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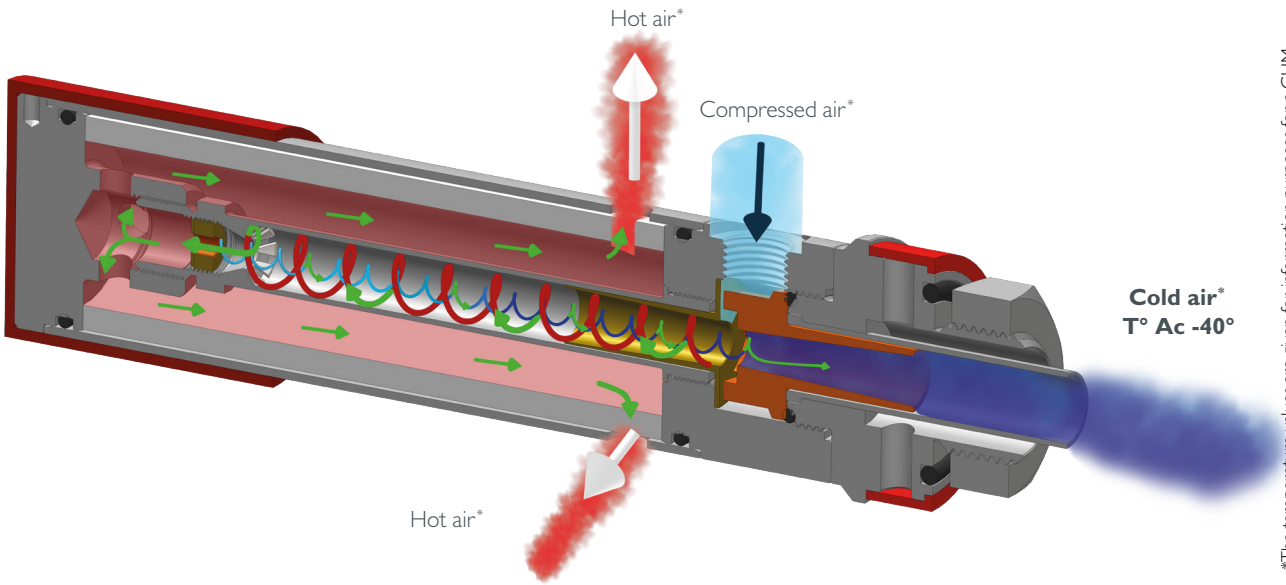
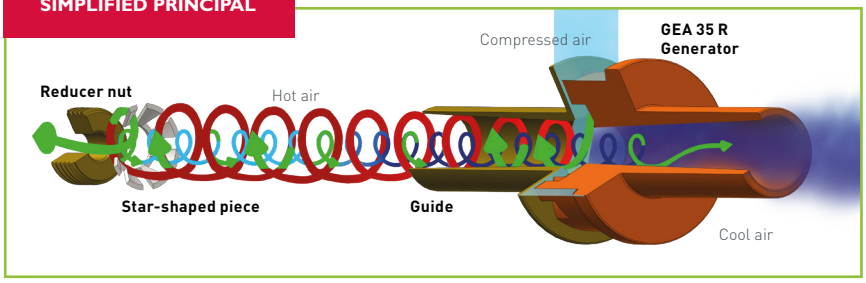
# CLIM/CLIM EL 500 TO 2500
# TECHNICAL SHEET
# VORTEX TUBES
## CABINET COOLER

## OPERATING PRINCIPAL

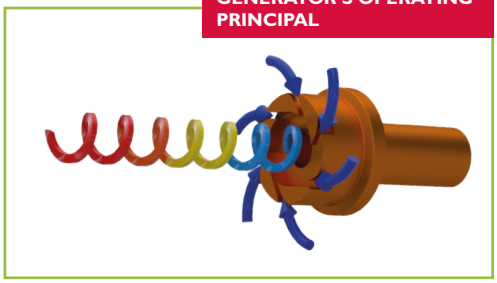



*The temperature values are given for information purposes for a CLIM 2500 item with a GEA 35R orange generator.
T° Ac= Temperature of the compressed air

