

Technical features

Power supply

Three phase tension from 200V to 690V at 50Hz or 60Hz; variable frequency from 20Hz to the nameplate frequency, at constant torque, with frequency inverter.

Polarities

8, 10 & 12 pole standard, 6 pole on request.

Reference Regulations and Directives

Low Voltage Directive 2006/95/CE;
EN/IEC 60034-1,
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 on the operating conditions. For detailed information, contact our technical assistance office.

Centrifugal force

Range extended to 9500 kgf. (93.7 kN), adjustable in continuous linear mode varying the position of eccentric weights.

Mechanical protection

IP66 according to IEC/EN 60529.

Protection against mechanical impacts

IK 08 according to IEC/EN 62262

Insulation class

Class F (155°C), class H (180°C) on request.

Tropicalisation

Standard on all vibrators, with "drop by drop" trickle system.

Ambient temperature

From -20°C to +40°C; higher or lower temperatures are possible on request.

Vibrator thermal protection

With thermal detectors with thermistors PTC 130°C as standard on the whole MVLS range. Upon request different temperatures thermistors are available, as well as bimetallic thermal protection and anti-condensation heaters.

Fixing of the vibrator

In all positions and therefore without any restriction.

Lubrication

All vibrators are correctly lubricated at the factory and do not require further lubrication at their start-up.

Terminal box

Large terminal box to facilitate electrical connection. Special shaped terminals allow for the power supply cable to be secured, whilst protecting it from loosening.

Electric motor

Three-phase asynchronous type. Designed for obtaining maximum torque values both at starting and when fully operational, to respond to the requirements of vibrating machines and particularly to those with dual mass for resonance systems. Insulated windings by means of the "drop by drop" trickle system with class H resin. The rotor is die cast aluminum (squirrel cage).

Casing

In spheroidal cast iron.

Bearing flange

Carried out in spheroidal graphite cast iron or lamellar graphite cast iron. Relevant design was studied to convey the load to the casing in a uniform way.

Bearings

Custom made with special profile especially designed for Italtvibras, suitable to withstand both high radial and axial loads.

Motor shaft

In treated steel alloy (isothermic hardening) resistant to stress.

Eccentric weights

They allow adjustment of the centrifugal force. It is achieved by means of a graduated scale expressing it as a percentage of the maximum centrifugal force.

The MVLS Series was specifically designed to supply high torque values and power for applications at low speed, from 900 down to 500 rpm. The MVLS range is therefore highly indicated for dual mass resonance vibrating machines besides being suitable for traditional brute force vibrating machines.

The range offers different values of centrifugal force at different speeds up to 8150kg (80kN).

Weight covers

Standard in aluminum alloy.

Painting/Coating

Electrostatic surface treatment based on polymerised epoxy polyester powder in oven at 200°C. Tested in salt spray for 500 hours.

For further details please contact Italtibras Technical Assistance.

Technical features and models mentioned in this catalogue are indicative and not binding. Italtibras reserves the right to modify them without any obligation.

Certifications



In conformity with the applicable European Community Directives.



Certification for the European-Asiatic Customs Union
N° TC N RU Д-ИТ.АЛ33.В.02527



CAN/CSA Rules - C22.2, N° 100-95, Certificate N° LR 100948 Class 4211 01 - Motors and generators UL1004-1 Rotational electric machines - General requirements
Class II Div. 2, Groups FG (T3B)



