

Specifications	Model Number																										
	TSG1500RESBV																										
	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	16A 250V																										
Power Plug/Power Cord Length	16 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	225kgs / 496 lbs																										
Typical Performance Characteristics																											
<div> <div> <p>Set Point 5°C @ 20°C Ambient</p> <p>Pull Down and Warm Up</p> </div> <div> <p>Set Point 5°C @ 20°C Ambient</p> <p>At 5C Cycle</p> </div> <div> <p>Test Unit Series Number or MSO Number: 20297-A-11-5</p> <table> <tr> <td>Cabinet Load:</td> <td>Unloaded</td> </tr> <tr> <td>Average Cabinet Temp (C):</td> <td>5.1</td> </tr> <tr> <td>Peak Variation from Setpoint (C):</td> <td>-3.94/2.1</td> </tr> <tr> <td>Uniformity (C):</td> <td>1.65</td> </tr> <tr> <td>Stability (C):</td> <td>3.75</td> </tr> <tr> <td>1-min Door Opening Recovery(min):</td> <td>4.75</td> </tr> <tr> <td>Cycle on Time(%):</td> <td>18</td> </tr> <tr> <td>Cycle (on/off) Time (min):</td> <td>3.73/16.76</td> </tr> <tr> <td>Energy Consumption (kw-hr/day):</td> <td>3.89</td> </tr> <tr> <td>Heat Rejection Rate (btu/hr):</td> <td>509</td> </tr> <tr> <td>Pull Down Time to setpoint:(Min)</td> <td>21.5</td> </tr> <tr> <td>Warm Up Time to 15°C (min):</td> <td>242</td> </tr> <tr> <td>Sound (dBA):</td> <td>50.3</td> </tr> </table> </div> </div>		Cabinet Load:	Unloaded	Average Cabinet Temp (C):	5.1	Peak Variation from Setpoint (C):	-3.94/2.1	Uniformity (C):	1.65	Stability (C):	3.75	1-min Door Opening Recovery(min):	4.75	Cycle on Time(%):	18	Cycle (on/off) Time (min):	3.73/16.76	Energy Consumption (kw-hr/day):	3.89	Heat Rejection Rate (btu/hr):	509	Pull Down Time to setpoint:(Min)	21.5	Warm Up Time to 15°C (min):	242	Sound (dBA):	50.3
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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

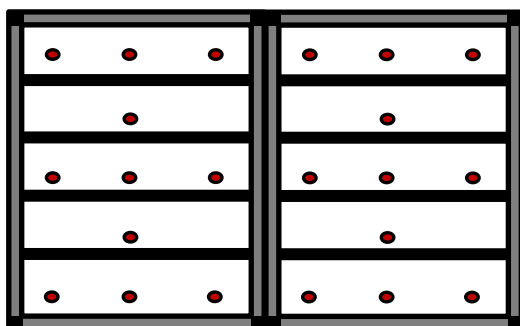
Temperatures are averages during > 20  
cycles after reaching a setpoint of 5C

**Top View of Shelves**

REAR  
FRONT

M3	M4	M53	M54
	M5		M55
M1	M2	M51	M52
M10		M60	
M13	M14	M63	M64
	M15		M65
M11	M12	M61	M62
M20		M70	
M23	M24	M73	M74
	M25		M75
M21	M22	M71	M72

*Front View*



20297-A-11-5

**Cabinet Average:** 5.1 C  
**Probe Average:** 7.4 C  
**Peak Variation:** +1.9 C / -3.7 C

	M1	M2	M3	M4	M5	M10
Avg	4.7	4.8	5	4.8	5.2	5.1
Max	6.7	6.8	6.8	6.7	6.8	6.2
Min	1.3	1.5	3.1	2	3.7	3.7

	M11	M12	M13	M14	M15	M20
Avg	5	5.4	4.8	4.5	5.2	5.2
Max	6.5	6.7	6	6	6.2	6.2
Min	2.4	3.2	2.6	1.6	4	4.1

	M21	M22	M23	M24	M25
Avg	5.6	5.7	5	4.4	4.9
Max	6.9	6.6	6	5.6	6.1
Min	3.9	4.2	3.4	2.1	3

	M51	M52	M53	M54	M55	M60
Avg	5.2	4.8	4.9	4.9	5.3	5.1
Max	6.9	6.8	6.8	6.8	6.8	6.3
Min	2.9	1.7	2.2	2.3	3.7	3.5

	M61	M62	M63	M64	M65	M70
Avg	5.4	5.7	4.7	4.7	5.1	5.1
Max	6.4	6.6	6	6	6.1	6.1
Min	4.1	4.5	2.4	2.2	3.7	3.8

	M71	M72	M73	M74	M75
Avg	5.8	5.7	4.8	5	5
Max	6.7	6.9	5.8	6	6.1
Min	4.3	4	3.2	3.3	3.1

