VDW
Crucial Temperature Solutions

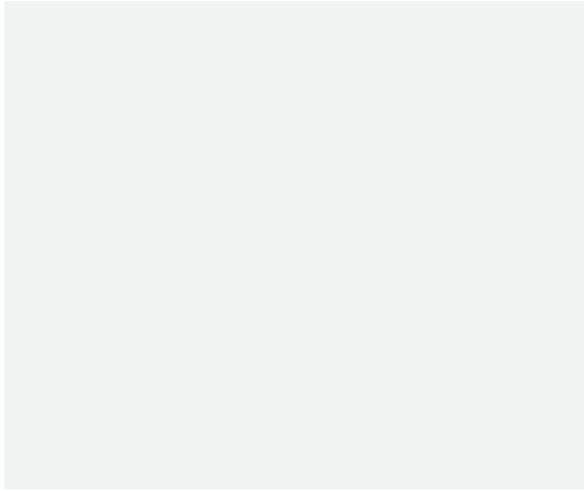
FDM Environment Makers

FDM Environment Makers Products
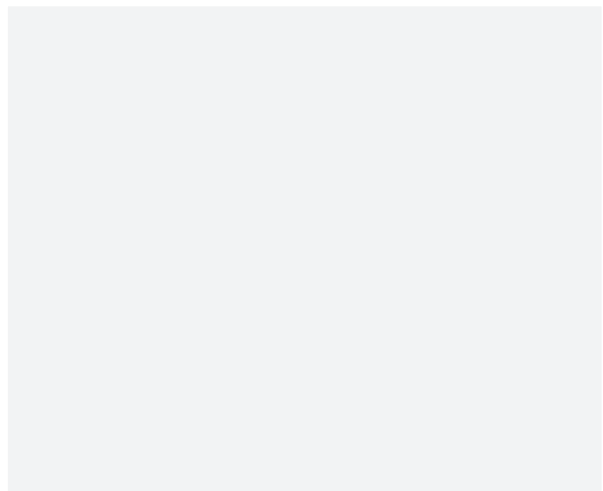Climatic and Thermostatic Chambers
Growth Chambers
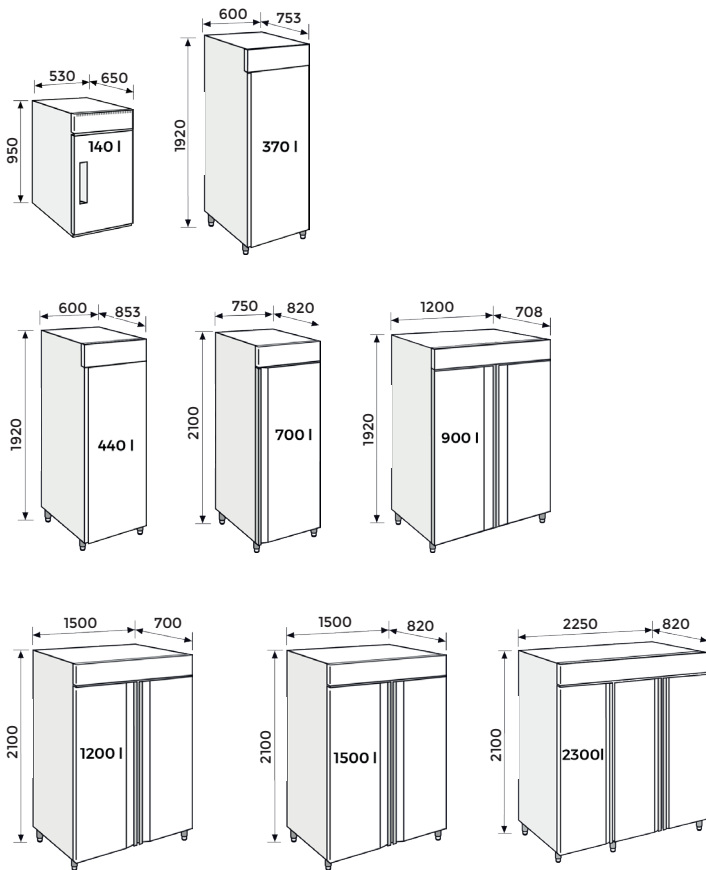Environmental Chambers
Ultrafreezers
Custom Products

Thermostatic Chamber

TB-TS Series

Technical specifications are subject to change

Sizes

The TB-TS series is FDM's standard thermostatic chamber category: you can choose different temperature and volume parameters.

The thermal tests are used to determine the quality, reliability and resistance of the samples to the various real external factors they may have to deal with in their life cycle.

The thermostatic chamber is a fundamental instrument for the laboratory, also and above all because the various tests to be carried out are regulated by the various standards established by official research bodies.
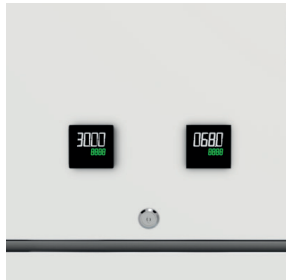
The types of products to be tested are practically infinite, here are some of the most common sectors of application:

cosmetic and pharmaceutical
food
textile
military/aerospace
electronic components
automotive
building materials

According to the type of test, cyclic or constant, we will distinguish the type of controller or temperature controller, respectively revoFACE and stillFACE.

