Modal Vibration Test System TV 51140-M

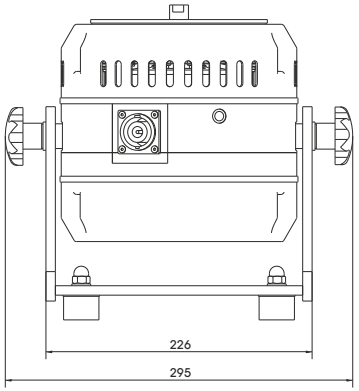
S 51140-M (Example drawing) Dimensions in mm

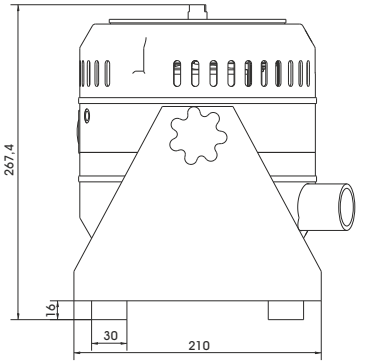
TECHNICAL PARAMETERS Modal exciter S 51140-M

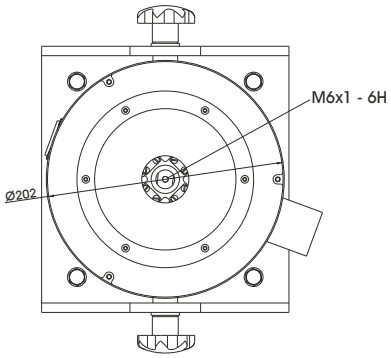
Rated peak force $Sine_{pk}$/$Random_{RMS}$ [1]	400/311 N
Frequency range	DC - 5000 Hz
Main resonance frequency (free-swinging)	>2450 Hz
Max. displacement Peak-Peak	20 mm
Max. velocity	1.5 m/s
Suspension stiffness	5 N/mm
Effective moving mass	0.4 kg
Total mass	18 kg
Coupling thread	M6

1) Random force according to ISO 5344:2004
For long-term tests, the load must be reduced to 80 %. Continuous operation at maximum load can cause damage.









SCOPE OF DELIVERY, OPTIONS AND FEATURES OF THE SYSTEM

Scope of delivery:
- Modal exciter
- Trunnion mount
- Power amplifier
- Cooling blower
- Connection cable (5 m)
- Power cable amplifier (1.5 m)
- Blower hose ø40 mm (3 m)

Options:
- Rack for mounting the amplifier
- Silencer
  - for cooling blower (Noise reduction up to 8 dB(A))
- Acoustic enclosure
  - for cooling blower (Noise reduction 15 - 23 dB(A))
- Stinger (see Modal brochure for details)
- Cable extension
- Factory acceptance test

Features:
- Vibration isolation
- Coarse filter unit
- High cross-axial stiffness
- Light weight construction by using rare earth magnet
- Minimum maintenance effort
- Made in Germany
- Servicehotline

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Subject to modifications

Modal Vibration Test System TV 51140-M

TECHNICAL PARAMETERS Amplifier BDA 1300

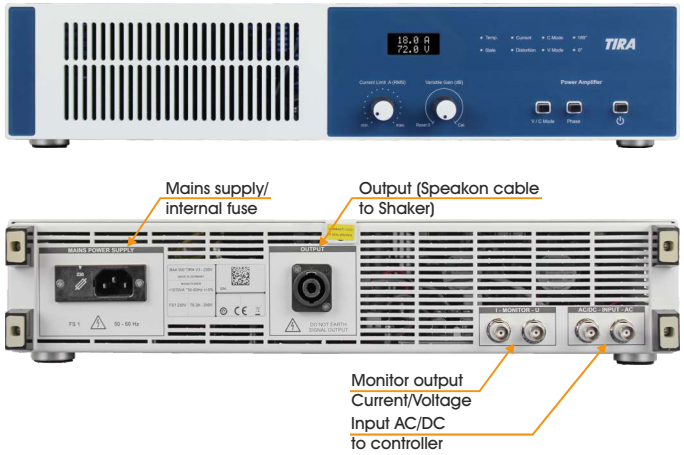
Output power$_{RMS}$, max.	1300 VA
Frequency range	DC - 25 kHz
Voltage-/Current mode	yes/yes
Voltage$_{RMS}$, max.	72 V
Current$_{RMS}$, max.	18 A
Signal input voltage$_{PK}$	3.5 V
Distortion	< 0.1 %
Signal to noise ratio	> 100 dB
Total mass	22 kg
Dimensions (WxHxD)	440 x 90 x 450 mm
Power supply (Standard)	1~ / N / PE 230 V±5% 50 Hz, CEE 7/7
Recommended fuse protection (Standard)	16 A slow
Max. power consumption at 230 V	1.22 kVA
Interlocks:	Overload, temperature, clipping

Features:
High Signal to noise ratio of > 100 dB
Monitoring output of voltage and current

TECHNICAL PARAMETERS Cooling blower TB 0140

Volume flow rate	max. 140 m³/h
Total pressure difference	max. 150 mbar
Power	1.1 kW
Frequency	50 Hz
Hose diameter	40 mm
Hose length (Std.)	3 m
Total mass	16 kg
Dimensions (WxHxD)	286 x 302 x 292 mm
Sound pressure level, max.	max. 63 dB(A)
Power supply (Standard)	1~ / N / PE 230 V±5% 50 Hz, CEE 7/7
Max. current consumption at 400 V	7.3 A

Options:
Silencer (Noise reduction up to 8 dB(A))
  Dimensions (LxD): 308 x 82 mm
  Mass: 0.2 kg
Acoustic enclosure (Noise reduction 15 - 23 dB(A))
  Dimensions (WxHxD): 860 x 760 x 650 mm
  Mass: 45 kg
Hose length according to customers request (up to 10 m)




Cooling blower TB 0140


Silencer TB 0140-SI
(optional)


Acoustic enclosure TB 0140-AE
(optional)

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