



WING

AIR CURTAIN
2023



WING

YOUR INVISIBLE BARRIER



Unique shape

A minimal casing with a streamlined form of a wing that seems to float in the air. The diamond style side panels hide the excellent 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.

Quality and design

High quality materials, unique shape and rigid construction are the basic assumptions of the designers of the curtain. Simple clean design of the curtain, double protective coating and the efficient and durable EC motor ensure trouble-free operation of the device.

Energy efficiency

- » Ultra-Premium Efficiency EC Motor Technology
- » Maximum unit efficiency even at reduced speed
- » Smooth speed regulation
- » Allow for up to 40% energy savings over conventional AC motors.

WING is the next generation air curtain created from a passion for a light and modern design representing characteristics of gliders.



HMI WING controller



- » modern and compact design
- » high contrast and clear screen
- » advanced calendar and time clock function
- » door sensor cooperation
- » BMS systems compatibility (Modbus)
- » preset 3-levels speed control (15-100%)
- » build-in thermostat
- » 3-levels of heating power
- » up to 8 air curtains connected with the one controller

DOOR OPTIMUM function

Door Optimum function allows the WING to maintain full protection of the door opening and at the same time optimize costs associated with its operation. It keeps the air curtain operating at minimum speed and continues to protect the door, from the outside air, once the door begins opening it also increases the speed of air by +1 or +2 levels, depending on user's preferences.

Product range

WING E

ELECTRIC HEATER

HEATING POWER RANGE:
7-51 MBH

EXHAUST FLOW RATE:
1085-2756 CFM

MAXIMUM AIR COVERAGE:
10 ft

WING W

WATER HEAT EXCHANGER

HEATING POWER RANGE:
13-160 MBH

EXHAUST FLOW RATE:
1074-2727 CFM

MAXIMUM AIR COVERAGE:
10 ft

WING C

WITHOUT HEAT EXCHANGER (AMBIENT)

EXHAUST FLOW RATE:
1130-2871 CFM

MAXIMUM AIR COVERAGE:
10 ft

Noise level

WATER CURTAIN	Noise level dB(A)*	ELECTRIC AIR CURTAIN	Noise level dB(A)*	AMBIENT AIR CURTAIN	Noise level dB(A)*
WING W100	66.5	WING E100	53-62	WING C100	57-66
WING W150	68.8	WING E150	55-62	WING C150	59-67
WING W200	71.9	WING E200	59-64	WING C200	61-67

Sound data is not AMCA certified

Technical parameters

MODEL	Indeks	Power supply (V/ph/Hz)	Max. Mounting height (ft)	Air curtain outlet area (ft²)	Nozzel Width (in)	Max vel. at nozzle (fpm)	Avg. outlet vel. (fpm)	Air volume (cfm)	Outlet vel. uniformity at nozzle (%)	Power rating (kW)	Motor power (hp)	Heating power range
WATER AIR CURTAIN												
WING W100 115-240/1/60	1-4-2801-0393	240/1/60	10	0.580	30	2335	2264	1074	97	0.3	0.4	13-58 MBH
WING W150 115-240/1/60	1-4-2801-0394	240/1/60	10	0.960	50	2671	2412	1781	91	0.475	0.63	34-109 MBH
WING W200 240/1/60	1-4-2801-0395	240/1/60	10	1.380	72	2528	2362	2727	96	0.475	0.63	58-160 MBH

ELECTRIC AIR CURTAIN												
WING E100 240/1/60	1-4-2801-0322	240/1/60	10	0.580	30	2360	2288	1085	97	0.2	0.27	2/4/6 kW
WING E100 240/3/60	1-4-2801-0328	240/3/60	10	0.580	30	2360	2288	1085	97	0.2	0.27	2/4/6 kW
WING E100 480/3/60 HLD	1-4-2801-0331	480/3/60 HLD	10	0.580	30	2360	2288	1085	97	0.2	0.27	2/4/6 kW
WING E150 240/3/60	1-4-2801-0323	240/3/60	10	0.960	50	2700	2437	1800	91	0.3	0.4	4/8/12 kW
WING E150 480/3/60 HLD	1-4-2801-0329	480/3/60 HLD	10	0.960	50	2700	2437	1800	91	0.3	0.4	4/8/12 kW
WING E200 240/3/60	1-4-2801-0324	240/3/60	10	1.380	72	2555	2387	2756	96	0.475	0.63	6/9/15 kW
WING E200 480/3/60 HLD	1-4-2801-0330	480/3/60 HLD	10	1.380	72	2555	2387	2756	96	0.475	0.63	6/9/15 kW

