

# Vibration Test System TV 5220-C



### **DESCRIPTION**

In all fields of industry, in aviation, the automotive industry and in power stations vibration analyses and measurements for determining the vibration transmission are increasingly carried out.

A large variety of measuring sensors is necessary to realize such investigations. These measuring sensors have to be checked for their accuracy and calibration in defined time intervals.

As most of the measuring sensors have a large measuring range and large frequency ranges, special shakers for calibrating these sensors are required.

TIRA has risen to this challenge and designed a unique shaker which meets these requirements. This newly developed shaker is equipped with a special guide system and a vibration system made of ceramic material. It is characterised by a very high utilisable frequency range up to 20 kHz and with the appropriate measuring equipment it is optimally suitable for professional calibration applications.

## **AMPLIFIER BAA 1000-ET**

**KVA** ratings 1200 VA DC-20 kHz Frequency range 72 V Voltage, max. Current, max. 18 A 4 Ohm Load resistance < 5 VInput voltage Distortion < 0.1 %  $> 90 \, dB$ Signal to noise ratio Field voltage, max. 70 V Field current, max. 3.2 A Weight 76 kg (167.6 lb) Size (WxHxD) 483 x 400 x 600 mm (19 x 15.7 x 23.6 in)

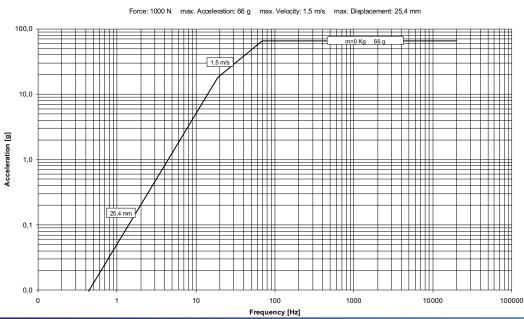


## TECHNICAL SPECIFICATION VIBRATION GENERATOR \$ 5220-C

Rated peak force (N lbf)	Sine/Random	1000/650	225/146
Frequency range (Hz)		DC-20000	DC-20000
Max. rated travel (mm inch)	Pk-Pk	25.4	1.0
Max. velocity (m/sec inch/sec)	Sine/Random	1.5/1.5	59/59
Max. acceleration (g)	Sine/Random	66/43	66/43
Max. power consumption at 230 V (kVA)		2	2
Nominal impedance (Ohm)		4	4
Effective moving mass (kg lb)		1.5	3.3
Main resonance frequency (Hz)		>19000	>19000
Weight with trunnion (kg lb)		110	242.5
Armature (ø/mm ø/inch)		130	5.12
Cooling (m³/h ft³/min)		80	47

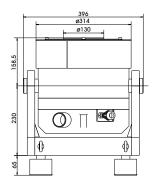
## PERFORMANCE DIAGRAM

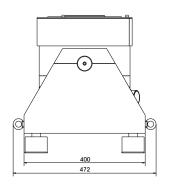
# System Performance TV 5220-C

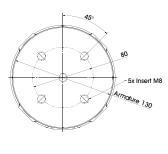


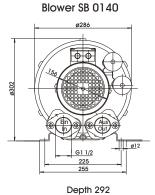
## **DIMENSIONS** in mm

\$ 5220-C (Example drawing)









Subject to modifications



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