



BIOMEDICAL

# R-138i Glass

## BIOMEDICAL REFRIGERATOR

With a compact design, this undercounter fits perfectly beneath your work bench, providing a storage solution that is ideal for places where space is limited.



Protection for storage  
CE II 3G nA IIB T6

+2°C  
+20°C



### DIMENSIONS

Outer Dimensions HxWxD, mm	825x595x642
Inner Dimensions HxWxD, mm	676x475x495
Weight Gross/Net, kg	59 / 48
Material inner cabinet	ABS
Material outer cabinet	Painted Steel
Packaging weight, kg	11
Packaging dimensions HxWxD, mm	1037x710x650
Insulation thickness	50
Insulation type	Polyurethane with Cyclopentane
Air distribution	Dynamic
Mobility	Standard: Adjustable Feet - Option: Castors
Refrigerant, Type / gram	R600a / 47
Variable Speed Compressor	Yes - Adaptive Cooling Technology
Number of probes	4

### CONTROLLER

Controller	i-Care, Touch screen
Controller language	EN, DE, FR
USB Connection	Yes
Logging	Data, Alarms & Events
Temperature graph	Yes
High/Low temp. Alarm	Yes
Open door alarm	Yes
Probe failure alarm	Yes
Power failure alarm	Yes

### STORAGE

Volume, Gross/Net, L	138 / 117
Shelves, Full/Half	2 / 1
Shelf material	Perforated Alu

### FEATURES

Lock	Yes
LED light	Yes
Battery Backup for Controller, 24h	Yes
Safety thermostat	Yes
Porthole	Yes - Ø 20 mm
Dry Contact	Yes
Reference bottle	Yes
Door	Glass
Door Features	Automatic: Closure < 90° - Hold Closure > 90°
Door Reversibility	Yes



# R-138i Glass

## BIOMEDICAL REFRIGERATOR

With a compact design, this undercounter fits perfectly beneath your work bench, providing a storage solution that is ideal for places where space is limited.

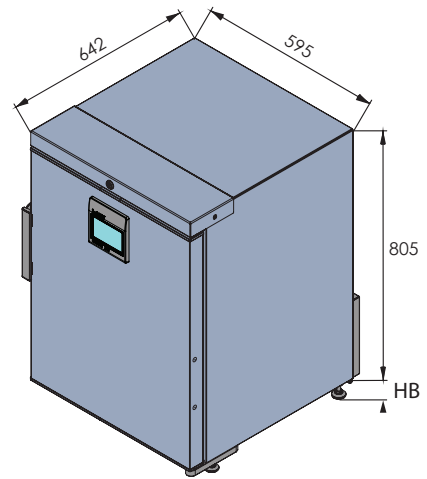
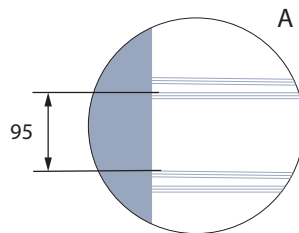
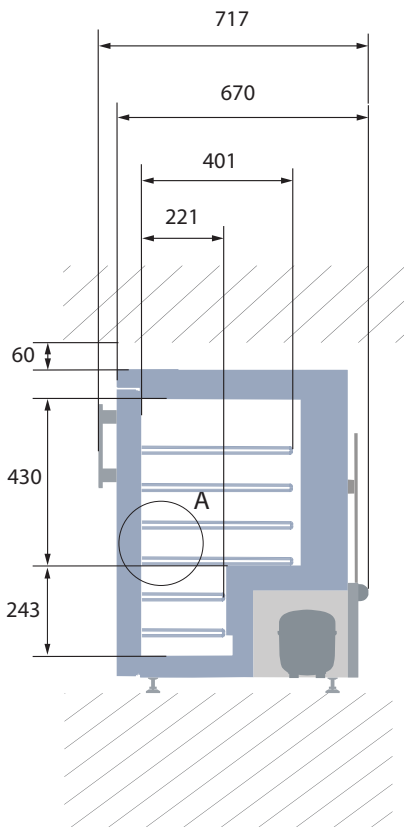
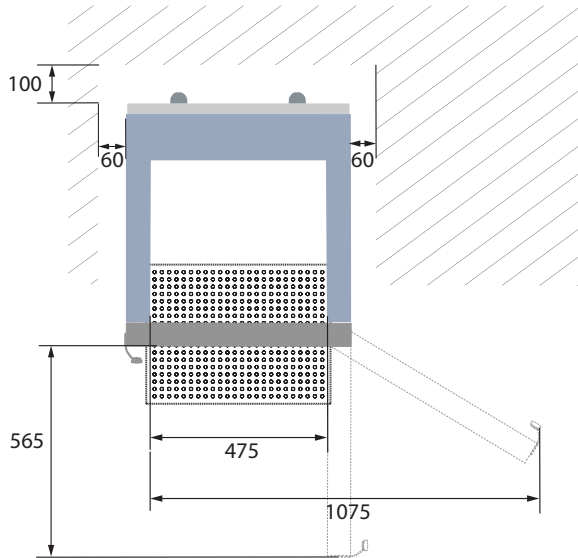
<b>Voltage/Frequency</b>	Voltage/Hz	230V/50-60Hz
<b>Max Ambient</b>	°C	32°C
<b>Max Humidity</b>	% rh	65%
<b>PERFORMANCE</b>		
All data in RT20°C		
<b>Temperature Range</b>	°C	2 to 20
<b>Uniformity in performance - difference between top and bottom</b>	°C	+/- 1,2
<b>Pull down time</b>	Minutes	33 min to 6°C
<b>Hold over time</b>	Minutes	80 min to 10°C
<b>Noise</b>	dB	44
<b>Energy Consumption, kWh / 24h</b>	kWh/24h	0,433 kWh/24h set 5°C
<b>Energy year</b>	kWh/year	158kWh/y set 5°C
<b>Instant Power Consumption</b>	kW	PD 0,082/Stable 0,028
<b>Heat Rejection</b>	W	55
<b>U-Value</b>	W/m <sup>2</sup> K	0,69
<b>COOLING COMPONENTS</b>		
<b>Refrigerant/Amount (gram)</b>		R600a/47gr
<b>Number of compressors</b>	pcs	1
<b>Variable speed compressor</b>	Yes/No	Yes
<b>Internal air distribution (type of)</b>		Dual Air Stream
<b>Evaporator Fan</b>	Yes/No/Variable	Yes
<b>Condenser Fan</b>	Yes/No/Variable	No
<b>Number of probes</b>	pcs	4
<b>Defrost</b>	Yes/No	Yes - automatic
<b>FEATURES</b>		
<b>Safety thermostat</b>	y/n/optional	Yes
<b>Lock</b>	y/n	Yes
<b>LED light</b>	y/n	Yes
<b>Battery Back Up For Controller</b>	y/n/optional	Yes - 24h
<b>Porthole</b>	y/n - Ømm	Yes - Ø 20mm
<b>Dry contact</b>	y/n	Yes
<b>Castors</b>	y/n/optional	Optional
<b>Door</b>	glass/solid	Glass
<b>Reference bottle</b>	y/n/optional	Yes
<b>Door closure</b>	y/n/optional	Yes
<b>Door reversibility</b>	y/n	Yes
<b>Automatic Hold 90°C</b>	y/n	Yes
<b>Vacum ventil + VIP (Vacum panel)</b>	y/n	No



