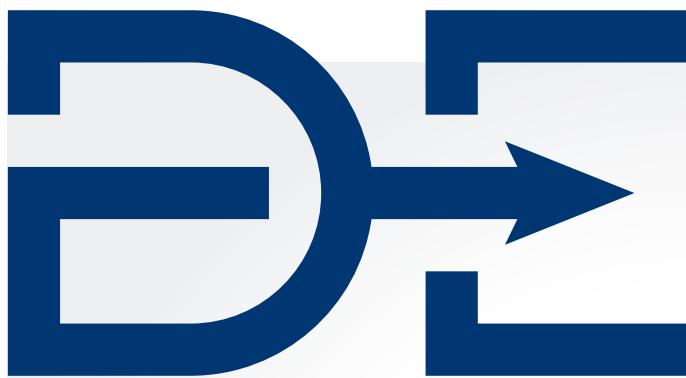


## EPA air conditioning units for power supply rooms



UNITS FOR COLD ROOMS  
EPA



# EPA air conditioning units for power supply rooms

The EPA series of air conditioning units with a simple or dual air supply are especially designed for use in food processing or handling rooms that require maintaining a positive temperature while also reducing the humidity inside the space.

Unlike standard evaporators for refrigeration chambers, the EPA series is built with thermally insulated panels and an aluminium perimeter structure with a thermal bridge, thus preventing condensation from forming outside the casing



**EPA SERIES  
SIMPLE AIR SUPPLY**



**EPA SERIES  
DUAL AIR SUPPLY**



## MAIN CHARACTERISTICS

- G4 washable filter and UL MERV8 certificate.
- Plug Fan EC Fans.
- AISI 304 stainless steel sliding condensates tray.
- Exchangers protected with an Epoxy treatment.
- Fully removable for cleaning and maintenance.
- Panels with interior thermal insulation.
- Flow rate control built-in to the unit.

## STANDARD FINISHES

- AISI 304 stainless interior/painted exterior.
- Aluminium structure with thermal bridge.

## OPTIONS

- Control built-in to the unit.
- Dehumidification stage.
- UVc germicidal chamber.
- F7 filtering of air supply.
- AISI 304 stainless steel structural sections.
- AISI 304 stainless steel interior and exterior.
- Air supply nozzles.
- Electrical heating elements kit.
- Bottom section return in simple air supply units.

## CONFIGURATIONS

- Simple air supply construction.
- Dual air supply construction.

## VERSIONS

- BASIC: Only flow rate control.
- PLUS: Carel IR33 temperature / humidity type control.
- MAX: Carel PCo+ type control with Modbus or other communication protocols upon special request.

**Operation**

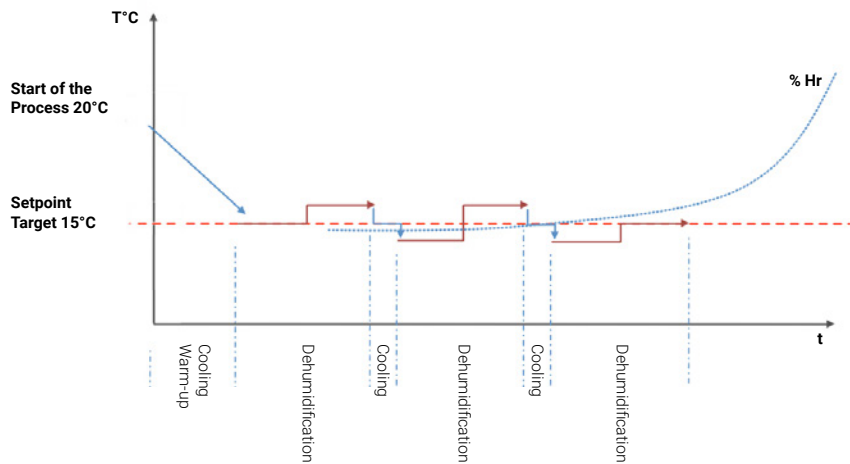
The EPA series air conditioning units replace typical evaporators and include cooling, dehumidifying and filtering into a single unit, preventing temperature from dropping below the set limit and thus preventing condensation from forming as well as excess cold air from being blown on the workers.



UVc germicidal lamps may be integrated in the units to ensure an optimum quality of bacteria free air is produced.

These units are capable of providing the air conditioning and filtering requirements of any food handling room with positive temperatures between 6°C and 18°C, although the flexibility in adapting to the project allows designing and manufacturing the ideal equipment for each application.