MVLS-C version
Class I Div.2, Groups ABCD
CAN/CSA Rules - C22.2



8 poles - 750/900 rpm

Three-phase

DESCRIPTION				MECHANICAL SPECIFICATIONS								ELECTRICAL SPECIFICATIONS					
Code	Type	SIZE	CSA*	Static moment*		Centrifugal force				Weight		Max input power		Max. current		Ia/In	
				kgmm	kgmm	kg	kg	kN	kN	kg	kg	W	W	A	A	50Hz	60Hz
				50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	400V 50Hz	460V 60Hz	50Hz	60Hz
602531	MVLS 075/1500-S90	184	•	1659		1043	1502	10,2	14,7	136		820	1000	3,00	3,10	6,40	5,50
602532	MVLS 075/2300-S90	215	•	2577		1620	2333	15,9	22,9	180		1640	1940	5,10	5,10	4,10	4,30
602533	MVLS 075/3000-S90	256	□	3452		2171	3126	21,3	30,7	215		3720	4500	7,30	7,50	5,50	6.1
602534	MVLS 075/4200-S90	256	□	4670		2936	4229	28,8	41,5	230		5600	6600	12,20	12,00	5,70	6,20
602536	MVLS 075/7500-S90	286	□	8310		5225	7524	51,2	73,8	465		7000	8550	13,40	14,30	8,90	9,00

10 poles - 600/720 rpm

DESCRIPTION				MECHANICAL SPECIFICATIONS								ELECTRICAL SPECIFICATIONS					
Code	Type	SIZE	CSA*	Static moment*		Centrifugal force				Weight		Max input power		Max. current		Ia/In	
				kgmm	kgmm	kg	kg	kN	kN	kg	kg	W	W	A	A	50Hz	60Hz
				50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	400V 50Hz	460V 60Hz	50Hz	60Hz
602965	MVLS 06/800-S90	184	•	1333		536	772	5,3	7,6	142		900	1000	3,40	3,40	5,10	4,40
602958	MVLS 06/1500-S90	184	•	2595		1044	1504	10,2	14,7	152		900	1000	3,40	3,40	5,10	4,40
602966	MVLS 06/1490-S90	215	•	2577		1037	1493	10,2	14,6	180		1850	2180	4,60	4,60	4,10	3,50
602953	MVLS 06/2300-S90	215	•	4002		1611	2319	15,8	22,7	194		1850	2180	4,60	4,60	4,10	3,50
602968	MVLS 06/2000-S90	256	□	3450		1388	1999	13,6	19,6	220		2400	2930	5,80	6,10	8,20	6,70
602967	MVLS 06/2700-S90	256	□	4670		1879	2706	18,4	26,5	230		3800	4500	6,80	8,40	10,3	7,30
602959	MVLS 06/3000-S90	256	□	5158		2076	2989	20,4	29,3	220		2520	2930	6,00	6,10	6,40	6,70
602952	MVLS 06/4200-S90	256	□	7391		2974	4283	29,2	42,0	297		3875	4500	8,60	8,40	7,00	7,30
602946	MVLS 06/6600-S90	286	□	11475		4618	6650	45,3	65,2	430		5760	6680	11,2	11,2	5,80	6,10
602960	MVLS 06/8100-S90	286	□	14069		5662	8153	55,5	80,0	485		6910	8450	13,3	14,0	7,00	5,70
602987	MVLS 06/9500-S90	286	□	16495		6638	9559	65,1	93,7	517		7800	-	15,0	-	-	-

12 poles - 500/600 rpm

DESCRIPTION				MECHANICAL SPECIFICATIONS								ELECTRICAL SPECIFICATIONS					
Code	Type	SIZE	CSA*	Static moment*		Centrifugal force				Weight		Max input power		Max. current		Ia/In	
				kgmm	kgmm	kg	kg	kN	kN	kg	kg	W	W	A	A	50Hz	60Hz
				50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	400V 50Hz	460V 60Hz	50Hz	60Hz
602957	MVLS 05/1000-S90	184	•	2418		676	973	6,6	9,5	145		810	960	3,70	3,80	3,30	3,30
602949	MVLS 05/1500-S90	215	•	3728		1042	1500	10,2	14,7	185		1140	1320	4,20	4,30	4,10	3,40
602950	MVLS 05/2300-S90	256	□	5743		1605	2311	15,7	22,7	225		1850	2270	6,40	6,50	3,80	3,90
602951	MVLS 05/3000-S90	256	□	7391		2066	2974	20,3	29,2	290		2625	3100	7,60	7,50	7,90	8,10
602947	MVLS 05/4200-S90	286	□	10332		2887	4158	28,3	40,8	399		3735	4500	8,30	8,60	6,60	6,90
602948	MVLS 05/6600-S90	286	□	16495		4610	6638	45,2	65,1	513		5960	6800	12,3	12,0	5,70	6,30

* Working moment = 2 x static moment.

