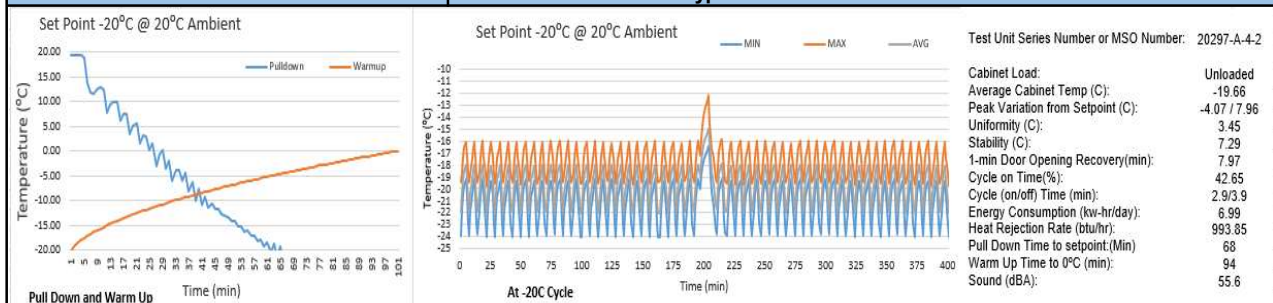


Specifications	Model Number
	TSG400FESBV
Application, Rating and Electrical Data	
Application	Storage of General (non-flammable) Laboratory Materials
Storage Volume	347Liters /12.25 Cubic Feet
Factory Set Point	-20 °C
Set Point / Increment	-20 °C / 0.1 °C
Electrical Power / Rated Current	230V 50 Hz 1 Phase / 1.6A
Building Supply Rating	16A 250V
Power Plug/Power Cord Length	16 Amp 250V / 3 Meters (10 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 / 626W
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)	1955 mm x 650 mm x 600 mm (77" x 25.6" x 23.6")
Insulation	Polyurethane Foam 7cms (2.75") at Back & 5cms (2") in the Sides
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	114kgs / 251.3 lbs
Typical Performance Characteristics	

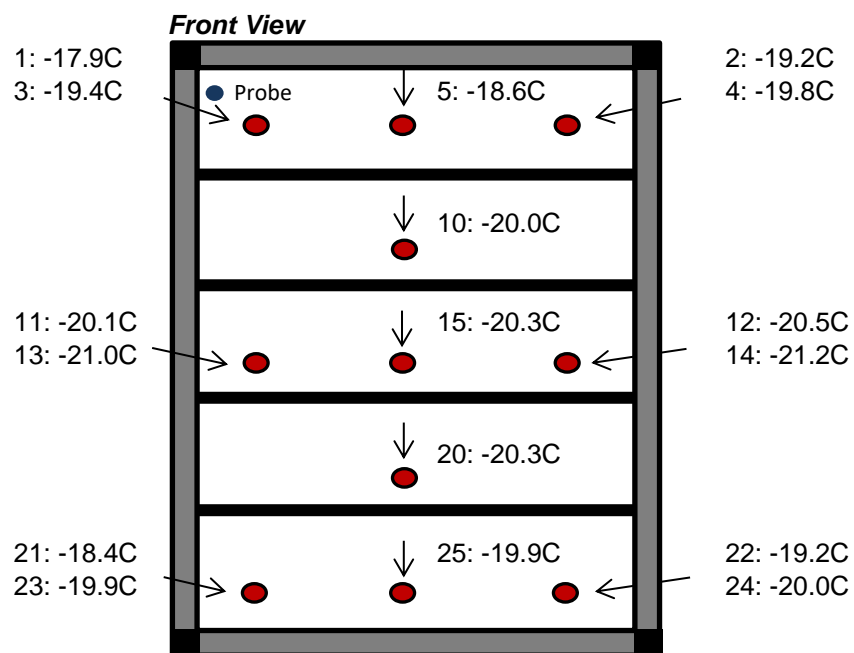
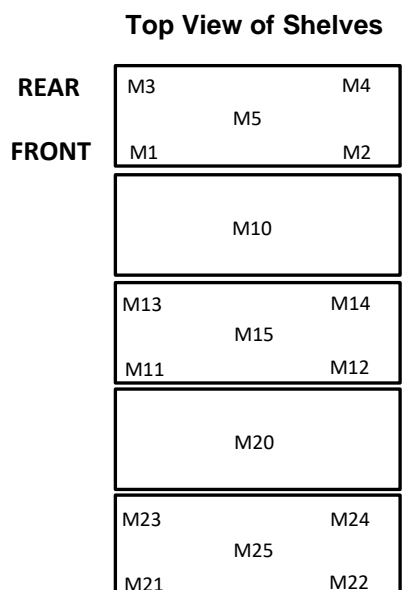


