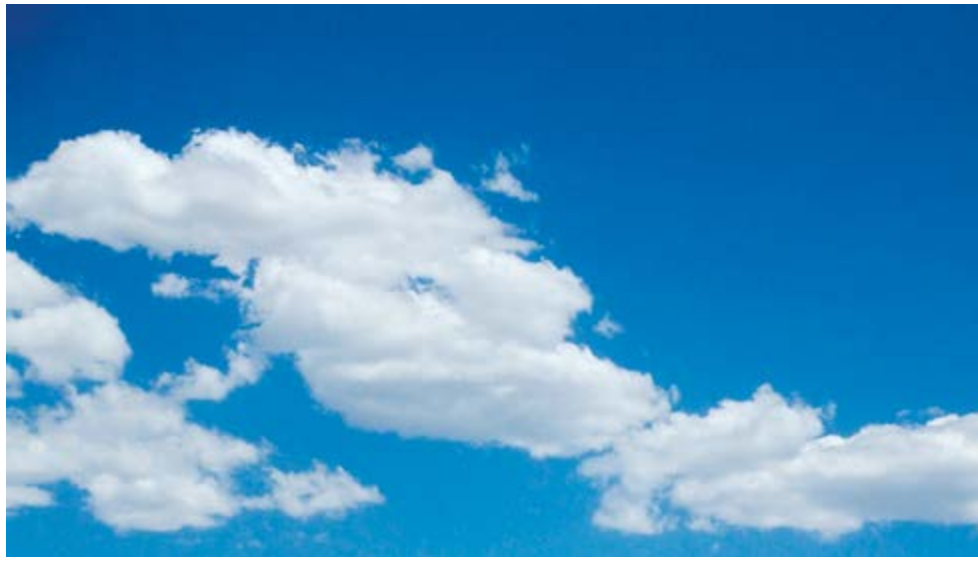
AIR CURTAINS / AIR DOORS
2015-2016



Heat Saving Systems®

ABOUT
HEAT SAVING SYSTEMS

Heat Saving Systems Inc. takes pride in supplying the highest quality air curtains to the market. Incorporating both functionality and elegant design, many years of development have gone into the current line of models. All the models have proven their durability over many years of reliable service, and are designed for maximum efficiency, performance and aesthetic appeal. Our air curtains are designed utilizing technology from NPO Teplomash, a leading manufacturer of industrial, commercial and residential heating and ventilating equipment in Europe since 1992. As one of their product lines, the company produces over 70,000 air curtains a year. All of Heat Savings Systems air curtains conform to current technical standards and are ETL certified for all jurisdictions in North American. We have models to service all your light industrial and commercial applications, as well as several decorative units that will aesthetically fit into the front lobbies and entrances of offices, condominiums and institutional buildings.

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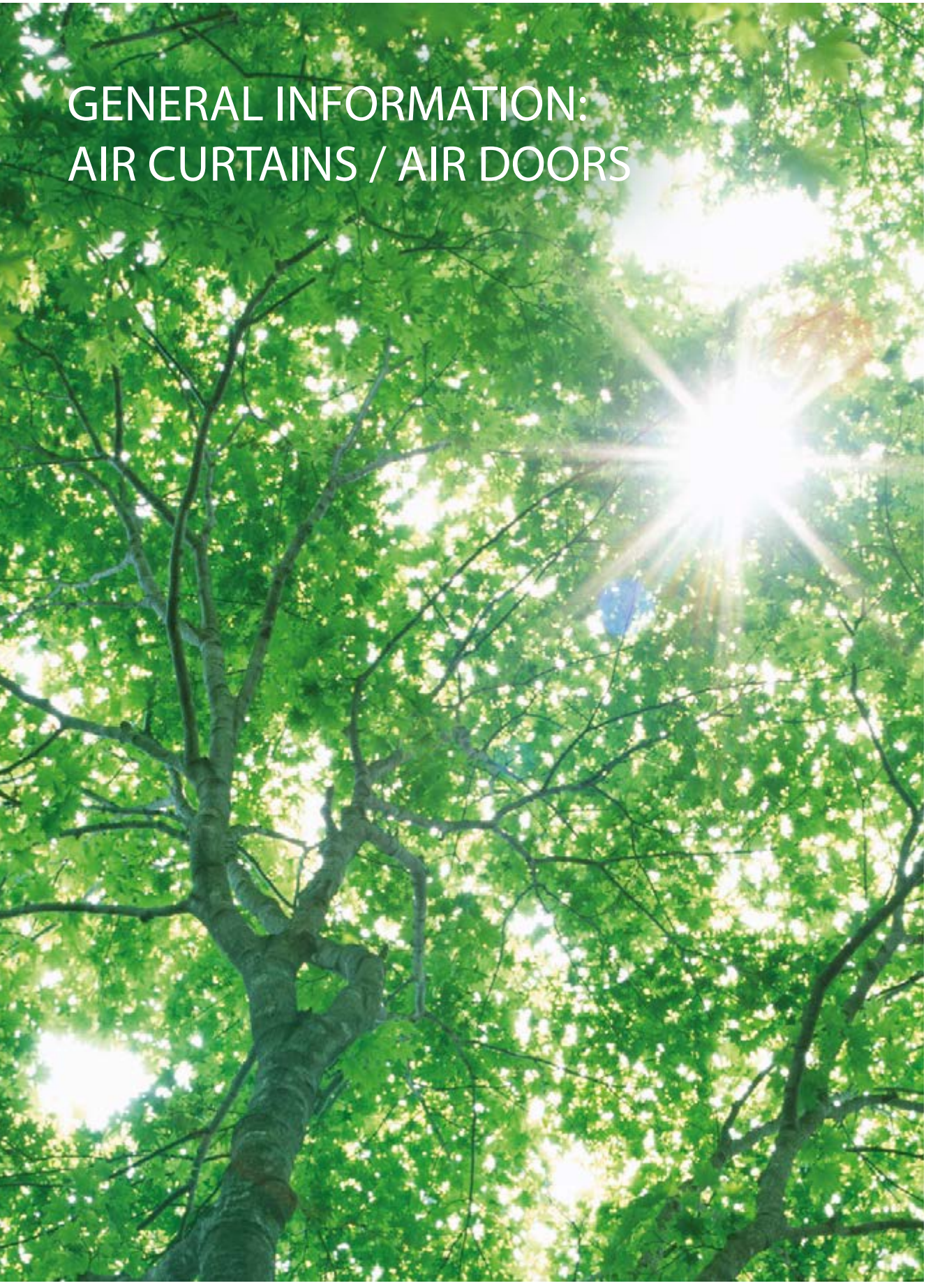


Utility and Cost Savings

Heat Saving Systems manufactures the highest quality air curtains for whatever your requirements may be. Designed to protect against energy losses through openings, when correctly sized and installed efficiencies of up to 80% can be achieved, as compared to a space with no air curtain installed.

Increased Building Efficiency

Air Curtain / Air Door:

- Creates a barrier by blocking the entry of outside air into a building, or escaping air from the interior of the premises
- Minimizes the use of existing HVAC equipment to make up for heat losses or gains
- Will increase the efficiency of existing vestibules, or may replace the need for building one
- Improves employee efficiency by not having to stop to open and close doors
- Maintains comfortable ambient temperatures around entrances and doorways for both customer and employees
- Allows for open doors, to increase customer traffic in retail environments
- Dry off floors in entrance ways for safety

Model Specifications

Heat Saving Systems has a complete range of models for all industrial, commercial and institutional applications, as well as several decorative units. Available as electric or water heated, or unheated (ambient).

