



| SUBMITTAL DATA: CAS12HP230V1BC | | 12000 BTU/H Cassette Heat Pump System | |
|--------------------------------|--------------|---------------------------------------|--|
| Job Name | Location | Date | |
| Purchaser | Engineer | | |
| Submitted To | For | | |
| Unit Designation | Schedule No. | | |

YT1F / XK19 CAS12HP230V1BC 3VIR12HP230V1AO



GENERAL FEATURES

- AHRI Certificate: 207201628**
- High Efficiency DC Inverter Technology**
- Compact and Quiet Design**
- 4 - Way Discharge Air**
- Internal Condensate Drain Pump**
- Wireless Remote with LCD Display Included**
- XK19 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 to 86°F)**
- Coil (Indoor and Outdoor) Copper Tube / Aluminum Fin***
- * (Blue Fin) 500 Hrs Salt Spray Tested**

Limited Warranty: 5 Year Parts, 7 Years Compressor - Residential & Commercial



| SPECIFICATIONS | | 3VIR12HP230V1AO / CAS12HP230V1BC | |
|---|-------------------------------|---|---------------------------|
| System Type | | HEAT PUMP | |
| SYSTEM PERFORMANCE | | | |
| Cooling | Rated Capacity @ 95°F | Btu/h | 12000 |
| | Min-Max Capacity | Btu/h | 900 - 14100 |
| | Rated Power Input (Min - Max) | W | |
| Heating | Rated Capacity @ 47°F | Btu/h | 12000 |
| | Rated Capacity @ 17°F | Btu/h | 6900 |
| | Min-Max Capacity | Btu/h | 900 - 15500 |
| | Rated Power Input (Min - Max) | W | |
| SEER / EER | | 24 / 13 | |
| HSPF / COP | | 11.3 / 4.0 | |
| Energy Star® | | YES | |
| Cooling Temperature Range | | °F | -20 - 122 |
| Heating Temperature Range | | °F | -22 - 86 |
| INDOOR UNIT | | CAS12HP230V1BC | |
| Fan Motor Output Power | | W | 45 |
| Fan Motor FLA | | amps | 0.5 |
| Air Flow (Min - Max) | | CFM | 265 - 383 |
| Sound Pressure Level (Cooling / Heating) | | dB(A) | 34 -44 |
| Dehumidification | | pt/hr | 2.96 |
| Condensate Drain Size (OD) | | in | 1 |
| Unit Dimension (WxHxD) | | in | 23 1/2 X 23 1/2 X 9 1/2 |
| Package Dimension (WxHxD) | | in | 30 1/2 X 29 X 11 1/4 |
| Weight (Net / Gross) | | lbs | 44 /53 |
| OUTDOOR UNIT | | 3VIR12HP230V1AO | |
| Compressor Type | | G-10 / 1-Stage Inverter | |
| Compressor RLA | | amps | 6.6 |
| Fan Motor Output Power | | W | 30 |
| Fan Motor RLA | | amps | 0.37 |
| Sound Pressure Level (Cooling / Heating) | | dB(A) | 52 |
| Unit Dimension (WxHxD) | | in | 35 3/8 X 23 1/2 X 14 7/8 |
| Package Dimension (WxHxD) | | in | 37 3/16 X 24 7/8 X 16 1/2 |
| Weight (Net / Gross) | | lbs | 83.8/90.4 |
| Refrigerant Charge - R410A | | oz | 47.3 |
| Coil Type | | Aluminum Fin / Copper Tube | |
| REFRIGERANT PIPING | | | |
| Indoor Service Valve Size (Liquid - Gas) | | in | 1/4 - 3/8 |
| Outdoor Service Valve Size (Liquid - Gas) | | in | 1/4 - 3/8 |
| Pre-Charge Length | | ft | 25 |
| Pipe Length (Min - Max) | | ft | 10 / 66 |
| Max. Pipe Elevation | | ft | 33 |
| ELECTRICAL | | | |
| Power Supply (Voltage Operating Range) | | 208-230V / 1Ph / 60Hz | |
| Rated Current (Cooling / Heating) | | amps | 4 / 7.5 |
| MCA / MOCP | | amps | 10 / 15 |
| Main Power Wire Size | | AWG | Size Per Local Code |
| Interconnecting Wire Size | | AWG | 14 / 4 |
| LIMITED WARRANTY | | 5 Yrs Parts, 7 Yrs Compressor - Residential & Commercial | |