### SIMPLIFIED PRINCIPAL




### GENERATOR'S OPERATING PRINCIPAL



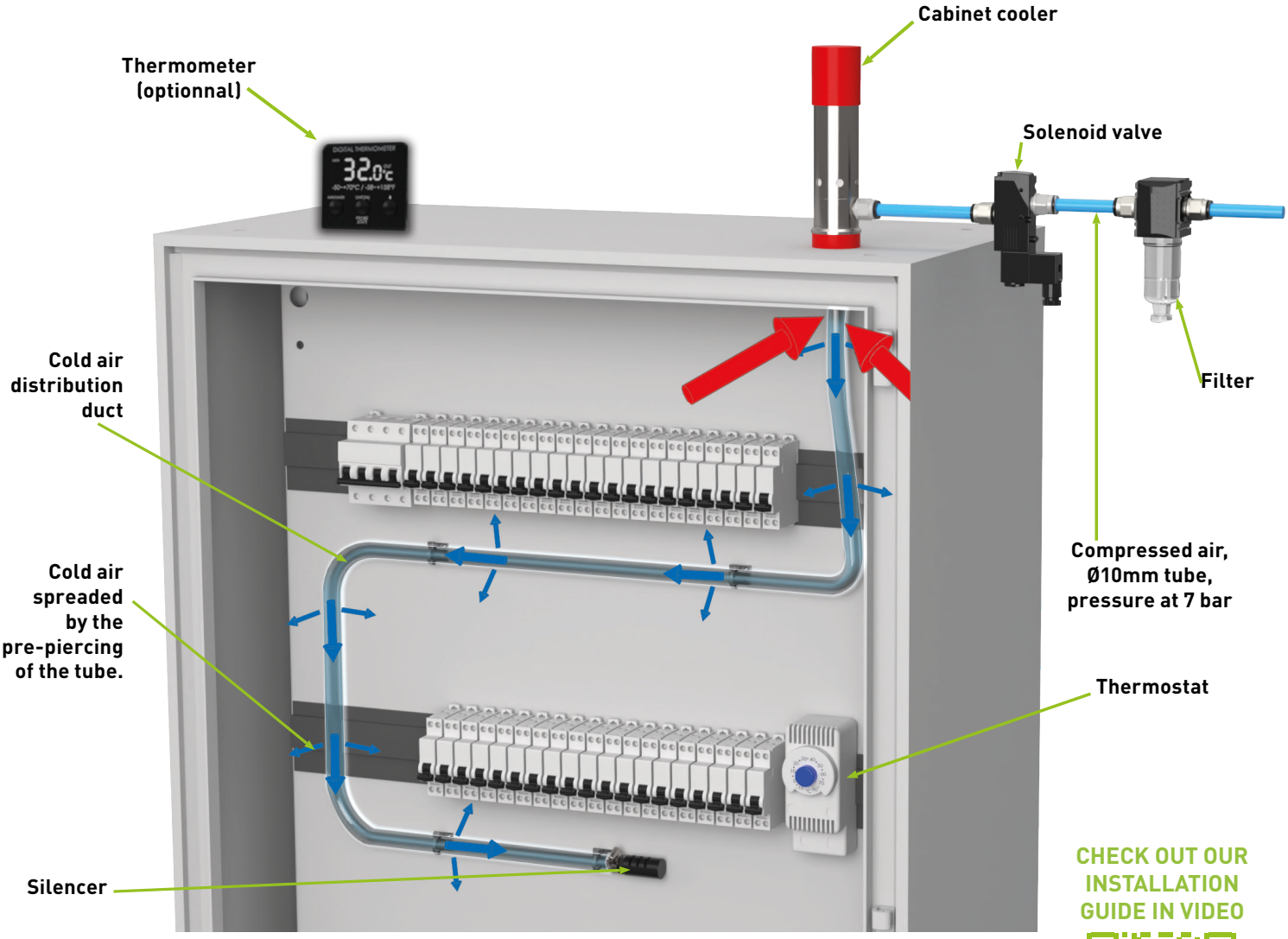
## TECHNICAL INFORMATION

| Item number | Connection (gaz measures) | Generator | Cooling capacity | | Consumed air (l/mn) | | Air flow at outlet (l/min) | | Cabinet size (meters) | Weight (grams) | Sound Level (dB) | Material |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | (Kcal/h)** | (BTU/h) | 6 bars | 7 bars | 6 bars | 7 bars | | | | |
| CLIM 500/ CLIM EL 500 | G1/4" | GEA 10R | 95 | 376,99 | 381 | 430 | 115 | 152 | 0,5 x 0,6 x 0,2 | 1085 | 75 (ideal condition) | Stainless steel |
| CLIM 900/ CLIM EL 900 | G1/4" | GEA 15R | 135 | 535,72 | 400 | 495 | 152 | 170 | 0,8 x 0,6 x 0,2 | | | Stainless steel |
| CLIM 1500/ CLIM EL 1500 | G1/4" | GEA 25R | 440 | 1746,06 | 494 | 597 | 205 | 285 | 1,0 x 1,0 x 0,4 | | | Stainless steel |
| CLIM 2500/ CLIM EL 2500 | G1/4" | GEA 35R | 720 | 2857,19 | 635 | 786 | 340 | 375 | 1,8 x 1,8 x 0,6 | | | Stainless steel |

For optimal results, we recommend using an 8 mm inside diameter tube for CLIM 500 and 900 items, and a 12 mm inside diameter tube for CLIM 1500 and 2500 items..

** The kilocalorie is an energy unit, a kilocalorie (equals 1000cal) represents the quantity of energy needed to reduce the temperature of 1 °C inside 1000 liters of water.

