



**SUBMITTAL DATA: DUCT09HP230V1BD 9000 BTU/H Slim Duct (HS) Heat Pump System**

Job Name	Location	Date
Purchaser	Engineer	
Submitted To	For	
Unit Designation	Schedule No.	

**YT1F / XK76 DUCT09HP230V1BD 3VIR09HP230V1AO**



**GENERAL FEATURES**

- AHRI Certificate: 207201625**
- High Efficiency DC Inverter Technology**
- Compact and Quiet Design**
- Slim Line Construction 11 7/8" high**
- High Static E.S.P Capability -Adjustible**
- Internal Condensate Drain Pump**
- Flexible Return Air From Bottom Or Rear**
- Wireless Remote with LCD Display Included**
- XK76 Wired Controller Included**
- Low Ambient Cooling down to -20°F (Range -20°F to 122°F)**
- Low Ambient Heating down to -22°F (Range -22°F tp 86°F)**
- Coil (Indoor and Outdoor) Copper Tube / Aluminum Fin\*☒**
- \* (Blue Fin) 500 Hrs Salt Spray Tested**

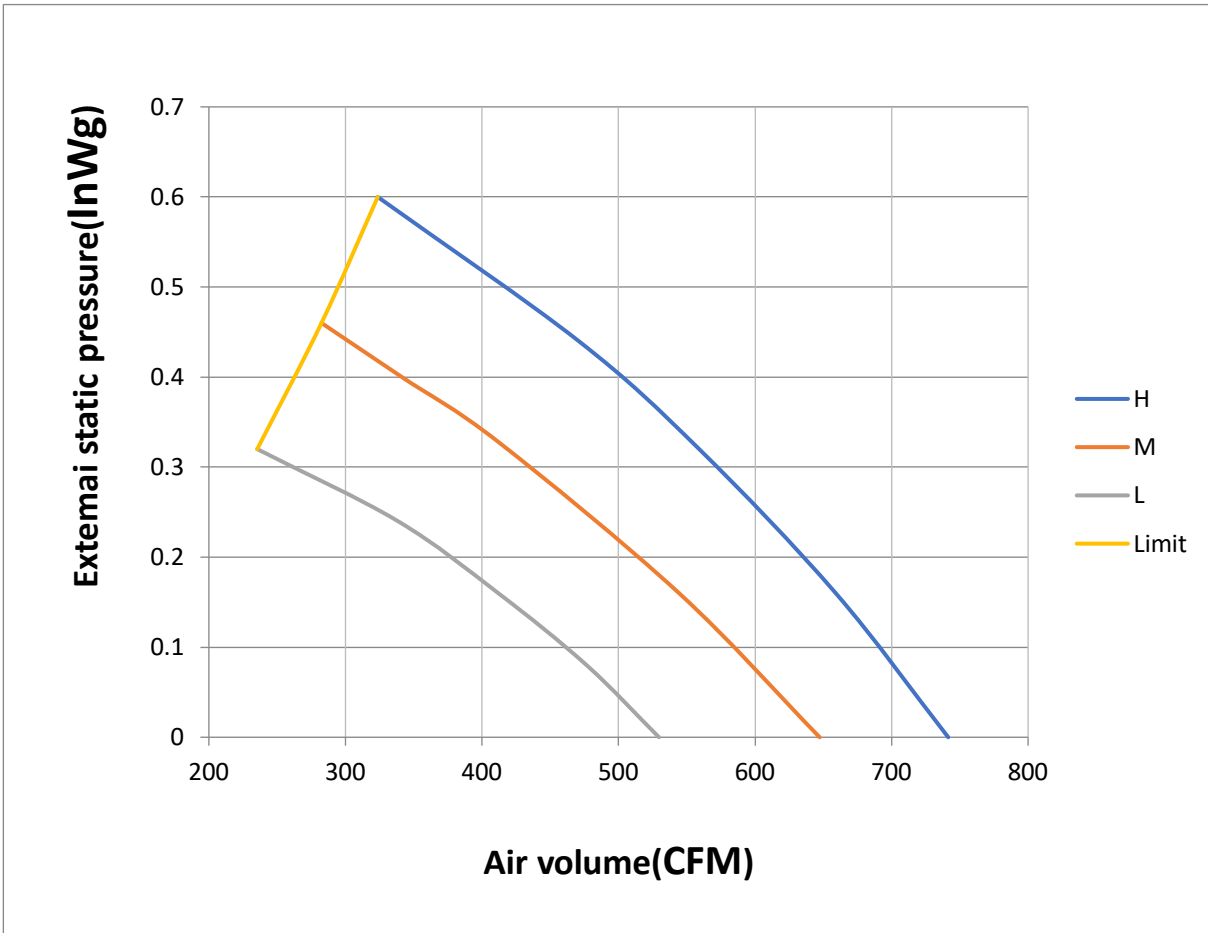
**5 Year Limited Compressor & Parts Warranty (Residential Only)**