- Steel casing coated with high-quality durable polymer coatings
- Fans – cross flow impellers and axial fans
- Motors – external rotor for superior cooling and heat dissipation, less vibration, motor and bearings sealed, higher efficiency and longer operating life
- Thermal protection – motors built-in, heating elements thermal relay protected
- Air curtain circuits are breaker protected
- Electric heating elements - straight stainless steel elements with stainless steel fins
- Water heated units – heat exchanger copper tubing with aluminum fins for efficient heat transfer. Rated for up to 70lbs psi. Equipped with drains in case of freezing risk
- All (non-decorative) units can be installed horizontally or vertically
- Complete with control panels
- Decorative models available in polished or matte stainless steel.

Heat Saving Systems has a full range of air curtains for many applications, and have been installed and proven to be effective in all types of buildings and regional climates. Many factors must be considered when specifying a unit above and beyond the size of opening being considered, especially where high traffic areas, large area or volume buildings, extreme interior and exterior temperature variables, the intended use etc. For further information see "Model Selection Guide", page 5.

Model Specifications

When sizing a unit, must consider:

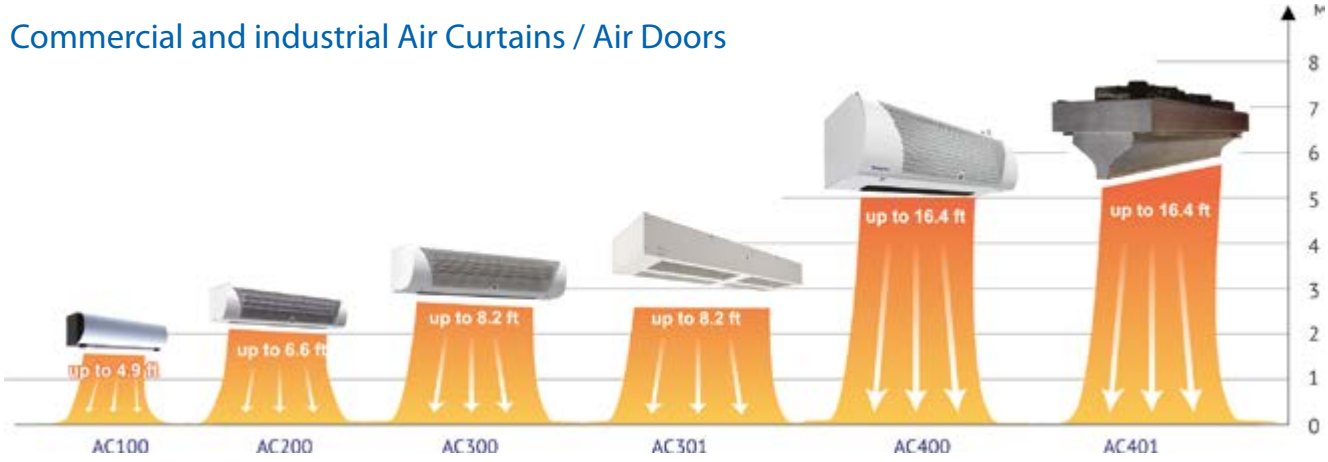
- Size of opening
- Exterior median low temperature
- Interior ambient temperature required
- Building air systems…positive or negative pressures
- Exterior wind factors
- Water systems – hot water temp., flows in litres or gallons per minute
- Building or area volume
- Pedestrian or commercial traffic at entryway

Applications and Construction

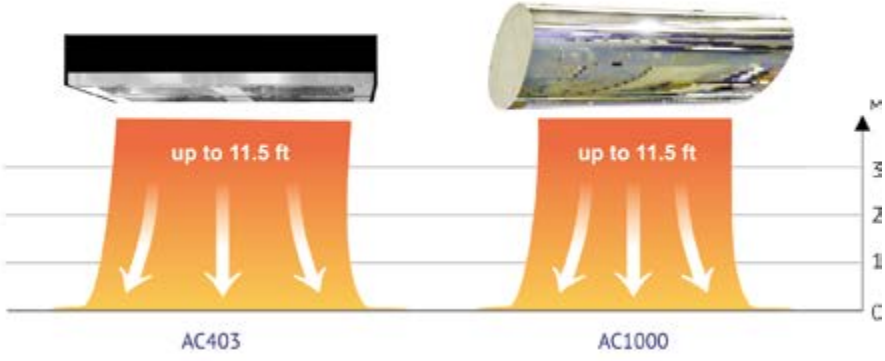
The various models are available in 39", 59" and 79" and can be mounted in tandem, either horizontally or vertically to make up any opening size dimension. Each Air Curtain is supplied with Control Panel. Air curtains are energy saving devices, typically installed in a building over an exterior opening. An air curtain can function in two different ways.
1. As a supplementary heater in an area air curtain will maintain an ambient preset interior temperature in the immediate area making it more comfortable for customers or employees.
2. To block the transfer of air from exterior to interior. Usually requires more air and no heat. A more precise specification of model required. Typically for commercial or industrial applications, higher efficiencies are gained by blocking the air transfer in large buildings, or high traffic areas.

QUICK REFERENCE GUIDE FOR AIR CURTAIN MODELS

Commercial and industrial Air Curtains / Air Doors



Decorative Air Curtains / Air Doors



Model Selection Guide

All recommendations below are to be used as a guideline only, and applied only to buildings and areas with balanced air systems as well as temperature ranges and wind conditions as stated. Because most applications are unique, a more detailed analysis and/or engineered specifications are generally required.

TABLE 1.1 EFFECTIVE AIR STREAM LENGTH AT 3.3 ft/s (1m/s) WIND

GRADATION OF CONDITIONS	APERTURE HEIGHT (ft/m)					
	6.5/2.0	8.2/2.5	9.84/3.0	11.5/3.5	13.1/4.0	16.4/5.0
≥32 °F/≥0 °C	100E opt 200E opt 200W opt	100E sat 200E opt 200W opt	300E opt 300W opt	300E opt 300W opt	400E opt (0°) 400W opt (0°)	400E opt (0°) 400W opt (0°)
From 32 to 14 °F/ From 0 to- 10 °C	100E sat 200E opt 200W opt	200E opt 200W opt	300E sat 300W sat	300E sat 300W opt	400E opt (20°) 400W opt (20°)	400E opt (30°) 400W opt (30°)
From 14 to- 13 °F/ From -10 to -25 °C	200E sat 200W sat 300W opt	300E opt 300W opt	300E sat 400E opt (20°) 300W sat 400W opt (20°)	400E opt (30°) 400W opt (30°)	400E sat (30°) 400W sat (30°)	400E sat (30°) 400W sat (30°)
From -13 to -40 °F/ From -25 to -40 °C	300E opt 300W opt	400E opt (15°) 300W sat 400W opt (15°)	400E opt (30°) 400W opt (30°)	-	-	-

TABLE 1.2 EFFECTIVE AIR STREAM LENGTH AT 13 .1 ft/s (4m/s) WIND

GRADATION OF CONDITIONS	APERTURE HEIGHT (ft/m)					
	6.5/2.0	8.2/2.5	9.84/3.0	11.5/3.5	13.1/4.0	16.4/5.0
≥32 °F/≥0 °C	100E opt 200E opt 200W opt	100E sat 200E sat 200W sat 300E opt 300W opt	300E opt 300W opt	300E opt (30°)	400E opt (10°) 400W opt (10°)	400E opt (20°) 400W opt (20°)
From 32 to 14 °F/ From 0 to- 10 °C	100E sat 200E opt 300E opt 200W opt 300W opt	300E opt 300W sat	300W sat	400E opt (15°) 300W sat (30°) 400W opt (15°)	400E opt (30°) 400W op (30°)	400E sat (30°) 400W sat (30°)
From 14 to- 13 °F/ From -10 to -25 °C	200E sat 300E sat 300W sat	300E sat 300W sat	400E opt (30°) 400W opt (30°)	400E sat (30°) 400W sat (30°)	400E sat (30°) 400W sat (30°)	-
From -13 to- 40 °F/ From -25 to- 40 °C	400E opt (15°) 400W opt (15°)	400E opt (30°) 400W opt (30°)	400E sat (30°) 400W sat (30°)	-	-	-

