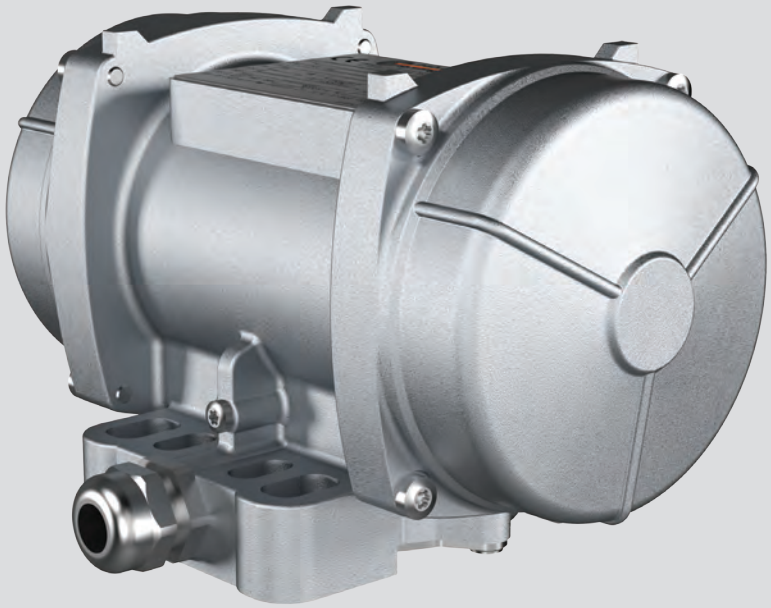
M3-E



Technical features

Power supply
Three-phase voltage 127/220V 50Hz, 200/346V 50Hz, or 210/363V 60 Hz; variable frequency (in presence of PTC thermistor) from 20Hz to the base frequency with constant torque load profile.

Polarity
2 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 up to 311 kgf (3.05 kN). Centrifugal force can be changed by adjusting the eccenctric 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, on request it is possible to have vibrators for max. ambient temperatures of +55°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. The terminal box is positioned underneath the vibrator, on the same side as the fixing base.

Lubrication
Sealed ball bearing, 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 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.

2 poles - 3.000/3.600 rpm

Three-phase

DESCRIPTION			MECHANICAL SPECIFICATIONS								ELECTRICAL SPECIFICATIONS									
			Static moment*		Centrifugal force				Peso				Max input power		Power rating		Max. current			
			kgmm		kg		kN		kg				W		W		A			
Code	Type	SIZE	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	Temp class (G)	Temp class (D)	50Hz	60Hz	50Hz	60Hz	400V 50Hz	460V 60Hz	tE (s)	Ia/In
6E0467	**M3/65E-S02**	00	6,43	6,43	**64,7**	**93,1**	**0,635**	**0,913**	4,30	4,30										3,48
6E0465	**M3/105E-S02**	00	9,64	9,64	**97,0**	**140**	**0,95**	**1,37**	5,20	5,20	T4	120°C	105	105	80	80	0,47	0,29	20	3,68
6E0462	**M3/205E-S02**	00	20,2	20,2	**203**	**293**	**2,00**	**2,87**	6,00	6,00										3,68
6E0461	**M3/305E-S02**	00	29,8	20,2	**300**	**293**	**2,94**	**2,87**	6,30	6,00										3,68

* Working moment = 2 x static moment. tE (s) = set time tE from IEC/EN 60079-7.

The M3-E is designed for use in industrial processes in environments with a potentially explosive atmosphere, caused by gas and dust, in compliance with ATEX Directive (94/9/EC).

In particular, the M3-E can be used in areas 1 and 2 (gas) and in areas 21 and 22 (dusts) according to the layout and the following features:

Category: II2D & II2G

Level of protection:
Ex tb IIIC T120°C Db, Ex e IIC T4 Gb

Temperature class:
Gas T4 (135°C)

Powders:
T120°C

Zones of use:
1, 2, 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 alluminum alloy with accurate surface sand blasting.

Other features
For the M3-E series, the user must fill the terminal box with suitable silicone, after having performed the connection.

Certifications

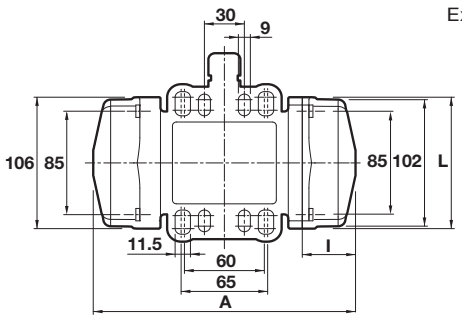
Compliance with the applicable European Union directives.

II2G II2D (2014/34/UE)
Ex e IIC T4 Gb
Ex tb IIIC T120°C Db
EN 60079-0
EN 60079-7
EN 60079-31

Ex tb IIIC T120°C Db
IEC 60079-0
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



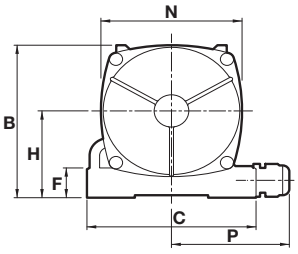


Fig. M1

DIMENSIONAL SPECIFICATIONS (mm)

Type	Fig.	A	B	C	Multi-hole D	Multi-hole E	Holes ØG	Holes N°	F	H	I	L	M	N	P	Cable entry thread
M3/65E-S02	**M1**	197	123	127	See drawing		9	4	24	70	40	106	86	106	88,5	M20x1,5
M3/105E-S02	**M1**	211									47					
M3/205E-S02	**M1**	235									59					
M3/305E-S02	**M1**	235									59					

Ia/In = rapporto fra corrente di avviamento e corrente max.