

ITV-VR/ITVAF



Technical features

Power supply

Three-phase voltage from 24V to 690V at the various frequencies, depending on the type and series. It is advisable to use the Vibravar, Multivar or the CFV variable high frequency power suppliers to power the electric vibrators.

Conformity to the European Directives

Low Voltage 2006/95/EC.

Reference standards

EN 60034-1.

Operation

Continuous service (S1) at the maximum declared centrifugal force and electric power values.

Centrifugal force

Range extended up to 5300 kgf (52kN) with force output adjustable from 0 to 100%.

Mechanical protection

IP66 according to IEC 529, EN 60529; IK08 protection against impact.

Insulation class

Class F (155°C).

Tropicalization

Standard on all vibrators, with vacuum encapsulation up to size AF33 and for frame size AF70, with "drop by drop" trickle system for sizes AF50 and AF68.

Ambient temperature

To operate correctly, from -20°C to +40°C.

Vibrator thermal protection

With PTC rated thermistor heat detectors 130°C installed as part of the standard assembly size AF70 onwards.

Also on request thermistors with different temperatures and anti-condensation heaters can be assembled on the lower sizes.

Fixing of the vibrator

In all positions and therefore without restriction. Two different types of connection are available for the ITV-VR and ITVAF series: fixed connection, where the electric vibrators are connected to the structure by bolts through fixing holes and the RS cradle connection, where the electric vibrators are connected to the

structure with the standardized cradle type RS2 except for frame size AF10, for this the cradle fixing is type RS1.

Lubrication

All the electric vibrators are correctly lubricated in our factory and need no further lubrication when used. Special grease for high-speed operation is used for frame sizes AF50, AF68 and AF70 a periodic re-lubrication is recommended by means of special grease nipples. The excess grease is discharged into the weight compartment by means of the differentiated labyrinth system.

Terminal box

Generously sized to make the electrical connections easier. Special shaped terminals allow to fix the power supply cable.

Electric motor

Three-phase asynchronous type.

Casing

Specifically designed for high speed duty. In high tensile strength aluminium alloy for frame sizes AF10, AF30 and AF33. In spheroidal cast iron for sizes AF33 (600245), AF50, AF68 and AF70.

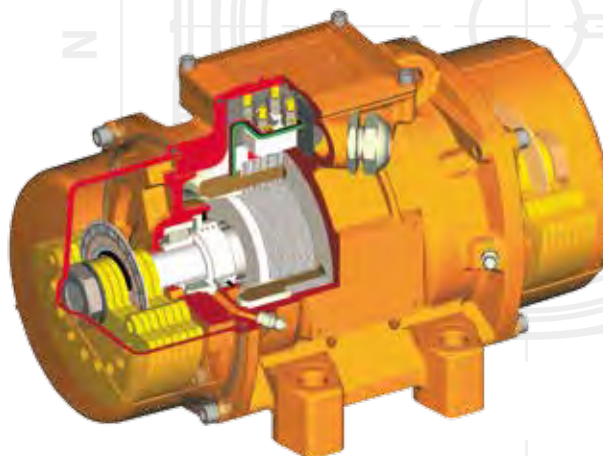


Italvibras produces 2 series of electric vibrators with frequency variation which can be applied to systems and machines in the precasting industry:

ITV-VR Series, with variable frequency;
ITVAF Series, with fixed frequency.

The ITV-VR series electric vibrators are able to provide a centrifugal force of up to 5300 Kgf (52 kN) at a frequency varying from 0 to 6.000 rpm. The ITVAF series electric vibrators with fixed vibration (6000 or 9000 rpm) provide a vibrating energy of up to 1480 Kgf (14,6 kN).

Both are available with either the fixed or cradle connection.



Bearings

A special shape, exclusively designed and made for Italvibras and able to bear strong loads at high speeds.

Motor shaft

in treated steel alloy (isothermic hardening) able to withstand high stress.

Eccentric weights

Specially shaped lamellar type that can be easily adjusted.

Weight covers

In aluminium alloy treated with rust inhibitor. They are perfectly dustproof, watertight and offer optimum shock resistance in all conditions of use and work environments.

Painting

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

Certifications



Regulation CAN/CSA - C22.2 N. 100-95,
file n° LR100948 Class 4211 01
– Motors and generators.



Certificate GOST-R
standards GOST 16261.1-85,
GOST 16264.0-85, GOST R 51689-2000.



