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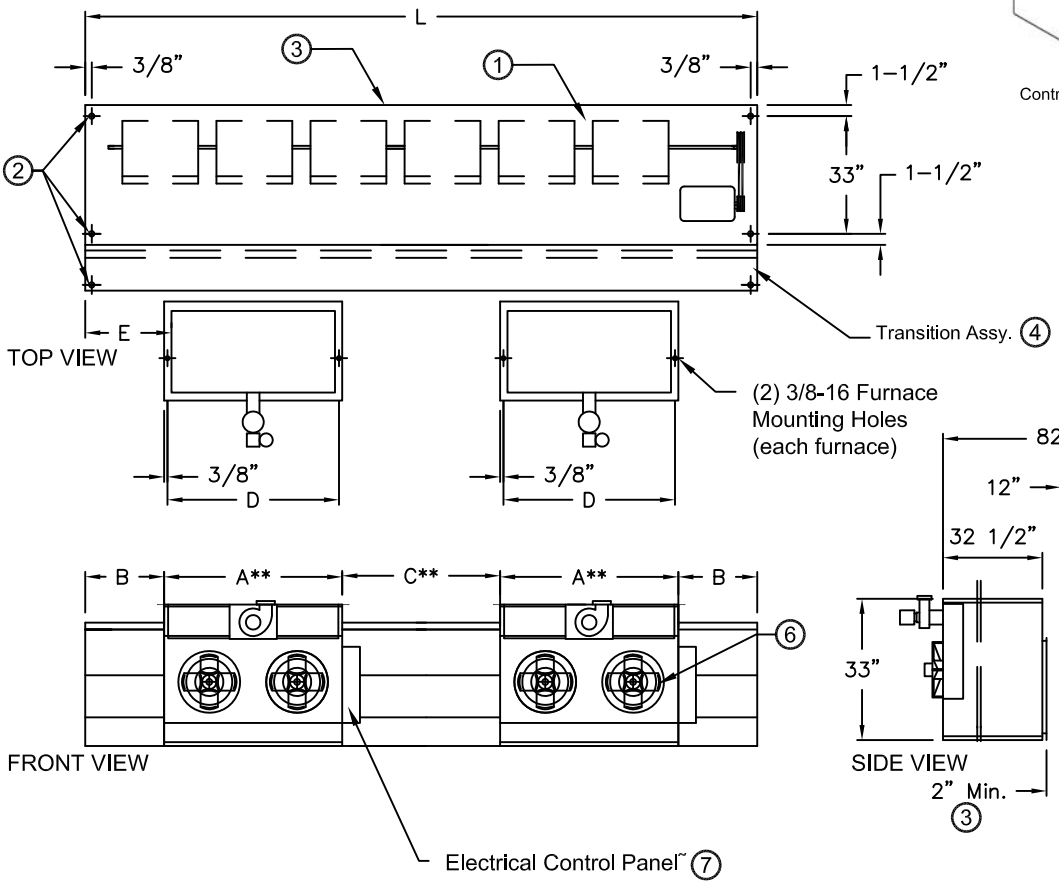
PROJECT		OPTIONS/ITEMS
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MODEL NO. BD18 Series	DRAWING NO BD18IG–F	DRAWN BY TVN	CHECKED BY	FILE NAME

