

ADIABATIC GAS COOLER

Technical Guide

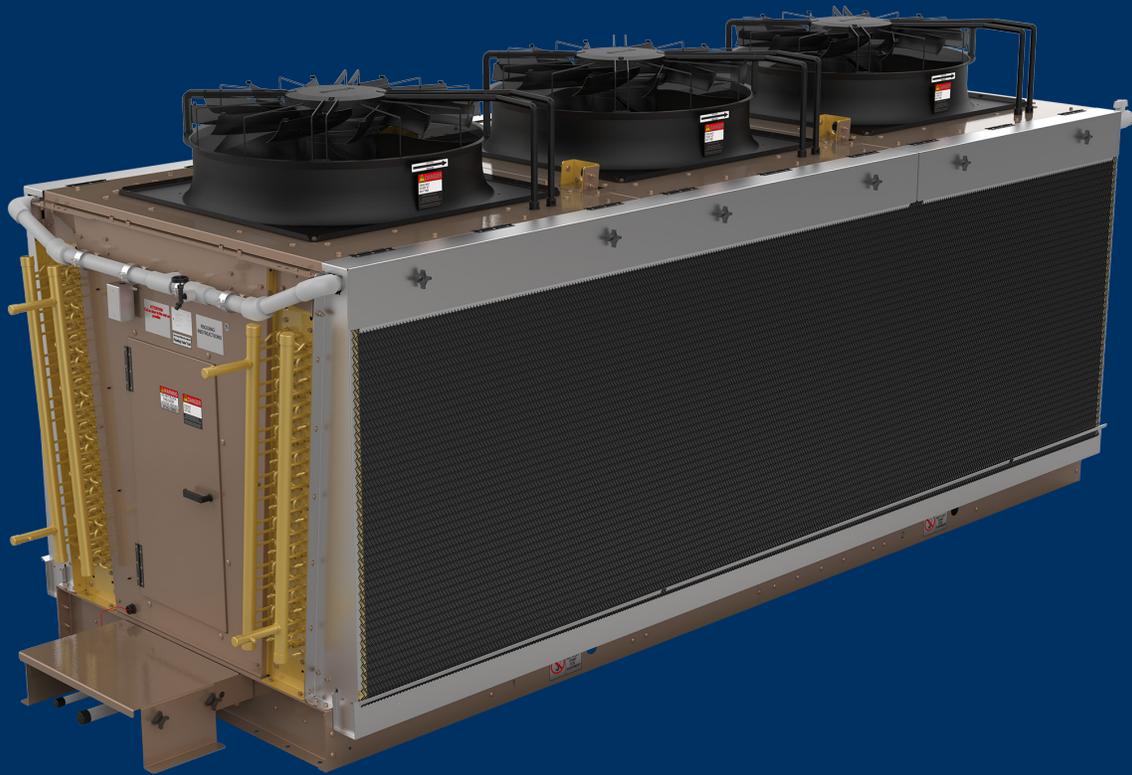
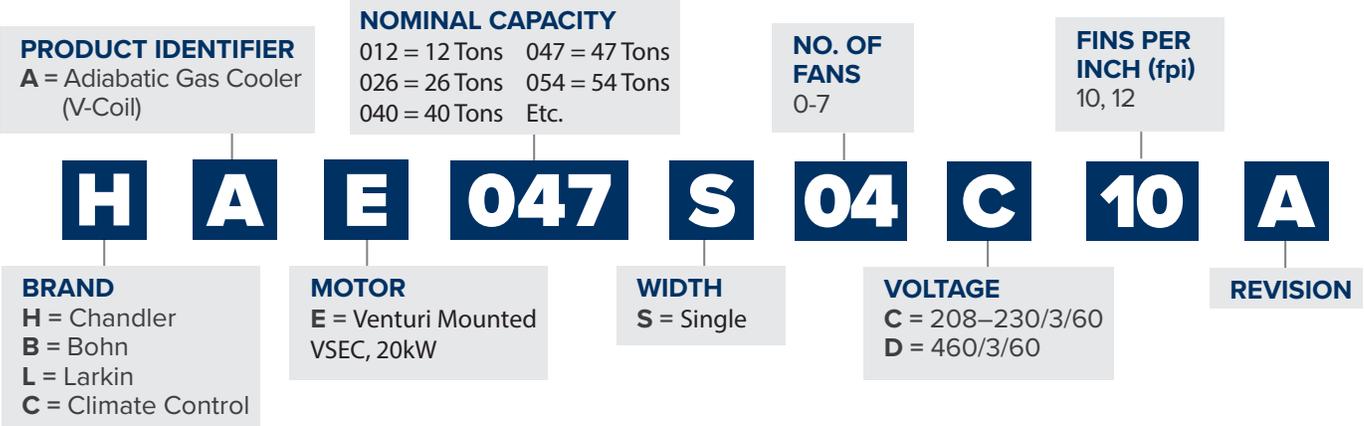