MODEL	Indeks	Power supply (V/ph/Hz)	Max. Mounting height (ft)	Effective nozzle width (in)	Max vel. at nozzle (fpm)	Avg. outlet vel. (fpm)	Air volume (cfm)	Outlet vel. Uniformity (%)	Power rating (kW)	Motor power (hp)	Heating power range
AMBIENT AIR CURTAIN											
WING C100 240/1/60	1-4-2801-0421	240/1/60	7	26	2231	2107	1197	92	0.3	0.4	-
WING C150 240/1/60	1-4-2801-0422	240/1/60	7	46	2222	2031	1919	91	0.475	0.63	-
WING C200 240/1/60	1-4-2801-0423	240/1/60	7	68	2375	2171	2940	92	0.475	0.63	-

WATER AIR CURTAIN											
WING W100 240/1/60	1-4-2801-0418	240/1/60	7	26	2119	2002	1137	92	0.3	0.4	13-58 MBH
WING W150 240/1/60	1-4-2801-0419	240/1/60	7	46	2111	1929	1823	91	0.475	0.63	34-109 MBH
WING W200 240/1/60	1-4-2801-0420	240/1/60	7	68	2256	2062	2793	92	0.475	0.63	58-160 MBH

ELECTRIC AIR CURTAIN											
WING E100 240/1/60	1-4-2801-0417	240/1/60	7	26	2142	2023	1149	92	0.2	0.27	2/4/6 kW
WING E100 240/3/60	1-4-2801-0411	240/3/60	7	26	2142	2023	1149	92	0.2	0.27	2/4/6 kW
WING E100 480/3/60 HLD	1-4-2801-0414	480/3/60 HLD	7	26	2142	2023	1149	92	0.2	0.27	2/4/6 kW
WING E150 240/3/60	1-4-2801-0412	240/3/60	7	46	2133	1950	1842	91	0.3	0.4	4/8/12 kW
WING E150 480/3/60 HLD	1-4-2801-0415	480/3/60 HLD	7	46	2133	1950	1842	91	0.3	0.4	4/8/12 kW
WING E200 240/3/60	1-4-2801-0413	240/3/60	7	68	2280	2084	2822	92	0.475	0.63	6/9/15 kW
WING E200 480/3/60 HLD	1-4-2801-0416	480/3/60 HLD	7	68	2280	2084	2822	92	0.475	0.63	6/9/15 kW

240V/1ph/60Hz power supply is required to meet NSF-37 standards. The maximum mounting height of the device is 7ft. Failure to meet these conditions means that the device cannot be considered to meet the NSF-37 requirements for custom door entry.



MODEL	Indeks	Power supply (V/ph/Hz)	Max. Mounting height (ft)	Air curtain outlet area (ft ²)	Nozzle Width (in)	Max vel. at nozzle (fpm)	Avg. outlet vel. (fpm)	Air volume (cfm)	Outlet vel. uniformity at nozzle (%)	Power rating (kW)	Motor power (hp)	Heating power range
AMBIENT AIR CURTAIN												
WING C100 115-240/1/60	1-4-2801-0396	240/1/60 115/1/60	10 8	0.580	30	2458 1385	2383 1314	1130 746	97 95	0.3 0.047	0.4	-
WING C150 115-240/1/60	1-4-2801-0397	240/1/60 115/1/60	10 8	0.960	50	2812 1543	2539 1408	1875 1331	91 93	0.475 0.09	0.63	-
WING C200 240/1/60	1-4-2801-0398	240/1/60	10	1.380	72	2661	2486	2871	96	0.475	0.63	-

