thermoscientific

Technical Data Sheet High Performance General Purpose Refrigerator

Revision-0

Thermo Fisher Scientific, Asheville, North Carolina

	Thermo Fisher Scientific, Asheville, North Carolina							
	Catalog number							
	TSX3005SV							
Specifications	Model Number							
	TSX3005SV							
	Application, Rating and Electrical Data							
Application	Storage of General (non-flammable) Laboratory Materials							
Storage Volume	827 Liters / 29.2 Cubic Feet							
Factory Set Point	5°C							
Set Point Range/Adjustable Increment	3°C to 7°C/ 0.1°C							
Electrical Power / Rated Current	208-230V 50 Hz 1 Phase / 4.40A							
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	CÉ, 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)							
Ambient Operating Temperature	Refrigeration Configuration							
Refrigeration System	Vapor compression system							
Compressor / Number / Capacity	Hermetic Variable Capacity Compressor / 1 / 394W							
	Enhanced Finned-Tube and Forced-Air Cooled / 1							
Condenser Type/Number								
Expansion Device	Capillary Tube							
Evaporator Type / Defrost Method	Forced Air Evaporator Coil / Automatic Defrost							
Refrigerant Charge / Flammability	R290,140gms,GWP:3 ODP:0 / 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)							
Connectivity / Remote Outputs	Remote alarm contacts, RS485 output and 4-20 mA output (optional)							
Adjustable Warm / Cold Alarms	Fully Adjustable							
Power Failure Alarm	Standard							
Electronic Chart Recorder	Optional							
	Dimensions and Construction							
Interior Dimensions (D x W x H)	72.3 cm X 76.2 cm X 147.3 cm (28.5" x 30.0" x 58.0")							
Exterior Dimensions (D x W x H)	96.2 cm x 86.4 cm x 199.4 cm (37.9" x 34.0" x 78.5")							
Insulation	5.08 cm (2.0") High-Density Water-Blown Polyurethane Foam							
Door Perimeter heater	Yes							
Shelves / Load Limit	(4) Adjustable Wire Shelves / 45 kg (100 lbs) per Shelf							
All-Direction Casters								
Shipping Weight	Standard with Locks							
Snipping Weight	208 kg / 459 lb Typical Performance Characteristics							
	Typical Fertormance Characteristics							
30 cuft Upright Refrigerator, Pull Down and Warm Up ——Pull Down ——Warm Up	30 cuft Upright Refrigerator at 5C Cycle MAX MIN AVG Test Unit Series Number or MSO Number: 19758-B-4							
19	Cabinet Load: Unloaded							
17	Average Cabinet Temp at 5C Cycle (C): 4.9 Peak Variation from Setpoint (C): +1.2 / -2.5							
v 15 15 15 15 15 15 15 15 15 15 15 15 15	Liniformity (C):							
9 15 ng 13 dd 11 Eb 2	Stability (C): Stability (C): 1-min Door Opening Recovery to 5C (min): 2 Duty Cycle at 5C (%): 28 Cycle (on/off) rate at 5C (min): 2 / 6							
ğ 11	Duty Cycle at 5C (%): 28							
Б 6 Те	Cycle (on/off) rate at 5C (min): 2 / 6 Energy Consumption (kw-hr/day): 4.0							
7	Heat Rejection Rate (btu/hr): 564							
5	Pull Down Time (to 5C) (min): 10							
	Warm Up Time (5C to 15C) (min): 197 50 0 120 240 360 480 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.
- 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.

© 2019 Thermo Scientific Inc. All trademarks are the property of Thermo Scientific Inc. and its subsidiaries. Specifications, terms and pricing are subject to change. Not all products are available in all countries. Please consult your local sales representative for details.

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

Typical Cabinet Temperature Map Refrigerator 30cuft , 4 Inner-Shelves + Base, Single Outer Door

Top View of Shelves

REAR

FRONT

М3 M4 M5 M1 M2

M10

M13 M14 M15 M11 M12

> M20 M24

M23 M25 M22 M21

Cabinet Average: 4.9 C Probe Average: 5.0 C Peak Variation: +1.2 C / -2.5 C

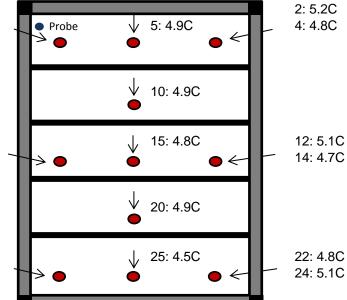
Front View 1: 5.1C 3: 4.9C



11: 5.0C 13: 4.9C

21: 4.8C

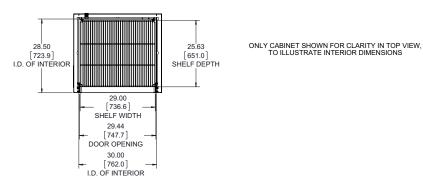
23: 4.7C



19758-B-4

		M1	M2	M3	M4	M5	M10	M11	M12	M13
I	Avg	5.1	5.2	4.9	4.8	4.9	4.9	5	5.1	4.9
	Max	6.2	6.2	5.9	6.1	6	6.1	6.1	6.2	5.9
	Min	3.9	4	3.8	3	3.7	3.4	3.8	3.8	3.7

		M14	M15	M20	M21	M22	M23	M24	M25
	Avg	4.7	4.8	4.9	4.8	4.8	4.7	5.1	4.5
	Max	6	5.9	6	6.1	6.1	6	6.1	6
Γ	Min	2.9	3.6	3.5	3.1	3	3	3.9	2.5



thermoscientific

