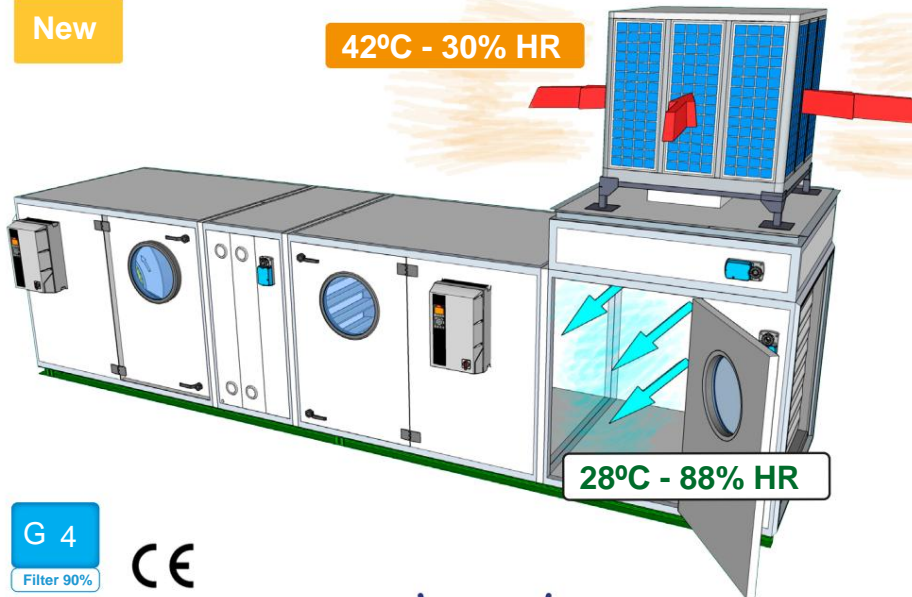


New

42°C - 30% HR



28°C - 88% HR

G 4

Filter 90%



UV WATER  
CLEANNING



PATENTED  
AUTOMATIC  
DRAIN

# ADIABATIC COOL BOX PREMIUM

ADIABATIC MODULES  
5.760 a 69.552 m<sup>3</sup>/h

- + Free Cooling
- + Energy Saving
- + Low Consumption

## MAIN FEATURES

Adiabatic modules increase the relative humidity of the environment and at the same time reduce the air temperature. They are very valuable and efficient systems in UTAS (air treatment units) providing fresh and humid air without external energy input.

The cooling process is based on the evaporation of water, which removes energy from the air, releasing sensible heat and cooling the environment. This phenomenon is known as evaporative cooling and its use is common in industrial premises where conventional air conditioning systems are not economically viable; they are systems with very low energy consumption and therefore with very economical cold production.

The ADIABTIC COOL Box range is adiabatic cooling equipment **without a ventilation group** where cooling is carried out depending on the air flow introduced into the equipment. The cooling efficiency varies depending on the speed of the air introduced into the equipment, as can be seen in the graph of the cooling panels on the next page.

- Treated air outlet bottom (V), top (VS) or side (H)
- Water tray made of polyamide (ACB-07-15-25-40) or stainless steel AISI-316 (ACB-55-70) •
- Corner and central posts made of AISI-304 stainless steel.
- Upper roof made of polyamide or galvanized steel with paint.
- Suction grilles in galvanized steel lacquered with polyester paint (INOX version in AISI-304)
- 100mm thick type 5090 cooling panels. • Drain system patented by MET MANN • Normally closed inlet solenoid valve
- EBM ALPHA 45/15 water pump with external rotor motor. • Half-turn opening system to access the interior of the equipment
- Base bench with legs supplied as standard to facilitate transportation and installation
- Air filtering to comply with BRC food regulations.

## WHY METMANN? - Why Met Mann? - Why Met Mann?

- We guarantee the exterior structure for 5 years and the rest for 1 year of elements.

5 years guarantee for the exterior polyamide structure and 1 year for other elements.

We guarantee the exterior polyamide structure for 5 years and the rest of the components for 1 year.

- We are manufacturers and we can adapt to your needs.

We are manufacturers and we can adapt our products to your needs.

We are manufacturers and we can adapt to your needs.

- Fully personalized technical-commercial advice.  
Fully personalized technical and commercial consultation.  
Technical-commercial assistance, totally personalized.
- We guarantee the supply of spare parts.  
We guarantee the supply of replacement parts.  
We guarantee the supply of spare parts.



