



# Air Curtains

Product Profile

The VTS logo is located within a teal hexagonal shape. It consists of the letters "VTS" in a white, italicized, sans-serif font. Above the letter "V" is a white, curved swoosh that arches over the letters.



## **Your projects, challenges and requirements are our focus. We have a dedicated team that can engineer tailored solutions for your commercial HVAC application.**

*Oceania Solutions Group is an Australian owned business that focuses on providing engineered HVAC solutions. We value the importance of relationships with our clients and partners. Our team enjoy collaborating and solving complex 'design and construct' projects for your business with our product solutions.*

Oceania Solutions Group are proud of our extensive portfolio and experience within HVAC industry. From industrial applications through to commercial air conditioning installations for tropical and high humidity environments.

Operating throughout Australia, New Zealand and the South Pacific Islands, we provide engineered technical data and commercial support for a wide range of HVAC solutions.

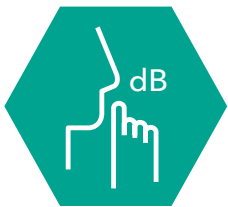
Our experienced team of HVAC professionals work hand-in-hand with market leading suppliers of HVAC solutions and equipment.

With international accreditation from Eurovent, CTI, AHRI, TÜV and AMCA, our products are rigorously tested and certified, meeting Australian and New Zealand standards and regulations.

Partnering with trusted international suppliers, we are available to provide an engineered solution for your next project.

# Components and features

WING is the new generation device created from a passion for a light and modern design. Representing characteristics of gliders, the minimal casing has a streamlined form of a wing, that seems to float in the air. The diamond style side panels hide components in an innovative curtain body to set new standards for air curtains. WING combines the unique design and excellent efficiency to redefine the air curtain image.



Quiet operation



Efficient and reliable EC motors



BIM compatible  
Revit® files



Available online 24/7  
[oceania-group.com/air-curtains](https://oceania-group.com/air-curtains)

## Silent and powerful



### Low resistance of the air inlet

A larger surface of the air inlet allows the heat exchanger to be fully utilised.

### Optimal air flow rate

The design of the blades ensures an increase in the air stream range by 20% compared to conventional approaches. A larger air intake area makes it possible to take full advantage of heat exchanger power.

### Quiet operation

The design supports the air flow and effectively reduces the level of sound emitted to the environment.

### Configured to building specifications

The electronically controlled motor allows an easy adjustment of the WING to any protected entry-way requirements.

## Design and performance



### Water heater

The high-performance, two-row water heater is adapted to operate with low parametric factors.



### Electric heater

The low-temperature, high-power heater ensures safe operation without a fan overrun. The asymmetrical distribution of the heating power provides the best adjustment to individual customer needs.



### Combination of functionality and design

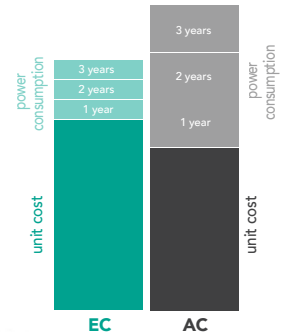
The characteristic diamond-shaped element of the side cover not only protects the inlet of the engine cooling system but also fulfills an ability to access function.

## Quality and design



### Electricity savings

Modern design of the engine and fan saves up to 60% of energy compared to conventional solutions.



### Simple cleaning

Thanks to the optimised construction of the covers, cleaning the air curtain is easy and does not require the disassembly of any part, always ensuring hygienic operation.



### Galvanised steel casing

Double coating (galvanisation + powder paint) provides long-term protection against corrosion and consistent aesthetic qualities.

### High efficiency

High power output is a result of applying a heater with large heat exchange surface arranged in a uniform air stream.