Mechanical protection IP66 (EN 60529),
protection against impacts IK 08
(EN 50102)



Comply with the applicable
European Union directives

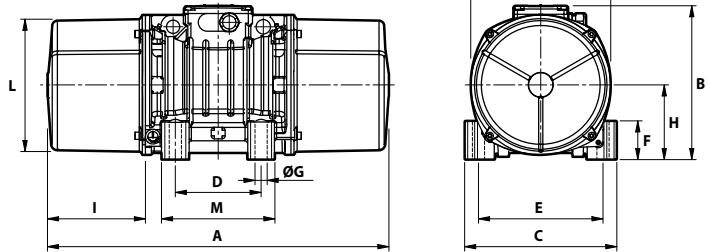
ITV-VR/ITVAF



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Fig. A



ITV-VR fixed connection

ITV-VR RS cradle connection

Description				Mechanical specifications			Electrical specifications			
Code	Type	SIZE	SA	Plage vibrat. (vibr./mn.)	Centrifugal force kg kN	Weight kg	Max input power W	Max. current A 100 Hz		I _A /I _N
								42V	400V	
600500	ITV-VR/1210-S08	AF33	•	0÷6000	1569 15.4	23	1200	21	2.3	4.48
600507	ITV-VR/2010-S08	AF33	•	0÷6000	2000 19.6	27	1700	27	2.9	5.00
600248	ITV-VR/2510	AF50	-	0÷6000	2500 24.5	41	2200	35	3.9	6.15
600249	ITV-VR/2510-V *	AF50	-	4500÷6000	2500 24.5	41	2200	35	3.9	6.15
600208	ITV-VR/3300 *	AF68	-	4500÷6000	3300 32.3	74	4000	-	7.2	5.10
600514	ITV-VR/5000-S02	AF70	-	0÷4300	5300 52.0	105	5000	-	8.0	5.30
600508	ITV-VR/1210-RS-S08	AF33	•	0÷6000	1569 15.4	21	1200	21	2.3	4.48
600245	ITV-VR/2010-RS	AF33	•	0÷6000	2000 19.6	28	1700	27	2.9	5.00

* Special ventilated type for heavy service.

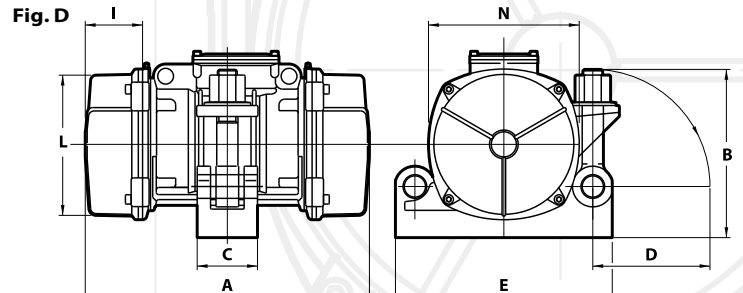
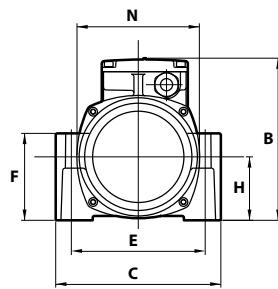
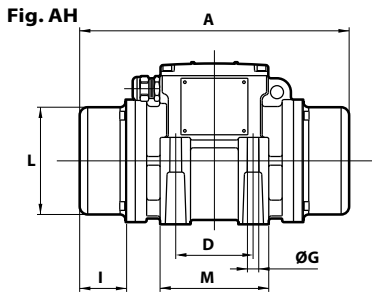
ITVAF fixed connection

