

# ITV-VR / ITVAF

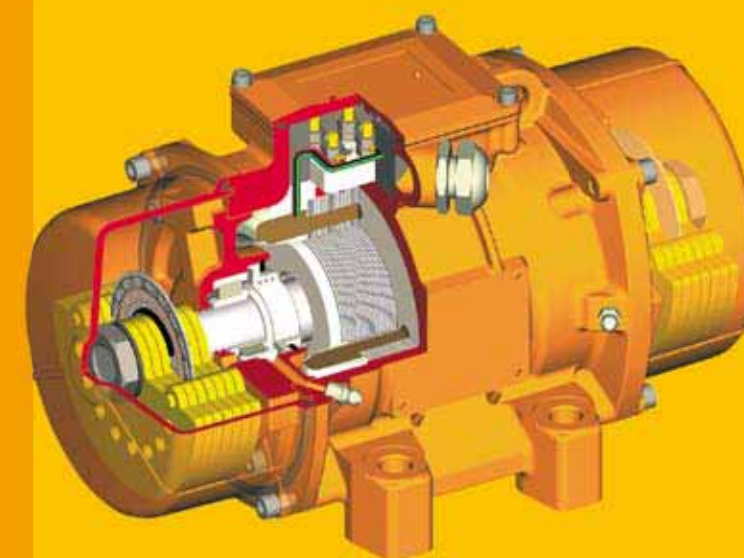


Italvibras produces 2 series of electric vibrators with frequency variation which can be applied to systems and machines in the precasting industry:

**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.



## 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 72/23/CE; Electromagnetic compatibility 89/336/CE.

### 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 impregnation up to size AF 33 and 35, with "drop by drop" trickle system for larger sizes.

### Environmental temperature

To operate correctly, from -30°C to +40°C.

### Vibrator heat 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.

### Fixing of the vibrator

In all positions and therefore without restriction. Two different types of connection are available for the ITV-VR-S90 and ITVAF-S90 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.

### 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. 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 and bearing flange

In ductile cast iron to optimize the seal and efficiency at high speeds.

### 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.



Mechanical protection IP66 (EN 60529), shock-proof protection IK 08 (EN 50102)

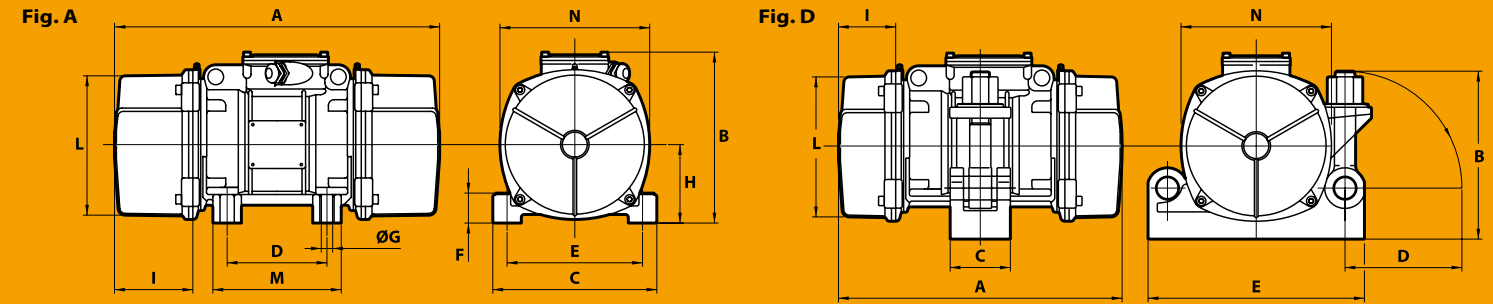


Gost-R certificate for all models of vibrators: GOST 16264.1, GOST 16264.0, GOST R 51689.



Comply with the applicable European Union directives

# ITV-VR / ITVAF



|                                   | Description |                |      |    | Mechanical specifications |                   |      |           | Electrical specifications |                       |      |       |
|-----------------------------------|-------------|----------------|------|----|---------------------------|-------------------|------|-----------|---------------------------|-----------------------|------|-------|
|                                   | Code        | Type           | SIZE | SF | Plage vibrat. (vibr./mn.) | Centrifugal force |      | Weight kg | Max input power W         | Max. current A 100 Hz |      | Ia/In |
|                                   |             |                |      |    |                           | kg                | kN   |           |                           | 42V                   | 400V |       |
| <b>ITV-VR</b><br>fixed connection | 600246      | ITV-VR/1210    | AF33 | •  | 0+6000                    | 1475              | 14.5 | 28        | 1200                      | 21                    | 2.3  | 4.48  |
|                                   | 600247      | ITV-VR/2010    | AF33 | •  | 0+6000                    | 2000              | 19.6 | 31        | 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  |
|                                   | 600212      | ITV-VR/5000    | AF70 | -  | 0+4300                    | 5300              | 52.0 | 106       | 5000                      | -                     | 8.0  | 5.30  |