## SPECIFICATIONS

## 3VIR09HP230V1AO / DUCT09HP230V1BD

System Type		HEAT PUMP	
<b>SYSTEM PERFORMANCE</b>			
Cooling	Rated Capacity @ 95°F	Btu/h	9100
	Min-Max Capacity	Btu/h	2450 - 13300
Heating	Rated Capacity @ 47°F	Btu/h	11000
	Rated Capacity @ 17°F	Btu/h	6900
	Min-Max Capacity	Btu/h	2590 - 13300
SEER / EER		21 / 14.2	
HSPF / COP		11.2 / 3.74	
Energy Star®		YES	
Cooling Temperature Range		°F	-20 - 122
Heating Temperature Range		°F	-22 - 86
<b>INDOOR UNIT</b>		<b>DUCT09HP230V1BD</b>	
Fan Motor Output Power		W	150
Fan Motor FLA		amps	0.4
Air Flow (Min - Max)		CFM	188 - 324
External Static Pressure		In W.c.	0.6
Sound Pressure Level (Cooling / Heating)		dB(A)	25 - 36
Dehumidification		pt/hr	1.7
Condensate Drain Size (OD)		in	1
Unit Dimension (WxHxD)		in	32 3/4 X 11 7/8 X 29 3/4
Package Dimension (WxHxD)		in	35 1/4 X 13 5/8 X 31 3/4
Weight (Net / Gross)		lbs	71 / 84
<b>OUTDOOR UNIT</b>		<b>3VIR09HP230V1AO</b>	
Compressor Type		G-10 / 1-Stage Inverter	
Compressor RLA		amps	6
Fan Motor Output Power		W	30
Fan Motor RLA		amps	0.4
Sound Pressure Level (Cooling / Heating)		dB(A)	52
Unit Dimension (WxHxD)		in	33 3/8 X 23 1/2 X 12 5/8
Package Dimension (WxHxD)		in	34 1/2 X 24 7/8 X 14 1/4
Weight (Net / Gross)		lbs	73.9/80.5
Refrigerant Charge - R410A		oz	36.3
Coil Type		Aluminum Fin / Copper Tube	
<b>REFRIGERANT PIPING</b>			
Line Set Size by Indoor Unit(Liquid - Gas)		in	1/4 - 3/8
Outdoor Service Valve Size (Liquid - Gas)		in	1/4 - 3/8
Pre-Charge Lengh		ft	25
Pipe Length (Min - Max)		ft	10 / 49
Max. Pipe Elevation		ft	33
<b>ELECTRICAL</b>			
Power Supply (Voltage Operating Range)		208-230V / 1Ph / 60Hz	
Rated Current (Cooling / Heating)		amps	3 / 7.2
MCA / MOCP		amps	9 / 15
Main Power Wire Size		AWG	Size Per Local Code
Interconnecting Wire Size		AWG	14 / 4
<b>LIMITED WARRANTY</b>		<b>5 Years Parts and Compressor - Residential</b>	

Rated External Static Pressure - .2 InWc  
 External Static Pressure Range- 0 - .4 InWc



**Note:**

During installation there are 9 dip switches in the control box used set static pressure from 0" to .4". You can select P01, P02, P03, P04, P05, P06, P07, P08, P09 in fan mode of indoor fan motor, which means different fan mode combinations are corresponding to different static pressure.