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NOMENCLATURE



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

OVERVIEW

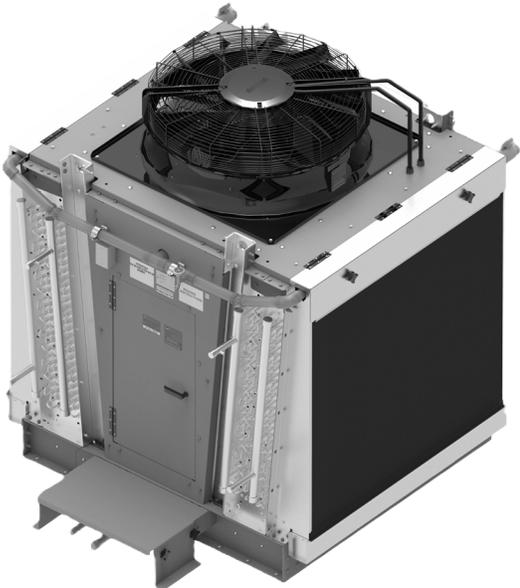
To meet the growing demand of CO₂ systems and to offer our customers a suite of product solutions to meet Low GWP regulations, Heatcraft Refrigeration is proud to offer the Adiabatic Gas Cooler product line specifically designed to be used in transcritical CO₂ applications. The Adiabatic Gas Cooler line 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