**MET MANN**  
Industrial Climate Solutions

www.metmann.com - Tel +34 93 851 15 99 - C/ Fontcuberta, 32-36 08560 - Manlleu (Barcelona) SPAIN

## Get In Touch

Call: 0845 6880112  
Email: [info@adremit.co.uk](mailto:info@adremit.co.uk)

## Our Address

Puravent, Adremit Limited, Unit 5a, Commercial Yard,  
Settle, North Yorkshire, BD24 9RH

## ADIABATIC MODULES

Adiabatic modules increase the relative humidity of the environment and at the same time reduce the air temperature. They are very valuable and efficient systems in air handling units (AHUs), providing cool, moist air without the need for external energy.

The air cooling process is based on the evaporation of water which removes energy from the air, giving up sensible heat and cooling the environment. This phenomenon is known as evaporative cooling and its use is common in industrial premises where conventional air conditioning systems are not economically viable, they are systems with a very low energy consumption and therefore with a very economical production of cold.

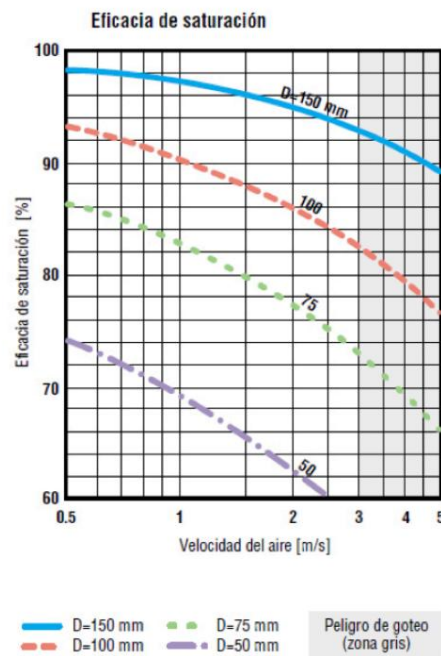
The ADIABTIC COOL Box range is adiabatic cooling equipment **without a ventilation unit** where cooling is carried out according to the air flow rate introduced into the equipment. The cooling efficiency varies according to the speed of the air introduced into the unit, as can be seen in the graph of the cooling panels.

### MAIN FEATURES

- Treated air outlet bottom (V), top (VS) or side (H)
  - Water tray made of polyamide (ACB-07-15-25-40) or stainless steel AISI-316(ACB-55-70)
  - Posts made of AISI-304 stainless steel.
  - Cooling panels type 5090 of 100mm thick •
- Aspiration grilles and upper roof made of galvanised steel lacquered with polyester paint or polyester paint or in stainless steel AISI-304 in INOX version equipment.
- Emptying system patented by MET MANN •
- Water distribution system applied on the roof itself •  
EBM or WILO water pump according to model •  
Quick opening of the panels with half-turn fasteners •  
Galvanised steel support base frame in standard and stainless steel version •  
G4 filtration system (optional) •  
UV lamp for disinfection of micro-organisms (optional)

## SATURATION EFFICIENCY AND PRESSURE DROP

### Saturation efficiency and pressure drop



## MODULES ADIABATIQUES

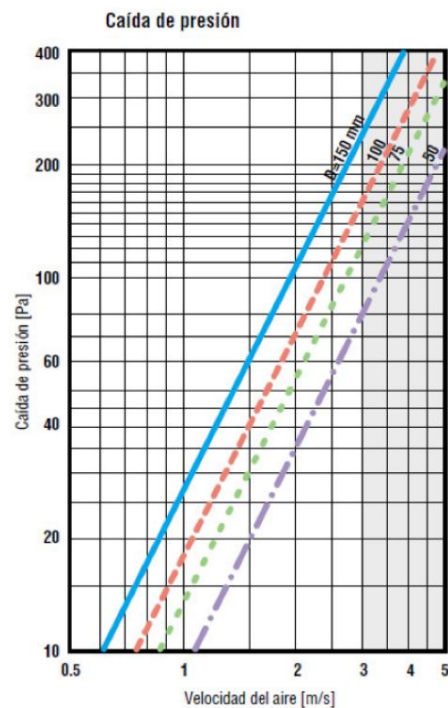
Adiabatic modules increase the relative humidity of the environment and at the same time reduce the air temperature. These are very valuable and efficient systems in air handling units (AHU), which provide cool, humid air without the need for external energy.

The air cooling process is based on the evaporation of water which removes energy from the air, thereby giving up sensible heat and cooling the surroundings. This phenomenon is known as evaporative cooling and its use is common in industrial premises where conventional air conditioning systems are not economically viable, they are systems with very low energy consumption and therefore very cold production. economic.

The ADIABTIC COOL Box range is adiabatic cooling equipment **without a ventilation unit** where cooling is carried out according to the air flow introduced into the equipment. The cooling efficiency varies depending on the speed of the air introduced into the unit, as can be seen in the cooling panel graph.