Ex-factory defaulted mode is P05. You can set the mode through wired controller. S01, S02,

**EXTENDED RATINGS**

**DUCT09HP230V1BD**

COOLING PERFORMANCE						HEATING PERFORMANCE				
Outdoor Ambient Temperature (DB)		Return Air Temperature				Outdoor Ambient Temperature (DB)		Return Air Temperature		
		80°F (DB)						70°F (DB)		
		TC (Btu/h)	SHR	EER	Power Input (W)			TC (Btu/h)	COP	Power Input (W)
<b>MAX OUTPUT</b>	-20°F	5076	3834	2.67	554	<b>MAX OUTPUT</b>	-22°F	4300	1.29	980
	-15°F	5176	3976	2.68	566		-20°F	5000	1.41	1040
	-10°F	5386	4121	2.73	579		-15°F	5800	1.55	1100
	-5°F	5593	4270	2.74	598		-10°F	6600	1.69	1148
	0°F	5800	4480	2.78	612		-5°F	7480	1.87	1171
	5°F	5992	4644	2.81	625		0°F	8360	2.05	1195
	10°F	6184	4784	2.79	650		5°F	8910	2.14	1219
	15°F	6280	4881	2.78	663		10°F	9350	2.20	1244
	20°F	6568	5120	2.80	688		15°F	10780	2.49	1270
	25°F	6760	5262	2.78	713		17°F	11660	2.64	1296
	30°F	7144	5577	2.82	742		20°F	11880	2.63	1322
	35°F	7528	5896	2.79	790.1		25°F	12320	2.68	1349
	40°F	7720	6040	2.78	815		30°F	11880	2.63	1322
	45°F	8008	6256	2.67	879		35°F	12980	2.93	1297
	50°F	8296	6508	2.52	965.2		40°F	13860	3.07	1323
	55°F	8776	6910	2.56	1006		45°F	14800	3.21	1350
	60°F	9160	7202	2.51	1069		47°F	15400	3.21	1404
	65°F	9832	7756	2.54	1133		50°F	13200	2.87	1348
	70°F	10216	8096	2.56	1171.1		55°F	14080	3.00	1375
	75°F	10696	8466	2.62	1196.5		60°F	12100	2.69	1320
	80°F	11080	8862	2.69	1209.2		65°F	11220	2.44	1346
	85°F	11764	9110	2.79	1234.6		70°F	11550	2.44	1387
	90°F	11588	8713	2.72	1247.3		75°F	11880	2.43	1432
	95°F	11600	8488	2.70	1260		80°F	12030	2.41	1460
100°F	10520	8205	2.35	1310	86°F	12280	2.40	1500		
105°F	9940	7882	2.14	1361						
110°F	9556	7582	2.00	1400						
115°F	9264	7501	1.87	1450						
120°F	8204	6708	1.64	1463						
122°F										

**LEGEND:** W - Watts  
 DB - Dry Bulb  
 TC - Total Capacity  
 SHR - Sensible Heat Ratio  
 COP - Coefficient of Performance

## FEATURES & FUNCTIONS SUMMARY

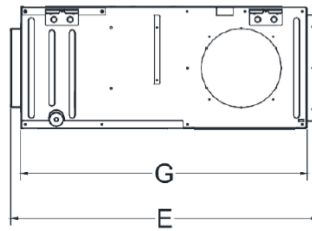
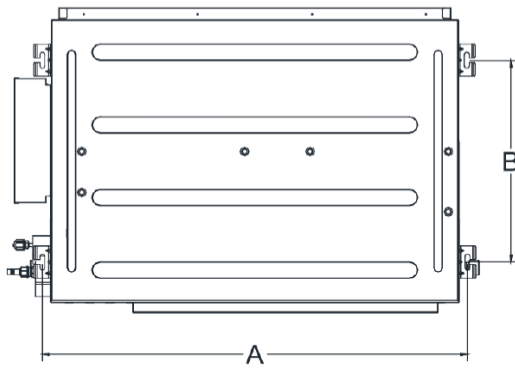
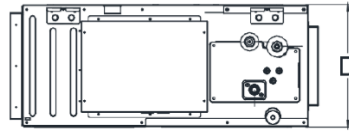
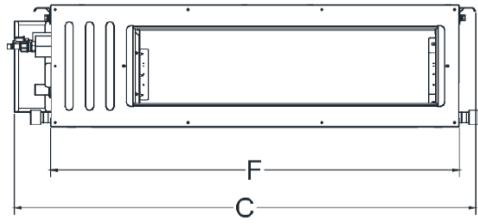
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### SYSTEM FEATURES