Data referred for:

- *Series 100-300 operate as a supplementary heating, see page 3 "Application and Construction", paragraph 1.*
- *Series 400 operate as specified in paragraph 2. see page 3 "Application and Constuction".*
- *Water heated Air Curtains, input and output water temp 203/158 °F (95/70 °C).*
- *"Opt" - optimal - the average air temperature at nozzle is from 15.6 °F (12 °C) to 64.4 °F (18 °C).*
- *"Sat" - satisfactory - the average air temperature at nozzle is from 41 °F(5 °C) to 15.6 °F (12 °C).*
- *(15°) (20°) (30°) are the angles of air stream relative to the plane of the opening.*
- *In some conditions, to optimize performance, or, in extreme weather conditions, air curtains can be installed vertically on either side of an opening. In such cases, for model selection, use 0.7 of the rated opening size applicable to that particular model.*

Operating Conditions for Air Curtains

- Relative ambient air temperature, -4…+104 °F/ -20…+40 °C.
- Air moisture level at no more than 80% at 68 °F (+20°C).
- No dust or other airborne particles at concentrations exceeding 10 mg/m3.
- There should be no condensation or presence of other airborne substances that are aggressive to carbon steels (acids, alkalis), adhesives or flammable compounds, fibrous materials such as oleoresins or other industrial fibers.
- For Water Heated Air Curtains hot water is used as a heating agent, with the following characteristics:
  - operating pressure ≤ 1.2 MPa
  - temperature ≤ 302 °F (150 °C).

*The maximum current of the unit is shown at the rated voltage 208V.

208v electric heated models single 3ph wired. 600v and 480v electric heated models dual wired, corresponding 3ph wiring to the heating elements and 208v 1ph connection to the motors.

Product Code Description

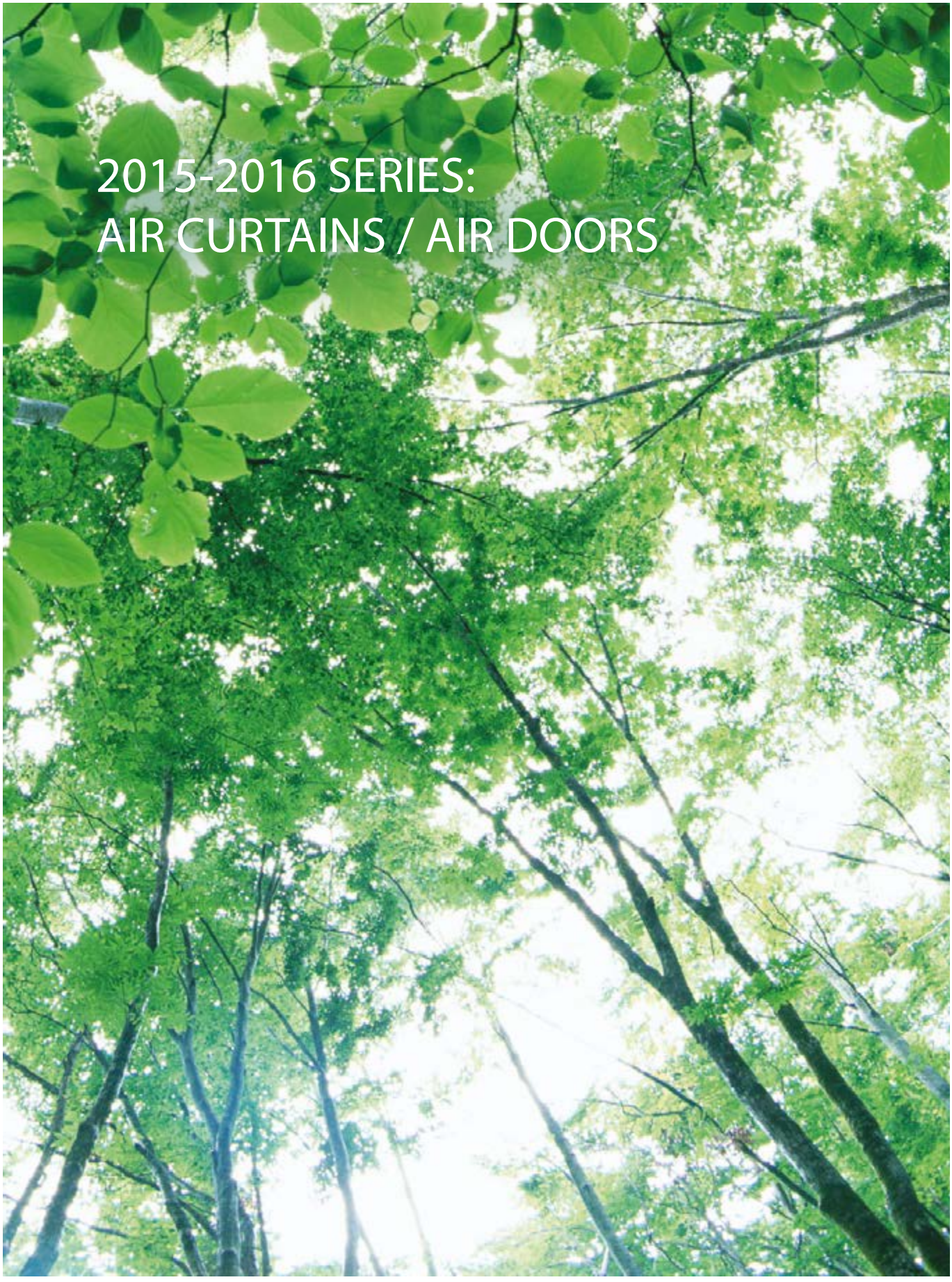
Example
AC300-79E21

AC	Air Curtain
300	series
39, 59, 79	length in inches
E, W, A	Electric, water, ambient
21	Heater power, kW

Control Panel

Control Panel included with every air curtain and incorporate a thermostat, 3 speed control and 2 heat settings, and can be connected central building control system or door activated switches and sensors.

2015-2016 SERIES:
AIR CURTAINS / AIR DOORS

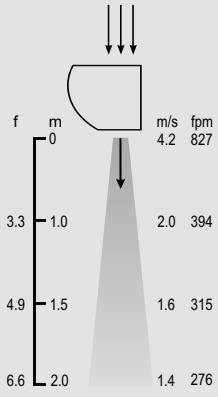


SERIES	AC100
AVAILABLE OPTIONS	Electric Heated
MODELS	31E5
AVAILABLE VOLTAGES	208V/1

OVERVIEW

Series 100 – compact stylish unit for use in smaller applications. A lower velocity unit with a 5 kW heater designed with built-in controls for ease of installation and operation. Ideal as a unit space heater or air curtain over a drive through window.