EXTENDED RATINGS

CAS12HP230V1BC

| 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 | | | | | MAX OUTPUT | -22°F | | | | |
| | -15°F | | | | | | -20°F | | | | |
| | -10°F | | | | | | -15°F | 5140 | 1.44 | 1046 | |
| | -5°F | 5820 | 4210 | 3.25 | 525 | | -10°F | 5460 | 1.51 | 1062 | |
| | 0°F | 5990 | 4350 | 3.26 | 539 | | -5°F | 5760 | 1.57 | 1077 | |
| | 5°F | 6230 | 4555 | 3.32 | 550 | | 0°F | 7800 | 2.09 | 1096 | |
| | 10°F | 6400 | 4700 | 3.31 | 567 | | 5°F | 8990 | 2.36 | 1116 | |
| | 15°F | 6570 | 4851 | 3.30 | 584 | | 10°F | 9600 | 2.61 | 1077 | |
| | 20°F | 6900 | 5090 | 3.34 | 605 | | 15°F | 10140 | 2.77 | 1072 | |
| | 25°F | 7200 | 5320 | 3.37 | 627 | | 17°F | 10670 | 2.93 | 1067 | |
| | 30°F | 7680 | 5722 | 3.41 | 660 | | 20°F | 10800 | 3.11 | 1019 | |
| | 35°F | 8020 | 6011 | 3.42 | 688 | | 25°F | 10920 | 3.23 | 989 | |
| | 40°F | 8390 | 6300 | 3.44 | 715 | | 30°F | 11160 | 3.34 | 980 | |
| | 45°F | 8760 | 6593 | 3.31 | 776 | | 35°F | 11280 | 3.46 | 955 | |
| | 50°F | 9110 | 6886 | 3.19 | 836 | | 40°F | 11400 | 3.59 | 931 | |
| | 55°F | 9420 | 7130 | 3.22 | 858 | | 45°F | 11760 | 3.63 | 951 | |
| | 60°F | 9720 | 7387 | 3.24 | 880 | | 47°F | 11870 | 3.62 | 961 | |
| | 65°F | 10360 | 7916 | 3.25 | 935 | | 50°F | 12000 | 3.63 | 970 | |
| | 70°F | 11040 | 8440 | 3.27 | 990 | | 55°F | 12960 | 3.80 | 999 | |
| | 75°F | 12110 | 9332 | 3.40 | 1045 | | 60°F | 13800 | 3.93 | 1028 | |
| | 80°F | 12600 | 9735 | 3.48 | 1062 | | 65°F | 13200 | 3.65 | 1059 | |
| | 85°F | 13070 | 10137 | 3.55 | 1079 | | 70°F | 12700 | 3.49 | 1067 | |
| | 90°F | 12530 | 9720 | 3.37 | 1089 | | 75°F | 11880 | 3.23 | 1077 | |
| | 95°F | 12000 | 9360 | 3.20 | 1100 | | 80°F | 11160 | 3.12 | 1048 | |
| | 100°F | 11390 | 8919 | 2.92 | 1144 | | 86°F | 10350 | 2.91 | 1042 | |
| | 105°F | 10800 | 8470 | 2.66 | 1188 | | | | | | |
| 110°F | 10420 | 8221 | 2.49 | 1228 | | | | | | | |
| 115°F | 10050 | 7960 | 2.33 | 1265 | | | | | | | |
| 120°F | 9450 | 7511 | 2.18 | 1271 | | | | | | | |
| 122°F | 8870 | 7050 | 2.03 | 1279 | | | | | | | |

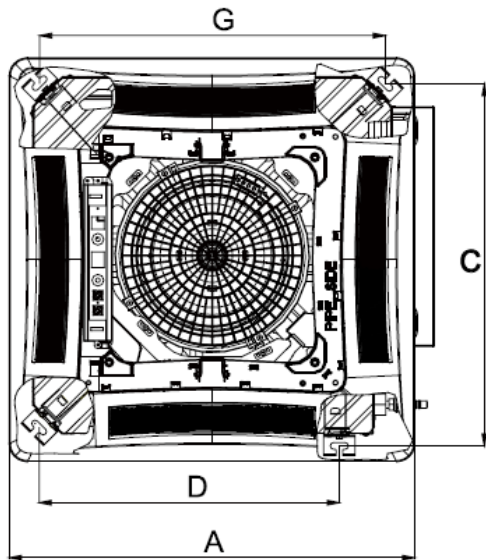
LEGEND: W - Watts
 DB - Dry Bulb
 TC - Total Capacity
 SHR - Sensible Heat Ratio
 COP - Coefficient of Performance