# Technical parameters

Parameters	UNIT	Water air curtain			Electrical air curtain			Ambient air curtain		
		WING W100	WING W150	WING W200	WING E100	WING E150	WING E200	WING C100	WING C150	WING C200
		EC	EC	EC	EC	EC	EC	EC	EC	EC
VTS article No.		1-4-2801-0055	1-4-2801-0056	1-4-2801-0057	1-4-2801-0058	1-4-2801-0059	1-4-2801-0060	1-4-2801-0061	1-4-2801-0062	1-4-2801-0063
maximum door width (1 device)	m	1	1,5	2	1	1,5	2	1	1,5	2
maximum door height (vertical stream range)**	m	3,7			3,7			4		
maximum exhaust flow rate***	m³/h	1850	3100	4400	1850	3150	4500	1950	3200	4600
heating power range*	kW	4-17	10-32	17-47	2/6 or 4/6	4/12 or 8/12	6/15 or 9/15	-		
maximum temperature of heating agent	°C	95			-			-		
maximum operating pressure	MPa	1,6			-			-		
water volume	dm³	1,6	2,6	3,6	-			-		
number of	pcs	2			-			-		
supply voltage	V/ph/Hz	~ 230/1/50			~230/1/50 for 2kW 400/3/50 for 2/4/6kW	~400/3/50		~230/1/50		
electric heating coil power	kW	-			2 i 4	4 i 8	6 i 9			
electric heating coil current draw	A	-			3/6/ max 9	6/11,3/ max 17,3	8,5/12,9/ max 21,4			
motor power (EC motor)	kW	0,2	0,3	0,45	0,2	0,3	0,45	0,2	0,3	0,45
rated current (EC motor)	A	1,1	1,3	1,9	1,1	1,3	1,9	1,1	1,3	1,9
weight (without water) EC	kg	21,5	29	37,5	22	30,5	39	19	25,5	32,5
protection rating	IP	IP20 (standard) / IP54 (optional)								
casing colour		RAL 9016, outlet grid: RAL 9022								

FAN SPEED	UNIT	WATER AIR CURTAIN			ELECTRIC AIR CURTAIN			AMBIENT AIR CURTAIN		
		1m	1,5m	2m	1m	1,5m	2m	1 m	1,5 m	2 m
III	dB(A)***	61	63	66	62	62	64	66	67	67
II		59	62	65	55	60	63	63	66	65
I		56	57	60	53	55	59	57	58	61

\* available heating power in the control option configuration: Wing E100 2/6 kW or 4/6 kW, for Wing E150 4/12kW or 8/12kW, for Wing E200 6/15 kW or 9/15 kW

\*\* air stream range depends on curtain operation speed

\*\*\* measurement conditions: semi-open space, horizontal installation on the wall, measurement performed 3 m away from the device

## 3 Constituents of Success Worldwide





# Controller WING EC



- Cooperation with door sensor
- Time calendar for workdays and weekends
- Works with BMS systems
- Possibility of working in 3-level mode of speed control and 2-level mode of heating power
- Up to 8 air curtains can be connected to one controller

## Why VTS?

The highest quality products. Competitive market prices. Short delivery times. These three pillars of our market policy are why VTS is always one step ahead worldwide.

HMI-WING EC is a control panel, dedicated for all types of WING curtains. It has an interface with RTU Modbus protocol for easy integration with building management systems (BMS). It is characterised by very easy and intuitive operation due to the comfortable, practical keypad and backlit screen.

HMI-WING EC controller has been made from electronic materials of the highest class. The panel is adapted for continuous operation with 230 V AC single-phase power supply. Due to the well-thought design, the controller is installed in a very easy manner on a special mounting bracket in the Ø60 mm flush mounting box. The mounting bracket enables easy installation and removal of the panel. Electric wires are connected directly to the terminal block, located at the back of the controller. The panel enables three-position regulation of rotational speed of the fans with EC motors, as well as two-position regulation of the heating power.

Due to the integrated thermostat and temperature sensor as well as programmer function, the controller defines operating parameters in the weekly schedule (on working days/at weekend, with 2 heating periods per 24 hours).

