

Biomedical

R-90



R-90

Premium Biomedical +2°C to +20°C Refrigerator

The new tabletop refrigerator is great for storing medicine or samples. Despite a small stature it features up to 90L of safe and reliable storage of medicine and samples. This makes it great for customers in need of decentralized or dedicated storage. Featuring our ETR-system™ (Extended temperature Range) this model can easily be used for multiple purposes i.e. storage of chilled medicine, room temperature medicine or breast milk. Fitted with acoustic and visual alarms, a dry contact and logging and extraction of data, you can rest assured that whatever the content, it is safely stored.

- 🏆 **Energy Efficient**
- 🏆 **Very Low Noise**
- 🏆 **ETR-system™**
- 🏆 **Flexible Accessory Options**
- 🏆 **Stable and Uniform Temperature**



R-90 | Gallery



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Construction	Value
Dimension	652x595x642 mm
Dimension inner	481x475x495 mm
Weight	55 / 44 gross/net
Package weight	11 kg
Material inner cabinet	ABS Kg. gross/net
Material outer cabinet	Painted steel Kg. gross/net
Insulation type	Polyurethane with cyclopentane
Insulation thickness	50 mm
Type of packaging	Cardboard, EPS, Vinyl bag, Wooden pallet
Mobility	4 x Adjustable feet

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Storage	Value
Volume	90 / 76
Shelves	1
Half shelf	1

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Features	Value
Safety thermostat	Optional
Lock	✓
LED light	✓
Battery backup	Optional
Porthole	✓
Porthole size	20 mm
Dry contact	✓
Reference bottle	✓
Door closure	✓
Door reversibility	✓
Automatic hold 90°	✓

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Alarms	Value
High / Low temperature	✓
Open door	✓
Power failure	✓
Probe failure	✓

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Test	Value
Voltage	220-240 V
Frequence	50 Hz
Max ambient	35 °C
Max Humidity	75 %
Test condition	20

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Operation	Value
Temperature range	+2 to +20 °C
Unifromity in performance	0,7 / -0,4 °C
Pull down time (from test condition to fabric setpoint)	95 Minutes
Hold over time (from fabric SP to 10) empty	61 Minutes
Noise	46 dB
Energy 24 hours	0,4 kWh/24h
Instant Power Consumption	PD 0,082 / Stable 0,078 kW
Heat Rejection	95 W
K-Value	0,58 W/m ² k

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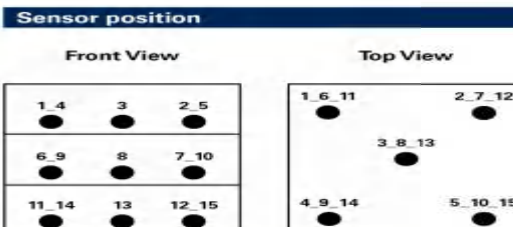
Cooling components	Value
Refrigerant/amount	R600a / 39g Type & gram
Number of compressors	1
Variable speed compressor	☐
Internal air distribution (Type)	Dynamic
Number of probes	2
Defrost	☒

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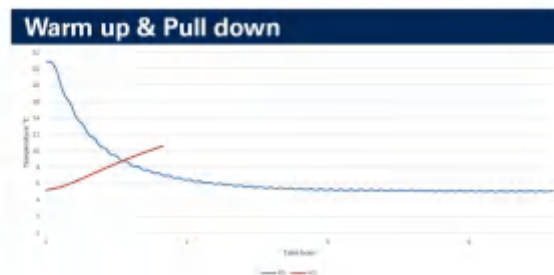
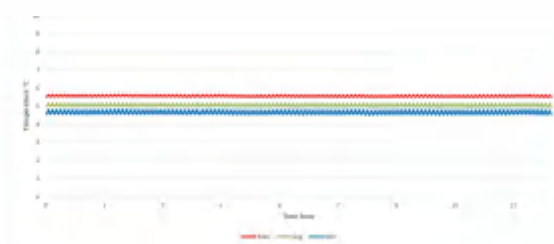
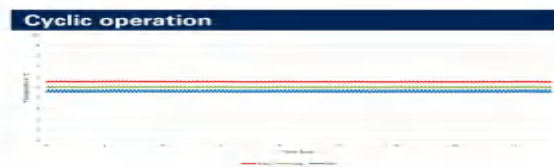
Controller	Value
Controller	Dixell
Controller type	XW737K
USB Connection	Yes
Data connection	MODBUS
Controller abilities	Logging of data & alarms
Controller languages	Digits
Log numbers	35000
Temperature graph in controller	☐

