

# BD14 (Belt Driven 14) Series

Electric Heated

Model Lengths: 96"–192"

Environmental Separation (up to 16')

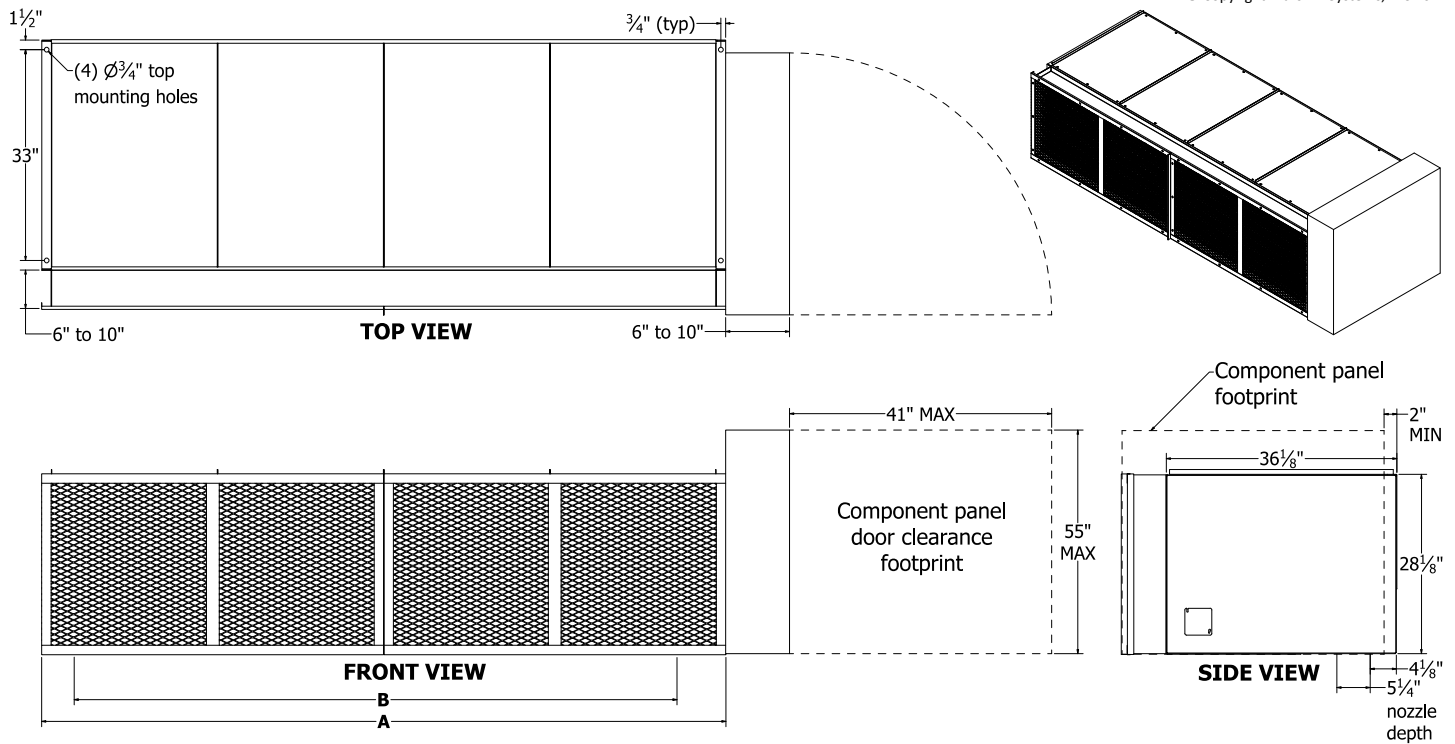
Insect Control (up to 14')



atmosphere is everything

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## Notes:

1. Recommended service clearances are 6" to the left and right sides, 24" on top, and 24" in front of the unit.
2. Circuit protection (per NEC) to be installed by others.
3. To prevent accidental damage during operation, unit must be installed so that the bottom of the air curtain does not extend below the door header.
4. Unit can be suspended from overhead on both ends without intermediate support.
5. Electric heater shown with heater component panel on the right side, as standard.