Electric Heated



Air Flow

GENERAL CHARACTERISTICS		
MODEL		31E5
Voltage	V/PH/Hz	208/1/60
Heat Output	kBTU/h kW	16.3 4.8
Air Volume	cfm m^3/h	295 500
Max. Door Height	ft m	7.2 2.2
Temperature rise	°F °C	50.4 28
Length	ft mm	2.6 785
Dimensions (L x W x H)	in mm	30.9 x 7.5 x 8.9 800 x 195 x 235
Weight	lb kg	23 10.5
Motor Input	hp W	0.08 55
Sound Level at 5 m (distance)	dB(A)	45
Max. Current unit	A	15.9

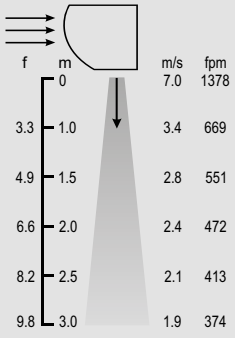
SERIES	AC200
AVAILABLE OPTIONS	Electric Heated
MODELS	39E5
AVAILABLE VOLTAGES	208V/240V/1, 208V/240V/3, 480V/3, 600V/3

OVERVIEW

Series 200 – Lower velocity units rated for installation up to a maximum 8′ (2.5m). Designed primarily for single doors or smaller vestibules. Ideal for drive through windows where a higher velocity may be required when mounting the unit farther from the window.

Control panel included with every air curtain. Complete with - 3 speed control, Thermostat and 2 heat settings.

Electric Heated



Air Flow

GENERAL CHARACTERISTICS		
MODEL		39E5
Heat Output	kBTU/h kW	18 5.3
Air Volume	cfm m^3/h	883 1500
Max. Door Height	ft m	8.2 2.5
Temperature rise	°F °C	18.9 10.5
Length	ft mm	3.3 1000
Dimensions (L x W x H)	in mm	41 x 9 x 9 1040 x 225 x 225
Weight	lb kg	33.1 15
Motor Input	hp W	0.14 100
Sound Level at 5 m (distance)	dB(A)	52
*Max. Current unit (208V)	A	16.1
Maximum motor current	A	0.5
*Max. Current heating elements 480 V 600 V	A	 6.9 6.4

* See page 6.

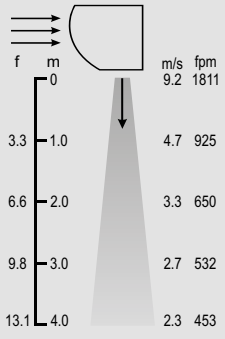
SERIES	AC300
AVAILABLE OPTIONS	Electric Heated | Water Heated | Ambient (Unheated)
MODELS	39E8, 59E13, 79E16 | 39W12, 59W20, 79W28 | 39A, 59A, 79A
AVAILABLE VOLTAGES	208V/240V/1, 208V/240V/3, 480V/3, 600V/3

OVERVIEW

Series 300 - Elegant in design for retail and commercial applications. Designed for pedestrian entrances, with or without vestibules. Available in 39" for a single door, 59" and 79" for double swinging or sliding doors, or install in tandem for larger installs.

Control panel included with every air curtain. Complete with - 3 speed control, Thermostat and 2 heat settings.

Electric Heated

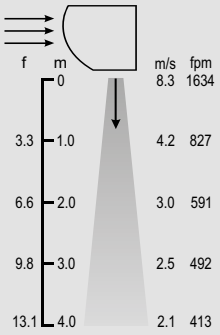


Air Flow

GENERAL CHARACTERISTICS				
MODEL		39E8	59E13	79E16
Heat Output	kBTU/h kW	27.3 8.0	45.7 13.4	54.9 16.1
Air Volume	cfm m^3/h	1030 1750	1590 2700	2091 3550
Max. Door Height	ft m		11.5 3.5	
Temperature rise	°F °C	25.2 14	27.0 15	25.2 14
Length	ft mm	3.3 1000	4.9 1500	6.6 2000
Dimensions (L x W x H)	in mm	42 x 12.8 x 10.4 1070 x 325 x 265	61.4 x 12.8 x 10.4 1560 x 325 x 265	79.3 x 12.3 x 10.7 2015 x 325 x 265
Weight	lb kg	42 19	65 29.5	79.5 36
Motor Input	hp W	0.29 210	0.57 420	0.57 420
Sound Level at 5 m (distance)	dB(A)	54	54	57
*Max. Current unit (208V)	A	24.4	41.1	48.9
Maximum motor current	A	1	2	2
*Max. Current heating elements 480 V 600 V	A	 10.1 8.9	 16.4 15.1	 20.2 18.7

* See page 6.

Water Heated



Air Flow

GENERAL CHARACTERISTICS				
MODEL		**39W12**	**59W20**	**79W28**
Voltage	V/PH/Hz	208/1/60		
Heat Output	kBTU/h kW	39.2 11.5	67.6 19.8	93.5 27.4
Air Volume	cfm m^3/h	972 1650	1472 2500	1943 3300
Max. Door Height	ft m	11.5 3.5		
Temperature rise	°F °C	43.2 24	46.8 26	48.6 27
Length	ft mm	3.3 1000	4.9 1500	6.6 2000
Dimensions (L x W x H)	in mm	42 x 12.8 x 10.4 1070 x 325 x 265	61.4 x 12.8 x 10.4 1560 x 325 x 265	79.3 x 12.3 x 10.7 2015 x 325 x 265
Weight	lb kg	42 19	66.2 230	82 36
Motor Input	hp W	0.29 210	0.57 420	0.57 420
Max. Current	A	1.1	2.2	2.2
Sound Level at 5 m (distance)	dB(A)	52	53	56

THERMAL CHARACTERISTICS (**Thermal characteristics at ambient room temperature 59°F (15°C) and maximum airow**)							
MODEL		**39W12**					
Water Temperature at Intel/Outlet	°F °C	302/158 150/70	266/158 130/70	221/158 105/70	203/158 95/70	176/140 80/60	140/104 60/40
Heat Output	kBTU/h kW	26.3 7.7	36.5 10.7	38.6 11.3	39.2 11.5	31.4 9.2	10.6 3.1
Air Temperature rise	°F °C	28.8 16	41.4 23	43.2 24	43.2 24	34.2 19	10.8 6
Water Flow	USGPH l/s	28.53 0.03	47.56 0.05	85.60 0.09	123.64 0.13	114.13 0.12	38.04 0.04
MODEL		**59W20**					
Water Temperature at Intel/Outlet	°F °C	302/158 150/70	266/158 130/70	221/158 105/70	203/158 95/70	176/140 80/60	140/104 60/40
Heat Output	kBTU/h kW	76.8 22.5	72.7 21.3	68.9 20.2	67.6 19.8	54.6 16.0	27.3 8.0
Air Temperature rise	°F °C	55.8 31	52.2 29	48.6 27	46.8 26	39.6 22	36 20
Water Flow	USGPH l/s	76.09 0.08	95.11 0.1	152.18 0.16	188.74 0.20	199.74 0.21	104.62 0.11
MODEL		**79W28**					
Water Temperature at Intel/Outlet	°F °C	302/158 150/70	266/158 130/70	221/158 105/70	203/158 95/70	176/140 80/60	140/104 60/40
Heat Output	kBTU/h kW	111.9 32.8	105.1 30.8	96.6 28.4	93.5 27.4	75.4 22.1	41.6 12.2
Air Temperature rise	°F °C	61.2 34	55.8 31	50.4 28	48.6 27	41.4 23	23.4 13
Water Flow	USGPH l/s	104.62 0.11	133.16 0.14	209.25 0.22	285.34 0.30	285.34 0.30	152.18 0.16

** Based on intel and outlet water temperatures of 203 °F/128 °F (95°C/70°C)*

Ambient (Unheated)

