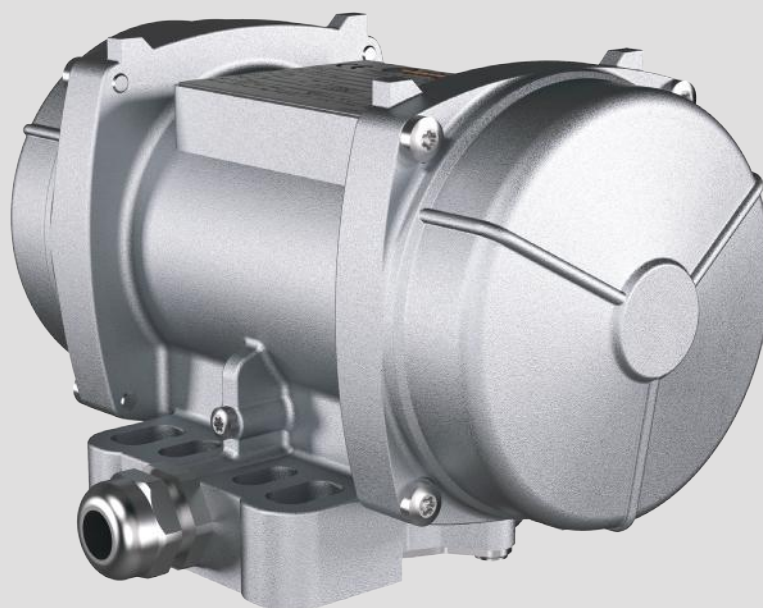




Technical features

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 industrial continuous duty, the M3 series features a compact shape, reduced overall dimensions, terminal box underneath which means also a high electric 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 Italvibras.

The technical data and models listed in this catalogue are not binding. Italvibras 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 e 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

M3



2 poles - 3.000/3.600 rpm

Three-phase

DESCRIPTION					MECHANICAL SPECIFICATIONS								ELECTRICAL SPECIFICATIONS					
Code	Type	SIZE		 II2D Temp. class	Static moment*		Centrifugal force				Weight		Max input power		Max. current		Ia/In	
					kgmm		kg		kN		kg		W		A			
					50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	400V 50Hz	460V 60Hz	50Hz	60Hz
600467	M3/65-S02	00	•	120°C	6,43	6,43	64,7	93,1	0,635	0,913	4,30	4,30	120	120	0,27	0,23	3,43	3,90
600465	M3/105-S02	00	•	120°C	9,64	9,64	97	140	0,95	1,37	5,20	5,20	180	180	0,35	0,30	2,68	3,00
600462	M3/205-S02	00	•	120°C	20,2	20,2	203	293	2,00	2,87	6,00	6,00	180	180	0,35	0,30	2,68	3,00
600461	M3/305-S02	00	•	120°C	29,8	20,2	300	293	2,94	2,87	6,30	6,00	180	180	0,35	0,30	2,68	3,00

Single-phase

Code	Type	SIZE	SP	Ex II2D Temp. class	Static moment* kgmm		Centrifugal force				Weight kg		Max input power W		Max. current A		Ia/In	
					50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	400V 50Hz	460V 60Hz	50Hz	60Hz
600467	M3/65-S02	00	•	120°C	6,43	6,43	64,7	93,1	0,635	0,913	4,30	4,30	110	110	0,56	1,52	2,24	2,24
600465	M3/105-S02	00	•	120°C	9,64	9,64	97	140	0,95	1,37	5,20	5,20	165	165	0,75	1,52	1,67	2,24
600462	M3/205-S02	00	•	120°C	20,2	20,2	203	293	2,00	2,87	6,00	6,00	165	165	0,75	1,52	1,67	2,24
600461	M3/305-S02	00	•	120°C	29,8	20,2	300	293	2,94	2,87	6,30	6,00	165	165	0,75	1,52	1,67	2,24

