

AllianceMotori

Electric Vibrator Motor



AVI SERIES

Introductions



- | | | | | |
|----------------------|------------------|---------------------|-----------------------|------------------|
| A. EndShield Cover | D. Fixed Weight | G. Stator | J. Terminal Box Cover | L. Rotor |
| B. Adjustable Weight | E. O Shaped Ring | H. Frame | K. Bearing | N. Bearing Cover |
| C. Scale Disc | F. EndShield | I. Connection Board | | |

AF-T	Concrete Vibrator Series - General Application in Batching Plants and Other Concrete Plants.	Aluminium Frame 00AL - 03AL	Cast Iron Frame 30 -120
		Mounting Dimension : Alliance Standard; May Not interchangeable with Other Major Brand	
AVI	Heavy Duty Industrial Vibrator Series - Heavy Duty Application in Mines, Power Plants.	Cast Iron Frame 70-110	
		Mounting Dimension : International Standard; Interchangeable with Major Brand	
AVM	Premium Industrial Vibrator Series - General Industry Vibrator Such as Conveyor, SILO, Feeder Polishing Machine.	Aluminium Frame 30 -75	Cast Iron Frame 10-20
		Mounting Dimension : International Standard; Interchangeable with Other Major Brand	

Technical Features

Power supply

Three-phase voltage from 24V to 690V, 50Hz or 60Hz or single phase 100-130V, 60Hz and 200-240V, 50Hz (single-phase types are supplied without capacitor); suitable for use with an inverter from 20Hz to the base frequency with constant torque load profile.

Polarity

2, 4, 6 and 8 standard poles, 10 and 12 poles on request.

Reference Regulations

EN 60034-1, IEC/EN 61241-0, IEC/EN 61241-1.

Functioning

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 assistance office.

Centrifugal force

Range extended up to 30500 Kgf. (300 kN), with centrifugal force adjustable from 0 to 100%

Mechanical Protection IP55 / IP65

Protection against mechanical impacts

IK 08 according to IEC 68, EN 50102.

Insulation class

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

Ambient Temperature

From -20°C to +40°C. Versions for higher or lower temperatures are available on request.

Fixing of the vibrator

In all positions and therefore without restriction.

Lubrication

All vibrators are lubricated in the factory and do not require further lubrication if used in normal operating conditions

Terminal Box

Large fixed electrical connections. Special shaped terminals allow to fix the power supply cable, protecting it from loosening.

Electric Motor

Three-phase asynchronous type. Designed for maximum starting torques and torque curves specific to requirements of vibrating machines.

Bearing Flange

Constructed in cast iron (spheroidal or grey) or in aluminium with steel bearing seat. The geometry of the flange transmits the load to the casing uniformly.

Motor Shaft

In treated steel alloy (isothermic hardening) resistant to stress.

Eccentric Weights

Allow continual adjustment of the centrifugal force. This adjustment is realized by a graduated scale, which expresses the centrifugal force as a percentage of the maximum centrifugal force.

Weight Covers

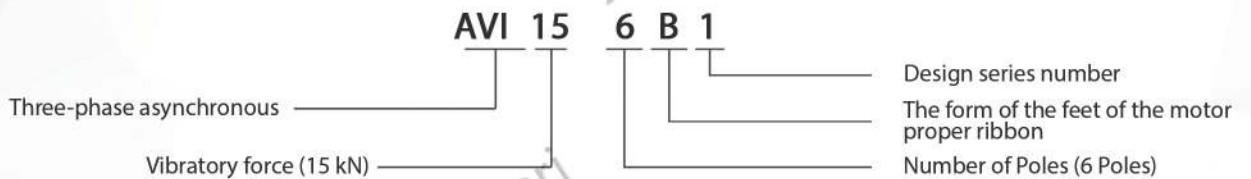
In aluminium alloy. On several sizes split covers are available, please refer to section MVSI-TS on page 16. On request stainless steel AISI 304 weight covers can be supplied.

