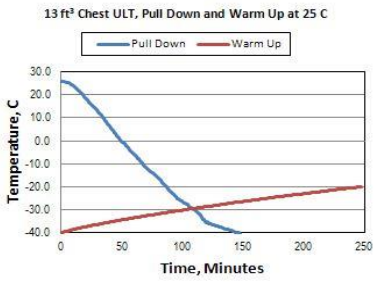
Technical Data Sheet

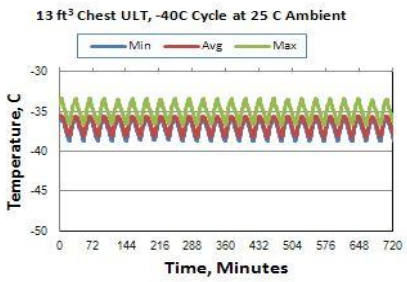
Thermo Scientific Ultra-Low Temperature Chest Freezer

MODEL RELEASE - 20

Thermo Fisher Scientific, Marietta, Ohio

Specifications	Model Number
	TSC1350V
	Application, Rating and Electrical Data
Application	Storage of General (non-flammable) Laboratory Materials
Storage Volume	359.6 Liters/12.7 Cubic Feet
Temperature Rating	-10°C to -40°C
Electrical Power	230V 50 Hz, 1 Phase
Instrument Rated Current	6.5 AMP
Building Supply Rating	15.0A (min) dedicated grounded circuit. Protected by circuit breaker rated for inductive loads
Power Plug/Power Cord Length	Country Dependant plug / IEC Cords, 3.048 Meters (10 Feet)
Agency Listings	CE, FDA
Indoor/Outdoor Usage	Indoor Use Only
Application Environment	Non-Corrosive, Non-Flammable, Non-Explosive, Good Air Ventilation, 15° C - 32° C (59° F - 90° F)
	Refrigeration Configuration
Refrigeration System	Industrial-Rated one-stage System
Compressor / Number	Hermetic Compressor for Low Temperature Application / 1
Compressor Capacity*	730 W
Condenser Type/Number	Enhanced Finned-Tube and Forced-Air Cooled / 1
Expansion Device	Capillary Tube
Evaporator Type	Cold Wall With Enhanced Heat Transfer Treatment
Defrost Method	Manual Defrost
Refrigerant Charge/Flammability	R404A / Non-Flammable
	Controller/Electrical System Configuration and Features
Controller Level	Top
Power Switch	On-Off with Circuit Breaker
Controller Type	Microprocess Control
Setpoint Security	Yes
Compressor Safe Guard	High Pressure Cutout Switch/High Temp Cutout Switch/Current protection/Logic protection
Control Sensor	Single RTD (1000 ohm Platinum RTD)
Remote Alarm Terminals	RS485, 4-20mA, Dry Contacts
Adjustable Warm/Cold Alarms	Fully Adjustable
Auto-Voltage Safeguard	Buck/Boost System
	Dimensions and Construction
Interior Dimensions (H x D x W)	706 H x 470 D x 1077 W mm (27.8 H x 18.5 D x 42.4 W in.)
Exterior Dimensions (H x D x W)	1028 H x 848 D x 1829 W mm (40.5 H x 33.4 D x 72 W in.)
Shipping Dimensions	1168 H x 973 D x 2068 W mm (46 H x 38.3 D x 81.4 W in.)
Insulation	High Density Polyurethane Foam, R-30 (ft2·°F·hr/Btu)
Door Seal	Silicone-Based High Performance Seal Gasket
Shelves / Capacity	N/A
All-Direction Casters	Standard with Locks
Unit Weight	Approximately 276 kg / 609 lbs.
Other Options	Electronic Recorder and CO2 or LN2 Back-Up System
	Typical Performance Characteristics in 25 ° C Ambient



