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 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, 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

Three phase																				
DESCRIPTION			MECHANICAL SPECIFICATIONS								ELECTRICAL SPECIFICATIONS									
			Static moment*		Centrifugal force			Peso				Max input power		Power rating		Max. current				
			kgmm		kg		kN		kg		Temp	Temp	W		W		400V	A 460V	tE	
Code	Туре	SIZE	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	class (G)	class (D)	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	(s)	la/In
6E0467	M3/65E-S02	00	6,43	6,43	64,7	93,1	0,635	0,913	4,30	4,30	T4	120°C	105	105	80	80	0,47	0,29	20	3,48
6E0465	M3/105E-S02	00	9,64	9,64	97,0	140	0,95	1,37	5,20	5,20										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 (2014/34/EU).

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) Dust 120°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



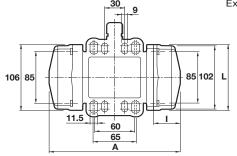
Ex tb IIIC T120°C Db IEC 60079-0 IEC 60079-31

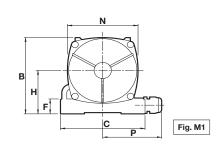


Certification for Eurasian Customs Union N° TC RU C-IT.ГБ08.В.02190



KOSHA Korea Certificate nº 11-AVG BO-0346/7/8/9/50/51 Ex e IIT3/T4 Ex td A21 IP66





DIMENSIONAL SPECIFICATIONS (mm)

Multi-hole Cable entry thread В н Type Fig. Е ØG M3/65E-S02 197 40 М1 M3/105E-S02 М1 211 47 See drawing 123 127 9 4 24 70 106 M20x1,5 86 106 88,5 M3/205E-S02 M1 235 59 M3/305E-S02 235 M1 59

la/ln = rapporto fra corrente di avviamento e corrente max.

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