FEATURES & FUNCTIONS SUMMARY**3VIR12HP230V1AO / CAS12HP230V1BC****SYSTEM FEATURES**

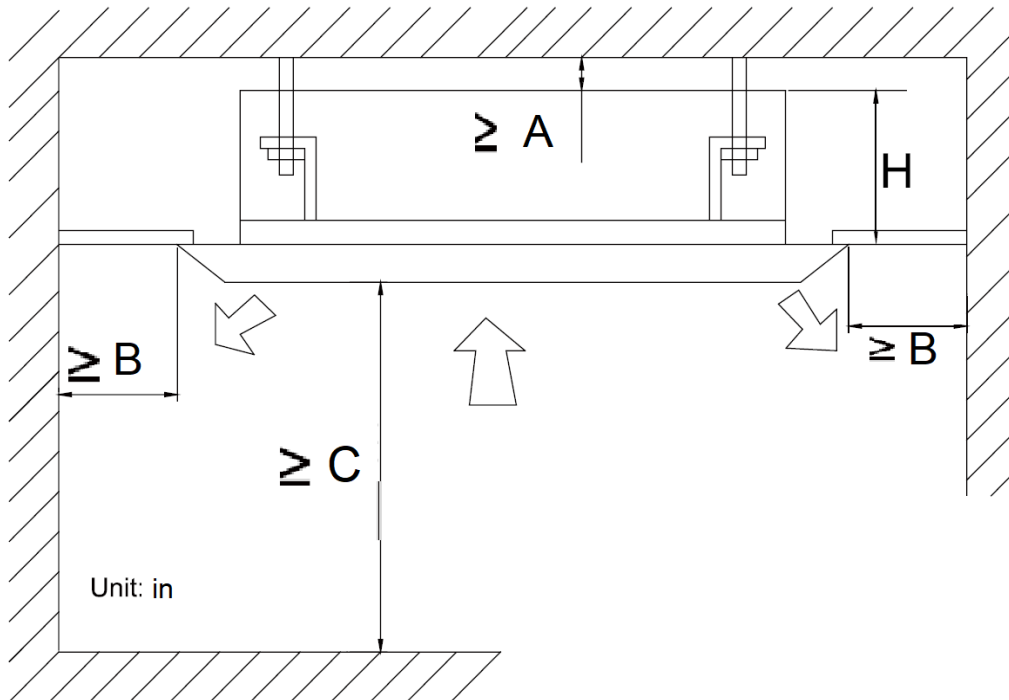
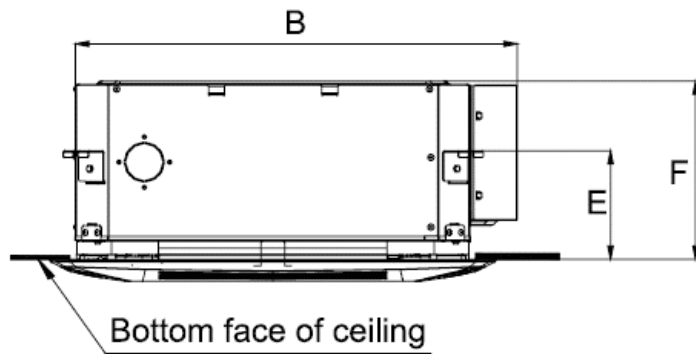
| | |
|------------------------------------|------------------------|
| Inverter Type | G10 |
| Ultra Low Frequency Torque Control | Yes |
| Power Factor Correction | Yes |
| Compressor Type - Inverter | High Efficiency Rotary |
| Basepan With Electric Heater | Yes |
| Indoor & Outdoor Fin Coating | 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) | No |

REMOTE CONTROLLER FUNCTIONS

| | |
|------------------------------------|-----|
| Auto Mode | Yes |
| Auto Fan | Yes |
| Auto Swing (Horizontal Auto Swing) | No |
| Auto Swing (Vertical Auto Swing) | Yes |
| Clock | Yes |
| Dry Mode | Yes |
| Dry Anti-Mildew (X-Fan) Mode | Yes |
| Energy Saving Mode | Yes |
| Dirty Filter Alert | No |
| Fan Speed Control (7 Speeds) | Yes |
| I Feel Function | Yes |
| Privacy Lock | Yes |
| Quiet Mode | No |
| Room Temperature Display | No |
| Sleep Mode | Yes |
| Normal Sleep Mode Option | Yes |
| Timer Mode | Yes |
| Turbo Mode | Yes |
| Display On/Off Control | Yes |
| Freeze Guard Mode | Yes |
| Power Failure Mode | Yes |

