

# F130

## Technical data sheet

CFC / HCFC free:	yes
Climate class:	SN
Ambient temperature range °C (°F):	from +10 to +32 ( from 50 to 90 )
Max. relative humidity:	75%
<b>Voltage V:</b>	<b>220-240</b>
<b>Frequency Hz:</b>	<b>50/60</b>
Fuse Amp:	10
Power W:	300
Running current A:	2.0
Energy consumption Kwh/24h:	1.35 @50Hz / 1.28 @60Hz
Heat ejection Kcal/h:	53
Running time %:	37
Noise level dB(A) (in 1m height +1m distance):	45 @50Hz / 47 @60Hz
Accu data / function time:	12V -2.3 AH / 48 hours
Defrosting technique:	manual
Compressor manufacturer:	Embraco
Compressor type:	FFU130UAX
Cooling capacity W (ASHRAE):	319
Capillary tube, inner diam x length mm (inch):	0.65 x 4000 ( 0.026 x 157.48 )
Refrigerant type:	R290
Refrigerant quantity g (oz):	70 ( 2.469 )
Door insulation mm (inch):	82 ( 3.23 )
Cabinet insulation mm (inch):	60 to 65 ( 2.36 to 2.56 )
K value W/m <sup>2</sup> xK at 20°C (68°F):	
Hold over time h at °C (°F):	0.7 from -32 to -23°C ( from -26 to -9°F ), @25°C ( 77°F )
Net volume l (cu ft):	106 ( 3.743 )
Gross volume l (cu ft):	121 ( 4.273 )
Internal width mm (inch):	475 ( 18.70 )
Internal depth mm (inch):	470 ( 18.50 )
Internal height mm (inch):	630 ( 24.80 )
External width mm (inch):	595 ( 23.43 )
External depth mm (inch):	695 ( 27.36 )
External height mm (inch) [with recorder]:	830 ( 32.68 ) [ 1003 ( 39.49 ) ]
Net weight with standard equipment kg (lbs):	58 ( 127.87 )
EMC directive:	2014/30/EU
Low voltage directive:	2014/35/EU
GS certificate:	no
Medical device directive:	93/42/EEC, Class I
GMP-clean room classification:	class ISO6/EC GMP B
ATEX-categorie III, zone 2, interior:	no

Subject to changes without prior notice !

Revision: 07.02.2019

### Measurement conditions:

Setpoint -32°C ( -26°F ) @ +25°C ( 77°F ) ambient temperature, unless otherwise stated  
All appliances without load

## Technical data sheet

CFC / HCFC free:	yes
Climate class:	SN
Ambient temperature range °C (°F):	from +10 to +32 ( from 50 to 90 )
Max. relative humidity:	75%
<b>Voltage V:</b>	<b>115-127</b>
<b>Frequency Hz:</b>	<b>60</b>
Fuse Amp:	10
Power W:	360
Running current A:	4.5
Energy consumption Kwh/24h:	1.98
Heat ejection Kcal/h:	65
Running time %:	36
Noise level dB(A) (in 1m height +1m distance):	47
Accu data / function time:	12V -2.3 AH / 48 hours
Defrosting technique:	manual
Compressor manufacturer:	Secop
Compressor type:	NLE8.0CN
Cooling capacity W (ASHRAE):	453
Capillary tube, inner diam x length mm (inch):	0.65 x 4000 ( 0.026 x 157.48 )
Refrigerant type:	R290
Refrigerant quantity g (oz):	70 ( 2.469 )
Door insulation mm (inch):	82 ( 3.23 )
Cabinet insulation mm (inch):	60 to 65 ( 2.36 to 2.56 )
K value W/m <sup>2</sup> xK at 20°C (68°F):	
Hold over time h at °C (°F):	0.7 from -32 to -23°C ( from -26 to -9°F ), @25°C ( 77°F )
Net volume l (cu ft):	106 ( 3.743 )
Gross volume l (cu ft):	121 ( 4.273 )
Internal width mm (inch):	475 ( 18.70 )
Internal depth mm (inch):	470 ( 18.50 )
Internal height mm (inch):	630 ( 24.80 )
External width mm (inch):	595 ( 23.43 )
External depth mm (inch):	695 ( 27.36 )
External height mm (inch) [with recorder]:	830 ( 32.68 ) [ 1003 ( 39.49 ) ]
Net weight with standard equipment kg (lbs):	60 ( 132.28 )
EMC directive:	not applicable
Low voltage directive:	not applicable
GS certificate:	no
Medical device directive:	not applicable
GMP-clean room classification:	class ISO6/EC GMP B
ATEX-categorie III, zone 2, interior:	no

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## Measurement conditions:

Setpoint -32°C ( -26°F ) @ +25°C ( 77°F ) ambient temperature, unless otherwise stated  
All appliances without load

## Electronic data sheet

Electronic type:	Precision electronic
RS 485:	not available
°B Connected monitoring software:	Option, with DCU
DCU:	Option
DCU Wlan:	not available
Display range °C (°F):	-50.0°C to +50.0°C (-58°F to 122°F)
Display indication step K:	0.1
Preset set point °C (°F):	-32 (-26)
Set point range °C (°F):	from -32 to -20 (from -26 to -4)
Set point adjustable step K:	0.1
Temperature distribution acc. to FDX 15-140 K:	10
Preset warm alarm °C (°F):	-27 (-17)
Preset cold alarm °C (°F):	-37 (-35)
Alarm range °C (°F):	-82 to +30 (-116 to 86)
Alarm adjustable step K:	0.1
Min alarm difference to set point K:	5.0
Alarm indication:	optically + acoustically
Remote alarm relais:	change-over switch
Remote alarm relais output:	temperature and display sensor error
Additional remote alarm:	yes as standard: powerfail, system fault and door alarm
Regulation sensor type:	NTC
Regulation sensor measuring accuracy:	at 0°C ± 0,3°C (at 32°F ± 37.4°F)
Display sensor type:	NTC
Display sensor measuring accuracy:	at 0°C ± 0,3°C (at 32°F ± 37.4°F)
Display sensor reference body:	100ml DOW corning 200-5CST (silicon oil)
Safety thermostat at °C (°F) / type:	not available
Safety thermostat measuring accuracy:	/
Evaporator sensor type:	not available
Evaporator sensor measuring accuracy:	/
Ambient temp sensor as option, type:	not available
Ambient temp sensor measuring accuracy:	/

## Material and equipment

## Material specifications

Inner body material:	PP copolymer UV RAL9016
Outer body material:	PP copolymer UV RAL9016
Inner door material:	PP copolymer UV RAL9016
Outer door material:	PP copolymer UV RAL9016
Wire shelf material:	no wire shelf
Drawer material:	Polycarbonate, transparent

## Equipment

<i>Standard equipment inside:</i>	
2 drawers with front / 1 bottom drawer	
Lots of wire shelves, recommend / maximum:	not available
Lots of drawers, recommend / maximum:	See standard configuration
Lots of shuttle racks per wire shelf, maximum:	Not available
Door hinge standard / option:	right / left
Light:	not available
Castors:	2 rollers
Water cooling:	not available
External unit:	not available
Recorder as option, range / sensor type:	from -50 to 0°C (from -58 to 32°F) / PT1000
Recorder sensor measuring accuracy:	at +25°C ± 0,5°C (at 77°F ± 32.9°F)
Recorder sensor reference body:	100ml DOW coming 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 (at 77°F ± 32.4°F)
PT100 sensor reference body:	100ml DOW coming 200-5CST (silicon oil)
Packing standard / option:	cardboard / -

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