| Type           | Fig. | Dimensional specifications (mm) |     |     |     |     |       |   |    |      |      |     |     |     |  |
|----------------|------|---------------------------------|-----|-----|-----|-----|-------|---|----|------|------|-----|-----|-----|--|
|                |      | A                               | B   | C   | D   | E   | Holes |   |    |      | I    | L   | M   | N   |  |
|                |      | øG                              | N°  | F   | H   | øG  | N°    | F | H  | I    | L    | M   | N   |     |  |
| ITV-VR/1210    | A    | 339                             | 214 | 215 | 100 | 180 | 17    | 4 | 47 | 92.5 | 73.5 | 164 | 140 | 179 |  |
| ITV-VR/2010    | A    | 355                             | 214 | 215 | 100 | 180 | 17    | 4 | 47 | 92.5 | 81.5 | 164 | 140 | 179 |  |
| 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/5000    | A    | 558                             | 305 | 310 | 155 | 255 | 25    | 4 | 90 | 130  | 108  | 233 | 210 | 248 |  |

|                                       |        |                |      |   |        |      |      |    |      |    |     |      |
|---------------------------------------|--------|----------------|------|---|--------|------|------|----|------|----|-----|------|
| <b>ITV-VR RS</b><br>cradle connection | 600244 | ITV-VR/1210-RS | AF33 | • | 0+6000 | 1475 | 14.5 | 25 | 1200 | 21 | 2.3 | 4.48 |
|                                       | 600245 | ITV-VR/2010-RS | AF33 | • | 0+6000 | 2000 | 19.6 | 28 | 1700 | 27 | 2.9 | 5.00 |

|                |   |     |     |    |     |     |   |   |   |   |      |     |   |     |
|----------------|---|-----|-----|----|-----|-----|---|---|---|---|------|-----|---|-----|
| ITV-VR/1210-RS | D | 339 | 189 | 83 | 140 | 240 | - | - | - | - | 73.5 | 164 | - | 179 |
| ITV-VR/2010-RS | D | 355 | 189 | 83 | 140 | 240 | - | - | - | - | 81.5 | 164 | - | 179 |

|                                  |        |                  |      |   |              |      |      |    |      |    |     |      |
|----------------------------------|--------|------------------|------|---|--------------|------|------|----|------|----|-----|------|
| <b>ITVAF</b><br>fixed connection | 603035 | ITVAF 6/1220-S90 | AF33 | - | 6000 - 200Hz | 1157 | 11.3 | 27 | 1200 | 23 | -   | 6.04 |
|                                  | 603036 | ITVAF 6/1510-S90 | AF33 | - | 6000 - 200Hz | 1484 | 14.6 | 29 | 1700 | 29 | 4.9 | 7.10 |
|                                  | 604035 | ITVAF 9/1110-S90 | AF33 | - | 9000 - 150Hz | 1113 | 10.9 | 26 | 1150 | 18 | -   | 8.52 |
|                                  | 604036 | ITVAF 9/1510-S90 | AF33 | - | 9000 - 150Hz | 1484 | 14.6 | 28 | 1600 | 24 | 4.0 | 10.4 |

|                  |   |     |     |     |     |     |    |   |    |      |      |     |     |     |
|------------------|---|-----|-----|-----|-----|-----|----|---|----|------|------|-----|-----|-----|
| ITVAF 6/1220-S90 | A | 339 | 214 | 215 | 100 | 180 | 17 | 4 | 47 | 92.5 | 73.5 | 164 | 140 | 179 |
| ITVAF 6/1510-S90 | A | 355 | 214 | 215 | 100 | 180 | 17 | 4 | 47 | 92.5 | 81.5 | 164 | 140 | 179 |
| ITVAF 9/1110-S90 | A | 339 | 214 | 215 | 100 | 180 | 17 | 4 | 47 | 92.5 | 73.5 | 164 | 140 | 179 |
| ITVAF 9/1510-S90 | A | 355 | 214 | 215 | 100 | 180 | 17 | 4 | 47 | 92.5 | 81.5 | 164 | 140 | 179 |

|                                      |        |                     |      |   |              |      |      |    |      |    |     |      |
|--------------------------------------|--------|---------------------|------|---|--------------|------|------|----|------|----|-----|------|
| <b>ITVAF RS</b><br>cradle connection | 603038 | ITVAF 6/1220-RS-S90 | AF33 | - | 6000 - 200Hz | 1157 | 11.3 | 25 | 1200 | 23 | -   | 6.04 |
|                                      | 603039 | ITVAF 6/1510-RS-S90 | AF33 | - | 6000 - 200Hz | 1484 | 14.6 | 27 | 1700 | 29 | 4.9 | 7.10 |
|                                      | 604038 | ITVAF 9/1110-RS-S90 | AF33 | - | 9000 - 150Hz | 1113 | 10.9 | 24 | 1150 | 18 | -   | 8.52 |
|                                      | 604039 | ITVAF 9/1510-RS-S90 | AF33 | - | 9000 - 150Hz | 1484 | 14.6 | 26 | 1600 | 24 | 4.0 | 10.4 |

|                     |   |     |     |    |     |     |   |   |   |   |      |     |   |     |
|---------------------|---|-----|-----|----|-----|-----|---|---|---|---|------|-----|---|-----|
| ITVAF 6/1220-RS-S90 | D | 339 | 189 | 83 | 140 | 240 | - | - | - | - | 73.5 | 164 | - | 179 |
| ITVAF 6/1510-RS-S90 | D | 355 | 189 | 83 | 140 | 240 | - | - | - | - | 81.5 | 164 | - | 179 |
| ITVAF 9/1110-RS-S90 | D | 339 | 189 | 83 | 140 | 240 | - | - | - | - | 73.5 | 164 | - | 179 |
| ITVAF 9/1510-RS-S90 | D | 355 | 189 | 83 | 140 | 240 | - | - | - | - | 81.5 | 164 | - | 179 |

\* Special ventilated type for heavy service.