# HEAT / COOL

## DAILY CHARMING, COOLING CHARMO

### 12,000 BTU / H WALL MOUNTED HEAT- PUMP SYSTEM

## SUBMITTAL DATA: TW12HXCA5D

| | | | | |
|---|---|---|---|---|
| Job Name | Location | | Date | |
| Purchaser | Engineer | | | |
| Submitted To | For | ☐ Reference | ☐ Approval | ☐ Construction |
| Unit Designation | Schedule No. | | | |

**AHRI CERTIFIED REF NO: 211164221**





**XE72-44/E (Optional)**



**XE71-00/E (Optional)**



**YAA1FB8 (Standard)**



**SQZ003 (Optional)**




## GENERAL FEATURES

- Easy installation and cleaning
- Self-cleaning function
- Fast cooling with meticulous care
- WIFI included
- 3D air outlet
- Wired Controller/thermostat (Optional)
- 7 indoor fan speeds
- Copper tube/Aluminum fins w/Acrylic resin anti-corrosion both inside and out
- Outdoor temperature display
- I-FEEL function

| SYSTEM RATINGS | | | INDOOR UNIT DATA | |
|---|---|---|---|---|
| **Cooling** | | | **Fan Motor** | |
| Rated Capacity at 95° F | | 12,000 BTU/H | Type | Cross-flow |
| Capacity Range | | 2,388-13,307BTU/H | Output Power | 15W |
| Power Input | | 1,380 W | FLA | 0.40A |
| Power Input (Min/Max) | | 180/1,500 W | Fan Speeds | 7 |
| SEER / SEER2 | | 17.5 / 17.5 | Air flow (Min/Max) | 182/424 CFM |
| EER / EER2 | | 10.05 / 10.05 | **Sound Pressure Level** | |
| **Heating** | | | Cooling (Low/High) | 27/47 dB(A) |
| Rated Capacity at 47° F | | 12,000 BTU/H | Heating (Low/High) | 27/47 dB(A) |
| Capacity Range | | 2,388-15,013 BTU/H | **Dehumidification** | 2.96 pt/hr |
| Power Input | | 1,004 W | **OUTDOOR UNIT DATA** | |
| Power Input (Min/Max) | | 260 / 1,650W | **Compressor** | |
| HSPF/HSPF2 | | 10.0 / 8.5 | Type | DC Inverter Driven, Rotary |
| COP | | 3.50 | RLA | 7.30 A |
| | | | **Fan Motor** | |
| | | | Output Power | 30 W |
| **Operating Range** | | | RLA | 0.6 A |
| Cooling | (Max) | 115°F (46°C) | **Sound Pressure Level** | 48 dB(A) |
| | (Min) | 0°F (-18°C) | **Refrigerant Piping Data** | |
| Heating | (Max) | 75°F (24°C) | Liquid Pipe Size (OD) | 1/4-in |
| | (Min) | -13°F (-25°C) | Gas Pipe Size (OD) | 3/8-in |
| **Power Supply** | | | Connection Method | Flared |
| Rated | | 208/230 V, 1 Phase, 60 Hz | Factory Charge | R410A/27.5 oz |
| Voltage Range | | 187 - 253 V | Additional Charge | 0.215 oz/ft |
| Main Power Wire Size | | 14-2 AWG | Pre-Charge Length | 25.0-ft |
| Interconnecting Cable Wire Size | | 14-4 AWG | MAX Refrigerant Pipe Length | 66.0-ft |
| MCA | | 11A | MIN Refrigerant Pipe Length | 10.0-ft |
| MOCP/Max Breaker Size | | 15 A | MAX Refrigerant Pipe Height Difference | 40.0-ft |

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# FEATURES & FUNCTION SUMMARY: TW12HXCA5D

