
APPENDIX C

FREEZE DRYER

SPECIFICATIONS

This Appendix contains technical information about the freeze dryer including electrical specifications, environmental operating conditions and wiring diagrams.

Electrical Specifications

Catalog #	Voltage		Frequency	Phase	Amperage	
	Nominal	Operating Range			Nominal w/o Vacuum Pump	Max. with Vacuum Pump
7386020	115V	103-127	60	1	11	16
	100V	90-110	50	1	11	16
7386021	115V	103-127	60	1	11	16
	100V	90-110	50	1	11	16
7386030	230V	198-254	50	1	5.5	10
7386031	230V	198-254	50	1	5.5	10
7386040	230V	187-253	60	1	5.5	10
7386041	230V	187-253	60	1	5.5	10
7387020	115V	103-127	60	1	11	16
	100V	90-110	50	1	11	16
7387021	115V	103-127	60	1	11	16
	100V	90-110	50	1	11	16
7387030	230V	198-254	50	1	5.5	10
7387031	230V	198-254	50	1	5.5	10
7387040	230V	187-253	60	1	5.5	10
7387041	230V	187-253	60	1	5.5	10

Environmental Conditions

- Indoor use only.
- Maximum altitude: 6562 feet (2000 meters).
- Ambient temperature range: 41° to 104°F (5° to 40°C).
- Maximum relative humidity: 80% for temperatures up to 88°F (31°C), decreasing linearly to 50% relative humidity at 104°F (40°C).
- Main supply voltage fluctuations not to exceed $\pm 10\%$ of the nominal voltage.
- Transient overvoltages according to Installation Categories II (Overvoltage Categories per IEC 1010). Temporary voltage spikes on the AC input line that may be as high as 1500V for 115V models and 2500V for 230V models are allowed.
- Used in an environment of Pollution degrees 2 (i.e., where normally only non-conductive atmospheres are present). Occasionally, however, a temporary conductivity caused by condensation must be expected, in accordance with IEC 664.
- Heat rejected from freeze dryer excluding the vacuum pump: Less than 4320 BTU/HR.