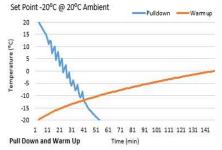
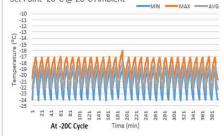


Technical Data Sheet

General Purpose Freezer 700L

	Revision-A						
	Model Number						
Specifications	TSG700FESBW						
	Application, Rating and Electrical Data						
Application	Storage of General (non-flammable) Laboratory Materials						
Storage Volume	620Liters / 21.9 Cubic Feet						
Factory Set Point	-20 °C						
Set Point / Increment	-20 °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)						
1 0 1	Refrigeration Configuration						
Refrigeration System	Vapor compression system						
Compressor / Number / Capacity	Single speed / 1 / 462W						
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	R290,145gms,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)	1505 mm x 686 mm x 600 mm (59.25" x 27" x 23.6")						
Exterior Dimensions (H x D x W)	2085 mm x 855 mm x 750 mm (82.1" x 33.6" x 29.5")						
Insulation	Polyurethane Foam 7.5cms (2.95")						
Door Perimeter heater	Yes						
Shelves / Load Limit	4 Shelves / 30kg (66 lbs) per Shelf						
Casters	2 Lockable Castors at the front & 2 Fixed Castors at the rear						
Non-Crated Shipping Weight	158kgs / 348.3 lbs						
- FI 5 5	Typical Performance Characteristics						
et Point -20°C @ 20°C AmbientPulldownWarmup	Set Point -20°C @ 20°C Ambient Test Unit Series Number or MSO Number 20207.4						
20 Warmup	MIN MAX —AVG						
15	-11 Cabinet Load: Unloat -12 Average Cabinet Temp (C): -20.1 -21 Peak Variation from Setpoint (C): -2.75/1						
10	1-3 Average cannot reting (c): 2-2.75/1 2-14 Peak Variation from Setpoint (C): 2-7.75/1 2-15 Uniformity (C): 2-55/2 2-17 Stability (C): 5-23						
5	5-15 Uniformity (C): 2-55 Stability (C): 5-23						





Cabinet Load: Unloaded Average Cabinet Temp (C): 2-27/4.3-3

Veak Variation from Setpoint (C): 2-75/4.87

Uniformity (C): 2.59

Stability (C): 2.59

Stability (C): 12.7

Cycle on Time(%): 45.8

Cycle (on/off) Time (min): 5.5/6.5

Energy Consumption (kw-hr/day): 6.62

Heat Rejection Rate (btu/hr): 941.77

Pull Down Time to setpoint (Min) 61

Warm Up Time to 0°C (min): 132

Sound (dBA): 56.4

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.

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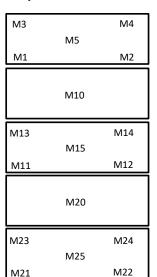


Typical Cabinet Temperature Map Freezer 22cuft , 4 Inner-Shelves + Base, Single Outer Door

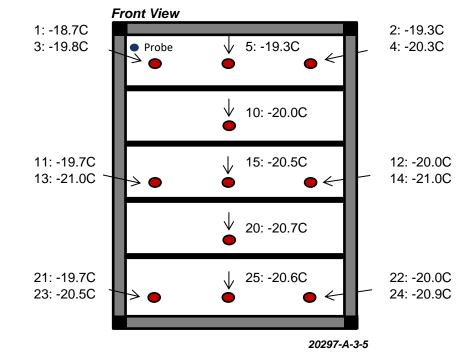
Temperatures are averages during > 20 cycles after reaching a setpoint of -20C

Top View of Shelves

REAR FRONT



Cabinet Average: -20.2 C Probe Average: -17.4 C Peak Variation: +5.6 C / -4.4 C



	M1	M2	M3	M4	M5	M10	M11	M12	M13
Avg	-18.7	-19.3	-19.8	-20.3	-19.3	-20	-19.7	-20	-21
Max	-14.8	-14.4	-14.8	-15	-14.6	-16.2	-16.2	-16.2	-16.8
Min	-21	-22.4	-23.2	-24.4	-22.4	-22.2	-21.5	-22.1	-23.6

	M14	M15	M20	M21	M22	M23	M24	M25
Avg	-21	-20.5	-20.7	-19.7	-20	-20.5	-20.9	-20.6
Max	-16.5	-16.7	-16.8	-16.3	-16.2	-16.9	-16.7	-16.7
Min	-24.1	-22.6	-22.8	-21.8	-22.6	-22.7	-23.6	-22.9

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ONLY CABINET SHOWN FOR CLARITYIN THE TOP VIEW, TO ILLUSTRATE INTERIOR DIMENSIONS