| SYSTEM FEATURES | |
|---|---|
| Ultra Low Frequency Torque Control | Yes |
| Power Factor Correction | Yes |
| Compressor Type | Rotary |
| Outdoor Unit Drain Pan / Chassis Electric Heater | YES |
| Indoor & Outdoor Fin Coating (Blue) | Acrylic Resin / Anti-Corrosion |
| Low Voltage Startup | YES |
| Memory/Power Failure Recovery | YES |
| Self Diagnosis | YES |
| WIFI Included | YES |
| Indoor Fan Type | Cross-flow |
| Multi Fan Speeds | 7 Speeds |
| Indoor Unit Display | YES |
| Auxiliary Electrical Heater | NO |
| Auto Mode | YES |
| Auto Fan | YES |
| Dry Mode | YES |
| Dry Anti-Mildew Mode / X-Fan | YES |
| Energy Saving Mode / I-demand | YES |
| Dirty Filter Alert | YES |
| I Feel Function | YES |
| Child Lock on Remote Controller | YES |
| Quiet Mode | YES |
| Sleep Mode | YES |
| Artificial Intelligence for Saving Energy | Version 1.0 |
| Turbo Mode | YES |
| Freeze Guard Mode | YES |
| R32 Leakage Detector | YES |
| Low Temperature Cooling / Heating | YES |
| 24Vac Signal 3rd party Backup Heater Output | XE71-00/E, SQZ003 |
| Auto Swing | Vertical |
| Intelligent Defrosting | YES |



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# EXTENDED RATINGS: TW12HXCA5D

**COOLING PERFORMANCE**

| Outdoor Ambient Temperature (DB) | | Return Air Temperature | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 68°F (DB) / 57°F (WB) | | | | | 73°F (DB) / 61°F (WB) | | | | | 80°F (DB) / 67°F (WB) | | | | | 90°F (DB) / 73°F (WB) | | | | |
| | | TC (Btu/h) | SC (Btu/h | SHR | EER | Power Input (W) | TC (Btu/h) | SC (Btu/h | SHR | EER | Power Input (W) | TC (Btu/h) | SC (Btu/h | SHR | EER | Power Input (W) | TC (Btu/h) | SC (Btu/h | SHR | EER | Power Input (W) |
| MAX OUTPUT* | 0°F | 4288 | 3109 | 73% | 5.0 | 863 | 5298 | 3841 | 73% | 5.8 | 908 | 6307 | 4541 | 72% | 6.6 | 956 | 6551 | 4749 | 72% | 6.7 | 985 |
| | 5°F | 4919 | 3591 | 73% | 5.5 | 901 | 5928 | 4328 | 73% | 6.2 | 949 | 6937 | 5064 | 73% | 6.9 | 999 | 7206 | 5260 | 73% | 7.0 | 1027 |
| | 14°F | 5550 | 4079 | 73% | 6.1 | 914 | 6559 | 4821 | 73% | 6.8 | 962 | 7568 | 5525 | 73% | 7.5 | 1013 | 7861 | 5778 | 73% | 7.3 | 1070 |
| | 23°F | 5802 | 4293 | 74% | 6.0 | 966 | 6811 | 5040 | 74% | 6.7 | 1017 | 7820 | 5787 | 74% | 7.3 | 1070 | 8123 | 6011 | 74% | 7.5 | 1084 |
| | 32°F | 6054 | 4510 | 75% | 6.0 | 1004 | 7063 | 5262 | 75% | 6.7 | 1057 | 8072 | 5974 | 74% | 7.3 | 1113 | 8385 | 6247 | 74% | 7.3 | 1156 |
| | 41°F | 6811 | 5108 | 75% | 6.6 | 1030 | 7820 | 5865 | 75% | 7.2 | 1084 | 8829 | 6622 | 75% | 7.7 | 1141 | 9171 | 6878 | 75% | 7.7 | 1199 |
| | 50°F | 7568 | 5714 | 76% | 6.9 | 1095 | 8577 | 6476 | 76% | 7.4 | 1152 | 9586 | 7285 | 76% | 7.9 | 1213 | 9957 | 7517 | 76% | 8.0 | 1241 |
| | 59°F | 8072 | 6135 | 76% | 7.1 | 1133 | 9081 | 6902 | 76% | 7.6 | 1193 | 10090 | 7669 | 76% | 8.0 | 1256 | 10481 | 7965 | 76% | 8.2 | 1284 |
| | 68°F | 8451 | 6465 | 77% | 7.2 | 1172 | 9460 | 7237 | 76% | 7.7 | 1234 | 10469 | 8061 | 77% | 8.1 | 1298 | 10874 | 8319 | 77% | 8.2 | 1327 |
| | 77°F | 10595 | 8158 | 77% | 8.4 | 1262 | 11604 | 8935 | 77% | 8.7 | 1328 | 12613 | 9712 | 77% | 9.0 | 1398 | 13101 | 10088 | 77% | 9.7 | 1356 |
| | 86°F | 11730 | 9091 | 77% | 8.8 | 1326 | 12739 | 9873 | 77% | 9.1 | 1396 | 13748 | 10724 | 78% | 9.4 | 1470 | 14280 | 11067 | 78% | 10.3 | 1384 |
| | 95°F | 10595 | 8264 | 78% | 8.2 | 1288 | 11604 | 9051 | 78% | 8.6 | 1356 | 12613 | 9838 | 78% | 8.8 | 1427 | 13101 | 10219 | 78% | 8.9 | 1470 |
| | 104°F | 9334 | 7327 | 79% | 8.2 | 1133 | 10343 | 8119 | 78% | 8.7 | 1193 | 11352 | 8968 | 79% | 7.7 | 1481 | 11791 | 9256 | 79% | 7.9 | 1498 |
| | 113°F | 8577 | 6776 | 79% | 8.2 | 1043 | 9586 | 7573 | 79% | 8.7 | 1098 | 10595 | 8370 | 79% | 7.3 | 1447 | 11005 | 8694 | 79% | 7.3 | 1512 |

