



## Fan Assisted Series HAF and KAF

Cryoquip fan-assisted units provide maximum heat exchange and high vaporization rates of liquid oxygen, nitrogen, argon, LNG and other cryogenic fluids. The heat exchange elements are 8 inches (200 mm) aluminum construction from tip to tip, with internal fins providing additional surface for a maximum performance. The KAF and BAF series elements are taller than the HAF and can therefore provide more capacity. The UAF model is Cryoquip's high efficiency Uniflo fan ambient vaporizer. The UAF is the most efficient high capacity vaporizer in the industry. The 100% counter flow design provides for the greatest heat transfer efficiency and structurally the most reliable design. In many instances, fan units may provide an economic advantage over natural draft vaporizers, especially at higher capacity where electric power is available and high capacity are required in small plot spaces. Multiple units can be used to suit a wide range of performance requirements.

- These vaporizers offer ample exchange surface to permit substantial short-term accumulation of ice not blown off by the forced air flow. Brief periods of no load operation at temperatures above freezing also allow the unit to begin shedding accumulated ice. All models consist of Cryoquip's Alpine 800 extended height heat transfer elements with a direct drive fan assembly at the top to force air downward through the heat exchange array. The standard fan assembly includes a hot dip galvanized venture motor mount assembly, and fan intake safety screens.
- These units include integral magnetic motor starters with circuit breakers and NEMA 4 electrical cabinet with door interlock. Other options include flanged connections, an "automatic-on" feature which permits the fan to start automatically when liquid is introduced, stainless steel or monel liner for service to 6000 psi (414 bar), multiple unit switching controls for continuous operation, and Cryoquip's HEXAD electrical or gas-fired defrost system for colder climates. Lower noise fan options are also available.

## Performance Data

Model	Oxygen Rating		Power
	SCFH	Nm <sup>3</sup> / hr	kW
HAF-816-F	20,000	525	2.2
HAF-825-F	30,000	790	2.2
KAF-825-F	36,000	945	2.2
HAF-836-F	45,000	1185	3.7
KAF-836-F	54,000	1420	3.7
HAF-864-F	80,000	2105	7.5
KAF-864-F	95,000	2500	7.5
HAF-899-F	125,000	3290	7.5
KAF-899-F	140,000	3685	7.5
BAF-899-F	175,000	4600	7.5
UAF-880-FL35	280,000	7400	16
UAF-1280-FL35	400,000	10500	16

- Ratings are for 8 hours at 70°F (21°C) and 70% relative humidity and are based on saturated liquid oxygen inlet with a 30°F (17°C) approach to ambient temperature.
- Standard units have maximum allowable working pressure up to 500 psig (34.5 barg). Pressure drop is typically 15 psi (1 bar) depending on model size, when operated at 175 psig (12 barg) discharge. Standard electrical power is 480/400/240 Volts 3 phase 50/60 hertz.

## Dimensions

Model	Height		Width		Depth		Weight	
	inches	mm	inches	mm	inches	mm	Lbs	kg
HAF-816-F	193	4900	37	900	50	1250	2200	1000
HAF-825-F	193	4900	45	1150	60	1500	2500	1135
HAF-836-F	193	4900	52	1300	67	1700	3100	1405
HAF-864-F	205	5200	69	1750	84	2150	4300	1950
HAF-899-F	226	5750	85	2150	100	2550	5500	2495
BAF-899-f	286	7265	85	2150	100	2550	8000	3600
UAF-880-FL35	505	12827	92	2330	97	2464	16000	6400
UAF-1280-FL35	505	12827	92	2330	97	2464	20000	9000

## Options Available

- Flanged connections
- Explosion Proof to Class 1, Div.2, Group D
- NEMA 4X stainless steel control enclosure
- Automatic-on starts fan automatically on liquid introduction
- Electric or gas-fired defrost
- Designs for power other than standard 480/400/240V
- Stainless steel or Monel liner available for Electronics Industry and service to 6000 psi (414g)
- Magnetic starter and circuit breaker
- Lower noise fan assembly option
- Horizontal unit mount configuration