# R-138i Glass

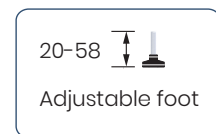
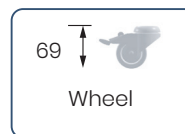
## BIOMEDICAL REFRIGERATOR

With a compact design, this undercounter fits perfectly beneath your work bench, providing a storage solution that is ideal for places where space is limited.



All measurements in mm.

HB: Height of base  
(HB is adjustable when given value is xx-xx)





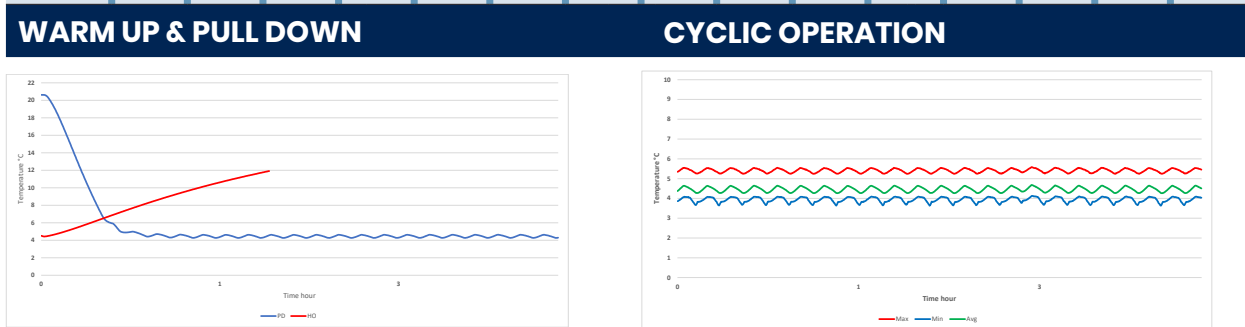
# R-138i Glass

## BIOMEDICAL REFRIGERATOR

With a compact design, this undercounter fits perfectly beneath your work bench, providing a storage solution that is ideal for places where space is limited.

SENSOR POSITION		MODEL	R-138I GLASS
<p><b>FRONT VIEW</b></p>		<p><b>TOP VIEW</b></p>	
		<b>Test type</b>	15-point test
		<b>Test environment</b>	Controlled conditions, empty cabinet
		<b>Ambient temperature</b>	20°C
		<b>Humidity</b>	60%
		<b>Set-point</b>	5°C
		<b>Sensor used</b>	25gr tinned brass formed as a cylinder with a diameter of 15,2 mm
		<b>Installation</b>	Appliance installed according to instruction manual conditions
		<b>Refrigerant</b>	R600a

SENSOR TEMPERATURE																
Sensor position	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	P15	
Max.	5,2	5	5,1	5,6	4,9	4,4	4,1	4,3	4,6	4,3	4,6	4,9	4,4	4,4	4,4	
Avg.	5,1	4,8	4,8	5,4	4,7	4,2	4	4,1	4,5	4,2	4,4	4,2	4,2	4,2	4,1	
Min.	4,9	4,5	4,6	5,2	4,5	4,1	3,9	3,9	4,3	4	4,2	3,6	4	4,1	3,9	



TYPICAL PERFORMANCE IN AMBIENT 20°C – EMPTY CABINET	
<b>Avg. cabinet temperature</b>	4,5°C
<b>Uniformity</b>	+/- 1,2°C
<b>Stability in avg.</b>	0,2°C
<b>1 min. door open recovery to 6°C avg. temperature</b>	<1 min.
<b>Cycle rate on/off</b>	5,3 / 4,5 min.
<b>Duty cycle</b>	53,8%
<b>Energy consumption</b>	0,43 kWh/day
<b>Pull down time to 6°C avg. temperature</b>	33 min.
<b>Hold over time from 5°C to 10°C</b>	80 min.
<b>Sample temperature does not exceed</b>	8°C
<b>Heat rejection</b>	55 W