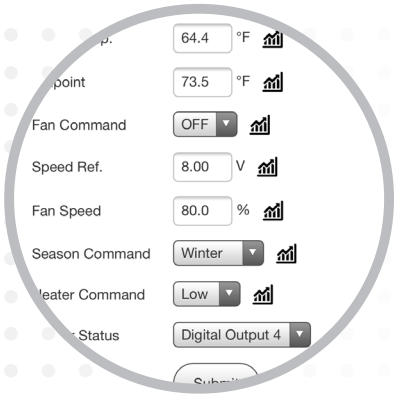
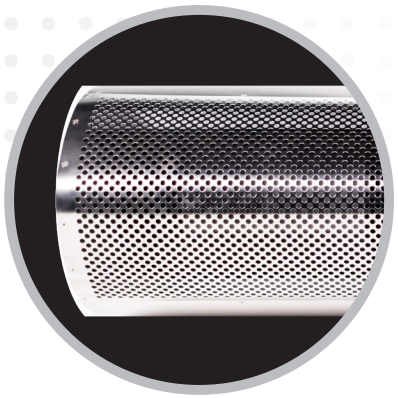
Mars Air Systems offers sanitation, protection, and energy savings

Air Curtain Product Catalog Fall 2021





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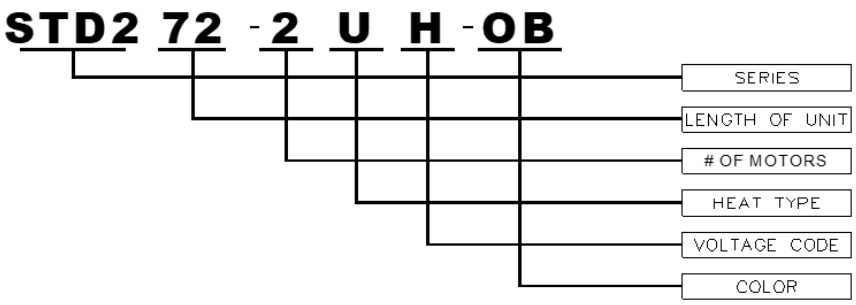
Unheated Nomenclature

Applicable For All Series & Heat Type Except For Electric Heated LPV2,STD2,QP10,PH,HV2 Series.

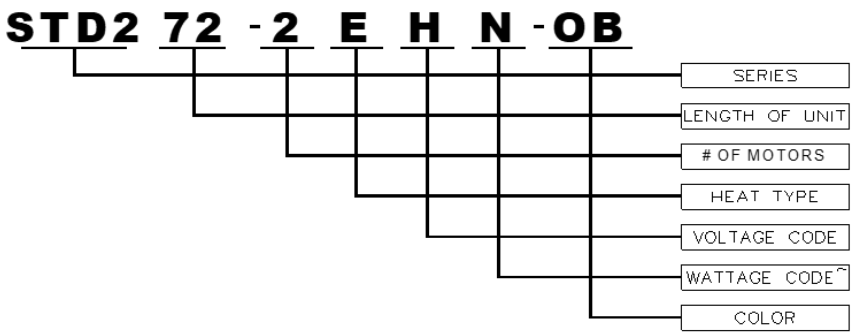


SERIES	LENGTH OF UNIT	# OF MOTORS	HEAT TYPE		VOLTAGE				COLOR	
			HEAT MODE	CODE	VOLTS	PHASE	HZ	CODE	(HOUSING ONLY)	CODE
LPV2	25	1	Unheated	U	115	1	60	A	Obsidian Black	OB
STD2	36	2	Electric Heated*	E	208/230	1	60	D	Titanium Silver	TS
PH10	42	3	Water Single Row	W	208/230	3	60	G	Battleship Gray	BG
PH12	48	4	Water Double Row	X	277	1	60	L	Pearl White	PW
QP10	60		Steam Single Row	Y	460	3	60	H	Stainless Steel	SS
LPN2	72		Steam Double Row	Z	575	3	60	I	Pearl White	PW
N2	84		Single Row Hot Water or Steam	V	220	1	50	U	RAL Color Code	RAL
NH2	96		Indirect Fired Gas	I	220	3	50	V		
HV2	108				380/415	3	50	W		
EP2	120									
WMI	144									
WMH	168									
BD14	192									
BD18										
BD22										
BD26										
BD30										

*For single wattage WM and BD models only

Electric Heated Nomenclature

Applicable For Electric Heated LPV2,STD2,QP10,PH,HV2 Series.

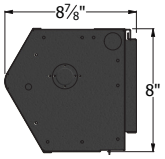


			HEAT TYPE		VOLTAGE					WATTAGE ~		COLOR	
SERIES	LENGTH OF UNIT	# OF MOTORS	HEAT MODE	CODE	VOLTS	PHASE	HZ	SEPARATE MOTOR VOLTAGE	CODE	HEATER KW	CODE	HOUSING COLOR	CODE
LPV2	25	1	Electric Heated	E	208	1	60		B	4	A	Obsidian Black	OB
STD2	36	2			230	1	60		C	6	B	Titanium Silver	TS
PH10	42	3			208	3	60		E	6.1	C	Battleship Gray	BG
PH12	48	4			230	3	60		F	8	D	Pearl White	BG
QP10	60				277	1	60		L	9	E	Stainless Steel	SS
LPN2	72				460	3	60		H	9.5	F	Pearl White	PW
N2	84				575	3	60		I	10	G	RAL Color Code	RAL
NH2	96				460	3	60	115V Motor	O	12	H		
HV2	108				460	3	60	208/230V Motor	P	13	I		
EP2	120				575	3	60	115V Motor	Q	16	J		
	144				575	3	60	208/230V Motor	R	18	K		
					220	1	50		U	19	L		
					220	3	50		V	20	M		
					380/415	3	50		W	24	N		
										26	O		
										27	P		
										28.5	Q		
										32	R		
										36	S		
										48	T		
										64	W		

~ Wattage Code Applicable for Electric Heated Models Except for WM and BD Series

KEY FEATURES

- **ETL listed to UL 507 (US) and CSA 22.2 (Canada)**
  - Certified to ANSI/NSF 37 (LPN2 only)
- **Ultra low-profile design**
- **Variable speed control (LPV2 only)**
- **Overhead or wall mounting**
- **Powder coated Obsidian Black**
- **Freight allowed in continental US**



Temperature Control for Commercial, Office, and Retail Applications

LPV2 (LoPro 2) Series															
Unheated Model Number	Opening Width (in)	Opening Height (ft)	Unit Dimesions (in)		Air Velocity FPM @ Nozzle (Max)	Air Volume CFM @ Nozzle	Full Load Amps (Total FLA) 1 Phase		# of Motors	HP per Motor	Net Weight (lbs)	Accreditation Standards		
			Height	Depth			115V (A)	208V/230V (D)				Performance	Safety	Sanitation
LPV2 - Mounting Heights: Environmental Separation (up to 8') and Insect Control (up to 7')														
LPV225-1U*-OB	25	5	8	8 7/8	1800	625	2.4	1.2/1.2	1	1/6	20	---	UL 507/CSA 22.2	---
LPV236-1U*-OB	36	7-8	8	8 7/8	1800	900	2.4	1.2/1.2	1	1/6	32	---	UL 507/CSA 22.2	---
LPV242-1U*-OB	42	7-8	8	8 7/8	1800	1050	2.4	1.2/1.2	1	1/6	35	---	UL 507/CSA 22.2	---
LPV248-1U*-OB	48	7-8	8	8 7/8	1800	1200	2.4	1.2/1.2	1	1/6	40	---	UL 507/CSA 22.2	---
LPV260-1U*-OB	60	7-8	8	8 7/8	1800	1500	2.6	1.4/1.4	1	1/6	48	---	UL 507/CSA 22.2	---
LPV272-1U*-OB	72	7-8	8	8 7/8	1800	1800	2.6	1.4/1.4	1	1/6	58	---	UL 507/CSA 22.2	---
LPV284-2U*-OB	84	7-8	8	8 7/8	1800	2100	4.8	2.4/2.4	2	1/6	75	---	UL 507/CSA 22.2	---
LPV296-2U*-OB	96	7-8	8	8 7/8	1800	2400	4.8	2.4/2.4	2	1/6	83	---	UL 507/CSA 22.2	---
LPV2108-2U*-OB	108	7-8	8	8 7/8	1800	2700	5	2.6/2.6	2	1/6	92	---	UL 507/CSA 22.2	---
LPV2120-2U*-OB	120	7-8	8	8 7/8	1800	3000	5.2	2.8/2.8	2	1/6	102	---	UL 507/CSA 22.2	---
LPV2144-2U*-OB	144	7-8	8	8 7/8	1800	3600	5.2	2.8/2.8	2	1/6	122	---	UL 507/CSA 22.2	---

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

Note: Data above for 1725 RPM at 60 Hz, 50 Hz is 1425 RPM with 17% reduction in the performance data.

Flying Insect Control for Restaurant, Food Retail, and Food Preparation Applications

LPN2 (Sanitation) Series														
LPN2 - Mounting Height: Insect Control (up to 7')														
LPN225-1U*-OB	25	5	8	8 7/8	1800	625	2.4	1.2/1.2	1	1/6	20	---	UL 507/CSA 22.2	NSF/ANSI 37
LPN236-1U*-OB	36	7	8	8 7/8	1800	900	2.4	1.2/1.2	1	1/6	32	---	UL 507/CSA 22.2	NSF/ANSI 37
LPN242-1U*-OB	42	7	8	8 7/8	1800	1050	2.4	1.2/1.2	1	1/6	35	---	UL 507/CSA 22.2	NSF/ANSI 37
LPN248-1U*-OB	48	7	8	8 7/8	1800	1200	2.4	1.2/1.2	1	1/6	40	---	UL 507/CSA 22.2	NSF/ANSI 37
LPN260-1U*-OB	60	7	8	8 7/8	1800	1500	2.6	1.4/1.4	1	1/6	48	---	UL 507/CSA 22.2	NSF/ANSI 37
LPN272-1U*-OB	72	7	8	8 7/8	1800	1800	2.6	1.4/1.4	1	1/6	58	---	UL 507/CSA 22.2	NSF/ANSI 37
LPN284-2U*-OB	84	7	8	8 7/8	1800	2100	4.8	2.4/2.4	2	1/6	75	---	UL 507/CSA 22.2	NSF/ANSI 37
LPN296-2U*-OB	96	7	8	8 7/8	1800	2400	4.8	2.4/2.4	2	1/6	83	---	UL 507/CSA 22.2	NSF/ANSI 37
LPN2108-2U*-OB	108	7	8	8 7/8	1800	2700	5	2.6/2.6	2	1/6	92	---	UL 507/CSA 22.2	NSF/ANSI 37
LPN2120-2U*-OB	120	7	8	8 7/8	1800	3000	5.2	2.8/2.8	2	1/6	102	---	UL 507/CSA 22.2	NSF/ANSI 37
LPN2144-2U*-OB	144	7	8	8 7/8	1800	3600	5.2	2.8/2.8	2	1/6	122	---	UL 507/CSA 22.2	NSF/ANSI 37

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

Note: Data above for 1725 RPM at 60 Hz, 50 Hz is 1425 RPM with 17% reduction in the performance data.