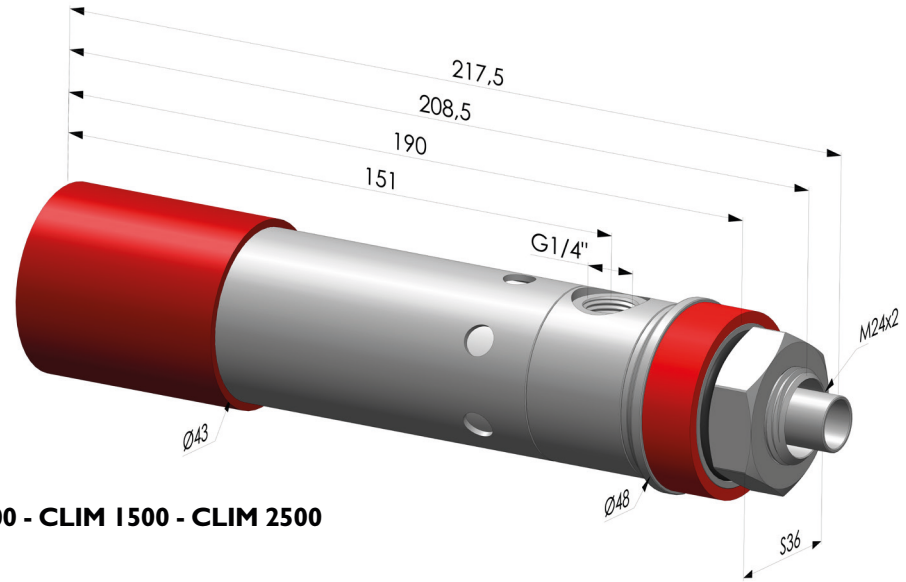
## OPERATION




CHECK OUT OUR INSTALLATION GUIDE IN VIDEO

**CLIM 500 - CLIM 900 - CLIM 1500 - CLIM 2500**
**CLIM EL 500 - CLIM EL 900 - CLIM EL 1500 - CLIM EL 2500**

## DIMENSIONS




**CLIM 500 - CLIM 900 - CLIM 1500 - CLIM 2500**

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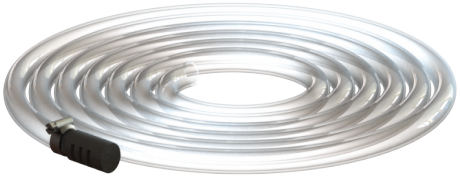
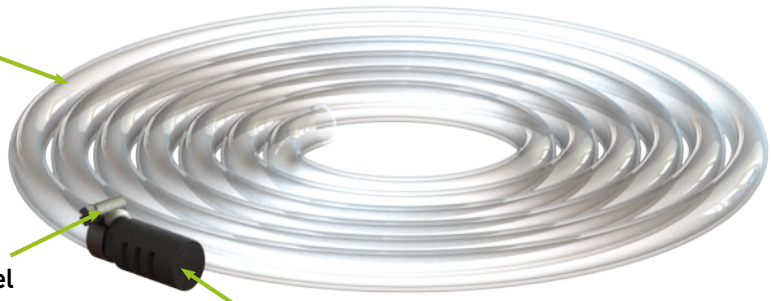
# COLD AIR DISTRIBUTION DUCT



# TECHNICAL SHEET VORTEX TUBES

## CABINET COOLER

## DESCRIPTION





Included accessories
Possibility to request a different length for the PVC

## TECHNICAL INFORMATION

| ITEM NUMBER | MATERIAL | DIMENSION | LENGTH |
|---|---|---|---|
| CLIM TUB | PVC | 13x17mm | Max: 2,50m<br>Adjustable length depending on the cabinet size |

