Section II General Information

Description

The CryoCool Series of immersion coolers is designed as a refrigeration source for sub-ambient work in liquid baths.

CryoCools employ mechanical refrigeration systems constructed with full-hermetic refrigeration compressors. The CC-65 employs a single stage refrigeration system with one compressor. The CC-100 has a dual stage refrigeration system using two compressors in cascade configuration. An insulated coaxial hose assembly carries refrigerant to the cooling probe.

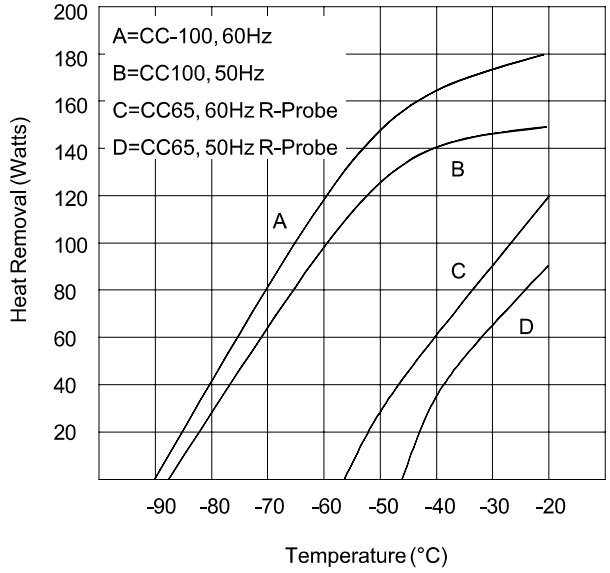
Specifications

	CC-65	CC-100
Temperature Range[1]	-20°C to -55°C	-25°C to -90°C
Temperature Stability	±0.5°C	±0.5°C
Evaporator Head Dimensions[2] (Length x Diameter)		
F-head		
Inches	N/A	18 x 5/8
Centimeters	N/A	45.7 x 1.6
FV-head		
Inches	25 x 1/2	25 x 1/2
Centimeters	63.5 x 1.3	63.5 x 1.3
R-head		
Inches	7 ¼ x 1 1/4	7 ¼ x 1 1/4
Centimeters	18.4 x 3.2	18.4 x 3.2
Minimum Bend Radius[3]		
F-head		
Inches	N/A	1 1/2
Centimeters	N/A	3.8
FV-head		
Inches	1	1
Centimeters	2.5	2.5
R-head		
Inches	N/A	N/A
Centimeters	N/A	N/A

1. Low end specifications listed for "no load" conditions.
2. See Section III, Cooling Probes for a description of the evaporator heads.
3. The minimum bend radius is the smallest radius that the cooling probe can be bent without suffering damage at room temperature. Never bend the probe when it is cold.

	CC-65	CC-100
Evaporator Hose Dimensions (Length x Diameter)		
Inches	44 x 1 1/4	65 x 1 ½
Centimeters	111.8 x 3.2	165.1 x 3.8
Unit Dimensions (H x W x D)		
Inches	15 1/4 x 7 1/2 x 10 1/4	20 1/2 x 14 1/2 x 17 3/4
Centimeters	38.7 x 19.1 x 26.0	52.1 x 36.8 x 45.1
Weight		
Pounds	41.0	130.0
Kilograms	18.6	59.0

Cooling Capacity[4]



4. Specifications obtained in a 2 liter container at +20°C ambient with cooling fluid specific heat of 0.5.