4 poles - 1.500/1.800 rpm

Three-phase

DESCRIPTION					MECHANICAL SPECIFICATIONS								ELECTRICAL SPECIFICATIONS					
Code	Type	SIZE		 II2D Temp. class	Static moment*		Centrifugal force				Weight		Max input power		Max. current		Ia/In	
					kgmm		kg		kN		kg		W		400V 50Hz	460V 60Hz		
601514	M15/36-S02	00	•	120°C	12,1	12,1	30,5	43,8	0,30	0,43	5,40	5,40	85	95	0,21	0,20	1,78	1,95
601515	M15/81-S02	00	•	120°C	29,8	20,2	75,0	73,0	0,74	0,72	6,30	6,0	85	95	0,21	0,20	1,78	1,95

Single-phase

Code	Type	SIZE	SP	Ex II2D Temp. class	Static moment* kgmm		Centrifugal force				Weight kg		Max input power W		Max. current A		Ia/In	
					50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	400V 50Hz	460V 60Hz	50Hz	60Hz
601514	M15/36-S02	00	•	120°C	12,1	12,1	30,5	43,8	0,30	0,43	5,40	5,40	90	100	0,43	1,00	1,20	1,30
601515	M15/81-S02	00	•	120°C	29,8	20,2	75,0	73,0	0,74	0,72	6,30	6,0	90	100	0,43	1,00	1,20	1,30

* Working moment = 2 x static moment. Ia/In = rapporto fra corrente di avviamento e corrente max.

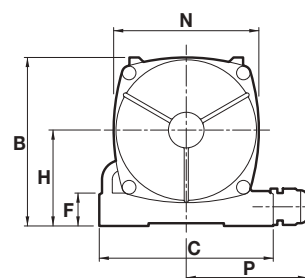
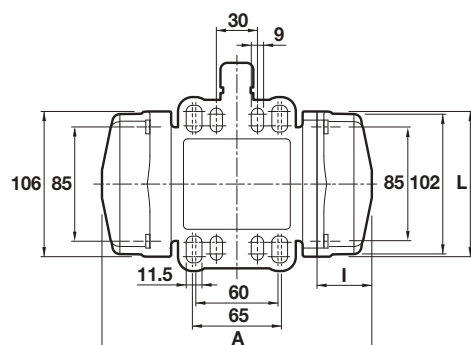


Fig. M1

DIMENSIONAL SPECIFICATIONS (mm)

Type	Fig.	A	B	C	Multi-hole		Holes		F	H	I	ØL	M	N	P	Capacitor (µF)		Cable entry thread
					D	E	ØG	N°								220V 50Hz	115V 60Hz	
M3/65-S02	M1	197			See drawing		9	4	24	70	40	106	86	106	88,5	-	-	M20x1,5
M3/105-S02	M1	211	123	127							47							
M3/205-S02	M1	235									59							
M3/305-S02	M1	235									59							

Type	Fig.	A	B	C	Multi-hole		Holes		F	H	I	ØL	M	N	P	Capacitor (µF)		Cable entry thread
					D	E	ØG	N°								220V 50Hz	115V 60Hz	
M3/65-S02	M1	197			See drawing		9	4	24	70	40	106	86	106	88,5	10	28	M20x1,5
M3/105-S02	M1	211	123	127							47							
M3/205-S02	M1	235									59							
M3/305-S02	M1	235									59							

DIMENSIONAL SPECIFICATIONS (mm)

Type	Fig.	A	B	C	Multi-hole		Holes		F	H	I	ØL	M	N	P	Capacitor (µF)		Cable entry thread
					D	E	ØG	N°								220V 50Hz	115V 60Hz	
M15/36-S02	M1	214	123	127	See drawing		9	4	24	70	59	106	86	106	88,5	-	-	M20X1,5
M15/81-S02	M1	235																

Type	Fig.	A	B	C	Multi-hole		Holes		F	H	I	ØL	M	N	P	Capacitor (µF)		Cable entry thread
					D	E	ØG	N°								220V 50Hz	115V 60Hz	
M15/36-S02	M1	214	123	127	See drawing		9	4	24	70	59	106	86	106	88,5	3,15	25	M20X1,5
M15/81-S02	M1	235																