## RECOMMENDATIONS

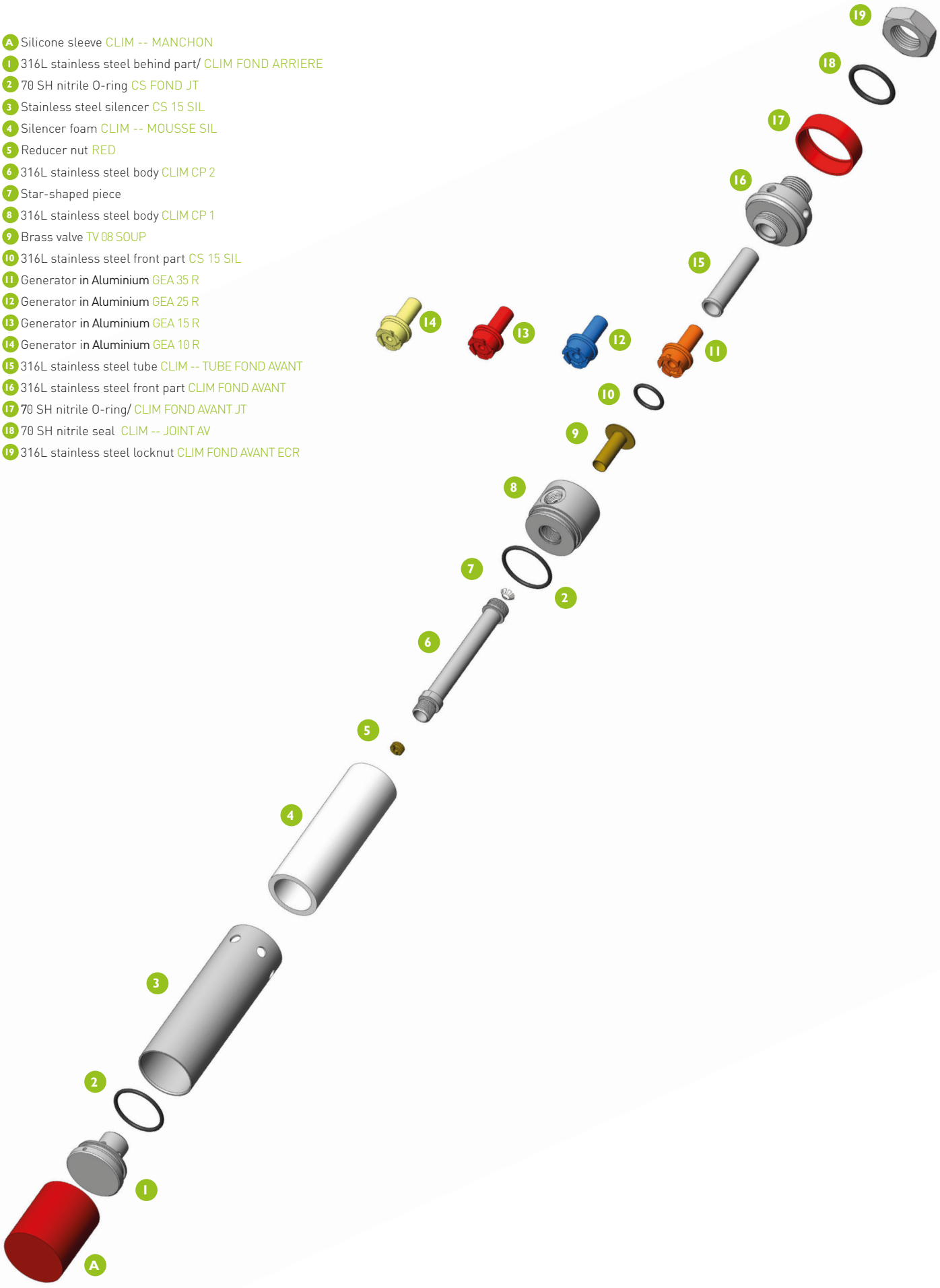
- For optimal use, we recommend using a hose with a minimum internal diameter of 8 mm for the Clim 500 and 900, and a hose with a minimum internal diameter of 12 mm for the Clim 1500 and 2500.
- Recommended compressed air pressure: 7 bar

It is best not to use elbow fittings for the supply of compressed air on this product, you may have power losses.

It is essential to make several perforations on your transparent tube, for the diffusion of cold air in the cabinet, we recommend a 5mm drill.

## DETAILED VIEW

- A Silicone sleeve CLIM -- MANCHON
- 1 316L stainless steel behind part/ CLIM FOND ARRIERE
- 2 70 SH nitrile O-ring CS FOND JT
- 3 Stainless steel silencer CS 15 SIL
- 4 Silencer foam CLIM -- MOUSSE SIL
- 5 Reducer nut RED
- 6 316L stainless steel body CLIM CP 2
- 7 Star-shaped piece
- 8 316L stainless steel body CLIM CP 1
- 9 Brass valve TV 08 SOUP
- 10 316L stainless steel front part CS 15 SIL
- 11 Generator in Aluminium GEA 35 R
- 12 Generator in Aluminium GEA 25 R
- 13 Generator in Aluminium GEA 15 R
- 14 Generator in Aluminium GEA 10 R
- 15 316L stainless steel tube CLIM -- TUBE FOND AVANT
- 16 316L stainless steel front part CLIM FOND AVANT
- 17 70 SH nitrile O-ring/ CLIM FOND AVANT JT
- 18 70 SH nitrile seal CLIM -- JOINT AV
- 19 316L stainless steel locknut CLIM FOND AVANT ECR



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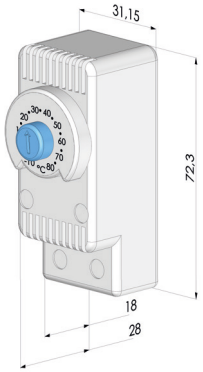
# CLIM EL THERMOSTAT TECHNICAL SHEET

# VORTEX TUBES

## CABINET COOLER

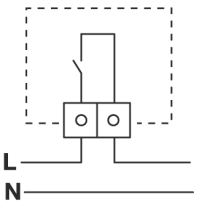
## DETAILED VIEW




## TECHNICAL INFORMATION

| Item number | Rated voltage range | Rated current (A) | Setting range (A) | Differential (referred to the set point) (°C) | Accuracy (°C) | Weight (g) |
|---|---|---|---|---|---|---|
| CLIM THERMOSTAT NO | 60 V d.c. - 110-250 V a.c. | 10 | 15 | -10 ~ 80 | ± 3 | 54g |