**Basic Diagram of the process**



**DEHUMIDIFICATION TABLE in kg/h at 0 m of altitude above sea level**

Room	Water -2°C ΔT 6°C													
10°C 85%	1.4	1.9	2.4	2.9	3.1	4.1	4.4	4.7	5.0	5.3	5.6	5.9	6.2	
10°C 90%	2.0	2.7	3.4	4.1	4.5	5.0	5.7	6.4	7.1	7.8	8.5	9.2	9.9	
15°C 75%	1.7	2.2	2.7	3.2	3.7	4.2	4.7	5.2	5.7	6.2	6.7	7.2	7.7	
15°C 80%	2.3	3.0	3.7	4.4	5.1	5.8	6.3	7.2	7.9	8.6	9.3	10.0	10.7	
Q M3/h	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000	7500	

Room	Water 0°C ΔT 6°C													
10°C 85%	0.8	1.0	1.2	1.4	1.6	1.8	2.0	2.2	2.4	2.6	2.8	3.0	3.2	
10°C 90%	1.3	1.7	2.1	2.5	2.9	3.3	3.7	4.1	4.5	4.9	5.3	5.7	6.1	
15°C 75%	1.6	1.9	2.2	2.5	2.8	3.1	3.4	3.7	4.0	4.3	4.6	4.9	5.2	
15°C 80%	2.0	2.6	3.2	3.8	4.4	5.0	5.6	6.2	6.8	7.4	8.0	8.6	9.2	
Q M3/h	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000	7500	

## Technical characteristics

### EPA SERIES SIMPLE AIR SUPPLY

Model		EPA 1.3 4 1	EPA 2.5 8 1	EPA 3.8 14 1	EPA 5.0 17 1	EPA 6.5 22 1	EPA 7.5 26 1
COOLING CAPACITY	kW (0°C-Δ12°C)	4.3	8.8	14	17	22.5	26.5
	kW (+2°C-Δ10°C)	3.6	7.3	11.0	14.6	18.5	22.0
FLOW RATE	m <sup>3</sup> /h	1300	2500	3800	5000	6500	7500
	CFM	765	1471	2235	2941	3824	4412
FILTERING		G4 Washable corrosion resistant plastic					
REACH	M	6.0	8.0	10.0	10.0	10.0	11.0
HEATING ELEMENTS*	W (DEFROSTING)	1400	3000	3500	4500	5500	6500
	W (SUPPORT)	1000	2000	2500	3000	4000	4500
POWER SUPPLY	V	1x200-230 V 50/60 Hz			1x200-230 V 50/60 Hz or 3x380-400 V+N 50/60 Hz		

\*Optional electrical heating elements kit

### EPA SERIES DUAL AIR SUPPLY

Model		EPA 1.6 5 1 2D	EPA 2.5 8 1 2D	EPA 3.1 10 1 2D	EPA 4.5 17 1 2D	EPA 5.6 22 1 2D	EPA 6.8 26 1 2D
COOLING CAPACITY	kW (0°C-Δ12°C)	5.7	8.2	10	17	22	26
	kW (+2°C-Δ10°C)	4.2	6.5	8.4	14.1	17.9	22.0
FLOW RATE	m <sup>3</sup> /h	1600	4500	3100	4500	5600	6800
	CFM	941	2647	1824	2647	3294	4000
FILTERING		G4 Washable corrosion resistant plastic					
REACH	M	3.8	4.5	7.0	8.0	8.0	9.0
HEATING ELEMENTS*	W (DEFROSTING)	1300	1800	2500	6000	7500	8800
	W (SUPPORT)	1300	1800	2500	3000	4000	4500
POWER SUPPLY	V	1x200-230 V 50/60 Hz			1x200-230 V 50/60 Hz or 3x380-400 V+N 50/60 Hz		

\*Optional electrical heating elements kit

## Dimensions mm

### EPA SERIES SIMPLE AIR SUPPLY

Model	EPA 1.3 4 1	EPA 2.5 8 1	EPA 3.8 14 1	EPA 5.0 17 1	EPA 6.5 22 1	EPA 7.5 26 1
HEIGHT	400	400	400	400	700	700
WIDTH	1500	1500	1500	2100	2700	2700
DEPTH	650	650	650	650	800	800
FIN SEPARATION	2.5/3.0	2.5/3.0	2.5/3.0	2.5/3.0	2.5/3.0	2.5/3.0

### EPA SERIES DUAL AIR SUPPLY

Model	EPA 1.6 5 1 2D	EPA 2.5 8 1 2D	EPA 3.1 10 1 2D	EPA 4.5 17 1 2D	EPA 5.6 22 1 2D	EPA 6.8 26 1 2D
HEIGHT	400	400	400	400	400	400
WIDTH	1500	1500	1500	2100	2700	2700
DEPTH	1200	1200	1200	1200	1400	1400
FIN SEPARATION	2.5	2.5	2.5	2.5	2.5	2.5

