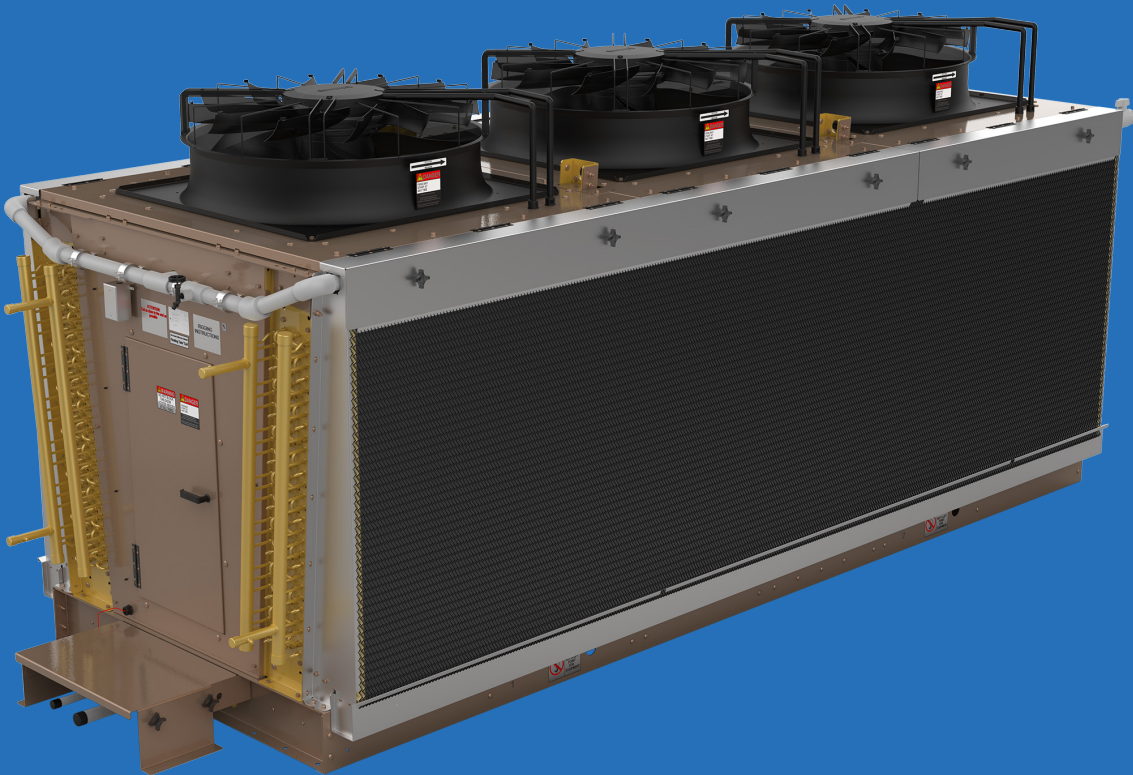


ADIABATIC GAS COOLER

Technical Guide

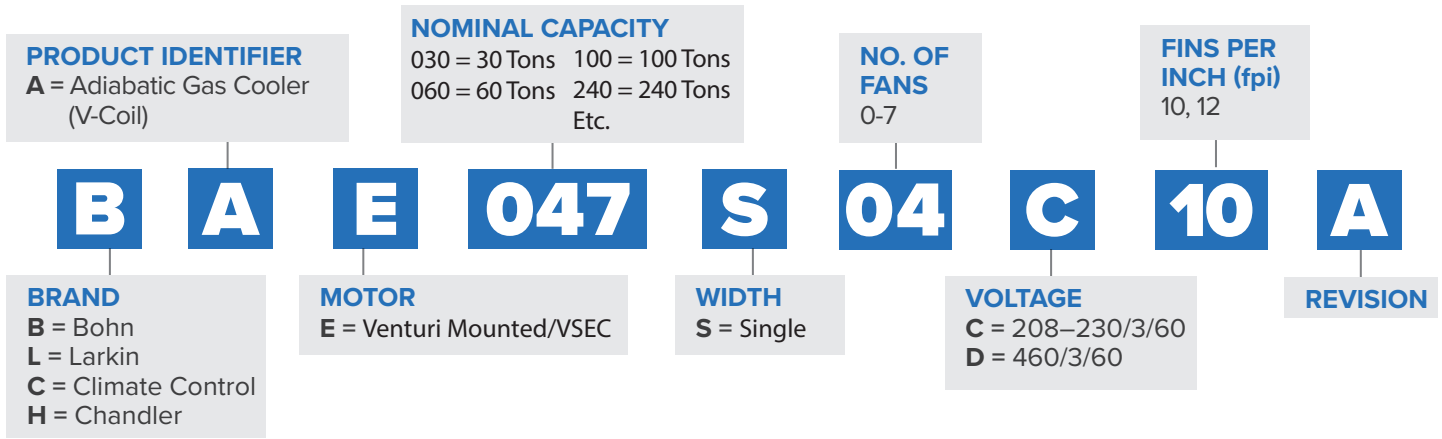


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NOMENCLATURE



Note: Please consult your Sales Representative for 575/3/60 application requirements

OVERVIEW

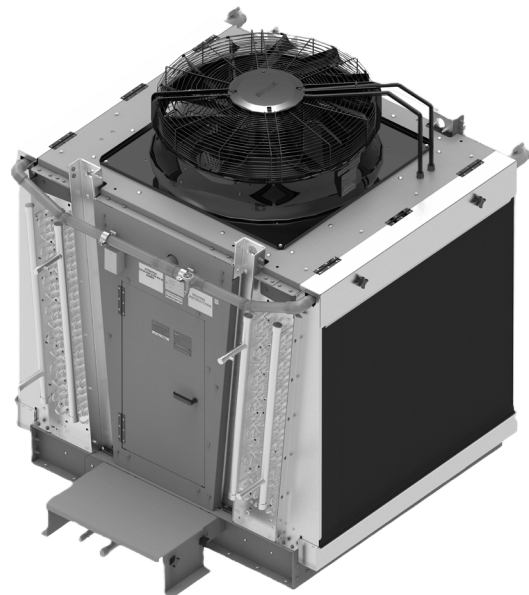
To meet the growing demand of CO₂ systems and to offer our customers a suite of product solutions to meet Low GWP regulations, Heatcraft Refrigeration is proud to offer the Adiabatic Gas Cooler product line specifically designed to be used in transcritical CO₂ applications. The Adiabatic Gas Cooler line offers our customers ample capacity range from 26 to 240 tons to satisfy an array of applications and uses the latest variable speed motor technology and water recirculation system to provide critical

sound and energy performance where significant energy savings are essential. The Adiabatic Gas Cooler product line is offered standard with a painted galvanized steel cabinet and stainless steel panels housing the water system.

The Adiabatic Gas Cooler is available with 1-7 fans in a single row configuration.



