

# Technical data 2022

Inventus MC & MF

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**PORKKA**  
SCIENTIFIC

# Technical data

## Inventus MC medical chillers

R290  
Refrigerant

Inventus			MC 6	MC 7	MC 8	MC 6 GW	MC 7 GW	MC 8 GW
External dimensions	Width	mm	600	730	850	600	730	850
	Depth	mm	760	870	750	760	870	750
	Height	mm	2100	2100	2100	2100	2100	2100
Internal dimensions	Width *	mm	404	534	654	404	534	654
	Depth	mm	610	675	555	610	675	555
	Height	mm	1485	1485	1485	1485	1485	1485
Volume (measured on a SS shelf according to DIN standard)	Net	liters	331	489	491	331	489	491
	Gross	liters	421	609	619	421	609	619
Weight	Net	kg	132	152	152	137	157	157
Package weight	Gross	kg	142	162	162	147	167	167
Package size	Width	mm	650	780	900	650	780	900
	Depth	mm	800	920	800	800	920	800
	Height	mm	2250	2250	2250	2250	2250	2250
Sound level measured at the distance of 1m and from the height of 1.6 m		dB	49	49	49	49	49	49
Operating temperature		°C	+2...+15 °C	+2...+15 °C	+2...+15 °C	+2...+15 °C	+2...+15 °C	+2...+15 °C
Ambient temperature		°C	+10...+35 °C	+10...+35 °C	+10...+35 °C	+10...+35 °C	+10...+35 °C	+10...+35 °C
Temperature accuracy		°C	DIN58345	DIN58345	DIN58345	DIN58345	DIN58345	DIN58345
Refrigerant	(g)/GWP	g	R290/115 g (GWP 3)	R290/110 g (GWP 3)	R290/110 g (GWP 3)	R290/115 g (GWP 3)	R290/110 g (GWP 3)	R290/110 g (GWP 3)
Connection Power		kW	0.5	0.5	0.5	0.5	0.5	0.5
Fuse	Slow	A	10	10	10	10	10	10
Voltage		V	230/50 Hz	230/50 Hz	230/50 Hz	230/50 Hz	230/50 Hz	230/50 Hz
Defrost 1. Air 2. Hot gas 3. Electric			1	1	1	1	1	1
Energy consumption (GW LED light OFF/ON)		kWh/year	208	239	237	350	409	409
Energy consumption (GW LED light OFF/ON)		kWh/d	0.569	0.654	0.65	0.96	1.12	1.12
Shelves (width x depth)		mm	400 x 600	530 x 650	650 x 530	400 x 600	530 x 650	650 x 530
Shelf amount standard/maximum		pcs	4 / 24	4 / 24	4 / 24	4 / 24	4 / 24	4 / 24



Inventus MC 6



Inventus MC 7



Inventus MC 8



Inventus MC 6 GW



Inventus MC 7 GW



Inventus MC 8 GW

\* Free width = shelf width -20 mm

# Technical data

## Inventus MF medical freezers

Inventus medical freezers have been designed with the needs of hospitals and healthcare institutions in mind as the ideal solution to storing temperature sensitive medicines. They are energy efficient, safe and reliable.

The lockable and easy to clean Inventus MC medical freezer standard setup includes four glass shelves adjustable in 56 mm intervals.

Inventus medical freezers have an automatic defrosting functionality with an excellent steadiness of temperature uniformity.

### Features

- Excellent temperature uniformity ( $\pm 1^{\circ}\text{C}$ )
- Low noise level, under 50 dB(A)
- Control unit with clear numeric display for temperature and other functions
- 12-hour battery backup for control unit's power failure alarm and temperature recording (DIN 58345 requirement)
- Antimicrobial (Nanoksi Fotonit) coated controller keyboard
- Real time temperature recording and USB port for data reading
- Key lock on the control unit
- Recording of maximum and minimum temperature
- Visual and audible high/low temperature alarm
- Door switch for fan control and door open-alarms
- Probe failure alarm
- Readiness for RS485 adapter for computer connection
- Potential free (no voltage) alarm coupling readiness for real estate monitoring
- 50 ml bottle for a temperature sensor P4 inside the cabinet
- Fan assisted air distribution
- Automatic defrost
- High Temperature Protection during defrost period
- Automatic vaporization of condensed water
- Molded eco-friendly polyurethane insulated frame. The insulation thickness is 80-100 mm
- External finish has a white polyester coated sheet steel. Interior finish in stainless steel grade AISI 304
- 4 glass shelves (maximum load 50 kg / shelf) which are adjustable in increments of 56 mm
- Abloy lock is placed in front panel for easy maintenance (Abloy Sentry key)
- The self-closing door has a sturdy molded handle, magnetic seal, and durable hinges. The door remains open at a 90 degree angle
- Antimicrobial (Nanoksi Fotonit) coated handle is designed as a solid part of the door
- Stainless steel legs, height adjustable from 130 mm to 205 mm
- Efficient, environmental friendly, energy saving R290 refrigerant
- Electrical supply 230V / 50 Hz

### Accessories

- Additional shelves
- Wire basket
- Flat bottomed plastic storage box set
- Castors, lockable front castors
- Short stainless steel legs, adjustable from 80 mm to 105 mm
- Door opening pedal
- $\varnothing 8$  mm sleeved access port for additional probe
- LED light
- iLOQ lock (Abloy as a standard)
- DIN accessory package (lockable battery backup switch)

