

FTS Systems CharpyCool™

Low Temperature Bath for Charpy Impact Testing



Features

- Temperature control range of -80 to 30 °C.
- Built-in magnetic stirrer.
- Liquid medium enhances temperature stability and uniformity.
- Available with 4-liter or 8-liter baths.
- Multi-functional temperature controller.
- Mechanically refrigerated.

Benefits

- Satisfies a wide range of applications.
- Maintains isothermal bath conditions.
- Exceeds ASTM-E23 temperature stability requirements.
- Allows for a capacity of 65 or 91 specimens.
- Provides accurate temperature control with temperature indication.
- Eliminates costs and hazards associated with expendable refrigerants.

Agency Approvals

- CE (2006/42/EC), (2006/95/EC), (006/108/EC)
- UL #61010-1, CAN/CSA 22.2 #61010-1

Performance Specifications

	CC480	CC880
Maximum Low Temperature	-80 °C	-80 °C
Temperature Control Range	-80 to 30 °C	-80 to 30 °C
Temperature Control Stability	± 0.1 °C	± 0.1 °C
Temperature Indication Display	0.1	0.1
Compressor	2 @ .25 hp	2 @ .25 hp
Bath Volume	4 L	8 L
Magnetic Stirrer	Included	Included
Vortex Breaker	Optional	Optional


Note: Performance specifications are based on SP Scientific test data from units using methanol operating at an ambient room temperature of approximately 22 °C (72 °F).

Heat Removal*

	CC480	CC880
20 °C	270 W, 922 Btu/hr	270 W, 922 Btu/hr
0 °C	240 W, 820 Btu/hr	240 W, 820 Btu/hr
-20 °C	200 W, 683 Btu/hr	200 W, 683 Btu/hr
-40 °C	170 W, 581 Btu/hr	170 W, 581 Btu/hr
-60 °C	120 W, 410 Btu/hr	120 W, 410 Btu/hr
-80 °C	30 W, 102 Btu/hr	30 W, 102 Btu/hr

Electrical Requirements

	CC480	CC880
60 Hz Option	120 V, 12 A [†]	120 V, 12 A [†]
50 Hz Option	220 V, 6 A [†]	220 V, 6 A [†]

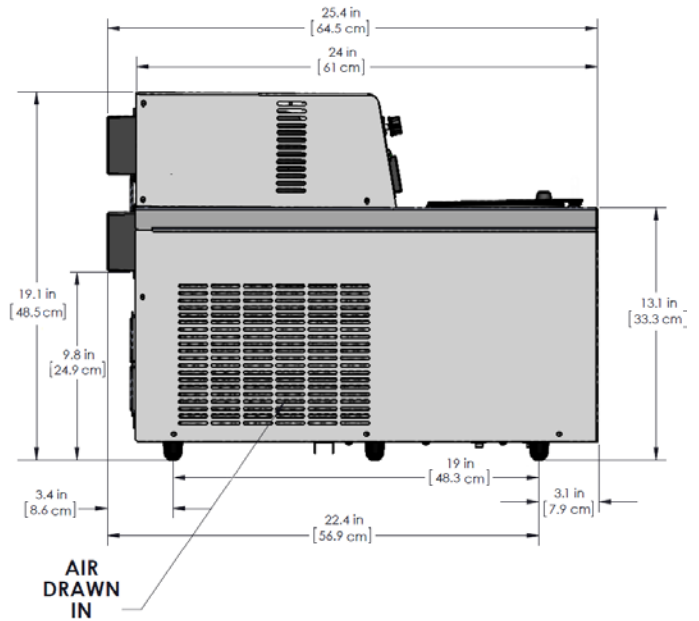
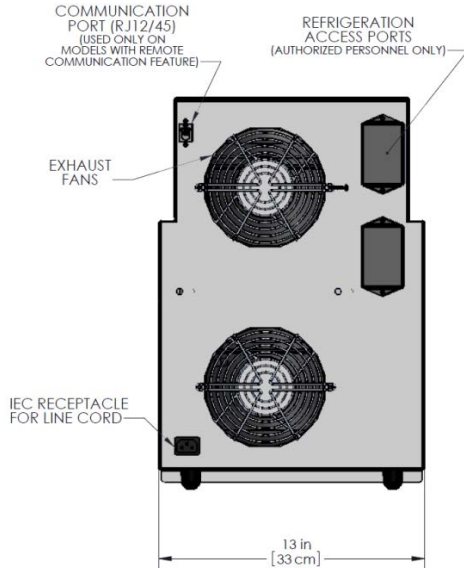
Note: All equipment configured with the 60 Hz option is supplied with a 5-15P NEMA configuration (i.e., ). All equipment configured with the 50 Hz option is supplied with a non-terminated AWG 18-3 power cord.

* 50 Hz option decreases heat removal by 17%.

[†] Maximum continuous amperage drawn by the equipment.

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Dimensional Data

	CC480	CC880
Width	13 in (33 cm)	13 in (33 cm)
Depth	25.4 in (64.5 cm)	25.4 in (64.5 cm)
Height	19.1 in (48.5 cm)	19.1 in (48.5 cm)
Weight	96 lbs (43.5 kg)	100 lbs (45.4 kg)
Chamber Diameter	6.5 in (16.5 cm)	7.8 in (19.8 cm)
Chamber Depth [‡]	7.3 in (18.5 cm)	9 in (22.9 cm)
Height to Work Surface Above Bench Top	13.5 in (34.3 cm)	13.5 in (34.3 cm)

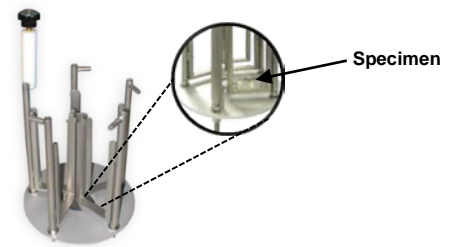
Fluid Selections

For best stirring results, choose a fluid medium with kinematic viscosity of 20 centistokes or less over the full operating temperature range.

[‡] Stirrer assembly reduces chamber depth by 0.75 inches (1.9 cm) in cylindrical chambers.

Optional Accessories

Charpy Rack	For 4-liter baths (CRA-4)	For 8-liter baths (CRA-8)
	5 racks	7 racks
	Maximum specimens per rack: 13	Maximum specimens per rack: 13
	Maximum specimens total: 65	Maximum specimens total: 91



Vortex Breaker	For 4-liter baths (VB-4)	For 8-liter baths (VB-8)
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Tongs	Centering tongs with V-notch (CC-T)
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