### MAIN FEATURES

- Lower (V), upper (VS) or side (H) treated air outlet
- Water tray in polyamide (ACB-07-15-25-40) or stainless steel AISI-316(ACB-55-70)
- AISI-304 stainless steel posts. • Type 5090 cooling panels, 100mm thick • Suction grilles and upper ceiling in lacquered galvanized steel with polyester paint or polyester paint or AISI-304 stainless steel in INOX version equipment. • Draining system patented by MET MANN • Water distribution system applied to the roof itself • EBM or WILO water pump depending on the model • Quick opening of the panels thanks to half-turn fixings • Steel support base frame galvanized in standard version and in stainless steel • G4 filtration system (optional) • UV lamp for disinfection of micro-organisms (optional).



**MET MANN**  
Industrial Climate Solutions

www.metmann.com - Tel +34 93 851 15 99 - C/ Fontcuberta, 32-36 08560 - Manlleu (Barcelona) SPAIN

### Get In Touch

Call: 0845 6880112  
Email: [info@adremit.co.uk](mailto:info@adremit.co.uk)

### Our Address

Puravent, Adremit Limited, Unit 5a, Commercial Yard, Settle, North Yorkshire, BD24 9RH

## ADIABATIC COOL BOX

## STANDARD / STANDARD

## V / VS / H

MODEL	SECTION	EFFICIENCY 90% 1 m/s	LOSS	EFFICIENCY 88% 1.5 m/s	LOSS	WATER BOMB	EQUIPMENT	FILTRADO G4	UV TREATMENT
Model	Section	Panel efficiency	PRESSURE	Panel efficiency	PRESSURE	Water pump	STANDARD	G4 Filter	UV Treatment
Model	Section	Panel efficiency	Pressure loss	Panel efficiency	Pressure loss	Water pump	Standard equipment	Filtered G4	UV treatment
	m2	m³/h	Well	m³/h	Well	IN	€	€	€
ACB-15-V-100	2,84	10.224	18	15.336	40	16	15021551000S 04150115G412 031501101010M		
ACB-25-V-100	4,80	17.280	18	25.920	40	250	15022551000S 04150125G412 031501101010M		
ACB-40-V-100	7,20	25.920	18	38.880	40	250	15024051000S 04150140G412 031501101010M		
ACB-55-V-100	10,8	38.880	18	58.320	40	250	15025521000S 04150140G412 031501102020M		
ACB-70-V-100	12,88	46.368	18	69.552	40	250	15027021000S 04150170G412 031501102020M		
ACB-07-VS-100	1,60	5.760	18	8.640	40	16	15020761000S 04150107G412	031501101010M	
ACB-15-VS-100	2,84	10.224	18	15.336	40	16	15021561000S 04150115G412	031501101010M	
ACB-25-VS-100	4,80	17.280	18	25.920	40	250	15022561000S 04150125G412	031501101010M	
ACB-40-VS-100	7,20	25.920	18	38.880	40	250	15024061000S 04150140G412	031501101010M	
ACB-55-VS-100	10,8	38.880	18	58.320	40	250	15025531000S 04150140G412	031501102020M	
ACB-70-VS-100	12,88	46.368	18	69.552	40	250	15027031000S 04150170G412	031501102020M	
ACB-07-H-100	1,20	4.320	18	6.480	40	16	15020741000S 04150107G412	031501101010M	
ACB-15-H-100	2,13	7.668	18	11.502	40	16	15021541000S 04150115G412	031501101010M	
ACB-25-H-100	3,60	12.960	18	19.440	40	250	15022541000S 04150125G412	031501101010M	
ACB-40-H-100	5,40	19.440	18	29.160	40	250	15024041000S 04150140G412	031501101010M	
ACB-55-H-100	8,10	29.160	18	43.740	40	250	15025511000S 04150140G412	031501102020M	
ACB-70-H-100	9,66	34.776	18	52.164	40	250	15027011000S 04150170G412	031501102020M	

Pulse temperatures 1.0 m/s / Pulse temperatures / Pulse temperature  
(Panel / Panel / Panneau 5090 100mm - Eficiencia / Efficiency / Efficacité 90%)

HUMIDITY	TEMPERATURA EXTERIOR / Exterior temperature						
Humidity / Humidity 30°C	32°C	34°C	36°C	40°C	42°C	44°C	
20%	17,0	18,4	19,7	21,0	23,7	25,0	26,3
25%	18,1	19,5	20,9	22,3	25,1	26,5	27,9
30%	19,1	20,6	22,0	23,5	26,4	28	29,4
40%	21,0	22,6	24,2	25,7	28,9	30,6	32,2
50%	22,8	24,4	26,1	27,8	31,2	32,9	34,6
60%	24,4	26,1	27,9	29,7	33,3	35,1	36,8

