

# SENTRY TCU AIR-COOLED SAMPLE CHILLER

## Sample Chillers

### SAMPLE CONDITIONING

Ensure you can closely control your sample temperatures with a secondary control unit. Sentry's Temperature Control Units can handle a wide variety of temperatures - 30°F to 115°F (-1°C to 46°C) – all while cooling samples within  $\pm 1^\circ\text{F}$  (0.5°C). These self-contained temperature controls ensure that pumping and refrigeration can all be managed directly from the unit. Operators can also find versatility in the varieties of TCU flow rates, capacity, and horsepower, confirming you can find the right sample chiller for your needs.

### MODELS

SENQA03 | SENQA05 | SENQA08 | SENQA10 | SENQA15

### FEATURES

- The TCU Sample Chiller can handle capacities ranging from 3 tons to 15 tons.
- Sample Chillers are available in water cooled and air-cooled varieties.
- Ensure you know what exactly is occurring with clear displays, warnings, and alarms.
- All TCUs are available for outdoor service without degradation of performance and functionality.

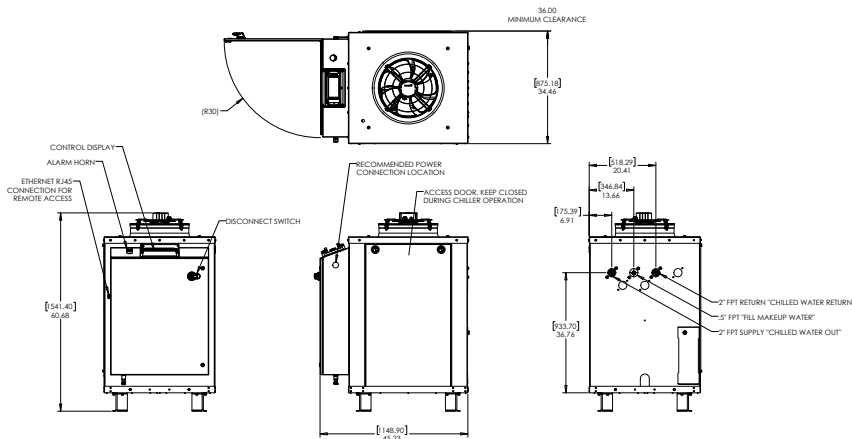
### SPECIFICATIONS

- Refrigeration
  - Hermetically sealed scroll compressor
  - Full factory refrigerant charge of R410A or R454B
  - Copper brazed 316L stainless steel evaporator
  - Hot gas bypass control valve for temperature control
  - Crankcase heater
  - Sealed desiccant core filter-dryer
  - Moisture and liquid indicator
  - Thermostatic expansion valve
- Chilled Water
  - Stainless steel TEFC close-coupled centrifugal pump
  - Pressure indicator at pump discharge
  - Accurate to  $\pm 1^\circ\text{F}$  ( $\pm 0.5^\circ\text{C}$ )
  - Adjustable make-up water pressure reducing valve
  - Pressure relief valve to protect pump and evaporator
- Controller
  - Keypad control to run system or pump alone
  - Microprocessor based PID temperature control
  - Digital contact provided for remote system start
  - Digital indication of chilled water outlet temperature
  - Clear display of operational warnings and alarms
  - General fault alarm contact for remote indicator
- Electrical
  - NEMA 1 enclosure with disconnect
  - 460 Vac / 60 Hz / 3 phase (standard)
- Options
  - High air temperature (110-120°F)
  - Outdoor installation (NEMA 4)
  - Internal electric heater for additional warming of sub-cooled samples
  - Remote condenser
  - CE



Sample. Monitor. Measure.  
**SENTRY**  
Any Application. Anywhere.

size (tons)	dimensions L x W x H (in)	dimensions L x W x H (mm)	weight lb	weight kg	chilled water connections
A03	48 x 35 x 61	1219 x 889 x 1549	720	327	2" NPT
A05	48 x 35 x 61	1219 x 889 x 1549	720	327	2" NPT
A08	75 x 35 x 61	1905 x 889 x 1549	1195	542	2½" NPT
A10	75 x 35 x 61	1905 x 889 x 1549	1195	542	2½" NPT
A15	88 x 41 x 93	2235 x 1041 x 2362	3200	1451	3" NPT



**SPECIFICATIONS**

Model: SENQA		A03	A05	A08	A10	A15
cooling capacity <sup>1</sup>	Btu/hr (kW)	36,000 (10.6)	60,000 (17.6)	96,000 (28.1)	120,000 (35.1)	180,000 (52.7)
	gpm (L/min)	30 (114)	50 (189)	80 (303)	100 (379)	150 (568)
pump horsepower	60 hz	2	3	5	7.5	10
	50 hz	2	3	3	5	7.5
standard heating capacity	Btu/hr (kW)	10,800 (3.2)	18,000 (5.3)	28,800 (8.4)	36,000 (10.6)	54,000 (15.8)
minimum circuit ampacity 460 Vac/60 Hz/3-phase (standard)		17.6	19.8	30.7	35.5	56.7
auxiliary heater	Btu/hr (kW)	30,000 (9)	30,000 (9)	30,000 (9)	40,000 (12)	60,000 (18)

<sup>1</sup> Cooling capacity based upon 110°F (43°C) ambient air and 76°F (24°C) coolant setpoint, 60 Hz power.

<sup>2</sup> Note: Cooling and heating capacity is reduced about 17% for 50 Hz power.