

FTS Systems MultiCool™

Low Temperature Bath



Features

- Temperature control range of -80 to 100 °C.
- Built-in magnetic stirrer and vortex breaker.
- Liquid medium enhances temperature stability and uniformity.
- Multi-functional temperature controller.
- Includes USB adapter, two (2) meter cable and software for plug and play operation.
- Mechanically refrigerated.

Benefits

- Satisfies a wide range of applications.
- Maintains isothermal bath conditions.
- Provides accurate temperature control with temperature indication.
- Permits complete control of the machine from a PC and allows for data logging
- 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

	MC480	MC880
Maximum Low Temperature	-80 °C	-80 °C
Temperature Control Range	-80 to 100 °C	-80 to 100 °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	Included	Included
Computer Interface	RS485/USB (with software)	RS485/USB (with software)


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*

	MC480	MC880
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

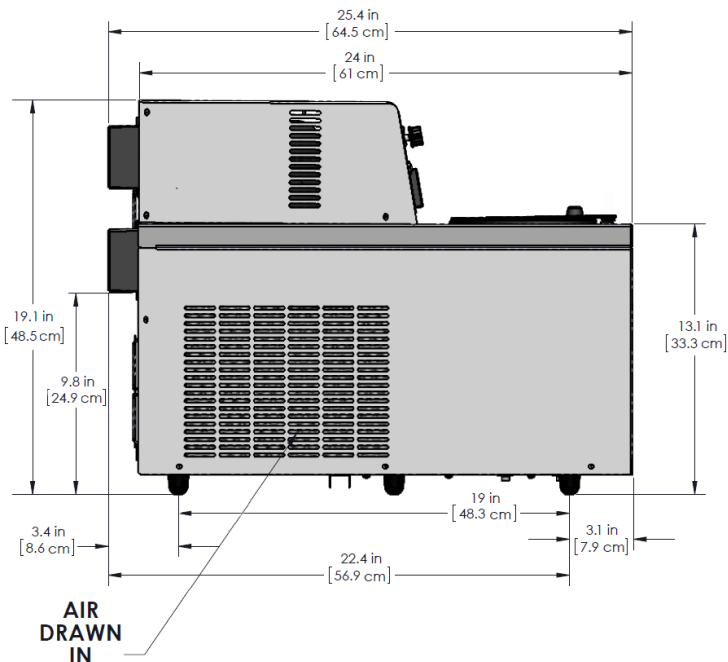
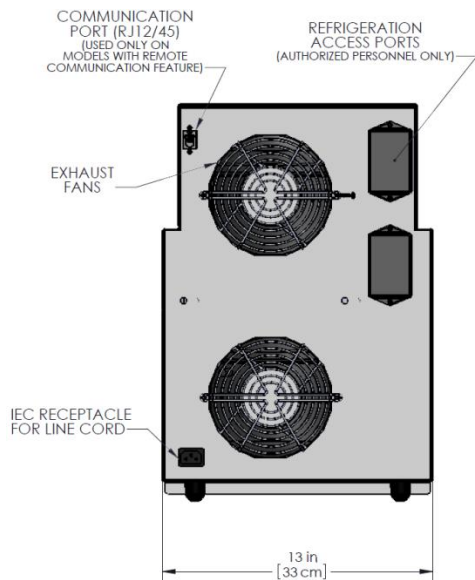
Electrical Requirements

	MC480	MC880
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.

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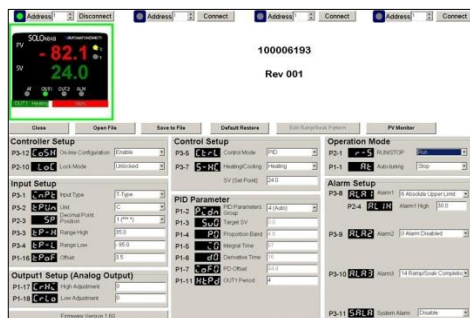


Communication Kit, Solo Control

A communication kit "p/n COMMKIT" is available for the MultiCool™. The kit includes a USB adapter, a two (2) meter cable and software.

A PC with the Windows® 98, Windows® NT, Windows® XP, 32-bit Windows Vista®, or 32-bit Windows® 7 operating system is required for bridge and driver installation.

Note: The communication kit will not work with a 64-bit Windows® operating system.



Software



USB Adapter



2 meter cable

Communication Kit Features

- Permits complete control of the MultiCool from a PC.
- Allows for plug and play operation.
- Allows for data logging.
- Includes a 64 segment ramp soak program.

* 50 Hz option decreases heat removal by 17%.

† Maximum continuous amperage drawn by the equipment.

‡ Stirrer assembly reduces chamber depth by .75 inches (1.9 cm) in cylindrical chambers.

Dimensional Data

	MC480	MC880
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 [†]	7.25 in (18.4 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.