



POWERED AIRE INC.

www.poweredaire.com

**109 Mortensen Road
Greenville, PA 16125**

**Phone: 724-588-3305
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SUGGESTED AIRE CURTAIN SPECIFICATIONS MODEL EHD

(CSI formatted specifications available at www.poweredaire.com)

Aire curtains are to be furnished as factory assembled units manufactured by Powered Aire Inc. Greenville, PA. Each unit consists of casing, motors, centrifugal fans, protective inlet screen and discharge nozzle. Aire curtains will be equipped with access panels for motor and fan assembly. Individual motor and fan assembly can be removed without lowering the unit or lowering the bottom half of the unit. Aire Curtain unit to provide uniform velocity across the entire length of the discharge area. The units will be front or top air intake. Units are universally manufactured for wall mount or top mount.

Units to be constructed with sufficient rigidity to span the length of the opening without intermediate support. Additional mounting holes to be provided on larger units for buildings where structural support is not adequate for supporting the aire curtain from ends only. All weight bearing structural support will be made of formed 11-gauge stainless steel and galvanized steel. Outer casing shall be constructed of 16-gauge stainless steel. Intake screen will be 20 gauge perforated type stainless steel. Casing will be equipped with stainless steel access panels for inspection, cleaning and removal of motor blower assembly. Internal components shall be welded and bolted construction.

Units shall be equipped with dynamically balanced curved double inlet double width galvanized blower wheels with brazed hubs and matched blower housings. Fan scrolls or formed fiberglass air diverters shall not be acceptable.

Motors will be 5 horse power Total Enclosed Air Over (TEAO) 1160 RPM 50/60 cycle equipped with sealed ball bearings of equal size at each end and double extended shafts. To prevent a misalignment from occurring, no outboard bearings or flexible couplings will be acceptable. Aire curtain discharge to distribute outlet air evenly at and between blowers for the entire length of aire curtain through the use of a plenum.

Discharge nozzle shall be adjustable to ± 20 degrees with no dampers or grills to add turbulence and create a pressure drop or a sound pressure increase.

The unit design shall allow for addition of heating sections or filters without altering the base unit.

Electric Heat Option

For electric heating option consult factory.

Steam / Hot Water Coil

For steam or hot water heated aire curtains see Hot Water / Steam Heated section of catalog.

Direct and Indirect Gas Heat

For direct or indirect gas heated aire curtains see Gas Heated section of catalog.

Controls

Standard control panel shall be Nema 12 enclosure with magnetic motor starter, overload relays, 115 volt control transformer and terminal provisions for field wiring of a remote hand off automatic selector switch and a door switch.

Aire Curtain unit shall be ETL or UL listed. Unheated unit(s) shall have a 24 month warranty on all parts. Heated unit(s) shall have an 18 month warranty on all parts.

March, 2011

Control Options for Model EHD

Unheated * Recommended

***Door Switch/Magnetic** -- A non-mechanical door switch that turns the air curtain on when the door is opened.

* **Hand/Off/Auto Selector Switch (Panel Mounted)** -- Switches between the unit running constantly in the hand position, off, and auto, which only runs when the door switch is activated.

Other Options

Cruise Control Programmable Switch -- Digital logic controller with an LCD display that takes the place of several individual control components including a Built-in Time Delay Relay, and On/Off/Auto Switch.

Disconnect-Fused -- A switch that will disconnect all power from the unit so that the unit can be serviced or inspected and includes fuses for circuit protection.

Disconnect-Non Fused -- A switch that will disconnect all power from the unit so that the unit can be serviced or inspected.

Door Switch/Roller-Plunger -- A mechanical door switch that turns the air curtain on when the door is opened.

Motion Detector -- Turns the air curtain on when the sensors detect motion so that the air curtain turns on before the door is opened.

On/Off Selector Switch (Panel Mounted) -- Switches the air curtain on and off.

Programmable Digital Thermostat -- A thermostat that is programmable with a digital display (7-day, 1/2 hour increments, specify up to 4 time periods per day)

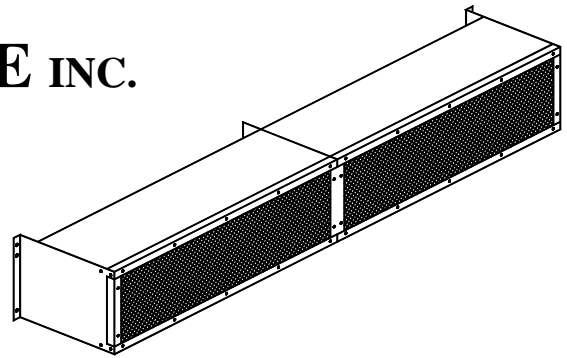
Built-in Time Delay Relay -- Provides a delay for shutting off the air curtain after the door is shut. This is useful for doors that see a lot of foot traffic, so the unit is not constantly turning on and off during the day. To be used in conjunction with a door switch.



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MODEL: EHD Unheated
Extra High Door
Door Height: Up to Twenty-Two Feet



PRODUCT DATA

Model	EHD 1-48	EHD 1-60	EHD 1-72	EHD 2-96	EHD 2-108	EHD 2-120	EHD 2-132	EHD 2-144	EHD 3-156	EHD 3-168	EHD 3-180	EHD 3-192	EHD 3-204	EHD 3-216	EHD 4-228	EHD 4-240
Door Width Feet	4	5	6	8	9	10	11	12	13	14	15	16	17	18	19	20
Nozzle Width Inches	48	60	72	96	108	120	132	144	156	168	180	192	204	216	228	240
Max FPM at Nozzle	6572	6572	6572	6572	6572	6572	6572	6572	6572	6572	6572	6572	6572	6572	6572	6572
Max CFM at Nozzle	6994	9924	12854	15926	17888	19848	21291	23891	25850	27812	29772	30355	31114	31850	37736	39696
Avg. FPM at Nozzle	5499	4358	5128	4842	4600	4358	4842	4842	4681	4520	4358	4842	4358	4600	4842	4358
CFM at Nozzle	6305	7480	9256	12977	13769	15750	16120	19168	20257	22825	23004	23335	23400	24570	28329	29120
Outlet Velocity Uniformity	95%	94%	94%	95%	94%	94%	95%	95%	94%	94%	94%	95%	94%	95%	94%	95%
Number of Motors	1	1	1	2	2	2	2	2	3	3	3	3	3	3	4	4
Horse Power	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Weight (Lbs)	387	420	440	748	781	814	834	854	1145	1180	1210	1227	1248	1268	1615	1645

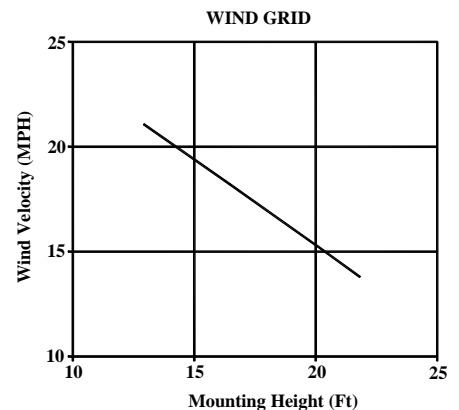
Sound level: 71 dba

Sound level measured 10 feet from the unit in a free field based on a one motor unit.

Three Phase Motor Voltage Available: 208 240 480 575

Amp Draw Per Motor: 17.0 15.8 7.9 6.3

**** Units over 240 inches contact factory**



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