Indirect Fired Gas Heated Drawing

BD18

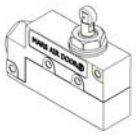
(Belt Driven 18) Series



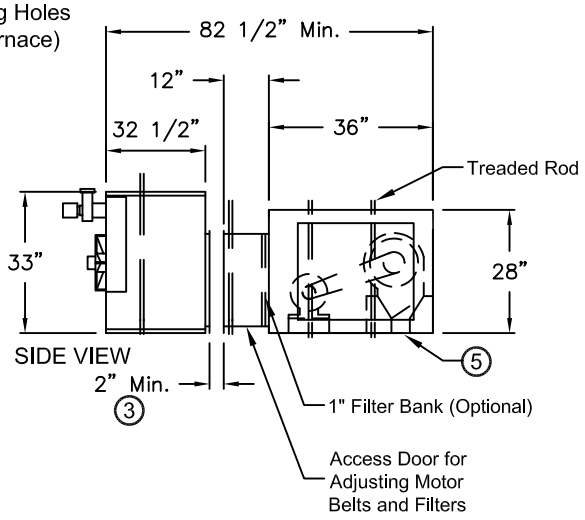
8 Recommended Accessories


Control Panels


Remote T'stat Shipped Loose


Door Limit Switches

Intertek Furnace Only



Note: MARS reserves the right to change specifications and product design without notice. Such revisions do not entitle the buyer to corresponding changes, Improvements additions or replacements for previously purchased equipment.

˜Please see Furnace Submittal for Furnace Data and Dimension
Removal of Furnace may be required for servicing and trouble shooting.

*- Use corresponding letters in "Electrical Data" columns to complete the model numbers.

** For 3 furnace models, please add an additional C and A dims

MODEL NUMBER	Overall Width (in) L	Furnace Width (in) A	End Space (In) B	Center Space (In) C	Mounting Distance (In) D	End Dim (in) E	Furnace Size (MBH)
BD1896-1I*-TS	107	32 3/4	10 3/8	20 3/4	30 5/8	11 3/4	2 @ 250
BD18120-1I*-TS	131	50 3/4	7 3/8	14 3/4	48 5/8	8 3/4	2 @ 400
BD18144-1I*-TS	155	50 3/4	13 3/8	26 3/4	48 5/8	14 3/4	2 @ 400
BD18168-1I*-TS	179	50 3/4	-	12 1/2	48 5/8	2 1/4	3 @ 400
BD18192-1I*-TS	203	50 3/4	8 11/24	16 11/12	48 5/8	9 5/6	3 @ 400

Notes:

1. The Air Curtain is designed to comply with the National Electric Code (NEC) and the Furnaces are ETL verified to be 83% efficient with 3/8 overhead mounting hardware for overhead mounting.
2. 7/8" mounting holes (4) provided, (2) on each end of air curtain and 5/8" mounting holes (2) provided, (1) on each end of transition assembly.
3. Cabinet has sufficient strength for fastening from overhead on both ends without intermediate support. Furnace must be mounted at least 2" away from the transition. Transition pieces are provided with pilot holes for easy field assembly and hardware is included.
4. Factory assembled, powder coated Transition shipped loose for field installation. Units 10' and longer, use (2) transitions side by side.
5. Unit is to be installed such that air flow is unobstructed. Air discharge nozzle containing adjustable air directional vanes with 40° sweep front to back.
6. Furnaces with impellers have positive pressure, 20 gauge aluminized tubular heat exchanger with in-shot burner technology, power vented exhaust (horizontal or vertical), single stage gas valve, direct spark ignition and certified for Category I and III venting.
7. Circuit protection as per NEC by others.
8. Optional motor control panel and door limit switch are field installed and/or wired by others. The door limit switch is to be mounted such that the air curtain turns on as door begins to open. To prevent unit damage, the mounting brackets must be installed such that the bottom of the air curtain is not below the door header.

BD18 (Belt Driven 18) Series

Indirect Fired Gas Heated

Model Lengths 96” – 192”

atmosphere is everything

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Indirect Fired Gas Heated Data Sheet

Applications: Environmental Separation (up to 18’)

BD18 (WindGuard)	Mechanical Data							Lab Data	
Model Number	Nozzle Length (in)	Length (in)	Depth (in)	Height (in)	Motor (hp)	Total Weight*** (lbs)	Furnace Weight (lbs)	Max Velocity (fpm)	Max Volume (cfm)
BD1896-1I*-TS	96	107	82 1/2	33	7 1/2	1148	2 @ 211 ea	5100	13800
BD18120-1I*-TS	120	131	82 1/2	33	7 1/2	1513	2 @ 335 ea	5100	17255
BD18144-1I*-TS	144	155	82 1/2	33	10	1630	2 @ 335 ea	5100	20700
BD18168-1I*-TS	168	179	82 1/2	33	10	2082	3 @ 335 ea	5100	24100
BD18192-1I*-TS	192	203	82 1/2	33	15	2199	3 @ 335 ea	5100	27600

* - Use corresponding letters in "Electrical Data" columns to complete the model numbers.