NOTES

- **Alternate voltage codes with FLA (Full Load Amp) data:**
  - 220V/1Ø/50Hz (U) – 0.9A per motor
- **For total FLA, multiply motor FLA by # of motors.**
- **Ampacity (MCA) = total FLA x 1.25**
- **Sound levels (measured at 10' in an open field):**
  - 25"-36" = 49 dBA
  - 42" = 50 dBA
  - 48" = 52 dBA
  - 60"-96" = 53 dBA
  - 108"-144" = 54 dBA

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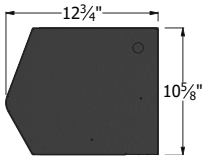
LPN2 Models Only

MARS RECOMMENDED ACCESSORIES

- **Controls** LINK
  - J0021, Commercial low voltage controller, 115V, 1Ø, adjustable time delay, with commercial plastic surface mounted door limit switch (field installed)
  - J0022, Commercial low voltage controller, 208-277V, 1Ø, adjustable time delay, with commercial plastic surface mounted door limit switch (field installed)
- **Mounting brackets** LINK
  - B0042, Transom mounting bracket set
- **Filter** LINK
  - J05^{++}, 1/4" aluminum pressed flat bank filters ($^{++}$ = Model length. Refer to table above, LPV2 only)
- **Door limit switches** LINK
  - 9-014, Combination mechanical switch
- **Available heat types (LPV2 only)** LINK
  - Electric, hot water, and steam

KEY FEATURES

- **AMCA 211 certified and ETL listed to UL 507 (US) and CSA 22.2 (Canada)**
  - Certified to ANSI/NSF 37 (N2 only)
- **Low-profile design**
- **Overhead or wall mounting**
- **Powder coated Obsidian Black**
- **Freight allowed in continental US**



Temperature Control for Commercial, Office, and Retail Applications

Unheated Model Number	Opening Width (in)	Opening Height (ft)	Unit Dimesions (in)		Air Velocity FPM @ Nozzle	Air Volume CFM @ Nozzle	Full Load Amps (Total FLA) 1 Phase		Full Load Amps (Total FLA) 3 Phase			# of Motors	HP per Motor	Net Weight (lbs)	Accreditation Standards		
			Height	Depth			115V (A)	208V/230V (D)	208V/230V (G)	460V (H)	575V (I)				Performance	Safety	Sanitation
STD2 (Standard 2) Series																	
STD2 - Mounting Heights: Environmental Separation (up to 12') and Insect Control (up to 10')																	
STD236-1U*-OB	36	10-12	10 5/8	12 3/4	2206	1379	5.1	2.5/2.5	1.8/1.6	0.8	0.7	1	1/2	60	AMCA 211	UL 507/CSA 22.2	---
STD242-1U*-OB	42	10-12	10 5/8	12 3/4	1945	1418	5.1	2.5/2.5	1.8/1.6	0.8	0.7	1	1/2	65	AMCA 211	UL 507/CSA 22.2	---
STD248-1U*-OB	48	10-12	10 5/8	12 3/4	1730	1442	5.1	2.5/2.5	1.8/1.6	0.8	0.7	1	1/2	70	AMCA 211	UL 507/CSA 22.2	---
STD260-2U*-OB	60	10-12	10 5/8	12 3/4	2592	2700	10.2	5.0/5.0	3.6/3.2	1.6	1.4	2	1/2	90	---	UL 507/CSA 22.2	---
STD272-2U*-OB	72	10-12	10 5/8	12 3/4	2206	2758	10.2	5.0/5.0	3.6/3.2	1.6	1.4	2	1/2	120	AMCA 211	UL 507/CSA 22.2	---
STD284-2U*-OB	84	10-12	10 5/8	12 3/4	1945	2836	10.2	5.0/5.0	3.6/3.2	1.6	1.4	2	1/2	125	AMCA 211	UL 507/CSA 22.2	---
STD296-2U*-OB	96	10-12	10 5/8	12 3/4	1730	2884	10.2	5.0/5.0	3.6/3.2	1.6	1.4	2	1/2	135	AMCA 211	UL 507/CSA 22.2	---
STD2108-3U*-OB	108	10-12	10 5/8	12 3/4	2206	4137	15.3	7.5/7.5	5.4/4.8	2.4	2.1	3	1/2	175	AMCA 211	UL 507/CSA 22.2	---
STD2120-3U*-OB	120	10-12	10 5/8	12 3/4	2084	4341	15.3	7.5/7.5	5.4/4.8	2.4	2.1	3	1/2	185	AMCA 211	UL 507/CSA 22.2	---
STD2144-3U*-OB	144	10-12	10 5/8	12 3/4	1730	4326	15.3	7.5/7.5	5.4/4.8	2.4	2.1	3	1/2	200	AMCA 211	UL 507/CSA 22.2	---

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

Note: Data above for 1725 RPM at 60 Hz, 50 Hz is 1425 RPM with 17% reduction in the performance data.

Flying Insect Control for Restaurant, Food Retail, and Food Preparation Applications

Unheated Model Number	Opening Width (in)	Opening Height (ft)	Unit Dimesions (in)		Air Velocity FPM @ Nozzle	Air Volume CFM @ Nozzle	Full Load Amps (Total FLA) 1 Phase		Full Load Amps (Total FLA) 3 Phase			# of Motors	HP per Motor	Net Weight (lbs)	Accreditation Standards		
			Height	Depth			115V (A)	208V/230V (D)	208V/230V (G)	460V (H)	575V (I)				Performance	Safety	Sanitation
N2 (Sanitation) Series																	
N2 - Mounting Height: Insect Control (up to 7')																	
N236-1U*-OB	36	7	10 5/8	12 3/4	2206	1379	5.1	2.5/2.5	1.8/1.6	0.8	0.7	1	1/2	60	AMCA 211	UL 507/CSA 22.2	NSF/ANSI 37
N242-1U*-OB	42	7	10 5/8	12 3/4	1945	1418	5.1	2.5/2.5	1.8/1.6	0.8	0.7	1	1/2	65	AMCA 211	UL 507/CSA 22.2	NSF/ANSI 37
N248-1U*-OB	48	7	10 5/8	12 3/4	1730	1442	5.1	2.5/2.5	1.8/1.6	0.8	0.7	1	1/2	70	AMCA 211	UL 507/CSA 22.2	NSF/ANSI 37
N260-2U*-OB	60	7	10 5/8	12 3/4	2592	2700	10.2	5.0/5.0	3.6/3.2	1.6	1.4	2	1/2	90	---	UL 507/CSA 22.2	NSF/ANSI 37
N272-2U*-OB	72	7	10 5/8	12 3/4	2206	2758	10.2	5.0/5.0	3.6/3.2	1.6	1.4	2	1/2	120	AMCA 211	UL 507/CSA 22.2	NSF/ANSI 37
N284-2U*-OB	84	7	10 5/8	12 3/4	1945	2836	10.2	5.0/5.0	3.6/3.2	1.6	1.4	2	1/2	125	AMCA 211	UL 507/CSA 22.2	NSF/ANSI 37
N296-2U*-OB	96	7	10 5/8	12 3/4	1730	2884	10.2	5.0/5.0	3.6/3.2	1.6	1.4	2	1/2	135	AMCA 211	UL 507/CSA 22.2	NSF/ANSI 37
N2108-3U*-OB	108	7	10 5/8	12 3/4	2206	4137	15.3	7.5/7.5	5.4/4.8	2.4	2.1	3	1/2	175	AMCA 211	UL 507/CSA 22.2	NSF/ANSI 37
N2120-3U*-OB	120	7	10 5/8	12 3/4	2084	4341	15.3	7.5/7.5	5.4/4.8	2.4	2.1	3	1/2	185	AMCA 211	UL 507/CSA 22.2	NSF/ANSI 37
N2144-3U*-OB	144	7	10 5/8	12 3/4	1730	4326	15.3	7.5/7.5	5.4/4.8	2.4	2.1	3	1/2	200	AMCA 211	UL 507/CSA 22.2	NSF/ANSI 37

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

Note: Data above for 1725 RPM at 60 Hz, 50 Hz is 1425 RPM with 17% reduction in the performance data.

NOTES

- **Alternate voltage codes with FLA (Full Load Amp) data:**
  - 277V/1Ø/60Hz (L) – 2.7A per motor
  - 220V/1Ø/50Hz (U) – 2.5A per motor
  - 380-415V/3Ø/50Hz (W) – 1.1A per motor
- **For total FLA, multiply motor FLA by # of motors.**
- **Ampacity (MCA) = total FLA x 1.25**
- **Sound levels (measured at 10' in an open field):**
  - 1 motor unit = 66 dBA
  - 2 motor unit = 68 dBA
  - 3 motor unit = 71 dBA
  - 4 motor unit = 73 dBA

Intertek N2 Models Only

Intertek

MARS RECOMMENDED ACCESSORIES

- **Controls** LINK
  - MCPA-†U*, Control panel, 120V control voltage († = # of Motors, * = Voltage Code)
    - MCP-24V, Low voltage control option (panel required)
    - MCP-TD, Adjustable time delay
    - BMS-303, BMS for monitoring and controlling (Motor control panel required with MCP-24V option)
  - SK-UU, SimpleLink, 115V-230V, 1PH, 2Mtr & 1HP max, Integral Control, Nema 1
- **Mounting brackets** LINK
  - B0004, Adjustable mounting bracket set, 3½" clearance
  - B0005, Adjustable mounting bracket set, 7"-13" clearance
  - B0041, Transom mounting bracket set
- **Filter (STD2 only)** LINK
  - J21^{++}-†, 1/4" aluminum pressed flat bank filters ($^{++}$ = Model length, † = # of Motors) (refer to table above)
- **Door limit switches**
  - 99-014, Combination mechanical switch
  - 99-125, Industrial surface mounted magnetic switch
- **Available heat types (STD2 only)** LINK
  - Electric, hot water, and steam

KEY FEATURES

- ETL listed to UL 507 (US) and CSA 22.2 (Canada) (Air Curtain Only for Packaged HEPAC Models)
- Low-profile design
- Low voltage (24Vac) control option
- Top mounted and factory wired junction box with labeled wires for easy field wiring
- Includes surface mounted magnetic switch
- Overhead or wall mounting
- Powder coated Obsidian Black
- Freight allowed in continental US

Air Sanitation and Temperature Control for Commercial, Office, and Retail Applications