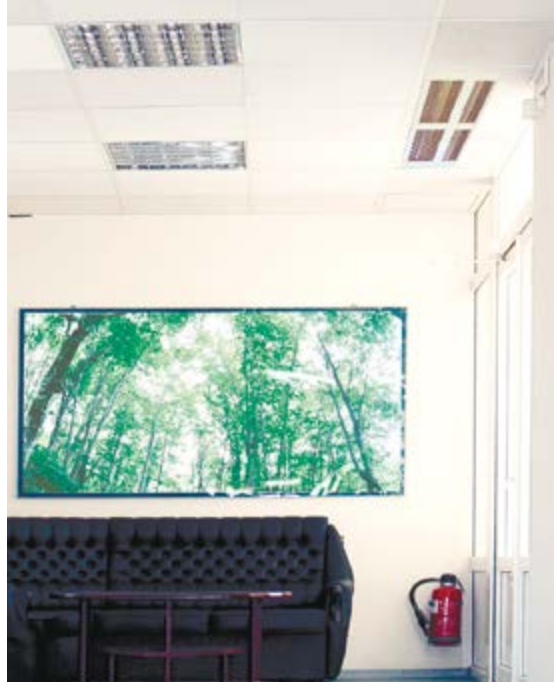
GENERAL CHARACTERISTICS				
MODEL		**39A**	**59A**	**79A**
Voltage	V/PH/Hz	208/1/60		
Air Volume	cfm m^3/h	1030 1750	1590 2700	2091 3550
Max. Door Height	ft m	11.5 3.5		
Length	ft mm	3.3 1000	4.9 1500	6.6 2000
Dimensions (L x W x H)	in mm	42 x 12.8 x 10.4 1070 x 325 x 265	61.4 x 12.8 x 10.4 1560 x 325 x 265	79.3 x 12.3 x 10.7 2015 x 325 x 265
Weight	lb kg	26.5 12	53 24	88 66.5
Motor Input	hp W	0.29 210	0.57 420	0.57 420
Max. Current	A	1.1	2.2	2.2
Sound Level at 5 m (distance)	dB(A)	52	53	56

SERIES	AC301
AVAILABLE OPTIONS	Electric Heated | Water Heated
MODELS	39E8, 79E16 | 39W11, 79W28
AVAILABLE VOLTAGES	208V/240V/1, 208V/240V/3, 480V/3, 600V/3

OVERVIEW

Series 301 - Designed specifically for installations into standard drop ceilings of up to 11' (3.5m) in height, but can be utilized wherever a flush mounted air curtain will be required for commercial, retail or institutional applications. Can be secured directly to structure from above or suspended on chains or threaded rods.

Control panel included with every air curtain. Complete with - 3 speed control, Thermostat and 2 heat settings.



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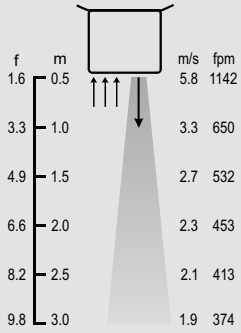
Electric Heated

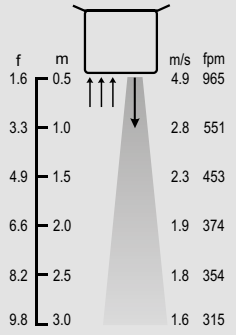


Air Flow

GENERAL CHARACTERISTICS			
MODEL		39E8	79E16
Heat Output	kBTU/h kW	27.3 8.0	54.9 16.1
Air Volume	cfm m^3/h	1030 1750	2091 3550
Max. Door Height	ft m	11.5 3.5	
Temperature rise	°F °C	25.2 14	25.2 14
Length	ft mm	3.3 1000	6.6 2000
Dimensions (L x W x H)	in mm	43.5 x 17.3 x 11.8 1105 x 440 x 300	80.7 x 17.3 x 11.8 2050 x 440 x 300
Weight	lb kg	66.2 30	119.2 54
Motor Input	hp W	0.31 230	0.63 460
Sound Level at 5 m (distance)	dB(A)	53	57
*Max. Current unit (208V)	A	24.5	49.1
Maximum motor current	A	1.1	2.2
*Max. Current heating elements 480 V 600 V	A	 10.1 9.3	 20.2 18.7

* See page 6.

Water Heated



Air Flow

GENERAL CHARACTERISTICS			
MODEL		**39W11**	**79W28**
Voltage	V/PH/Hz	208/1/60	
Heat Output	kBTU/h kW	39.2 11.5	93.5 27.4
Air Volume	cfm m^3/h	972 1650	1943 3300
Max. Door Height	ft m	11.5 3.5	
Temperature rise	°F °C	43.2 24	48.6 27
Length	ft mm	3.3 1000	6.6 2000
Dimensions (L x W x H)	in mm	43.5 x 17.3 x 11.8 1050 x 440 x 300	80.7 x 17.3 x 11.8 2050 x 440 x 300
Weight	lb kg	70.6 34	132.4 60
Motor Input	hp W	0.31 230	0.63 460
Max. Current	A	1.1	2.2
Sound Level at 5 m (distance)	dB(A)	52	56

THERMAL CHARACTERISTICS (**Thermal characteristics at ambient room temperature 59°F (15°C) and maximum airow**)							
MODEL		**39W11**					
Water Temperature at Intel/Outlet	°F °C	302/158 150/70	266/158 130/70	221/158 105/70	203/158 95/70	176/140 80/60	140/104 60/40
Heat Output	kBTU/h kW	26.28 7.7	36.52 10.7	38.6 11.3	39.25 11.5	31.40 9.2	10.58 3.1
Air Temperature rise	°F °C	28.8 16	41.4 23	43.2 24	43.2 24	34.2 19	10.8 6
Water Flow	USGPH l/s	28.53 0.03	47.56 0.05	85.60 0.09	123.65 0.13	114.13 0.12	38.04 0.04
MODEL		**79W28**					
Water Temperature at Intel/Outlet	°F °C	302/158 150/70	266/158 130/70	221/158 105/70	203/158 95/70	176/140 80/60	140/104 60/40
Heat Output	kBTU/h kW	111.95 32.8	105.12 30.8	96.93 28.4	93.52 27.4	75.43 22.1	41.6 12.2
Air Temperature rise	°F °C	61.2 34	55.8 31	50.4 28	48.6 27	41.4 23	23.4 13
Water Flow	USGPH l/s	104.62 0.11	133.16 0.14	209.25 0.22	285.34 0.30	285.34 0.30	152.18 0.16

** For water heaters this is 203 °F/158 °F (95°C/70°C) hot water*

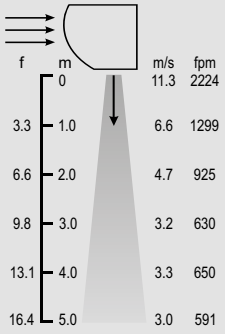
SERIES	AC400
AVAILABLE OPTIONS	Electric Heated | Water Heated | Ambient (Unheated)
MODELS	39E8, 59E16, 79E16 | 39W20, 59W32, 79W47 | 39A, 59A, 79A
AVAILABLE VOLTAGES	208V/240V/1, 208V/240V/3, 480V/3, 600V/3

OVERVIEW

Series 400 – Higher output units for high pedestrian traffic areas, larger volume buildings i.e. malls, recreational facilities, smaller warehouse bay doors. Available heated (electric or water) or unheated. Versatile in many different commercial or industrial applications.

Control panel included with every air curtain. Complete with - 3 speed control, Thermostat and 2 heat settings.

