



FDM Environment Makers Products

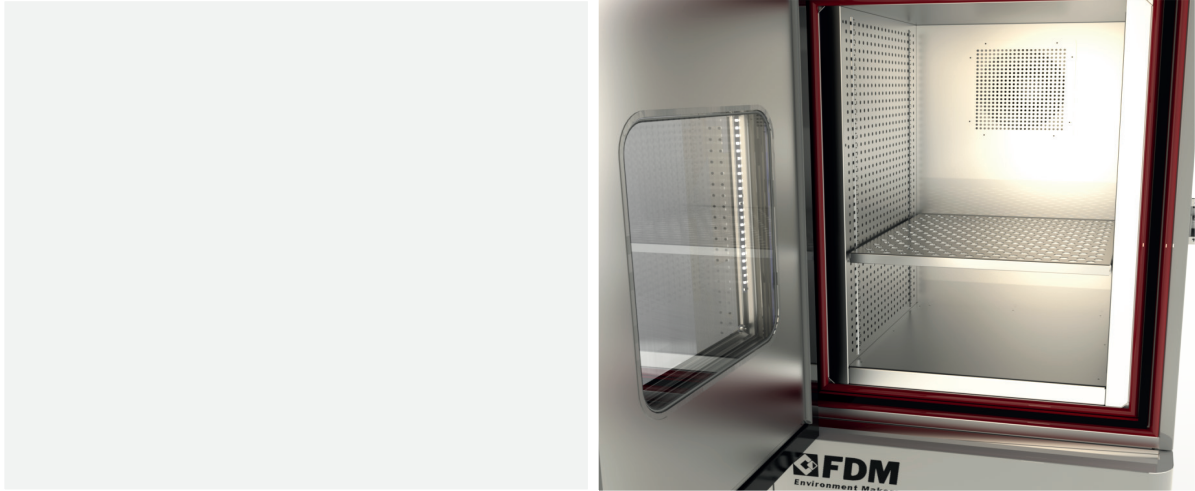
Climatic and Thermostatic Chambers

Growth Chambers

Environmental Chambers

Ultrafreezers

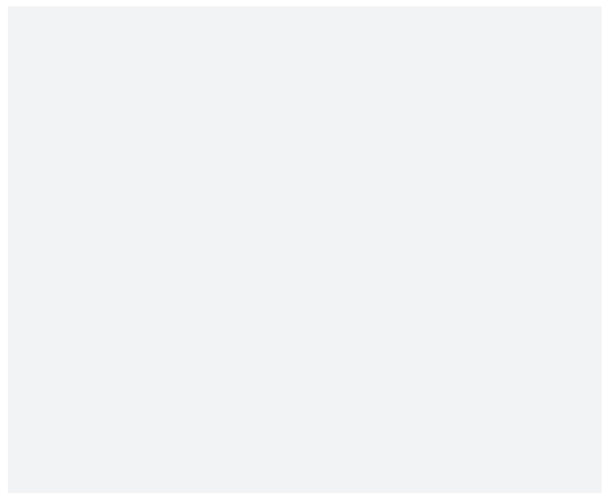
Custom Products



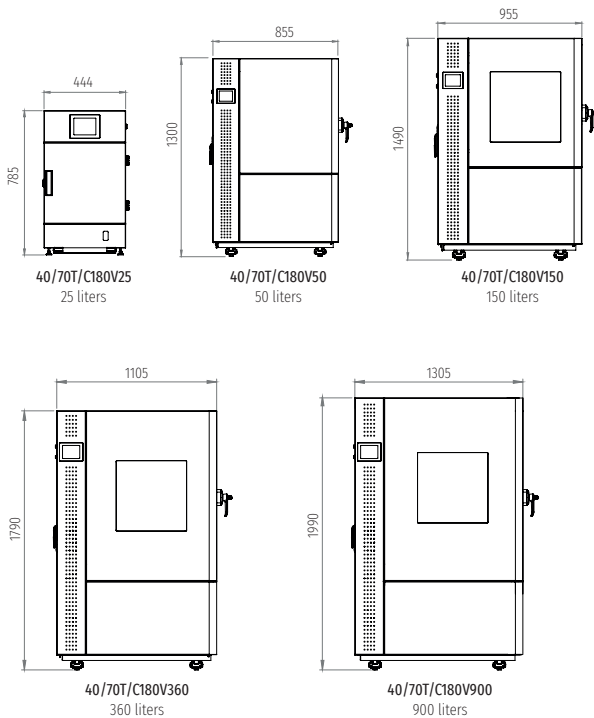
Environmental Chambers

Temperature, Humidity and Illumination

40/70T/C180V Series



Sizes



The 40/70T/C180V series is the category of FDM's best performing environmental chambers: you can choose different temperature, humidity and volume parameters.

You can also choose between a cyclic or constant climate chamber, the latter for those who need a stable test environment.

The environmental 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.

FDM environmental simulation chambers are equipped with a thermo-glazed door with quadruple toughened glass, to give a complete internal view of the chamber, without penalizing the test performance. Excluding models with a volume of 25 and 50 liters.

Moreover, as standard, the environmental chamber is equipped with a lateral hole for the passage of cables inside, 4 rotating wheels and the water tank for the humidification system, positioned so as to have easy access to it.

Advantages

Volumes from 25 to 900 liters
Adjustable temperature -70°C...+180°C
Humidity range 10...98% ur
Internal stainless steel shelves adjustable in height
Programmable controller revoFACE or for stillFACE stable tests
Anti-fog inspection window with LED lighting
Distilled water tank with easy access
Hole for cables passage inside the chamber Ø50 with cap
Internal forced and homogeneous ventilation
High and low temperature and humidity alarms
Electric power 220-240V /50Hz or 110V



The stillFACE controller is designed for stability testing.