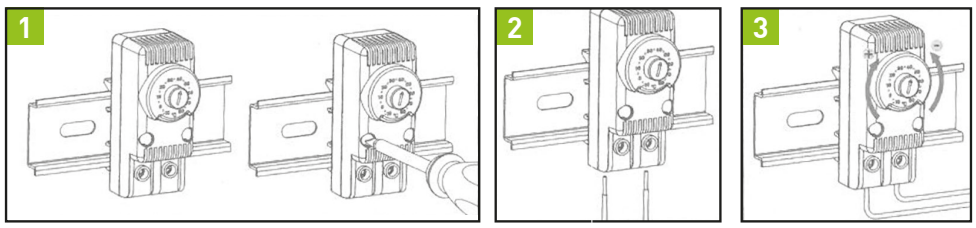
## ELECTRICAL DIAGRAM



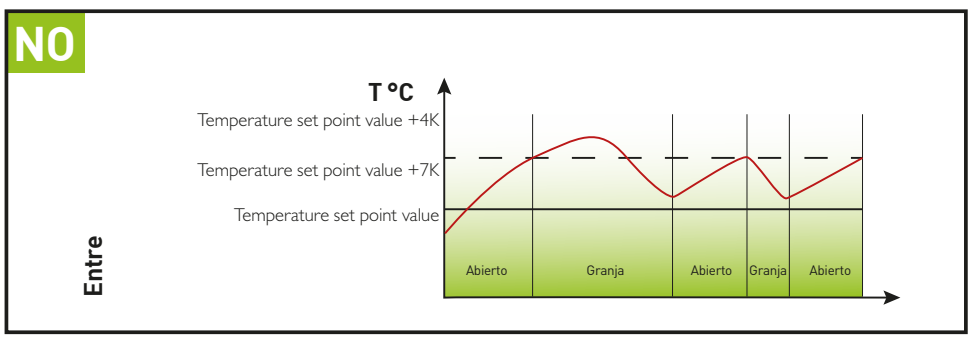

**Casing material:** PA66 UL 94V-0
**Color:** grey RAL 7035
**Protection degree:** IP20
**Appliance class:** Class II
**Assemble on:** DIN rail 35mm (EN 50 022); DIN rail 15mm (EN 50 045); DIN rail 32mm (EN 50 035)
**Fixing method:** Snap on
**Electrical connection:** screw terminals
**Electrical wires section:** from 0.75mm2 to 2.5 mm2
**Sensitive element type:** bi-metallic
**Setting/indexing:** external knob/5°C

**Storage temperature:** from -40°C to +90°C
**Max air humidity:** 95% RH et 25°C (not condensing)
**Temperature scale:** available with Fahrenheit degree scale (°F)
**External dimensions:** 68x29x45mm
**Endurance:** 100 000 cycles
**Applicable standards:** EN 60730-1 and UL (Underwriters Laboratories) approved, according to UL 873 andC22.2 № 24-93 standards
**Approvals:** CE, cURus

## OPERATION




1. Hook the thermostat on the rail using the proper elastic hooks. Optionally, place the thermostat in position and fix the two UNI 9707-TA 3x20 screws (not included)
2. Connect the thermostat electrically (see electrical connections).
3. Adjust the set point temperature by rotating the graduated disc.




The NO thermostat (Normally open - blue) has an open contact when the temperature is below the set point value and closes when the temperature rises. The graph below shows the typical operation cycle: the contact closes with rising temperature, at value T=T set point + 4K when the rated current is 5A, or T=T set point + 7K when the rated current is > 5A. The contact opens in decrease at the value T=T set point. The set point value represents the lower limit of the setting temperature range, the upper limit represents the differential, having a value of +4K or +7K to the set point value compared.

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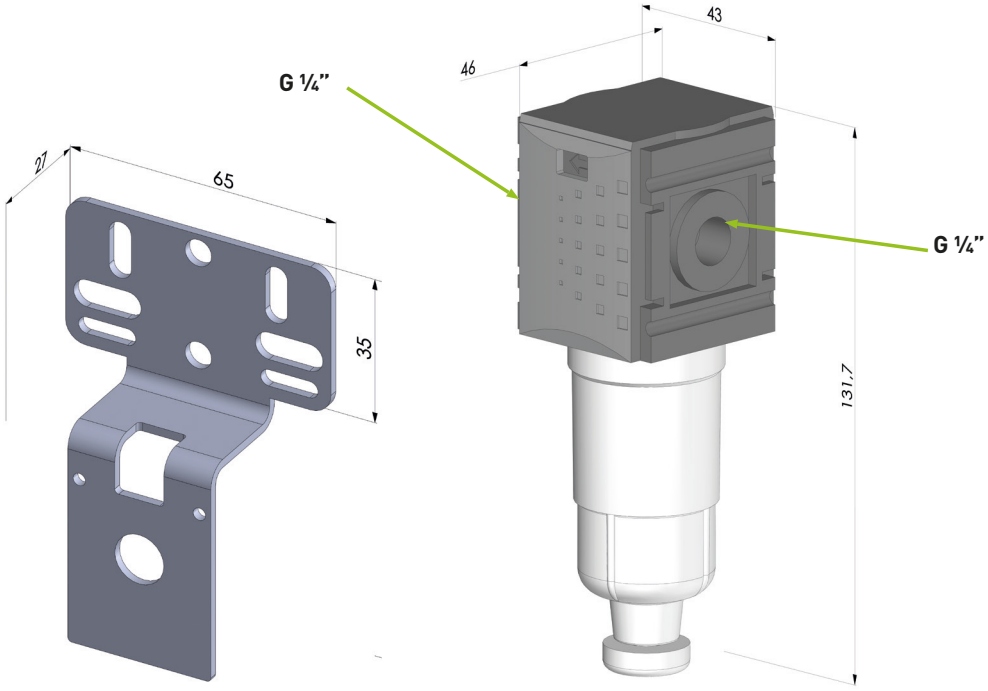
# CLIM EL FILTER
# TECHNICAL SHEET
# VORTEX TUBES
## CABINET COOLER

