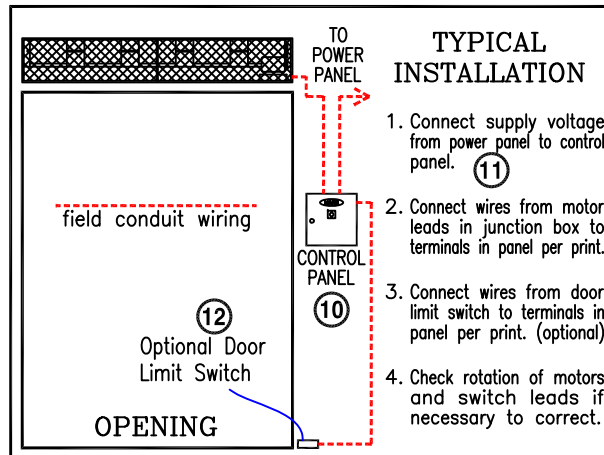


NOTES:

- ① This product is designed to comply with the National Electric Code (NEC).
- ② Unit includes a Steam/Hot Water Coil. Supply Fittings are Middle Right (Steam) or Bottom Right for (Hot Water). Return is Bottom Left (Steam) or Top Left (Hot Water).
- ③ High efficiency forward curved centrifugal blowers. (1 per 2 linear feet)
- ④ (4) 3/4" mounting holes for top mounting, (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 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 N.E.C. 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.
- ⑬ When specifying one row design, use "S" prefix for steam and "W" prefix for hot water. For two row design, use "WW" for hot water and "SS" for steam.

MODEL NUMBER ⑬	NOZZLE WIDTH A	OVERALL WIDTH B	MOUNTING WIDTH C
BD-18-096-XX	96"	107"	105 1/2"
BD-18-120-XX	120"	131"	129 1/2"
BD-18-144-XX	144"	155"	153 1/2"
BD-18-168-XX	168"	179"	177 1/2"
BD-18-192-XX	192"	203"	201 1/2"



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

MARS®
 AIR SYSTEMS

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JOB: _____

ARCHITECT/ENGINEER: _____

DRWG.: _____

CONTRACTOR: _____

SHEET _____ **of** _____ **DATE:** _____

MARK	STANDARD STEAM/HOT WATER HEATED MODEL NUMBER ①	NO. REQ'D	LENGTH (INCHES)	WEIGHT (LBS)	MOTOR FAN DATA					HEATING CAPACITY OF COILS								dBA Measured 10 ft. from Nozzle	REMARKS	
					MOTOR HP @ 1750 RPM**	VOLTS & PHASE	FLA* THREE PHASE		MAX FPM** @ NOZZLE	MAX CFM** @ NOZZLE	STEAM ②				HOT WATER ②					
							208V/230V	460V			HEAT MBH		TEMP RISE °F		HEAT MBH		TEMP RISE °F			
											ONE ROW	TWO ROW	ONE ROW	TWO ROW	ONE ROW	TWO ROW	ONE ROW			TWO ROW
	BD-18-096-XX		107	850	1 @ 7½		21.6/20.0	10.0	5100	13800	686	943	46	63	431	556	29	37	74	
	BD-18-120-XX		131	1000	1 @ 7½		21.6/20.0	10.0	5100	17255	764	1088	41	58	521	668	28	36	75	
	BD-18-144-XX		155	1150	1 @ 10		28.0/26.0	13.0	5100	20700	911	1299	40	58	605	793	27	35	75	
	BD-18-168-XX		179	1300	1 @ 10		28.0/26.0	13.0	5100	24100	1057	1508	40	58	685	869	26	33	76	
	BD-18-192-XX		203	1450	1 @ 15		42.0/40.0	20.0	5100	27600	1201	1721	40	57	762	960	25	32	76	

NOTES: ① When specifying one row design use "S" prefix for steam and "W" prefix for hot water. For two row design, use "SS" for steam and "WW" for hot water.
 ② MBH and air temperature rise based on 70°F ambient air and (5 psi steam) or (200°F hot water).

EQUIPMENT SPECIFICATIONS – Standard Features

GENERAL

Air curtain shall be a Mars® Air Doors brand air curtain: Type WindGuard® Belt Drive Industrial Steam/Hot Water Heated Models.

APPROVALS

Air curtains, excluding coils, shall meet the requirements of the National Electric Code (NEC).

CABINET

Cabinets shall be self contained one piece housing with sufficient strength for fastening to wall on both ends without intermediate support. Cabinet constructed of fire retardant, corrosion proof paint lock metal and double protected with gray baked rust preventative electrostatic polyurethane powder coating. Cabinet to have mechanically field adjustable variable air intake louver assembly capable of reducing outlet air velocity up to 50% with louvers in the totally closed position. Discharge air outlet nozzle shall be wedge shape containing adjustable air directional vanes with a 40° sweep front to back. Motor/fan assembly to be easily accessible for maintenance.

COIL CONSTRUCTION FOR BOTH STEAM & HOT WATER

Single Row Steam Distributing Coils shall be constructed of .035" heavy tube wall x 1" OD seamless copper tubing with die formed aluminum fins. Tubes shall be arranged in a staggered pattern in the direction of air flow.

Double Row Steam Distributing Coils (Dual Feed) shall be constructed of .035" heavy tube wall x 5/8" OD seamless copper tubing with die formed aluminum fins. Tubes shall be arranged in a staggered pattern in the direction of air flow.

Hot Water Coils One & Two Row shall be constructed of .025" heavy tube wall x 5/8" OD seamless copper tubing with die formed aluminum fins. Tubes shall be arranged in a staggered pattern in the direction of air flow.

All casings shall not be less than 16 gauge galvanized steel with tube holes formed with extruded collars. Tube shall be mechanically expanded into fins to ensure a uniform pressure bond throughout the entire length of each tube. Manifolds shall be of heavy seamless copper construction. All joints shall be brazed with high temperature silver brazing alloy. Fittings shall be of wrought copper or similar construction such that the entire fluid circuit shall be of compatible nonferrous materials. Manifold shall be fitted with 1/4" vent or drain fittings. Supply fitting is on the right side of coil. Return fitting is on the left side.

MOTOR & BLOWER HOUSING

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 an adjustable motor base, sheaves, and pulleys. Motor shall be internally mounted in the air curtain cabinet to prevent damage and to eliminate the need of a belt guard, complying with OSHA requirements. Fixed pulley mechanism and replacement of motor belts. Blower wheel shall be forward curved cold rolled steel, direct coupled, dynamically balanced and furnished with blower wheel housing. Blower wheels shall not exceed 1500 RPM.

ELECTRICAL WIRING

A 4"x4" watertight junction box shall be mounted on motor end unless otherwise specified.

* - For Ampacity Multiply FLA X 1.25

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

GUARANTEE

Shall be 18 months on all parts.

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.

- Hot water coil manufactured with supply and return fittings on same side of coil manifold.
 - Left hand fittings Right hand fittings Other _____
- Special Coil Construction
 - Heresite coated Copper Stainless Steel Cupernickel
- Door limit switch (20 Amps) for automatic On/Off control. Turns air curtain on when door is opened and turns off when 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 total number of motors to be powered through panel

- 1 2 3 4 5 6

- Variable Frequency Drive (VFD)

- Coil casing finished to match air curtain housing

- All stainless steel housing

- Washable aluminum air filter

- Optional colors

- Pearl White Titanium Silver Spartan Bronze Obsidian Black Other _____

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