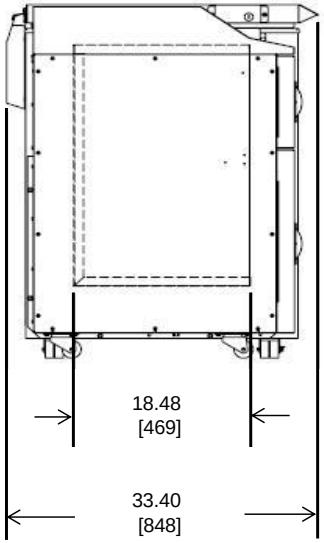


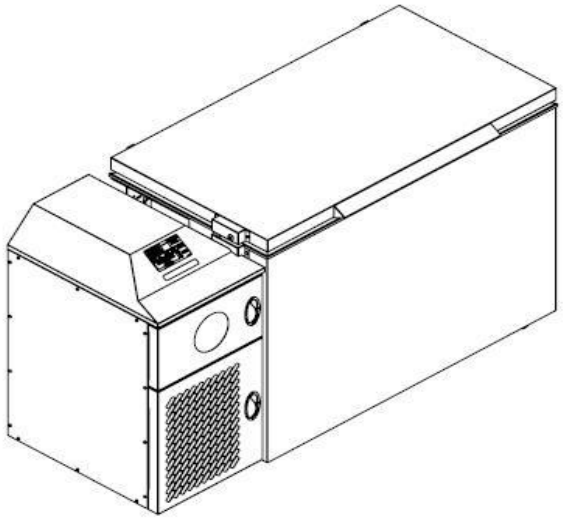
Test Unit Series or MSO Number:	18828-CB-AC
Avg Cabinet Temp at -40 C Cycle (C):	-36.7
Peak Variation from Setpoint (C):	+ 6.7 / + 1.2
Average Uniformity (C):	2.1
Average Stability (C):	2.9
Duty Cycle at -40C Setpoint (%):	62.7%
Cycle (on/off) rate at -40C (min):	19 / 11
Avg. energy consumption (kW-hr/day):	7.8
Avg. heat rejection rate (Btu/hr):	1106
Overall Pulldown Time (to -40C) (mins):	147.0
Warmup Time (-40 to -20 C) (minutes):	247

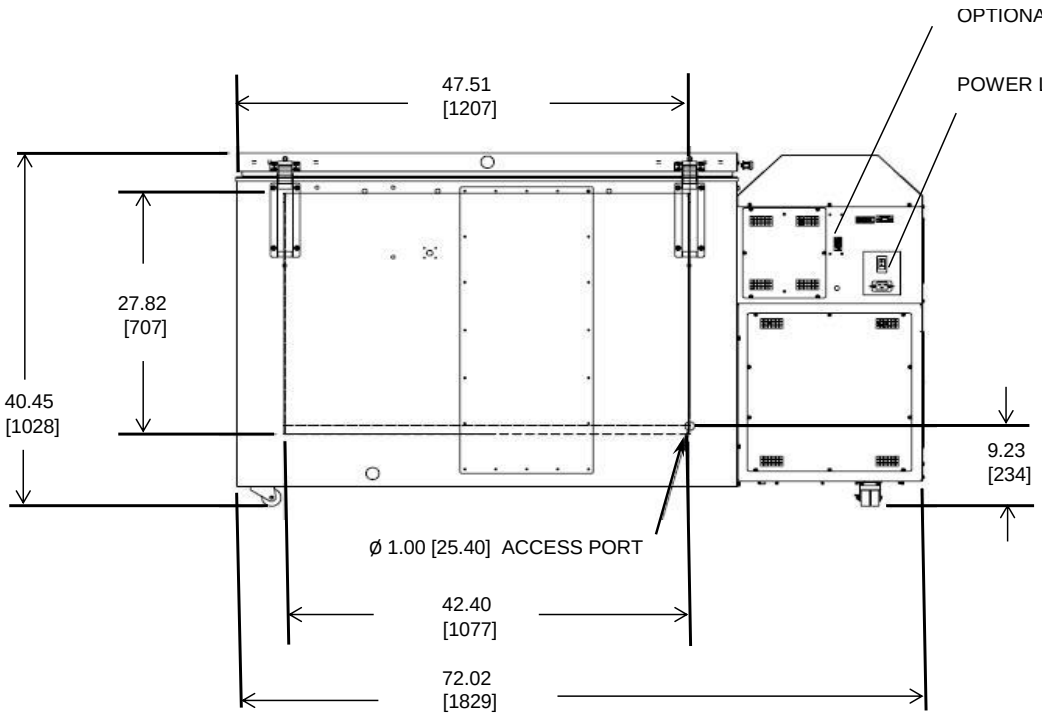
1) Performance is nominal and individual units may vary.
2) Freezer performance will differ due to product amount, product size and operating conditions.
3) Continuous product enhancements may, without notice, result in amendments or ommisions to this specification. Thermo Scientific cannot accept responsibility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

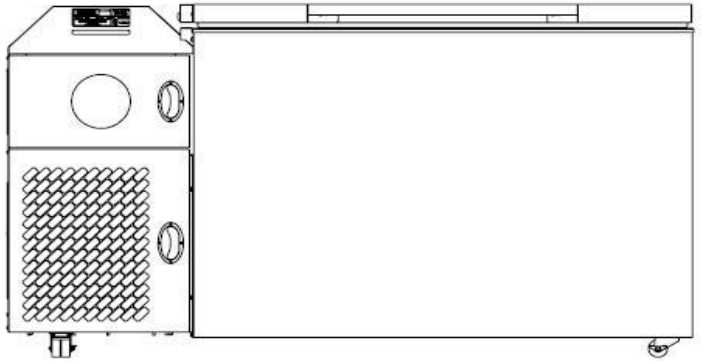
** Manufacturer measured compressor capacity taken at standard -23°C/49°C (Evap/Cond) condition.*

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thermo scientific

13 cuft Chest Freezer

NOTE: DUAL DIMENSION IS INCH OVER METRIC

DO NOT USE FOR ENGINEERING PURPOSES. SUBJECT TO CHANGE WITHOUT NOTICE.