

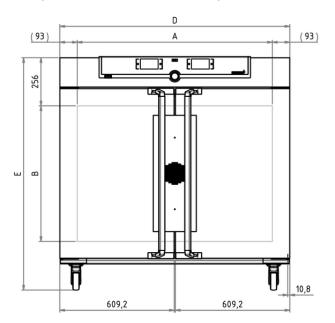
Incubator

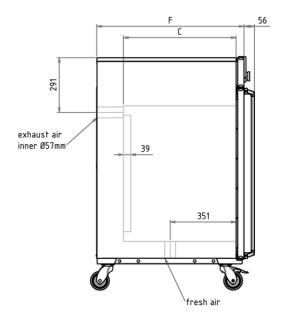
IF450plus

The incubator I is at home everywhere in the world of research, medicine, pharmaceutics and food analytics, as well as food chemistry.



The heating of this incubator is optimally tuned for forced air circulation; the fan can also be switched off completely, and valuable chamber loads for research, pharmaceutics, medicine and food chemistry are warmed up very carefully. On this page, you can find all the essential technical data on our incubator. Our customer relations team will be pleased to help if you want further information. If you should require a customised special solution, please contact our technical specialists at sales@memmert.com.





Temperature		
Setting temperature range	+20 to +80 °C	
Working temperature range	min. 10°C above ambient up to +80°C	
Setting accuracy temperature	0.1 °C	
Temperature sensor	2 Pt100 sensors DIN Class A in 4-wire-circuit for mutual monitoring, taking over functions in case of an error	
Control technology		
ControlCOCKPIT	TwinDISPLAY. Adaptive multifunctional digital PID-microprocessor controller with 2 high-definition TFT-colour displays.	
Language setting	German, English, Spanish, French, Polish, Czech, Hungarian	
Timer	Digital backwards counter with target time setting, adjustable from 1 minute to 99 days	
Function HeatBALANCE	adapting the distribution of the heating performance of the upper and lower heating circuit from -50 $\%$ to +50 $\%$	
Function SetpointWAIT	the process time does not start until the set temperature is reached	
Calibration	three freely selectable temperature values	
adjustable parameters	temperature (Celsius or Fahrenheit), fan speed, air flap position, programme time, time zones, summertime/wintertime	
Sterilisation	fixed sterilisation programme (4 hours/160°C) for sterilisation of working chamber, not for sterilising the load	
Ventilation		
Ventilation Fan	forced air circulation by quite air turbine, adjustable in 10 % steps for each segment individually	
	forced air circulation by quite air turbine, adjustable in 10 % steps for each segment individually Admixture of pre-heated fresh air by electronically adjustable air flap	
Fan		
Fan Fresh air	Admixture of pre-heated fresh air by electronically adjustable air flap	
Fresh air Vent	Admixture of pre-heated fresh air by electronically adjustable air flap	
Fan Fresh air Vent Communication	Admixture of pre-heated fresh air by electronically adjustable air flap vent connection with restrictor flap	
Fan Fresh air Vent Communication Documentation	Admixture of pre-heated fresh air by electronically adjustable air flap vent connection with restrictor flap programme stored in case of power failure AtmoCONTROL software on a USB stick for programming, managing and transferring programmes	
Fan Fresh air Vent Communication Documentation Programming	Admixture of pre-heated fresh air by electronically adjustable air flap vent connection with restrictor flap programme stored in case of power failure AtmoCONTROL software on a USB stick for programming, managing and transferring programmes	
Fan Fresh air Vent Communication Documentation Programming Safety	Admixture of pre-heated fresh air by electronically adjustable air flap vent connection with restrictor flap programme stored in case of power failure AtmoCONTROL software on a USB stick for programming, managing and transferring programmes via Ethernet interface or USB port mechanical temperature limiter TB, protection class 1 according to DIN 12880 to switch off the heating	
Fan Fresh air Vent Communication Documentation Programming Safety Temperature control	Admixture of pre-heated fresh air by electronically adjustable air flap vent connection with restrictor flap programme stored in case of power failure AtmoCONTROL software on a USB stick for programming, managing and transferring programmes via Ethernet interface or USB port mechanical temperature limiter TB, protection class 1 according to DIN 12880 to switch off the heating approx. 20°C above nominal temperature overtemperature monitor TWW, protection class 3.1 or adjustable temperature limiter TWB, protection	
Fan Fresh air Vent Communication Documentation Programming Safety Temperature control	Admixture of pre-heated fresh air by electronically adjustable air flap vent connection with restrictor flap programme stored in case of power failure AtmoCONTROL software on a USB stick for programming, managing and transferring programmes via Ethernet interface or USB port mechanical temperature limiter TB, protection class 1 according to DIN 12880 to switch off the heating approx. 20°C above nominal temperature overtemperature monitor TWW, protection class 3.1 or adjustable temperature limiter TWB, protection class 2, selectable on display additionally integrated over- and undertemperature monitor "ASF", automatically following the setpoint value at a preset tolerance range, alarm in case of over- or undertemperature, heating is switched off	

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Internals	2 stainless steel grid(s), electropolished	
Works calibration certificate	incl. works calibration certificate for +37°C	
Door	inner glass doors	
Door	fully insulated stainless steel doors with2-point locking (compression door lock)	

Stainless steel interior

Dimensions	$w_{(A)} \times h_{(B)} \times d_{(C)}$: 1040 x 720 x 600 mm (d less 39 mm for fan)	
Interior	easy-to-clean interior,made of stainless steel, reinforced by deep drawn ribbing with integrated and protected large-area heating on four sides	
Volume	449	
Max. number of internals	8	
Max. loading of chamber	300 kg	
Max. loading per internal	30 kg	

Textured stainless steel casing

Dimensions	w _(D) x h _(E) x d _(F) : 1224 x 1247 x 784 mm (d +56mm door handle)
Installation	on lockable castors
Housing	rear zinc-plated steel

Electrical data

Voltage	230 V, 50/60 Hz
Electrical load	approx. 1800 W
Voltage	115 V, 50/60 Hz
Electrical load	approx. 1500 W

Ambient conditions

Set Up	The distance between the wall and the rear of the appliance must be at least 15 cm. The clearance from the ceiling must not be less than 20 cm and the side clearance from walls or nearby appliances must not be less than 5 cm.
Altitude of installation	max. 2,000 m above sea level
Ambient temperature	+5 °C to +40 °C
Humidity rh	max. 80 %, non-condensing
Overvoltage category	II
Pollution degree	2

Packing/shipping data

Transport information	The appliances must be transported upright
Customs tariff number	8419 8998
Country of origin	Federal Republic of Germany
WEEE-RegNo.	DE 66812464
Dimensions approx incl. carton	w x h x d: 1330 x 1440 x 1050 mm
Net weight	approx. 161 kg
Gross weight carton	approx. 227 kg

Standard units are safety-approved and bear the test marks







