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Technical Data Sheet

Thermo Scientific General Purpose Refrigerator

Revision-1

Energy Consumption (KW-hr/day):

Pull Down Time (15C to 5C) (min):

Warm Up Time (5C to 15C) (min):

Heat Rejection Rate (Btu/hr):

700

1.50

213

29

269

	Re	vision-1					
	Thermo Fisher Scientifi	c, Asheville, North Carolina					
	Catalo	og Number					
	TSG505SA Model Number						
	TSG505SA						
Specifications	Application, Rating and Electrical Data						
Application	General Purpose Undercount	ter Laboratory Grade Refrigerator					
Storage Volume	5.5 cu	. ft. (156 L)					
et Point Range/Adjustable in Increments of	+2°C to	9°C / 0.5°C					
Electrical Power	100-240	V, 50-60 Hz					
Instrument Rated Current		3.9 A					
Building Supply Rating	Breaker 15 Amps/100	-240 Volt While Operating					
Power Plug/Power Cord Length	NEMA 5-15P,1.	828 Meters (6 Feet)					
Agency Listings	c	ULus					
Indoor/Outdoor Usage	Indoor	r Use Only					
Application Environment	Non-Corrosive, Non-Flammable, Non-Explosive, Good Air Ventilation, 10°C - 32°C (50°F - 90°F)						
		n Configuration	,				
Refrigeration System	Thermoelectric Based Refrigeration System						
Cooling System		electric Heat Pump					
Cold Side		744 (CO ₂) as Refrigerant					
Hot Side	•	at Exchanger with H ₂ O as working fluid					
Defrost Method	Adaptive Automatic Defrost						
	Controller/Electrical System Configuration and Features						
Controller Level	Waist Level						
Power Switch	No						
Controller Type	1.44" LCD non-touch display with separate capacitive touch buttons						
Control Sensor	(1) Air Thermistor						
Display Temperature Sensors	(1) Air Thermistor						
Remote Alarm Terminals		Yes					
Alarms							
Data Logger	Yes, Audible and Visual (Temperature Range, Door Ajar, No Power, Battery Low) No						
	Dimensions and Construction						
Interior Dimensions (H x D x W)	585 mm X 521 mm x 496 mm (23" x 20.5" x 19.5")						
Exterior Dimensions (H x D x W)	813 mm X 661 mm x 600 mm (32" x 26" x 23.6")						
Insulation	VIP, HFC-free Polyurethane Foam						
Door Perimeter Heater	Yir, Til Onlee Polyaleulaie Loant Yes						
Shelves	(3) Adjustable						
Leveling Feet	(3) Adjustable (4) Adjustable						
Ship Weight	(4) Adjustable 58 kg (128 lbs.)						
Access port	Yes, Rear wall, Accomodates 25 mm probe						
	Typical Performance Characteristics						
5.5 cu. ft. Refrigerator 20°C ambient, Pull Down and Warm U	p 5.5 cu. ft. Refrigerator 20°C ambient, 5C Cycle	Test Unit MSO Number:	19708-B-4-2				
		Cabinet Load:	Unloaded				
25		Average Cabinet Temp at 5C Cycle (C):	5.3				
	7	Average Uniformity (C):	0.21				
20		Average Stability (C):	0.16				
		Peak Variation from Setpoint (C):	+0.49 / +0.1				
10 III	Q 3	1-min Door Opening Recovery (min):	22				
	6 2	→ II					

1) Performance is nominal and individual units may vary.

100

150

Time (min)

200

250

2) Refrigerator performance will differ due to product amount, product size and operating conditions.
3) Continuous product enhancements may, without notice, result in amendments or ommisions to this specification. Thermo Scientific

100 200 300 400

Time (min)

500 600

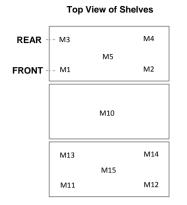
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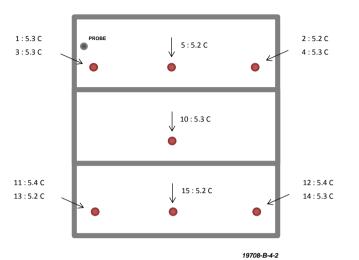
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Typical Cabinet Temperature Map 5.5 cu. ft. A-Volt Refrigerator, 3 Inner Shelves, Single Outer Door Temperatures are averages during 12 hrs. after reaching a setpoint of 5°C



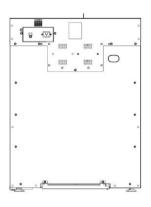


Cabinet Average : 5.3°C Probe Average : 5.79°C Peak Variation : +0.49 / +0.1°C

	M1	M2	M3	M4	M5	M10	M11	M12	M13	M14	M15
Avg	5.3	5.2	5.3	5.3	5.2	5.3	5.4	5.4	5.3	5.3	5.2
Max	5.3	5.3	5.4	5.4	5.3	5.4	5.5	5.5	5.4	5.4	5.3
Min	5.2	5.1	5.2	5.2	5.2	5.2	5.3	5.3	5.3	5.2	5.1

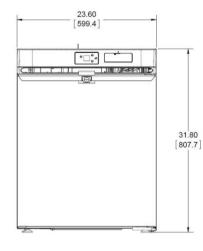
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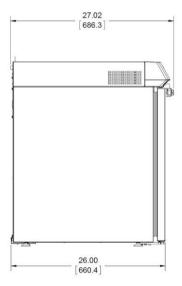




ISOMETRIC VIEW WITH DOOR OPEN







FRONT VIEW

SIDE VIEW

DO NOT USE FOR ENGINEERING PURPOSES SUBJECT TO CHANGE WITHOUT NOTICE

GENERAL PURPOSE REFRIGERATOR