



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 poles.

Conformity with Standards and Regulations

MVSS - Low Voltage Directive 2006/95/EC; EN/IEC 60034-1; UL 1004-1, CSA C22.2 No.100, NEMA MG-1. MVSS-P - Low Voltage Directive 2006/95/EC; ATEX Directive 2014/34/UE; EN/IEC 60034-1, EN/IEC 60079-0, EN/IEC 60079-31, UL 1004-1, CSA C22.2 No.100, NEMA MG-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 4300 kgf. (42.4 kN), with centrifugal force adjustable from 0 to 100%.

Mechanical protection

IP 66 according to IEC/EN 60529.

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

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

Vibrator thermal protection

Standard PTC rated thermistor heat detectors 130°C on size 70, on request for smaller sizes. For MVSS-P series PTC 130°C are standard for all types. 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 at start-up.

Terminal box

Large fixed electrical connections, with terminal board cover in stainless steel AISI 304. Special shaped terminals allow to fix the power supply cable, protecting it from loosening.

Electric motor

Three-phase and single-phase asynchronous type. Designed for maximum starting torques and torque curves specific to vibrating machines. Insulated windings using vacuum encapsulating up to size 35; using the "drop by drop" trickle system with class H resin for larger sizes. The rotor is die cast aluminium.

Casing

In stainless steel AISI 304, ball burnishing surface treated to make the surface more hydrophobic.

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.

Bearings

The lower and upper bearings have been studied to support the relative load and therefore they have a particular geometry, especially designed and made for Italvibras.

The MVSS stainless steel series vibrators are characterized by their total protection from liquids, dusts, aggressive agents and contaminants, thanks to the AISI 304 stainless steel casing and external components.

It is therefore suitable for use in all food, chemical, pharmaceutical and others environments where the outer surface can be subject to corrosion by atmospheric or chemical / bacterial agents.

Line MVSS-P is available for potentially explosive dust atmospheres in conformity with ATEX Directive 2014/34/UE.

Category: II2D

Level of protection:

Ex tD A21 T...°C IP66 (Ex tb IIIC T...°C Db)

Temperature class:

si veda tabella

EC certificate:

LCIE 05 ATEX 6163 X

Zones of use:

21, 22

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.

A patented system, called ARS, prevents adjustment errors.

Weight covers

In stainless steel AISI 304 with thickness measuring 1.2 to 1.5mm, to unite mechanical resistance to the guaranteed protection of stainless steel.

Surface treatment

Ball burnishing surface treatment to obtain a low roughness, hydrofobic, bright and uniform external surface.

Other features

Identification plate in AISI 316L stainless steel.

For further details please contact sales offices at Italtibras.

The technical data and models listed in this catalogue are not binding. Italtibras reserves the right to modify them without prior notice.

Certifications MVSS



Compliance with the applicable European Union directives.



Standard CAN/CSA – C22.2, N°.100-95, Certificate n° LR 100948
Class 4211 01 – Motors and generators
UL 1004-1 – Rotating Electrical Machines – General Requirements
Class II Div.2, Groups FG (T3B)



Certification for Eurasian Customs Union
N° TC N RU Д-IT.А133.В.02527

Certifications MVSS-P



Compliance with the applicable European Union directives.



II2D (2014/34/UE)
Ex tD A21 T...°C IP66 (Ex tb IIIC T...°C Db)
EN 60079-0
EN 60079-31



Ex tD A21 T...°C IP66 (Ex tb IIIC T...°C Db)
IEC 60079-0
IEC 60079-31



Certification for Eurasian Customs Union
N° TC RU C-IT.ГБ08.В.02190