

Shake Out Deck

VIBRATORY MOTORS & DRIVES

FOUNDRY INDUSTRY Vibratory Motors the Metal Casting Industry

AIRMATIC 284 Three Tun Rd. Malvern, PA 19355 215.333.5600 infocenter@airmatic.com airmatic.com



FOUNDRY INDUSTRY

Maximize uptime while minimizing cost when purchasing an off-the-shelf replacement Vibratory Motor for your Feeders, Separators, Sifters, Screeners, Classifiers, Shakers, Drums and other Vibratory Equipment with Vibrator Motors from AIRMATIC. There is no longer a need to go back to the original equipment manufacturer for an expensive (both cost and lead time) replacement vibrator when you can buy an exact replacement Vibratory Drive directly from AIRMATIC – North America's leading vibrator distributor.





OUR PRODUCTS

AIRMATIC stocks the nation's largest inventory of Foot-Mount Vibrator Motors used by most manufacturers of Feeders & Conveyors, Shakeouts, Screeners, Densifiers & De-airs, Classifiers, Separators, Sifters, and Settlers & Compactors, and we are a service center for most vibrator manufacturers.

AIRMATIC also stocks and services Vertical-Mount Vibrator Motors that are fully interchangeable with any Vibrator used on standard 48" and 60" Round Separator Machines made by the leading manufacturers of vibratory equipment.

TECHNICAL SUPPORT

Need technical support or application assistance to solve a problem with your existing vibratory equipment or in selecting new equipment? Let our Consultants help. We have over 30 years' experience in vibratory equipment selection and troubleshooting, and because we don't represent any vibratory equipment manufacturers, we can provide expert and impartial recommendations.



VIBRATOR REPAIR

If a Vibrator Motor needs repair, contact **AIRMATIC at 800.332.9770.** Most electric motor repair shops are not trained to repair industrial Electric Vibrator Motors. We recommend that they be returned to our Malvern, PA Service Center. Attempting to repair Electric Vibrator Motors in-house or by a non-qualified repair shop – including bearing replacement – will void the manufacturer's warranty.





1200RPM

		Centrifugal Force LBF		Power Output		Bolt Pattern	
Frame Size	Туре	50 Hz	60 Hz	50 Hz	60 Hz	D	E
50	Α	2490	2532	0.74	0.75	5.51	7.48
50	Α	3133	3263	0.87	0.87	5.51	7.48
50	Α	3604	3408	1.1	1.3	6.10	8.86
60	Α	4739	4624	1.5	1.6	6.10	8.86
70	Α	5722	6043	2.1	2.3	6.10	10.04
70	Α	6615	6873	2.3	2.7	69.10	10.04
80	Α	8417	8428	2.6	3.1	7.09	11.02
80	Α	10342	10226	3.5	3.9	7.09	11.02
80	Α	11506	1140	3.5	3.9	7.09	11.02
90	Α	11458	11645	3.9	4.2	7.87	12.60
90	Α	12430	12320	3.9	4.2	7.87	12.60
90	Α	14359	14364	4.3	6.7	7.87	12.60
97	С	14958	14091	5.6	4.7	4.92	14.96
90	С	15429	15400	4.3	6.7	7.87	12.60

TYPE A





Request Spec Sheet for Complete Dimensional Data

Type C shown on page 4





1200RPM

6		Centrifugal Force LBF		Power Output		Bolt Pattern	
Frame Size	Туре	50 Hz	60 Hz	50 Hz	60 Hz	D	Е
90	Α	15429	15400	4.3	4.7	7.87	12.60
95	Α	17701	17591	7.5	8.4	7.87	12.60
95	Α	19065	19072	8.0	9.4	7.87	12.60
97	С	21329	20057	8.4	9.0	4.92	14.96
97	С	24552	24420	8.4	9.0	4.92	14.96
100	С	27047	26710	10.1	11.0	5.51	17.32
97	С	28307	28886	10.6	11.4	4.92	14.96
105	F	31141	30809	12.1	13.4	5.51	18.90
105	F	38119	36969	14.7	15.4	5.51	18.90
105	F	44136	40480	15.8	16.6	5.51	18.90
110	F	49249	44458	20.6	20.4	5.51	20.47
110	F	55000	52360	20.6	20.4	5.51	20.47
120	F	67232	67232	28.0	30.0	5.51	23.62

Type C



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Request Spec Sheet for Complete Dimensional Data





900RPM

		Centrifugal Force LBF		Power Output		Bolt Pattern	
Frame Size	Туре	50 Hz	60 Hz	50 Hz	60 Hz	D	E
50	Α	1401	2017	0.29	0.40	5.51	7.48
60	Α	2028	2919	0.87	1.1	6.10	8.86
60	Α	2671	3843	1.0	1.2	6.10	8.86
70	Α	3219	4635	1.4	1.8	6.10	10.04
80	Α	4734	6818	2.0	2.0	7.09	11.02
80	Α	5819	8378	2.5	3.0	7.09	11.02
90	Α	6446	9280	2.7	3.2	7.87	12.60
90	Α	8078	11631	4.0	5.3	7.87	12.60
95	Α	9957	14337	5.0	5.8	7.87	12.60
97	С	10155	14623	5.6	6.0	4.92	14.95
97	С	17142	21861	7.1	8.5	4.92	14.95
100	С	19116	2417	7.6	8.7	5.51	17.32
105	F	24827	30879	10.2	11.0	5.51	18.90
105	F	29520	37979	11.9	12.7	5.51	18.90
110	F	39611	48822	14.7	17.5	5.51	20.47
110	F	-	57039	-	174	5.51	20.47
110	F	46354	66946	25.0	26.0	5.51	26.62

