

Note: Data Sheet for Reference Only - Actual Chambers will vary depending on Model Year and Individual Configuration

Thermotron SE-Series Temperature Chamber Specifications

	SE-300	SE-600	SE-1000	SE-1200
Interior Dimensions	61 cm x 67 cm x 71 cm (24" w x 26.25" d x 28" h)	102 cm x 67 cm x 86 cm (40" w x 26.25" d x 34" h)	102 cm x 100 cm x 97 cm (40" w x 39.25" d x 38.25" h)	102 cm x 100 cm x 117 cm (40" w x 39.25" d x 46" h)
Volume	289 liters (10.2 cu ft)	586 liters (20.7 cu ft)	986 liters (34.8 cu ft)	1,184 liters (41.8 cu ft)
Exterior Dimensions	86 cm x 155 cm x 196 cm (34" w x 61" d x 77" h)	122 cm x 155 cm x 208 cm (48" w x 61" d x 82" h)	122 cm x 188 cm x 218 cm (48" w x 74" d x 86" h)	122 cm x 188 cm x 239 cm (48" w x 74" d x 94" h)
Window Size	38 cm x 48 cm (15" w x 19" h)	38 cm x 48 cm (15" w x 19" h)	38 cm x 48 cm (15" w x 19" h)	38 cm x 48 cm (15" w x 19" h)
Temperature Range	180°C to -70°C (355°F to -94°F)	180°C to -70°C (355°F to -94°F)	180°C to -70°C (355°F to -94°F)	180°C to -70°C (355°F to -94°F)
Temperature Control	±0.3°C (±0.5°F)	±0.3°C (±0.5°F)	±0.3°C (±0.5°F)	±0.3°C (±0.5°F)
Temperature Uniformity*	±0.5°C (±0.9°F)	±0.5°C (±0.9°F)	±0.5°C (±0.9°F)	±0.5°C (±0.9°F)
Airflow	14,158 liters/minute (500 cfm)	28,316 liters/minute (1,000 cfm)	28,316 liters/minute (1,000 cfm)	28,316 liters/minute (1,000 cfm)

	SE-300	SE-600			SE-1000		SE-1200	
Compressor Size	2-2 Hp	3-3 Hp	5-5 Hp	3-3 Hp	5-5 Hp	3-3 Hp	5-5 Hp	
Performance Capacity								
Cooling (Minutes) Air Temperature with Empty Chamber								
180°C to -65°C (355°F to -85°F)	75	66	51	74	58	82	63	
71°C to -65°C (160°F to -85°F)	48	36	30	41	36	46	40	
85°C to -40°C (185°F to -40°F)	35	25	22	32	26	37	30	
Product Temperature with 23 kg (50 lbs) of Aluminum**								
71°C to -65°C (160°F to -85°F)	90	56	48	60	53	62	56	
85°C to -40°C (185°F to -40°F)	72	48	40	53	46	55	49	
Heating (Minutes) Air Temperature with Empty Chamber								
-65°C to 180°C (-85°F to 355°F)	38	37	37	43	43	47	47	
-40°C to 85°C (-40°F to 185°F)	16	16	16	19	19	21	21	
-65°C to 71°C (-85°F to 160°F)	17	17	17	20	20	22	22	
Product Temperature with 23 kg (50 lbs) of Aluminum**								
-40°C to 85°C (-40°F to 185°F)	38	38	38	41	41	44	44	
-65°C to 71°C (-85°F to 160°F)	40	40	40	44	44	48	48	
Live Load Capacity (Watts)								
0°C (+32°F)	1,250	2,500	3,000	2,500	3,000	2,500	3,000	
-54°C (-65°F)	750	1,500	2,000	1,500	2,000	1,500	2,000	
Electrical Voltage (Full Load Amps with Humidity / without Humidity)								
208 Volts / 3-Phase / 60 Hertz	45 / 34	55 / 37	67 / 58	55 / 37	67 / 58	55 / 37	67 / 58	
230 Volts / 3-Phase / 60 Hertz	39 / 39	55 / 35	61 / 52	55 / 35	61 / 52	55 / 35	61 / 52	
460 Volts / 3-Phase / 60 Hertz	19 / 28	27 / 17	31 / 26	27 / 17	31 / 26	27 / 17	31 / 26	
400 Volts / 3-Phase / 50 Hertz	23 / 17	30 / 20	35 / 30	30 / 20	35 / 30	30 / 20	35 / 30	
Noise Level*** (dBA)								
Heating	60	60	60	60	60	60	60	
Cooling	68	74	76	74	76	74	76	
Approximate Shipping Weight								
Kilograms	603	762	789	834	862	875	902	
Pounds	1,330	1,680	1,740	1,840	1,900	1,930	1,990	

* Temperature Uniformity: Standard deviation from the mean, measured at either -25°C (-13°F) or 100°C (212°F).

** Description of Standard Test Load: 23 kg (50 lbs) comprised of ten 12-gauge aluminum sheets, 52 cm x 52 cm (20.5" w x 20.5" h), in a vertical orientation, spaced 5 cm (2") apart, with the Product Temperature Control thermocouple on the center sheet.

