



## Technical features

### Power supply

Three-phase voltage from 24V to 690V, 50Hz or 60Hz or single-phase 100-130V, 60Hz and 200-240V, 50Hz; suitable for use with an inverter from 20Hz to the base frequency with constant torque load profile.

### Polarity

2 and 4 poles.

### Conformity with Standards and Regulations

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 up to 311 kgf (3.05 kN). Centrifugal force can be changed by adjusting 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 with vacuum encapsulation.

### Ambient temperature

From -20°C to +40°C.

### Vibrator thermal protection

On request with PTC thermistor rated heat detectors 130°C.

### Fixing of the vibrator

In all positions and therefore without restriction.

### Lubrication

Sealed ball bearings, lubricated "for life".

### Terminal box

The terminal box is positioned underneath the vibrator, on the same side as the fixing base. Special shaped terminals allow to fix the power supply cable, protecting it from loosening.

### Electric motor

Three-phase or single-phase asynchronous type. Insulated windings using vacuum encapsulating. The rotor is die cast aluminium.

### Casing

In high-tensile aluminium alloy, with sand blasted surface. Multiholes fixing base allow different fixing patterns.

Designed for continuous industrial duty, the M3 series features a compact shape, reduced overall dimensions (in comparison to MVSI series) and the terminal box underneath, ensuring high electrical protection in dusty environments. Multi-holes mounting feet enable M3 series to match several existing mounting plates. M3 series motors comply with the most recent international standards for use in explosive dust atmospheres. Particularly M3 series can be used in zones 21 and 22.

**Category:** II 2 D

**Level of protection:**

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

**Temperature class:**

T120°C

**Zones of use:**

21, 22

**Bearing flange**

In ductile cast iron.

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**

Easily adjustable from 100% down to 0.

**Weight covers**

Made in die cast, high strength aluminium alloy with accurate surface sand blasting.

**For further details please contact sales offices at Italtvibras.**

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

**Certifications**



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)



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 N RU Д-IT.АЛ33.В.02527  
N° TC RU C-IT.Г508.В.02190



KOSHA Korea  
Certificate n° 11-AVG BO-0359  
Ex td A21 IP66