The installation of an external door sensor enables the selection of one of three modes of automatic operation:

- Door (default one): heating with the air supply or only the air supply, maintenance of set temperature. Active only with an open door.
- Room: heating with the air supply or only the air supply (air supply activated manually), maintenance of the set temperature. Active regardless of the status of the door sensor.
- Door + room: heating with the air supply or only the air supply, maintenance of the set temperature. Active, depending on the status of the door sensor.

HMI-WING EC controller optimises the operation of the curtains, ensuring their continuous and reliable operation, and well-thought functions of the device provide significant power efficiency.



# Accessories



Controller WING EC		
VTS article No.	1-4-2801-0155	
Motor support	EC	
Power supply voltage	V/ph/Hz	~230/1/50
Permissible load	A	1A for 230VAC 0,02A for 0-10V
Setting range	°C	5...40
protection rating	IP	30



Controller WING EC		
VTS article No.	1-4-0101-0451	
Motor support	EC	
Power supply voltage	V/ph/Hz	~230/1/50
Permissible load	A	1A for 230VAC 0,02A for 0-10V
Setting range	°C	5...40
protection rating	IP	30



Door sensor (reed switch)*	
VTS article No.	1-4-0101-0454
Contact configuration	NO
Switching current	500 mA
Switching voltage	max 200 V
Connection	screw



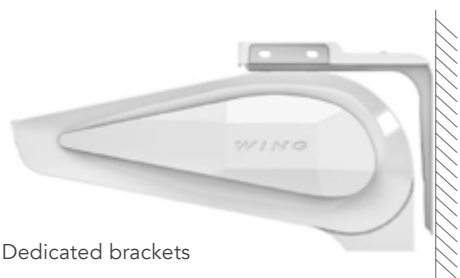
With actuator (VA-VEH202TA)		
VTS article No.	1-2-1204-2019	
Power supply voltage	V/ph/Hz	~230/1/50
Opening/	min	3-Mar
Kvs	-	4,5
protection rating	IP	54

\* cooperations with WING EC controller



# Installation

Dedicated brackets and fixing points enable immediate installation of the curtain.

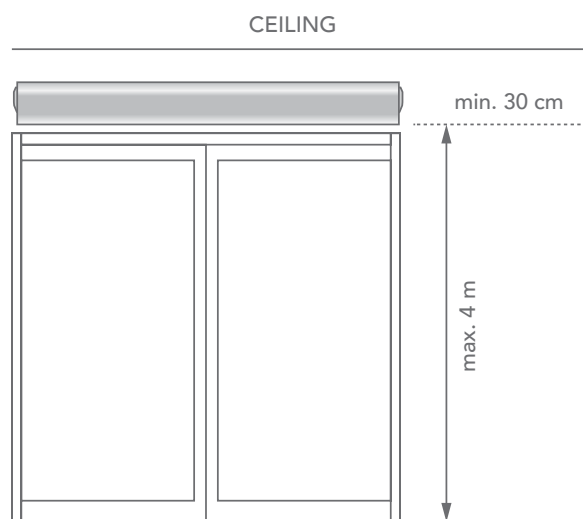


Dedicated brackets

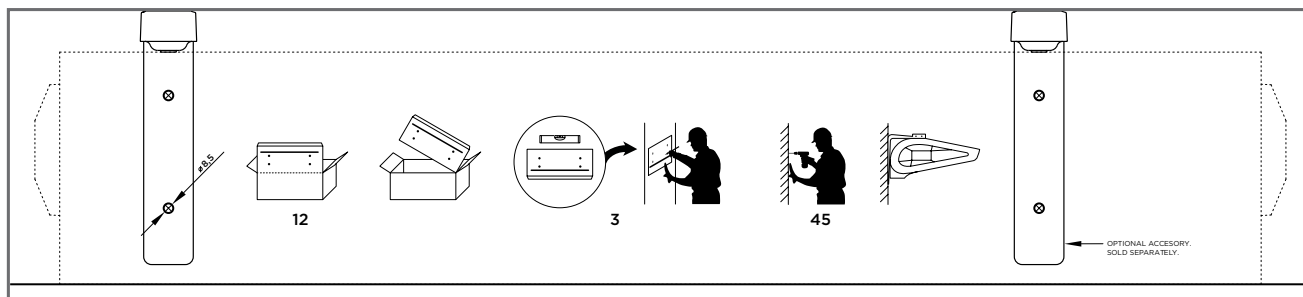


Fastening pins

The maximum mounting height is 4m. The minimum distance between the air outlet of the curtain and the ceiling is 30 cm.