Clean Air Series														
Unheated Model Number	Opening Width (in)	Opening Height (ft)	Unit Dimesions (in)		Air Velocity FPM @ Nozzle	Air Volume CFM @ Nozzle	Full Load Amps (Total FLA) 1 Phase		# of Motors	HP per Motor	Net Weight (lbs)	Accreditation Standards		
			Height	Depth			115V (A)	208V/230V (D)				Performance	Safety	Sanitation
LPV2 - Packaged UV Models - Mounting Heights: Environmental Separation (up to 8')														
LPV236-1U*-OB-UVP	36	7-8	8	12 1/2	1800	900	3	1.8/1.8	1	1/6	80	---	UL 507/CSA 22.2	---
LPV242-1U*-OB-UVP	42	7-8	8	12 1/2	1800	1050	3	1.8/1.8	1	1/6	90	---	UL 507/CSA 22.2	---
LPV248-1U*-OB-UVP	48	7-8	8	12 1/2	1800	1200	3	1.8/1.8	1	1/6	100	---	UL 507/CSA 22.2	---
LPV260-1U*-OB-UVP	60	7-8	8	12 1/2	1800	1500	3.5	2.3/2.3	1	1/6	125	---	UL 507/CSA 22.2	---
LPV272-1U*-OB-UVP	72	7-8	8	12 1/2	1800	1800	3.8	2.6/2.6	1	1/6	160	---	UL 507/CSA 22.2	---
STD2 - Packaged UV Models - Mounting Heights: Environmental Separation (up to 10')														
STD236-1U*-OB-UVP	36	8-10	10 5/8	21 3/8	2206	1379	5.7	3.1/3.1	1	1/2	85	---	UL 507/CSA 22.2	---
STD242-1U*-OB-UVP	42	8-10	10 5/8	21 3/8	1945	1418	5.7	3.1/3.1	1	1/2	95	---	UL 507/CSA 22.2	---
STD248-1U*-OB-UVP	48	8-10	10 5/8	21 3/8	1730	1442	5.7	3.1/3.1	1	1/2	110	---	UL 507/CSA 22.2	---
STD260-2U*-OB-UVP	60	8-10	10 5/8	21 3/8	2592	2700	11.1	5.9/5.9	2	1/2	135	---	UL 507/CSA 22.2	---
STD272-2U*-OB-UVP	72	8-10	10 5/8	21 3/8	2206	2758	11.4	6.2/6.2	2	1/2	170	---	UL 507/CSA 22.2	---
STD2 - Packaged HEPAC Models - Mounting Heights: Environmental Separation (up to 8')														
STD236-1U*-OB-HCP	36	8	10 5/8	21 3/8	2206	1379	5.1	2.5/2.5	1	1/2	95	---	UL 507/CSA 22.2	---
STD242-1U*-OB-HCP	42	8	10 5/8	21 3/8	1945	1418	5.1	2.5/2.5	1	1/2	110	---	UL 507/CSA 22.2	---
STD248-1U*-OB-HCP	48	8	10 5/8	21 3/8	1730	1442	5.1	2.5/2.5	1	1/2	125	---	UL 507/CSA 22.2	---
STD260-2U*-OB-HCP	60	8	10 5/8	21 3/8	2592	2700	10.2	5.0/5.0	2	1/2	150	---	UL 507/CSA 22.2	---
STD272-2U*-OB-HCP	72	8	10 5/8	21 3/8	2206	2758	10.2	5.0/5.0	2	1/2	190	---	UL 507/CSA 22.2	---
STD2 - Packaged UV, HEPAC & Ionizer Models - Mounting Heights: Environmental Separation (up to 8')														
STD236-1U*-OB-VHP	36	8	10 5/8	30	2206	1379	5.7	3.1/3.1	1	1/2	120	---	UL 507/CSA 22.2	---
STD242-1U*-OB-VHP	42	8	10 5/8	30	1945	1418	5.7	3.1/3.1	1	1/2	140	---	UL 507/CSA 22.2	---
STD248-1U*-OB-VHP	48	8	10 5/8	30	1730	1442	5.7	3.1/3.1	1	1/2	165	---	UL 507/CSA 22.2	---
STD260-2U*-OB-VHP	60	8	10 5/8	30	2592	2700	11.1	5.9/5.9	2	1/2	195	---	UL 507/CSA 22.2	---
STD272-2U*-OB-VHP	72	8	10 5/8	30	2206	2758	11.4	6.2/6.2	2	1/2	240	---	UL 507/CSA 22.2	---
STD2 - Air Wash Series (UV, HEPAC, and Ionizer) - Door height of 7' Max & Door Width of 3'-6'														
AWS-4U*-OB-VHP	84	---	10 5/8	30	1945	5672	22.8	12.4/12.4	4	1/2	280	---	UL 507/CSA 22.2	---

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

Note: Data above for 1725 RPM at 60 Hz, 50 Hz is 1425 RPM with 17% reduction in the performance data.

NOTES

- **For total FLA, multiply motor FLA by # of motors.**
- **Ampacity (MCA) = total FLA x 1.25**
- **Sound levels (measured at 10' in an open field):**
  - 25"-36" = 49 dBA (LPV2)
  - 42" = 50 dBA (LPV2)
  - 48" = 52 dBA (LPV2)
  - 60"-96" = 53 dBA (LPV2)
  - 1 motor unit = 66 dBA (STD2)
  - 2 motor unit = 68 dBA (STD2)

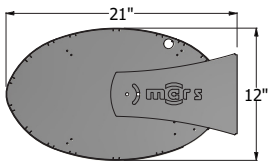
MARS RECOMMENDED ACCESSORIES

- **Controls** LINK
  - INS-TD, Adjustable time delay
- **Mounting brackets** LINK
  - B0004, Adjustable mounting bracket set, 3½" clearance
  - B0005, Adjustable mounting bracket set, 7"-13" clearance

Air Curtain Only for HCP & VHP option

KEY FEATURES

- ETL listed to UL 507 (US) and CSA 22.2 (Canada)
- Sleek, aesthetic design
- Overhead or wall mounting
- Brushed aluminum finish
- Freight allowed in continental US



Temperature Control for Commercial, Office, and Retail Applications

QP (QuietPro) Series																	
Unheated Model Number	Opening Width (in)	Opening Height (ft)	Unit Dimesions (in)		Air Velocity FPM @ Nozzle	Air Volume CFM @ Nozzle	Full Load Amps (Total FLA) 1 Phase		Full Load Amps (Total FLA) 3 Phase			# of Motors	HP per Motor	Net Weight (lbs)	Accreditation Standards		
			Height	Depth			115V (A)	208V/230V (D)	208V/230V (G)	460V (H)	575V (I)				Performance	Safety	Sanitation
QP10 - Mounting Heights: Environmental Separation (up to 12') and Insect Control (up to 10')																	
QP1036-1U*-AL	36	10-12	10 5/8	12 3/4	2206	1379	5.1	2.5/2.5	1.8/1.6	0.8	0.7	1	1/2	60	---	UL 507/CSA 22.2	---
QP1042-1U*-AL	42	10-12	10 5/8	12 3/4	1945	1418	5.1	2.5/2.5	1.8/1.6	0.8	0.7	1	1/2	65	---	UL 507/CSA 22.2	---
QP1048-1U*-AL	48	10-12	10 5/8	12 3/4	1730	1442	5.1	2.5/2.5	1.8/1.6	0.8	0.7	1	1/2	70	---	UL 507/CSA 22.2	---
QP1072-2U*-AL	72	10-12	10 5/8	12 3/4	2206	2758	10.2	5.0/5.0	3.6/3.2	1.6	1.4	2	1/2	120	---	UL 507/CSA 22.2	---
QP1084-2U*-AL	84	10-12	10 5/8	12 3/4	1945	2836	10.2	5.0/5.0	3.6/3.2	1.6	1.4	2	1/2	125	---	UL 507/CSA 22.2	---
QP1096-2U*-AL	96	10-12	10 5/8	12 3/4	1730	2884	10.2	5.0/5.0	3.6/3.2	1.6	1.4	2	1/2	135	---	UL 507/CSA 22.2	---
QP10108-3U*-AL	108	10-12	10 5/8	12 3/4	2206	4137	15.3	7.5/7.5	5.4/4.8	2.4	2.1	3	1/2	175	---	UL 507/CSA 22.2	---
QP10120-3U*-AL	120	10-12	10 5/8	12 3/4	2084	4341	15.3	7.5/7.5	5.4/4.8	2.4	2.1	3	1/2	185	---	UL 507/CSA 22.2	---
QP10144-3U*-AL	144	10-12	10 5/8	12 3/4	1730	4326	15.3	7.5/7.5	5.4/4.8	2.4	2.1	3	1/2	200	---	UL 507/CSA 22.2	---

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

Note: Data above for 1725 RPM at 60 Hz, 50 Hz is 1425 RPM with 17% reduction in the performance data.

NOTES

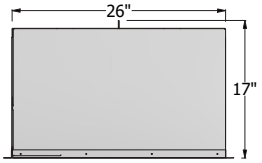
- **Alternate voltage codes with FLA (Full Load Amp) data:**
  - 277V/1Ø/60Hz Z(L) – 2.7A per motor
  - 220V/1Ø/50Hz (U) – 2.5A per motor
  - 380-415V/3Ø/50Hz (W) – 1.1 A per motor
- **For total FLA, multiply motor FLA by # of motors.**
- **Ampacity (MCA) = total FLA x 1.25**
- **Sound levels (measured at 10' in an open field):**
  - 1 motor unit = 53 dBA
  - 2 motor unit = 55 dBA
  - 3 motor unit = 57 dBA
  - 4 motor unit = 59 dBA

MARS RECOMMENDED ACCESSORIES

- **Controls** LINK
  - MCPA-†U*, Control panel, 120V control voltage († = # of Motors, * = Voltage Code)
    - MCP-24V, Low voltage control option (panel required)
    - MCP-TD, Adjustable time delay
    - BMS-303, BMS for monitoring and controlling (Motor control panel required with MCP-24V option)
  - SK-UU, SimpleLink, 115V-230V, 1PH, 2Mtr & 1HP max, Integral Control, Nema 1
- **Door limit switches** LINK
  - 99-014, Combination mechanical switch
  - 99-125, Industrial surface mounted magnetic switch
- **Available heat types** LINK
  - Electric, hot water, and steam

KEY FEATURES

- AMCA 211 certified and ETL listed to UL 507 (US) and CSA 22.2 (Canada)
- Recessed mouted in ceiling for invisible protection
- Overhead or wall mounting
- Powder coated Pearl White
- Freight allowed in continental US



Temperature Control for Commercial, Office, and Retail Applications

Unheated Model Number	Opening Width (in)	Opening Height (ft)	Unit Dimesions (in)		Air Velocity FPM @ Nozzle	Air Volume CFM @ Nozzle	Full Load Amps (Total FLA) 1 Phase		Full Load Amps (Total FLA) 3 Phase			# of Motors	HP per Motor	Net Weight (lbs)	Accreditation Standards		
			Height	Depth			115V (A)	208V/230V (D)	208V/230V (G)	460V (H)	575V (I)				Performance	Safety	Sanitation
PH (Phantom) Series																	
PH10 - Mounting Heights: Environmental Separation (up to 12') and Insect Control (up to 10')																	
PH1036-1U*-PW	36	10-12	17	26	1947	1460	5.1	2.5/2.5	1.8/1.6	0.8	0.7	1	1/2	60	AMCA 211	UL 507/CSA 22.2	---
PH1042-1U*-PW	42	10-12	17	26	1806	1580	5.1	2.5/2.5	1.8/1.6	0.8	0.7	1	1/2	60	AMCA 211	UL 507/CSA 22.2	---
PH1048-1U*-PW	48	10-12	17	26	1632	1632	5.1	2.5/2.5	1.8/1.6	0.8	0.7	1	1/2	65	AMCA 211	UL 507/CSA 22.2	---
PH1060-2U*-PW	60	10-12	17	26	2217	2771	10.2	5.0/5.0	3.6/3.2	1.6	1.4	2	1/2	100	---	UL 507/CSA 22.2	---
PH1072-2U*-PW	72	10-12	17	26	1947	2920	10.2	5.0/5.0	3.6/3.2	1.6	1.4	2	1/2	105	AMCA 211	UL 507/CSA 22.2	---
PH1084-2U*-PW	84	10-12	17	26	1806	3160	10.2	5.0/5.0	3.6/3.2	1.6	1.4	2	1/2	125	AMCA 211	UL 507/CSA 22.2	---
PH1096-2U*-PW	96	10-12	17	26	1632	3264	10.2	5.0/5.0	3.6/3.2	1.6	1.4	2	1/2	130	AMCA 211	UL 507/CSA 22.2	---
PH10108-3U*-PW	108	10-12	17	26	1947	4380	15.3	7.5/7.5	5.4/4.8	2.4	2.1	3	1/2	170	AMCA 211	UL 507/CSA 22.2	---
PH10120-4U*-PW	120	10-12	17	26	2217	5541	20.4	10.0/10.0	7.2/6.4	3.2	2.8	4	1/2	200	---	UL 507/CSA 22.2	---
PH10144-4U*-PW	144	10-12	17	26	1947	5840	20.4	10.0/10.0	7.2/6.4	3.2	2.8	4	1/2	210	AMCA 211	UL 507/CSA 22.2	---
PH12 - Mounting Heights: Environmental Separation (up to 16') and Insect Control (up to 14')																	
PH1242-1U*-PW	42	12-16	17	26	2471	1379	9.0	5.0/5.0	3.3/3.2	1.6	1.3	1	1	90	AMCA 211	UL 507/CSA 22.2	---
PH1248-1U*-PW	48	12-16	17	26	2534	1418	9.0	5.0/5.0	3.3/3.2	1.6	1.3	1	1	90	AMCA 211	UL 507/CSA 22.2	---
PH1260-1U*-PW	60	12-16	17	26	2759	1442	9.0	5.0/5.0	3.3/3.2	1.6	1.3	1	1	95	---	UL 507/CSA 22.2	---
PH1272-2U*-PW	72	12-16	17	26	4646	2700	18.0	10.0/10.0	6.6/6.4	3.2	2.6	2	1	155	AMCA 211	UL 507/CSA 22.2	---
PH1284-2U*-PW	84	12-16	17	26	4942	2758	18.0	10.0/10.0	6.6/6.4	3.2	2.6	2	1	175	AMCA 211	UL 507/CSA 22.2	---
PH1296-2U*-PW	96	12-16	17	26	5068	2836	18.0	10.0/10.0	6.6/6.4	3.2	2.6	2	1	180	AMCA 211	UL 507/CSA 22.2	---
PH12120-2U*-PW	120	12-16	17	26	5518	2884	18.0	10.0/10.0	6.6/6.4	3.2	2.6	2	1	270	---	UL 507/CSA 22.2	---
PH12144-4U*-PW	144	12-16	17	26	9292	4137	36.0	20.0/20.0	13.2/12.8	6.4	5.2	4	1	310	AMCA 211	UL 507/CSA 22.2	---