Test method per ANSI / AMCA Standard 300-14, fig. 1 Setup, Installation type A

	LwA (dB)	Sones (dB)*
WING 100	76	13.2
WING 150	79	15.4
WING 200	82	18.5

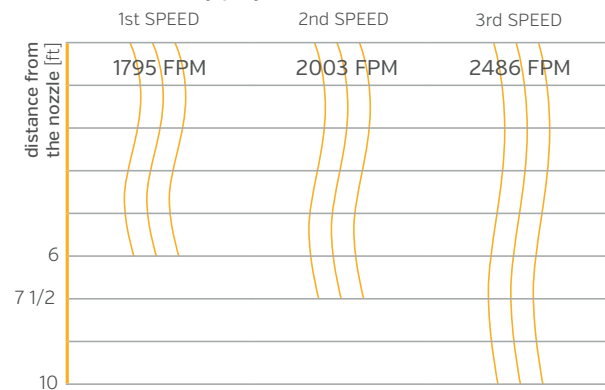
*Sones calculation based on a hemispherical free field at 5 ft.

The ratings shown above are based on tests and procedures performed in accordance with the AMCA Standard 220 Air Performance. Rated data shown is base (unheated - WING C) units. Rated date is shown for base power supply 240V/1ph/60Hz. The AMCA Certified Ratings Seal applies to airflow rate, average outlet velocity, outlet velocity uniformity, velocity projection and power rating at free delivery only.



Stream range

WING C200 - velocity projection

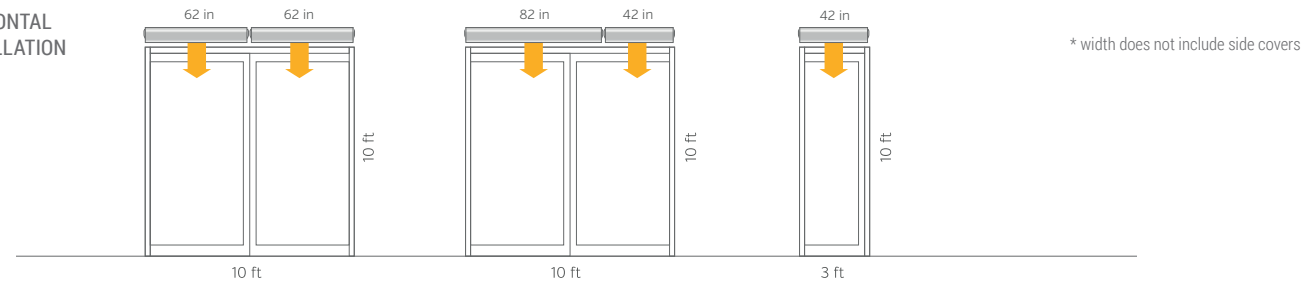


ASHRAE 90.1-2019 vestibule exception requires, "a jet velocity of not less than 6.6 feet per second (2.0 m/s; 400 fpm) at 6.0 in (15 cm) above the floor. The rating based on tests performed in accordance with AMCA Standard 220 Air Performance for WING C200 operating with full capacity which relates to 3rd SPEED.

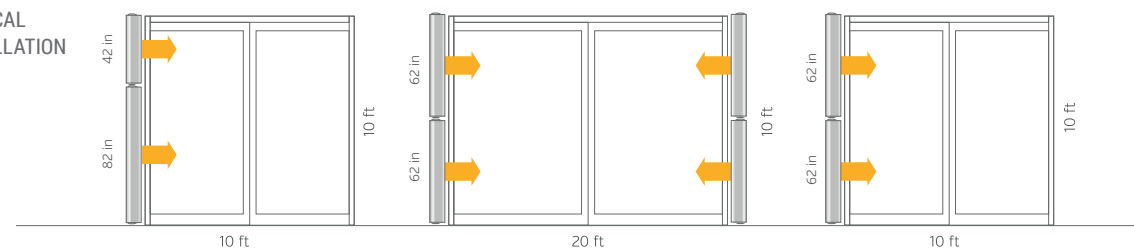
WING 100/150/200



HORIZONTAL INSTALLATION



VERTICAL INSTALLATION



Accessories



HMI WING controller

VTS article No.	1-4-2801-0223
Motor support	- EC
Power supply voltage	V/ph/Hz ~115-240/1/60
Permissible load	A 1A for 240 V AC 0,02A for 0-10V
Setting range	°F 41...104
Protection rating	IP 20