## Installation template

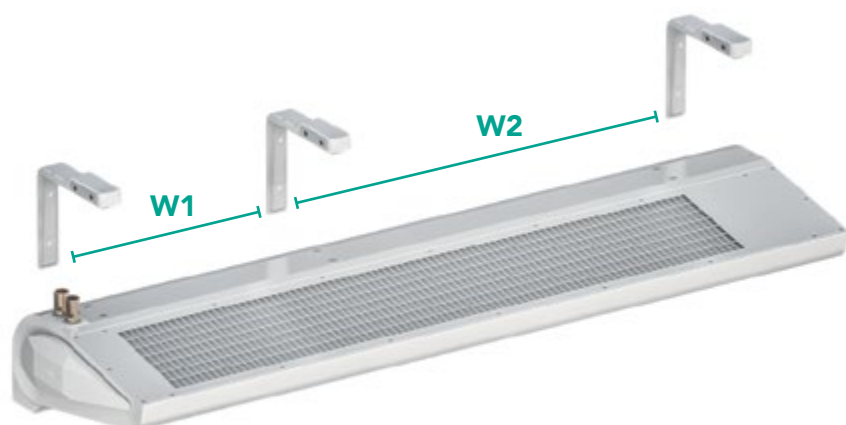


Each package of the WING Air Curtain comes with a template containing hole spacing and line leveling. All you need to do is to cut the template out of the cardboard lid and you are ready for the assembly.





# Dimensions



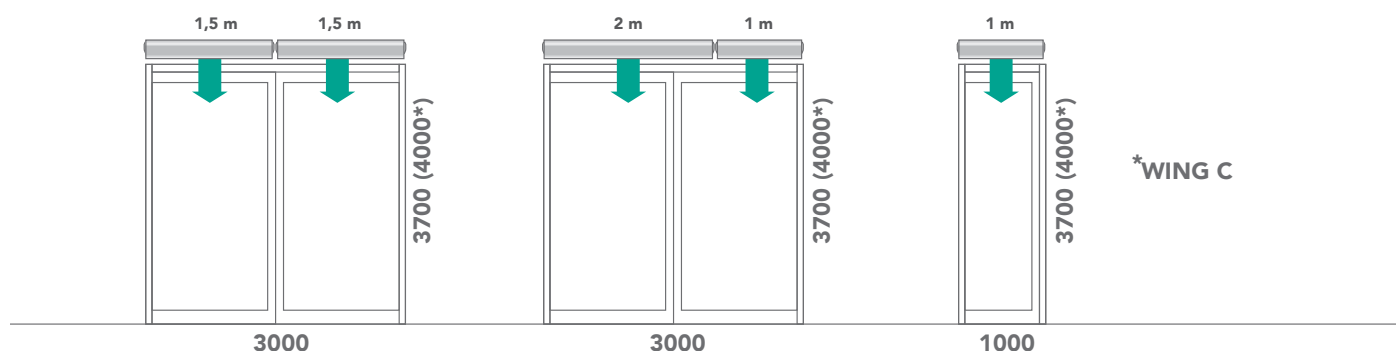
Curtain type	W1 [mm]	W2 [mm]
<b>WING 100</b>	772	-
<b>WING 150</b>	502	772
<b>WING 200</b>	921	910