## DETAILED VIEW




**Supply pressure P1 min:** 1.5 bar
**Supply pressure P1 max:** 12 bar
**Temperature range:** -10 ° C to + 50 ° C
**Bowl:** Polycarbonate
**Emptying:** semi-automatic
**Mounting:** vertical
**Filter element:** 5 µm

## TECHNICAL INFORMATION*

| Item number | Flow | Supply | Weight(g) |
|---|---|---|---|
| **CLIM FRL** | 1000 l/mn | G1/4" | 128 |

| Item number | Fixation | Material | Weight(g) |
|---|---|---|---|
| **CLIM FRL sup** | - | Acier galvanisé | 75 |

## MOUNTING

1 Carefully remove one of the gray covers on the side of the filter.

2 Attach the rear fixing bracket, screw it to the body using the two screws supplied (2 screws 3x10 with Torx 10IP) and a wrench (not supplied).

*Model with automatic drain available on request.

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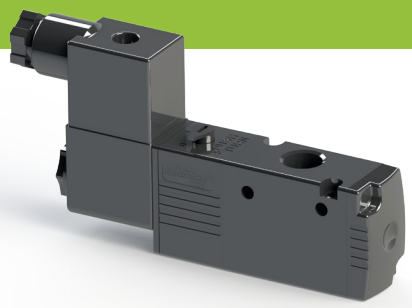
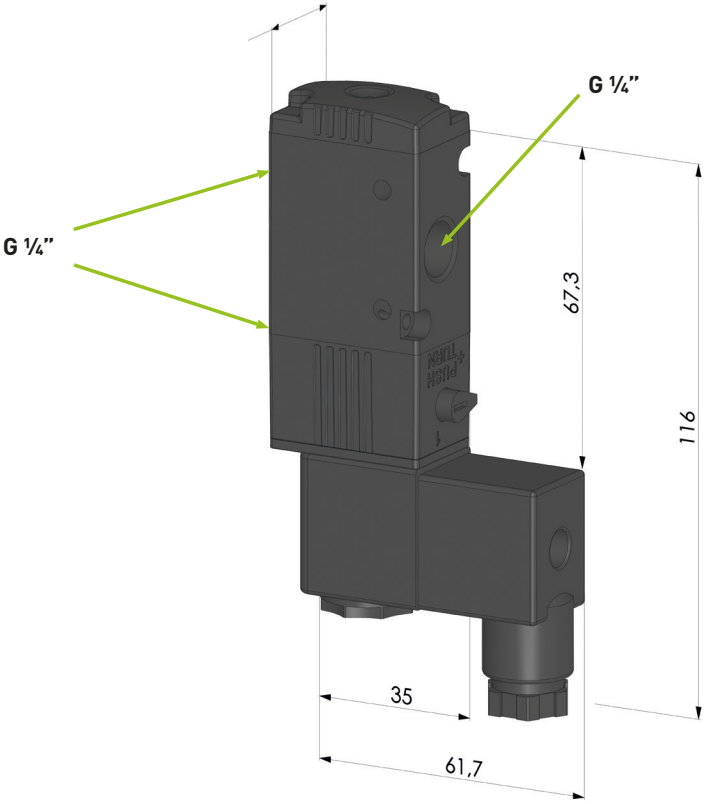
# CLIM EL SOLENOID VALVE
# TECHNICAL SHEET
# VORTEX TUBES
## CABINET COOLER

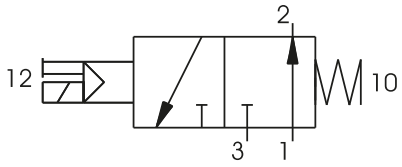


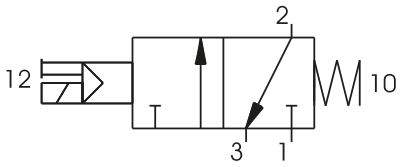
## DETAILED VIEW




**Body:** Aluminium
**Operators:** Technopolymer/
Aluminium for spring bottom plates
**Spools:** Aluminium
**Seals:** Nitrile
**Pistons:** Technopolymer
**Springs:** Spring steel

### WIRING




## TECHNICAL INFORMATION

| Item number | Fluid | Max working pressure (bar) | Operating pressure (°C) | Flow at 6 bar with ΔP = 1 (Nl / min) | Orifice size (mm) | Working port size | Weight (g) | Voltage available |
|---|---|---|---|---|---|---|---|---|
| CLIM EV 1/4 | Air filtré et lubrifié | 8 | -5 à +50 °C | 890 | 6,5 | G1/4" | 210 | 220 V<br>110 V<br>48 V<br>24 V<br>24 VDC |

## OPERATION

These valves have an average life of 15 million cycles depending on the application and air quality, filtered and lubricated air using specified lubricants will dramatically reduce the wear of the seals and ensures long and trouble free operation. Please ensure that the valve is being using according with the manufacturers specification, such as air pressure and temperature and that exhaust ports 3 & 5 are protected against the possible ingress of dirt or debris. Repair kits including the spool complete with seals are available for overhauling the valves; however, although this is a simple operation it should be carried out by a competent person.