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

Note: Data above for 1725 RPM at 60 Hz, 50 Hz is 1425 RPM with 17% reduction in the performance data.

NOTES

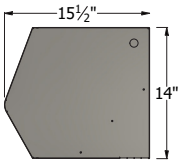
- **Alternate voltage codes with FLA (Full Load Amp) data:**
  - 277V/1Ø/60Hz (L) – 2.7A per motor (PH10), 5.2A per motor (PH12)
  - 220V/1Ø/50Hz (U) – 2.5A per motor (PH10), 7.1A per motor (PH12)
  - 380-415V/3Ø/50Hz (W) – 1.1A per motor (PH10), 1.8A per motor (PH12)
- **For total FLA, multiply motor FLA by # of motors.**
- **Ampacity (MCA) = total FLA x 1.25**
- **Sound levels (measured at 10' in an open field):**
  - 1 motor unit = 66 dBA (PH10), 70 dBA (PH12)
  - 2 motor unit = 68 dBA (PH10), 73 dBA (PH12
  - 3 motor unit = 71 dBA (PH10), 75 dBA (PH12)
  - 4 motor unit = 73 dBA (PH10), 75 dBA (PH12)

MARS RECOMMENDED ACCESSORIES

- **Controls** LINK
  - MCP⁺-†U*, Control panel, 120V control voltage
    (⁺ = Motor HP Code, † = # of Motors, * = Voltage Code)
    - MCP-24V, Low voltage control option (panel required)
    - MCP-TD, Adjustable time delay
    - BMS-303, BMS for monitoring and controlling (Motor control panel required with MCP-24V option)
  - SK-UU, SimpleLink, 115V-230V, 1PH, 2Mtr & 1HP max, Integral Control, Nema 1
- **Door limit switches** LINK
  - 99-014, Combination mechanical switch
  - 99-125, Industrial surface mounted magnetic switch
- **Available heat types** LINK
  - Electric, hot water, and steam

KEY FEATURES

- AMCA 211 certified and ETL listed to UL 507 (US) and CSA 22.2 (Canada)
- Certified to ANSI/NSF 37 (NH2 only)
- Low-profile design
- Overhead or wall mounting
- Powder coated Titanium Silver
- Freight allowed in continental US (except gas fired)



Temperature Control for Mid Size Dock Doors, and Receiving Door Applications

HV2 (High Velocity 2) Series																		
Unheated Model Number	Opening Width (in)	Opening Height (ft)	Unit Dimesions (in)		Air Velocity FPM @ Nozzle	Air Volume CFM @ Nozzle	Full Load Amps (Total FLA) 1 Phase		Full Load Amps (Total FLA) 3 Phase			# of Motors	HP per Motor	Net Weight (lbs)	Accreditation Standards		
			Height	Depth			115V (A)	208V/230V (D)	208V/230V (G)	460V (H)	575V (I)				Performance	Safety	Sanitation
HV2 - Mounting Heights: Environmental Separation (up to 14') and Insect Control (up to 12')																	
HV236-1U*-TS	36	12-14	14	15 5/8	2745	2059	9.0	5.0/5.0	3.3/3.2	1.6	1.8	1	1	115	AMCA 211	UL 507/CSA 22.2	---
HV242-1U*-TS	42	12-14	14	15 5/8	2654	2322	9.0	5.0/5.0	3.3/3.2	1.6	1.8	1	1	120	AMCA 211	UL 507/CSA 22.2	---
HV248-1U*-TS	48	12-14	14	15 5/8	2447	2447	9.0	5.0/5.0	3.3/3.2	1.6	1.8	1	1	125	AMCA 211	UL 507/CSA 22.2	---
HV260-1U*-TS	60	12-14	14	15 5/8	2208	2760	9.0	5.0/5.0	3.3/3.2	1.6	1.8	1	1	140	---	UL 507/CSA 22.2	---
HV272-2U*-TS	72	12-14	14	15 5/8	2745	4118	18.0	10.0/10.0	6.6/6.4	3.2	3.6	2	1	220	AMCA 211	UL 507/CSA 22.2	---
HV284-2U*-TS	84	12-14	14	15 5/8	2654	4644	18.0	10.0/10.0	6.6/6.4	3.2	3.6	2	1	235	AMCA 211	UL 507/CSA 22.2	---
HV296-2U*-TS	96	12-14	14	15 5/8	2447	4894	18.0	10.0/10.0	6.6/6.4	3.2	3.6	2	1	250	AMCA 211	UL 507/CSA 22.2	---
HV2108-3U*-TS	108	12-14	14	15 5/8	2745	6177	27.0	15.0/15.0	9.9/9.6	4.8	5.4	3	1	330	AMCA 211	UL 507/CSA 22.2	---
HV2120-2U*-TS	120	12-14	14	15 5/8	2208	5519	18.0	10.0/10.0	6.6/6.4	3.2	3.6	2	1	275	---	UL 507/CSA 22.2	---
HV2120-3U*-TS	120	12-14	14	15 5/8	2678	6693	27.0	15.0/15.0	9.9/9.6	4.8	5.4	3	1	345	AMCA 211	UL 507/CSA 22.2	---
HV2144-3U*-TS	144	12-14	14	15 5/8	2447	7341	27.0	15.0/15.0	9.9/9.6	4.8	5.4	3	1	375	AMCA 211	UL 507/CSA 22.2	---

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

Note: Data above for 1725 RPM at 60 Hz, 50 Hz is 1425 RPM with 17% reduction in the performance data.

Flying Insect Control for Restaurant, Food Retail, and Food Preparation Applications

NH2 (Sanitation) Series																	
NH2 - Mounting Height: Insect Control (up to 7')																	
NH236-1U*-TS	36	12-14	14	15 5/8	2745	2059	9.0	5.0/5.0	3.3/3.2	1.6	1.3	1	1	115	AMCA 211	UL 507/CSA 22.2	NSF/ANSI 37
NH242-1U*-TS	42	12-14	14	15 5/8	2654	2322	9.0	5.0/5.0	3.3/3.2	1.6	1.3	1	1	120	AMCA 211	UL 507/CSA 22.2	NSF/ANSI 37
NH248-1U*-TS	48	12-14	14	15 5/8	2447	2447	9.0	5.0/5.0	3.3/3.2	1.6	1.3	1	1	125	AMCA 211	UL 507/CSA 22.2	NSF/ANSI 37
NH272-2U*-TS	72	12-14	14	15 5/8	2745	4118	18.0	10.0/10.0	6.6/6.4	3.2	2.6	2	1	220	AMCA 211	UL 507/CSA 22.2	NSF/ANSI 37
NH284-2U*-TS	84	12-14	14	15 5/8	2654	4644	18.0	10.0/10.0	6.6/6.4	3.2	2.6	2	1	235	AMCA 211	UL 507/CSA 22.2	NSF/ANSI 37
NH296-2U*-TS	96	12-14	14	15 5/8	2447	4894	18.0	10.0/10.0	6.6/6.4	3.2	2.6	2	1	250	AMCA 211	UL 507/CSA 22.2	NSF/ANSI 37
NH2108-3U*-TS	108	12-14	14	15 5/8	2745	6177	27.0	15.0/15.0	9.9/9.6	4.8	3.9	3	1	330	AMCA 211	UL 507/CSA 22.2	NSF/ANSI 37
NH2120-3U*-TS	120	12-14	14	15 5/8	2678	6693	27.0	15.0/15.0	9.9/9.6	4.8	3.9	3	1	345	AMCA 211	UL 507/CSA 22.2	NSF/ANSI 37
NH2144-3U*-TS	144	12-14	14	15 5/8	2447	7341	27.0	15.0/15.0	9.9/9.6	4.8	3.9	3	1	375	AMCA 211	UL 507/CSA 22.2	NSF/ANSI 37

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

Note: Data above for 1725 RPM at 60 Hz, 50 Hz is 1425 RPM with 17% reduction in the performance data.

