

# M I C R O



PRODUCT UPDATE 2008

# MICRO



The MICRO series has been designed for continual industrial service in processes where a reduced centrifugal force and reduced overall vibrator size are required. MICRO vibrators are used in numerous applications in feeding, transport, screening, sizing, separation processes, compaction in the automatic machines used in the chemical industry, food industry, pharmaceuticals, packaging and automation in general.

The MICRO series has been conceived to guarantee higher performance in all conditions and environments and complies with the most recent IEC and EN international standards for use in atmospheres with potentially explosive powders. In particular, the MICRO series can be used in area 22.

**Category:** II 3 D  
**Level of protection:** tD A22 IP65  
**Temperature class:** T 100°C  
**Area of use:** 22

## Technical features

### Power supply

Three-phase voltage from 24V to 480V, 50/60Hz or single phase 100-130V, 50/60Hz and 200-240V, 50/60Hz (in the standard single-phase version, the capacitor is already included in a case along the power supply cable); suitable for use with an inverter from 20 to 60Hz to the base frequency with constant torque load profile.

**Polarity**  
2 poles.

**Conformity with European Directives**  
ATEX 94/9/CE; Low voltage 2006/95/CE.

### Reference Regulations

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

### 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 to 65 Kgf. (638 N), with centrifugal force adjustable from 0 to 100%.

### Mechanical protection

IP 65 according to IEC 529, EN 60529.

### Insulation class

Class F (155°C).

### Tropicalization

Standard on all vibrators.

### Environmental temperature

From -20°C to +40°C.

### Fixing of the vibrator

In all positions and therefore without restriction.

### Lubrication

Prelubricated bearings. They don't need further lubrication or maintenance (lubrication "FOR LIFE").

### Electric motor

Three-phase and single-phase asynchronous type. The M3/4 model can only be supplied in the single-phase version and does not require a capacitor. Models M3/20 and M3/45 can be supplied both in three-phase and single-phase versions. The capacitor is already included in a case along the power supply cable.

### Casing

In high-tensile light aluminium alloy with polished surface.

### Eccentric weights

Thin plate-type, allow step-by-step adjustment through variation of the number of weights mounted or their rotation.

### Weight covers

In stainless steel AISI 304.

### Other features

The Micro series standard models are supplied with power supply cable (2 meters for M3/20-S02,

M3/45-S02 and 1 meter for M3/4-S02) and, in the models requiring it, a capacitor inserted into a special enclosure in-line with the cable. CSA certification can be supplied on request. The supplied product is not equipped with a capacitor (neither along the cable nor in other positions), therefore the user must install one as per Standard.

## Certifications



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



II 3D, tD A22 IP65 T 100°C

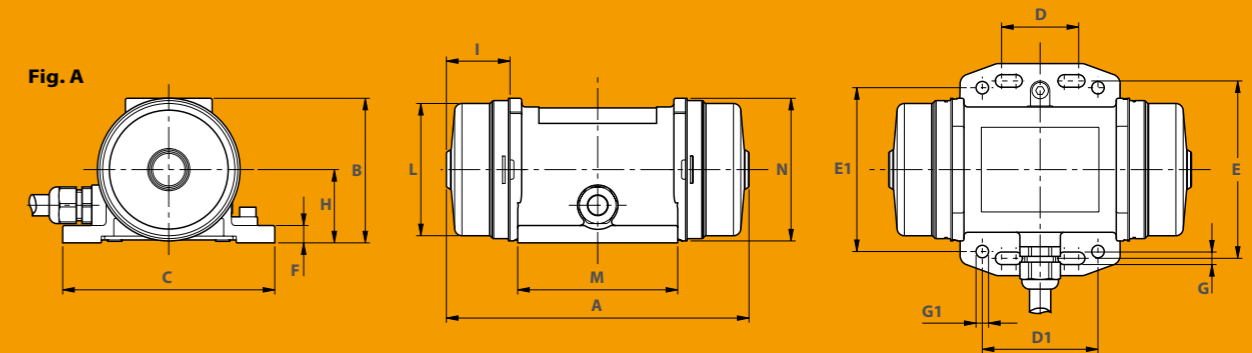


Gost-R certificate for all models of vibrators: GOST 16264.1, GOST 16264.0, GOST R 51689.



Comply with the applicable European Union directives

Fig. A



	Description				Mechanical specifications								Electrical specifications			Type	Dimensional specifications (mm)																			
	Code	Type	II 3D Temp. class	Ex	Static moment* kgmm		Centrifugal force				Weight		Max input power W	Max. current A	Type		Fig.	A	B	C	D	D1	E	E1	F	G	Holes				H	I	L	M	N	Cable entry thread
					50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz															50 Hz	60 Hz	øG1	N°						
three-phase	600449	M3/20-S02	□	100°C	2.0	2.0	20	29	196	284	1.97	1.97	35	0.15	M3/20-S02	A	157	75	110	25-40	60	92	85	9	6.5	6.5	8	38	33	69	83	74	M16x1.5			
	600450	M3/45-S02	□	100°C	4.5	4.5	45	65	441	638	2.20	2.20	45	0.16	M3/45-S02	A	172	75	110	25-40	60	92	85	9	6.5	6.5	8	38	40.5	69	83	74	M16x1.5			
single-phase	600448	M3/4-S02	□	100°C	0.4	0.4	4	6	39	59	0.92	0.92	24	0.13	M3/4-S02	A	113	66.5	90	25-40	-	75	-	9	5.5	-	4	34	25	60	59	65	M12x1.5			
	600449	M3/20-S02	□	100°C	2.0	2.0	20	29	196	284	1.97	1.97	35	0.17	M3/20-S02	A	157	75	110	25-40	60	92	85	9	6.5	6.5	8	38	33	69	83	74	M16x1.5			
	600450	M3/45-S02	□	100°C	4.5	4.5	45	65	441	638	2.20	2.20	45	0.20	M3/45-S02	A	172	75	110	25-40	60	92	85	9	6.5	6.5	8	38	40.5	69	83	74	M16x1.5			

\*The CSA version can be supplied on request and does not envision supply of the condenser..



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