Electric Heated

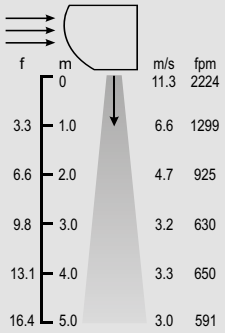


Air Flow

GENERAL CHARACTERISTICS				
MODEL		39E8	59E16	79E16
Heat Output	kBTU/h kW	27.3 8.0	54.6 16.0	54.9 16.1
Air Volume	cfm m^3/h	1590 2700	2356 4000	3534 6000
Max. Door Height	ft m		16.4 5.0	
Temperature rise	°F °C	14.4 8	21.6 12	16.2 9
Length	ft mm	3.3 1000	4.9 1500	6.6 2000
Dimensions (L x W x H)	in mm	43.7 x 13.8 x 13.4 1110 x 350 x 340	62 x 13.8 x 13.4 1575 x 350 x 340	82.3 x 13.8 x 13.4 2090 x 350 x 340
Weight	lb kg	56.2 25.5	89.4 40.5	101.5 46.0
Motor Input	hp W	0.54 400	1.22 900	1.22 900
Sound Level at 5 m (distance)	dB(A)	60	65	66
*Max. Current unit (208V)	A	25.3	51.2	51.2
Maximum motor current	A	1.9	4.3	4.3
*Max. Current heating elements 480 V 600 V	A	 10.1 9.3	 20.2 18.7	 20.2 18.7

* See page 6.

Water Heated



Air Flow

GENERAL CHARACTERISTICS				
MODEL		**39W20**	**59W32**	**79W47**
Voltage	V/PH/Hz	208/1/60		
Heat Output	kBTU/h kW	68.3 20.0	109.2 32.0	161.8 47.4
Air Volume	cfm m^3/h	1531 2600	2002 3400	3062 5200
Max. Door Height	ft m	16.4 5.0		
Temperature rise	°F °C	66.6 37	46.8 26	48.6 27
Length	ft mm	3.3 1000	4.9 1500	6.6 2000
Dimensions (L x W x H)	in mm	43.7 x 13.8 x 13.4 1110 x 350 x 340	62 x 13.8 x 13.4 1575 x 350 x 340	82.3 x 13.8 x 13.4 2090 x 350 x 340
Weight	lb kg	68.5 31	91.6 41.5	117 53
Motor Input	hp W	0.61 450	0.87 640	1.22 900
Max. Current	A	2.2	3	4.4
Sound Level at 5 m (distance)	dB(A)	64	64	65

THERMAL CHARACTERISTICS (**Thermal characteristics at ambient room temperature 59°F (15°C) and maximum airow**)							
MODEL		**39W20**					
Water Temperature at Intel/Outlet	°F °C	302/158 150/70	266/158 130/70	221/158 105/70	203/158 95/70	176/140 80/60	140/104 60/40
Heat Output	kBTU/h kW	58.4 17.1	62.4 18.3	65.2 19.1	66.2 19.4	52.6 15.4	16.5 4.9
Air Temperature rise	°F °C	63 35	64.8 36	66.6 37	66.6 37	59.4 33	37.8 21
Water Flow	USGPH l/s	57 0.06	76.1 0.08	142.7 0.15	200 0.21	200 0.21	57 0.06
MODEL		**59W32**					
Water Temperature at Intel/Outlet	°F °C	302/158 150/70	266/158 130/70	221/158 105/70	203/158 95/70	176/140 80/60	140/104 60/40
Heat Output	kBTU/h kW	122.9 36	118.4 34.7	111.9 32.8	109.2 32	88.1 25.8	45.1 13.2
Air Temperature rise	°F °C	52.2 29	50.4 28	48.6 27	46.8 26	37.8 21	19.8 11
Water Flow	USGPH l/s	123.65 0.13	152.18 0.16	247.29 0.26	332.89 0.35	332.89 0.35	171.20 0.18
MODEL		**79W47**					
Water Temperature at Intel/Outlet	°F °C	302/158 150/70	266/158 130/70	221/158 105/70	203/158 95/70	176/140 80/60	140/104 60/40
Heat Output	kBTU/h kW	195.2 57.2	182.9 53.6	167.9 49.2	161.8 47.4	130.7 38.3	73.0 21.4
Air Temperature rise	°F °C	59.4 33	55.8 31	48.6 27	48.6 27	39.6 22	21.6 12
Water Flow	USGPH l/s	190.22 0.20	237.78 0.25	361.43 0.38	494.58 0.52	494.58 0.52	275.83 0.29

** Based on intel and outlet water temperatures of 203 °F/128 °F (95°C/70°C)*

Ambient (Unheated)

GENERAL CHARACTERISTICS				
MODEL		**39A**	**59A**	**79A**
Voltage	V/PH/Hz	208/1/60		
Air Volume	cfm m^3/h	1531 2600	2002 3400	3062 5200
Max. Door Height	ft m	16.4 5.0		
Length	ft mm	3.3 1000	4.9 1500	6.6 2000
Dimensions (L x W x H)	in mm	43.7 x 13.8 x 13.4 1110 x 350 x 340	62 x 13.8 x 13.4 1575 x 350 x 340	82.3 x 13.8 x 13.4 2090 x 350 x 340
Weight	lb kg	61.8 28	78.3 35.5	101.5 46
Motor Input	hp W	0.61 450	0.87 640	1.22 900
Max. Current	A	2.2	3.0	4.4
Sound Level at 5 m (distance)	dB(A)	64	64	65

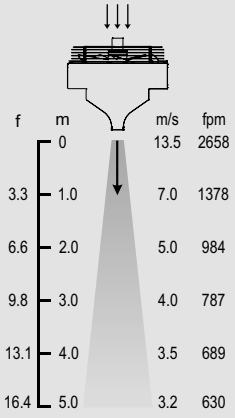
SERIES	AC401
AVAILABLE OPTIONS	Electric Heated | Water Heated
MODELS	59E16, 79E16 | 59W32, 79W47
AVAILABLE VOLTAGES	208V/240V/3, 480V/3, 600V/3

OVERVIEW

Intertek

Series 401 – Designed specifically for high humidity locations i.e. car, truck or bus wash bays, industrial and production drying facilities etc.

Electric Heated

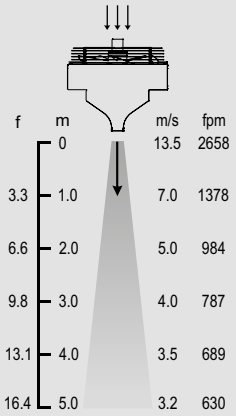


Air Flow

GENERAL CHARACTERISTICS			
MODEL		59E16	79E16
Heat Output	kBTU/h kW	54.9 16.1	36.5 10.7
Air Volume	cfm m^3/h	2237 3800	3500 6000
Max. Door Height	ft m	16.4 5.0	
Temperature rise	°F °C	22.5 12.5	25.2 14
Length	ft mm	4.9 1500	6.6 2000
Dimensions (L x W x H)	in mm	58.7 x 21.8 x 20.2 1495 x 555 x 515	79.5 x 21.8 x 20.2 2020 x 555 x 515
Weight	lb kg	128 58	168 76
Motor Input	hp W	0.74 540	1.09 800
Sound Level at 5 m (distance)	dB(A)	65	66
*Max. Current unit (208V)	A	49.5	50.8
Maximum motor current	A	2.6	3.9
*Max. Current heating elements 480 V 600 V	A	 20.2 18.7	 20.2 18.7

* See page 6.

