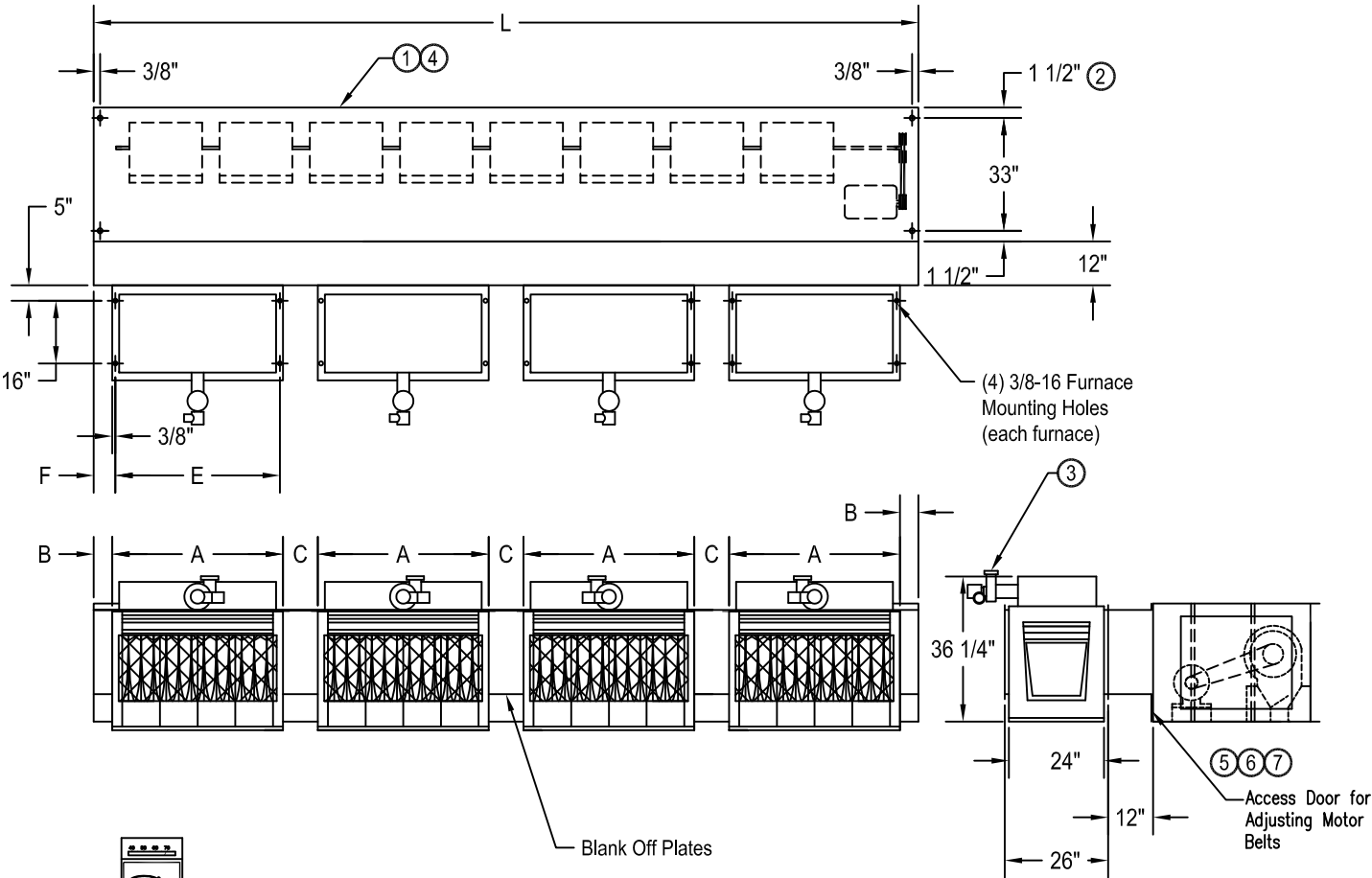


NOTES:

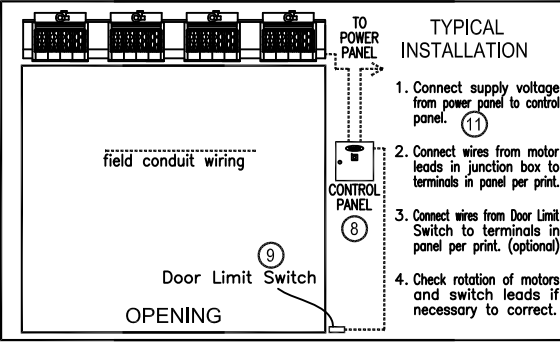
- ① This product is designed to comply with the National Electric Code (NEC). Duct furnaces are design is certified by CSA International for use with natural an LP (Propane) gases with Single Stage Gas Valve and Aluminized Heat Exchanger and Burners.
- ② 3/4" Mounting holes (4) provided. (2) each end.
- ③ Standard Power Venter. Flue connection field adjustable. Horizontal or Vertical flue.
- ④ 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.
- ⑤ Unit provided with adjustable sheaves and pulleys, field adjustable to suit varying conditions.
- ⑥ Adjustable perforated volume dampers (2). Capable of reducing air velocity up to 50%.
- ⑦ Unit is to be installed such that air flow is not obstructed. Air discharge nozzle is adjustable with 40° sweep front to back.
- ⑧ Standard motor control panel, overloads are factory preset. Burner controls are interlocked with motor control panel. Standard procedure is to ship panel loose for remote mount.
- ⑨ Optional door limit switch is field installed and is to be wired to the control panel. Switch to be mounted such that the air curtain turns on when door begins to open.
- ⑩ Remote mounted thermostat field installed. Thermostat to regulate furnaces operation, must be located in area which senses either the intake or discharge temperature. (Max. output 90°F)
- ⑪ Circuit protection as per (NEC) by others.



