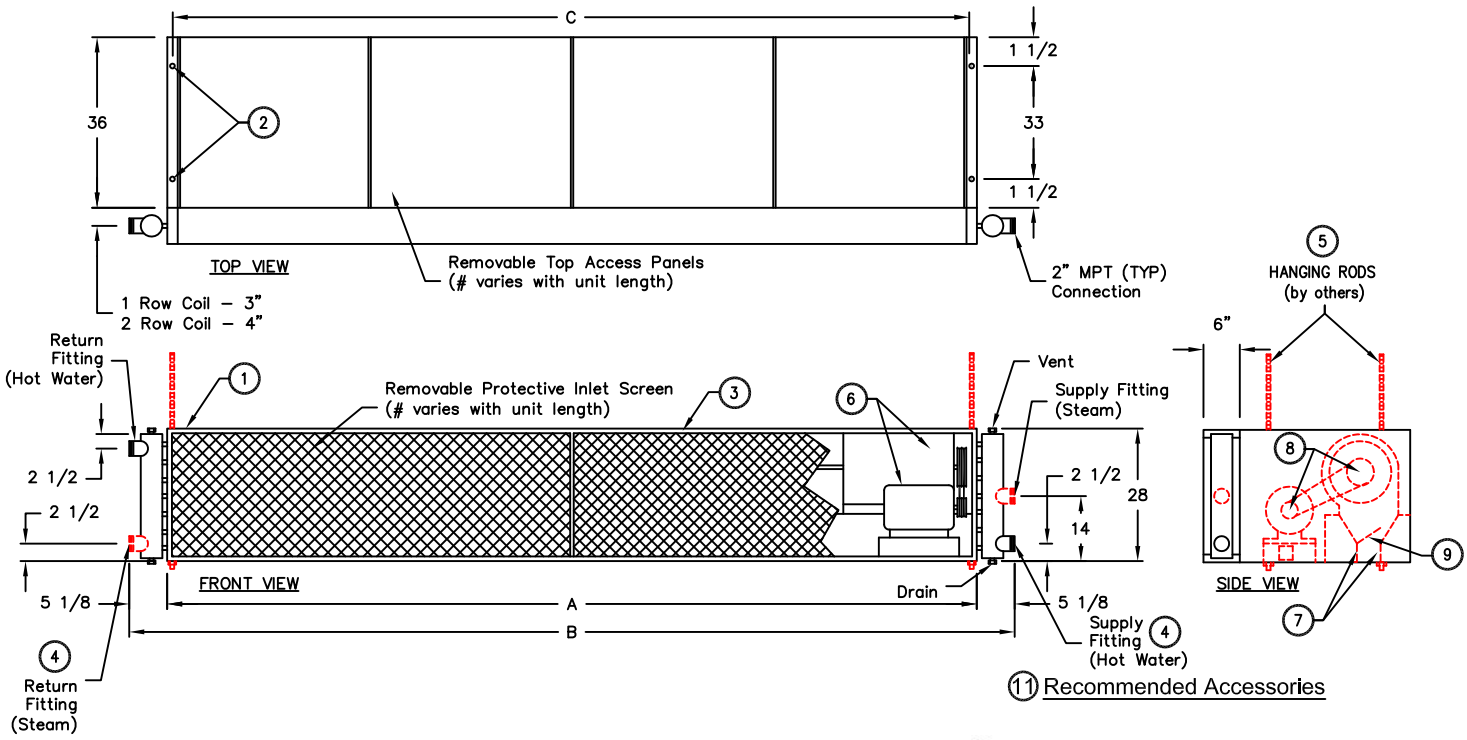
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MODEL NO. BD18 Series	DRAWING NO BD18HWS–F	DRAWN BY TVN	CHECKED BY	FILE NAME

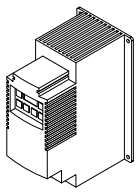
Hot Water/Steam Heated Drawing

BD18

(Belt Driven 18) Series



11 Recommended Accessories



Variable Frequency Drive





Control Panels with Remote T'stat 10



Door Limit Switches

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

MODEL NUMBER	NOZZLE LENGTH (in)	AIR CURTAIN LENGTH A (in)	OVERALL LENGTH B (in)	MOUNTING WIDTH C (in)
BD1896-1**-TS	96	107	117	105 1/2
BD18120-1**-TS	120	131	141	129 1/2
BD18144-1**-TS	144	155	165	153 1/2
BD18168-1**-TS	168	179	189	177 1/2
BD18192-1**-TS	192	203	213	201 1/2

Notes:

1. This product is designed to meet the National Electric Code (NEC).
2. (4) 3/4" mounting holes provided on for overhead mounting provided, (2) on each end.
3. All units have a self contained one piece cabinet, fire retardant and corrosion proof paint lock metal double protected with baked on Titanium Silver color, rust preventative electrostatic polyurethane powder coating.
4. Hot Water application shown. For Steam, return fitting is at bottom of manifold and supply is at center of manifold. (2" MPT Typical)
5. Cabinet is to be mounted from overhead and has sufficient strength for suspension from both ends without intermediate support.
6. High efficiency motor and dynamically balanced forward curved centrifugal blowers.
7. Unit is to be installed such that air flow is unobstructed. Unit has a 5" air discharge nozzle containing adjustable air directional vanes with 40° sweep front to back.
8. Unit provided with adjustable sheaves and pulleys field adjustable to suit varying conditions. VFD optional.
9. Adjustable perforated volume dampers (2). Capable of reducing air velocity up to 50%.
10. Circuit protection as per NEC by others.
11. 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 air curtain must be installed such that the bottom of the air curtain is not below the door header.

BD18 (Belt Drive) Series

Hot Water/Steam Heated

Model Lengths 96” – 192”

atmosphere is everything

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Hot Water/Steam 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)	Weight (lbs)	Max Velocity (fpm)	Max Volume (cfm)
BD1896-1**-TS	96	117	42	28	7 1/2	900	5100	13800
BD18120-1**-TS	120	141	42	28	7 1/2	1050	5100	17255
BD18144-1**-TS	144	165	42	28	10	1200	5100	20700
BD18168-1**-TS	168	189	42	28	10	1350	5100	24100
BD18192-1**-TS	192	213	42	28	15	1500	5100	27600

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

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

Features:

Air Curtain

- 7 1/2 to 15 HP Heavy Duty Motors
- Air curtain has a self-contained cabinet with sufficient strength for fastening from overhead on both ends without intermediate support. Top and rear mounting holes provided (4) 3/4”
- Adjustable air directional nozzle with 40° sweep front to back
- Standard color is Titanium Silver
- Rust preventative electrostatic polyurethane powder coating
- All units are shipped fully assembled ready for installation
- 18 month parts warranty
- Freight Not Included (FOB Factory)
- Proudly Made in the USA

Coil Data	Hot Water				Steam		
	Coil Code (X)	GPM	MBH	Temp Rise (°F)	Coil Code (Y)	MBH	Temp Rise (°F)
BD1896-1**-TS	2 Row	45	544	37	1 Row	526	35
BD18120-1**-TS	2 Row	48	664	36	1 Row	653	35
BD18144-1**-TS	2 Row	49	772	35	1 Row	780	35
BD18168-1**-TS	2 Row	48	873	34	1 Row	905	35
BD18192-1**-TS	2 Row	47	972	33	1 Row	1033	35

EAT: 70 F, EWT: 200 F, Steam pressure: 5 PSI

Hot Water and Steam Coils

- Coil casings shall not be less than 16 gauge galvanized steel with tube holes formed with extruded collars.
- Fins are die formed .006” aluminum (1 row – 10 FPI, 2 row – 8 FPI)
- Coils tubes constructed of heavy wall, 5/8" OD seamless copper (Steam - .035 & Hot Water - .025”)
- Coil tubes arranged in a staggered pattern and mechanically expanded into fins to ensure a uniform pressure bond
- Manifolds shall be of heavy seamless copper construction
- All joints shall be brazed with high temperature silver brazing alloy (Steam – 5% & Hot Water – 2%), max steam operating pressure: 30 PSI
- 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

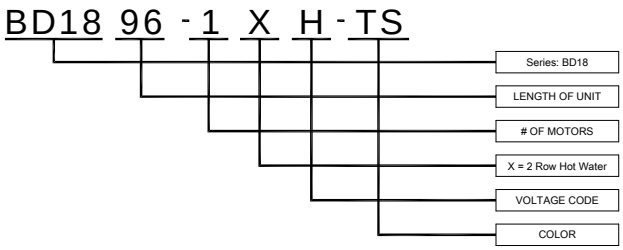
Electrical Data (FLA)	Unit Voltage (Voltage Code)		
	208/230v (G)	460v (H)	575v (I)
BD1896-1**-TS	21.6/20.0	10.0	8.9
BD18120-1**-TS	21.6/20.0	10.0	8.9
BD18144-1**-TS	28.0/26.0	13.0	10.3
BD18168-1**-TS	28.0/26.0	13.0	10.3
BD18192-1**-TS	42.0/40.0	20.0	15.6

* - Use corresponding letters in "Coil Data" then "Electrical Data" columns to complete the model numbers.
Note: For Ampacity Multiply FLA X 1.25

Options and Accessories: (see Accessories Brochure)

- Motor Control Panels with remote mounted t’stat
- Steam distribution, Cupro-Nickel and CRN coils
- Rust resistant epoxy coated or SS coils
- Custom housing and transition colors and finishes (304SS, 316SS, Aluminum)

EXAMPLE



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

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

NOTE: MARS AIR SYSTEMS, LLC 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.