This model is NC (Normally open) in 220V, other functions and voltages on request

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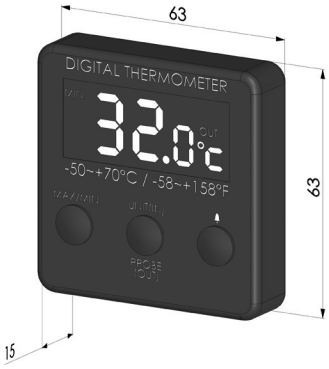
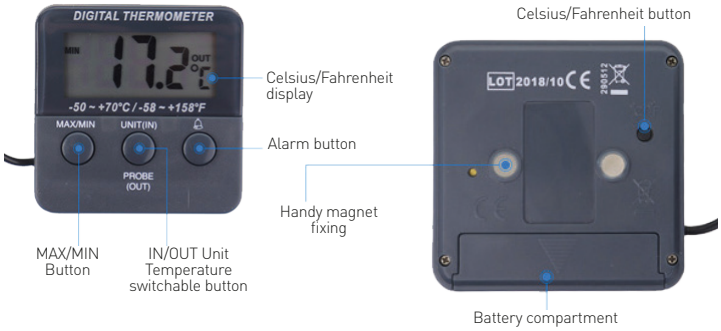
# CLIM EL DIGITAL THERMOMETER
# TECHNICAL SHEET
# VORTEX TUBES
## CABINET COOLER


## DETAILED VIEW




## TECHNICAL INFORMATION

| Item number | Measuring Range | Display Resolution | Probe Length | Differential (referred to the set point) | Accuracy (°C) | Weight (g) |
|---|---|---|---|---|---|---|
| CLIM THERMOMETER | -20 to +50°C/-20 bis + 50°C | 0.1 | 2M | -20 ~ +70 | ± 1 | 82 |




**Digital thermometer with max min temperature feature and high/low temperature warning alarm setting. Ideally suited to read temperature in a fridge or freezer or any outdoor temperature and room temperature simultaneously. Magnet fixation.**

**Features**
High/Low temperature alarm setting (External probe reading only)
Max/Min temperature memory
Waterproof temperature sensor
C° and F switchable Magnetic fixing on the back of the main unit

**Specification**
Measuring Range: -20 to +50C&F (room temperature) / -50 to +70C&F (external probe temperature)
Accuracy: +/- 1C
Display Resolution: 0.1
Display Reading Update: 10 seconds
Battery: 1 x AAA (Supplied)
Probe Length: 2 metres

## OPERATION

**1 °C/°F Exchange**
Press [°C/°F] on the back of instrument to select temperature unit

**2 Max/Min reading memory**
a. Press [Max/min] to display maximum measured value (MAX).
b. Press the button again to display minimum measured value (MIN)
c. Press the button again to return to nominal display
d. Press and hold [Max/min] for about 2 seconds to reset memory

**3 Probe sensor temperature display**
a. Press [IN/OUT] to display probe sensor temperature
b. Press the button again to display main unit temperature reading

**4 High/Low temperature alarm setting (external probe sensor only)**
a. Press and hold [ ] for about 2 seconds, the HIGH and OUT icons will flash
b. Press [°C/°F] on the back of instrument to set alarm high limit
c. Press [ ] again, the LOW and OUT icons will flash
d. Press [°C/°F] on the back of the instrument to set alarm low limit
e. Press [ ] once more to finish setting and return to main unit reading
During limit setting, holding down [°C/°F] will advance the value automatically. If the probe sensor reading is out of the set limit, the alarm will sound.

**5 Alarm on/off**
a. Press [ ] to switch off alarm (AL off)
b. Press [ ] again to switch on alarm (AL on)

**NOTE**
The IN reading relates to the sensor on the main unit.
The OUT reading relates to the external probe sensor reading.
Keep out of direct sunlight, rain or extreme heat.

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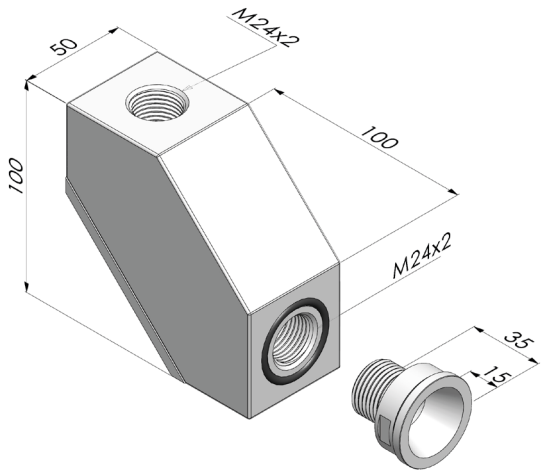
# 90° ADAPTER FOR CLIM EL TECHNICAL SHEET VORTEX TUBES

