

Sarns™ TCM II Cooling and Heating System

A space-saving, multi-function patient cooling/heating system.



Independent ice maker

Precise temperature control

Oxygenator and cardioplegia water supply

Optional remote control and display module

Sarns™ TCM II

Electrical

	<u>4415</u>	<u>4416</u>
Voltage	108/122V (115V nominal)	210/250V (220/240V nominal)
Frequency	60 Hz	50Hz
Amperage	16 amps	12 amps
Current leakage	100 microamps maximum for 115V	500 microamps maximum for 220V
Ground resistance	Max. 0.1 Ohm	Max. 0.1 Ohm

Dimensions

	<u>Main Unit</u>	<u>Large Tank</u>	<u>Small Tank</u>
Height	34.4" (87.4 cm)		
Width	20.0" (50.8 cm)		
Depth	31.5" (80.0 cm)		
Weight	282 lbs (127.9 kg) with tanks empty 356 lbs (161.5 kg) with tanks full		
Length		18.5" (47.0 cm)	9.5" (24.1 cm)
Width		8.7" (22.1 cm)	5.5" (14.0 cm)
Depth		21.5" (54.6 cm)	9.3" (23.6 cm)
Capacity: Water		9.0 gal (34 L)	1.2 gal (4.5 L)
Capacity: Crushed ice		40.0 lbs (18.1 kg)	7.5 lbs (3.4 kg)

	<u>Temperature Display Unit</u>	<u>Temperature Probe Modules</u>
Length	8.75" (22.2 cm)	9.0" (22.9 cm)
Width	5.5" (14.0 cm)	5.75" (14.6 cm)
Depth	2.5" (6.4 cm)	2.5" (6.4 cm)

Water Outlet Temperature

Arterial heat exchange and blanket	0 - 42° C
Cardioplegia	Ice water only
Heaters	1 each - 700 watt, 850 watt, 115V units 2 each - 1000 watt, 220V units

Maximum Flow Performance (1/8 hp pump)

Arterial heat exchanger* outlet port	5.5 gal/min (20.8 L/min) at zero head 13.5 psi (698 mmHg) maximum pressure
Blanket supply outlet port*	0.8 gal/min (3.0 L/min) at zero head 11.8 psi (610 mmHg) maximum pressure
Cardioplegia water supply port	2.1 gal/min (7.9 L/min) 7.5 psi (388 mmHg) maximum pressure

*Note: performance will be different with both a heat exchanger and a blanket being supplied at the same time.

Ice Supply

If the large tank is filled to the maximum level with 25° C water, the ice maker can provide a maximum of 50.0 lbs (22.7 kg) in 8 hours.

If the large tank is filled to the maximum level with 3° C water, the ice maker can provide a maximum of 33.5 lbs (15.1 kg) in 3 hours.

Temperature Probe Module Operating Range 0 - 50°C

Remote Temperature Sensing and Display Accuracy ±0.3°C

Venous Differential Mode

6°C gradient = rewarm water temperature is held to a maximum of 6

76°C more than the incoming venous blood temperature.

10°C gradient = rewarm water temperature is held to a maximum of 10°C more than the incoming venous blood temperature.

Catalog Number	Description	Units/Case
4415	TCM II Heating/Cooling System 115V, with cardioplegia supply	1
4416	TCM II Heating/Cooling System 220/240V, with cardioplegia supply	1
15746	Remote control module with temperature displays	1
15745	Additional temperature probe module	1