*** Noise Level: A-weighted sound pressure level measured at a distance of 1.0 meter (39.4 inches) from the surface of the equipment at a height of 1.6 meters (63 inches) from the floor in free-field conditions, using a calibrated instrument.

Single Stage Chamber Specifications

	SE-300	SE-600	SE-1000	SE-1200
Interior Dimensions	61 cm x 67 cm x 71 cm (24" w x 26.25" d x 28" h)	102 cm x 67 cm x 86 cm (40" w x 26.25" d x 34" h)	102 cm x 100 cm x 97 cm (40" w x 39.25" d x 38.25" h)	102 cm x 100 cm x 117 cm (40" w x 39.25" d x 46" h)
Volume	289 liters (10.2 cu ft)	586 liters (20.7 cu ft)	986 liters (34.8 cu ft)	1,184 liters (41.8 cu ft)
Exterior Dimensions	86 cm x 155 cm x 196 cm (34" w x 61" d x 77" h)	122 cm x 155 cm x 208 cm (48" w x 61" d x 82" h)	122 cm x 188 cm x 218 cm (48" w x 74" d x 86" h)	122 cm x 188 cm x 239 cm (48" w x 74" d x 94" h)
Window Size	38 cm x 48 cm (15" w x 19" h)	38 cm x 48 cm (15" w x 19" h)	38 cm x 48 cm (15" w x 19" h)	38 cm x 48 cm (15" w x 19" h)
Temperature Range	180°C to -40°C (355°F to -40°F)	180°C to -40°C (355°F to -40°F)	180°C to -40°C (355°F to -40°F)	180°C to -40°C (355°F to -40°F)
Temperature Control	±0.3°C (±0.5°F)	±0.3°C (±0.5°F)	±0.3°C (±0.5°F)	±0.3°C (±0.5°F)
Temperature Uniformity*	±0.5°C (±0.9°F)	±0.5°C (±0.9°F)	±0.5°C (±0.9°F)	±0.5°C (±0.9°F)
Airflow	14,158 liters/minute (500 cfm)	28,316 liters/minute (1,000 cfm)	28,316 liters/minute (1,000 cfm)	28,316 liters/minute (1,000 cfm)

	SE-300	SE-600		SE-1000		SE-1200	
Compressor Size	2 Hp	3 Hp	5 Hp	3 Hp	5 Hp	3 Hp	5 Hp
Performance Capacity							
Cooling (Minutes) Air Temperature with Empty Chamber							
180°C to -35°C (355°F to -31°F)	54	54	43	74	52	83	60
71°C to -35°C (160°F to -31°F)	33	35	26	46	33	53	39
85°C to -20°C (185°F to -4°F)	22	23	18	32	22	39	26
Product Temperature with 23 kg (50 lbs) of Aluminum**							
71°C to -35°C (160°F to -31°F)	60	56	44	66	49	72	55
85°C to -20°C (185°F to -4°F)	46	39	33	48	39	55	44
Heating (Minutes) Air Temperature with Empty Chamber							
-35°C to 180°C (-31°F to 355°F)	32	31	31	36	36	40	40
-20°C to 85°C (-4°F to 185°F)	13	13	13	15	15	17	17
-35°C to 71°C (-31°F to 160°F)	13	13	13	15	15	17	17
Product Temperature with 23 kg (50 lbs) of Aluminum**							
-20°C to 85°C (-4°F to 185°F)	30	31	31	33	33	36	36
-35°C to 71°C (-31°F to 160°F)	30	31	31	33	33	36	36
Live Load Capacity (Watts)							
0°C (+32°F)	1,250	2,500	3,000	2,500	3,000	2,500	3,000
-20°C (-4°F)	500	1,500	2,000	1,500	2,000	1,500	2,000
Electrical Voltage (Full Load Amps with Humidity / without Humidity)							
208 Volts / 3-Phase / 60 Hertz	41 / 41	55 / 37	67 / 58	55 / 37	67 / 58	55 / 37	67 / 58
230 Volts / 3-Phase / 60 Hertz	38 / 38	55 / 35	61 / 52	55 / 35	61 / 52	55 / 35	61 / 52
460 Volts / 3-Phase / 60 Hertz	26 / 17	27 / 17	31 / 26	27 / 17	31 / 26	27 / 17	31 / 26
400 Volts / 3-Phase / 50 Hertz	23 / 14	30 / 20	35 / 30	30 / 20	35 / 30	30 / 20	35 / 30
Noise Level*** (dBA)							
Heating	60	60	60	60	60	60	60
Cooling	68	74	76	74	76	74	76
Approximate Shipping Weight							
Kilograms	617	680	771	753	844	794	884
Pounds	1,360	1,500	1,700	1,660	1,860	1,750	1,950

* **Temperature Uniformity:** Standard deviation from the mean, measured at either -25°C (-13°F) or 100°C (212°F).

** **Description of Standard Test Load:** 23 kg (50 lbs) comprised of ten 12-gauge aluminum sheets, 52 cm x 52 cm (20.5" w x 20.5" h), in a vertical orientation, spaced 5 cm (2") apart, with the Product Temperature Control thermocouple on the center sheet.

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