Venturi VSEC Mounted Motor Technology



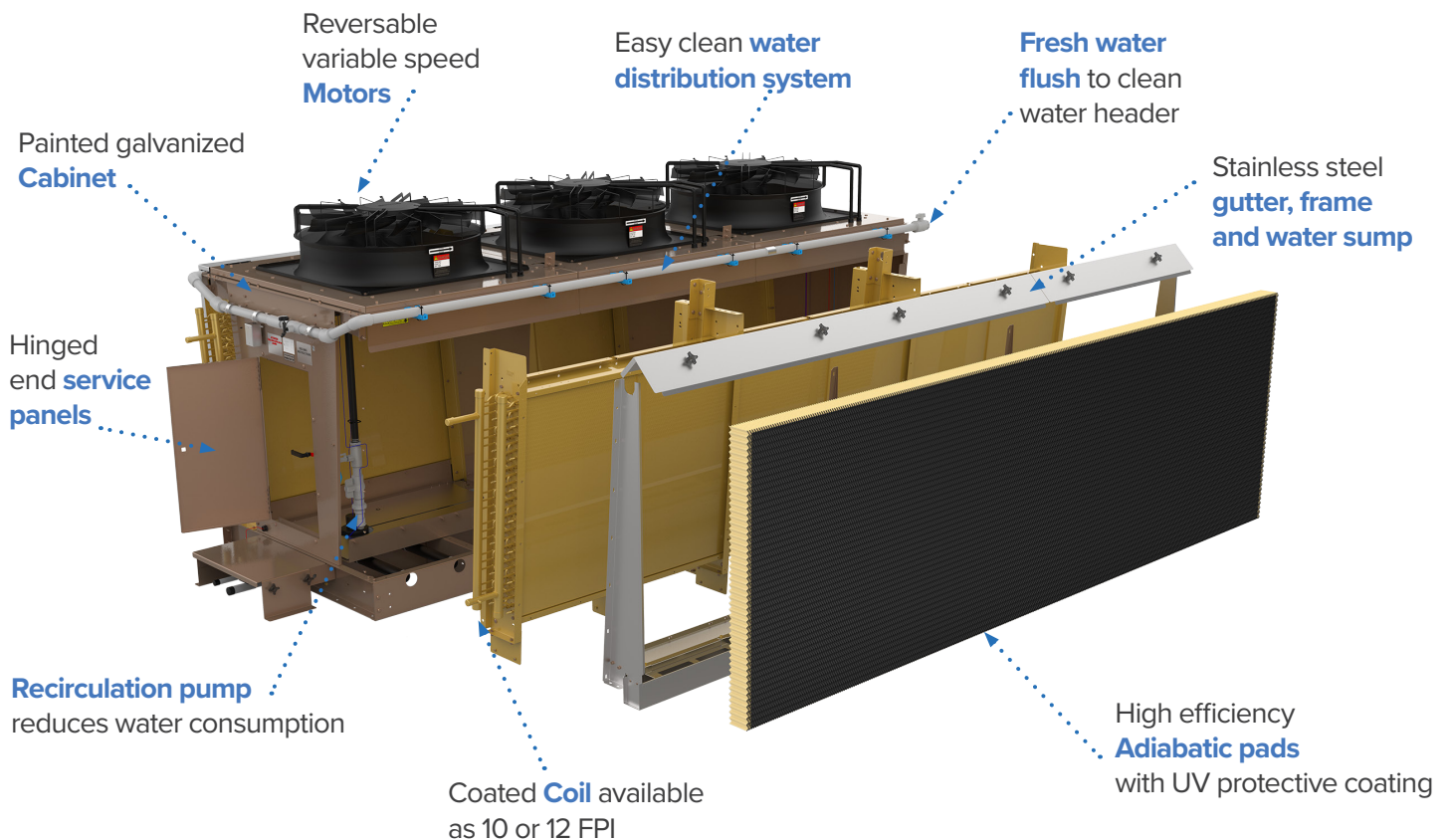
FEATURES

The Adiabatic Gas Cooler is designed with features to meet specific customer requirements.

STANDARD FEATURES INCLUDE:

- Variable speed EC motor with reversible flow for coil cleaning
- Broad capacity range from 26 to 240 tons
- 10 or 12 FPI coil
- Painted galvanized steel cabinet is standard with stainless steel used where there is contact with water.
- Hinged access panels for ease of maintenance
- Non-fused, through-the-door disconnect
- Coil design pressure is 1886psig and UL listed
- Coated coils standard for added corrosion resistance

OUTSTANDING FEATURES



PERFORMANCE DATA

| Model | Fans | Capacity @ Dry bulb 100°F, Wet bulb 70°F, Gas cooler Inlet 195°F, Pressure Inlet 1110 Psia | | | |
|--------------|------|---|-------|--------|-------|
| | | 10 FPI | | 12 FPI | |
| | | Ton | MBH | Ton | MBH |
| BAE030S01^*A | 1 | 26.8 | 322 | 28.9 | 347 |
| BAE060S02^*A | 2 | 53.7 | 644 | 57.9 | 695 |
| BAE100S03^*A | 3 | 89.16 | 1,070 | 97.9 | 1,175 |
| BAE120S04^*A | 4 | 107.5 | 1,290 | 115.8 | 1,390 |
| BAE150S05^*A | 5 | 136.5 | 1,638 | 147.4 | 1,769 |
| BAE200S06^*A | 6 | 184.6 | 2,215 | 203 | 2,436 |
| BAE240S07^*A | 7 | 217.6 | 2611 | 239.2 | 2,870 |

Notes:
 ^ = Electrical Code Designator (see Nomenclature details)
 * = Fins Per Inch (see Nomenclature details)

