

# Biomedical





397



## 397

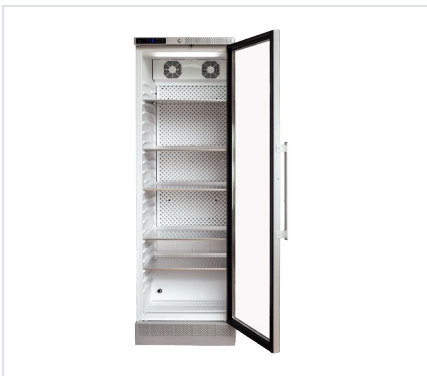
### Pharmacy Refrigerator

The pharmacy refrigerator ensures reliable storage of medicine. The Model is equipped with external digital temperature display and fully electronic temperature control that ensures a correct set temperature between +2°C to +20°C. It features; Open door, high/low alarm, contact for remote alarm, porthole for external monitoring systems, dual ventilators for optimal uniformity in temperatures and for the extra hardware version power failure alarm.

-  **Energy Efficient**
-  **Very Low Noise**
-  **Stable and Uniform Temperature**
-  **ETR-system™**



## 397 | Gallery



### 397 |

Construction	Value
Dimension	1919x595x638 mm
Dimension inner	1587x518x460 mm
Weight	95 / 93 gross/net
Package weight	2 kg
Material inner cabinet	PVC Kg. gross/net
Material outer cabinet	Painted steel Kg. gross/net
Insulation type	Polyurethane with cyclopentane
Insulation thickness	35 mm
Type of packaging	Plastic with EPS
Mobility	2x Feet 2x Rollers

### 397 |

Storage	Value
Volume	381 / 351
Shelves	5
Half shelf	1

### 397 |

Features	Value
Safety thermostat	Optional
Lock	✓
LED light	✓
Battery backup	Optional
Porthole	✓
Porthole size	14,8 mm
Dry contact	✓
Reference bottle	✓
Door closure	—
Door reversibility	✓
Automatic hold 90°	—

### 397 |

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

### 397 |

Test	Value
Voltage	220-240 V
Frequence	50 Hz
Max ambient	32 °C
Max Humidity	65 %
Test condition	20

### 397 |

Operation	Value
Temperature range	+2 to +20 °C
Unifromity in performance	2,5 / -1,2 °C
Pull down time (from test condition to fabric setpoint)	50 Minutes
Hold over time (from fabric SP to 10) empty	72 Minutes
Noise	41 dB
Energy 24 hours	0,8 kWh/24h
Instant Power Consumption	N/A kW
Heat Rejection	N/A W
K-Value	N/A W/m <sup>2</sup> k

### 397 |

Cooling components	Value
Refrigerant/amount	R600a / 60g Type & gram
Number of compressors	1
Internal air distribution (Type)	Dynamic
Number of probes	5
Defrost	☑

### 397 |

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	☐

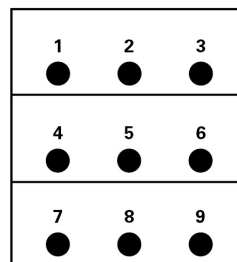
## Temperature mapping

### Test overview

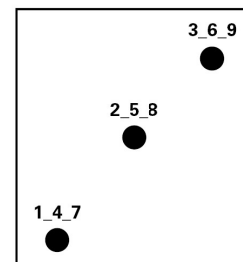
Test type	9-point test
Test environment	Controlled conditions, empty cabinet
Ambient temperature	20°C
Humidity	60%
Set-point	5°C
Sensors used	25gr tinned brass formed as a cylinder with a diameter of 15,2mm
Installation	Appliance installed according to instruction manual conditions
Refrigerant	R600a

### Sensor position

Front View



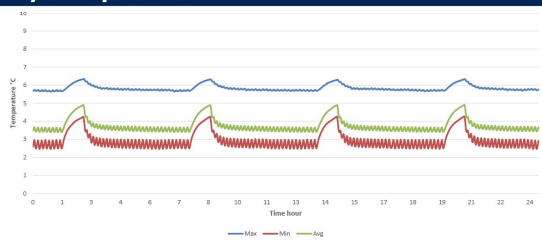
Top View



### Sensor temperature

Sensor position	P1	P2	P3	P4	P5	P6	P7	P8	P9
Max.	6,3	4,9	4,9	5	4,8	5	4,8	4,3	4,4
Avg.	5,8	4,2	4,2	3,3	3,2	3,3	3,8	3,1	3,2
Min.	5,6	4	4	2,8	2,7	2,8	3,4	2,6	2,7