Pulse temperatures 1.5 m/s / Pulse temperatures / Pulse temperature  
(Panel / Panel / Panneau 5090 100mm - Eficiencia / Efficiency / Efficacité 88%)

HUMIDITY	TEMPERATURA EXTERIOR / Exterior temperature						
Humidity / Humidity 30°C	32°C	34°C	36°C	40°C	42°C	44°C	
20%	17,3	18,7	20,0	21,3	24,0	25,4	26,7
25%	18,3	19,8	21,2	22,6	25,4	26,8	28,3
30%	19,3	20,8	22,3	23,8	26,7	28,3	29,8
40%	21,2	22,8	24,4	26,0	29,2	30,8	32,4
50%	22,9	24,6	26,3	28,0	31,4	33,1	34,8
60%	24,5	26,3	28,1	29,8	33,4	35,2	37,0



**MET MANN**  
Industrial Climate Solutions

www.metmann.com - Tel +34 93 851 15 99 - C/ Fontcuberta, 32-36 08560 - Manlleu (Barcelona) SPAIN

## Get In Touch



Call: 0845 6880112



Email: [info@adremit.co.uk](mailto:info@adremit.co.uk)

## Our Address

Puravent, Adremit Limited, Unit 5a, Commercial Yard,  
Settle, North Yorkshire, BD24 9RH

# EVAPORATIVE COOLING EVAPORATIVE COOLING

## ADIABATIC COOL BOX

## INOX

## V / VS / H

MODEL	SECTION	EFFICIENCY 90% 1 m/s	LOSS	EFFICIENCY 88% 1.5 m/s	LOSS	WATER BOMB	EQUIPMENT	FILTRADO G4	UV TREATMENT
Model	Section	Panel efficiency	PRESSURE	Panel efficiency	PRESSURE	Water pump	INOX	G4 Filter	UV Treatment
Model	Section	Panel efficiency	Pressure loss	Panel efficiency	Pressure loss	Water pump	Inox equipment	Filtered G4	UV treatment
			Loss of pressure		Loss of pressure		Stainless steel device		
	m2	m³/h	Well	m³/h	Well	IN	€	€	€
ACB-15-V-100-I	2,84	10.224	18	15.336	40	16	15021551000I 04150115G412I 031501101010M		
ACB-25-V-100-I	4,80	17.280	18	25.920	40	250	15022551000I 04150125G412I 031501101010M		
ACB-40-V-100-I	7,20	25.920	18	38.880	40	250	15024051000I 04150140G412I 031501101010M		
ACB-55-V-100-I	10,8	38.880	18	58.320	40	250	15025521000I 04150140G412I 031501102020M		
ACB-70-V-100-I	12,88	46.368	18	69.552	40	250	15027021000I 04150170G412I 031501102020M		
ACB-07-VS-100-I	1,60	5.760	18	8.640	40	16	15020761000I 04150107G412I	031501101010M	
ACB-15-VS-100-I	2,84	10.224	18	15.336	40	16	15021561000I 04150115G412I	031501101010M	
ACB-25-VS-100-I	4,80	17.280	18	25.920	40	250	15022561000I 04150125G412I	031501101010M	
ACB-40-VS-100-I	7,20	25.920	18	38.880	40	250	15024061000I 04150140G412I	031501101010M	
ACB-55-VS-100-I	10,8	38.880	18	58.320	40	250	15025531000I 04150140G412I	031501102020M	
ACB-70-VS-100-I 12,88		46.368	18	69.552	40	250	15027031000I 04150170G412I	031501102020M	
ACB-07-H-100-I	1,20	4.320	18	6.480	40	16	15020741000I 04150107G412I	031501101010M	
ACB-15-H-100-I	2,13	7.668	18	11.502	40	16	15021541000I 04150115G412I	031501101010M	
ACB-25-H-100-I	3,60	12.960	18	19.440	40	250	15022541000I 04150125G412I	031501101010M	
ACB-40-H-100-I	5,40	19.440	18	29.160	40	250	15024041000I 04150140G412I	031501101010M	
ACB-55-H-100-I	8,10	29.160	18	43.740	40	250	15025511000I 04150140G412I	031501102020M	
ACB-70-H-100-I	9,66	34.776	18	52.164	40	250	15027011000I 04150170G412I	031501102020M	

Pulse temperatures 1.0 m/s / *Pulse temperatures / Pulse temperature*  
(Panel / *Panel / Panneau* 5090 100mm - *Eficiencia / Efficiency / Efficacité* 90%)