Water Heated



Air Flow

GENERAL CHARACTERISTICS			
MODEL		**59W32**	**79W47**
Voltage	V/PH/Hz	208/3/60	
Heat Output	kBTU/h kW	109.2 32.0	161.8 47.4
Air Volume	cfm m^3/h	2120 3600	2950 5000
Max. Door Height	ft m	16.4 5.0	
Temperature rise	°F °C	46.8 26	48.6 27
Length	ft mm	4.9 1500	6.6 2000
Dimensions (L x W x H)	in mm	58.7 x 21.8 x 20.2 1495 x 555 x 515	79.5 x 21.8 x 20.2 2020 x 555 x 515
Weight	lb kg	132.5 60	168 76
Motor Input	hp W	0.74 540	1.09 800
Max. Current	A	0.9	1.3
Sound Level at 5 m (distance)	dB(A)	60	62

THERMAL CHARACTERISTICS (**Thermal characteristics at ambient room temperature 59°F (15°C) and maximum airow**)							
MODEL		**59W32**					
Water Temperature at Intel/Outlet	°F °C	302/158 150/70	266/158 130/70	221/158 105/70	203/158 95/70	176/140 80/60	140/104 60/40
Heat Output	kBTU/h kW	122.9 36	118.4 34.7	111.9 32.8	109.2 32	88.1 25.8	45.1 13.2
Air Temperature rise	°F °C	52.5 29	50.4 28	48.6 27	46.8 26	37.8 21	19.8 11
Water Flow	USGPH l/s	123.65 0.13	152.18 0.16	247.29 0.26	332.89 0.35	332.89 0.35	171.20 0.18
MODEL		**79W47**					
Water Temperature at Intel/Outlet	°F °C	302/158 150/70	266/158 130/70	221/158 105/70	203/158 95/70	176/140 80/60	140/104 60/40
Heat Output	kBTU/h kW	195.2 57.2	182.9 53.6	167.9 49.2	161.8 47.4	130.7 38.3	73.0 21.4
Air Temperature rise	°F °C	59.4 33	55.8 31	48.6 27	48.6 27	39.6 22	21.6 12
Water Flow	USGPH l/s	190.22 0.20	237.78 0.25	361.43 0.38	494.58 0.52	494.58 0.52	275.83 0.29

** For water heaters this is 203 °F/158 °F (95°C/70°C) hot water*

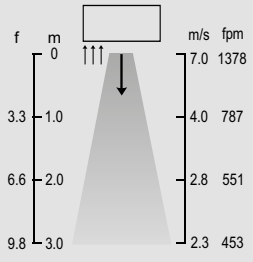
SERIES	AC403
AVAILABLE OPTIONS	Electric Heated | Water Heated
MODELS	39E8, 59E16, 79E16 | 39W20, 59W32, 79W47
AVAILABLE VOLTAGES	208V/240V/1, 208V/240V/3, 480V/3, 600V/3

OVERVIEW

Series 403 – Surface mount unit for many types of applications, commercial, or institutional wherever higher output is required . Available in 39", 59" and 79" lengths, in coloured finish or decorative with polished stainless steel.

Control panel included with every air curtain.Complete with 3-speed control, Thermostat and 2 heat settings.

Electric Heated

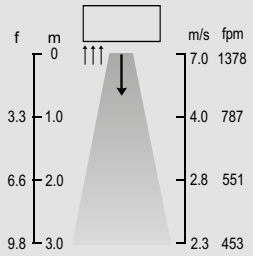


Air Flow

GENERAL CHARACTERISTICS				
MODEL		39E8	59E16	79E16
Heat Output	kBTU/h kW	23.7 8	54.9 16.1	54.9 16.1
Air Volume	cfm m^3/h	1413 2400	1885 3200	2827 4800
Max. Door Height	ft m	16.0 5.0		
Temperature rise	°F °C	18 10	27 15	18 10
Length	ft mm	3.3 1000	4.9 1500	6.6 2000
Dimensions (L x W x H)	in mm	44.5 x 23.6 x 15.2 1130 x 600 x 385	63.4 x 23.6 x 15.2 1610 x 600 x 385	83.8 x 23.6 x 15.2 2130 x 600 x 385
Weight	lb kg	106 48	150 68	195 88
Motor Input	hp W	0.61 450	0.87 640	1.22 900
Sound Level at 5 m (distance)	dB(A)	60	61	63
*Max. Current unit (208V)	A	25.6	50	51.2
Maximum motor current	A	2.2	3.1	4.3
*Max. Current heating elements 480 V 600 V	A	 10.1 9.3	 20.2 18.7	 20.2 18.7

* See page 6.

Water Heated



Air Flow

GENERAL CHARACTERISTICS				
MODEL		**39W20**	**59W32**	**79W47**
Voltage	V/PH/Hz	208/1/60		
Heat Output	kBTU/h kW	68.2 20.0	109.2 32.0	161.8 47.4
Air Volume	cfm m^3/h	1178 2000	2120 3600	2950 5000
Max. Door Height	ft m	16.4 5.0		
Temperature rise	°F °C	66.6 37	46.8 26	48.6 27
Length	ft mm	3.3 1000	4.9 1500	6.6 2000
Dimensions (L x W x H)	in mm	44.5 x 23.6x 15.1 1130 x 600 x 385	63.4 x 23.6 x 15.1 1610 x 600 x 385	83.9 x 23.6 x 15.1 2130 x 600 x 385
Weight	lb kg	77.2 45	95 59	126 73
Motor Input	hp W	0.54 400	0.72 530	1.09 800
Max. Current	A	2.1	2.8	4.2
Sound Level at 5 m (distance)	dB(A)	64	64	65

THERMAL CHARACTERISTICS (**Thermal characteristics at ambient room temperature 59°F (15°C) and maximum airow**)							
MODEL		**39W20**					
Water Temperature at Intel/Outlet	°F °C	302/158 150/70	266/158 130/70	221/158 105/70	203/158 95/70	176/140 80/60	140/104 60/40
Heat Output	kBTU/h kW	58.4 17.1	62.4 18.3	65.2 19.1	66.2 19.4	52.6 15.4	16.5 4.9
Air Temperature rise	°F °C	63 35	64.8 36	66.6 37	66.6 37	59.4 33	37.8 21
Water Flow	USGPH l/s	57 0.06	76.1 0.08	142.7 0.15	200 0.21	200 0.21	57 0.06
MODEL		**59W32**					
Water Temperature at Intel/Outlet	°F °C	302/158 150/70	266/158 130/70	221/158 105/70	203/158 95/70	176/140 80/60	140/104 60/40
Heat Output	kBTU/h kW	122.9 36	118.4 34.7	111.9 32.8	109.2 32	88.1 25.8	45.1 13.2
Air Temperature rise	°F °C	52.2 29	50.4 28	48.6 27	46.8 26	37.8 21	19.8 11
Water Flow	USGPH l/s	123.65 0.13	152.18 0.16	247.29 0.26	332.89 0.35	332.89 0.35	171.20 0.18
MODEL		**79W47**					
Water Temperature at Intel/Outlet	°F °C	302/158 150/70	266/158 130/70	221/158 105/70	203/158 95/70	176/140 80/60	140/104 60/40
Heat Output	kBTU/h kW	195.2 57.2	182.9 53.6	167.9 49.2	161.8 47.4	130.7 38.3	73.0 21.4
Air Temperature rise	°F °C	59.4 33	55.8 31	48.6 27	48.6 27	39.6 22	21.6 12
Water Flow	USGPH l/s	190.22 0.20	237.78 0.25	361.43 0.38	494.58 0.52	494.58 0.52	275.83 0.29

** Based on intel and outlet water temperatures of 203 °F/128 °F (95°C/70°C)*

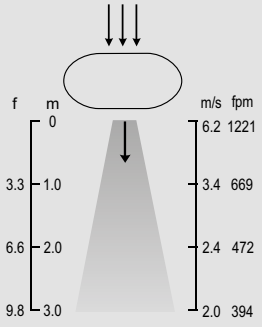
SERIES	AC1000
AVAILABLE OPTIONS	Electric Heated | Water Heated
MODELS	39E16, 79E21 | 39W20, 79W50
AVAILABLE VOLTAGES	208V/240V/1, 208V/240V/3, 480V/3, 600V/3

OVERVIEW

Series 1000 – Higher output decorative air curtain designed to be both functional and have the ability to suit different styles of architecture, from traditional to more modern retail or commercial environments. Available in soft white painted finish, optional polished or brushed stainless steel.

