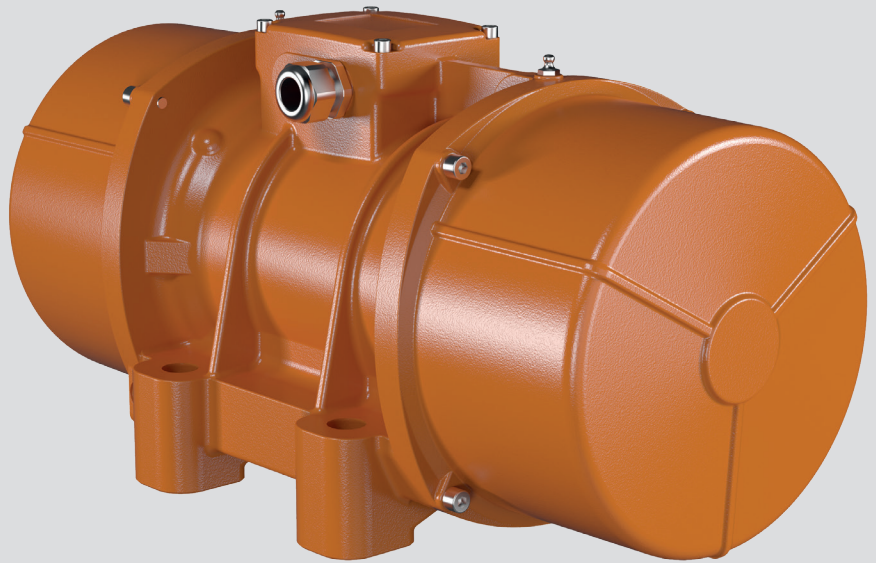


# ■ MVSII-E



## Technical features

### Power supply

Three-phase voltage from 220V to 690V, 50Hz or 60Hz; variable frequency (in presence of PTC thermistor) from 20Hz to the base frequency with constant torque load profile tipo PWM.

### Polarity

2, 4, 6 and 8 poles.

### Conformity with Standards and Regulations

ATEX Directive 2014/34/UE;  
EN/IEC 60079-0, EN/IEC 60079-7,  
EN/IEC 60079-31, EN/IEC 60034-1.

### Controls

The components that affect protection are 100% accurately controlled and recorded.

### Functioning

Continual service (S1) at maximum declared centrifugal force and electric power.

### Centrifugal force

Range extended up to 11160 Kgf. (109 KN), adjustable in a continuous linear mode with variation of the position of the eccentric weights.

### Mechanical protection

IP 66 according to IEC/EN 60529.

### Protection against mechanical impacts

IK 08 according to IEC/EN 62262.

### Insulation class

Class F (155°C).

### Tropicalization

Standard on all vibrators, with vacuum encapsulation up to size AF 33 and 35, with "drop by drop" trickle system for larger sizes.

### Ambient temperature

From -20°C to +40°C, on request it is possible to have vibrators for max. ambient temperatures of +55°C.

### Vibrator thermal protection

Standard PTC rated thermistor heat detectors 130°C from size 70, on request for smaller sizes. 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. 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 vacuum encapsulating up to sizes AF33 and 35 included; using the "drop by drop" trickle system with class H resin for larger sizes. The rotor is die cast aluminium.

### Casing

In high-tensile aluminium alloy up to size 60, in spheroidal cast iron for larger sizes.

### 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

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

The MVSI-E series has been designed for use in industrial processes in environments with a potentially explosive atmosphere, due to the presence of explosive gas and dust, in compliance with ATEX Directive (2014/34/UE) and in compliance with IECEx Scheme.

In particular, the MVSI-E series can be used in areas 1 and 2 (gas) and in areas 21 and 22 (dusts):

**Category:** II2D & II2G

**Level of protection:**  
Ex tb IIIC T...°C Db

**Temperature class:**  
see tables

**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 aluminium alloy.

#### Painting

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

**Other mounting bolt patterns are available. 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



Compliance with the applicable European Union directives.



II2G II2D (2014/34/UE)  
Ex e IIC T3/T4 Gb  
Ex tb IIIC T...°C Db  
EN 60079-0  
EN 60079-7  
EN 60079-31



Ex e IIC T3/T4 Gb  
Ex tb IIIC T...°C Db  
IEC 60079-0  
IEC 60079-7  
IEC 60079-31



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



KOSHA Korea  
Certificate n° 11-AVG BO-0346/7/8/9/50/51  
Ex e IIT3/T4  
Ex td A21 IP66