*Maximum Output values are not based on AHRI test conditions

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



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# EXTENDED RATINGS: TW12HXCA5D

| HEATING PERFORMANCE | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Outdoor Ambient Temperature (DB) | | Return Air Temperature | | | | | | | | | | | |
| | | 70°F (DB) / 59°F (WB) | | | 75°F (DB) / 63°F (WB) | | | 80°F (DB) / 67°F (WB) | | | 90°F (DB) / 73°F (WB) | | |
| | | TC (Btu/h) | COP (W/W) | Power Input (W) | TC (Btu/h) | COP (W/W) | Power Input (W) | TC (Btu/h) | COP (W/W) | Power Input (W) | TC (Btu/h) | COP (W/W) | Power Input (W) |
| MAX OUTPUT* | -4°F | 7206 | 1.91 | 1106 | 7507 | 1.95 | 1128 | 7807 | 1.99 | 1151 | 8107 | 2.02 | 1174 |
| | 0°F | 8257 | 2.15 | 1128 | 8557 | 2.18 | 1151 | 8858 | 2.21 | 1174 | 9158 | 2.24 | 1198 |
| | 6°F | 8708 | 2.22 | 1152 | 9008 | 2.25 | 1175 | 9308 | 2.28 | 1198 | 9608 | 2.30 | 1222 |
| | 10°F | 9008 | 2.25 | 1175 | 9308 | 2.28 | 1199 | 9608 | 2.30 | 1222 | 9909 | 2.33 | 1247 |
| | 16°F | 10009 | 2.45 | 1199 | 10309 | 2.47 | 1223 | 10609 | 2.49 | 1247 | 10909 | 2.51 | 1272 |
| | 19°F | 10708 | 2.57 | 1223 | 11008 | 2.59 | 1248 | 11308 | 2.60 | 1273 | 11608 | 2.62 | 1298 |
| | 24°F | 11260 | 2.64 | 1248 | 11560 | 2.66 | 1273 | 11860 | 2.68 | 1299 | 12161 | 2.69 | 1325 |
| | 32°F | 11410 | 2.62 | 1274 | 11710 | 2.64 | 1299 | 12010 | 2.66 | 1325 | 12311 | 2.67 | 1352 |
| | 41°F | 14262 | 3.22 | 1300 | 14563 | 3.22 | 1326 | 14863 | 3.22 | 1352 | 15163 | 3.22 | 1379 |
| | 43°F | 14713 | 3.25 | 1326 | 15013 | 3.25 | 1353 | 15313 | 3.25 | 1380 | 15614 | 3.25 | 1408 |
| | 47°F | 15013 | 3.25 | 1354 | 15313 | 3.25 | 1381 | 15614 | 3.25 | 1408 | 15914 | 3.25 | 1436 |
| | 53°F | 15163 | 3.19 | 1394 | 15463 | 3.19 | 1422 | 15764 | 3.19 | 1450 | 16064 | 3.18 | 1479 |
| | 59°F | 15313 | 3.13 | 1436 | 15614 | 3.12 | 1465 | 15914 | 3.12 | 1494 | 16214 | 3.12 | 1524 |
| | 64°F | 15764 | 3.12 | 1479 | 16064 | 3.12 | 1509 | 16364 | 3.12 | 1539 | 16664 | 3.11 | 1570 |
| | 70°F | 16214 | 3.12 | 1523 | 16514 | 3.11 | 1554 | 16815 | 3.11 | 1585 | 17115 | 3.10 | 1617 |
| | 75°F | 16664 | 3.11 | 1569 | 16965 | 3.11 | 1600 | 17265 | 3.10 | 1632 | 17565 | 3.09 | 1665 |

