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Technical Data Sheet

High Performance General Purpose Freezer



	Thermo Fisher Scientific, Asheville, North Carolina ENERGYST					
	Catalog number					
	TSX5030FV Model Number TSX5030FV Application, Rating and Electrical Data Storage of General (non-flammable) Laboratory Materials					
Specifications						
Application						
Storage Volume	1447 Liters / 51.1 Cubic Feet					
Factory Set Point	-30°C					
et Point Range/Adjustable Increment	-35 °C to -15 °C / 0.1 °C					
Electrical Power / Rated Current	208-230V 50/60 Hz 1 Phase / 8.7A					
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					
	15°C - 32°C (60°F - 90°F)					
Ambient Operating Temperature						
Pofrigoration System	Refrigeration Configuration					
Refrigeration System	Vapor compression system Hermetic Variable Capacity Compressor / 1 / 672W					
Compressor / Number / Capacity						
Condenser Type/Number	Enhanced Finned-Tube and Forced-Air Cooled / 1					
Expansion Device	Thermal Expansion Valve					
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					
	Typical Performance Characteristics					
50 cuft Upright Freezer, Pull Down and Warm U Pull Down Warm Up						
20 15 10 5 0 -5 -10 -15 -20 -25 -30	-20 -22 -22 -23 -24 -26 -29 -					

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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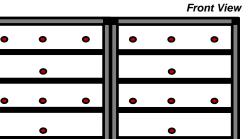
Typical Cabinet Temperature Map Freezer 50cuft , 8 Inner-Shelves + Base, 2 Outer Doors

Top View of Shelves

REAR	M3		M4	M53	M54	
	M5			M55		
FRONT	M1		M2	M51	M52	
	M10			M60		
	M13		M14	M63	M64	
	M15			M65		
	M11		M12	M61	M62	
	M20				M70	
	M23		M24	M73	M74	
	M25			M75		
	M21		M22	M71	M72	

Temperatures are averages during > 20 cycles after reaching a setpoint of -30C

	M1	M2	M3	M4	M5	M10
Avg	-27.8	-29.3	-29.5	-29.8	-29.2	-30
Max	-21	-22.4	-22.1	-22.4	-23	-24.
Min	-29.1	-30.7	-31	-31.2	-30.5	-31.
	M11	M12	M13	M14	M15	M2
Avg	-29.5	-30	-30.4	-30.6	-30.4	-30.
Max	-24	-24.4	-24.2	-23.9	-24.5	-24.
Min	-30.7	-31.1	-31.7	-31.9	-31.6	-31.
		M21	M22	M23	M24	M2
	Avg	-29.9	-29.8	-30.1	-30.3	-30.
	Max	-24.3	-24.3	-24.2	-24.5	-24.
	Min	-31.1	-31	-31.3	-31.4	-31.
		-				
	M51	M52	M53	M54	M55	M6
Avg	-29.2	-29.9	-30	-30.2	-29.5	-29.
Max	-22.5	-22.5	-22.3	-22.4	-22.1	-24.
Min	-30.6	-31.3	-31.4	-31.7	-30.9	-30.
	M61	M62	M63	M64	M65	M7
Avg	-29.9	-29.5	-30.5	-30.4	-29.8	-30.
Max	-24.5	-24.3	-24.4	-23.9	-24.2	-24.
Min	-31	-30.5	-31.8	-31.6	-31	-31.
					•	
		M71	M72	M73	M74	M7
	Avg	-29.6	-29.4	-30.1	-29.7	-30.
	Max	-24.1	-24	-24.4	-24.4	-24.
				-31.3	-30.8	-31.



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Cabinet Average: -29.9 C Probe Average: -29.2 C Peak Variation: +9.0 C / -1.9 C