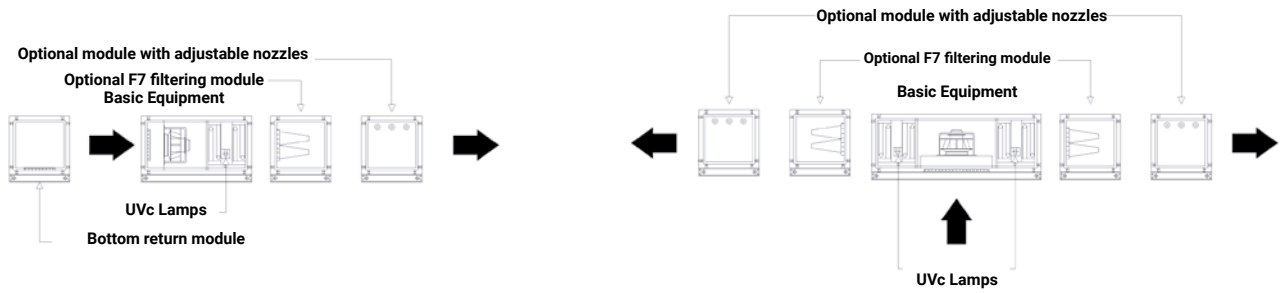
### Configurations



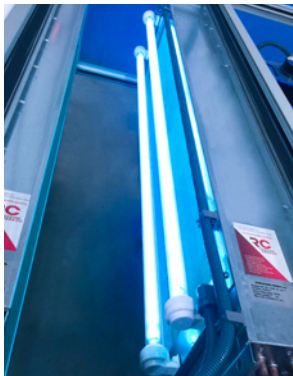
**EPA STAINLESS SERIES  
SIMPLE AIR SUPPLY**



**EPA STAINLESS SERIES  
DUAL AIR SUPPLY**

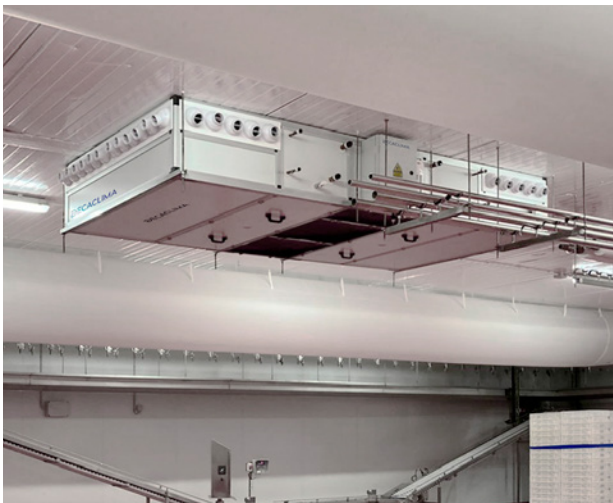


### Upon request



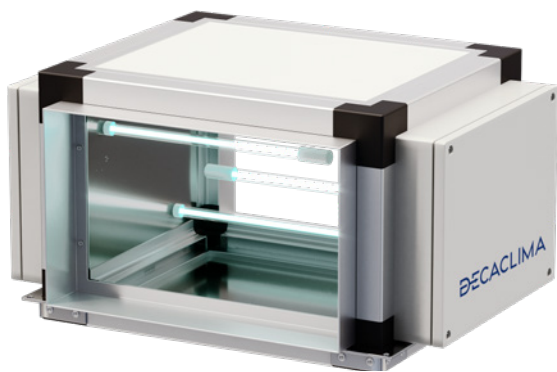
Germicide chamber with UVc lamps upon request

### Examples of application



# Germicidal modules for ducts

Units specifically designed to be installed inserted in ducting and used for cleaning the air inside any type of premise; primarily in high occupancy areas. The product range is introduced for connection to 240 V and easy to install in technical ceilings.



Unit built using "C" range UV lamps with a 253.7 nm spectrum, which is the wave amplitude that is prescribed for deactivating a large variety of micro-organisms.

Cellular DNA and RNA absorb the UVc energy of the short wave length. UVGI technology has demonstrated an effectiveness of 99% for controlling microbial growth in the battery area and the drainage tray when it is properly installed.

## MAIN CHARACTERISTICS

- UVc Lamps.
- Panels with interior insulation.
- Lugs so the unit can be easily hoisted.
- Nozzles to facilitate installation in the duct.
- Galvanised steel interior/painted exterior.
- Aluminium modular structure.