# Technical data

## Inventus MF medical freezers

R290  
Refrigerant

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	Depth	mm	760	870	750
	Height	mm	2100	2100	2100
Internal dimensions	Width *	mm	404	534	654
	Depth	mm	610	675	555
	Height	mm	1485	1485	1485
Volume (measured on a SS shelf according to DIN standard)	Net	liters	331	489	491
	Gross	liters	421	609	619
Weight	Net	kg	132	152	152
Package weight	Gross	kg	142	162	162
Package size	Width	mm	650	780	900
	Depth	mm	800	920	800
	Height	mm	2250	2250	2250
Sound level measured at the distance of 1m and from the height of 1.6 m		dB	50	50	50
Operating temperature		°C	-26...-15 °C	-26...-15 °C	-26...-15 °C
Ambient temperature		°C	+10...+35 °C	+10...+35 °C	+10...+35 °C
Temperature accuracy 100 g mass		°C	±1°C	±1°C	±1°C
Refrigerant	(g)/GWP	g	R290/83 g (GWP 3)	R290/90 g (GWP 3)	R290/90 g (GWP 3)
Connection Power		kW	0.5	0.5	0.5
Fuse	Slow	A	10	10	10
Voltage		V	230V/50Hz	230V/50Hz	230V/50Hz
Defrost 1. Air 2. Hot gas 3. Electric			2	2	2
Energy consumption (GW LED light OFF/ON)		kWh/year	837	928	894
Energy consumption (GW LED light OFF/ON)		kWh/d	2.293	2.542	2.45
Shelves (width x depth)		mm	400 x 600	530 x 650	650 x 530
Shelf amount standard/maximum		pcs	4 / 24	4 / 24	4 / 24



Inventus MF 6



Inventus MF 7



Inventus MF 8

\* Free width = shelf width - 20 mm

# Technical data

## Inventus MC MF accessories

APF19010	Ø 8 MM SLEEVED ACCESS PORT FOR ADDITIONAL PROBE (ADDITION TO INSTALLATION DEPTH: MODEL 6 +25 MM, MODELS 7 AND 8 +35 MM)
APF19022	PROBE PT100 TF14 (CABLE 3 M)
APC12030	JUNCTION BOX AND CONNECTED ALARM CABLE (2.5 M) WITH RJ45 PLUG
APF19021	CENTRAL ALARM JUNCTION BOX
APC12100	TTL/RS-485 DATA CABLE 0.5 M
APC12300	GROUNDING CABLE
APF19020	DIN ACCESSORY PACKAGE (LOCKABLE BATTERY BACKUP SWITCH)
APF19000	ELECTRONIC LOCK iLOQ S10 + ONE KEY Further information: <a href="http://www.iloq.com">www.iloq.com</a>
APM20605	iLOQ S10 ADDITIONAL KEY Further information: <a href="http://www.iloq.com">www.iloq.com</a>
APF19001	ELECTRONIC LOCK iLOQ S5+ ONE KEY Further information: <a href="http://www.iloq.com">www.iloq.com</a>
6300221	iLOQ S5 ADDITIONAL KEY Further information: <a href="http://www.iloq.com">www.iloq.com</a>
GD1294	STAINLESS STEEL PANEL SHELF 6
APF10650	STAINLESS STEEL WIRE SHELF 6
EF3252	GLASS SHELF 6
EF3097	STAINLESS STEEL BOTTOM WIRE SHELF 6
GD1296	STAINLESS STEEL PANEL SHELF 7
EF3091	STAINLESS STEEL WIRE SHELF 7
EF3250	GLASS SHELF 7
EF3095	STAINLESS STEEL BOTTOM WIRE SHELF 7
APF11020	STAINLESS STEEL WIRE BASKET 7
GD1264	STAINLESS STEEL PANEL SHELF 8
EF3092	STAINLESS STEEL WIRE SHELF 8
EF3251	GLASS SHELF 8
EF3096	STAINLESS STEEL BOTTOM WIRE SHELF 8
APF10970	STAINLESS STEEL WIRE BASKET 8
APF19032	FLAT BOTTOMED PLASTIC STORAGE BOX 6, ONE SHELF SET 150 x 600 x 90 MM (2 PCS)
APF19031	FLAT BOTTOMED PLASTIC STORAGE BOX 7, ONE SHELF SET 230 x 600 x 90 MM (2 PCS)
APF19030	FLAT BOTTOMED PLASTIC STORAGE BOX 8, ONE SHELF SET 230 x 500 x 90 MM (2 PCS) + 150 x 500 x 90 MM (1 PCS)
EF3582	HYGIENIC ROOFING 6
EF3580	HYGIENIC ROOFING 7
EF3581	HYGIENIC ROOFING 8
APF16600	LED LIGHT
APF13800	CASTORS, LOCKABLE FRONT CASTORS WHEN CABINET HEIGHT = 2080 MM
APF13200	SHORT STAINLESS STEEL LEGS, ADJUSTABLE FROM 80 MM TO 105 MM WHEN CABINET HEIGHT = 2050 MM
APF12400	DOOR OPENING PEDAL
APF19040	NANOKSI FOTONIT COATING WITH DISINFECTING LIGHT
APF19041	NANOKSI FOTONIT COATING WITH DISINFECTING LIGHT (GW MODELS)

# Technical data

## Inventus MC MF accessories



JUNCTION BOX AND CONNECTED ALARM CABLE (2.5 M) WITH RJ45 PLUG



CENTRAL ALARM JUNCTION BOX



TTL/RS-485 DATA CABLE 0.5 M



iLOQ LOCK



STAINLESS STEEL PANEL SHELF



STAINLESS STEEL WIRE SHELF



GLASS SHELF



STAINLESS STEEL WIRE BASKET 7, 8



FLAT BOTTOMED PLASTIC STORAGE BOX



HYGIENIC ROOFING



LED LIGHT



CASTORS



SHORT STAINLESS STEEL LEGS



DOOR OPENING PEDAL