* cooperations with WING EC controller



Door sensor (reed switch)*

VTS article No.	1-4-0101-0454
Contact configuration	- NO
Switching current	mA 500
Switching voltage	V max 200 V
Connection	screw



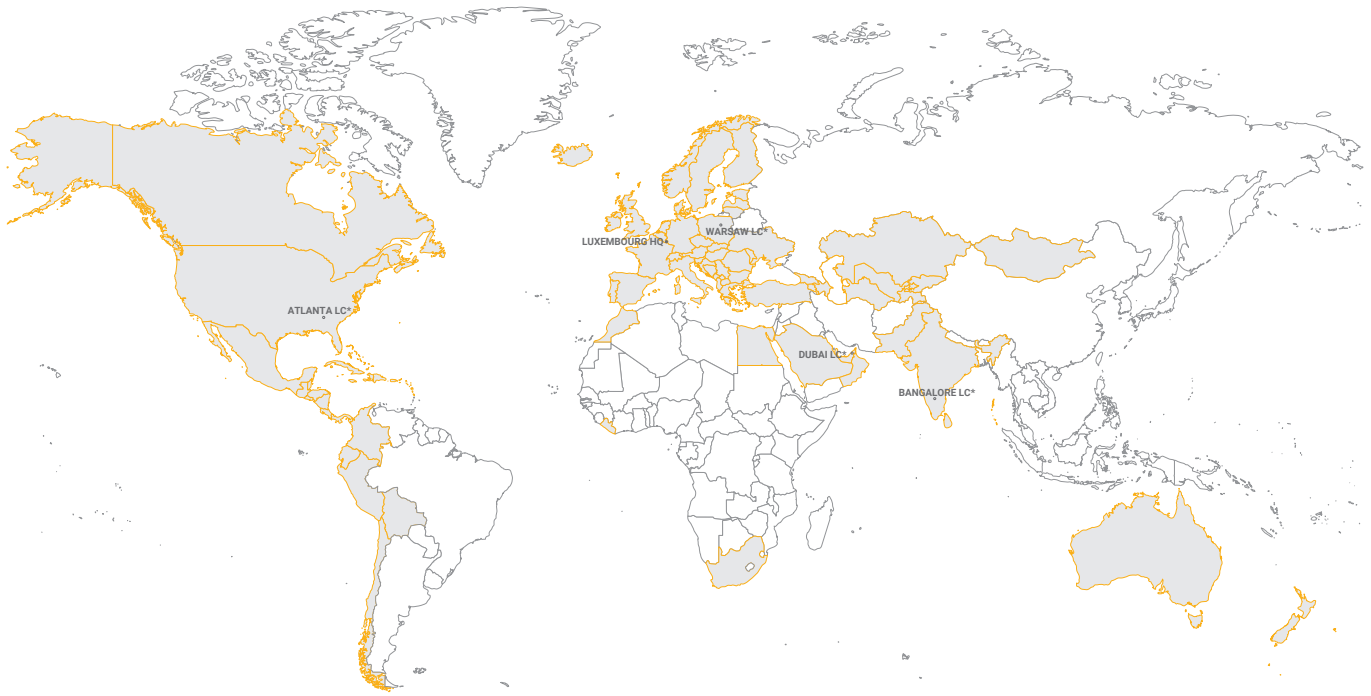
Valve with actuator

VTS article No.	1-2-1204-0003
Power supply voltage	V/ph/Hz ~240/1/60
Power consumption electrical	W 1
Connection	* 3/4
Coefficient of Volume	4.5
Opening/closing time	min 3/3
Protection rating	IP 54



Flex. connection hoses (set)

VTS article No.	1-2-2702-0076
Length	ft 2-3
Connection type	GW/GW 3/4"
Max. fluid pressure	psi 232
Min. working temperature for water	°F 41
Min. working temperature for glycol	°F -4
Max. working temperature	°F 200
Set includes	- hose (2 pcs) gasket (4 pcs)



COMPETITIVE
\$ PRICE

HIGH
CROWN QUALITY

OVER
1 000 000
UNITS
SOLD

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EH CAD CURTAIN SELLECTION TOOL



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The features mentioned are subject to continuous upgrades and can change any time.
VTS assuring continuous improvement for products and data and reserves the right to change design and specifications without notice.