



SUBMITTAL DATA: DUCT18HP230V1BD 18000 BTU/H Slim Duct (HS) Heat Pump System

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

YT1F / XK76 DUCT18HP230V1BD 3VIR18HP230V1AO



GENERAL FEATURES

- AHRI Certificate: 207201630**
- High Efficiency DC Inverter Technology**
- Compact and Quiet Design**
- Slim Line Construction 11-7/8" high**
- High Static E.S.P Capability -Adjustable**
- 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**

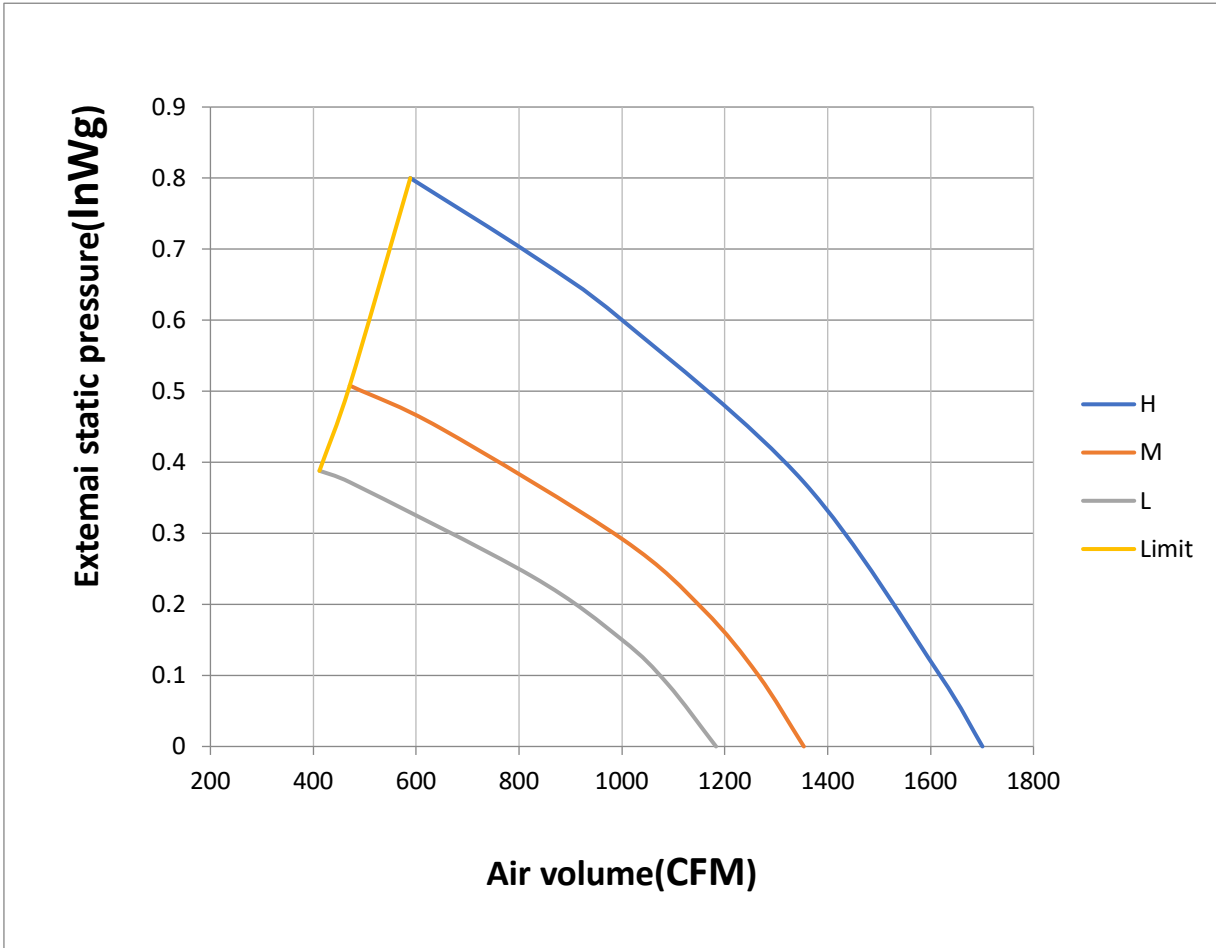
5 Year Limited Compressor & Parts Warranty (Residential Only)