NOTES

- **Alternate voltage codes with FLA (Full Load Amp) data:**
  - 277V/1Ø/60Hz (L) – 5.2A per motor
  - 220V/1Ø/50Hz (U) – 7.1A per motor
  - 380-415V/3Ø/50Hz (W) – 1.8A per motor
- **For total FLA, multiply motor FLA by # of motors.**
- **Ampacity (MCA) = total FLA x 1.25**
- **Sound levels (measured at 10' in an open field):**
  - 1 motor unit = 70 dBA
  - 2 motor unit = 73 dBA
  - 3-4 motor unit = 75 dBA

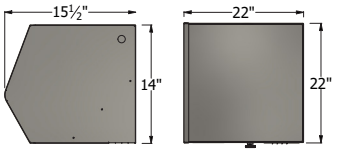
NH2 Models Only

MARS RECOMMENDED ACCESSORIES

- **Controls** LINK
  - MCPB-†U*, Control panel, 120V control voltage († = # of Motors, * = Voltage Code)
    - MCP-24V, Low voltage control option (panel required)
    - MCP-TD, Adjustable time delay
    - BMS-303, BMS for monitoring and controlling (Motor control panel required with MCP-24V option)
- **Mounting brackets** LINK
  - B0004, Adjustable mounting bracket set, 3½" clearance
  - B0008 to B0011, Extended wall mounting bracket, 10", 16", 19", 23" clearance respectively
- **Door limit switches** LINK
  - 99-014, Combination mechanical switch
  - 99-125, Industrial surface mounted magnetic switch
- **Available heat types (HV2 only)** LINK
  - Electric, hot water, steam, and indirect gas fired

KEY FEATURES

- EP2: ETL listed to UL 507 (US) and CSA 22.2 (Canada)
- Overhead mounting (all) or wall mounting (EP2 only)
- Powder coated Titanium Silver
- EP2: Freight allowed in continental US (except gas fired)
- WMI/WMH: Freight not included



Temperature Control for Large Dock Doors, and Receiving Door Applications

Unheated Model Number	Opening Width (in)	Opening Height (ft)	Unit Dimesions (in)		Air Velocity FPM @ Nozzle	Air Volume CFM @ Nozzle	Full Load Amps (Total FLA) 3 Phase			# of Motors	HP per Motor	Net Weight (lbs)	Accreditation Standards		
			Height	Depth			208V/230V (G)	460V (H)	575V (I)				Performance	Safety	Sanitation
EP2 (Extra Power 2) Series															
EP2 - Mounting Heights: Environmental Separation (up to 16') and Insect Control (up to 14')															
EP296-2U*-TS	96	14-16	14	15 5/8	4800	9600	16.6/15.2	7.6	6.0	2	3	280	---	UL 507/CSA 22.2	---
EP2108-2U*-TS	108	14-16	14	15 5/8	4200	9600	16.6/15.2	7.6	6.0	2	3	295	---	UL 507/CSA 22.2	---
EP2120-2U*-TS	120	14-16	14	15 5/8	3840	9600	16.6/15.2	7.6	6.0	2	3	305	---	UL 507/CSA 22.2	---
EP2120-3U*-TS	120	14-16	14	15 5/8	5760	14400	24.9/22.8	11.4	9.0	3	3	390	---	UL 507/CSA 22.2	---
EP2144-3U*-TS	144	14-16	14	15 5/8	4800	14400	24.9/22.8	11.4	9.0	3	3	420	---	UL 507/CSA 22.2	---

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

Note: Data above for 1725 RPM at 60 Hz, 50 Hz is 1425 RPM with 17% reduction in the performance data.

Temperature Control for Large Dock Door, and Heavy Industrial Applications with Mild Breeze

WM (Windstopping) Series															
WMI - Mounting Heights: Environmental Separation (up to 16') and Insect Control (up to 14')															
WMI96-2U*-TS	96	14-16	22	22	2614	7842	14.4/14.0	7.0	4.6	2	2	515	AMCA 211	---	---
WMI120-2U*-TS	120	14-16	22	22	3205	9474	28.4/21.2	10.6	4.6	2	3	610	AMCA 211	---	---
WMI144-2U*-TS	144	14-16	22	22	3009	13422	28.4/21.2	10.6	4.6	2	3	695	AMCA 211	---	---
WMI168-3U*-TS	168	14-16	22	22	2920	15060	42.6/31.8	15.9	6.9	3	3	880	AMCA 211	---	---
WMI192-4U*-TS	192	14-16	22	22	2614	15684	28.8/28.0	14.0	9.2	4	2	1030	AMCA 211	---	---
WMH - Mounting Heights: Environmental Separation (up to 20') and Insect Control (up to 18')															
							208V/230V (E/F)	460V (H)	575V (I)						
WMH96-2U*-TS	96	16-20	22	22	3732	10824	38/31.6	15.8	12.6	2	5	635	AMCA 211	---	---
WMH120-2U*-TS	120	16-20	22	22	4057	15014	38/31.6	15.8	12.6	2	5	735	AMCA 211	---	---
WMH144-2U*-TS	144	16-20	22	22	3816	17022	---/42.0	21.0	16.8	2	7	890	AMCA 211	---	---
WMH168-3U*-TS	168	16-20	22	22	3822	19845	57/47.4	23.7	18.9	3	5	1060	AMCA 211	---	---
WMH192-4U*-TS	192	16-20	22	22	3722	21648	76/63.2	31.6	25.2	4	5	1275	AMCA 211	---	---

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

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

NOTES

- **Alternate voltage codes with FLA (Full Load Amp) data:**
  - 380-415V/3Ø/50Hz (W) – 4.5A per motor (EP2), 6.6A per motor (WMH 5HP), 8.9A per motor (WMH 7HP). For WMI, consult factory.
- **For total FLA, multiply motor FLA by # of motors.**
- **Ampacity (MCA) = total FLA x 1.25**
- **Sound levels (measured at 10' in an open field):**
  - 1 motor unit = 76 dBA (EP2)
  - 2 motor unit = 79 dBA (EP2), 66 dBA (WMI), 69 dBA (WMH)
  - 3 motor unit = 81 dBA (EP2), 67 dBA (WMI), 70 dBA (WMH)
  - 4 motor unit = 68 dBA (WMI), 72 dBA (WMH)

MARS RECOMMENDED ACCESSORIES

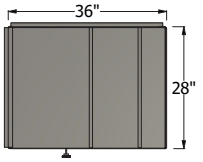
- **Controls** LINK
  - MCP^{+}-†U*, Control panel, 120V control voltage ($^{+}$ = Motor HP Code, † = # of Motors, * = Voltage Code)
    - – MCP-24V, Low voltage control option (panel required)
    - – MCP-TD, Adjustable time delay
    - – BMS-303, BMS for monitoring and controlling (Motor control panel required with MCP-24V option)
- **Mounting brackets** LINK
  - B0004-TS, Adjustable mounting bracket set, 3½" clearance (EP2 only)
  - B0008 to B0011, Extended wall mounting bracket, 10", 16", 19", 23" clearance respectively (EP2 only)
- **Door limit switches** LINK
  - 99-125, Industrial surface mounted magnetic switch
- **Available heat types** LINK
  - Electric, hot water, steam, and indirect gas fired

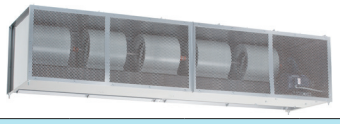
WMI/WMH only

EP2 Only

KEY FEATURES

- Belt drive unit for heavy industrial projects
- Overhead mounting
- Powder coated Titanium Silver
- Freight not included





Temperature Control for Large Dock Door and Heavy Industrial Applications with Mild Gusts

BD (Windguard) Series												
Unheated Model Number	Opening Width (in)	Opening Height (ft)	Unit Dimesions (in)		Air Velocity FPM @ Nozzle	Air Volume CFM @ Nozzle	Full Load Amps (Total FLA) 3 Phase			# of Motors	HP per Motor	Net Weight (lbs)
			Height	Depth			208V/230V (G)	460V (H)	575V (I)			
BD14 - Mounting Heights: Environmental Separation (up to 16') and Insect Control (up to 14')												
BD1496-1U*-TS	96	14-16	28	36	4500	11700	14.2/13.0	6.5	5.3	1	5	600
BD14120-1U*-TS	120	14-16	28	36	4500	14650	14.2/13.0	6.5	5.3	1	5	700
BD14144-1U*-TS	144	14-16	28	36	4500	17600	21.6/20.0	10.0	8.9	1	7½	800
BD14168-1U*-TS	168	14-16	28	36	4500	20500	21.6/20.0	10.0	8.9	1	7½	900
BD14192-1U*-TS	192	14-16	28	36	4500	23450	28.0/26.0	13.0	10.3	1	10	1000
BD18 - Mounting Heights: Environmental Separation (up to 20') and Insect Control (up to 18')												
BD1896-1U*-TS	96	16-20	28	36	5100	13800	21.6/20.0	10.0	8.9	1	7½	650
BD18120-1U*-TS	120	16-20	28	36	5100	17255	21.6/20.0	10.0	8.9	1	7½	750
BD18144-1U*-TS	144	16-20	28	36	5100	20700	28.0/26.0	13.0	10.3	1	10	850
BD18168-1U*-TS	168	16-20	28	36	5100	24100	28.0/26.0	13.0	10.3	1	10	950
BD18192-1U*-TS	192	16-20	28	36	5100	27600	42.0/40.0	20.0	15.6	1	15	1050
BD22 - Mounting Heights: Environmental Separation (up to 24') and Insect Control (up to 22')												
BD2296-1U*-TS	96	20-24	28	36	6000	16250	28.0/26.0	14.0	10.3	1	10	700
BD22120-1U*-TS	120	20-24	28	36	6000	20300	42.0/40.0	20.0	15.6	1	15	800
BD22144-1U*-TS	144	20-24	28	36	6000	24350	42.0/40.0	20.0	15.6	1	15	900
BD22168-1U*-TS	168	20-24	28	36	6000	28400	55.0/51.0	25.5	20.2	1	20	1000
BD22192-1U*-TS	192	20-24	28	36	6000	32500	55.0/51.0	25.5	20.2	1	20	1100
BD26 - Mounting Heights: Environmental Separation (up to 28') and Insect Control (up to 26')												
BD2696-1U*-TS	96	24-28	28	36	6500	18700	42.0/40.0	20.0	16.8	1	15	750
BD26120-1U*-TS	120	24-28	28	36	6500	23400	55.0/51.0	25.5	20.2	1	20	850
BD26144-1U*-TS	144	24-28	28	36	6500	29200	65.0/60.0	30.0	24.8	1	25	950
BD26168-1U*-TS	168	24-28	28	36	6500	32700	65.0/60.0	30.0	24.8	1	25	1050
BD26192-1U*-TS	192	24-28	28	36	6500	37400	78.0/71.0	35.5	29.7	1	30	1150
BD30 - Mounting Heights: Environmental Separation (up to 32') and Insect Control (up to 30')												
BD3096-1U*-TS	96	28-32	28	36	6950	19200	55.0/51.0	25.5	20.2	1	20	800
BD30120-1U*-TS	120	28-32	28	36	6950	24900	65.0/60	30.0	24.8	1	25	900
BD30144-1U*-TS	144	28-32	28	36	6950	30300	78.0/71.0	35.5	29.7	1	30	1000
BD30168-1U*-TS	168	28-32	28	36	6950	33000	78.0/71.0	35.5	29.7	1	30	1100
BD30192-2U*-TS	192	28-32	28	36	6950	38100	110.0/102.0	51.0	40.4	2	20	1200

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

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

NOTES

- **Alternate voltage codes with FLA (Full Load Amp) data:**
  - 380-415V/3Ø/50Hz (W) – 6.5A per motor (5HP), 8.3A per motor (7½HP), 11.5A per motor (10HP), 15.5A per motor (15HP), 22.5A per motor (20HP), 30.0A per motor (25HP), 36.5A per motor (30HP)
- **For total FLA, multiply motor FLA by # of motors.**
- **Ampacity (MCA) = total FLA x 1.25**
- **Sound levels (measured at 10' in an open field):**
  - 5HP unit = 73 dBA (BD14)
  - 7½HP unit = 74 dBA (BD14), 75 dBA (BD18)
  - 10HP unit = 75 dBA (BD14, BD22), 76 dBA (BD18)
  - 15HP unit = 76 dBA (BD18, BD22, BD26)
  - 20HP unit = 77 dBA (BD22, BD26, BD30)
  - 25HP unit = 78 dBA (BD26, BD30)
  - 30HP unit = 79 dBA (BD26, BD30)
  - (2) 20HP unit = 80 dBA (BD30)

MARS RECOMMENDED ACCESSORIES

- **Controls** LINK
  - MCP⁺-†U*, Control panel, 120V control voltage (⁺ = Motor HP Code, † = # of Motors, * = Voltage Code)
    - MCP-24V, Low voltage control option (panel required)
    - MCP-TD, Adjustable time delay
    - BMS-303, BMS for monitoring and controlling (Motor control panel required with MCP-24V option)
- **Door limit switches** LINK
  - 99-125, Industrial surface mounted magnetic switch
- **Available heat types** LINK
  - Electric, hot water, steam, and indirect gas fired

