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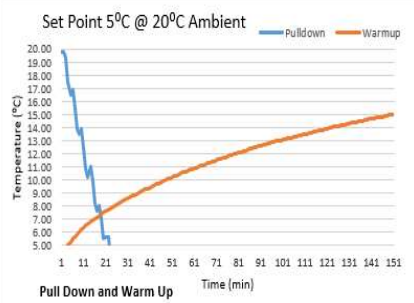
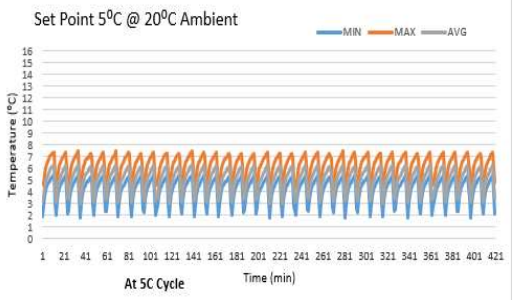
Technical Data Sheet

General Purpose Refrigerator 400L

Revision-A

Specifications	Model Number
	TSG400REGBW
	Application, Rating and Electrical Data
Application	Storage of General (non-flammable) Laboratory Materials
Storage Volume	347Liters /12.25 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 / 3 Meters (10 feet)
Agency Listings	CE
Standards and directives	2014/30/CE, 2014/35/CE, 2011/65/CE (RoHS), 2012/19/CE (RAEE)
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 / 616W
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	R290,120gms,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)	1405 mm x 493 mm x 500 mm (55.3" x 19.4" x 19.7")
Exterior Dimensions (H x D x W)	1956 mm x 658 mm x 600 mm (77" x 25.9" x 23.6")
Insulation	Polyurethane Foam 70 MM (2.75") at Back & 50 MM (2") in the Sides
Door Perimeter heater	No
Shelves / Load Limit	5 Shelves / 30kg (66 lbs) per Shelf
Casters	2 Lockable Castors at the front & 2 Fixed Castors at the rear
Non-Crated Shipping Weight	127kgs / 280 lbs
	Typical Performance Characteristics





Test Unit Series Number or MSO Number:	20297-A-6-2
Cabinet Load:	Unloaded
Average Cabinet Temp (C):	5.07
Peak Variation from Setpoint (C):	-3.25/2.47
Uniformity (C):	2.03
Stability (C):	3.32
1-min Door Opening Recovery(min):	4
Cycle on Time(%):	16.7
Cycle (on/off) Time (min):	2/10
Energy Consumption (kw-hr/day):	1.1
Heat Rejection Rate (btu/hr):	156.64
Pull Down Time to setpoint:(Min)	26
Warm Up Time to 15ºC (min):	141
Sound (dBA):	51.6

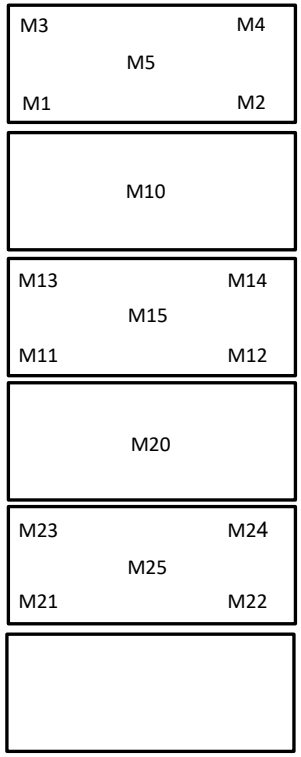
1)Performance is nominal and individual units may vary.
2)Product performance will differ due to product amount, product size and operating conditions.
3)Continuous product enhancements may, without notice, result in amendments or ommisions to this specification. Thermo Scientific cannot accept responsibility for damage, injury, loss or expenses resulting from misapplication of the information herein.

Typical Cabinet Temperature Map

Refrigerator 12cuft , 5 Inner-Shelves + Base, Single Outer Door

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

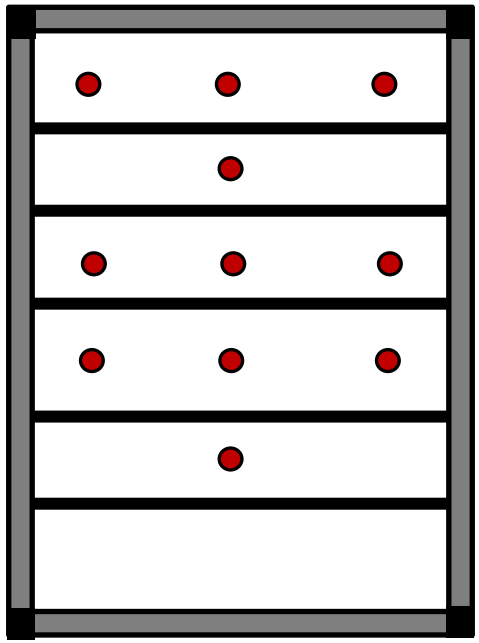
Top View of Shelves



REAR

FRONT

FRONT VIEW



20297-A-6-2

	M1	M2	M3	M4	M5
Avg	6.2	5.7	5.9	5.6	6
Max	7.5	7.1	7.4	7.3	6.6
Min	4.3	3.5	2.9	1.8	3.3
	M10	M11	M12	M13	
Avg	5.2	4.9	4.8	4.5	
Max	6.4	6.2	6.1	5.9	
Min	3.4	3.1	2.5	2.2	
	M14	M15	M20	M21	
Avg	5.2	4.5	4.6	4.7	
Max	6.3	5.9	5.9	5.9	
Min	3	1.4	2.7	3.3	
	M22	M23	M24	M25	
Avg	5.6	5.2	5.5	5.1	
Max	6.7	6.5	6.6	6.4	
Min	4.1	2.7	3.3	2.6	

Cabinet Average: 5.0 C

Probe Average: 6.2 C

Peak Variation: +2.7 C / -2.7 C

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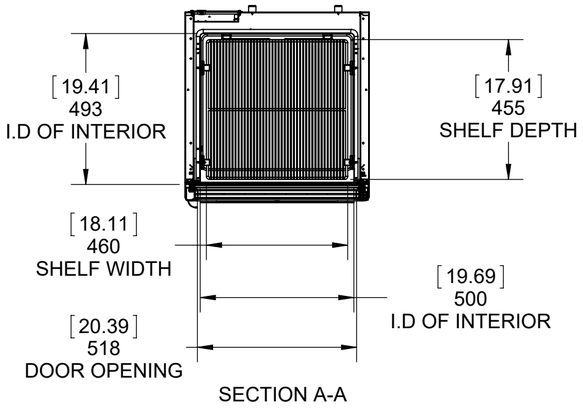

SECTION A-A