- 1)Performance is nominal and individual units may vary.
- 2)Product performance will differ due to product amount, product size and operating conditions.
- 3)Continuous product enhancements may, without notice, result in amendments or omissions to this specification. Thermo Scientific cannot accept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



Typical Cabinet Temperature Map
Freezer 12cuft , 4 Inner-Shelves + Base, Single Outer Door

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



Cabinet Average: -19.8 C
Probe Average: -17.6 C
Peak Variation: +4.1 C / -4.1 C

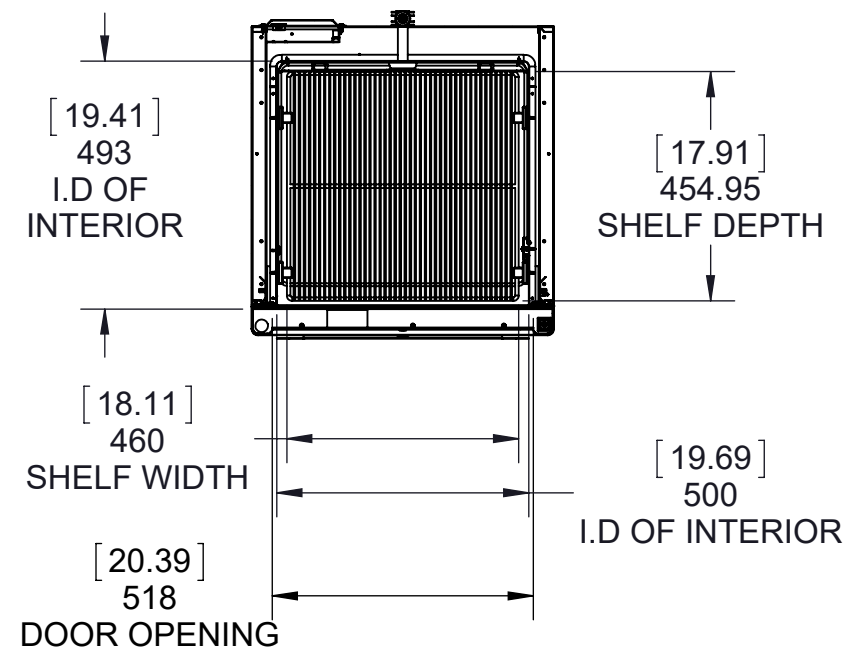
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	M1	M2	M3	M4	M5	M10	M11	M12	M13
Avg	-17.9	-19.2	-19.4	-19.8	-18.6	-20	-20.1	-20.5	-21
Max	-16	-16.3	-16.4	-16.3	-16.1	-18.4	-18.5	-18.8	-19.1
Min	-20.1	-22.6	-23	-24.1	-21.6	-21.9	-22.1	-22.9	-23.7

	M14	M15	M20	M21	M22	M23	M24	M25
Avg	-21.2	-20.3	-20.3	-18.4	-19.2	-19.9	-20	-19.9
Max	-19.2	-19.1	-19.1	-17	-17.7	-18.4	-18.7	-18.5
Min	-24	-22	-21.8	-19.8	-21.3	-21.8	-21.6	-21.7

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

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SECTION A-A