## Installation example

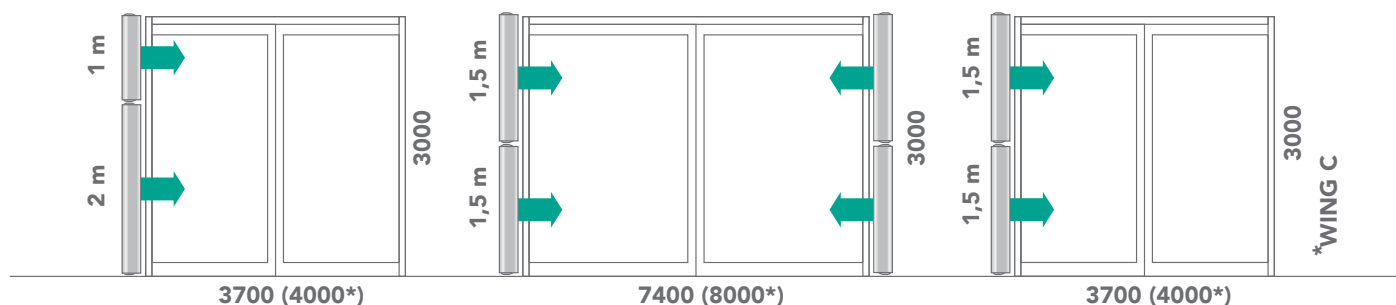
Every WING Air Curtain can be mounted horizontally and vertically, except for electric. Electric is the only air curtain that cannot be mounted vertically. Due to the slim design, very small height of the housing and the inclined air inlet, the device may be mounted in a limited space above the door, without any effect on performance.



### Horizontal installation



### Vertical installation



**Electric curtain cannot be mounted vertically!**

# WING curtain with EC motor



## Energy efficiency

- Higher efficiency throughout the adjustment range in comparison to regular motors
- Excellent durability
- Low maintenance costs
- Possibility of connecting directly to BMS system
- Silent with considerable rates of rotation
- Adjustment of fan rates rotation with 0-10V DC signal