Advantages

Volumes from 140 up to 2300 liters
Adjustable temperature -25°C...+70°C
Stability range ± 0.1...0.5°C
Internal shelves adjustable in height
Programmable controller revoFACE or for stillFACE stable tests
Internal forced and homogeneous ventilation
High and low temperature and humidity alarms
Electrical power 220-240V /50Hz or 110V

The stillFACE controller is designed for stability testing.

The revoFACE programmer is designed for cycle testing.

Configuration examples

T140BXPRO
PV101-140

T700BXPRO
RT100

T700BXPRO
PV101 + RT100

T1500SXPRO

Positive Range (S)		T140S	T370S	T440S	T700S	T900S	T1200S	T1500S	T2300S
Negative Range (B)		**T140B**	**T370B**	**T440B**	**T700B**	**T900B**	**T1200B**	**T1500B**	**T2300B**
Temperature range [°C]	(S)	0...+70							
	(B)	-20...+70	-25...+70						
Temperature performance									
Temperature uniformity depending on setpoint [± K]		0.5..2.5							
Temperature fluctuation depending on setpoint [± K]		0.1..0.5							
Average heating-up rate according to EN 60068-3-5 [K/min]		+2							
Average cooling down rate according to EN 60068-3-5 [K/min]		-1	-0.6		-1	-0.6		-1	
Outer dimeansions									
Width net [mm]		530	600	600	750	1200	1500	1500	2250
Depth net [mm]		650	753	853	820	708	700	820	820
Height net [mm]		950	1920	1920	2100	1920	2100	2100	2100
Doors									
Unit doors		1	1	1	1	2	2	2	3
Internal Dimensions									
Width [mm]		450	500	500	600	1090	1340	1300	2090
Depth [mm]		540	480	580	670	580	570	670	670
Height [mm]		520.5	1257	1257	1340	1257	1350	1340	1340
Measures									
Interior net volume [L]		130	310	370	530	810	1020	1180	1830
Net weight of the unit (empty) [kg]		70	93	103	160	190	205	208	360
Permitted load per rack [kg]		30	30	30	30	30	30	30	30
Fixtures									
Number of shelves (std./max.)		3/5	3/5	3/5	3/6	6/10	6/12	6/12	9/14
Shelf Width [mm]		400	460	460	530	460	530	530	530
Shelf Depth [mm]		500	470	570	650	570	550	650	650
*still*FACE Controller									
Controller		Constant monitoring temperature controller							
Interface port		Optional: RS485							
*revo*FACE Programmer									
Set-up DIsplay		Programme status, set up temperature and humidity, date, time and language							
Programmer		10 programs and 50 segments each, adjustable from 1 min. to 999 hrs.							
Calibration		Possibility to calibrate all parameters							
Interface port		Optional: RS485 - Optional: Ethernet - Wifi - Dedicated mobile app							
Environment-specific data									
Sound-pressure level [dB(A)]		60							

All technical data are specified for units with standard equipment at an ambient temperature of +24 °C and a voltage fluctuation of ±10 %.

Positive Range (S)		T140S	T370S	T440S	T700S	T900S	T1200S	T1500S	T2300S
Negative Range (B)		**T140B**	**T370B**	**T440B**	**T700B**	**T900B**	**T1200B**	**T1500B**	**T2300B**
Structure and insulation									
Exterior material		White coated galvanized steel or full Stainless steel AISI 304							
Internal material		AISI 304 Stainless Steel							
Insulation		CFC and HCFC free							
Shelf grill		Removable and height adjustable stainless steel plastic coated							
Ventilation									
Fan		forced ventilation							
Safety									
Temperature		Class 2 independent adjustable temperature safety devices (DIN 12880)							
Alarm		Audio-Visual							
Electrical data									
Rated Voltage [V]		220/240							
Power frequency [Hz]		50							
Nominal power [kW]	(S)	1.4	1.4	1.4	1.8	2.2	2.3	2.5	2.7
	(B)	1.5	1.6	1.6	2.2	2.6	2.7	2.8	3.1
Unit fuse [A]		16							
Phase (nominal voltage)		1 ~							

Main Options

- ETH100 – Ethernet interface for remote connection
- RS485 – Interface port RS485
- PG50200 – Upgrade. 50 program 200 step for revoFACE
- PE100 – Interior socket coverable universal 220-230 V
- SPS100 – Interior compartment glass doors
- SPS07 – Flooding system for EN1348-2007
- BDS020 – Relative humidity decreasing up to 2% @ 20°C
- TE110 – Power supply 110 V 50-60 Hz
- CO200 – CO2 Regulation System for EN 12390-10

· FD100

Cable hole installed on the side of the chamber that allows the passage of cables inside without loss of performance.

· UDB100

USB port for downloading test data with the possibility of viewing them on a PC in Excel format.

· GP100R

The reinforced stainless steel shelf differs from the standard one (pictured above) in that it has a higher supported load capacity.

· RT100

Swivel castors with chamber lock for easy movement.

· PV101

Double tempered glass door for a complete visibility of the environment and stability of the climatic conditions inside the chamber.

All technical data are specified for units with standard equipment at an ambient temperature of +24 °C and a voltage fluctuation of ±10 %.

Click and go to Online Configurator

www.dellamarca.it