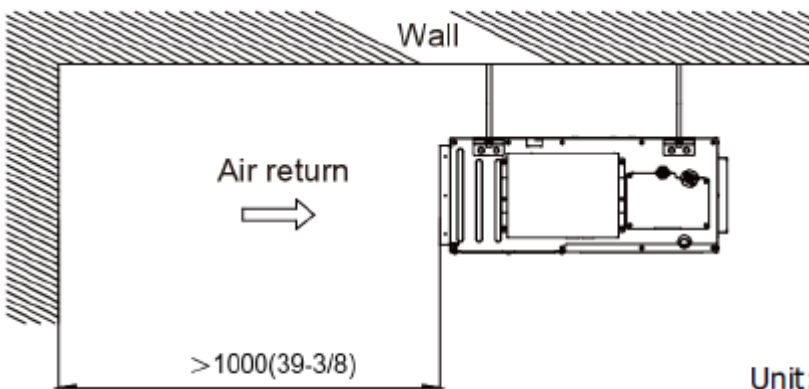
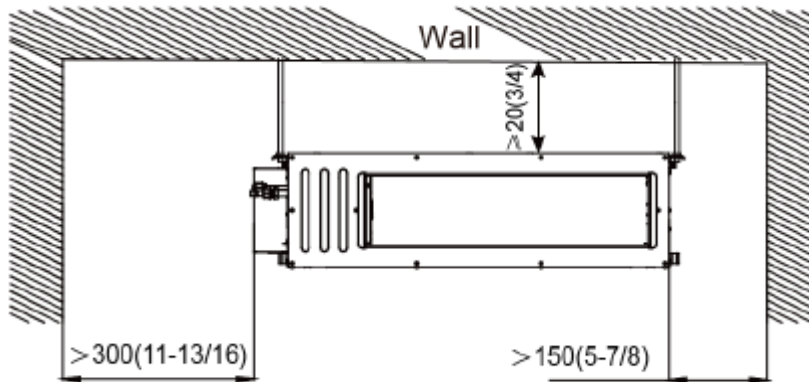
Inverter Type	G10
Ultra Low Frequency Torque Control	Yes
Power Factor Correction	Yes
Compressor Type	High Efficiency Rotary
Basepan With Electric Heater	Yes
Indoor & Outdoor Fin Coating (Blue Fin)	Yes
Intelligent Defrosting	Yes
Intelligent Preheating	Yes
Low Voltage Startup	Yes
Memory/Power Failure Recovery	Yes
Self Diagnosis	Yes
Wired Controller Interface	Yes
WiFi Included	No
Indoor Fan Type	Centrifugal
Multi Fan Speeds	4 Speeds
Indoor Unit Display	Yes
Auxiliary Electrical Heater	No
Ventilation (Outdoor Air)	Yes