## Technical parameters

### WING **W**

#### Water heat exchanger

Heating power range:  
**4 – 47 Kw**

Exhaust flow rate:  
**1850-4400 M3/h**

Maximum air coverage:  
**3,7 M**

### WING **E**

#### Electric heating coil

Heating power range:  
**2 – 15 Kw**

Exhaust flow rate:  
**1850-4500 M3/h**

Maximum air coverage:  
**3,7 M**

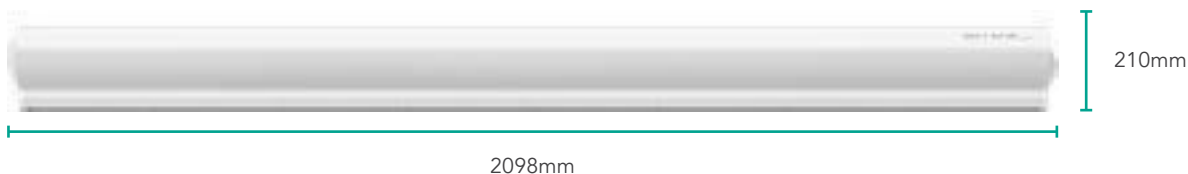
### WING **C**

#### Without heat exchanger (ambient)

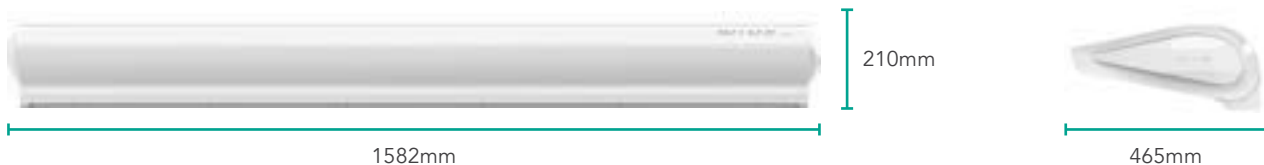
Maximum air coverage:  
**4 M**

Exhaust flow rate:  
**1950-4600 M3/h**

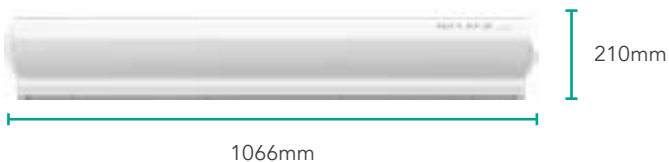
#### 200 W/E/C



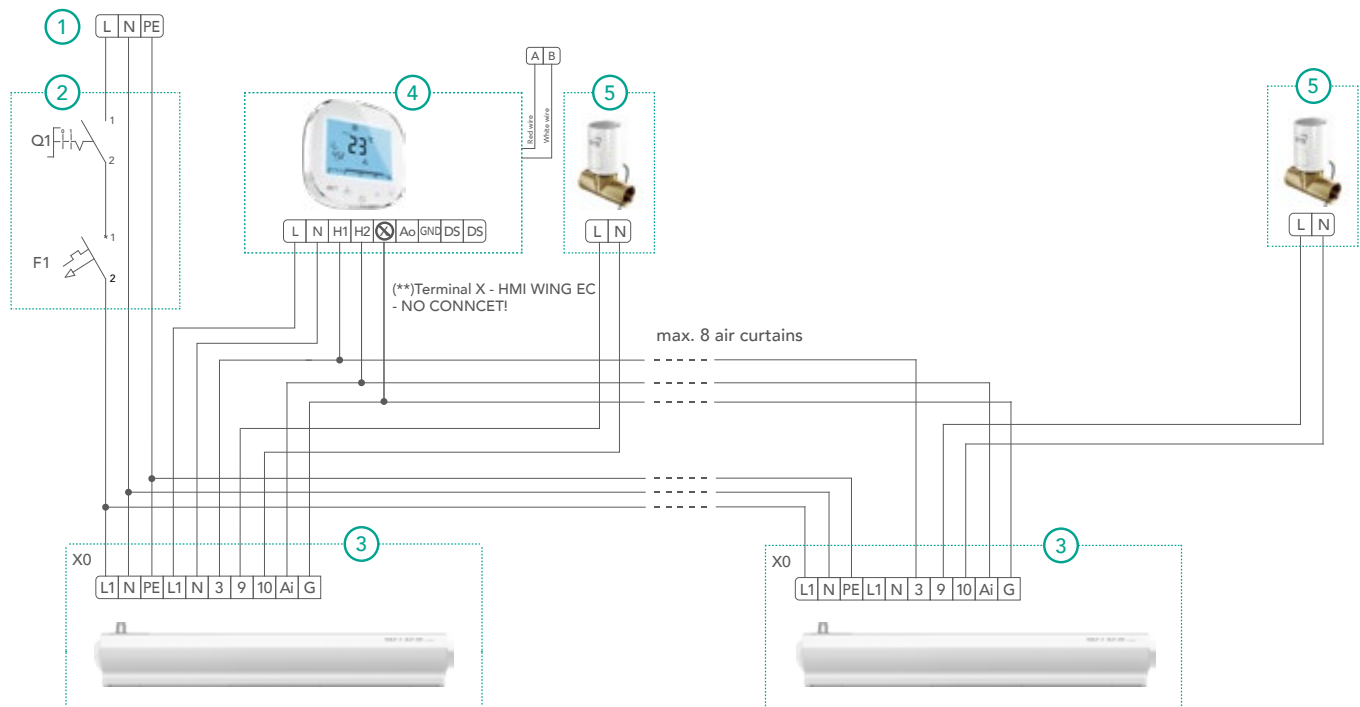
#### 150 W/E/C



#### 100 W/E/C



# Sample connection diagram for the air curtain



1. Power supply 230V/50 Hz
2. Main switch, fuses
3. WING W100/150/200
4. HMI WING EC controller

5. Valve with actuator

All EC air curtains are characterised by ease and simplicity of connection

## Recent projects

**Woolworths  
Metro:  
Fish Lane  
Queensland**

**Advanti Bike Shop  
Fortitude Valley  
Queensland**

**Westbourne  
Grammar School  
Melbourne**

**Fish Factory  
Morningside  
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**Kingaroy Hospital  
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**Wilston Grange  
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