

M3-E



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:

Technical features

Power supply

Three-phase voltage 127/220V 50Hz, 200/346V 50Hz, or 210/363V 60 Hz; suitable for use with an inverter from 20Hz to the base frequency with constant torque load profile.

Polarity

2 poles.

Conformity with European Directives

Low Voltage 2006/95/EC, ATEX 94/9/EC.

Reference Regulations

IEC/EN 60079-0, IEC/EN 60079-7, IEC/EN 60079-31, EN 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. 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 529, EN 60529.

Protection against mechanical impacts

IK 08 according to IEC 68, EN 50102.

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 (DIN 44081-44082).

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.

2 poles - 3000/3600 rpm

	Description			Mechanical specifications						Electrical specifications						t _E (s)				
	Code	Type	SIZE	Static moment*		Centrifugal force				Weight		Temp. class (G)	Temp. class (D)	Max input power			Power rating		Max. current	
				kgmm	kgmm	kg	kN	kg	kg	W	W			A	A					
three-phase	6E0467	M3/65-E-S02	00	6.43	6.43	64.7	93.1	0.635	0.913	4.3	4.3	T4	120°C	105	105	80	80	0.30	0.29	20
	6E0465	M3/105-E-S02	00	9.64	9.64	97.0	140	0.950	1.37	5.2	5.2			105	105	80	80	0.30	0.29	20
	6E0462	M3/205-E-S02	00	21.0	21.0	211	304	2.07	2.98	6.0	6.0			105	105	80	80	0.30	0.29	20
	6E0461	M3/305-E-S02	00	31.0	21.0	311	304	3.05	2.98	6.3	6.0			105	105	80	80	0.30	0.29	20

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

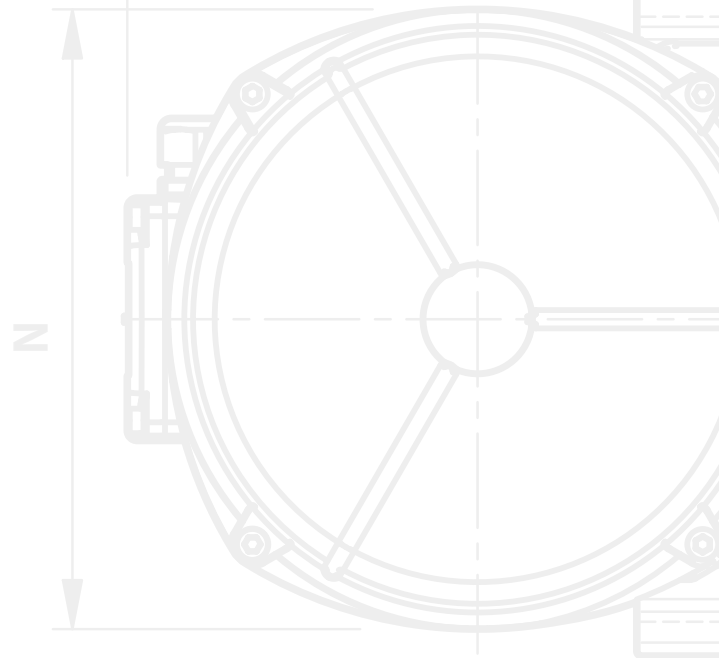
Category: II 2 G,D

Level of protection: Ex e IIC T3/T4 Gb,
Ex tb IIIC T120°C Db

Temperature class: Gas: T4 (135°C) Dusts: 120°C

EC certificate: LCIE 06 ATEX 6092 X

Zones of use: 1, 2, 21, 22



Casing

In high-tensile aluminium alloy, with sand-blasted surface.

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



II 2 GD - Class Ex e IIC T3/T4 Gb,
Ex tb IIIC T120°C Db. IEC/EN 60079-0,
IEC/EN 60079-7, IEC/EN 60079-31
Certificate n° LCIE 06 ATEX 6092 X



GGTN Permit and Gost-R:
Ex e T3/T4 - DIP A21 IP66
standards GOST R 51330.0-99,
GOST R 51330.8-99,
GOST R IEC 61241-1-1-99.



Certificate of Conformity
n° IECEx LCI 10.0003X
following standards IEC 60079-0,
IEC 60079-7, IEC 60079-31

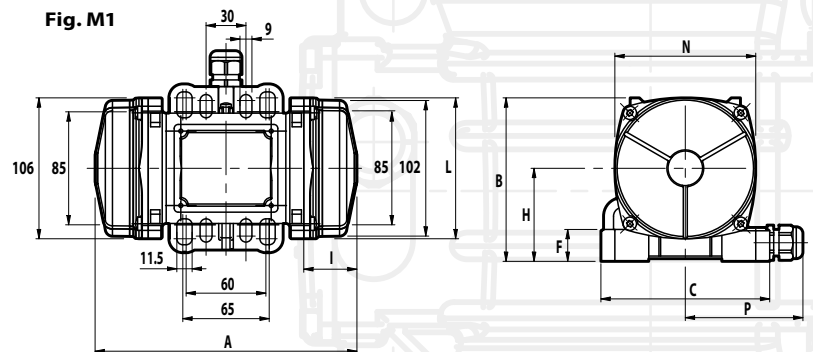


Comply with the applicable European
Union directives: ATEX (94/9/CE),
Low Voltage (2006/95/CE).



KOSHA Korea
Certificate n° 11-AV4 BO-0346/7/8/9/50/51
Ex e II T3/T4 - Ex td A21 IP66

Fig. M1



Dimensional specifications (mm)

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

I_w/I_N = ratio between start-up current and maximum current.