HUMIDITY	TEMPERATURA EXTERIOR / Exterior temperature						
Humidity / Humidity 30°C	32°C	34°C	36°C	40°C	42°C	44°C	
20%	17,0	18,4	19,7	21,0	23,7	25,0	26,3
25%	18,1	19,5	20,9	22,3	25,1	26,5	27,9
30%	19,1	20,6	22,0	23,5	26,4	28	29,4
40%	21,0	22,6	24,2	25,7	28,9	30,6	32,2
50%	22,8	24,4	26,1	27,8	31,2	32,9	34,6
60%	24,4	26,1	27,9	29,7	33,3	35,1	36,8

Pulse temperatures 1.5 m/s / *Pulse temperatures / Pulse temperature*  
(Panel / *Panel / Panneau* 5090 100mm - *Eficiencia / Efficiency / Efficacité* 88%)

HUMIDITY	TEMPERATURA EXTERIOR / Exterior temperature						
Humidity / Humidity 30°C	32°C	34°C	36°C	40°C	42°C	44°C	
20%	17,3	18,7	20,0	21,3	24,0	25,4	26,7
25%	18,3	19,8	21,2	22,6	25,4	26,8	28,3
30%	19,3	20,8	22,3	23,8	26,7	28,3	29,8
40%	21,2	22,8	24,4	26,0	29,2	30,8	32,4
50%	22,9	24,6	26,3	28,0	31,4	33,1	34,8
60%	24,5	26,3	28,1	29,8	33,4	35,2	37,0



**MET MANN**  
Industrial Climate Solutions

www.metmann.com - Tel +34 93 851 15 99 - C/ Fontcuberta, 32-36 08560 - Manlleu (Barcelona) SPAIN

### Get In Touch



Call: 0845 6880112



Email: [info@adremit.co.uk](mailto:info@adremit.co.uk)

### Our Address

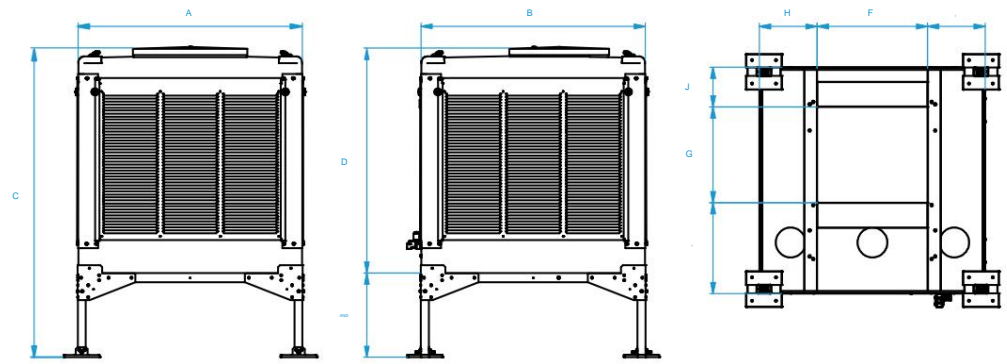
Puravent, Adremit Limited, Unit 5a, Commercial Yard,  
Settle, North Yorkshire, BD24 9RH

## DIMENSIONS / Dimensions (mm)

### ACB-15-V

#### LOWER AIR OUTLET

Bottom air discharge  
Lower air outlet

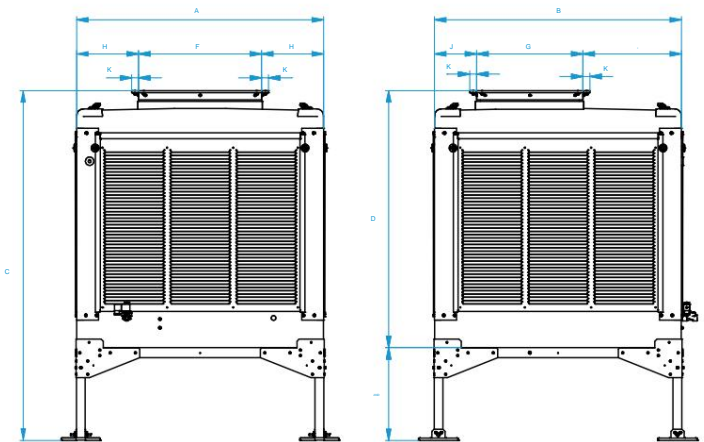


MODEL	A	B	C	D	...	F	G	H	J	K	EMPTY WEIGHT Kg	WEIGHT WITH WATER Kg	
Model											Empty wgt.	Wgt. w/water	
Model											Unloaded weight)	Weight (water)	
ACB-15-V	1127	1127	1555	1133	422	555	480	290	290	199	30	105 (max.)	125 (max.)