AVI SERIES

Vibrator Motor (Type B)



Type Identifiers



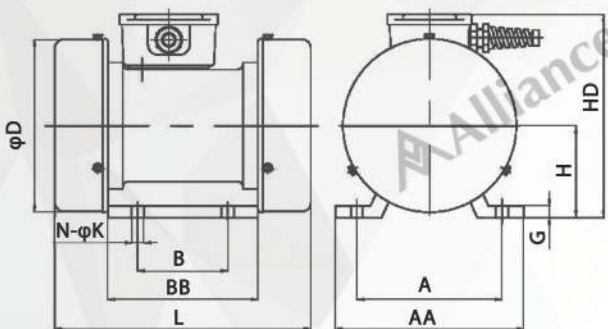
Specification

1. This motor is of a reasonable design using superior process materials in order to product a highly efficient motor with a low operating temperature with a long service operating life.
2. The weight density and design this vibratory motor has a good vibratory output force (kN) with a high starting torque and low electrical power consumption.
3. Low Operating noise levels (dB) during running and fluctuating loads.
4. This vibratory motor has a completely enclosed construction whereas it can used in high levels of various dust environments.
5. By adjusting the angle of the counterweights (flyweight) various levels of vibratory force percentage can be achieved.
6. Based on the method of the vibratory motor installation, the direction of the vibratory forces can be obtained.
7. The various levels of vibratory modes of vibration are able to be achieved for the work required.

Workable Condition

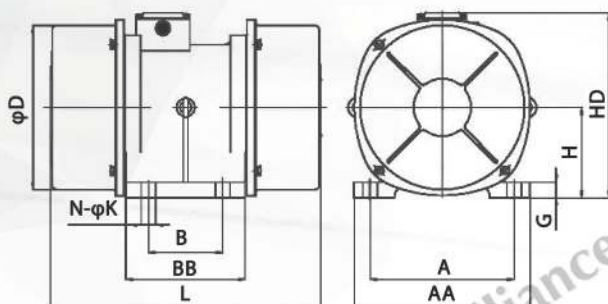
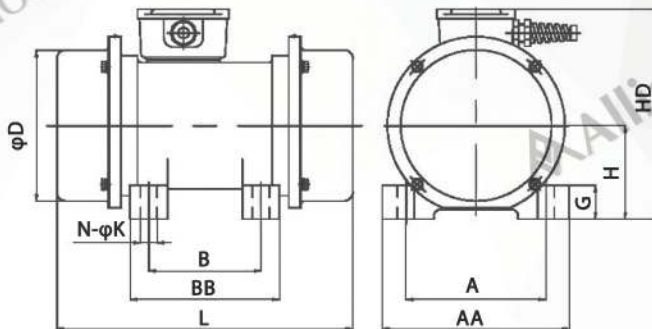
Ambient Temperature	Altitude (m)	Voltage (V)	Frequency (Hz)	Insulation Class
-20°C ~ 40°C	≤ 1000	380	50	F
Degrees of Protection Provided	Duty Type	Cooling	Mounting Arrangement	
IP55, IP65, IP66	S1	C410	Any (except some motors which have fixing signs)	

Dimension of AVI Vibrator



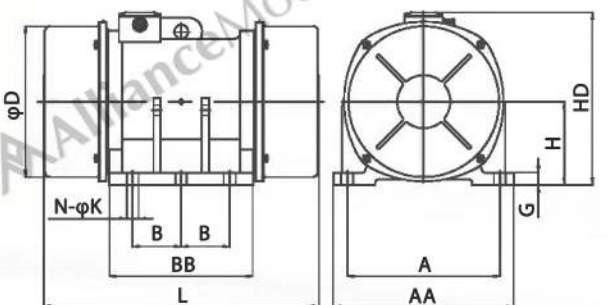
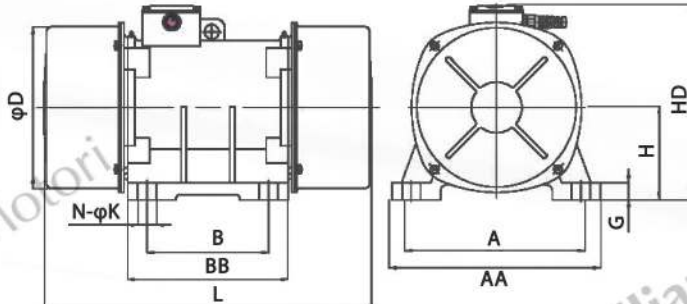
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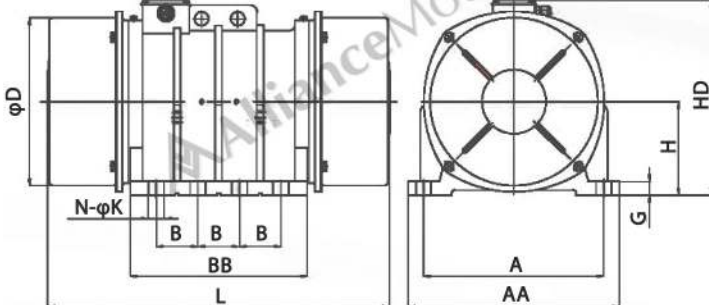
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Technical Parameters - AVI Series