SPECIFICATIONS

3VIR18HP230V1AO / DUCT18HP230V1BD

System Type		HEAT PUMP	
SYSTEM PERFORMANCE			
Cooling	Rated Capacity @ 95°F	Btu/h	18000
	Min-Max Capacity	Btu/h	5118 - 23202
Heating	Rated Capacity @ 47°F	Btu/h	18200
	Rated Capacity @ 17°F	Btu/h	12500
	Min-Max Capacity	Btu/h	5800 - 23543
SEER / EER		15.2 / 8.85	
HSPF / COP		9.7 / 3.18	
Energy Star®		NO	
Cooling Temperature Range		°F	-20 - 122
Heating Temperature Range		°F	-22 - 86
INDOOR UNIT		DUCT18HP230V1BD	
Fan Motor Output Power		W	200
Fan Motor FLA		amps	0.7
Air Flow (Min - Max)		CFM	288 - 589
External Static Pressure		In W.c.	0.8
Sound Pressure Level (Cooling / Heating)		dB(A)	26 - 39
Dehumidification		pt/hr	3.8
Condensate Drain Size (OD)		in	1
Unit Dimension (WxHxD)		in	44 1/2 X 11 7/8 X 29 3/4
Package Dimension (WxHxD)		in	47 5/16 X 13 5/8 X 32 X 13 5/8
Weight (Net / Gross)		lbs	93 / 107
OUTDOOR UNIT		3VIR18HP230V1AO	
Compressor Type		G-10 / 1-Stage Inverter	
Compressor RLA		amps	10.4
Fan Motor Output Power		W	60
Fan Motor RLA		amps	0.45
Sound Pressure Level (Cooling / Heating)		dB(A)	57
Unit Dimension (WxHxD)		in	38 X 27 5/8 X 15 5/8
Package Dimension (WxHxD)		in	40 1/2 X 29 X 18
Weight (Net / Gross)		lbs	103.6 / 113.6
Refrigerant Charge - R410A		oz	56.4
Coil Type		Aluminum Fin / Copper Tube	
REFRIGERANT PIPING			
Line Set Size by Indoor Unit(Liquid - Gas)		in	3/8 - 5/8
Outdoor Service Valve Size (Liquid - Gas)		in	1/4 - 5/8
Pre-Charge Lengh		ft	25
Pipe Length (Min - Max)		ft	10 / 98
Max. Pipe Elevation		ft	66
ELECTRICAL			
Power Supply (Voltage Operating Range)		208-230V / 1Ph / 60Hz	
Rated Current (Cooling / Heating)		amps	6 / 12
MCA / MOCP		amps	15 / 20
Main Power Wire Size		AWG	Size Per Local Code
Interconnecting Wire Size		AWG	14 / 4
LIMITED WARRANTY		5 Years Parts and Compressor - Residential	

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

DUCT18HP230V1BD

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)
MAX OUTPUT	-20°F	5710	3863	1.55	1080	MAX OUTPUT	-22°F	6778	1.70	1170
	-15°F	6022	4249	1.71	1030		-20°F	7256	1.78	1194
	-10°F	6436	4347	1.75	1080		-15°F	8100	1.95	1219
	-5°F	7071	4706	1.77	1172		-10°F	9281	2.19	1244
	0°F	7900	4783	1.79	1291		-5°F	9787	2.26	1269
	5°F	9480	5780	2.06	1349		0°F	10125	2.29	1295
	10°F	10042	6192	2.10	1403		5°F	10742	2.38	1321
	15°F	10357	6359	2.22	1368		10°F	11651	2.53	1348
	20°F	10614	6478	2.15	1445		15°F	11730	2.50	1376
	25°F	10709	6619	2.17	1445		17°F	12500	2.40	1528
	30°F	11060	6882	2.16	1503		20°F	13304	2.72	1433
	35°F	11757	7224	2.21	1561		25°F	14819	2.97	1462
	40°F	12113	7588	2.30	1542		30°F	15162	2.98	1492
	45°F	12789	7893	2.33	1610		35°F	16334	3.12	1536
	50°F	13166	8302	2.36	1638		40°F	17212	3.19	1582
	55°F	13868	8803	2.40	1696		45°F	17718	3.19	1630
	60°F	14287	9058	2.39	1749		47°F	18200	2.96	1805
	65°F	14395	9198	2.41	1754		50°F	18324	3.18	1687
	70°F	15761	10305	2.48	1861		55°F	18407	3.22	1678
	75°F	16677	10726	2.59	1888		60°F	18045	3.36	1576
	80°F	17241	11203	2.62	1925		65°F	16961	3.26	1527
	85°F	17587	11591	2.60	1985		70°F	16421	3.23	1489
	90°F	17701	11456	2.66	1952		75°F	15337	3.12	1443
	95°F	17555	11437	2.67	1927		80°F	14979	3.09	1419
100°F	16310	10756	2.69	1776	86°F	14159	2.93	1416		
105°F	15624	9997	2.56	1785						
110°F	13873	9189	2.46	1652						
115°F	13107	8379	2.46	1561						
120°F	10962	7612	2.18	1472						
122°F	10092	7274	2.18	1359						