Model Number	Mechanical Data					Lab Data	
	Overall Length A (in)	Nozzle Length (in)	Mounting Width	Motor (hp)	Weight (lb)	Max Velocity (fpm)	Max Volume (cfm)
<input type="checkbox"/> BD1496-1E*-TS	107	96	105½	5	750	4500	11700
<input type="checkbox"/> BD14120-1E*-TS	131	120	129½	5	875	4500	14650
<input type="checkbox"/> BD14144-1E*-TS	155	144	153½	7½	1000	4500	17600
<input type="checkbox"/> BD14168-1E*-TS	179	168	177½	7½	1125	4500	20500
<input type="checkbox"/> BD14192-1E*-TS	203	192	201½	10	1250	4500	23450

\* – Use corresponding letters in "Electrical Data" column headers (see page 2) to complete the model numbers.

Note: above data is for 60 Hz at 950 RPM. For 50 Hz, RPM is 790 with a 17% reduction in performance.

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## Standard Features:

### Air Curtain

- ❖ 5 to 10 HP continuous duty Premium Efficiency industrial motors
  - Motor shall be inverter rated Totally Enclosed Fan Cooled (TEFC) suitable for continuous heavy-duty operation
- ❖ Fire retardant and rust preventative electrostatic polyurethane powder coating
  - Standard color is Titanium Silver (TS)
- ❖ Adjustable air directional vanes with 40° sweep front to back
- ❖ All units are shipped with fully assembled ready for installation
- ❖ 12-months parts warranty
- ❖ Freight not included
- ❖ Proudly made in the USA

### Electric Heater Coil and Wiring

- ❖ Electric heaters are U.L. listed for "Zero Clearance" and meets all applicable NEC requirements
  - ❖ Coils are an open type for rapid temperature rise to be located in the air curtain's intake directly in the air stream.
  - ❖ Manual reset thermal overload protection provided.
  - ❖ Heater component panel is mounted on the right side, as standard.
    - Left side mount or remote mounted options available
- Note:** This heater component panel is not the same as a motor control panel (MCP). MCP is recommended to integrate the motors, heater component panel, and door switch.

## Mars Recommended Accessories (see [catalog](#) for complete listing):

- ❖ [Door Limit Switches](#) (§)
  - ☐ 99-125, Industrial surface mounted magnetic switch (controller required)
- ❖ [Controllers](#)
  - ☐ MCP‡-†E\*, [Motor Control Panel](#), 120V control voltage (‡ = HP Code, † = # of Motors, \* = Voltage Code) (§)

**Note:** possible HP codes = E (5 HP), G (7 ½ HP) or H (10 HP)

☐ MCP-TD, Adjustable time delay, 1sec-100hr (panel required)

☐ MCP-24V, Low voltage control option (panel required)

☐ BMS-306, BMS for monitor and control (panel with MCP-24V required)

**Note:** Dry contact provided in panel for monitoring motor. 24Vac signal provided from panel for controlling motor.

(§) = Shipped loose

## Sound Levels (measured at 10' in a free field):

5 HP Motor Unit = 73 dBA, 7½ Motor Unit = 74 dBA, 10 HP Motor Unit = 75 dBA

Electrical Data Full Load Amp (FLA)	Unit Amperage(Voltage Code)		Heater Data	
	460V (H)	575V (I)	3Ø kW	Temp Rise (°F)
<input type="checkbox"/> BD1496-1E*-TS	139	111	110	30
<input type="checkbox"/> BD14120-1E*-TS	176	141	140	30
<input type="checkbox"/> BD14144-1E*-TS	214	171	170	31
<input type="checkbox"/> BD14168-1E*-TS	245	196	195	30
<input type="checkbox"/> BD14192-1E*-TS	283	226	225	30

\* – Use corresponding letters in "Electric Data" column headers to complete the model numbers

Ampacity (MCA) = total FLA x 1.25

Amps per motor (included in values above):

5HP: 6.5A @ 460V/3Ø; 5.3A @ 575V/3Ø

7½HP: 10A @ 460V/3Ø; 8.9A @ 575V/3Ø

10HP: 13A @ 460V/3Ø; 10.3A @ 575V/3Ø

### EXAMPLE

**BD14 96 - 1 E H - TS**