2 Poles - Three Phase (380V / 50 Hz)

Type	Vibrating Force (Kn)	Speed (r/min)	Power (kW)	Current (A)	Installation Size					Contour Size					Kg	Fig.
					A	B	N-φK	AA	BB	H	G	HD	L	D		
AVI-0.6-2B	0.6	2800	0.06	0.20	106	62	4-8.5	130	86	46	24	129	198	83	6	2
AVI-2-2B1	2		0.12	0.35	106	62	4-9	125	100	61	24	157	237	103	9	2
AVI-3-2B	3		0.20	0.50	150	90	4-14	188	150	92	12	203	256	172	15	1
AVI-4-2B	4		0.25	0.65	140	90	4-18	176	162	90	20	199	291	143	20	3
AVI-6-2B	6		0.40	0.90	150	120	4-18	200	160	100	36	225	317	162	25	2
AVI-8-2B	8		0.55	1.20	170	120	4-18	210	200	105	18	235	345	185	35	3
AVI-10-2B	10		0.75	1.60	170	120	4-18	210	200	105	18	235	349	185	47	3
AVI-16-2B	16		1.20	2.50	190	180	4-22	250	246	130	25	278	427	211	60	3
AVI-20-2B	20		1.60	3.25	205	130	4-26	260	246	160	20	331	454	265	83	3
AVI-30-2B	30		2.20	4.33	260	150	4-32	325	258	160	25	346	540	254	97	3
AVI-40-2B	40		3.00	5.80	320	190	4-32	390	304	200	35	410	562	333	160	3
AVI-50-2B	50		3.70	7.35	320	190	4-32	390	304	200	35	410	562	333	172	3

4 Poles - Three Phase (380V / 50 Hz)

AVI-2-4B	2	1440	0.12	0.37	150	90	4-14	188	150	92	12	205	242	172	16	1
AVI-2.5-4B	2.5		0.12	0.37	160	100	4-14	188	150	92	12	205	242	172	17	1
AVI-5-4B	5		0.25	0.78	140	105	4-14	188	160	105	16	225	299	185	25	3
AVI-8-4B	8		0.37	0.86	170	120	4-18	210	200	105	18	235	387	185	35	3
AVI-10-4B	10		0.55	1.46	170	120	4-18	210	200	105	18	235	391	185	51	3
AVI-20-4B	20		1.10	2.38	205	130	4-26	260	230	150	24	306	470	265	78	3
AVI-25-4B	25		1.50	3.20	205	130	4-26	260	230	150	24	306	500	265	80	3
AVI-32-4B	32		1.50	3.20	205	130	4-26	260	230	150	24	306	554	265	88	3
AVI-35-4B	35		1.50	3.20	205	130	4-26	260	230	150	24	306	554	265	91	3
AVI-50-4B	50		2.20	4.70	320	150	4-32	390	250	180	30	391	542	333	153	3
AVI-75-4B	75		3.70	7.64	320	120	6-32	400	370	200	30	427	648	364	285	5

6 Poles - Three Phase (380V / 50 Hz)

AVI-3-6B1	3	960	0.25	0.76	160	125	4-15	190	155	100	40	230	373	179	29	2
AVI-3-6B3	3		0.25	0.76	140	100	4-13	170	130	100	35	230	373	179	29	2
AVI-4-6B	4		0.37	1.07	150	120	4-13	175	150	100	163	233	383	179	33	2
AVI-6-6B	6		0.55	1.50	175	140	4-13	202	170	105	152	250	434	193	42	2

