



# POWERED AIRE INC.

[www.poweredaire.com](http://www.poweredaire.com)

**109 Mortensen Road  
Greenville, PA 16125**

**Phone: 724-588-3305**

**Fax: 724-588-3371**

## **SUGGESTED AIRE CURTAIN SPECIFICATIONS**

### **MODEL BCT**

**(CSI formatted specifications available at [www.poweredaire.com](http://www.poweredaire.com))**

All aire curtains furnished are complete factory assembled units as manufactured by Powered Aire Inc. Greenville, PA. Each unit consists of stainless steel casing, centrifugal fans, raised stainless steel inlet screen, discharge nozzle, motor(s), and an optional 1/2 inch recleanable filter. The aire curtain unit provides a specific CFM and a uniform velocity across the entire length of the discharge area.

Units shall be furnished in single increments of sufficient structural strength to be supported from both ends without intermediate support. Multiple units shall not be permitted. Unit casing shall be a minimum of 18 gauge 304 stainless steel in a number three finish.

Motors at 3/4 H.P. 1630 rpm each shall be heavy duty type equipped with permanently lubricated, shielded ball bearings of equal size at each end and double extended shafts requiring no outboard bearings. Primary motor voltage shall be 115/208/230/480/575 volts 50/60 Hz single phase.

Galvanized fans shall be forward curved centrifugal type, double inlet design, with zinc plated hubs. Tangential type blowers and coupling connection shall not be permitted. Inlet screen shall be perforated stainless steel powder coated black.

Discharge nozzle shall be high efficiency discharge plenum, designed so that the air leaves on a 6 degree plane. Aire curtain creates a positive air seal with directional air foil vane. The vane shall facilitate deflection of air stream  $\pm 20$  degrees.

Consult factory for optional top air intake.

Complete Aire Curtain unit shall be ETL or UL listed. When unit(s) will be mounted outdoors, unit(s) must bear ETL or UL label for outdoor use.

Unit shall be built to USDA and FDA compliance.

Unheated units shall have a 24 month warranty on all parts.

**March, 2011**

## Control Options for Model BCT

### 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 (Remote or Unit 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

**Outdoor installation** – Outdoor mount can be specified when ordered. Switches must be remote mounted if unit is installed outdoors.

**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.

**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, On/Off/Auto Switch, and High/Low 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 (Remote or Unit Mounted)** -- Switches the air curtain on and off.



# POWERED AIRE INC.

www.poweredaire.com

**MODEL: BCT**  
**Bug Control Ten**  
**Door Height: Up to Ten Feet**

## PRODUCT DATA

Model	BCT 1-36	BCT 1-42	BCT 1-48	BCT 1-60	BCT 2-60	BCT 2-72	BCT 2-84	BCT 2-96	BCT 3-108	BCT 3-120	BCT 3-132	BCT 4-144
Nozzle Width Inches	36	42	48	60	60	72	84	96	108	118	133	145
Max. FPM at Nozzle	4218	4218	4218	4218	4218	4218	4218	4218	4218	4218	4218	4218
Max. CFM at Nozzle	2899	3384	3867	4374	5050	5803	6766	7732	8702	9668	10853	11606
Avg. FPM at Nozzle	3695	3169	2771	2218	3315	3696	3169	2773	3702	3174	2792	3696
CFM at Nozzle	2541	2532	2559	2528	3812	5082	5063	5081	7623	7614	7589	10164
Outlet Velocity Uniformity	95%	93%	92%	91%	95%	95%	93%	92%	95%	94%	95%	95%
Number Of Motors	1	1	1	1	2	2	2	2	3	3	3	4
Horse Power	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
Weight (Lbs)	90	97	104	117	147	169	187	203	245	274	290	338

Sound Level: 63 dba

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

Single Phase Motor Voltage Available: **120 208/230 480 575**

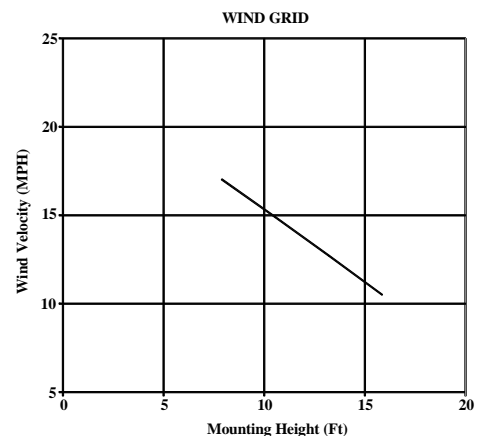
Amp Draw Per Motor: **8.0 3.6 2.0 1.5**

\*\* Nozzle width equals door width.

\*\* For three phase motors consult factory.

\*\* For unit over twelve feet long consult factory.

Indoor, Outdoor listed.



109 Mortensen Rd. Greenville, PA 16125

PHONE: 724-588-3305  
 March, 2011

FAX: 724-588-3371