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

FEATURES & FUNCTIONS SUMMARY

3VIR18HP230V1AO / DUCT18HP230V1BD

SYSTEM FEATURES

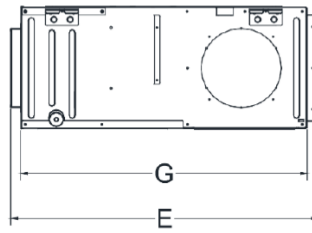
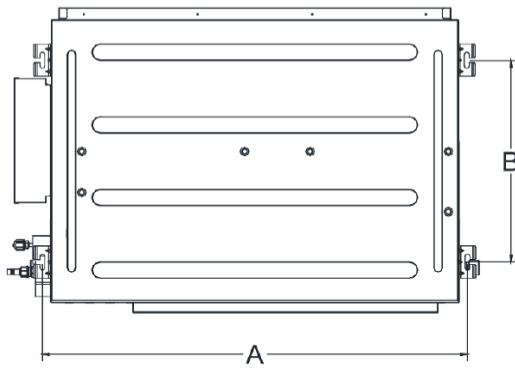
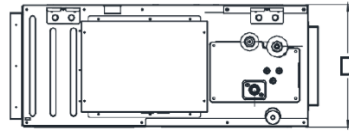
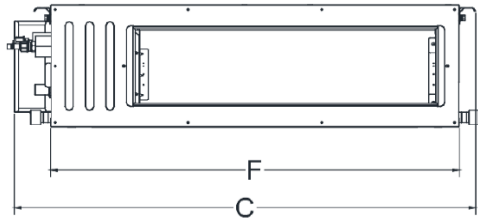
Inverter Type	G10
Ultra Low Frequency Torque Control	Yes
Power Factor Correction	Yes
Compressor Type	High Efficiency Rotary
Basepan With Electric Heater	Yes
Indoor & Outdoor Fin Coating	Yes
Intelligent Defrosting	Yes
Intelligent Preheating	Yes
Low Voltage Startup	Yes
Memory/Power Failure Recovery	Yes
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

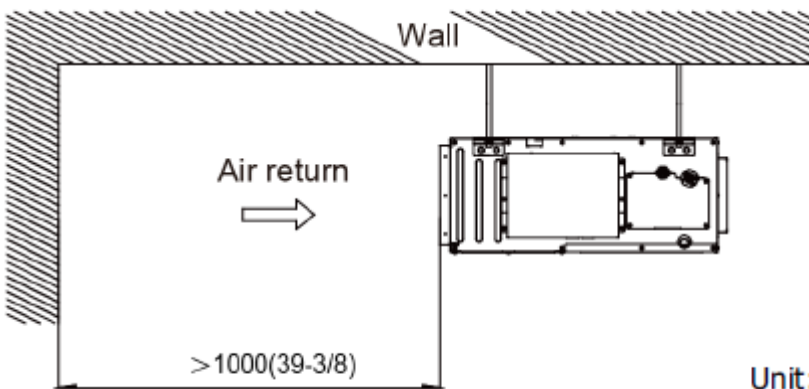
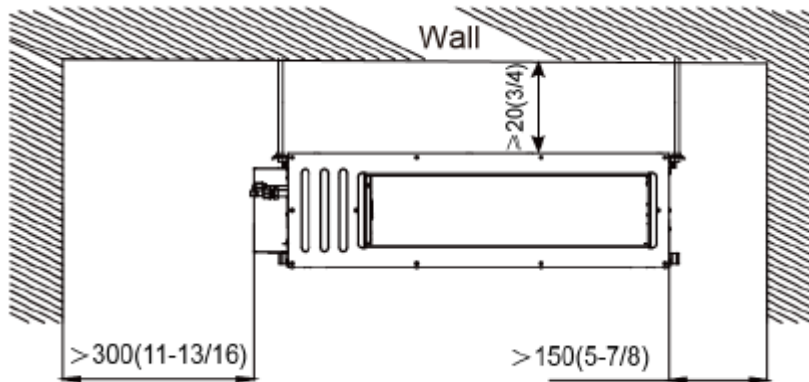
Auto Mode	Yes
Auto Fan	Yes
Auto Swing - (Horizontal Auto Swing)	No
Auto Swing - (Vertical Auto Swing)	No
Clock	Yes
Dry Mode	Yes
Dry Anti-Mildew (X-Fan) Mode	Yes
Energy Saving Mode	Yes
Dirty Filter Alert	No
Fan Speed Control (4 Speeds)	Yes
I Feel Function	Yes
Privacy Lock	Yes
Quiet Mode	Yes
Room Temperature 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 & CLEARANCES

