

Section 4: SPECIFICATIONS

This section contains centrifuge specifications and rotor information for the SORVALL® RC-5B PLUS Superspeed Refrigerated Centrifuge.

NOTE Centrifuge specifications may vary depending on the rotor being used.

4-1. Centrifuge Specifications

Run Speed ¹	
Speed Selection Range (rpm)	500 to 21 000
Speed Control Accuracy	±1% or 100 rpm, whichever is greater
Maximum Relative Centrifugal Force (using the F-20/MICRO Rotor)	
	51 070 g
Run Temperature	
Temperature Selection Range	-20 to +40°C
Temperature Control Range	-15 to +30°C ^{2,3}
Temperature Control Accuracy	±1°C ^{3,4}
Run Time Selection Range	0 to 120 minutes or Hold
Ambient Temperature Range	+15 to +38°C ³
Mass (Weight)	308 kg (680 lb)
Dimensions	
Width	76 cm (30 in)
Height to top of control console	114 cm (45 in)
Depth	99 cm (39 in)
Electrical Requirements	
Input Power (single phase, 30 A)	240 V, 50 Hz 230 V, 60 Hz 220 V, 50 Hz 208 V, 60 Hz 200 V, 60 Hz

(continued on next page)

¹ Speed in revolutions per minute (rpm) is related to angular velocity, ω , according to the following:

$$\omega = (\text{rpm}) \left(\frac{2\pi}{60} \right) = (\text{rpm}) (0.10472)$$

Where ω = rad/s. All further references in this manual to speed will be designated as rpm.

² May vary at very low speeds (below approximately 2000 rpm).

³ The centrifuge will operate at ambient temperatures up to 38°C, but refrigeration system performance may be less than optimal above 25°C.

⁴ After the centrifuge system has reached equilibrium.

4-1. Centrifuge Specifications (continued)

Input Power (polyphase, 3ØA) 220V, 50Hz
Receptacle..... NEMA 6-30R
(for NEMA 6-30P grounded plug that is supplied)

Maximum Noise Level <62 dB¹

Heat Output 4.8 kW²
(16 500 Btu/h²)

1 For the SS-34 rotor at 20 000 rpm.

2 For the SS-34 rotor spinning 20 000 rpm at 4°C, after it has reached equilibrium. Other rotors, speeds, and temperatures cause the heat output to vary.