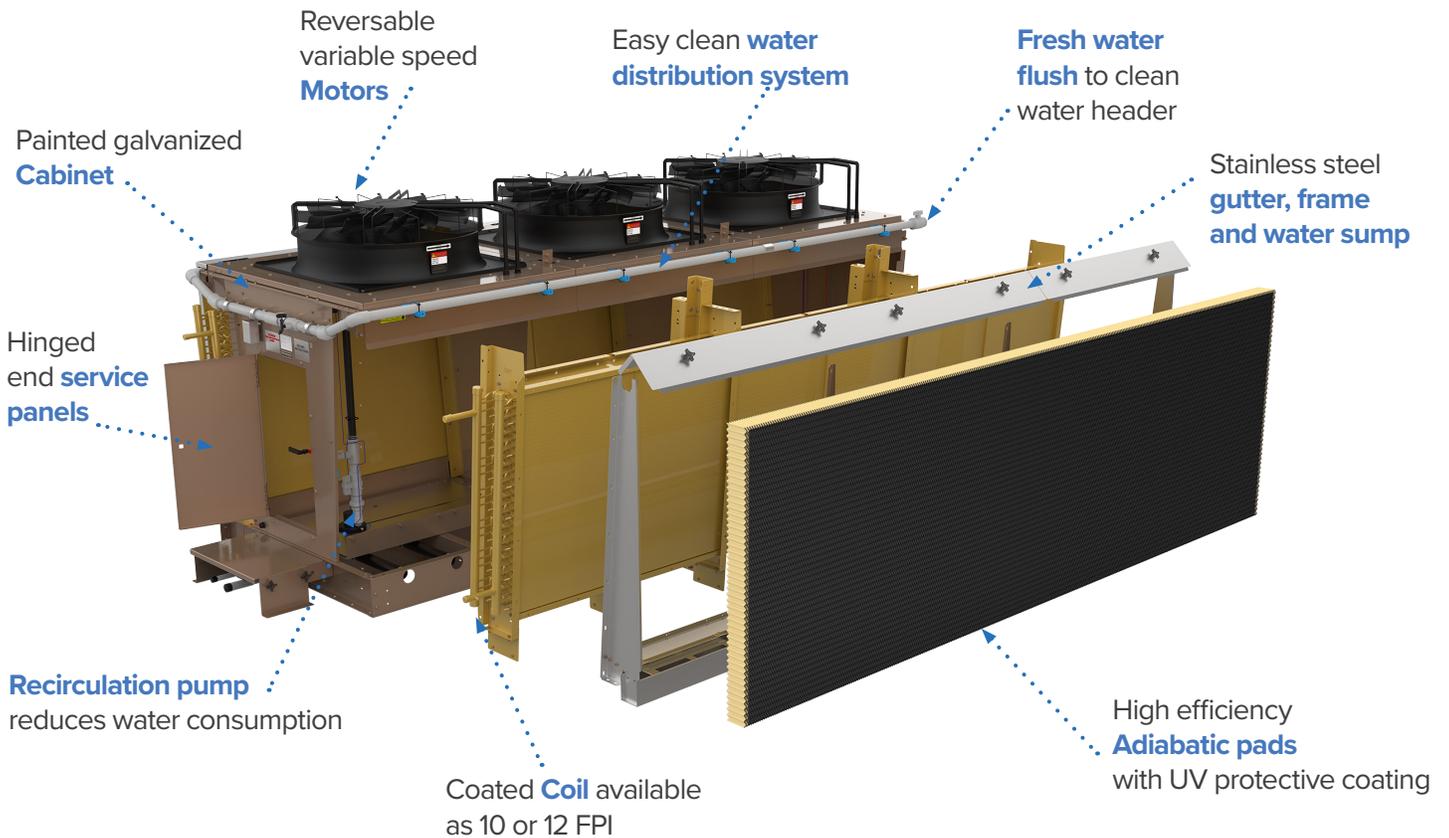
FEATURES

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
HGE030S01^*A	1	26.8	322	28.9	347
HGE060S02^*A	2	53.7	644	57.9	695
HGE100S03^*A	3	89.16	1,070	97.9	1,175
HGE120S04^*A	4	107.5	1,290	115.8	1,390
HGE150S05^*A	5	136.5	1,638	147.4	1,769
HGE200S06^*A	6	184.6	2,215	203	2,436
HGE240S07^*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			
HGE030S01C*A	1	14,396	8.8	13.2	22	2.7	1-1/8", Copper	7
HGE060S02C*A	2	28,792	8.8	22	30.8	5.4	1-1/8", Copper	14
HGE100S03C*A	3	43,189	8.8	30.8	46.2	8.1	1-1/8", Copper	21
HGE120S04C*A	4	57,585	8.8	39.6	55	10.8	1-1/8", Copper	28
HGE150S05C*A	5	71,981	8.8	50.5	74.7	13.5	1-1/8", Copper	28
HGE200S06C*A	6	86,377	8.8	59.3	83.5	16.2	1-5/8", Copper	42
HGE240S07C*A	7	100,773	8.8	68.1	92.3	18.9	1-5/8", Copper	42

Notes:

* = Fins Per Inch (see Nomenclature details)

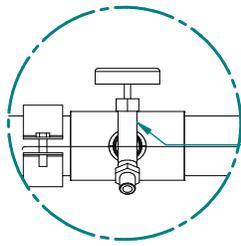
SPECIFICATIONS

Model	Fans	Total CFM	460/3/60hz			Fan Power (KW)	Refrigerant Connections, Material	Circuits
			FLA	MCA	MOPD			
HGE030S01D*A	1	14,396	5	7.35	12.35	2.7	1-1/8", Copper	7
HGE060S02D*A	2	28,792	5	12.35	17.35	5.4	1-1/8", Copper	14
HGE100S03D*A	3	43,189	5	17.35	26.1	8.1	1-1/8", Copper	21
HGE120S04D*A	4	57,585	5	22.35	31.1	10.8	1-1/8", Copper	28
HGE150S05D*A	5	71,981	5	28.45	42.2	13.5	1-1/8", Copper	28
HGE200S06D*A	6	86,377	5	33.45	47.2	16.2	1-5/8", Copper	42
HGE240S07D*A	7	100,773	5	38.45	52.2	18.9	1-5/8", Copper	42

