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## **Technical Data Sheet**

Thermo Scientific General Purpose Refrigerator

Pevision-1

	Revision-1							
	Thermo Fisher Scientific, Asheville, North Carolina							
	Catalog Number							
	TSG205SA Model Number TSG205SA Application, Rating and Electrical Data							
Specifications								
Application	General Purpose Countertop Laboratory Grade Refrigerator							
Storage Volume	1.8 cu. ft. (52 L)							
t Point Range/Adjustable in Increments of	+2°C to 8°C / 0.1°C							
Electrical Power	115 VAC, 60 Hz							
Instrument Rated Current	1.2 A							
Building Supply Rating	Breaker 15 Amps/115V±10 Volt While Operating							
Power Plug/Power Cord Length	NEMA 5-15P,1.828 Meters (6 Feet)							
Agency Listings	cMETus							
Indoor/Outdoor Usage	Indoor Use Only							
Application Environment	Non-Corrosive, Non-Flammable, Non-Explosive, Good Air Ventilation, 10°C - 32°C (50°F - 90°F)							
	Refrigeration Configuration							
Refrigeration System	Thermoelectric Based Refrigeration System							
Cooling System	50W Thermoelectric Heat Pump							
Cold Side	Cold Wall Design with Internal Air Circulation Fan, R744 (CO <sub>2</sub> ) as Refrigerant							
Hot Side	Forced Air Heat-pipe Fin Tube Heat Exchanger with H <sub>2</sub> O as working fl	uid						
Defrost Method	Pre-programmed Automatic, Option for Manual Initiation Available							
	Controller/Electrical System Configuration and Features							
Controller Location	Front Mounted							
Power Switch	No							
Controller Type	2.4" Diagonal, 240 x 320 Pixels, 16 bit color TFT-LCD Display, Tactile Control Buttons							
Control Sensor	(1) Air Thermistor							
Display Temperature Sensors	Glycol as Default (Air/Glycol User-Selectable)							
Remote Alarm Terminals	No							
Alarms	Yes, Audible and Visual (Temperature Range, Door Ajar, No Power, Battery Low,	, Memory Full)						
Data Logger	Inbuilt Data Logger, Data Accessible through USB Device							
	Dimensions and Construction							
Interior Dimensions (H x D x W)	467 mm X 310 mm x 363 mm (18.4" x 12.2" x 14.3")							
Exterior Dimensions (H x D x W)	584 mm X 561 mm x 521 mm (23" x 22.1" x 20.5")							
Insulation	CFC-free Polyurethane Foam							
Door Perimeter heater	No							
Shelves / Load Limit	(3) Adjustable / 12 kg (26.4 lbs) per Shelf							
Leveling Feet	(4) Adjustable							
Ship Weight	38 kg (83 lbs.)							
Access port	Yes/1 rear access port accomodates 3.5 mm probe							
	Typical Performance Characteristics							
1.8 cu. ft. Refrigerator 20°C ambient, Pull Down and Warm Up	1.8 cu. ft. Refrigerator 20°C ambient, 5C Cycle Test Unit MSO Number:	19795-X-1-1						
PD WU	Max Min AVG Cabinet Load:	Unloaded						
25	8 Average Cabinet Temp at 5C Cycle							
20	Average Uniformity (C):	0.31						
15	Average Stability (C):	0.32						
	Peak Variation from Setpoint (C):	+0.45 / -0.18						
	Average Stability (C): Peak Variation from Setpoint (C): 1-min Door Opening Recovery (min) Energy Consumption (KW.th/d/au):							
5		0.42						
0	0 Heat Rejection Rate (Btu/hr):	60						
0 50 100 150 200 250 Time (min)	300     0     50     100     150     200     Pull Down Time (15C to 5C) (min):       Time (min)	45						
time (mm)	inite (timi)							

1) Performance is nominal and individual units may vary.

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

cannot accept responsibility for damage, injury, loss or expenses resulting from misapplication of the information herein.

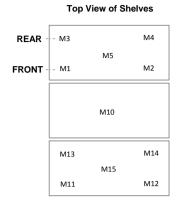
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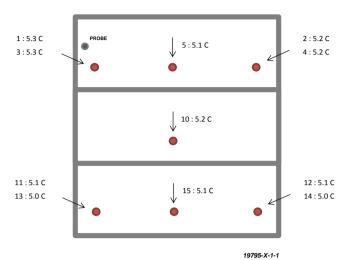
Warm Up Time (5C to 15C) (min):

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Typical Cabinet Temperature Map 1.8 cu. ft. A-Volt Refrigerator, 3 Inner Shelves, Single Outer Door Temperatures are averages during 12 hrs. after reaching a setpoint of 5°C



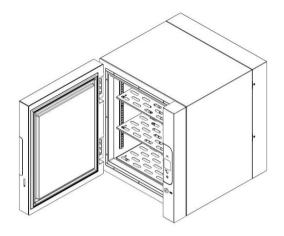


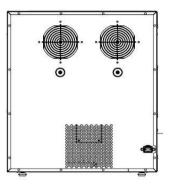
Cabinet Average : 5.14°C Probe Average : 5.29°C Peak Variation : +0.45 / -0.18°C

	M1	M2	M3	M4	M5	M10	M11	M12	M13	M14	M15
Avg	5.3	5.2	5.3	5.2	5.1	5.2	5.1	5.1	5.0	5.0	5.1
Мах	5.4	5.4	5.5	5.4	5.3	5.3	5.3	5.3	5.2	5.2	5.2
Min	5.2	5.1	5.1	5.0	5.0	5.0	5.0	4.9	4.8	4.8	4.9

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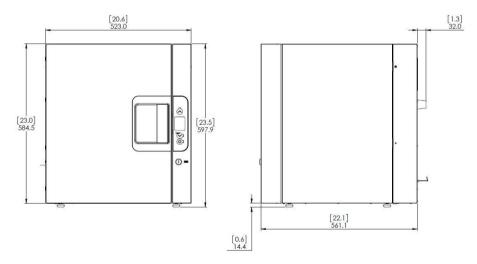
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ISOMETRIC VIEW WITH DOOR OPEN

REAR VIEW



FRONT VIEW

SIDE VIEW

DO NOT USE FOR ENGINEERING PURPOSES SUBJECT TO CHANGE WITHOUT NOTICE

GENERAL PURPOSE REFRIGERATOR