Technical Parameters - AVI Series

6 Poles - Three Phase (380V / 50 Hz)

Type	Vibrating Force (Kn)	Speed (r/min)	Power (kW)	Current (A)	Installation Size					Contour Size					Kg	Fig.
					A	B	N-φK	AA	BB	H	G	HD	L	D		
AVI-15-6B1	15	960	1.10	2.90	205	130	4-26	260	230	150	24	306	496	265	85	3
AVI-20-6B1	20		1.50	3.70	260	150	4-32	325	230	160	24	316	530	290	92	3
AVI-20-6B3	20		1.50	3.70	260	180	4-26	325	256	160	25	346	542	290	125	3
AVI-25-6B	25		1.50	3.70	260	150	4-32	325	256	160	25	346	542	290	130	3
AVI-30-6B	30		2.20	5.04	320	150	4-32	390	250	180	30	391	544	333	159	3
AVI-32-6B	32		2.40	5.66	350	220	4-38	430	330	190	35	400	594	333	176	4
AVI-36-6B	36		2.20	5.04	320	150	4-32	390	250	180	30	391	544	333	172	3
AVI-40-6B	40		3.00	6.73	320	150	4-32	390	250	180	30	391	600	333	191	3
AVI-40-6B1	40		3.00	6.69	350	220	4-38	430	330	190	35	400	630	333	189	4
AVI-50-6B	50		3.70	8.30	320	165	4-32	390	265	200	35	410	601	364	220	3
AVI-50-6B1	50		3.20	7.48	350	250	4-38	430	330	190	35	400	674	333	220	4
AVI-60-6B	60		3.70	8.33	350	220	4-38	430	330	190	35	400	722	333	237	4
AVI-75-6B	75		5.50	11.00	440	248	4-38	520	346	240	40	467	710	404	352	3
AVI-75-6B1	75		5.50	11.00	320	120	6-32	400	370	200	30	427	780	364	353	5
AVI-75-6B2	75		5.50	11.00	380	125	6-38	480	370	200	30	427	780	364	355	5
AVI-100-6B	100		980	7.50	16.00	440	140	6-34	520	414	240	35	498	794	434	520
AVI-100-6B1	100	7.50		16.00	440	140	6-45	530	414	240	35	498	794	434	493	5
AVI-135-6B	135	9.0		18.90	480	140	8-45	570	510	265	38	529	908	484	672	6
AVI-160-6B	160	11.0		22.90	480	140	8-45	570	510	265	38	529	970	484	735	6
AVI-180-6B	180	13.0		26.60	520	120	8-45	610	510	270	40	564	986	484	821	6
AVI-210-6B	210	15.0		30.00	520	120	8-45	610	510	270	40	564	1050	484	886	6
AVI-240-6B	240	18.0		36.50	520	120	8-45	610	510	270	40	564	1076	484	920	6

8 Poles - Three Phase (380V / 50 Hz)

Type	Vibrating Force (Kn)	Speed (r/min)	Power (kW)	Current (A)	Installation Size					Contour Size					Kg	Fig.
					A	B	N-φK	AA	BB	H	G	HD	L	D		
AVI-20-8B	20	720	1.50	3.80	280	150	4-32	325	256	160	25	346	598	290	158	3
AVI-30-8B	30		2.20	5.40	320	150	4-32	390	250	180	30	391	600	333	202	3
AVI-40-8B	40		3.00	7.20	320	165	4-32	390	265	200	35	410	637	364	254	3
AVI-50-8B	50		3.70	9.50	380	125	6-39	460	330	220	35	437	706	404	333	5
AVI-75-8B	75		5.50	14.60	440	140	6-34	520	414	240	35	498	890	434	536	5
AVI-100-8B	100		7.50	18.80	480	140	8-45	570	510	265	38	529	932	484	700	6

Other Products

DC Vibrator Motor



ZF-TDC90



ZF-TDC200



ZF-TDC1500



ZN Series Handhold
Vibrator Motor



ZDN Straight High Frequency
Vibrator Shaft



Pneumatic Turbine Vibrator



Concrete Vibrator Shaft



Attached Flat Vibrator Motor



ZDN Electronic Inverter Low Noise
Concrete Vibrator Shaft

ZN Series - Insertion Vibrator Motor



ZN50F/70F



ZN50E/70E



ZN50A/70A



ZN50F/70F



ZN5G/70G



ZN50D/70D



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