

Technical data

The technical data of the Sorvall Legend X1 / X1R is listed in the following table.

Table 1-1. Technical Data Sorvall Legend X1 / X1R

Feature	Sorvall Legend X1R		Sorvall Legend X1	
Environmental conditions	-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 +35 °C		+2 °C to +35 °C	
Overvoltage category	II		II	
Pollution degree	2		2	
Voltage	230 V	120 V	230 V	120 V
Heat dissipation	4778 BTU/h	4096 BTU/h	3447 BTU/h	3901 BTU/h
IP	20		20	
Run time	unlimited		unlimited	
Max speed n_{max}	15200 rpm (depending on the rotor)		15200 rpm (depending on the rotor)	
Min speed n_{min}	300 rpm		300 rpm	
Maximum RCF value at n_{max}	25830 x g		25830 x g	
Maximum kinetic energy	62.5 kJ		51.7 kJ	
Noise level at maximum speed	< 63 dB (A)		< 63 dB (A)	
Temperature setting range	-10 °C to +40 °C			
Dimensions	refrigerated		ventilated	
Height	360 mm		360 mm	
Height with lid open	870 mm		870 mm	
Width	623 mm		440 mm	
Depth	605 mm		605 mm	
Table top height	310 mm		310 mm	
Weight without rotor	91.5 kg		57.5 kg	

Directives, standards and guidelines

Table 1-2. Directives, standards and guidelines

Tension / frequency		Produced and inspected according to the following standards and guidelines
230 V 50 / 60 Hz	2006/95/EC Low Voltage Directive: 2006/42/EC & 98/37/EC Machine Directive: 2004/108/EC EMC Directive 98/79/EC In-vitro-Diagnostika (IvD)	EN 61010-1, 2 nd Edition EN 61010-2-020, 2 nd Edition EN 61010-2-101 EN 61326-1 EN 61326-2-6 EN 55011B EN 61000-6-2 EN ISO 13485
230 V, 60 Hz 120 V, 60 Hz 100 V, 60 Hz		UL 61010-1, 2 nd Edition CAN/CSA-C22.2 No. 61010-1, 2 nd Edition IEC 61010-2-20, 2 nd Edition Pollution degree 2, Overvoltage category II) IEC 61010-2-101 Emitted interference FCC Part 15 CLASS 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.
100 V 50 Hz		IEC 61010-1 2 nd Edition IEC 61010-2-020 2 nd Edition IEC 61010-2-101 EN 61326-1 EN 61326-2-6 EN 55011A EN 61000-6-2 EN ISO 13485

Functions and features

The following table gives an overview of the important functional and performance characteristics of the Sorvall Legend X1 / X1R.

Table 1-3. Functions and Features

Component / function	Description / features
Structure / Housing	Galvanized steel chassis with armoured plating
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, pretemp with cooling equipped devices
Acceleration / braking profiles	9 acceleration and 10 braking curves
Rotor recognition	Automatic
Imbalance recognition	Electronic, contingent on rotor and speed
Lid lock	Automatic lid closing and locking starting from an initial hold position

Mains supply

The following table contains an overview of the electrical connection data for the Sorvall Legend X1 / X1R. This data is to be taken into consideration when selecting the mains connection socket.

Table 1-4. Electrical connection data of the Sorvall Legend X1 / X1R

Cat.		Mains voltage	Frequency	Rated current	Power consumption	Equipment fuse	Building fuse
75004260	refrigerated	230 V ±10 %	50 / 60 Hz	8 A	1400 W	15 AT	16 AT
75004261	refrigerated	120 V ±10 %	60 Hz	12 A	1200 W	15 AT	15 AT
75004263	refrigerated	100 V ±10 %	50 / 60 Hz ¹	12.5 A	1000 W	15 AT	15 AT
75004220	ventilated	230 V ±10 %	50 / 60 Hz	6 A	1010 W	15 AT	16 AT
75004221	ventilated	120 V ±10 %	60 Hz	9.5 A	850 W	15 AT	15 AT
75004223	ventilated	100 V ±10 %	50 / 60 Hz	9.5 A	750 W	15 AT	15 AT

¹ Please contact the Thermo Fisher service to run the unit at 60Hz Line frequency.