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

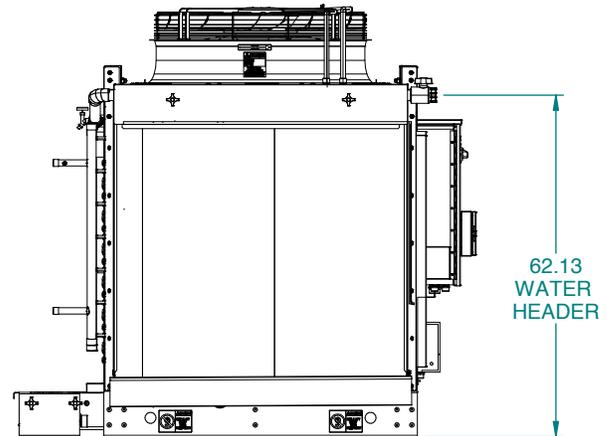
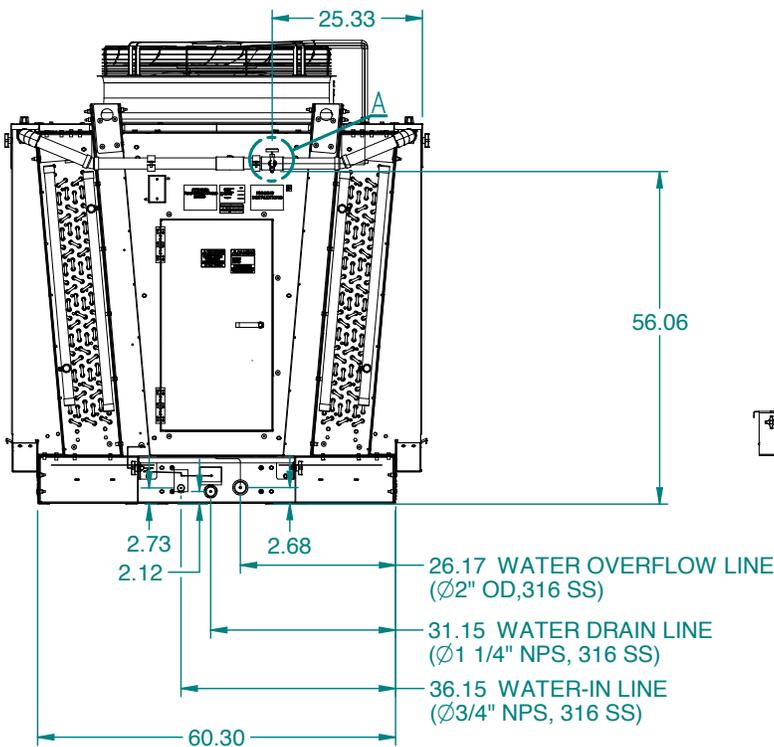
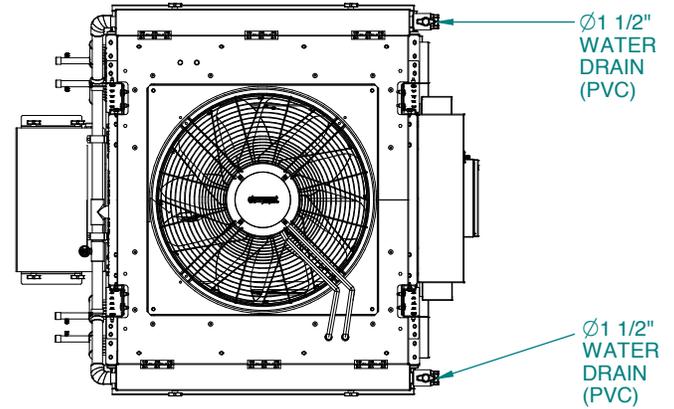
WATER CONNECTIONS

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

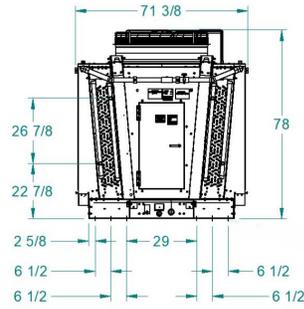
Model	Fans	Estimated Weight (lb)	
		10 FPI	12 FPI
HGE030S01^*A	1	2,064	2,084
HGE060S02^*A	2	3,551	3,581
HGE100S03^*A	3	4,642	4,682
HGE120S04^*A	4	5,940	6,000
HGE150S05^*A	5	7,465	7,535
HGE200S06^*A	6	8,722	8,802
HGE240S07^*A	7	9,793	9,893