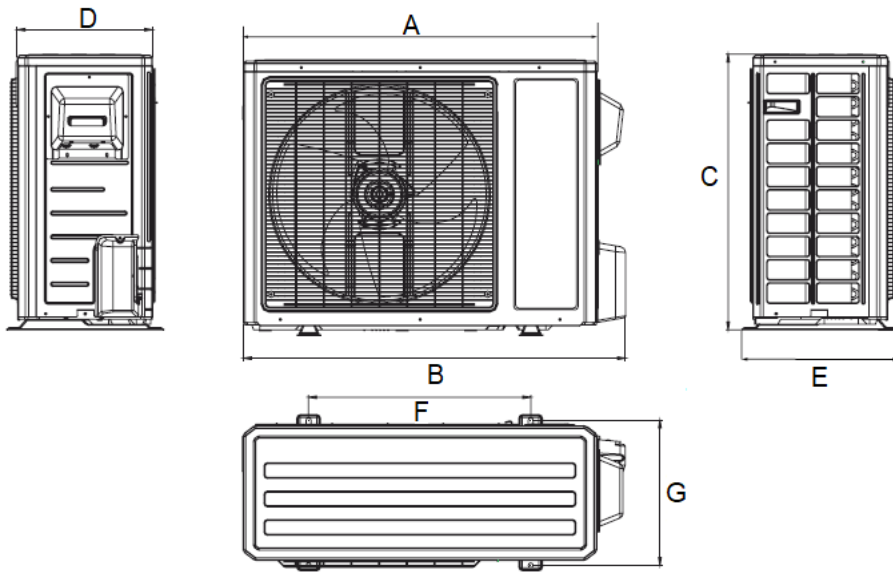
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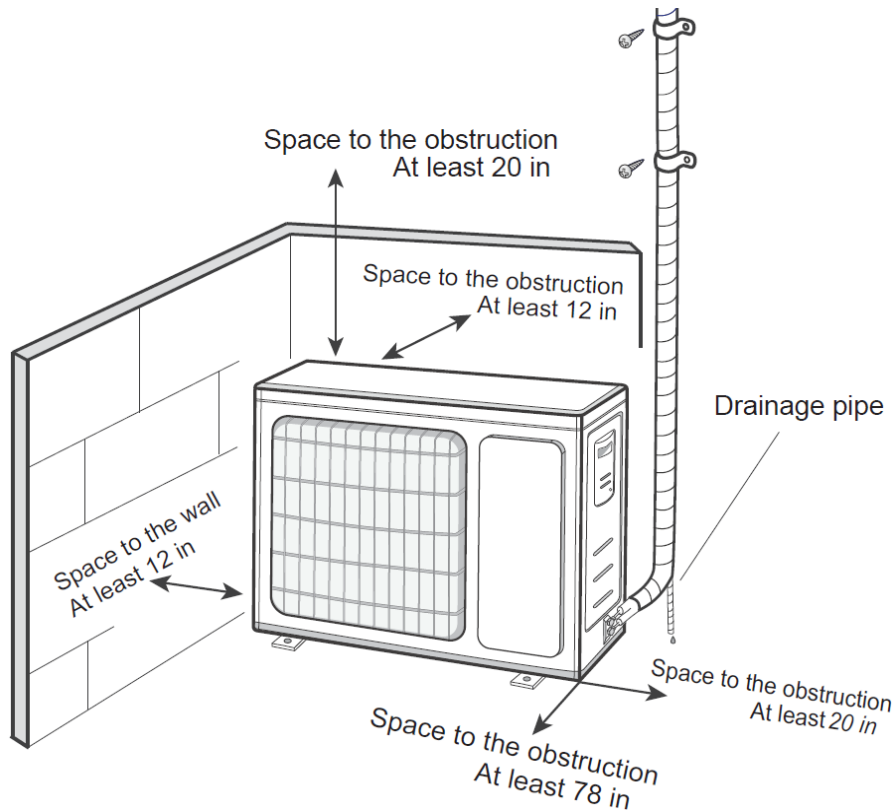
Dimensions	
A	41
B	19 3/4
C	44 1/2
D	11 7/8
E	29 3/4
F	39 3/8
G	27 5/8



Unit: mm(in.)



Dimensions	
A	35
B	38
C	27 9/16
D	13 7/16
E	15 9/16
F	22
G	14 5/16



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