The revoFACE programmer is designed for cycle testing.



Interior of environmental chamber constructed of stainless steel, including reinforced, adjustable and removable shelves.



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



Moisture system canister readily available via dedicated compartment.



Easy access to chamber maintenance parts.

Model A	40T/C180V25	40T/C180V50	40T/C180V150	40T/C180V360	40T/C180V900
Model B	70T/C180V25	70T/C180V50	70T/C180V150	70T/C180V360	70T/C180V900
Temperature performance					
Temperature range without humidity [°C]	A				-40/+180
	B				-70/+180
Temperature range with humidity [°C]				+10/+90	
Temperature uniformity depending on setpoint [± K]				0,5..1,5	
Temperature fluctuation depending on setpoint [± K]				0,1..0,5	
Average heating-up rate according to EN 60068-3-5 [K/min]	+2				+5
Average cooling down rate according to EN 60068-3-5 [K/min]	-2				-4
Performance Data Climate					
Humidity range [%]	30/98			10/98	
Humidity fluctuation depending on setpoint [±%]				0,5..2	
Water tank [L]	4	5	12	12	18
Outer dimensions					
Width net [mm]	444	855	955	1105	1335
Depth net [mm]	725	902	1102	1202	1559
Height net [mm]	785	1300	1490	1790	1990
Wall clearance back/ sidewise [mm]	250/250	250/250	250/250	250/250	250/250
Viewing window width/ height [mm]	O	O	480/480	480/480	480/480
Doors					
Unit doors	1	1	1	1	1
Internal Dimensions					
Width [mm]	300	350	450	600	800
Depth [mm]	280	350	550	650	1000
Height [mm]	300	410	600	900	1100
Measures					
Interior volume [L]	25	50	150	360	900
Net weight of the unit (empty) [kg]	80	150	450	700	860
Load per rack [kg]	20	20	20	20	20
Fixtures					
Number of shelves (std./max.)	1/2	1/2	2/4	2/4	2/4
Width net [mm]	300	350	450	600	800
Depth net [mm]	235	350	550	650	1000
stillFACE Controller					
Controller	Constant monitoring temperature and humidity controllers				
Interface port	Optional: RS485				
revoFACE Programmer					
Set-up Display	Programme status, set up temperature, humidity and time				
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)]	< 65				

O = Optional

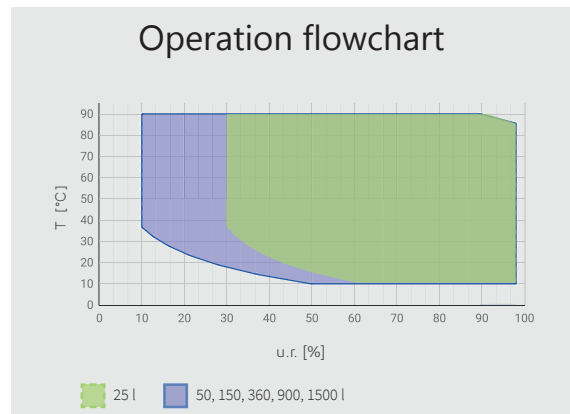
All technical data are specified for units with standard equipment at an ambient temperature of +24 °C and a voltage fluctuation of ±10 %.

40/70	T/C	180	V25
Minimum temperature -40°C or -70°C	Temperature (T) or Climatic (C) control	Maximum tempera- ture 180°C	Internal volume from 25 up to 900 liters

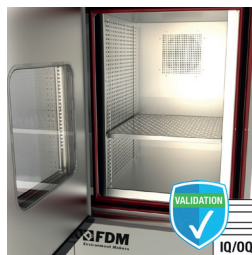
Model	A	40T/C180V25	40T/C180V50	40T/C180V150	40T/C180V360	40T/C180V900
Model	B	70T/C180V25	70T/C180V50	70T/C180V150	70T/C180V360	70T/C180V900
Structure and insulation						
Exterior material	Painted phosphated steel sheet					
Internal material	AISI 304 Stainless Steel					
Insulation	CFC and HCFC free					
Shelf grill	Removable and height adjustable steel grid					
Ventilation						
Fan	Forced					
Safety						
Temperature	Class 2 independent adjustable temperature safety devices (DIN 12880)					
Alarm	Audio-Visual					
Electrical data						
Rated Voltage [V]	A	230	230	400	400	400
	B	230	230	400	400	400
Power frequency [Hz]	50					
Nominal power [kW]	A	2,3	5,2	7,1	8,5	15
	B	5	8	10	13	19
Phase (nominal voltage)	A	1	1	1	1	3
	B	1	3	3	3	3

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
- VOLXXE - Volume extension of testing area
- W65T00 - Kit for directly connection to the water source
- BDS020 - Relative humidity decreasing up to 2% @ 20°C
- UMS100 - Sterilised flux vapor humidifier
- TE110 - Power supply 110 V 50-60 Hz
- CO200 - CO2 Regulation System for EN 12390-10



- UDB100
USB port for downloading test data with the possibility of viewing them on a PC in Excel format.



- IQ/OQ-100
IQ/OQ Validation



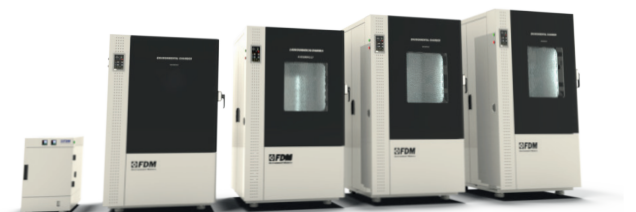
- EAC100
Compressed air drying system.



- ALED100
LED lighting for Accelerated Aging Test.

Click and go to Online Configurator

www.dellamarca.it



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