### ACB-07/15-VS

#### UPPER AIR OUTLET

Top air discharge  
Top air outlet

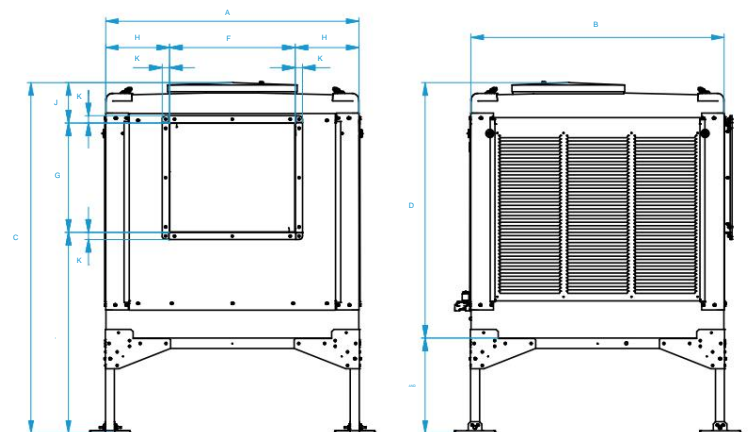


MODEL	A	B	C	D	...	F	G	H	J	K	EMPTY WEIGHT Kg	WEIGHT WITH WATER Kg	
Model											Empty wgt.	Wgt. w/water	
Model											Unloaded weight)	Weight (water)	
ACB-07-VS	822	822	1401	979	422	390	345	216	325	152	30	71 (max.)	81 (max.)
ACB-15-VS	1127	1127	1591	1169	422	561	485	283	450	192	30	105 (max.)	125 (max.)

### ACB-07/15-H

#### SIDE AIR OUTLET

Side air discharge  
Side air outlet



MODEL	A	B	C	D	...	F	G	H	J	K	EMPTY WEIGHT Kg	WEIGHT WITH WATER Kg	
Model											Empty wgt.	Wgt. w/water	
Model											Unloaded weight)	Weight (water)	
ACB-07-H	822	822	1382	959	422	389	343	216	749	290	30	71 (max.)	81 (max.)
ACB-15-H	1127	1127	1555	1269	422	559	485	284	892	179	30	105 (max.)	125 (max.)



**MET MANN**  
Industrial Climate Solutions

www.metmann.com - Tel +34 93 851 15 99 - C/ Fontcuberta, 32-36 08560 - Manlleu (Barcelona) SPAIN

## Get In Touch



Call: 0845 6880112



Email: [info@adremit.co.uk](mailto:info@adremit.co.uk)

## Our Address

Puravent, Adremit Limited, Unit 5a, Commercial Yard,  
Settle, North Yorkshire, BD24 9RH



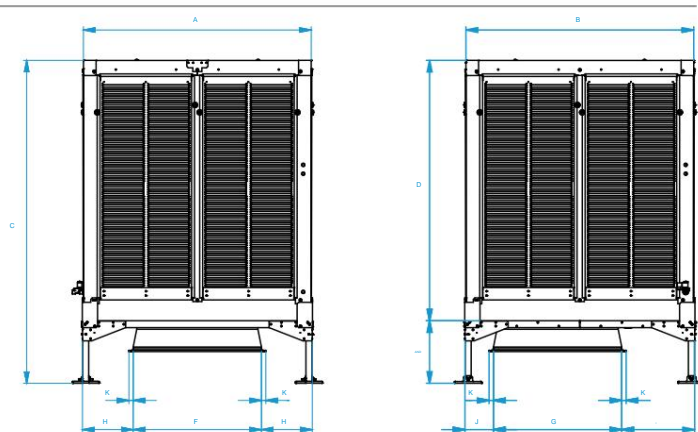
# EVAPORATIVE COOLING EVAPORATIVE COOLING