Control panel included with every air curtain.
Complete with - 3 speed control,
Thermostat and 2 heat settings.

Electric Heated

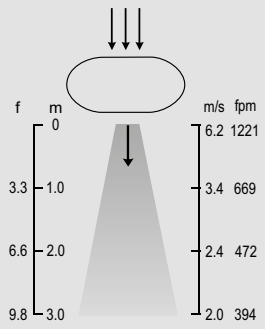


Air Flow

GENERAL CHARACTERISTICS			
MODEL		39E16	79E21
Heat Output	kBTU/h kW	54.9 16.1	73.4 21.5
Air Volume	cfm m^3/h	1707 2900	3415 5800
Max. Door Height	ft m	11.5 3.5	
Temperature rise	°F °C	28.8 16	19.8 11
Length	ft mm	3.3 1000	6.6 2000
Dimensions (L x W x H)	in mm	43.5 x 35 x 15.6 1105 x 890 x 395	82.9 x 35 x 15.6 2105 x 890 x 395
Weight	lb kg	99 45	161 73
Motor Input	hp W	0.61 450	1.22 900
Sound Level at 5 m (distance)	dB(A)	60	63
*Max. Current unit (208V)	A	49.0	66.8
Maximum motor current	A	2.2	4.3
*Max. Current heating elements 480 V 600 V	A	 20.2 18.7	 27.8 25.6

* See page 6.

Water Heated



Air Flow

GENERAL CHARACTERISTICS			
MODEL		**39W20**	**79W50**
Voltage	V/PH/Hz	208/1/60	
Heat Output	kBTU/h kW	70 20.5	172 50.4
Air Volume	cfm m^3/h	1590 2700	3230 5500
Max. Door Height	ft m	11.5 3.5	
Temperature rise	°F °C	39.6 22	55.8 31
Length	ft mm	3.3 1000	6.6 2000
Dimensions (L x W x H)	in mm	43.5 x 35 x 15.6 1105 x 890 x 395	82.9 x 35 x 15.6 2105 x 890 x 395
Weight	lb kg	99 45	161 73
Motor Input	hp W	0.61 450	1.22 900
Max. Current	A	4	8
Sound Level at 5 m (distance)	dB(A)	57	60

THERMAL CHARACTERISTICS (**Thermal characteristics at ambient room temperature 59°F (15°C) and maximum airow**)							
MODEL		**39W20**					
Water Temperature at Intel/Outlet	°F °C	302/158 150/70	266/158 130/70	221/158 105/70	203/158 95/70	176/140 80/60	140/104 60/40
Heat Output	kBTU/h kW	64.5 18.9	67.2 19.7	69.3 20.3	70 20.5	55.6 16.3	17 5
Air Temperature rise	°F °C	37.8 21	37.8 21	39.6 22	39.6 22	32.4 18	9 5
Water Flow	USGPH l/s	61.8 0.65	84.6 0.089	152.2 0.16	209.2 0.22	209.2 0.22	62.8 0.066
MODEL		**79W50**					
Water Temperature at Intel/Outlet	°F °C	302/158 150/70	266/158 130/70	221/158 105/70	203/158 95/70	176/140 80/60	140/104 60/40
Heat Output	kBTU/h kW	206.1 60.4	193.2 56.6	178.2 52.2	172.0 50.4	138.6 40.6	76.5 22.4
Air Temperature rise	°F °C	66.6 37	63 35	57.6 32	55.8 31	45 25	25.2 14
Water Flow	USGPH l/s	190.22 0.20	237.78 0.25	370.94 0.39	504.10 0.53	513.61 0.54	285.34 0.30

** For water heaters this is 203 °F/158 °F (95°C/70°C) hot water*

SERIES	AC1001
AVAILABLE OPTIONS	Electric Heated | Water Heated
MODELS	79E16 | 79W24
AVAILABLE VOLTAGES	208V/240V/1, 208V/240V/3, 480V/3, 600V/3

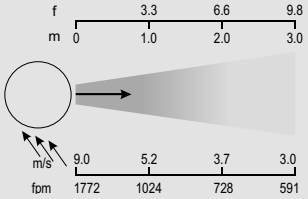
OVERVIEW

Series 1001- a popular model for installation where a decorative, but very functional application is required. These units are floor mounted and stand 79` high. Suitable for installing as a stand alone unit or as a pair can protect across several doors simultaneously. Available also in polished or brushed stainless steel finishes and are ideal in any style of public accessed building.

Control panel included with every air curtain. Complete with - 3 speed control, Thermostat and 2 heat settings.

Intertek

Electric Heated

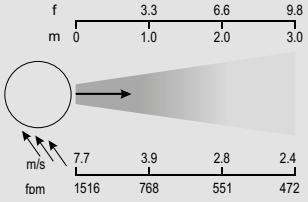


Air Flow

GENERAL CHARACTERISTICS		
MODEL		76E16
Heat Output	kBTU/h kW	54.9 16.1
Air Volume	cfm m^3/h	2000 3400
Max. Door Height	ft m	7.0 2.1
Temperature rise	°F °C	25.2 14
Length	ft mm	11.5 3500
Dimensions (L x W x H)	in mm	(w)18.1 (H)79.2 (w) 460 (H) 2012
Weight	lb kg	161.2 73
Motor Input	hp W	0.27 340
Sound Level at 5 m (distance)	dB(A)	54
*Max. Current unit (208V)	A	48.5
Maximum motor current	A	1.6
*Max. Current heating elements 480 V 600 V	A	 20.2 18.7

* See page 6.

Water Heated



Air Flow

GENERAL CHARACTERISTICS		
MODEL		**79W24**
Voltage	V/PH/Hz	208/1/60
Heat Output	kBTU/h kW	82.0 24.0
Air Volume	cfm m^3/h	1770 3000
Max. Door Height	ft m	7.0 2.1
Temperature rise	°F °C	54 30
Length	ft mm	11.5 3500
Dimensions	in mm	(W) 18.1 (H) 79.2 (W) 460 (H) 2012
Weight	lb kg	143.5 65
Motor Input	hp W	0.27 340
Max. Current	A	2
Sound Level at 5 m (distance)	dB(A)	54

THERMAL CHARACTERISTICS (**Thermal characteristics at ambient room temperature 59°F (15°C) and maximum airow**)							
MODEL		**79W24**					
Water Temperature at Intel/Outlet	°F °C	302/158 150/70	266/158 130/70	221/158 105/70	203/158 95/70	176/140 80/60	140/104 60/40
Heat Output	kBTU/h kW	97.9 28.7	92.2 27.0	85.0 24.9	81.9 24.0	66.2 19.4	37.5 11.0
Air Temperature rise	°F °C	64.8 36	61.2 34	55.8 31	54 30	43.2 24	25.2 14
Water Flow	USGPH l/s	90.36 0.095	114.13 0.12	180.71 0.19	237.78 0.25	247.29 0.26	133.16 0.14

** Based on intel and outlet water temperatures of 203 °F/158 °F (95°C/70°C) hot water*

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