KEY FEATURES

- ETL listed to UL 507 (US) and CSA 22.2 (Canada)
- Low-profile design
- Variable speed control (LPV2 only)
- QuickDry package: Fingersafe protection, factory installed solid-state controls and commercial magnetic switch (99-018) included
- Cold Storage package: Non-thermal transfer mounting hardware, factory installed solid-state controls and industrial magnetic switch (99-125) included
- Includes adjustable time delay and low voltage controls
- Freight allowed in continental US

Quickens Drying Times for Ware Washer Machine

Unheated Model Number	Opening Width (in)	Opening Height (ft)	Unit Dimesions (in)		Air Velocity FPM @ Nozzle	Air Volume CFM @ Nozzle	Full Load Amps (Total FLA) 1 Phase	# of Motors	HP per Motor	Net Weight (lbs)	Accreditation Standards		
			Height	Depth			115V (A)				Performance	Safety	Sanitation
QuickDry Series													
LPV2 - QuickDry Package - Mounting Heights: Environmental Separation (up to 7')													
LPV225-1UA-WW	25	7	8	8 7/8	1800	625	2.4	1	1/6	20	---	UL 507/CSA 22.2	---
STD2 - QuickDry Package - Mounting Heights: Environmental Separation (up to 7')													
STD236-1UA-WW	36	7	10 5/8	12 3/4	2206	1379	5.1	1	1/2	60	AMCA 211	UL 507/CSA 22.2	---

Temperature and Humidity Control for Walk-In Coolers

Cold Storage Series													
LPV2 - Cold Storage Package - Mounting Heights: Environmental Separation (up to 8')													
LPV236-1UA-OB-CS	36	7-8	8	8 7/8	1800	900	2.4	1	1/6	32	---	UL 507/CSA 22.2	---
LPV236-1UA-PW-CS	36	7-8	8	8 7/8	1800	900	2.4	1	1/6	32	---	UL 507/CSA 22.2	---
LPV236-1UA-TS-UVP-CS	36	7-8	8	12 1/2	1800	900	3	1	1/6	48	---	UL 507/CSA 22.2	---

NOTES

- For total FLA, multiply motor FLA by # of motors.
- Ampacity (MCA) = total FLA x 1.25
- Sound levels (measured at 10' in an open field):
  - 25"-36" = 49 dBA (LPV2)
  - 1 motor unit = 66 dBA (STD2)

MARS RECOMMENDED ACCESSORIES

- Mounting brackets
  - B0004, Adjustable mounting bracket set, 3½" clearance (For Cold Storage Only)
- Filter
  - LPV2 – J05++, 1/4" aluminum pressed flat bank filters (++ = Model length, refer to table above)
  - STD2 – J21++, 1/4" aluminum pressed flat bank filters (++ = Model length, refer to table above)

Please note the following represent the most commonly selected accessory in each respective category

DOOR LIMIT SWITCHES

Door limit switches automatically activate and de-activate (start and stop) the air curtain when the door(s) open and close.
Note: Control panel will be required if the air curtain selected is 3 phase or exceeds 250 volts, 20 amps, or 1 total horsepower. Please refer to the panel and/or switch submittals for additional rating details.

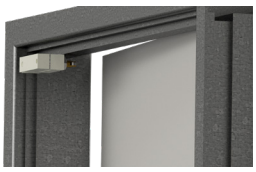
Mechanical

Mechanical switches are suitable for all door types and can be used without a control panel or controller if it does not exceed the switch limitations. Mechanical switches are adaptable to varying field conditions and have a large throw (activation range) to compensate for doors that may not close completely. Please refer to the switch submittals for switch limitations and control requirements.


99-014

Standard Duty

NEMA 1 - Designed for all door types in dry indoor environments. Part #: 99-014 - Mechanical Combination Roller/Plunger Type Door Limit Switch, NEMA 1 with a maximum rating of 250 volts, 20 amps or 1 horsepower, Single Pole and Single Throw (Field Installed)



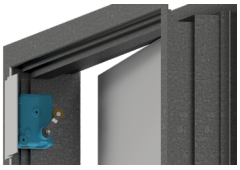

99-270

Severe Duty (typically for industrial applications)

NEMA 4X - Designed for outdoor and/or wet environments. Part # 99-270 - Mechanical Roller Type Door Limit Switch, NEMA 4X with a maximum rating of 250 volts, 15 amps or 1 horsepower, Single Pole & Single Throw (Field Installed)


99-016

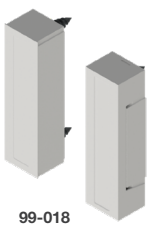
NEMA 7 (Fumes) & 9 (Dust) - Designed for indoor use in locations classified as hazardous. Part # 99-016 - Mechanical Roller Type Door Limit Switch, NEMA 7 & 9, Class I, Division I, Groups A, B, C, or D and NEMA 9, Class II, Groups E, F, or G with a maximum rating of 250 volts, 15 amps or 1 horsepower and Single Pole & Single Throw (Field Installed)



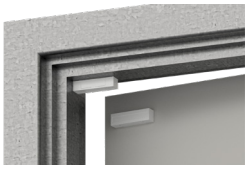
Magnetic

Magnetic switches are designed for low profile architectural NEMA 1 applications and are typically used for low voltage controls systems. Input power is limited to 1 phase and 240 volts, and a motor control panel or solid-state controller is required for all magnetic switches when used with unheated, hot water/steam, or indirect gas fired models. Magnetic switches have a narrow throw (activation range, 3/8" or less) and require the door(s) to fully close to de-activate the air curtain(s). Please refer to the switch submittals for switch limitations and control requirements.

Commercial Surface Mounted


99-018

Commercial surface-mounted switches are designed for the reed switch and the magnet to be mounted on the surface of the door jamb and the door. The compact footprint minimizes its surface exposure in visible high traffic areas, making them ideal for offices, retail shops, restaurants, and concession door applications. Note: Control wires can be concealed if the door frame and/or wall can accommodate wire races or conduit.



Part # 99-018 - Commercial Plastic Surface Mounted Magnetic Door Limit Switch, NEMA1 with 24Vac Controls, requires an optional Control Panel or Solid-State Controller. (Field Installed)

Please note the following represent the most commonly selected accessory in each respective category

Industrial Surface-Mounted

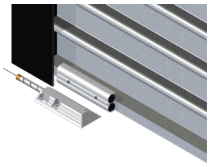
Industrial surface-mounted switches are designed for large factory and warehouse doors. The larger heavier duty aluminum reed switches and magnets allow for high voltage (120 volt), low load (1/2 amp) controls applications, and can withstand the rigors of industrial wear and tear. Conduits are required for high voltage control signals and may be used for 24V controls.


99-125

Part # 99-125 - Industrial Metallic Surface Mounted Magnetic Door Limit Switch, NEMA1 with 24Vac Controls, requires an optional Control Panel or Solid-State Controller. (Field Installed)


99-124

Part # 99-124 - Industrial Metallic Floor Mounted Magnetic Door Limit Switch, NEMA1 with 24Vac Controls, requires an optional Control Panel or Solid-State Controller. (Field Installed)



CONTROLLERS

Motor Control Panels

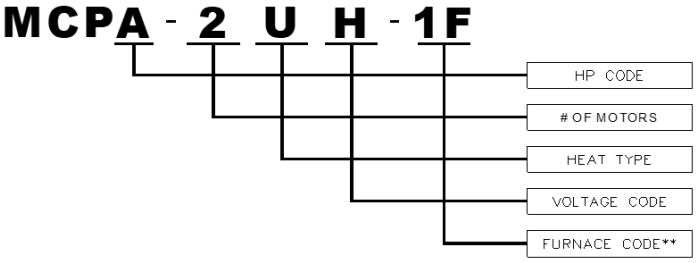
Mars Motor Control Panels (“Motor Starters”) integrate with Mars air curtain(s) to automatically and/or manually activate and de-activate (start and stop) the air curtain, via H-O-A (Hands-Off-Automatic), when the door(s) open and close. A panel is required when the air curtain uses 3 phase power or exceeds the door limit switch electrical limitations. Available in all voltages, horsepower, and phases with 115-volt control standard (24V available as an option) for unheated, hot water/steam, and indirect gas fired units. All panels are NEMA 1, designed for indoor use to provide protection to personnel against access to hazardous parts, and to provide a degree of protection to the equipment against ingress of solid foreign objects.


Motor Control Panel (MCP)

For severe duty applications including indoor/outdoor, hose-directed water, and corrosion resistance, Mars offers a NEMA 4X panel with a fiberglass enclosure (optional 304 stainless steel or 316 stainless steel enclosures are also available). In addition, spark-resistant hazardous applications are available with cast aluminum mill-faced enclosures. NEMA 7 (gases) enclosures are intended for indoor use in locations classified as Class I, Division I, Groups A, B, C, or D, while NEMA 9 (dust) enclosures are for indoor use in locations classified as Class II, Groups E, F, or G. These options are only available for unheated and hot water/steam units. Please refer to the panel submittals for additional details.

Mars Motor Control Panels can also be customized by adding multiple control options and accessories to suit a variety of customer needs and applications.

Please note the following represent the most commonly selected accessory in each respective category



HP CODE		# OF MOTORS	HEAT TYPE		VOLTAGE CODE				FURNACE CODE**	
HP	CODE		HEAT MODE	CODE	VOLTS	PHASE	HZ	CODE	FURNACE QTY	CODE
1/2	A	1	Unheated	U	115	1	60	A	1	1F
1	B	2	Electric	E	208/230	1	60	D	2	2F
2	C	3	Hot Water or Steam	V	208/230	3	60	G	3	3F
3	D	4	Indirect Fired Gas	I	277	1	60	L		
5	E	5			460	3	60	H		
7	F	6			575	3	60	I		
7 1/2	G				220	1	50	U		
10	H				220	3	50	V		
15	I				380/415	3	50	W		
20	J									
25	K									
30	L									
Special*	S									

*Usually for 1/6 HP motors or for a combination of different motors with different HP
**Must Specify for Indirect Fired Gas Control Panel Only

Part # MCP-TD - Accessory, Panel Mounted, Adjustable Time Delay, 1sec-17min, 24V-120V Controls, (Control Panel Required)

Part # MCP-VR - Accessory, Panel Mounted, VFD Ready, Unheated/Hot Water/Steam Heated (Control Panel & External Stand Alone VFD Required)

Part # MCP-HD - Accessory, Panel Mounted, Heat on Demand, Hot Water/Steam Heated (Thermostat Included)

Part # MCP-24V - Accessory, Panel Mounted, Transformer, Unheated/Hot Water/Steam Heated, 24V Controls (Control Panel Required)

Part # MCP-2S - Accessory, Pane l Mounted, 2 Speed, 1 Phase Only, Unheated/Hot Water/Steam Heated, STD2/HV2/PH10/PH12/QP10, 3 Motor Max (Control Panel Required)

Solid-State Panels

A solid-state control is an electronic switching device, designed to activate and de-activate a device when a small external voltage is applied across its control terminals. Solid-state controls consist of a sensor which reacts to digital and/or analog input and can be designed to switch either AC or DC control systems.

SimpleLink®

SimpleLink® is a multi-function programmable solid-state controller that enables automatic air curtain operation via an advanced control system with “Smart Mode,” which optimizes the air curtain sequence based on the current conditions, and regulates the heaters and/or fan speed as required by current local conditions. Includes factory built WiFi router for wireless connection to field supplied smartphone or tablet. Optional remote mounted HMI module available. Please refer to the SimpleLink® submittals for the list of compatible units and limitations.