*** - Total Weight includes air curtain, transition and furnace weights

Note: Data above is for 60 Hz, 17% reduction in the performance data with 50 Hz.

Features:

Air Curtain and Transition

- 7 ½ to 15 HP continuous duty premium efficiency industrial TEFC motors
- Air curtain is a self-contained one piece heavy gauge corrosion proof paint lock metal design
- Air curtain is constructed to conform to UL 507 (US) and CSA 22.2 (Canada) Standards
- Top mounting holes provided
- Cabinet has sufficient strength for fastening from overhead on both ends without intermediate support
- Adjustable air directional nozzle with 40° sweep front to back
- Transition is shipped fully assembled and attached to unit
- Standard color is Titanium Silver
- Rust preventative electrostatic polyurethane powder coating
- 12 month parts warranty
- Freight Not Included (FOB Factory)
- Proudly Made in the USA

Indirect Fired Gas Furnaces

- ETL verified to be 83% efficient
- In-shot burner technology
- Aluminized tubular heat exchanger (20 gauge)
- Positive pressure 120V impellers (separate 120V, 1Ø power req’d)
- Power vented exhaust
- Single stage gas valve
- Standard direct spark ignition
- Certified for Category I and III Venting
- Natural gas
- Factory test fired
- Overhead mounting hardware provided (2 per furnace)

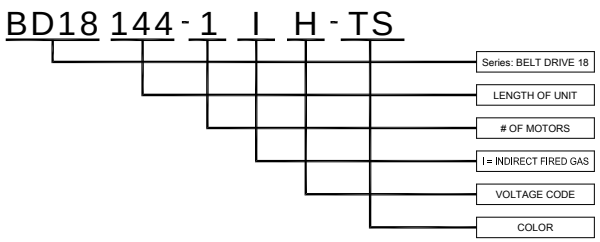
Electrical Data (FLA)	Unit Voltage (Voltage Code)			Electrical Data (FLA) Furnace
	208/230v (G)	460v (H)	575v (I)	115V
BD1896-1I*-TS	21.6/20.0	10.0	8.9	16.0
BD18120-1I*-TS	21.6/20.0	10.0	8.9	27.0
BD18144-1I*-TS	28.0/26.0	13.0	10.3	27.0
BD18168-1I*-TS	28.0/26.0	13.0	10.3	40.5
BD18192-1I*-TS	42.0/40.0	20.0	15.6	40.5

* - Use corresponding letters in "Electrical Data" columns to complete the model numbers.

Note: For Ampacity Multiply FLA X 1.25

Indirect Fired Gas Data						
Model Number	# of Furnaces	Input MBH per Furnace	Total Output MBH	Temp Rise (°F)	Flue Size	Natural Gas (NPT) CONN
BD1896-1I*-TS	2	250	415	28	5" Rnd	1/2"
BD18120-1I*-TS	2	400	664	36	6" Rnd	3/4"
BD18144-1I*-TS	2	400	664	30	6" Rnd	3/4"
BD18168-1I*-TS	3	400	996	38	6" Rnd	3/4"
BD18192-1I*-TS	3	400	996	33	6" Rnd	3/4"

EXAMPLE



Options and Accessories: (see Accessories Brochure)

- Motor Control Panels with remote mounted t’stat
- 409 and 321 stainless steel heat exchangers
- Separated combustion
- Two stage and modulating gas valves
- LP gas
- Custom housing and transition colors and finishes (304SS, 316SS)

Intertek

Furnace Only

Sound Levels: (measured at 10’ in an open field)

7 ½ HP Motor Unit = 74 dBA, 10 HP Motor Unit = 75 dBA, 15 HP Motor Unit = 76 dBA

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