## DIMENSIONS / Dimensions (mm)

### ACB-25/40-V

#### LOWER AIR OUTLET

Bottom air discharge  
Lower air outlet

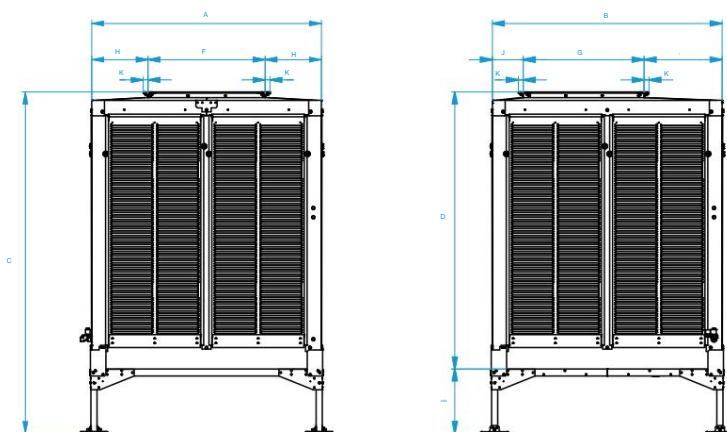


MODEL	A	B	C	D	...	F	G	H	J	K	EMPTY WEIGHT Kg	WEIGHT WITH WATER Kg	
Model											Empty wgt.	Wgt. w/water	
Model											Unloaded weight	Weight (water)	
ACB-25-V	1510	1510 1684	1262	422		850	850	337	486	185	30	250 (max.)	333 (max.)
ACB-40-V	1510	1510 2184	1762	422		850	850	337	484	190	30	288 (max.)	371 (max.)

### ACB-25/40-VS

#### UPPER AIR OUTLET

Top air discharge  
Top air outlet

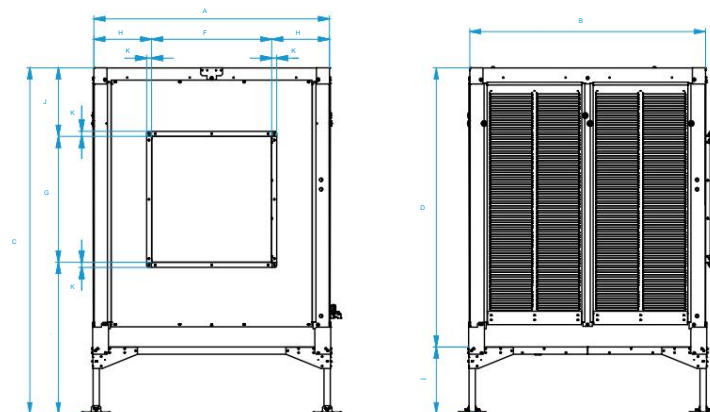


MODEL	A	B	C	D	...	F	G	H	J	K	EMPTY WEIGHT Kg	WEIGHT WITH WATER Kg		
Model											Empty wgt.	Wgt. w/water		
Model											Unloaded weight	Weight (water)		
ACB-25-VS 1510		1510	1741	1319		422	642	643	434	667	200	30	250 (max.)	333 (max.)
ACB-40-VS 1510		1510	2238	1816		422	770	795	370	513	203	30	280 (max.)	371 (max.)

### ACB-25/40-H

#### SIDE AIR OUTLET

Side air discharge  
Side air outlet



MODEL	A	B	C	D	...	F	G	H	J	K	EMPTY WEIGHT Kg	WEIGHT WITH WATER Kg		
Model											Empty wgt.	Wgt. w/water		
Model											Unloaded weight	Weight (water)		
ACB-25-H 1510		1510	1684	1262		422	640	640	435	890	155	30	250 (max.)	333 (max.)
ACB-40-H 1510		1510	2184	1762		422	770	795	370	956	433	30	288 (max.)	371 (max.)



**MET MANN**  
Industrial Climate Solutions

www.metmann.com - Tel +34 93 851 15 99 - C/ Fontcuberta, 32-36 08560 - Manlleu (Barcelona) SPAIN

#### Get In Touch

Call: 0845 6880112  
Email: [info@adremit.co.uk](mailto:info@adremit.co.uk)

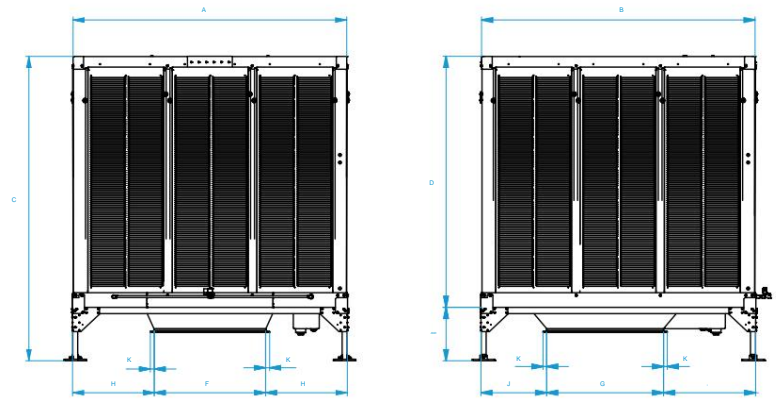
#### Our Address

Puravent, Adremit Limited, Unit 5a, Commercial Yard,  
Settle, North Yorkshire, BD24 9RH