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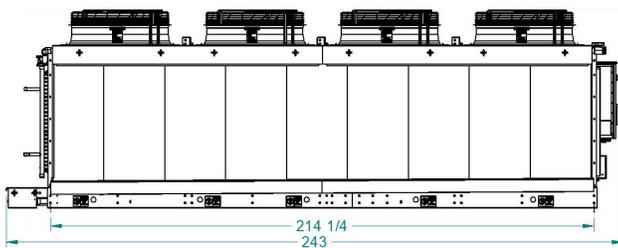
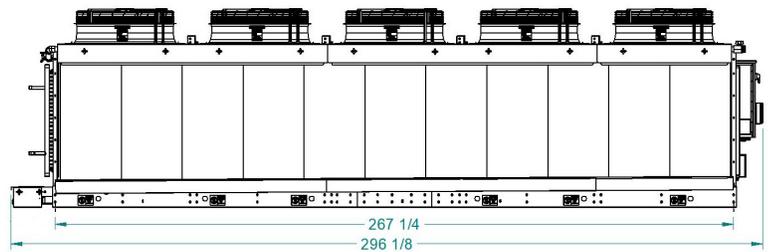
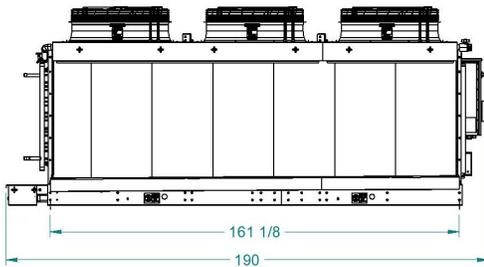
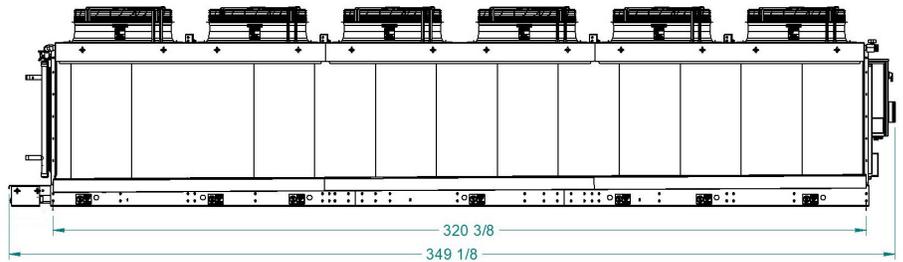
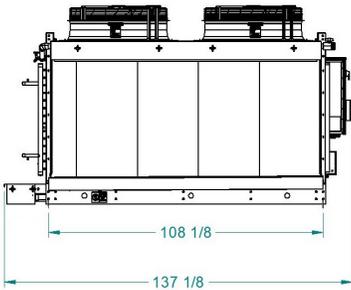
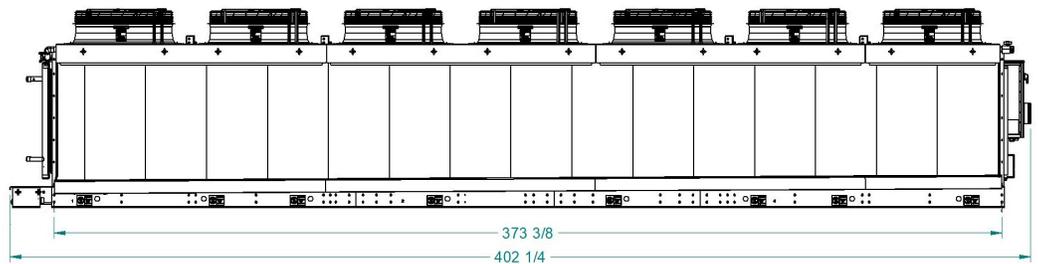
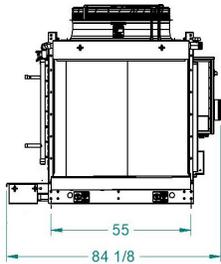
Notes:
Estimated weight includes wooden Skid

AGC GAS COOLER DIMENSIONS

END VIEW



SIDE VIEWS



Model	Fans	Length	Width	Height
HGE030S01^*A	1	84 1/8"	71 3/8"	78"
HGE060S02^*A	2	137 1/8"	71 3/8"	78"
HGE100S03^*A	3	190"	71 3/8"	78"
HGE120S04^*A	4	243"	71 3/8"	78"
HGE150S05^*A	5	296 1/8"	71 3/8"	78"
HGE200S06^*A	6	349 1/8"	71 3/8"	78"
HGE240S07^*A	7	402 1/4"	71 3/8"	78"



2175 West Park Place Blvd.

Stone Mountain, GA 30087

Phone: 800.537.7775 · Fax: 770.465.5900

heatcraftprd.com

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

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