*Maximum Output values are not based on AHRI test conditions

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



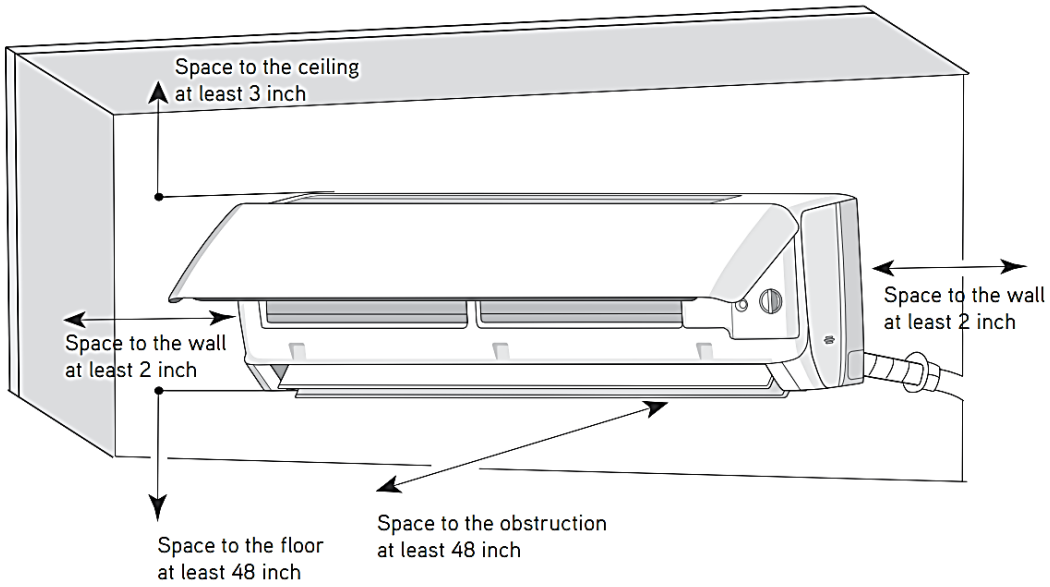
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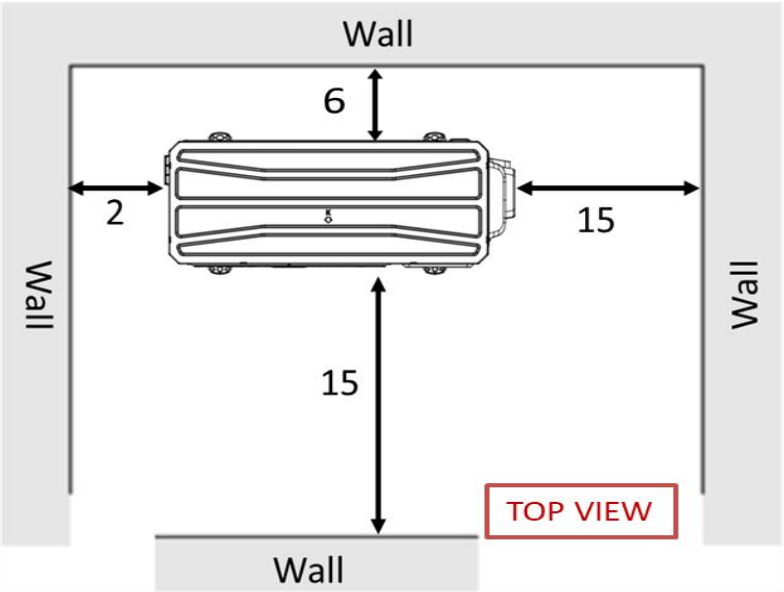
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# DIMENSIONAL SPECIFICATIONS: TW12HXCA5D