Remote Thermostat Shipped Loose

⑪

MODEL NUMBER	OVERALL WIDTH L	FURNACE WIDTH A	END SPACE B	CENTER SPACE C	FLUE SIZE D ③	MOUNTING DISTANCE E	DIM F	FURNACE SIZE (MBH)
BD18 96-11	107"	42 5/8"	5 7/16"	10 7/8"	6" ROUND	41 7/8"	5 13/16"	(2) @ 350
BD18 120-11	131"	48 1/8"	8 11/16"	17 3/8"	6" ROUND	47 3/8"	9 1/16"	(2) @ 400
BD18 144-11	155"	42 5/8"	4 1/2"	9 1/16"	6" ROUND	41 7/8"	4 7/8"	(3) @ 350
BD18 168-11	179"	48 1/8"	5 3/4"	11 1/2"	6" ROUND	47 3/8"	6 1/8"	(3) @ 400
BD18 192-11	203"	42 5/8"	4 1/16"	8 1/8"	6" ROUND	41 7/8"	4 7/16"	(4) @ 350



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	INDIRECT FIRED GAS MODEL NUMBER	NO. REQ'D	LENGTH	TOTAL WEIGHT LBS	FURNACE DATA			MOTOR FAN DATA						dBA Measured 10 ft. from Nozzle	REMARKS	
					MBH INPUT MAX	TEMP. RISE °F MIN	NATURAL GAS (NPT) CONN.	MOTOR HP @ 1750 RPM**	VOLTS & PHASE	FLA * THREE PHASE		MAX CFM** @ NOZZLE	AVG FPM** @ NOZZLE			MAX FPM **@ NOZZLE
										208/230V	460V					
	BD18 96-11		107	1450	(2) @ 300	47	3/4"	7 1/2		21.6/20.0	10.0	13800	4000	5100	74	
	BD18 120-11		131	1650	(2) @ 350	43	3/4"	7 1/2		21.6/20.0	10.0	17255	4000	5100	75	
	BD18 144-11		155	1850	(2) @ 400	47	3/4"	10		28.0/26.0	13.0	20700	4000	5100	75	
	BD18 168-11		179	2150	(3) @ 350	46	3/4"	10		28.0/26.0	13.0	24100	4000	5100	76	
	BD18 192-11		203	2650	(3) @ 400	47	3/4"	15		42.0/40.0	20.0	27600	4000	5100	76	

EQUIPMENT SPECIFICATIONS – Standard Features

GENERAL

Air curtain shall be a Mars Air Doors® brand air curtain: Type Windguard® Belt Drive Indirect Fired Gas Industrial Air Curtain.

APPROVALS

The Air Curtain shall meet the requirements of the National Electric Code. (NEC). The Duct Furnace shall be approved by the American Gas Association (AGA) and Canadian Gas Association (CGA).

CABINET AND TRANSITION

Cabinet shall be a self-contained one piece housing with sufficient strength for suspending with threaded rods on both ends without intermediate support. Transition(s) shipped assembled for field installation. Cabinet and Transition constructed of fire retardant, corrosion proof paint lock metal and double protected with gray baked, rust preventative, electrostatic, polyurethane powder coating. Discharge air outlet nozzle shall be wedge shaped containing adjustable air directional vanes with 40° sweep front to back. Motor/Fan assembly to be easily accessible, through bottom of transition, for maintenance.

INDIRECT FIRED, GAS HEATED FURNACES

Heat exchanger shall be Indirect Natural Gas Fired, Gravity Vented Duct Furnace. Heat Exchanger and Die-formed Burners shall be constructed of Aluminized Steel with Stainless Steel Insert Burners. Manifold, Orifices, Flame Sensor and Ignitor shall be easily removable as an assembly.

FURNACE CONTROLS

Unit shall include a 24 Volt Control Transformer, Combination Single-Stage Gas Control System with a Regulated Combination Redundant Gas Valve and an Intermittent Spark Pilot with Electric Flame Supervision. The unit also includes a remote mounted 24 Volt Thermostat with a Heat & Fan, Off and Fan Only Selector Switch. The Panel includes a built-in 30 Second Fan Time Delay and HOA Switch on control panel door. The unit is to include all required limit and safety controls.

MOTOR AND BLOWER HOUSINGS

Motor(s) shall be totally enclosed fan cooled (TEFC) 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.

GUARANTEE

Shall be 18 months on all parts.

* - For Ampacity Multiply FLA X 1.25

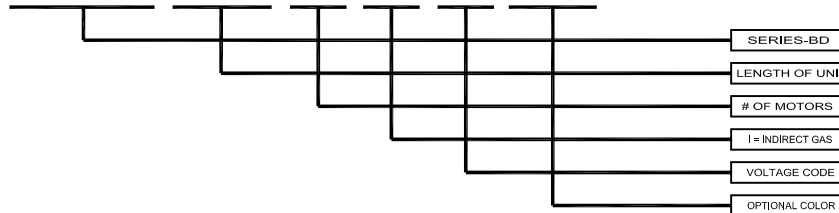
** - 17% Reduction in Performance on units with 50Hz.

ACCESSORIES

Refer to the optional features and accessories page.

EXAMPLE

BD18 168- 1 I H-TS



SIZE	VOLTAGE	CODE
96"-192"	208-230/3/60	G
96"-192"	460/3/60	H
96"-192"	575/3/60	I

COLOR	CODE
OBSIDIAN BLACK	OB
TITANIUM SILVER	TS
PEARL WHITE	PW
SPARTAN BRONZE	SB
BATTLESHIP GRAY	BG

MADE WITH PRIDE IN THE U.S.A.