## DIMENSIONS / Dimensions (mm)

**ACB-55/70-V****LOWER AIR OUTLET**

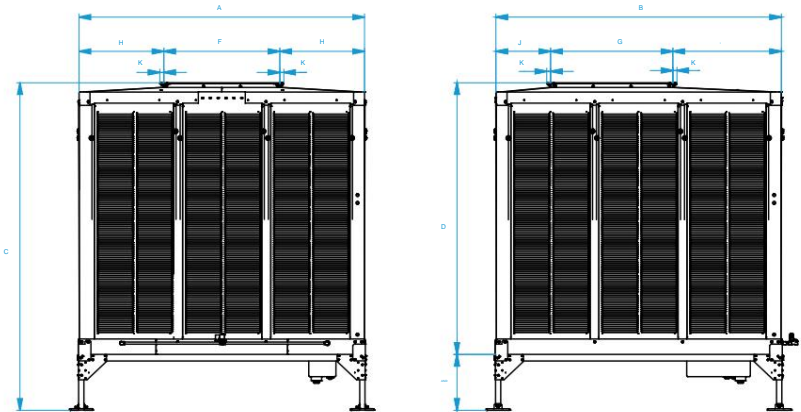
Bottom air discharge  
Lower air outlet



MODEL	A	B	C	D	...	F	G	H	J	K	EMPTY WEIGHT Kg	WEIGHT WITH WATER Kg	
Model											Empty wgt.	Wgt. w/water	
Model											Unloaded weight	Weight (water)	
ACB-55-V	2189	2189	2149	1723	426	890	936	655	737	526	30	375 (max.)	570 (max.)
ACB-70-V	2189	2189	2429	2004	426	890	936	654	737	526	30	400 (max.)	595 (max.)

**ACB-55/70-VS****UPPER AIR OUTLET**

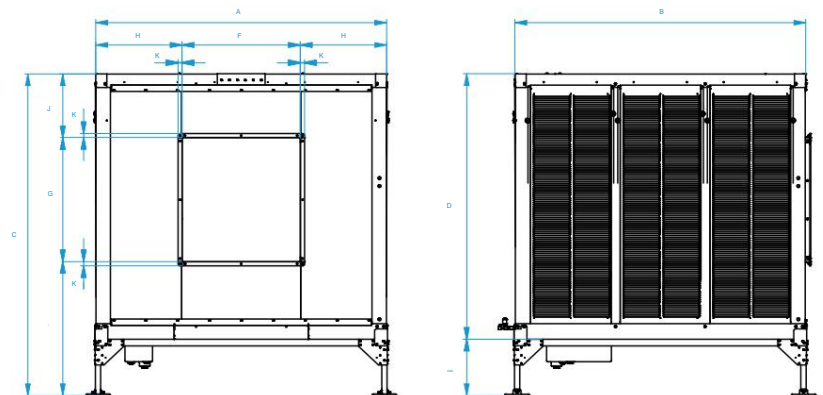
Top air discharge  
Top air outlet



MODEL	A	B	C	D	...	F	G	H	J	K	EMPTY WEIGHT Kg	WEIGHT WITH WATER Kg	
Model											Empty wgt.	Wgt. w/water	
Model											Unloaded weight	Weight (water)	
ACB-55-VS	2189	2189	2224	1797	426	889	935	650	830	425	30	375 (max.)	570 (max.)
ACB-70-VS	2189	2189	2500	2073	426	889	938	650	832	419	30	400 (max.)	595 (max.)

**ACB-55/70-H****SIDE AIR OUTLET**

Side air discharge  
Side air outlet



MODEL	A	B	C	D	...	F	G	H	J	K	EMPTY WEIGHT Kg	WEIGHT WITH WATER Kg
Model											Empty wgt.	Wgt. w/water
Model											Unloaded weight	Weight (water)
AD-55-H	2189	2189	2149	1724	426	891	936	649 1050	164	30	375 (max.)	570 (max.)
AD-70-H	2189	2189	2429	2004	426	890	936	650 1012	482	30	400 (max.)	595 (max.)



**MET MANN**  
Industrial Climate Solutions

www.metmann.com - Tel +34 93 851 15 99 - C/ Fontcuberta, 32-36 08560 - Manlleu (Barcelona) SPAIN

## Get In Touch



Call: 0845 6880112



Email: [info@adremit.co.uk](mailto:info@adremit.co.uk)

## Our Address

Puravent, Adremit Limited, Unit 5a, Commercial Yard,  
Settle, North Yorkshire, BD24 9RH