□ CSA certification on request, with feeding line included.

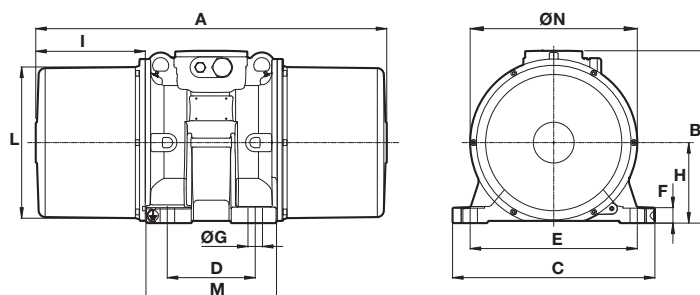


Fig. V

DIMENSIONAL SPECIFICATIONS (mm)

Type	A	B	C	D	E	Holes		F	H	I	L	M	ØN	Cable entry thread
						ØG	N°							
MVLS 075/1500-S90	660	316	340	160	280	27	4	25	150	210	273	236	316	M25x1,5
MVLS 075/2300-S90	604	351	390	200	320	28	4	30	162	152	303	294	340	M32x1,5
MVLS 075/3000-S90	798	404	460	200	380	33	4	35	183	249	344	294	380	M32x1,5
MVLS 075/4200-S90	798	404	460	200	380	33	4	35	183	249	344	294	380	M32x1,5
MVLS 075/7500-S90	892	503	528	200	440	33	4	35	238	282	428	308	460	M32x1,5

DIMENSIONAL SPECIFICATIONS (mm)

Type	A	B	C	D	E	Holes		F	H	I	L	M	ØN	Cable entry thread
						ØG	N°							
MVLS 06/800-S90	660	316	340	160	280	27	4	25	150	210	273	236	316	M25x1,5
MVLS 06/1500-S90	660	316	340	160	280	27	4	25	150	210	273	236	316	M25x1,5
MVLS 06/1490-S90	710	351	390	200	320	28	4	30	162	205	303	294	340	M32x1,5
MVLS 06/2300-S90	710	351	390	200	320	28	4	30	162	205	303	294	340	M32x1,5
MVLS 06/2000-S90	798	404	460	200	380	33	4	35	183	249	344	294	380	M32x1,5
MVLS 06/2700-S90	798	404	460	200	380	33	4	35	183	249	344	294	380	M32x1,5
MVLS 06/3000-S90	798	404	460	200	380	33	4	35	183	249	344	294	380	M32x1,5
MVLS 06/4200-S90	798	404	460	200	380	33	4	35	183	249	344	294	380	M32x1,5
MVLS 06/6600-S90	892	503	528	200	440	33	4	35	238	282	428	308	460	M32x1,5
MVLS 06/8100-S90	892	503	528	200	440	33	4	35	238	282	428	308	460	M32x1,5
MVLS 06/9500-S90	892	503	528	200	440	33	4	35	238	282	428	308	460	M32x1,5

DIMENSIONAL SPECIFICATIONS (mm)

Type	A	B	C	D	E	Holes		F	H	I	L	M	ØN	Cable entry thread
						ØG	N°							
MVLS 05/1000-S90	660	316	340	160	280	27	4	25	150	210	273	236	316	M25x1,5
MVLS 05/1500-S90	710	351	390	200	320	28	4	30	162	205	303	294	340	M32x1,5
MVLS 05/2300-S90	798	404	460	200	380	33	4	35	183	249	344	294	380	M32x1,5
MVLS 05/3000-S90	798	404	460	200	380	33	4	35	183	249	344	294	380	M32x1,5
MVLS 05/4200-S90	718	503	528	200	440	33	4	35	238	282	428	308	460	M32x1,5
MVLS 05/6600-S90	892	503	528	200	440	33	4	35	238	306	428	308	460	M32x1,5

Ia/I_n = ratio between start-up current and maximum current.

