

# Technical Data Sheet General Purpose Refrigerator 700L

Revision-A

Specifications	Model Number						
	TSG700RESBV						
Application	Application, Rating and Electrical Data						
	Storage of General (non-flammable) Laboratory Materials						
Storage Volume	620Liters / 21.9 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 / 236W						
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	R290,90gms,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						
Electionic Ghart (Coorder	Dimensions and Construction						
Interior Dimensions (H x D x W)	1505 mm x 686 mm x 600 mm (59.2" x 27" x 23.6")						
Exterior Dimensions (H x D x W)	2085 mm x 826 mm x 750 mm (82.1" x 32.5" x 29.5")						
Insulation	7.5 cm (2.95") Polyurethane Foam						
Door Perimeter heater	No						
Shelves / Load Limit	4 Shelves / 30kg (66 lbs) per Shelf						
	<u> </u>						
Casters	2 Lockable Castors at the front & 2 Fixed Castors at the rear						
Non-Crated Shipping Weight	152kgs / 335.1 lbs						
and the control of th	Typical Performance Characteristics						
Set Point 5°C @ 20°C Ambient  Pulldown ——Warmup	16						
20 19 18 18 16 16 16 18 12 12 12 12 19 19 19 19 19 19 19 19 19 19 19 19 19	Cabinet Load: Unloaded Average Cabinet Temp at 5C Cycle (C): 4,99 Peak Variation from Setpoint (C): 4,3/1.8 Uniformity (C): 1.11 Stability (C): 1.11 Stability (C): 1.11 Peak Central Peak Consumption (kw-hr/day): 14,9 Cycle on Time(%): 14,97 Cycle on Time(%): 1,17 Heat Rejection Return (kw-hr/day): 1,17 Peat Rejection Return (kw-hr/day): 165.88 Pull Down Time to setpoint: (Min): 25.9						
1 21 41 61 81 101 121 141 161 181 201 221 241  Pull Down and Warm Up  Time (min)	Warm Up Time to 15C (min): 239   At 5C Cycle   Warm Up Time to 15C (min): 239						

<sup>1)</sup>Performance is nominal and individual units may vary.

<sup>2)</sup>Product performance will differ due to product amount, product size and operating conditions.

<sup>3)</sup>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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### Typical Cabinet Temperature Map Refrigerator 22cuft , 3 Inner-Shelves + Base, Single Outer Door

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

# **Top View of Shelves**

REAR

FRONT

M3 M4 M5 M1 M2

M10

M15 M11 M12 M18 M19 M20

M14

M17

Cabinet Average: 5.1 C Probe Average: 6.2 C

Peak Variation: +1.8 C / -3.9 C

M13

M16

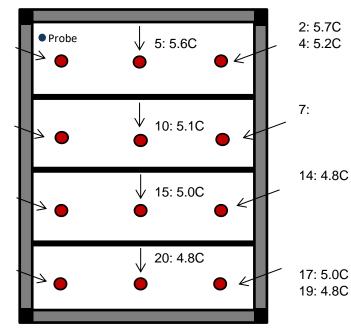
#### Front View

1: 5.7C 3: 5.5C

8:

11: 5.1C

16: 5.2C 18: 4.8C



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	M1	M2	M3	M4	M5	M10	M11	M12
Avg	5.7	5.7	5.5	5.2	5.6	5.1	5.1	9.3
Max	6.7	6.8	6.8	6.6	6.7	6.3	6.2	20.2
Min	3.9	3.6	2.1	1.1	3.1	3	3.2	1.1

	M13	M14	M15	M16	M17	M18	M19	M20
Avg	9.2	4.8	5	5.2	5	4.8	4.8	4.8
Max	20.2	6.2	6.1	6.2	6.2	6	6	6
Min	0.4	1.8	2.9	3.3	2.3	2.1	2.5	2.8

# ONLY CABINET SHOWN FOR CLARITY IN TOP VIEW, TO ILLUSTRATE INTERIOR DIMENSIONS

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