SimpleLink

Standard Package

The Mars SimpleLink® Controller Standard Package includes standard and programable control modes that automatically adjust the fan speed, heat, and time delay based on the specified set points via internally mounted sensors. Fully programable 24/7/365 timer, maintenance schedule alert, and password-protected screen is standard.

Please note the following represent the most commonly selected accessory in each respective category

Plus Package

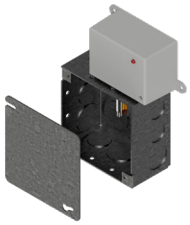
The Mars SimpleLink® Controller Plus Package includes all the features in the Standard Package, but also includes BACnet capability and Full Adaptive Controls (“Smart Mode”). Smart Mode regulates and adjusts the set points of the fan speed, heat, and time delay based on the current trending operational conditions.

Basic Controller

The basic controller is a simple, compact solid-state controller that offers an affordable method of automatically activating and de-activating (start and stop) the air curtain when the door(s) open and close. However, input power is limited to 115 or 208/240 volts, 1 phase, and ½ or 1 total unit horsepower and may not be considered as a “motor starter”. Please refer to the Basic Controller submittals for additional rating details and limitations.

Non-Time Delayed

Non-time delayed basic controller kits are the most popular type and turn the air curtain off immediately when the door closes. This option is typically selected when low voltage controls are required.



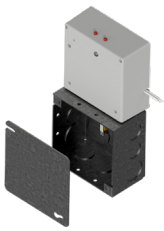
Non Time Delayed Basic Controller

Part # J0705 - Solid State Controller kit with 24Vac Non-time Delayed controls, NEMA1, 115V, 1Ø, (2) 1/2 HP motors max with part # 99-125, Commercial Plastic Surface Mounted Magnetic Door Limit Switch (Field Installed)

Part # J0706 - Solid State Controller kit with 24Vac Non-time Delayed controls, NEMA1, 208-277V, 1Ø, (2) 1/2 HP motors max with part # 99-125, Commercial Plastic Surface Mounted Magnetic Door Limit Switch (Field Installed)

Time Delayed

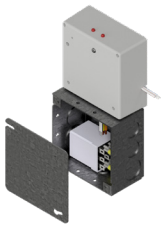
Time delayed basic controller kits reduce cycling of air curtain motors for high traffic applications (10 or more cycles per hour). The controller delays the unit from turning off when the door closes, with a minimum delay of 6 seconds and maximum of 20 minutes. Please refer to the Basic Controller submittals for additional kits available.



Time Delayed Basic Controller (1/2 HP)

Part # J0021 - Solid State Controller kit with 24Vac Adjustable (6s -20m) Time Delayed controls, NEMA1, 115V, 1Ø, 1/2 HP max with part # 99-018, Commercial Plastic Surface Mounted Magnetic Door Limit Switch (Field Installed)

Part # J0022 - Solid State Controller kit with 24Vac Adjustable (6s -20m) Time Delayed controls, NEMA1, 208-277V, 1Ø, 1/2 HP max with part # 99-018, Commercial Plastic Surface Mounted Magnetic Door Limit Switch (Field Installed)



Time Delayed Basic Controller (1 HP)

Part # J0703 - Solid State Controller kit with 24Vac Adjustable (6s -20m) Time Delayed controls, NEMA1, 115V, 1Ø, (2) 1/2 HP motors max with part # 99-018, Commercial Plastic Surface Mounted Magnetic Door Limit Switch (Field Installed)

Part # J0704 - Solid State Controller kit with 24Vac Adjustable (6s -20m) Time Delayed controls, NEMA1, 208-277V, 1Ø, (2) 1/2 HP motors max with part # 99-018, Commercial Plastic Surface Mounted Magnetic Door Limit Switch (Field Installed)

VFD (Variable Frequency Drive)

A Variable Frequency Drive (VFD), also known as an adjustable speed drive, adjustable frequency drive, AC drive, microdrive, or inverter, controls the motor speed by varying the frequency and voltage supplied to the electric motor .In addition to reducing the motor’s energy consumption, reduced motor speed may be required for certain applications. VFDs may only be used for inverter-rated motors, and always require 3 phase output power. VFDs can be factory-installed or mounted remotely as a standalone controller.

VFD

Single Phase Input Power

New applications with 1 phase input power can utilize a custom VFD. The VFD will need to be properly sized to ensure it meets the input power requirements for voltage, amperage, and horsepower. Existing 1 phase units cannot use VFDs without first changing the motor voltage to 3 phase. Please contact the factory for additional details.

Please note the following represent the most commonly selected accessory in each respective category

Three Phase Input Power

All Mars 3 phase units are inverter-rated and compatible with VFDs. Please refer to the VFD submittals for limitations.

BMS Control Options

Mars offers enhanced control features for “Smart Buildings” to increase their operational and energy efficiency. The Mars BMS (Building Management System) options offer an easy and seamless integration with industry standard BMS or BAS (Building Automation System) to assist in monitoring and controlling all its mechanical and electrical equipment. This is achieved through a computer-based control system that utilizes various Internet protocols and open standards. Mars offers BACnet as its standard enhanced communication platform.

Part # BMS-301 - BMS for monitoring only for all unheated models (Motor control panel required with MCP-24V option)

Part # BMS-302 - BMS for controlling only for all unheated models (Motor control panel required with MCP-24V option)

Part # BMS-303 - BMS for monitoring and controlling for all unheated models (Motor control panel required with MCP-24V option)

Part # BMS-304 - BMS for monitoring only for all hot water, steam, indirect gas and BD & WM electric heated models (Motor control panel required with MCP-24V option)

Part # BMS-305 - BMS for controlling only for all hot water, steam, indirect gas and BD & WM electric heated models (Motor control panel required with MCP-24V option)

Part # BMS-306 - BMS for monitoring and controlling for all hot water, steam, indirect gas and BD & WM electric heated models (Motor control panel required with MCP-24V option)

Part # BMS-300 - BMS for monitoring and controlling for all electric heated LP2/STD2/N2/HV2/NH2/EP2/PH models

THERMOSTATS

The Mars thermostat controls the optional heat output of air curtains by regulating the output temperature and providing supplemental heat to the local area. Thermostats are typically remote mounted to sense the average space or local area temperature (open spaces) and adjusts the air curtain heat to maintain the setpoint temperature.

Mars provides an analog thermostat as standard for most models with optional programmable digital thermostats available.

Part # 99-063 - Thermostat, 801, Line Voltage, Up to 250V, Analog, Single Stage, Single Pole (Optional for LPV2, WM/BD Electric & All Hot Water/Steam)

Part # 99-064 - Thermostat, 802, Line Voltage, Up to 250V, Analog, Two Stage, Double Pole (Optional for All Hot Water/Steam)

Part # 99-264 - Thermostat, 9200H, 24 Volt, Analog, Single Pole (Standard for Elec LPV2, STD2, HV2, EP2, PH & All Gas Fired)

99-264

99-063

Part # 99-263 - Thermostat, RS4110, 24 Volt, Digital, Single Pole, Battery Power (Optional for Elec LPV2, STD2, HV2, EP2, PH, WM/BD & All Gas Fired)

Please note the following represent the most commonly selected accessory in each respective category

DISCONNECTS

Mars disconnects are intended to manually open a circuit to disconnect power from a unit for servicing and/or during an overcurrent or short-circuit event. This is a line of protection for the air curtain and any other equipment that is integrated with it. In addition, it also serves as a mechanism for providing safe access to the unit for periodic maintenance and service, with most having the ability to “lock-out and tag” the input power.

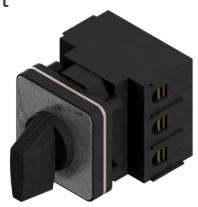
Disconnects are typically shipped remote mounted for field installation and wiring. This is mainly due to the physical size of the disconnect and thickness of the conduit required to integrate with the air curtain. Smaller amperage systems can be panel or unit mounted, but remote mounting as a standalone option is the most practical for higher amperage systems and fused type disconnects.

Fused Type

A fused disconnect switch is a combination of a manual switch to disconnect the circuit and fuses to shut the circuit off in the event of a problem. The disconnect and fuses are sized according to the unit voltage and amperage. Please refer to the disconnect submittals for additional details and selection guide.

Non-fused Type

A non-fused disconnect switch is designed to shut the circuit off in the event of a problem. The disconnects are sized according to the unit voltage and amperage. Please refer to the disconnect submittals for additional details and selection guide.



Non-Fused Type

Fused Type

BRACKETS

Mars brackets are individually designed to integrate with certain Mars units, but each bracket component is designed to be interchangeable and may be used with each bracket type to meet field clearance requirements. Brackets are not compatible with WM and BD series and gas heated units. Please refer to the bracket submittals for additional details and bracket compatibility.

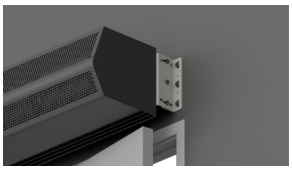
Offset Mounting

Offset mounting brackets are intended to clear obstructions directly above the opening and are compatible with both swinging and sliding door types. The obstruction must not extend beyond the outer edges of the opening, and a minimum of 6” clearance is required on either side for proper mounting. Examples of obstructions include exit signs, power conduits, outlets, sectional door tracks, protruding headers, etc.

B0004

Part # B0004 – Adjustable Mounting Bracket set with a maximum of clearance of 3-1/2”, Obsidian Black. One set required per air curtain. (Field Installed)

Part # B0005 - Adjustable Mounting Bracket set with variable clearances of 7”, 9”, 11” or 13”, Obsidian Black. One set required per air curtain. (Field Installed)

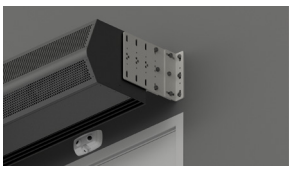


Adjustable Mounting Bracket B0004

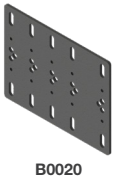
B0005

Side Extension

Side extension brackets are intended to extend the air curtain mounting holes sideways to clear obstructions on the outer edges and/or above the opening. Typically used in conjunction with offset mounting brackets to clear obstructions such as sectional door tracks, pipes and conduit, signs, etc.

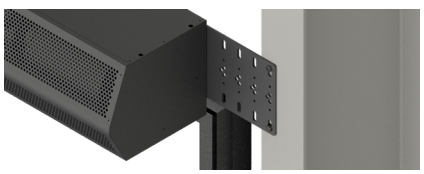


Adjustable Mounting Bracket B0005



B0020

Part # B0020 – Side Extension Plate set with variable clearances of 4”, 6”, 8” or 10”, Obsidian Black. One set required per air curtain. (Field Installed)



Side Extension Plate

Please note the following represent the most commonly selected accessory in each respective category

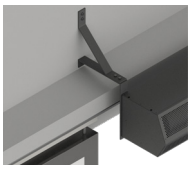
Extended Wall Mounting

Extended wall mounting brackets are intended to clear larger obstructions above the opening that extend beyond the door header but do not extend more than 24” above the door header. Specifically designed to clear drum roll-up type doors and larger diameter objects such as main water and gas pipes and allow the unit to be mounted directly in front of the obstruction. Side baffles are recommended for larger clearances to minimize bypass and losses from gaps.