SPECIFICATIONS

| Model | Fans | Total CFM | 208-230/3/60hz | | | Fan Power (KW) | Refrigerant Connections, Material | Circuits |
|--------------|------|-----------|----------------|------|------|----------------|-----------------------------------|----------|
| | | | FLA | MCA | MOPD | | | |
| BAE030S01C*A | 1 | 14,396 | 8.8 | 13.2 | 22 | 2.7 | 1-1/8", Copper | 7 |
| BAE060S02C*A | 2 | 28,792 | 8.8 | 22 | 30.8 | 5.4 | 1-1/8", Copper | 14 |
| BAE100S03C*A | 3 | 43,189 | 8.8 | 30.8 | 46.2 | 8.1 | 1-1/8", Copper | 21 |
| BAE120S04C*A | 4 | 57,585 | 8.8 | 39.6 | 55 | 10.8 | 1-1/8", Copper | 28 |
| BAE150S05C*A | 5 | 71,981 | 8.8 | 50.5 | 74.7 | 13.5 | 1-1/8", Copper | 28 |
| BAE200S06C*A | 6 | 86,377 | 8.8 | 59.3 | 83.5 | 16.2 | 1-5/8", Copper | 42 |
| BAE240S07C*A | 7 | 100,773 | 8.8 | 68.1 | 92.3 | 18.9 | 1-5/8", Copper | 42 |

Notes:

* = Fins Per Inch (see Nomenclature details)

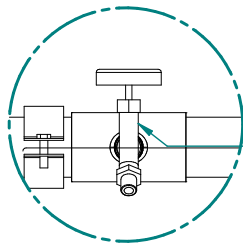
SPECIFICATIONS

| Model | Fans | Total CFM | 460/3/60hz | | | Fan Power (KW) | Refrigerant Connections, Material | Circuits |
|--------------|------|-----------|------------|-------|-------|----------------|-----------------------------------|----------|
| | | | FLA | MCA | MOPD | | | |
| BAE030S01D*A | 1 | 14,396 | 5 | 7.35 | 12.35 | 2.7 | 1-1/8", Copper | 7 |
| BAE060S02D*A | 2 | 28,792 | 5 | 12.35 | 17.35 | 5.4 | 1-1/8", Copper | 14 |
| BAE100S03D*A | 3 | 43,189 | 5 | 17.35 | 26.1 | 8.1 | 1-1/8", Copper | 21 |
| BAE120S04D*A | 4 | 57,585 | 5 | 22.35 | 31.1 | 10.8 | 1-1/8", Copper | 28 |
| BAE150S05D*A | 5 | 71,981 | 5 | 28.45 | 42.2 | 13.5 | 1-1/8", Copper | 28 |
| BAE200S06D*A | 6 | 86,377 | 5 | 33.45 | 47.2 | 16.2 | 1-5/8", Copper | 42 |
| BAE240S07D*A | 7 | 100,773 | 5 | 38.45 | 52.2 | 18.9 | 1-5/8", Copper | 42 |

Notes:
 * = Fins Per Inch (see Nomenclature details)

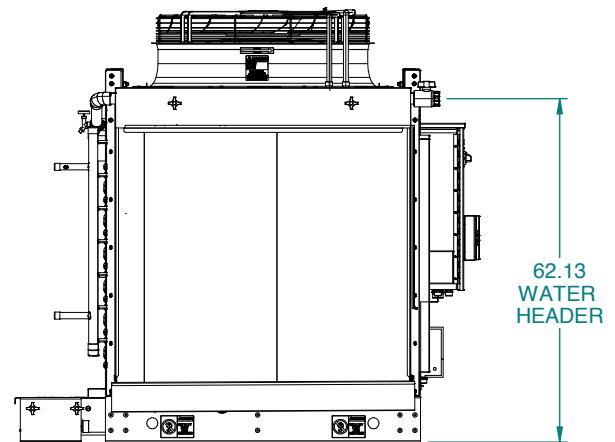
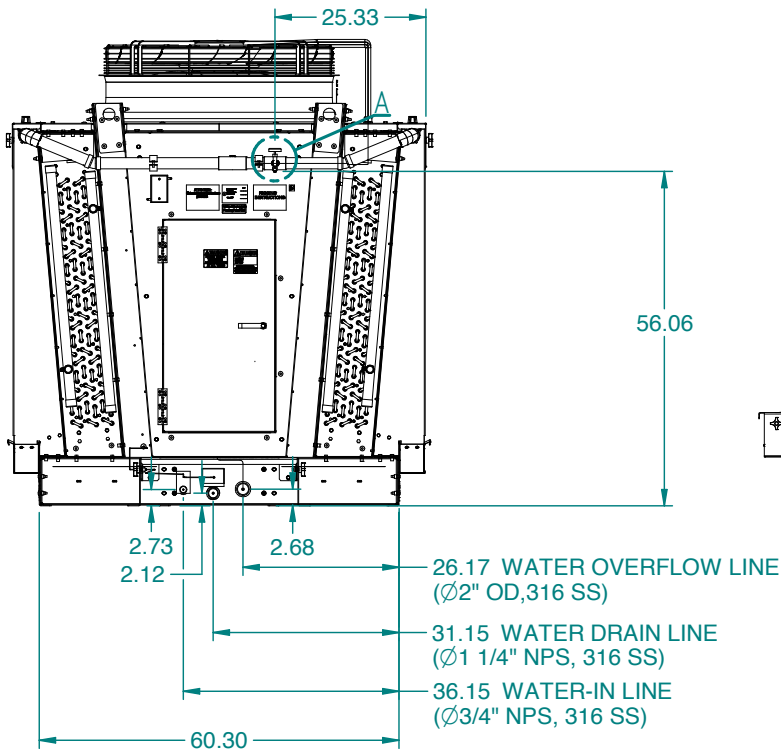
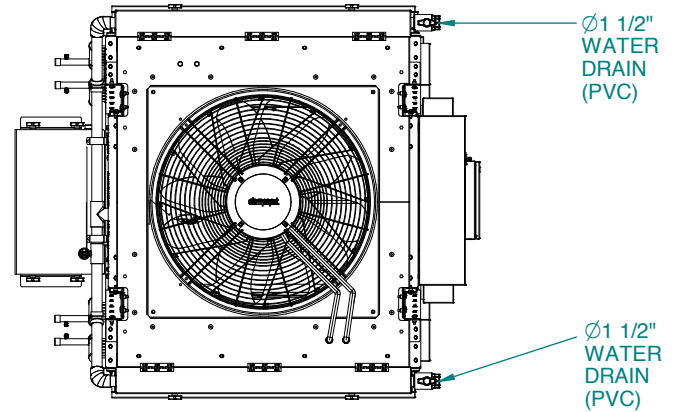
WATER CONNECTIONS