## OPTIONS

- Radiometer (indicates radiation, hours and percentage)

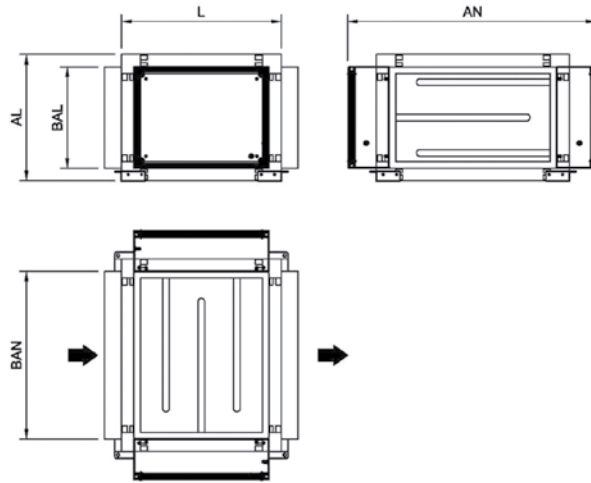
## Technical characteristics

Model		MGC 800 UV	MGC 1.200 UV	MGC 2.000 UV	MGC 3.000 UV	MGC 5.000 UV
FLOW RATE	m <sup>3</sup> /h	800	1200	2000	3000	5000
	CFM	471	706	1177	1766	2943
POWER SUPPLY	V	I-200-230 V 50/60 Hz	I-200-230 V 50/60 Hz	I-200-230 V 50/60 Hz	I-200-230 V 50/60 Hz	I-200-230 V 50/60 Hz
UVc	Units	2	4	6	10	12
	W*	14	28	42	70	84

\*Effective power of UVc radiation

\*Data subject to change without prior warning

**Dimensions mm**



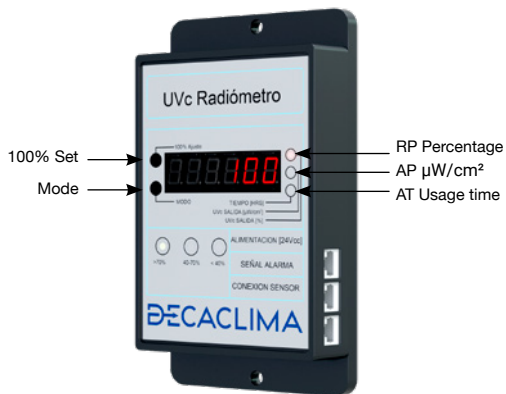
Model		MGC 800 UV	MGC 1.200 UV	MGC 2.000 UV	MGC 3.000 UV	MGC 5.000 UV
LENGTH (L)	mm	376	376	476	476	676
WIDTH (W)	mm	517	660	740	1040	1140
HEIGHT (H)	mm	276	276	376	376	476
NOZZLE (BAL)	mm	202	202	302	302	402
NOZZLE (BAN)	mm	400	500	500	800	900
WEIGHT	kg	15	21	29	37	50

\*Data subject to change without prior warning

**Radiometers**

Equipment that allows monitoring radiation levels (in  $\mu\text{W}/\text{cm}^2$ ) and setting the percentages to the desired level between 0 and 100%. The system includes an operating hours counter and monitoring of radiation for equipment in critical applications.

The radiometer ensures that UVc lamps are operating properly.

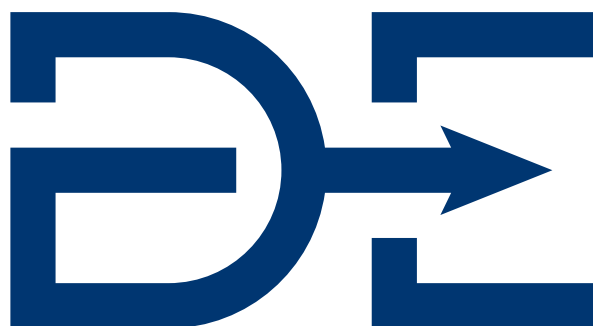


**MAXIMUM ABSOLUTE RATES**

Parameter	Value		Comments
	Min.	Max.	
Supply voltage (V)	9	24	*Only 5V (optional)
Supply current (A)		0.2	
Operating temperature ( $^{\circ}\text{C}$ )	-15	65	

**CHARACTERISTICS AT 25°C**

Parameter	Value		Comments
	Min.	Max.	
Detection range (nm)	220	280	10% of peak
Detection power range ( $\mu\text{W}/\text{cm}^2$ )	1	2,500	



INNOVATION IN AIR CONDITIONING  
AND AIR QUALITY EQUIPMENT

**DECACLIMA**

**DECACLIMA COMFORT SOLUTIONS, S.L.**  
Avda. del Castell, 31  
08570 Torelló (Barcelona)  
Tel. +34 930 130 703  
info@decaclima.com  
[www.decaclima.com](http://www.decaclima.com)

**SODECA** Group