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#### Technical Data Sheet High Performance General Purpose Refrigerator



Revision-0

Thermo Fisher	Scientific.	, Asheville,	North	Carolina
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	Catalog number					
	TSX5005SV					
Specifications	Model Number					
	TSX5005SV					
	Application, Rating and Electrical Data					
Application	Storage of General (non-flammable) Laboratory Materials					
Storage Volume	1447 Liters / 51.1 Cubic Feet					
Factory Set Point	5℃					
Set Point Range/Adjustable Increment	3℃ to 7℃ / 0.1℃					
Electrical Power / Rated Current	208-230V 50/60 Hz 1 Phase / 4.6A					
Building Supply Rating	15A dedicated grounded non-GFCI circuit. Protected by circuit breaker rated for inductive loads					
Power Plug/Power Cord Length	16 Amp (CEE 7/7) / 3.048 Meters (10 feet)					
Agency Listings	CE, UL, cUL					
Indoor/Outdoor Usage	Indoor Use Only					
Application Environment	Non-Corrosive, Non-Flammable, Non-Explosive, Good Air Ventilation					
Ambient Operating Temperature	15°C - 32°C (60°F - 90°F)					
	Refrigeration Configuration					
Refrigeration System	Vapor compression system					
Compressor / Number / Capacity	Hermetic Variable Capacity Compressor / 1 / 398W					
Condenser Type/Number	Enhanced Finned-Tube and Forced-Air Cooled / 1					
Expansion Device	Capillary Tube					
Evaporator Type / Defrost Method	Forced Air Evaporator Coil / Automatic Defrost					
Refrigerant Charge / Flammability	Environmentally Safe R290 / Flammable					
	Controller/Electrical System Configuration and Features					
Controller Level	Eye Level					
Power Switch	Keyed Off-On - Alarm					
Controller Type	IntrLogic Control System: Digital display, Graphic thermometer, Automatic defrost system					
Setpoint Security / Programmable	Yes / Yes					
Compressor Safe Guard	Current protection					
Control Sensor	Single RTD (1000 ohm shielded Platinum RTD)					
Remote Alarm Terminals	Standard					
Adjustable Warm / Cold Alarms	Fully Adjustable					
Power Failure Alarm	Standard					
Electronic Chart Recorder	Optional					
	Dimensions and Construction					
Interior Dimensions (H x D x W)	1473 mm x 724 mm x 1334 mm (58.0" x 28.5" x 52.5")					
Exterior Dimensions (H x D x W)	1994 mm x 962 mm x 1435 mm (78.5" x 37.9" x 56.5")					
Insulation	5.08 cm (2.0") High-Density Water-Blown Polyurethane Foam					
Door Perimeter heater	Yes					
Shelves / Load Limit	(8) Adjustable Wire Shelves / 45 kg (100 lbs) per Shelf					
All-Direction Casters	Locking Casters					
Shipping Weight	282 kg / 621 lb					
Onipping Weight	Typical Performance Characteristics					
50 cuft Upright Refrigerator, Pull Down and Warm						
——Pull Down —— Warm Up	Test Unit Series Number or MSO Number: 19585-B-26					
19	8 Cabinet Load: Unloaded					
	7 Average Cabinet Temp at 5C Cycle (C): 4.8					
17	Peak Variation from Setpoint (C): +1.4/-2.8 Uniformity (C): 1					
e 15	g 5 Stability (C): 3.2					
115 13 13 14 15 15 15 15 15 15 15 15 15 15 15 15 15	1-min Door Opening Recovery to 5C (min): 2					
<b>8</b> 11	Duty Cycle at 5C (%): 32  Cycle (on/off) rate at 5C (min): 3 / 6					
<b>P</b> 9	Energy Contamption (Arr Inrady). 0.2					
7	Heat Rejection Rate (btu/hr): 883					
5	Pull Down Time (to 5C) (min): 17 Warm Up Time (5C to 15C) (min): 258					
0 50 100 150 200 250	300 0 120 240 360 480 600 720 Sound (dBA): 52					
Time, minutes	Time, minutes					

