

JOB: _____ ARCHITECT/ENGINEER: _____ DRWG.: _____
 CONTRACTOR: _____ SHEET _____ of _____ DATE: _____

MARK	HIGH VELOCITY STEAM HOT WATER HEATED MODEL NUMBER ①	NO. REQ'D	LENGTH	WEIGHT (LBS)	MOTOR FAN DATA						HEATING CAPACITY OF COILS								dBA Measured 10 ft. from Nozzle	REMARKS
					MOTOR HP 1750 RPM	VOLTS & PHASE	FLA (AMPACITY) THREE PHASE		MAX FPM @ NOZZLE	MAX CFM @ NOZZLE	STEAM ②				HOT WATER ②					
							208V 240V	480V			TEMP RISE °F		TEMP RISE °F							
											ONE ROW	TWO ROW	ONE ROW	TWO ROW						
	48HV		4'	150	1		4.4 (5.5)	2.0 (2.5)	4000	4000	124	210	29	49	87	144	20	30	70	
	60HV		5'	190	1		4.4 (5.5)	2.0 (2.5)	3200	4000	141	238	33	55	94	152	20	30	70	
	72HV-2		6'	250	Two	1	8.8 (11.0)	4.0 (5.0)	5140	8000	210	362	24	42	164	272	20	30	73	
	84HV-2		7'	270	Two	1	8.8 (11.0)	4.0 (5.0)	4570	8000	231	395	27	46	174	284	20	30	73	
	96HV-2		8'	300	Two	1	8.8 (11.0)	4.0 (5.0)	4000	8000	250	426	29	49	177	283	20	30	73	
	108HV-2		9'	320	Two	1	8.8 (11.0)	4.0 (5.0)	3555	8000	271	452	30	51	185	301	20	30	73	
	108HV-3		9'	360	Three	1	13.2 (16.5)	6.0 (7.5)	5330	12000	318	545	24	42	224	360	20	30	75	
	120HV-2		10'	330	Two	1	8.8 (11.0)	4.0 (5.0)	3200	8000	284	479	33	55	195	307	20	30	73	
	120HV-3		10'	390	Three	1	13.2 (16.5)	6.0 (7.5)	4800	12000	338	579	26	45	255	410	20	30	75	
	144HV-3		12'	410	Three	1	13.2 (16.5)	6.0 (7.5)	4000	12000	377	641	29	49	281	410	20	30	75	

NOTES: ① When specifying one row design use "S" prefix for steam and "W" prefix for hot water, for two row design use "SS" and "WW".

② MBtu/Hr and air temperature rise based on 70° ambient air and (5 psi steam) or (200°F hot water).

EQUIPMENT SPECIFICATION - Standard Features

GENERAL: Air curtain shall be a Mars® Air Doors brand air curtain: Type High Velocity Steam or Hot Water heated.

APPROVALS

Air curtains, excluding coils, shall be Underwriters Laboratory Listed, Canadian Standards Association Certified and meet the requirements of the National Electric Code.

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 60% 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 HOT WATER & STEAM

Coils 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. Casings shall be of not less than 16 gauge galvanized steel with tube holes formed with extruded collars. Tubes shall be mechanically expanded into fins to assure 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. Coils are shipped loose.

MOTORS AND BLOWER WHEELS

Motor(s) shall be totally enclosed air over (TEAO) type suitable for continuous heavy duty, all angle operation. Construction shall include sealed lifetime pre-lubricated ball bearings, resilient mounted and protected by an automatic reset thermal overload switch. Motor(s) to have cord with pigtailed in water tight junction box, secured with a water tight fitting. Motor(s) to have double extended shaft and direct drive, double inlet, dynamically balanced, forward curve squirrel cage blower wheels. Shipped loose for units over 4 feet long.

ELECTRICAL WIRING

Each motor to have a watertight junction box to be mounted on bottom center of each motor/fan assembly.

GUARANTEE Shall be 18 months on all parts.

Single Phase Motors Available. 1ø, 115V (16A) & 208/230 (8.0A) per motor. Multiply the 1ø Amps by the number of motors per unit for the FLA. (FLA x 1.25=Ampacity)

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

OPTIONAL FEATURES

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

- Steam/Hot water coil manufactured with supply and return fittings on same side of coil manifold.
 - Left hand fittings Right hand fittings Other _____

- Explosion proof motor(s)
- Two speed motor(s)
- Door micro switch (20 Amp) for automatic On/Off control. Turns air curtain on when door is opened and turns off when door is closed. Field installed.
 - Plunger type Roller type

NOTE: Mars® recommends the use of a motor control panel on 3 phase motors whenever a door micro switch is used to start and stop the air curtain. One door micro switch can directly control one 1 HP single phase motor without the need for a motor control panel.

- Wall mounted control panel Factory mounted control panel on air curtain

Indicate total number of motors to be powered through panel

- 1 2 3 4 5 6
- Plates for side extension of mounting points
 - 5 inch extension 7 inch extension 9 inch extension
- Adjustable mounting brackets to clear any wall obstruction of air flow
 - 2 1/2 inch clearance 4 inch clearance 7 inch clearance 10 inch clearance
- Extended wall mounting brackets to install air curtain in front of DRUM TYPE roll-up doors
 - 10 inch clearance 16 inch clearance 19 inch clearance 23 inch clearance
- Coil casing finished to match air curtain housing
- All stainless steel housing
- Washable aluminum air filter
 - In lieu of adjustable inlet air louvers In conjunction with adjustable inlet air louvers

MADE WITH PRIDE IN THE U.S.A.

1 HP HIGH VELOCITY STEAM AND HOT WATER HEATED MODELS

SH2BX 03/14/03 RCP