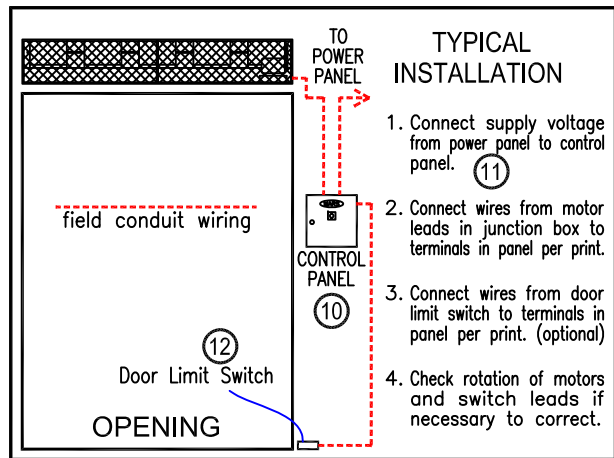


**NOTES:**

- ① This product is designed to comply with the National Electric Code (NEC).
- ② Unit shall be designed to accept the addition of a heater section without modification to the base unit.
- ③ High efficiency forward curved centrifugal blowers. ( 1 per 2 linear feet )
- ④ 3/4" mounting holes for top mounting (4), (2) on each end.
- ⑤ Cabinet is to be mounted from overhead and has sufficient strength for suspension from both ends without intermediate support.
- ⑥ All units have a self contained one piece cabinet, fire retardant and corrosion proof paint lock metal, double protected with baked on gray color rust proof electrostatic polyurethane powder coating.
- ⑦ Unit provided with adjustable sheaves and fixed pulleys, field adjustable to suit varying conditions.
- ⑧ Adjustable perforated volume dampers (2). Capable of reducing air velocity up to 50%.
- ⑨ Unit is to be installed such that air flow is not obstructed. Air discharge nozzle is adjustable with 40° sweep front to back.
- ⑩ Optional motor control panel. Overloads are factory preset. Standard procedure is to ship panel loose for remote mount.
- ⑪ Circuit protection as per (NEC) by others.
- ⑫ Optional door limit switch is field installed and is to be wired to control panel. Switch to be mounted such that air curtain turns on as door begins to open.

MODEL NUMBER	NOZZLE WIDTH A	OVERALL WIDTH B	MOUNTING WIDTH C
BD-22-096-UN	96"	107"	105 1/2"
BD-22-120-UN	120"	131"	129 1/2"
BD-22-144-UN	144"	155"	153 1/2"
BD-22-168-UN	168"	179"	177 1/2"
BD-22-192-UN	192"	203"	201 1/2"



PROJECT	Model No.:
LOCATION	Drawing No.:
ARCHITECT	Date
ENGINEER	Sheet of
	Drawn By:
	Checked By:



**MARS**  
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**BD-22 WindGuard® BELT DRIVE INDUSTRIAL UNHEATED MODELS**

**JOB:**

**ARCHITECT/ENGINEER:**

**DRWG.:** \_\_\_\_\_

**CONTRACTOR:**

**SHEET** \_\_\_\_\_ **of** \_\_\_\_\_ **DATE:** \_\_\_\_\_

**MOTOR FAN DATA**

MARK	WG MODEL NUMBER	NO. REQ'D	LENGTH (INCHES)	WEIGHT (LBS)	MOTOR HP @ 1750 RPM**	VOLTS & PHASE	FLA*		Maximum CFM** at Nozzle	Average FPM** at Nozzle	Maximum FPM** at Nozzle	dBA Measured 10 ft. from Nozzle	REMARKS
							THREE PHASE						
							208V/230V	460V					
	BD-22-096-UN		107	700	1 @ 10		28.0/26.0	13.0	16250	4700	6000	75	
	BD-22-120-UN		131	800	1 @ 15		42.0/40.0	20.0	20300	4700	6000	76	
	BD-22-144-UN		155	900	1 @ 15		42.0/40.0	20.0	24350	4700	6000	76	
	BD-22-168-UN		179	1000	1 @ 20		55.0/51.0	25.5	28400	4700	6000	77	
	BD-22-192-UN		203	1100	1 @ 20		55.0/51.0	25.5	32500	4700	6000	77	

**EQUIPMENT SPECIFICATIONS – Standard Features**

**GENERAL**

Air curtain shall be a Mars® Air Doors brand air curtain: Type WindGuard® Belt Drive Industrial Unheated Models.

**APPROVALS**

Air curtain shall meet the requirements of the National Electric Code.

**CABINET**

Cabinet shall be a self contained one piece housing, constructed of 16 gauge, 1½” square galvanized tube, cased with a minimum 14 gauge galvanized steel panels of sufficient rigidity to span its length with no noticeable deflection. Mounting holes shall be furnished on top ends of unit to allow for suspension from overhead. Discharge nozzle shall be 5 inches wide and shall distribute a uniform outlet air velocity pattern without the use of baffles or diverters. Variable volume dampers in the nozzle, field adjustable, may reduce velocity up to 50%. Nozzle shall be field adjustable with a 40° sweep front to back and shall contain no object such as vanes and louvers, to create turbulence. Housing shall be finished in a gray baked electrostatic polyurethane powder coating. Housing shall be designed to accept the addition of a heater section without modification to the base unit.

**MOTORS AND BLOWER WHEELS**

Motors shall be a standard totally enclosed fan cooled type suitable for continuous heavy duty operation. Motor shall be a belt drive type capable of maintaining and adjusting outlet air velocity through the use of adjustable motor base, sheaves, and pulleys. Motor shall be internally mounted in the air curtain cabinet to prevent damage and to eliminate the need for a belt guard, complying with OSHA requirements. Fixed pulley mechanism and adjustable motor base shall be provided for easy maintenance and replacement of motor belts. Blower wheel shall be forward curved cold rolled steel, direct coupled, dynamically balanced and furnished complete with blower wheel housing. Blower wheels shall not exceed 1500 RPM.

**ELECTRICAL WIRING**

A 4” x 4” watertight junction box shall be mounted on motor end unless otherwise specified.

**GUARANTEE**

Shall be 18 months on all parts.

\* - For Ampacity Multiply FLA X 1.25

\*\* - 17% Reduction in Performance on units with 50Hz.

An equipment specification can be prepared by combining the standard features with the checked boxes below indicating the selection of the optional features.

**OPTIONAL FEATURES**

When checked below, the air curtain will be supplied with the following special features.

- Wash Down Motor (IP 56)
- Door limit switch(es)(20 Amps) for automatic on/off controls. (NEMA 1)  
Turn air curtain on when the door is opened and off when the door is closed. Field installed.
  - Combination Type  Plunger Type  Roller Type
  - Magnetic Type (Surface or Floor Mounted)(Panel Req'd)
    - Floor Mounted  Surface Mounted

Note: A motor control panel is required whenever a door limit switch is used to automatically start and stop the air curtain. A door limit switch may not be used to directly control the air curtain.

- Wall Mounted Control Panel  Factory Mounted Control Panel
- Indicate the total number of motors to be powered through panel

- 1  2  3  4  5  6
- Variable Frequency Drive (VFD)
- Adjustable Time Delay (Control Panel Required)
- V-Bank Filter Section
  - 2” Pleated Throw Away  2” Washable Aluminum Mesh
- 304 Stainless Steel Housing
- Optional Colors

- Pearl White  Titanium Silver  Spartan Bronze
- Obsidian Black  Specify Color \_\_\_\_\_

**MADE WITH PRIDE IN THE U.S.A.**