

Specifications	Model Number / Catalog Number
	TSCM17FV
	Application, Rating and Electrical Data
Product	Thermo Scientific CryoMed Controlled-Rate Freezer General Purpose
Application	Controlled Sample preparation for multiple biological sample types
Electrical Power / Full Load Current	220-230V 50-60Hz / 7FLA
Building Supply Rating	15A dedicated grounded non-GFCI circuit. Protected by circuit breaker rated for inductive loads
Power Cord / Plug Length	CEE (7/7) / 8Ft
Minimum Air Clearance Required	Add 2.8in. (7.1cm) to F-B for utilities and door handle
Ambient Operating Conditions	15°C - 35°C Temperature Range, 20% - 85% RH (non condensing)
Agency Listings	CE
Application Environment	Indoor use only, Non-Corrosive, Non-Flammable, Non-Explosive, Good Air Ventilation
System Configuration	
Cooling Method	LN ₂ injection using dual solenoid valve and LN ₂ injection ring
Heating Method	Tubular Heater 945W, 115V
Operation Temp Range	+50°C to -180°C
Temperature Freezing Rate	Minimum 0.1°C / minute; Maximum 99.9°C / minute (no load, T-couple in free air, center of chamber)
Temperature Warming Rate	Minimum of 0.1°C / minute; Maximum of 10.0°C / minute (same conditions as above)
Product Attributes	
No. of doors / Type of door	(1) Front access door opening left to right.
Access Type / Sample Loading	Front Loading
Use Interface / Display	Touch-Screen LCD
Temperature Sensor	T-Type Thermocouple
Remote Communication Protocol	Open Platform Communications United Architecture (OPC UA) - Ethernet only
Companion Software	PC Interface Software
Printer Capability	Built-in Thermal Printer
Interior material	Stainless steel
Exterior material	Stainless Steel powder-coat finish
Freezing profiles	6 Presets, up to 14 Custom profiles with User Interface
Door closure mechanism	T-handle high compression latch mechanism
Insulation	Foamed in-place polyurethane insulation (HFC Free) and Teflon heat breaks
Dimensions and Construction	
Internal Chamber Capacity	17Liters / 0.6Cubic Feet
Exterior Dimensions (W X H X D)	37.3 x 21.7 x 24.3in. (94.7 x 55.1 x 61cm)
Interior Dimensions (W x H x D)	7 x 12 x 13in. (17.8 x 30.5 x 33cm)
Unpacked Weight (lbs & kg)	154lbs / 70kg
Packaged / Shipping Weight (lbs & kg)	213lbs / 97kg

Typical Performance Characteristics



- 1) Performance is nominal and individual units may vary.
- 2) Freezer 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.
- 4) Temperature uniformity is calculated based on the freezing of the first bag across a grid of bags instrumented with thermocouples.
- 5) Energy consumption information is an estimate based on test data from Preset Profile_3 and should be considered as reference only.

Dimensional Drawing

