



The VB series is made up of vertical vibrators with double conical flange. These vibrators are typically used in circular screens and in medium-size and large sieves.

They are supplied without eccentric weights, which must be realised and mounted by the Manufacturer of the vibrating machine.

The VB series complies with the most recent IEC and EN international standards for use in atmospheres with potentially explosive powders. In particular, the VB series can be used in areas 21 and 22.

Category: II 2 D

Level of protection: tD A21 IP66

Temperature class: 150°C

EC certificate: LCIE 05 ATEX 6163 X

Areas of use: 21, 22



Technical features

Power supply

Three-phase voltage from 220V to 690V, 50Hz or 60Hz; suitable for use with an inverter from 20Hz to the base frequency with constant torque load profile

Polarity

4 and 6 poles.

Conformity with European Directives

Low voltage 73/23/CE; Electromagnetic Compatibility 89/336/CE; ATEX 94/9/CE.

Reference Regulations

EN 60034-1, EN 50081-1, EN 50081-2, EN 50082-1, EN 50082-2, 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

Proportioned for a centrifugal force equal to 2500 Kg_f. (24.5 KN), with eccentric weights not included, to be made by the user.

Mechanical protection

IP 66 according to IEC 529, EN 60529.

Shock-proof 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 "drop by drop" trickle system.

Environmental temperature

From -30°C to +40°C. Versions for higher or lower temperatures are available on request.

Vibrator heat protection

On PTC rated request with thermistor heat detectors 130°C (DIN 44081-44082). Also on request thermistors with different temperatures and anti-condensation heaters.

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. In heavy duty operating conditions periodical re-lubrication may be applied.

Electrical connection box

The size guarantees passage of tools used for fixing the vibrator to the vibrating machine. The electrical connection must be carried out using the relative connectors inserted inside the connection box. 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. Insulated windings using

"drop by drop" trickle system with class H resin. The rotor is die cast aluminium.

Casing

In nodular cast iron to have high strength and optimal elasticity.

Bearing flange

Constructed in ductile cast iron. The geometry of the flange transmits the load to the casing uniformly.

Bearings

Custom made with particular geometry, especially designed for Italvibras, suitable to support both high radial and axial loads.

Motor shaft

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

Eccentric weights

Not envisioned, to be made and mounted by the user.

Weight covers

Not envisioned.

Painting

Electrostatic surface treatment based on polymerised epoxy polyester powder in oven at 200°C. Tested in salt spray for 500 hours.

Certifications



Regulation CAN/CSA - C22.2 N. 100-95, file n° LR100948 Class 4211 01 – Motors and generators.



Mechanical protection IP66 (EN 60529), shock-proof protection IK 08 (EN 50102)



II 2 D, tD A21 IP66
IEC/EN 61241-0, IEC/EN 61241-1
Certificate n. LCIE 05 ATEX 6163X



Gost-R certificate for all models of vibrators: GOST 16264.1, GOST 16264.0, GOST R 51689.



Comply with the applicable European Union directives

4 poles - 1500/1800 rpm / 6 poles - 1000/1200 rpm

	Description				Mechanical specifications						Electrical specifications						Dimensional specifications (mm)												
	Code	Type	SIZE	II2D Temp. class	Centrifugal force						Weight kg	Max input power W		Max. current A		Ia/In		Fig.	A	øB	C	D	E	F°	G	H	I	L	Cable entry thread
					50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz		50 Hz	60 Hz	400 V 50 Hz	460 V 60 Hz	50 Hz	60 Hz												
three phase	601223	VB 15/2510-D	4	150°C	1500	1800	2500	2500	24.5	24.5	68	2016	2600	3.60	4.10	3.50	3.58	H	517.5	281	152.5	30	26	14	85.3	136.6	35	108	M32x1.5
	602171	VB 10/2510-D	6	150°C	-	1200	-	2500	-	24.5	68	-	2100	-	3.22	-	3.27	H	517.5	281	152.5	30	26	14	85.3	136.6	35	108	M32x1.5

Ia/In = ratio between start-up current and maximum current.