

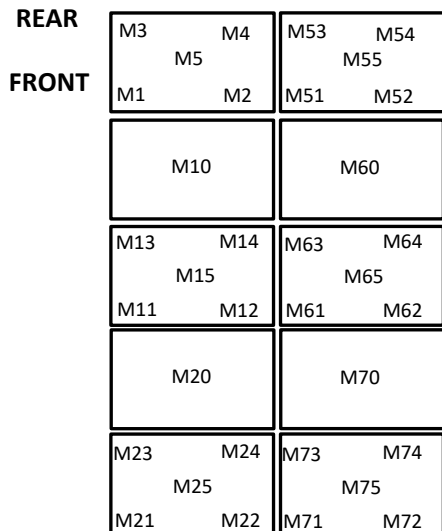
Specifications	Model Number																											
	TSG1500REGBW																											
	Application, Rating and Electrical Data																											
Application	Storage of General (non-flammable) Laboratory Materials																											
Storage Volume	1355Liters /47.8 Cubic Feet																											
Factory Set Point	+5 °C																											
Set Point / Increment	+5 °C / 0.1 °C																											
Electrical Power / Rated Current	230V 50 Hz 1 Phase / 1.6A																											
Building Supply Rating	13A 250V																											
Power Plug/Power Cord Length	13 Amp 250V / 4 Meters (13 feet)																											
Agency Listings	CE																											
Standards and directives	2006/42/EC, 2014/30/EU, 2014/35/EU, 2011/65/UE, 2015/863/EU & 2012/19/EU																											
Electromagnetic Compatibility	Emissions (Class A), Immunity (Industrial Environment)																											
Indoor/Outdoor Usage	Indoor Use Only																											
Application Environment	Non-Corrosive, Non-Flammable, Non-Explosive, Good Air Ventilation																											
Ambient Operating Temperature	15° C to 32° C (59° F to 90° F)																											
	Refrigeration Configuration																											
Refrigeration System	Vapor compression system																											
Compressor / Number / Capacity	Single speed / 1 / 256W																											
Condenser Type/Number	Forced-Air Cooled Finned-Tube Coil Heat Exchanger / 1																											
Expansion Device	Capillary Tube																											
Evaporator Type / Defrost Method	Forced Air Finned-Tube Coil Heat Exchanger / Automatic Defrost																											
Refrigerant Charge / Flammability	R290,100gms,GWP:3 ODP:0 / Flammable																											
	Controller/Electrical System Configuration and Features																											
Controller Level	Eye Level																											
Power Switch	On the Controller Main Screen																											
Controller Type	Electronic Controller with LCD display																											
Setpoint Security / Programmable	Yes / Yes																											
Compressor Safe Guard	Overload Protection (OLP)																											
Control Sensor	NTC Probe																											
Connectivity / Remote OutputsTerminals	Dry Contact (NO and NC)																											
Adjustable Warm / Cold Alarms	Fully Adjustable																											
Power Failure Alarm	Acoustic and Visual																											
Electronic Chart Recorder	Not Provided																											
	Dimensions and Construction																											
Interior Dimensions (H x D x W)	1510 mm x 690 mm x 1300 mm (59.4" x 27" x 51.2")																											
Exterior Dimensions (H x D x W)	2082 mm x 827 mm x 1440 mm (82.1" x 32.5" x 56.7")																											
Insulation	Polyurethane Foam 70 MM (2.75")																											
Door Perimeter heater	Yes																											
Shelves / Load Limit	8 Shelves / 30kg (66 lbs) per Shelf																											
Casters	2 Lockable Castors at the front & 2 Fixed Castors at the rear																											
Non-Crated Shipping Weight	240kgs / 529.1 lbs																											
	Typical Performance Characteristics																											
<p>Set Point 5°C @ 20°C Ambient</p> <p>Temperature (°C)</p> <p>Time (Min)</p> <p>Legend: Pulldown (blue), Warmup (orange)</p>	<p>Set Point 5°C @ 20°C Ambient</p> <p>Temperature (°C)</p> <p>Time (Min)</p> <p>Legend: MIN (blue), MAX (orange), AVG (grey)</p>	<p>Test Unit Series Number or MSO Number: 20297-A-10-7</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td>Cabinet Load:</td> <td>Unloaded</td> </tr> <tr> <td>Average Cabinet Temp (C):</td> <td>5.2</td> </tr> <tr> <td>Peak Variation from Setpoint (C):</td> <td>-3.7/2.9</td> </tr> <tr> <td>Uniformity (C):</td> <td>1.94</td> </tr> <tr> <td>Stability (C):</td> <td>4.2</td> </tr> <tr> <td>1-min Door Opening Recovery(min):</td> <td>8.3</td> </tr> <tr> <td>Cycle on Time(%):</td> <td>26.14</td> </tr> <tr> <td>Cycle (on/off) Time (min):</td> <td>4.6/13</td> </tr> <tr> <td>Energy Consumption (kw-hr/day):</td> <td>4.2</td> </tr> <tr> <td>Heat Rejection Rate (btu/hr):</td> <td>592.94</td> </tr> <tr> <td>Pull Down Time to setpoint.(Min)</td> <td>23.7</td> </tr> <tr> <td>Warm Up Time to 15°C (min):</td> <td>154</td> </tr> <tr> <td>Sound (dBA):</td> <td>50.6</td> </tr> </table>	Cabinet Load:	Unloaded	Average Cabinet Temp (C):	5.2	Peak Variation from Setpoint (C):	-3.7/2.9	Uniformity (C):	1.94	Stability (C):	4.2	1-min Door Opening Recovery(min):	8.3	Cycle on Time(%):	26.14	Cycle (on/off) Time (min):	4.6/13	Energy Consumption (kw-hr/day):	4.2	Heat Rejection Rate (btu/hr):	592.94	Pull Down Time to setpoint.(Min)	23.7	Warm Up Time to 15°C (min):	154	Sound (dBA):	50.6
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<p>1)Performance is nominal and individual units may vary.</p> <p>2)Product performance will differ due to product amount, product size and operating conditions.</p> <p>3)Continuous product enhancements may, without notice, result in amendments or omissions to this specification. Thermo Scientific cannot accept responsibility for damage, injury, loss or expenses resulting from misapplication of the information herein.</p> <p>© 2021 Thermo Scientific Inc. All trademarks are the property of Thermo Scientific Inc. and its subsidiaries. Specifications, terms and pricing are subject to change. Not all products are available in all countries. Please consult your local sales representative for details.</p>																												



