2	34.6	-	-	-	-	4.4	39.0	48.8	50	8	10
	208	Mult. 2	7.2	34.6	-	-	-	-	0	34.6	43.3	45	8	10
	208	Mult. 3	3.6	17.3	-	-	-	-	0	17.3	21.6	25	12	10

* Must conform to local building codes and national standards

USA: National Electronic Code (NEC) ANS/NFPA 70

CANADA: Canada Electric Code CSA C22.1

Single-Phase					
CFM	EHIA05KN10	EHIA10KN10	EHIA15KB10	EHIA20KB10	EHIA25KB10
600	0.01	0.01	-- --	-- --	-- --
700	0.01	0.01	-- --	-- --	-- --
800	0.01	0.01	0.01	-- --	-- --
900	0.01	0.01	0.01	-- --	-- --
1000	0.01	0.01	0.01	0.02	-- --
1100	0.01	0.01	0.02	0.02	-- --
1200	0.01	0.01	0.02	0.02	-- --
1300	0.01	0.02	0.02	0.02	-- --
1400	0.01	0.02	0.02	0.03	0.03
1500	0.01	0.02	0.02	0.03	0.04
1600	0.01	0.02	0.03	0.03	0.04
1700	0.01	0.02	0.03	0.03	0.04
1800	0.01	0.02	0.03	0.04	0.04
1900	0.01	0.02	0.03	0.04	0.05
2000	0.01	0.02	0.03	0.04	0.05
-- --	DO NOT OPERATE IN THIS AREA CFM / KW LIMIT EXCEEDED				



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SUBMITAL FORM

Duotec Series

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Specifications may change without prior notice

Project:	
Consultant Engineer:	
Electrician Contractor:	
Distributor:	
Date:	
Comments:	Approval Information



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