

A. Technical Specifications

A. 1. Sorvall X Pro Series

Model	Sorvall X1 Pro Sorvall X1 Pro-MD	Sorvall X1R Pro Sorvall X1R Pro-MD
Environmental Conditions	Use in interior spaces only. Altitudes of up to 3000 m above sea level. Max. relative humidity 80 % up to 31 °C; decreasing linearly to 50 % relative humidity at 40 °C	Use in interior spaces only. Altitudes of up to 3000 m above sea level. Max. relative humidity 80 % up to 31 °C; decreasing linearly to 50 % relative humidity at 40 °C
Environmental Conditions during Storage and Shipping	Temperature: -10 °C to 55 °C Humidity: 15 % to 85 %	Temperature: -10 °C to 55 °C Humidity: 15 % to 85 %
Permissible Ambient Temperature during Operation	+2 °C to +35 °C	+2 °C to +35 °C
Average Heat Dissipation 100–240 V, 50 / 60 Hz 120 V, 60 Hz 220-230 V, 50 / 60 Hz 100 V, 50 / 60 Hz	0.65 kW/h - - -	- 1.0 kW/h 1.0 kW/h 1.0 kW/h
Overvoltage Category	II	II
Pollution Degree	2	2
IP	20	20
Running Time	99 h, 59 min, 59 s (increments of 1 seconds)	99 h, 59 min, 59 s (increments of 1 seconds)
Maximum Speed n_{max}	15200 rpm (depending on the rotor)	15200 rpm (depending on the rotor)
Minimum Speed n_{min}	300 rpm	300 rpm
Maximum RCF Value at n_{max}	25830 x g (depending on the rotor)	25830 x g (depending on the rotor)
Noise Level at Maximum Speed ^{1, 2}	< 73 dB (A)	< 68 dB (A)
Maximum Kinetic Energy 100-240 V, 50 / 60 Hz 120 V, 60 Hz 220-230 V, 50 / 60 Hz 100 V, 50 / 60 Hz	41 kJ - - -	41 kJ 41 kJ 41 kJ
Temperature Setting Range	-	-10 °C to +40 °C
Dimensions Height (lid open / lid closed) Table top height Width Depth (with mains connection)	855 mm / 364 mm 320 mm 445 mm 660 mm	855 mm / 364 mm 320 mm 625 mm 660 mm
Weight ³ 100 V-240 V, 50 / 60 Hz 120 V, 60 Hz 220-230 V, 50 / 60 Hz 100 V, 50 / 60 Hz	61 kg - - -	- 92 kg 94 kg 94 kg

¹ 1 m in front of the instrument at 1.6 m height.

² Measured with Fiberlite F15-8 x 50cy at 14500 rpm, cooling set to -10 °C (only refrigerated).

³ Without rotor.

Table A-1: Technical Data Sorvall X Pro Series Centrifuges