| Connections | Connection Size |
|-----------------------|-----------------------------------|
| Water In Line | Ø3/4" NPS, 316 SS |
| Water Drain Line | Ø1-1/4" NPS, 316 SS |
| Water Overflow Line | Ø2" OD, 316 SS |
| Emergency Water Inlet | Ø0.50" PVC BARBED HOSE CONNECTION |
| Water Header Drain | Ø1-1/2" WATER DRAIN (PVC) |



DETAIL A

EMERGENCY WATER INLET CONNECTION (Ø0.50" PVC BARBED HOSE CONNECTION)



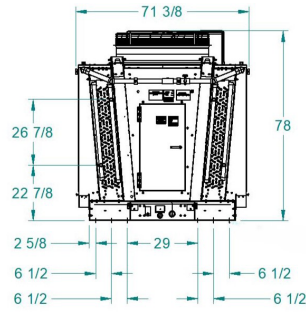
UNIT WEIGHT

| Model | Fans | Estimated Weight (lb) | |
|--------------|------|-----------------------|--------|
| | | 10 FPI | 12 FPI |
| BAE030S01^*A | 1 | 2,064 | 2,084 |
| BAE060S02^*A | 2 | 3,551 | 3,581 |
| BAE100S03^*A | 3 | 4,642 | 4,682 |
| BAE120S04^*A | 4 | 5,940 | 6,000 |
| BAE150S05^*A | 5 | 7,465 | 7,535 |
| BAE200S06^*A | 6 | 8,722 | 8,802 |
| BAE240S07^*A | 7 | 9,793 | 9,893 |

Notes:
Estimated weight includes wooden Skid

AGC GAS COOLER DIMENSIONS

END VIEW



SIDE VIEWS



| Model | Fans | Length | Width | Height |
|--------------|------|----------|---------|--------|
| BAE030S01^*A | 1 | 84 1/8" | 71 3/8" | 78" |
| BAE060S02^*A | 2 | 137 1/8" | 71 3/8" | 78" |
| BAE100S03^*A | 3 | 190" | 71 3/8" | 78" |
| BAE120S04^*A | 4 | 243" | 71 3/8" | 78" |
| BAE150S05^*A | 5 | 296 1/8" | 71 3/8" | 78" |
| BAE200S06^*A | 6 | 349 1/8" | 71 3/8" | 78" |
| BAE240S07^*A | 7 | 402 1/4" | 71 3/8" | 78" |



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Since product improvement is a continuing effort, we reserve the right to make changes in specifications without notice.

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