

ML670 SG

Technical data sheet

CFC / HCFC free:	yes
Climate class:	SN / ST
Ambient temperature range °C:	+10 to +38
relativ humidity range at °C ambient:	<= 75%
Voltage V:	220-240
Frequency Hz:	50
Fuse Amp:	10
Power W:	230
Starting power W:	236
Energy consumption Kwh/24h:	1.10
Heat ejection Kcal/h:	31
Running time %:	16
Noise level dB(A) (in 1m height +1m distance):	47
Accu data / function time:	12V -7 AH / 48 hours
Defrosting technique:	natural
Compressor manufacturer:	Embraco
Compressor type:	EMT6144U
Cooling capacity W (ASHRAE):	616
Capillary tube, inner diam x length mm:	1.24x2800
Refrigerant type:	R290
Refrigerant quantity g:	80
Starting current A:	1.50
Running current A:	1.40
Door insulation mm:	63
Cabinet insulation mm:	56 to 75
K value W/m ² xK at 20°C #:	0.33
Hold over time h:	2.00 (from +5 to +10°C, DIN58345)
Net volume l:	615
Gross volume l:	670
Internal width mm:	560
Internal depth mm:	707
Internal height mm:	1544
External width mm:	710
External depth mm:	910
External height mm (with recorder):	2050 / 1995 with shortened feet / 2055 with castors
Net weight kg (with standard equipment):	152
Protection class:	I
EMC directive:	2004 / 108 / EG
Low voltage directive:	2006 / 95 / EG
GS certificate:	yes
Medical device directive:	no
GMP-clean room classification:	class ISO6/EC GMP B
ATEX-categorie III, zone 2, interior:	not possible

Subject to changes without prior notice !

Revision: 06.2016

Measurement conditions: +25°C ambient temperature except of #
all appliances without load

ML670 S

Technical data sheet

CFC / HCFC free:	yes
Climate class:	SN / ST
Ambient temperature range °C:	+10 to +38
relativ humidity range at °C ambient:	<= 75%
Voltage V:	110 / 120 / 127 (220-240 with transformer)
Frequency Hz:	60
Fuse Amp:	16
Power W:	280
Starting power W:	315
Energie consumption Kwh/24h:	1.40
Heat ejection Kcal/h:	41
Running time %:	17
Noise level dB(A) (in 1m height +1m distance):	47
Accu data / function time:	12V -7 AH / 48 hours
Defrosting technique:	natural
Compressor manufacturer:	Embraco
Compressor type:	EM65HHR
Cooling capacity W (ASHRAE):	766
Capillary tube, inner diam x length mm:	1.24x2800
Refrigerant type:	R134a
Refrigerant quantity g:	260
Starting current A:	4.40 / 4.03 / 3.81
Running current A:	4.30 / 3.93 / 3.71
Door insulation mm:	63
Cabinet insulation mm:	56 to 75
K value W/m ² xK at 20°C #:	0.33
Hold over time h:	1.65 (from +5 to +10°C, DIN58345)
Net volume l:	615
Gross volume l:	670
Internal width mm:	560
Internal depth mm:	707
Internal height mm:	1544
External width mm:	710
External depth mm:	910
External height mm (with recorder):	2050 / 1995 with shortened feet / 2055 with castors
Net weight kg (with standard equipment):	158
Protection class:	I
EMC directive:	not applicable
Low voltage directive:	not applicable
c CSA us certificate:	no
Medical device directive:	not applicable
GMP-clean room classification:	class ISO6/EC GMP B
ATEX-categorie III, zone 2, interior:	not possible

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Electronic data sheet

Electronic type:	gold electronic V2008, control panel 2
RS 485:	standard
DMN software:	standard
DCU:	option
DCU Wan:	option
Display range °C:	-99 to +99
Display indication step K:	0.1
Preset set point °C:	+5
Set point range °C:	+4 to +15
Set point adjustable step K:	0.5
Temperature distribution [defrost] K: (according to FDX 15-140)	6
Preset warm alarm °C:	+8
Preset cold alarm °C:	+2
Alarm range °C:	+1 to +20
Alarm adjustable step K:	0.5
Min alarm difference to set point K:	3
Alarm indication:	optically + acoustically
Remote alarm relais:	change-over switch
Remote alarm relais output:	temperature
Additional power fail remote alarm:	standard
Regulation sensor type:	PT1000 2-WIRE 1/3DIN CL.B
Regulation sensor measuring accuracy:	at -80 to +180°C ± 0,2°C
Display sensor type:	PT1000 2-WIRE 1/3DIN CL.B
Display sensor measuring accuracy:	at -80 to +180°C ± 0,2°C
Display sensor reference body:	100ml DOW corning 200-5CST (silicon oil)
Safety thermostat at °C / type:	+2 / capillary tube
Safety thermostat measuring accuracy:	at 25°C ± 0,3°C
Evaporator sensor type:	not available
Evaporator sensor measuring accuracy:	/
Ambient temp sensor as option, type:	PT1000 2-WIRE 1/3DIN CL.B
Ambient temp sensor measuring accuracy:	at -80 to +180°C ± 0,2°C

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Material and equipment

Material specifications

Inner body material:	stainless steel 1.4301
Outer body material:	stainless steel 1.4301
Inner door material:	stainless steel 1.4301
Outer door material:	stainless steel 1.4301
Wire shelf material:	wire DIN177, white PA11 coated similar to RAL9010
Drawer material:	stainless steel 1.4301
Shuttle rack material:	polycarbonate (PC), transparent

Equipment

Standard equipment inside:	
6 wire shelves	
Lots of wire shelves, recommend / maximum:	6 / 12
Lots of drawers, recommend / maximum:	6 / 12
Lots of shuttle racks per wire shelf, maximum:	5
Door hinge standard / option:	right handed / left handed
Light:	LED, as option
Castors:	option
Water cooling:	not possible
External unit:	not possible
Recorder as option, range / sensor type:	-10°C to +20°C / capillary tube
Recorder sensor measuring accuracy:	at +25°C ± 1,5°C
Recorder sensor reference body:	100ml DOW corning 200-5CST (silicon oil)
PT100 sensor additional as option:	yes, type class B, 3-wire
PT100 sensor measuring accuracy:	at +25°C ± 0,2°C
PT100 sensor reference body:	100ml DOW corning 200-5CST (silicon oil)
Packing standard / option:	cardboard / wood

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