### REMOTE CONTROLLER FUNCTIONS

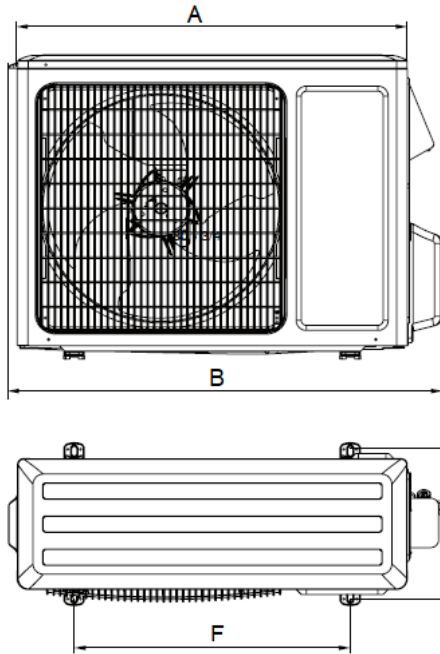
Auto Mode	Yes
Auto Fan	Yes
Auto Swing - (Horizontal Auto Swing)	No
Auto Swing - (Vertical Auto Swing)	No
Clock	Yes
Dry Mode	Yes
Dry Anti-Mildew (X-Fan) Mode	Yes
Energy Saving Mode	Yes
Dirty Filter Alert	No
Fan Speed Control (4 Speeds)	Yes
I Feel Function	Yes
Privacy Lock	Yes
Quiet Mode	Yes
Room Temperature Display	No
Sleep Mode (Normal Sleep)	Yes
4 Sleep Mode Options	No
Timer Mode	Yes
Turbo Mode	Yes
Display On/Off Control	No
Freeze Guard Mode	Yes
Power Failure Mode	Yes



Dimensions	
A	29 18
B	19 3/4
C	32 3/4
D	11 7/8
E	29 3/4
F	27 5/8
G	28 5/8

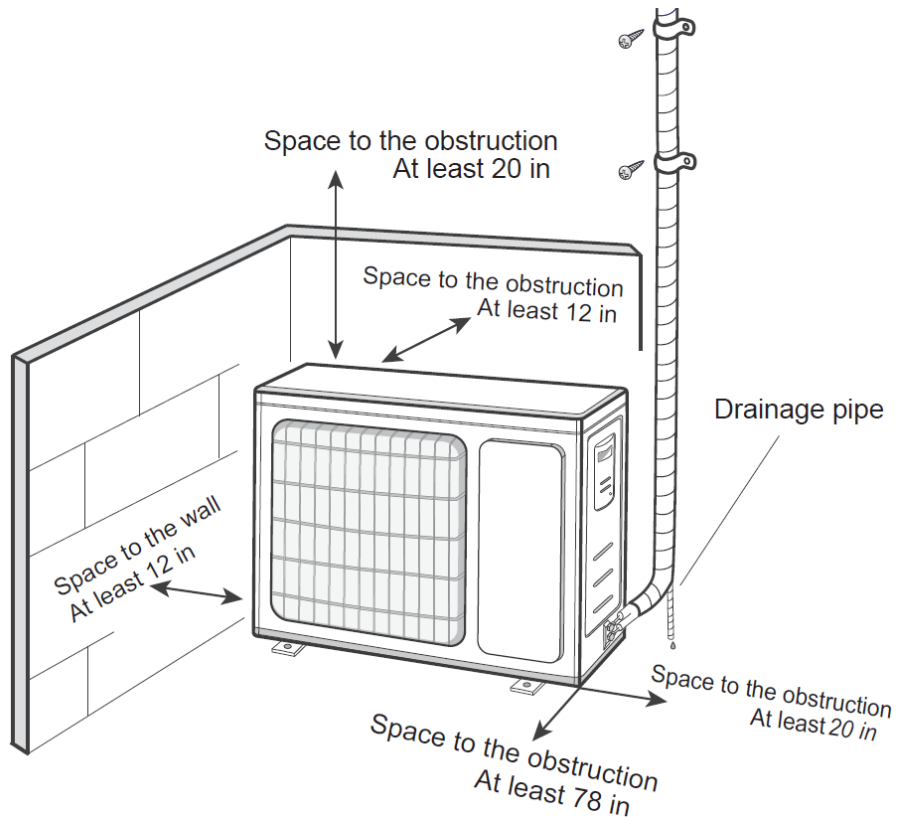


Unit: mm(in.)



Dimensions	
A	30 3/4
B	33 3/8
C	23 1/2
D	10 1/8
E	12 5/8
F	21 5/16
G	11 5/16

Unit:inch



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