ITVAF RS cradle connection

Description				Mechanical specifications			Electrical specifications						
Code	Type	SIZE	SA	Plage vibrat. (vibr./mn.)	Centrifugal force kg kN	Weight kg	Max input power W	200 Hz		Max. current A 150 Hz		100 Hz	I _A /I _N
								42 V	250 V	42 V	250 V	250 V	
603050	ITVAF 6/600-S02	AF10	-	6000	610 5.98	8.0	500	9.5	1.6	-	-	1.6	4.50
603044	ITVAF 6/1000-S02-BSH	AF30	-	6000	1022 9.70	18	1000	20	3.3	-	-	3.7	6.06
603043	ITVAF 6/1200-S02-BSH	AF30	-	6000	1200 11.3	18	1000	20	3.3	-	-	3.7	6.06
603053	ITVAF 6/1220-S08	AF33	-	6000	1095 10.7	23	1200	23	3.85	-	-	3.9	6.04
603054	ITVAF 6/1510-S08	AF33	-	6000	1484 14.6	25	1700	29	4.9	-	-	4.8	7.10
603037	ITVAF 6/2010-S90	AF50	-	6000	1978 19.4	40	2000	35	5.9	-	-	5.9	8.00
603010	ITVAF 6/3300 °	AF68	-	6000	2800 27.5	74	4000	-	-	-	-	11	5.10
604041	ITVAF 9/1110-S08	AF33	-	9000	1230 12	22	1150	-	-	18	-	-	8.52
604042	ITVAF 9/1510-S08	AF33	-	9000	1484 14.6	24	1600	-	-	24	4.0	-	10.4
603049	ITVAF 6/600-RS1-S02	AF10	-	6000	610 5.98	8.0	500	9.5	1.6	-	-	1.6	4.50
603055	ITVAF 6/1220-RS-S08	AF33	-	6000	1095 10.7	21	1200	23	3.85	-	-	3.9	6.04
603056	ITVAF 6/1510-RS-S08	AF33	-	6000	1484 14.6	23	1700	29	4.9	-	-	4.8	7.10
604043	ITVAF 9/1110-RS-S08	AF33	-	9000	1230 12	20	1150	-	-	18	-	-	8.52
604044	ITVAF 9/1510-RS-S08	AF33	-	9000	1484 14.6	22	1600	-	-	24	4.0	-	10.4

° Only supplied at 250V-100Hz, ventilated type, IP44 protection.

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



Dimensional specifications (mm)

Type	Fig.	A	B	C	D	E	Holes		F	H	I	L	M	N
							øG	N°						
ITV-VR/1210-S08	A	289	216.5	215	100	180	17	4	47	93.5	63	170	145	182
ITV-VR/2010-S08	A	375	216.5	215	100	180	17	4	47	93.5	106	170	145	182
ITV-VR/2510	A	430	230	230	140	190	17	4	49	104	87.5	186	180	200
ITV-VR/2510-V *	A	465	230	230	140	190	17	4	49	104	105	240	180	248
ITV-VR/3300 *	A	528	267	310	155	255	23.5	4	122	115	147	265	215	275
ITV-VR/5000-S02	A	560	290	310	155	255	25	4	90	130	137	238	210	250
ITV-VR/1210-RS-S08	D	289	189	83	140	240	-	-	-	-	63	170	-	182
ITV-VR/2010-RS-S08	D	355	189	83	140	240	-	-	-	-	81.5	164	-	179

Dimensional specifications (mm)

Type	Fig.	A	B	C	D	E	Holes		F	H	I	L	M	N
							øG	N°						
ITVAF 6/600-S02	A	255	179	152	90	125	13	4	28	73	54	124	128	141
ITVAF 6/1000-S02-BSH	AH	310	186	190	90	154	13	4	100	73	54	124	125	141
ITVAF 6/1200-S02-BSH	AH	310	186	190	90	154	13	4	100	73	54	124	125	141
ITVAF 6/1220-S08	A	289	216.5	215	100	180	17	4	47	93.5	63	170	145	182
ITVAF 6/1510-S08	A	375	216.5	215	100	180	17	4	47	93.5	106	170	145	182
ITVAF 6/2010-S90 °	A	430	230	230	140	190	17	4	49	104	87.5	186	180	200
ITVAF 6/3300 °	A	528	267	310	155	255	23.5	4	122	115	147	265	215	275
ITVAF 9/1110-S08	A	289	216.5	215	100	180	17	4	47	93.5	63	170	145	182
ITVAF 9/1510-S08	A	375	216.5	215	100	180	17	4	47	93.5	106	170	145	182
ITVAF 6/600-RS1-S02	D	255	140	97	97	180	-	-	-	-	54	124	-	141
ITVAF 6/1220-RS-S08	D	289	189	83	140	240	-	-	-	-	63	170	-	182
ITVAF 6/1510-RS-S08	D	375	189	83	140	240	-	-	-	-	106	170	-	182
ITVAF 9/1110-RS-S08	D	289	189	83	140	240	-	-	-	-	63	170	-	182
ITVAF 9/1510-RS-S08	D	375	189	83	140	240	-	-	-	-	106	170	-	182