Extended Wall Mounting Bracket

Part # B0008 - Extended Wall Mounting Bracket set with a maximum of clearance of 10”, Obsidian Black. One set required per air curtain and includes part # B0004, Offset Mounting Bracket. (Field Installed)

Part # B0009 - Extended Wall Mounting Bracket set with a maximum of clearance of 16”, Obsidian Black. One set required per air curtain and includes part # B0004, Offset Mounting Bracket. (Field Installed)



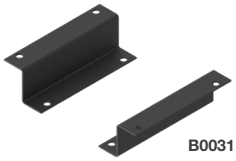
Sliding Door Application

Part # B0010 - Extended Wall Mounting Bracket set with a maximum of clearance of 19”, Obsidian Black. One set required per air curtain and includes part # B0004, Offset Mounting Bracket. (Field Installed)

Part # B0011 - Extended Wall Mounting Bracket set with a maximum of clearance of 23”, Obsidian Black. One set required per air curtain and includes part # B0004, Offset Mounting Bracket. (Field Installed)

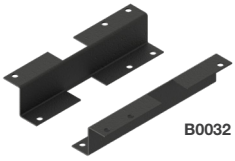
Top Mounting

Top mounting brackets are intended for overhead installations, using threaded rods (not included) to clear obstructions directly above all door types where wall mounting is not as an option. Wall or ceiling mounted stabilizing brackets or rods (not included) are recommended to minimize unit movement when cycling.



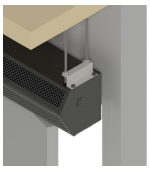
B0031

Part # B0031 - Top Mounting Bracket set for the unheated LP2 series, Obsidian Black. One set required per air curtain. Model 84”-144” long require an additional set for center support. (Field Installed)

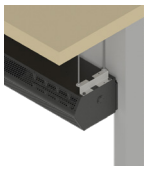


B0032

Part # B0032 - Top Mounting Bracket set for the electric, hot water and steam heated LPV2 series, Obsidian Black. One set required per air curtain. Model 84”-144” long require an additional set for center support. (Field Installed)

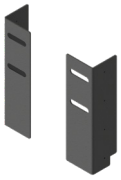


Overhead Mounted Unheated LP2



Overhead Mounted Unheated LPV2

Transom Mounting



B0041

Transom mounting brackets are designed to be mounted flush to the vertical frame of the transom (aluminum framed glass window) above the opening.

Part # B0041 - Transom Mounting Bracket set for the unheated and electric heated STD2/N2 series, Obsidian Black. One set required per air curtain. Models 84”-144” long require an additional set for center support. (Field Installed)

Transom Mounted STD2

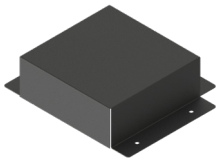
B0042

Part # B0042 - Transom Mounting Bracket set for the unheated, electric, hot water and steam-heated LP2 series, Obsidian Black. One set required per air curtain. Models 84”-144” long require an additional set for center support. (Field Installed)

Transom Mounted LP2

Please note the following represent the most commonly selected accessory in each respective category

Vertical Mounting



Vertical Mounting Base

Vertical mounting brackets are designed to secure the Mars air curtain to the floor and wall and are ETL certified for vertical mounting to the floor. Additional brackets (not included) may be required to suit field conditions.

Part # 09-500 – Vertical Mounting Bracket set for the unheated, electric, hot water and steam heated LP2 series 25” to 72”, Obsidian Black. For 25”-72” models only. Maximum of 2 units for hot water and steam heated models (Field Installed)

Part # 09-510 - Vertical Mounting Bracket set for the unheated, electric, hot water and steam heated STD2 series, Obsidian Black. Excludes electric heated with 16kW per motor/fan assembly. Maximum of 2 units for hot water and steam heated models (Field Installed)

Part # 09-520 - Vertical Mounting Bracket set for the unheated, electric, hot water and steam heated HV2/EP2 series, Titanium Silver. Maximum of 2 units for hot water and steam heated models (Field Installed)

Part # 09-530 - Vertical Mounting Bracket set for the unheated, hot water and steam heated WM series, Titanium Silver. Maximum of 2 units (Field Installed)

Part # 09-546 - Vertical Mounting Bracket set for the unheated, hot water and steam heated BD series, Titanium Silver. Maximum of 2 units (Field Installed)

Typical Mounting Base

Part # 09-550 - Vertical Mounting Bracket set for the unheated BD series, Titanium Silver. Maximum of 2 units (Field Installed)

SIDE BAFFLES

Mars side baffles are designed to minimize leakage (bypass) from the space created at the sides of the door when the air curtain is not mounted flush to the wall. The side baffles also improve the air curtain performance by framing the air curtain stream and redirecting it towards the floor. Available in 12” and 24” depth to cover a wide array of applications and may be customized in the field to contour the shapes of the obstructions. Note: The space between the back of the air curtain and the wall must also be blanked off, but that is typically field supplied and installed.

Part # B0101 - Side Vinyl Baffle Kit, 14’ Height, 12” Width (Set of two)

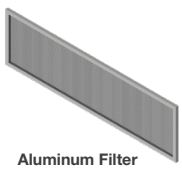
Part # B0103 - Side Vinyl Baffle Kit, 14’ Height, 24” Width (Set of two)

FILTERS

Aluminum and Pleated

Aluminum (washable) filters are designed to meet UL Class 2 requirements, with superior dust and debris holding capacity. The multi-layer bonded expanded aluminum construction allows uniform loading and low airflow resistance for long life and improved protection. They are durable, rust-proof, and are easy to clean or replace in the field.

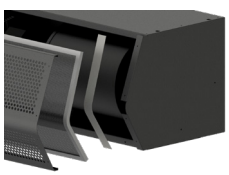
Pleated (disposable) filters are designed to meet MERV (Minimum Efficiency Rating Value) 8 and feature an extended area filtering medium that is extremely efficient and ecologically friendly. Made primarily from recycled materials, this medium achieves MERV 8 (particle sizes 3-10 pm) efficiency with low resistance to airflow. Higher MERV rated air filters are also available.



Aluminum Filter

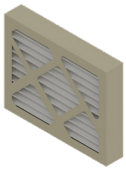
Flat-bank (1/4” - 2”)

1/4” aluminum pressed flat-bank filters are contoured to fit the Mars air curtain intake and do not require any additional parts beyond the included spring-loaded straps.



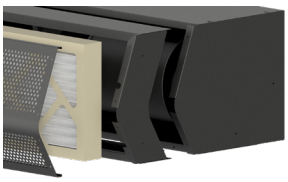
1/4” Pressed Filter

Please note the following represent the most commonly selected accessory in each respective category



1/2” to 2” Flat-bank filters require additional depth in front of the unit for the filter enclosure (included). Industrial air curtain models with higher airflows are limited to the 2” aluminum type due to higher face area velocities. Please refer to the filter submittals for additional details and filter compatibility.

Pleated Filter



2” Filter Section

V-bank

Please contact the factory for additional details.

SOUND DAMPENING

Noise Reduction

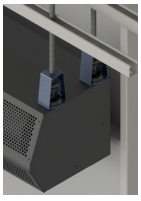
Mars offers a noise reduction package for sound abatement in noise-sensitive and tightly enclosed areas. Specialized coatings, custom internal configurations, and dampeners provide noise profiles to suit quiet restaurants, high-end retail shops, work areas near doors, galleries, etc.

Part # INS-NR – Noise Reduction Package for all LPV2, STD2, PH, HV2 series, one is required for each motor/wheel assembly. Excludes gas heated models.

Vibration Isolation

Mars offers vibration isolation sets for sound and vibration abatement by dampening vibration transfer from the unit to the mounting surface (suspended mounting only). Please refer to the vibration isolation submittals for additional details and compatibility.

Spring Isolator



Typical overhead mounting for Spring Isolator

NOZZLE EXTENSIONS

Mars offers nozzle extensions to lower the air curtain discharge just above the door header. Adjustable from 10” to 16” below the installation height for recessed mounting and high ceiling applications. Constructed with heavy gauge steel and powder coated for improved sound absorption with minimal performance loss. Painted to match unit color and includes trim pieces for field installation. Please refer to the Nozzle Extension submittals for additional details and features.

Nozzle Extention

CUSTOM MATERIALS, FINISHES & CONSTRUCTION

Mars offers a variety of material and finish options to complement the space’s architectural/design requirements. From custom materials such as stainless steel and aluminum, to custom-blended colors and coatings, Mars can provide a personalized solution for any application.

Materials

For severe duty applications, 304SS (stainless steel) is available and is best suited for outdoor and/or wet applications. However, for extremely corrosive applications such as marine or caustic environments, 316SS provides superior corrosion resistance, especially from chlorides and chlorinated solutions, but it comes at a premium. Brushed 6061 aluminum is also available for weigh reduction and to meet the project specifications, as required, but is not intended for corrosive environments.

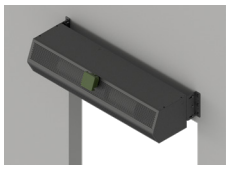
Please note the following represent the most commonly selected accessory in each respective category

Finishes

Upon request, any of the three standard colors may be used on any series. Special RAL colors are also available but are limited to selected stock RAL numbers from the manufacturer. Non-RAL colors may be ordered but will require custom blending and color samples. As an alternative to stainless steel, Heresite and epoxy coatings are available for severe duty applications that requires corrosion resistance. All the above color options are at an additional costs and lead time. Please contact the factory for additional details.

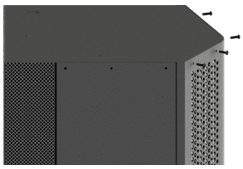
Construction

In addition to severe duty air curtain enclosures, switches, and panels, Mars also offers complete washdown/corrosion (NEMA 4X) and spark-resistant (NEMA 7 & 9) air curtain units, but are limited to Class I, Division I, Group D ratings, due to the motor limitations. Please consult with the project engineer to determine which rating is best suited for the application.



Tamper Resistant

Mars offers a tamper-resistant option for applications in highly secure areas such as government, mental health, and correctional facilities. Lockable doors and access panels, specialized screws heads (tool included), and wire mesh screens prevent removal of components and/or access to internal parts and controls. Please contact the factory for additional information.



FURNACE OPTIONS

Mars furnace options allows the designers, specifiers and engineers to customize the furnace sequencing, operation and materials to meet the application design requirements. Enhanced furnace heat output control systems are available to assist in minimizing furnace short-cycling, reduce BTU consumption and maintain a de-stratified and more comfortable local area or space. Stainless steel heat exchangers are available for caustic environments to maintain the standard furnace operational lifecycle.

Part # IDF-2STG – Two stage controls for Hi-Lo heat operation (per furnace)

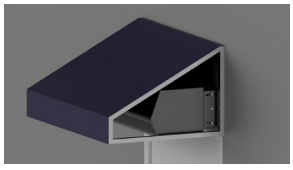
Part # IDF-SS - 409 Stainless Steel Heat Exchangers and Burners (per furnace)

Part # IDF-MOD-RS - Modulating controls for room sensing, 0-10Vdc/4-20mA controls included and factory supplied. Only one controller supplied per air curtain.

Part # IDF-SC - Single stage controls with separated combustion furnace for 100% outside air intake. One required for each furnace.

HARSH WEATHER COVER

Mars offers harsh weather covers to protect the air curtains from the inclement conditions when the air curtain is exposed to outside environment. Made from industrial grade steel tubing and thick durable outdoor rated fade and UV resistant canvas material, the harsh weather cover minimizes the accumulation of snow, ice, and other debris in and on the top of the units. It also reduces the affects of the direct sunlight and retards the premature aging of the air curtain finish and its internal components.



Specifically designed for all Mars unheated models and available with easily replaceable canvas cover, the harsh weather cover offers another layer of protection to maintain the air curtain's standard operational lifecycle. Please refer to the Harsh Weather Covers submittals for additional details and compatibility.