- 1) Performance is nominal and individual units may vary.
- 2) Product performance will differ due to product amount, product size and operating conditions.
- 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 50cuft , 8 Inner-Shelves + Base, 2 Outer Doors Temperatures are averages during > 20 cycles after reaching a setpoint of 5C

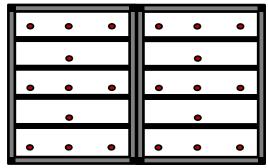
#### **Top View of Shelves**

#### **REAR**

#### FRONT

М3	M5	M4	M53	M54 M55
M1		M2	M51	M52
	M10			M60
M13		M14	M63	M64
	M15	5		M65
M11		M12	M61	M62
	M20			M70
M23		M24	M73	M74
	M25			M75
M21		M22	M71	M72





19585-B-26

**Cabinet Average:** 4.8 C **Probe Average:** 5.4 C

Peak Variation: +1.4 C / -2.8 C

	M1	M2	M3	M4	M5	M10
Avg	5.4	4.7	4.6	4.6	4.7	4.7
Max	6.4	6.1	6	6	6	6
Min	4.2	3	2.8	2.6	3.1	2.9

	M11	M12	M13	M14	M15	M20
Avg	5	4.6	4.5	4.5	4.6	4.6
Max	6.2	6	6.1	6.1	6	6
Min	3.3	2.8	2.2	2.2	2.8	2.6

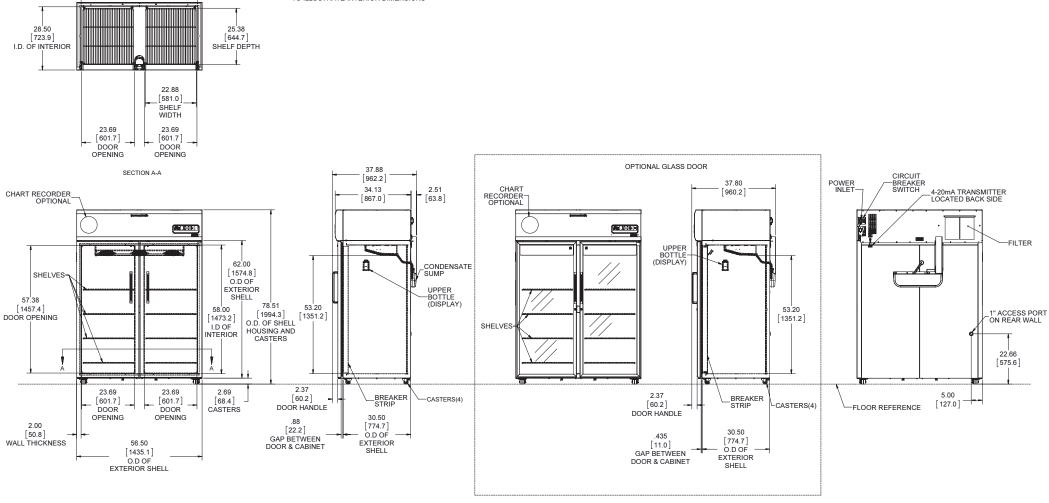
_		M21	M22	M23	M24	M25
	Avg	4.6	4.7	4.7	4.6	4.5
	Max	6.1	6.2	6	6.1	6.1
	Min	2.5	2.8	3.1	2.7	2.3

	M51	M52	M53	M54	M55	M60
Avg	5.2	5.4	4.9	4.8	5.1	4.9
Max	6.3	6.4	6.2	6.2	6.3	6.2
Min	3.8	4.1	3.1	3	3.6	3.3

	M61	M62	M63	M64	M65	M70
Avg	4.9	5.1	4.7	4.7	4.9	4.8
Max	6.2	6.3	6.2	6.2	6.2	6.1
Min	3.3	3.6	2.3	2.6	3.3	3

	M71	M72	M73	M74	M75
Avg	4.7	4.8	4.7	4.7	4.8
Max	6.2	6.2	6.2	6.1	6.2
Min	2.6	2.9	2.4	2.8	2.7

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



52.50 [1333.5]

I.D. OF INTERIOR