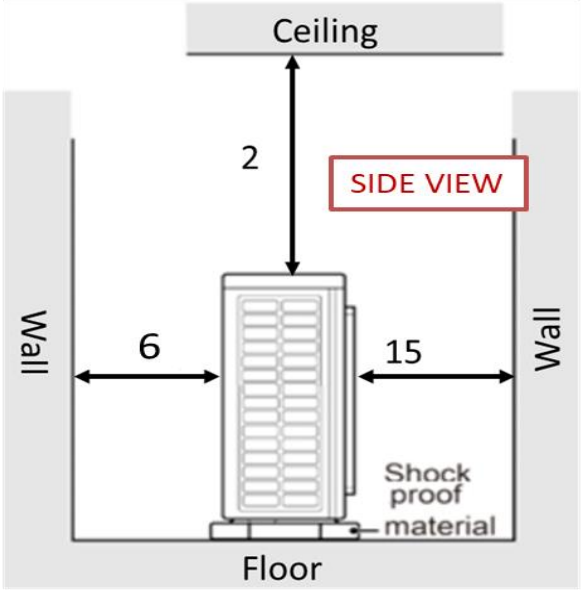
## MINIMUM SPACING REQUIREMENTS

**Unit: inch**




The ceiling should be open




Either left or right side should be open

Note:

1. Apply the value in the brackets to achieve best performance
2. Wall height on air outlet side ≤ 50inch



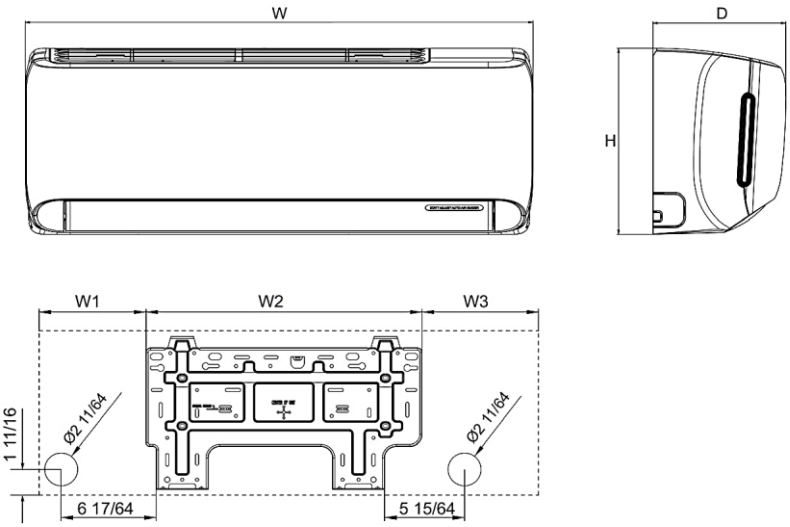
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# DIMENSIONAL SPECIFICATIONS: TW12HXCA5D

## INDOOR UNIT DIMENSIONS

Model No: TW12HXCA5DI

**Unit: inch**



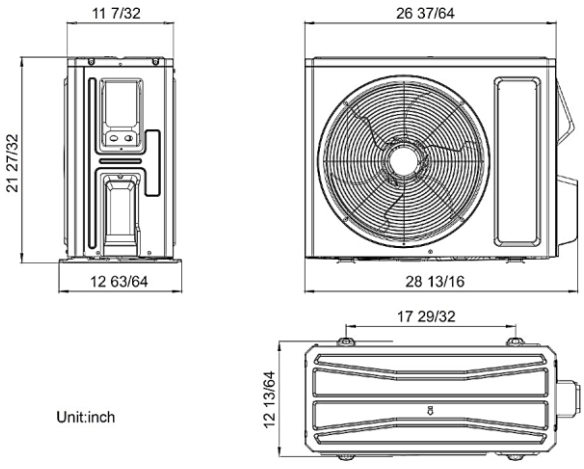

| Dimensions | |
|---|---|
| D | 7 7/8 |
| H | 10 53/64 |
| W | 32 7/8 |
| W1 | 7 3/64 |
| W2 | 18 5/32 |
| W3 | 7 11/16 |

**Weight (Net/Shipping) 19.8 / 24.3 LBS**

| | |
|---|---|
| Liquid Line Valve | 1/4-in OD Flared |
| Gas Line Valve | 3/8-in OD Flared |
| Drain Connector | 5/8-in OD |

## OUTDOOR UNIT DIMENSIONS

Model No: TW12HXCA5DO




**Weight (Net/Shipping) 57.3 /62.8 LBS**

| | |
|---|---|
| Liquid Line Valve | 1/4-in OD Flared |
| Gas Line Valve | 3/8in OD Flared |

Notes:

1.Recommended Interconnecting Cable Type 14 AWG 4 Stranded Copper Conductors Wire.

2.Power wiring cable size must comply with applicable national and local codes.

3.Test conditions are based on AHRI 210/240.



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