### Cyclic operation



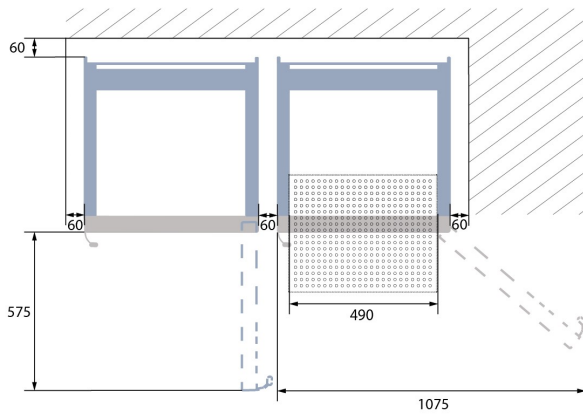
### Warm up & Pull down



### Typical Performance data

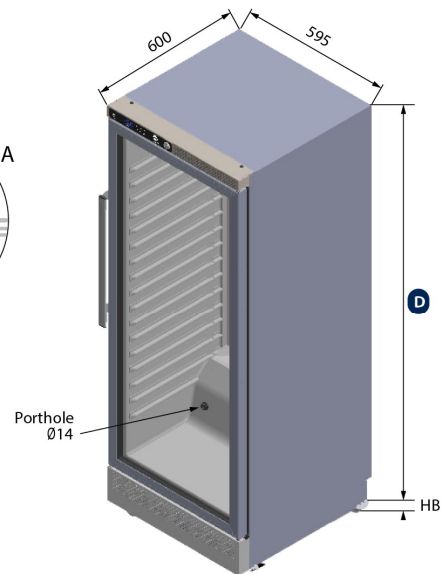
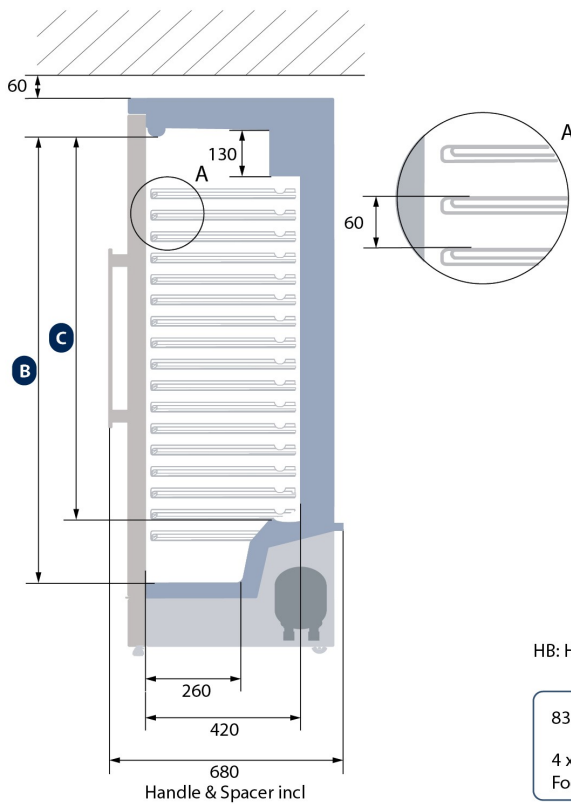
Avg. cabinet temperature	3,8°C
Peak variation from set-point	+2,5/-1,2°C
Stability in avg.	2,7°C
1 min. door open recovery to 6°C avg. temperature	15 min.
Cycle rate on/off	2,6/9,4 min.
Duty cycle	21,6%
Energy consumption	0,73 kWh/day
Pull down time to 6°C avg. temperature	50 min.
Hold over time from 5°C to 10°C	72 min.
Sample temperature does not exceed	8°C

## Dimensions






Model	B	C	D
AKS 337	1260	965	1535
AKS 397	1570	1175	1835

All measurements are in millimeters



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

83-101   
4 x Wheel with  
Footmaster

20-58  13   
Front: 2 x Ajustable foot      Back: 2 x Castor