Temperature mapping

Test overview	
Test type	15-point test
Test environment	Controlled conditions, empty cabinet
Ambient temperature	20°C
Humidity	60%
Set-point	5°C
Sensors used	25gr tinned brass formed as a cylinder with a diameter of 15,2mm
Installation	Appliance installed according to instruction manual conditions
Refrigerant	R600a



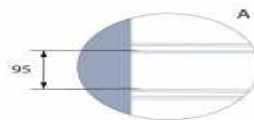
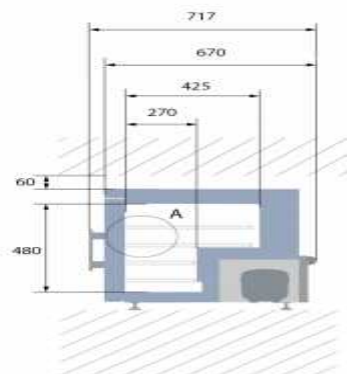
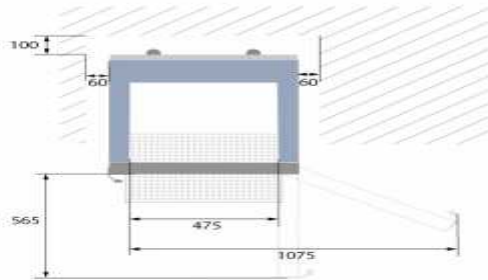
Sensor temperature																
Sensor position	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	P15	
Max.	5,7	5,3	5,1	5,6	5,5	5,3	4,9	4,8	5,3	5	5,2	4,9	4,9	5,2	4,9	
Avg.	5,6	5,1	5	5,5	5,4	5,2	4,8	4,7	5,2	4,9	5	4,7	4,7	5	4,8	
Min.	5,5	5	4,9	5,4	5,2	5	4,8	4,6	5,1	4,9	4,9	4,6	4,5	4,8	4,6	



Typical Performance data	
Avg. cabinet temperature	5°C
Peak variation from set-point	+0,7/-0,4°C
Stability in avg.	0,9°C
1 min. door open recovery to 6°C avg. temperature	16 min.
Cycle rate on/off	1/4,9 min.
Duty cycle	17,3%
Energy consumption	0,42 kWh/day
Pull down time to 6°C avg. temperature	95 min.
Hold over time from 5°C to 10°C	61 min.
Sample temperature does not exceed	8°C

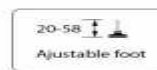
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Dimensions

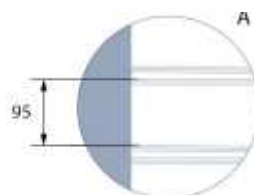
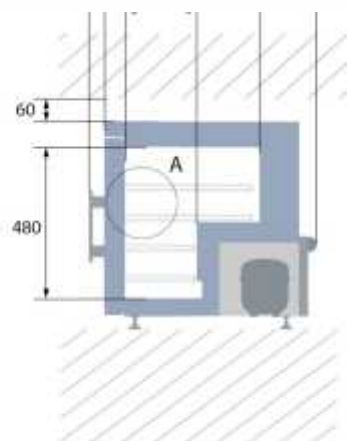


All dimensions in millimeters

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

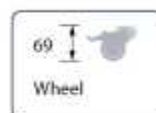


Version 1.02
Products and specifications are subject to change without notice.



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