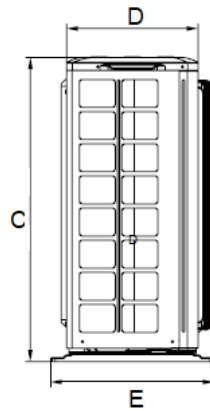
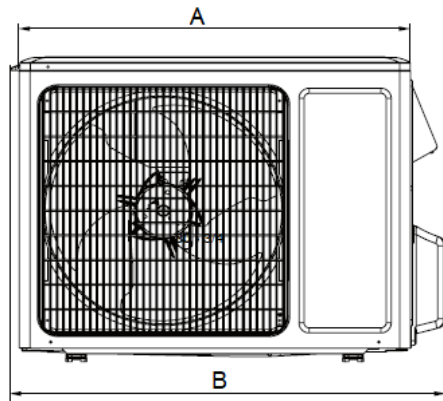


| Dimensions | |
|------------|---------|
| A | 26 3/8 |
| B | 26 3/8 |
| C | 23 5/8 |
| D | 19 1/2 |
| E | 5 11/16 |
| F | 9 7/16 |
| G | 23 1/2 |

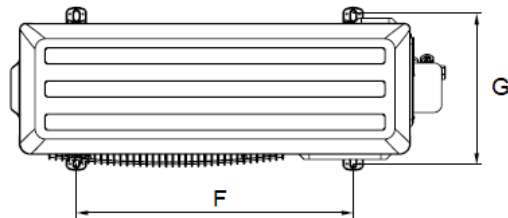


| Clearances | |
|------------|-----|
| A | 7/8 |
| B | 60 |
| C | 98 |
| H | 10 |

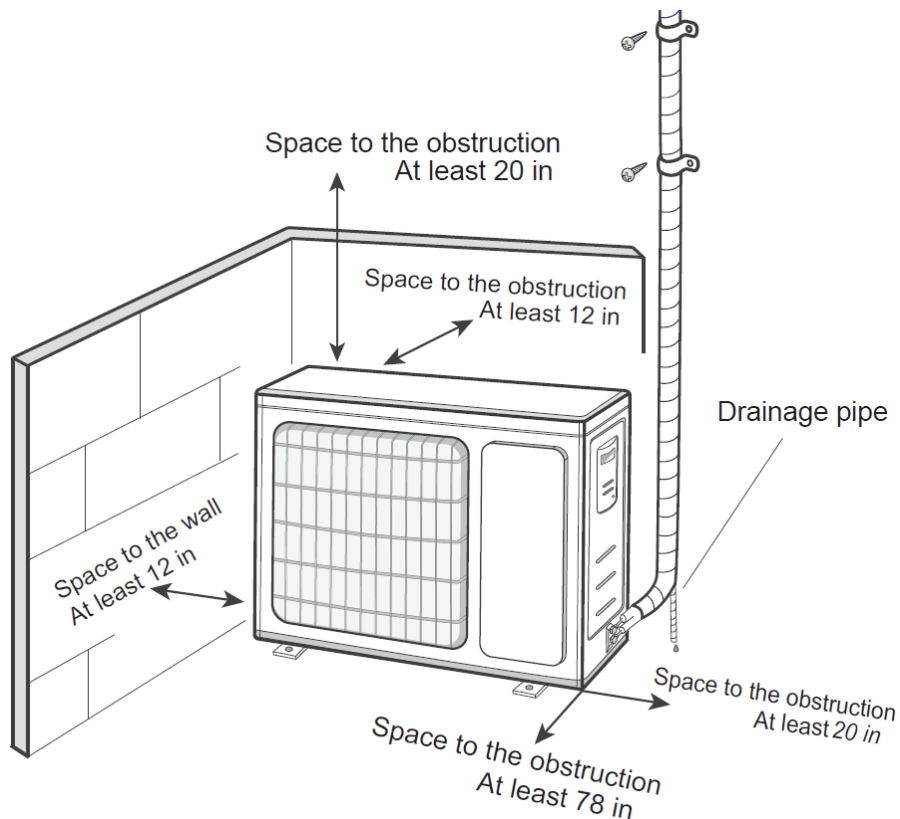
Unit: in



| 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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