## CABINET COOLER

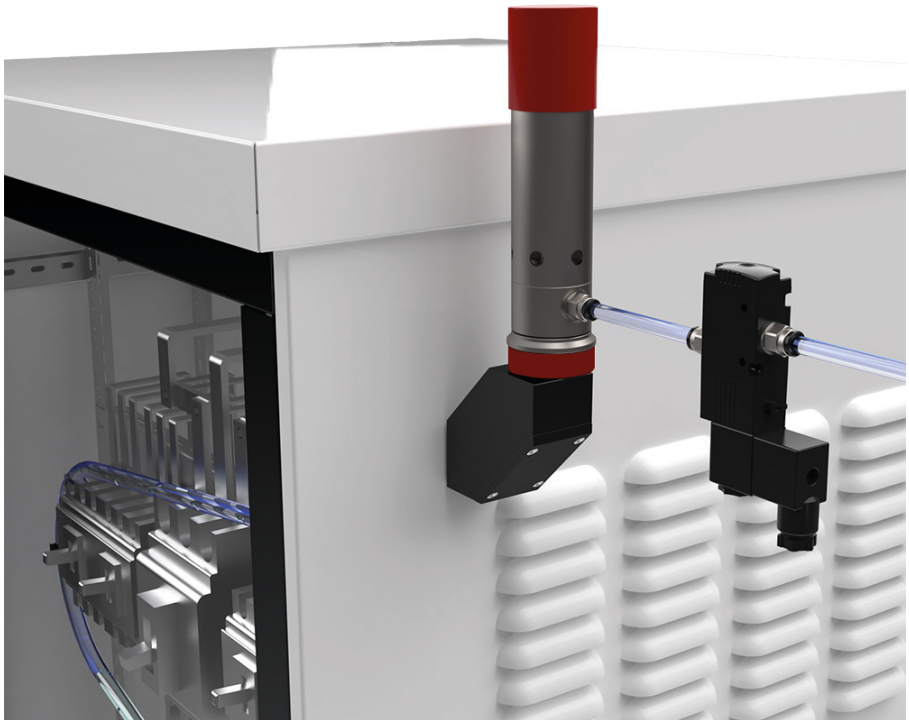

## DETAILED VIEW




## TECHNICAL INFORMATION

| Item number | Material | Weight (g) |
|---|---|---|
| **CLIM ADA 90** | Anodized aluminum | 550 |

## OPERATION



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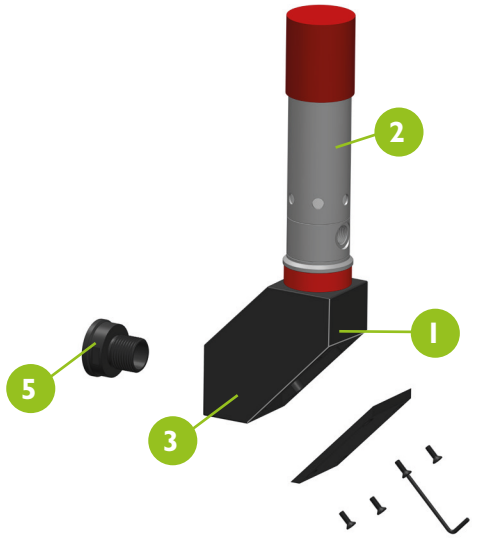
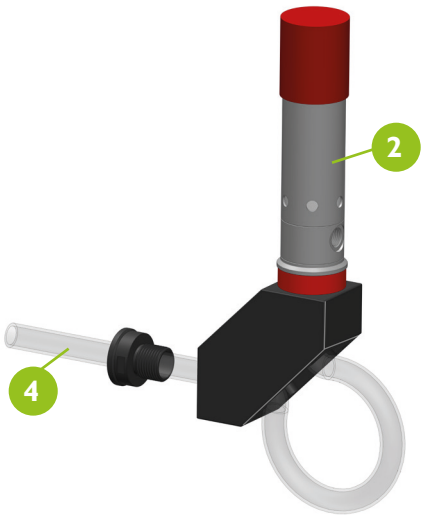
# CLIM EL SET-UP TECHNICAL SHEET
# VORTEX TUBES
## CABINET COOLER

## SET-UP PROCEDURE

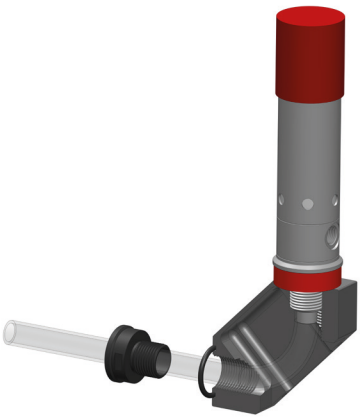
**A** Using a 2.5 Allen key, unscrew the four FHC M4x12 screws from the lid. Unscrew the connector 5 and screw the cooler 2 onto the support 3




**B** Insert the tube 4 through the connector and support and inside the cooler 2 up to the stop.




**C** **WARNING:** Ensure that the tube 4 is not folded, as this could reduce the performance of the cooler.



**D** Screw back the lid into the support and install the assembly on the electrical cabinet.