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Quality Equipment and Service Since 1962

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TECHNICAL DATA SUMMARY (1)

SELF-CONTAINED STANDARD PRECIPITATORS; 800-6000 CFM											
Model Series: Mi (with Integral Blower/motor Assembly)											
MIGHTY ION (Mi-Series) INDUSTRIAL ELECTROSTATIC PRECIPITATOR AIRCLEANERS (SELF-CONTAINED DESIGNS)											
MIGHTY ION MODEL*	Mi-8	Mi-10	Mi-12	Mi-16	Mi-20	Mi-24	Mi-30	Mi-36	Mi-40	Mi-48	Mi-60
MODEL CFM RATING (NOMINAL)**	800	1000	1200	1600	2000	2400	3000	3600	4000	4800	6000
MODEL m3/m RATING (NOMINAL)**	22.7	28.3	34.0	45.3	56.6	68.0	85.0	101.9	113.3	135.9	170.0
MATERIALS OF CONSTRUCTION:											
CABINET CELL(S)	16 gauge, cold rolled steel(alternates available);primed with enamel finish. Aluminum (alternate materials available in stainless steel, hastelloy, etc)										
WEIGHTS AND DIMENSIONS:											
UNIT WEIGHT, lbs US	200	225	240	300	400	425	450	475	500	600	700
HEIGHT, inches	23	23	23	23	23	23	23	23	41.25	41.25	41.25
LENGTH, inches	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5
WIDTH, inches	19	23	26.563	36	44.375	51.25	65.63	75.25	44.375	51.25	65.75
INLET DUCT OPENING:											
HEIGHT, inches	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	33.75	33.75	33.75
WIDTH, inches	16.25	20.375	23.75	33.375	41	48.5	61.625	73.25	41	47.875	62.25
OUTLET DUCT OPENING:											
HEIGHT, inches	10	10	10	10	10	10	10	10	12.25	12.25	12.25
WIDTH, inches	12	12	12	29	29	29	29	29	14.375	14.375	14.375
BLOWER MOTOR: (ODP standard/TEFC option)											
HP	1/4	1/4	1/3	1/3	1/2	1/2	3/4	1	1	1	1.5
RPM	1725	1725	1725	1725	1725	1725	1725	1725	1725	1725	1725
POWER REQUIREMENTS	115V,220V-1 ph,50/60 Hz 230V,460V-3ph,60 Hz										
ELECTRICAL DESIGN	NEMA 1, 60 Hz (Optional 50 Hz or NEMA 3,4,4X or 12)										
MOTOR DRIVE DESIGN	Variable sheave, Flexible V-belt										
BLOWER DESCRIPTION:											
TYPE	Forward curve with sealed ball bearings mounted with rubber grommets to reduce noise and vibration; belt driven.										
RPM	650	675	700	750	800	900	750	800	800	900	700
AIR CLEANER DESCRIPTION:											
TYPE	Two stage, dry, electrostatic precipitator										
EFFICIENCY	Atmospheric dust spot 91%; cold DOP 96%										
EFFICIENCY TEST METHOD	ASHRAE 52-76										
QUANTITY @ CELL SIZE (CFM) EACH	1x800	1x1000	1x1200	2x800	2x1000	2x1200	3x1000	3x1200	4x1000	4x1200	6x1000
TOTAL COLLECTOR PLATE SURFACE-Sq.inch	7612	9688	11418	15224	19376	22836	29064	34128	38592	45504	57888
PLATE SPACING	0.323	0.323	0.323	0.323	0.323	0.323	0.323	0.323	0.323	0.323	0.323
AIR VELOCITY, (FT/MIN)	415	415	415	415	415	415	415	415	415	415	415
COLLECTING CELL DIMENSIONS:											
HEIGHT, inches	18	18	18	18	18	18	18	18	18	18	18
WIDTH, inches	17.125	21.25	24	17.125	21.25	24	21.25	24	21.25	24	21.25
DEPTH, inches	12.5625	12.5625	12.563	12.563	12.5625	12.5625	12.56	12.56	12.5625	12.5625	12.56
WEIGHT, EACH (LBS US)	26	32	37	26	32	37	32	37	32	37	32
UNIT OPERATING CURRENT RANGE (Milliamps)	0.4-0.8	0.4-0.9	0.4-0.9	0.9-1.3	1.1-1.7	1.5-2.1	1.1-1.7	1.5-2.1	1.8-2.5	1.5-2.1	1.5-2.1
OPERATING VOLTAGE:											
IONIZER	7200 to 8800 VDC										
COLLECTOR	7200 to 8800 VDC										
IONIZER VOLTAGE GRADIENT	11,158 VDC/inch @ 8000 VDC										
COLLECTOR VOLTAGE GRADIENT	24,768 VDC/inch @ 8000 VDC										
IONIZER DESCRIPTION:											
TYPE	Integral to collecting cell, supported without ceramic insulators, tungsten wire electrodes (standard), optional electrode materials available.										
ELECTRODE DIAMETER, inches	0.007										
SUSPENSION	Stainless steel wire springs at each electrode end.										
POWER PACK DESCRIPTION:											
	Solid state design, controls include: circuit breaker with manual reset, LED power on light, ammeter, variable rheostat, safety interlock switch. Power packs can be unit or remote mounted.										
POWER PACK QUANTITY:	1	1	1	1	1	1	1	1	1	2	2
OTHER UNIT DESIGN FEATURES:											
INSULATOR DIAMETER, COLLECTOR PLATES	Collector plates are suspended with four, 2.25" diameter ceramic insulators.										
PRE- & POST FILTER	Washable, aluminum mesh mechanical pre- and post cell filters.										
OTHER OPTIONS AVAILABLE:											
PORTABLE DESIGNS	Contact factory for information on the Mi-10P series portable air cleaners.										
WATER WASH MANIFOLDS	Copper manifold (pipe) with wide angle spray nozzles; single side wash.										
SYSTEM CLEANING	Manually initiated or fully automatic wash and dry cycle with or without detergent injection.										
SOURCE CAPTURE PLENUMS	Specifically designed for the application										
FILTER MANIFOLDS	Pre- and post filter racks designed per requirement for HEPA or charcoal.										
ELECTRICAL CONTROLS	Custom designed options in relay logic or PLC.										

(1) Technical data and design features are subject to change without prior notification.

*Consult factory for larger models.

**Consult with factory or an authorized representative for proper model selection.