# **Technical Data**

The technical data of the RC 12BP+ is listed in the following table.

Table 1-1. Technical Data RC 12BP+

Feature	Value				
Environmental conditions	-Use in interior sp	-Use in interior spaces			
	-Altitudes of up to 2,000 m above sea level				
	-max. relative humidity 80% up to 31 °C; decreasing linearly up to 50%				
	relative humidity at 40 °C				
permissible ambient temperature	+2° C to +40° C	+35.6° F to +104°	F		
Overvoltage category	II	II	II		
Pollution degree	2	2	2		
Heat dissipation	230V	208V	400V		
	~5.2 kW	~4.5 kW	~5.8 kW		
	17700 BTU/h	15300 BTU/h	19700 BTU/h		
IP	20	20	20		
Running time	unlimited	unlimited	unlimited		
Maximum speed n <sub>max</sub>	4700 rpm	4700 rpm	4700 rpm		
Minimum speed n <sub>min</sub>	300 rpm	300 rpm	300 rpm		
Minimum sample temperature	4°C at 4700 rpm	4°C at 4550 rpm	4°C at 4700 rpm		
Maximum RCF value at n <sub>max</sub>	7340x g	7340 x g	7340 x g		
Maximum kinetic energy	<313 kJ	< 313 kJ	< 313 kJ		
Noise level at maximum speed <sup>1</sup>	< 65 dB (A)	< 65 dB (A)	< 65 dB (A)		
Temperature setting range	-10 °C to +40 °C	-10 °C to +40 °C	-10 °C to +40 °C		
Dimensions					
Height	1178 mm	46.3 inch			
Width	800 mm	31.5 inch			
Depth	905 mm	35.6 inch			
Length power cord	3000 mm	118.1 inch			
Weight without rotor	475 kg	1047 lb			

<sup>&</sup>lt;sup>1</sup> front side measurement

Thermo Scientific RC 12BP+ 1-3

## **Directives, Standards and Guidelines**

Table 1-2. Directives, standards and guidelines

Tension / Frequency		Produced and inspected according to the following standards and guidelines
220V-230V 50Hz, 400V 50Hz	2006/95/EC Low Voltage Directive: 2006/42/EC Machine Directive: 2004/108/EC EMC Directive	EN 61010-1, 2 <sup>nd</sup> Edition EN 61010-2-020, 2 <sup>nd</sup> Edition EN 61326-1 EN 55011B EN 61000-6-2
208-220V 60Hz, 230V 60Hz	The centrifuges are produced and inspected according to the following standards and guidelines	UL 61010-1, 2 <sup>nd</sup> Edition CAN/CSA-C22.2 No. 61010-1, 2 <sup>nd</sup> Edition IEC 61010-2-20, 2 <sup>nd</sup> Edition (Pollution degree 2, Overvoltage category II) Emitted interference FCC Part 15 A NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

### **Functions and Features**

The following table gives an overview of the important functional and performance characteristics of the RC 12BP+.

**Table 1-3.** Functions and features

Component / Function	Description / Features		
Structure / Housing	Galvanized and powder doated high-strength steel chassis and guard-ring		
Chamber	Stainless steel		
Drive	Induction drive without carbon brushes		
Keys and display	Easy-to-clean keypad and display surface		
Controls	Microprocessor-controlled		
Internal memory	The most recent data is saved		
Functions	RCF-selection, temperature control		
Acceleration / braking profiles	11 acceleration and 11 braking curves		
Imbalance detection	Electronic, contingent on rotor and speed		
Lid lock	Automatic lid closing and locking starting from an initial hold position		

1-4 RC 12BP+ Thermo Scientific

## **Mains Supply**

The following table contains an overview of the electrical connection data for the RC 12BP+. This data is to be taken into consideration when selecting the mains connection socket.

Table 1-4. Electrical connection data of the RC 12BP+

Cat.	Mains voltage	Frequency	Rated cur- rent	Power consumption	Equipment fuse	Building fuse	Supply Power Plugs
75007030	208-220V	60Hz	24 A	4400 W	25A & 6A	30 A	NEMA 6-30P SinglePhase
75007031	230V	60Hz	22.5 A	4500 W	25A & 6A	30 A	NEMA 6-30P SinglePhase
75007032	220V-230V	50Hz	24 A	4900 W	25A & 6A	32A	IEC60309 CEE 32 A-6h 1P+N+PE
75007033	230V/ 400V3~	50Hz	23.5 A	4370 W	25A & 6A	3x 32A	IEC60309 CEE 32 A-6h 3P+N+PE

#### **Rotor Selection**

The RC 12BP+ is supplied without a rotor.

Various rotors are available to choose from.

H12000 Blood bag rotor	77050
H12000 Bio rotor	77080

The technical data of the rotors and the corresponding adapters and reduction sleeves for various commercially available containers can be found in the corresponding rotor operating manuals.

For more information visit our website at: http://www.thermo.com

Thermo Scientific RC 12BP+ 1-5