Type F



Request Spec Sheet for Complete Dimensional Data

> Type A shown on page 3 Type C shown on page 4







1200RPMHIGH TORQUE

	Centrifugal Force LBF	Power Output	Bolt Pattern	
Frame Size	50 Hz	50 Hz	D	E
256	16430	3.4	7.87	14.96
256	18579	3.4	7.87	14.96

900RPMHIGH TORQUE

	Centrifugal Force LBF		Power Output		Bolt Pattern	
Frame Size	50 Hz	60 Hz	50 Hz	60 Hz	D	Е
184	2297	3307	0.85	1.0	6.30	11.02
215	2566	5135	1.70	2.0	7.87	12.60
256	4778	6879	4.20	5.0	7.87	14.96
256	6464	9306	6.30	7.5	7.87	14.96
286	11497	16555	8.30	10.0	7.87	17





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FOUNDRY INDUSTRY



TECHNICAL FEATURES

Motor Duty Cycle - Continual service (S1) at maximum declared centrifugal force and electric power. Intermittent services are also possible depending on the type of vibrator and the operating conditions. For detailed information, contact our technical support office.

Centrifugal Force - Range extended up to 67000 lb, with centrifugal force adjustable from 0 to 100%. **Mechanical Protection** - IP66 according to IEC 529, EN 60529.

Mechanical Impact Protection - IK 08 according to IEC 68, EN 50102.

Insulation Class - Class F (155°C), class H (180°C) on request.

Tropicalization - Standard on all Vibrators, with vacuum encapsulation up to size 35, with "drop by drop" trickle system for larger sizes.

Ambient Temperature Ratings - From -4°F to +104°F. Versions for higher or lower temperatures are available on request.

Thermal Protection - Standard PTC rated thermistor heat detectors 130°C (DIN 44081-44082) on size 70, on request for smaller sizes. On request, thermistors with different temperatures and anti-condensation heaters.

Lubrication - All Vibrators are lubricated at factory. Periodic re-lubrication recommended for size 35 and larger.

Terminal Box - Large fixed electrical connections. HD terminal cover (increased thickness) is built to contain internal explosions. Special shaped terminals enable power supply cable to be secured against loosening.

Design - Three-phase and single-phase asynchronous type. Designed for maximum starting torques and torque curves specific to vibratory motors. Insulated windings use vacuum encapsulating up to size 35; use the "drop by drop" trickle system with class H resin for larger sizes. The rotor is die cast aluminum. **Housing Construction** - A Ductile Iron Casting, designed to reduce build-up of dusts and liquids.

Bearing Flange - Constructed in grey cast iron. Geometry of flange uniformly transmits load to the housing uniformly.

Bearings - Shielded ball bearings or roller bearings are used depending on frame size and polarity. Bearings used are engineered to meet the unique speed, radial and axial forces and load direction imposed by vibratory motors.

Motor Shaft - Treated steel Alloy (isothermic hardening) resistant to stress.

Eccentric Weights - Allow continual adjustment of the centrifugal force. This adjustment can be read on a graduated scale, which shows the centrifugal force as a percentage of the maximum centrifugal force. A patented system (patent N° MO98A000194), called ARS, prevents adjustment errors.

Weight Covers - In Heavy-Duty Cast Aluminum with machined mechanical seal to combine the advantages of engineered sealing with the durability of a solid one-piece cover.







AIRMATIC founded in 1944, is a woman-owned Industrial Distributor, with installation and maintenance capabilities, offering equipment, machinery, and shop supplies to the Industrial, Construction, Utility, Government, and Commercial Markets. Our products and services are sold through three business units:

The **MATERIALS MANAGEMENT GROUP** provides products and services to industries that convey, store, transport, and process powders and bulk solids from aggregates, cement, and chemicals to foods, grains, metals, power generation, and waste water treatment applications;

The **SERVICE GROUP** provides fabrication, installation, and maintenance services to improve bulk materials handling efficiency; mechanical clean-out services for silos and hoppers to eliminate material flow problems; and shop repair/rebuilding and modifications services of products sold by the Company.

The **TOOL GROUP** provides power tools, personal protective equipment, materials-handling equipment, shop equipment and MRO supplies used for production, fabrication, assembly, metal removal, maintenance, and storage in manufacturing, construction, utility, and commercial applications.

Our Customers tell us that by choosing AIRMATIC to solve their problems, they gain increased productivity, decreased costs, and a safer, cleaner work environment.

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