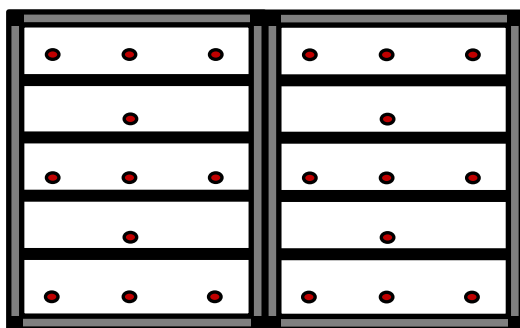
**Typical Cabinet Temperature Map**  
**Refrigerator 48cuft , 4 Inner-Shelves + Base, 2 Outer Doors**

Temperatures are averages during > 20  
 cycles after reaching a setpoint of 5C

**Top View of Shelves**



*Front View*



20297-A-10-7

**Cabinet Average:** 4.5 C  
**Probe Average:** 7.0 C  
**Peak Variation:** +2.5 C / -19.2 C

	M1	M2	M3	M4	M5	M10
Avg	4.9	4.8	5.3	4.9	5.2	5.2
Max	7.2	7.3	7.3	7	7.3	6.6
Min	1.8	1.4	3.4	2.3	3.2	3.8

	M11	M12	M13	M14	M15	M20
Avg	5.7	6.1	4.9	5.2	5.2	5.1
Max	6.9	7.1	6.3	6.5	6.5	6.3
Min	3.8	4.7	2.7	3.5	3.8	3.5

	M21	M22	M23	M24	M25
Avg	5.6	5.7	5	4.3	4.8
Max	6.9	7.2	6.1	5.8	6.2
Min	4	4.2	3.4	1.9	2.6

	M51	M52	M53	M54	M55	M60
Avg	5.4	4.8	4.7	4.9	5.4	5.3
Max	7.5	7.3	7.2	7.4	7.4	6.7
Min	2.9	1.7	1.5	2	3.8	3.8

	M61	M62	M63	M64	M65	M70
Avg	5.7	5.7	4.4	4.8	5.2	-1.5
Max	6.9	6.9	6.3	6.2	6.4	5.2
Min	4.1	4.6	1.7	2.5	3.8	-14.2

	M71	M72	M73	M74	M75
Avg	5.6	5.3	4.6	4.9	4.7
Max	6.8	6.8	5.9	6.1	6.2
Min	3.8	3.3	2.6	3.2	2.5

