

Vibration Test System TV 50350/LS-120

S 50350/LS-120 (Example drawing) Dimensions in mm

TECHNICAL PARAMETERS Vibration exciter S 50350/LS-120

Rated peak force Sine _{pk} /Random _{RMS} /Shock _{pk} ¹	2700/2000/6000 N
Frequency range	2-4000 Hz
Main resonance frequency	>3700 Hz
Max. displacement Peak-Peak ²	45.0 mm
Max. velocity Sine/Random/Shock	1.5/1.5/2.5 m/s
Max. acceleration Sine/Random/Shock ¹	98/73/148 g
Suspension stiffness	electronically adjusted
Effective moving mass	3.0 kg
Max. weight tested	25 kg
Weight	280 kg
Magn. stray field without/with degaussing	<8.5/<1 mT
Armature diameter	120 mm
Interlocks	Temperature, displacement, cooling air, overcurrent

1) theoretical maximum shock value. Depends on payload, amplifier, shock and shock width

2) impact by moving to static mass and frequency is possible



SCOPE OF DELIVERY, OPTIONS AND FEATURES OF THE SYSTEM

Scope of delivery:

Vibration exciter 2.7 kN
Trunnion mount
Power amplifier 4.2 kVA
Cooling blower
Connection cables (each 5 m)
Power cables (5 m)
for amplifier (CEE 16 connector)
Blower hose Ø60 mm (5 m)

Options:

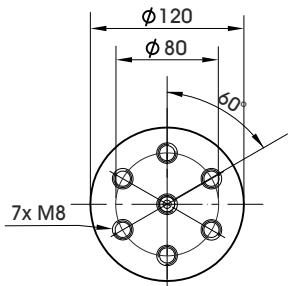
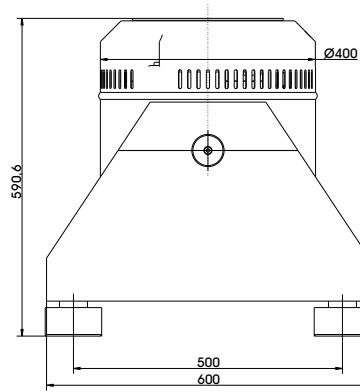
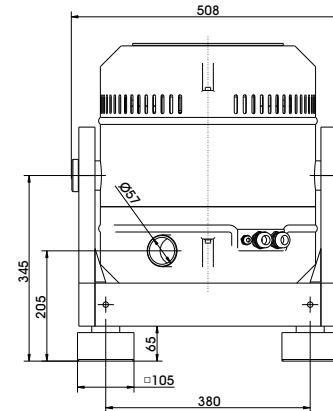
Different hole pattern of armature (different pitch diameter and/or thread inserts) at customers request
Degauss kit to reduce stray magnetic field
Squeak&Rattle (Silent operation without blower)
Thermobarrier (-40°C to +140°C)
Chamber leadthrough
Remote control (Software)
Silencer for cooling blower (Noise reduction up to 6 dB(A))
Acoustic enclosure for cooling blower (Noise reduction 15 - 23 dB(A))
Cable extension
Factory acceptance test

Options:

TIRA EMS Energy Management System
Operation with temperature-controlled cooling blower (and optional with variable field strength)

Features:

Vibration isolation < 6 Hz
Coarse filter unit
Fully automatic electronic load compensation
Electronic zero point regulation with adjustable stiffness
Automatic centering of the armature
Made in Germany
Servicehotline



Armature (Standard)

Vibration Test System TV 50350/LS-120

TECHNICAL PARAMETERS Amplifier A 1 01 1 004 T

Output power _{RMS}	4200 VA
Frequency range	DC - 4 kHz
Voltage _{RMS} , max.	105 V
Current _{RMS} , max.	40 A
Signal input voltage _{RMS} (switchable)	2.5/5/10 V
Distortion	< 0.5 %
Signal to noise ratio	> 90 dB
Field voltage, max.	100 V
Field current, max.	6 A
Weight	225 kg
Dimensions (WxHxD)	600 x 1800 x 800 mm
Power supply (Standard)	3~ / N / PE 400 V±5% 50 Hz, CEE 16
Recommended fuse protection (Standard)	16 A slow
Max. power consumption at 400 V (incl. blower)	6 kVA
Interlocks:	Overload, temperature, clipping and more
Features:	
High Signal to noise ratio of >90 dB	Noise-button
Field supply integrated	Input voltage analyzer
Mains switch and integrated line filter	Voltage clipping limiter to avoid clipping
ESD-monitoring (Protection of the system against damage)	3 Sigma peak current
Field voltage/Field current variable according to customer spec.	Electronic zero-point-regulation (TMC)



TECHNICAL PARAMETERS Cooling blower TB 0310

Volume flow rate	max. 315 m ³ /h
Total pressure difference	max. 290 mbar
Power	4 kW
Frequency	50 Hz
Hose diameter	60 mm
Hose length (Std.)	5 m
Weight	42 kg
Dimensions (WxHxD)	382 x 384 x 432 mm
Sound pressure level, max.	max. 69 dB(A)
Power supply (standard)	by amplifier rack
Max. power consumption at 400 V	5 kVA

Options:

- Silencer TB 0310-SI (Noise reduction up to 6 dB(A))
Dimensions (LxD): 308 x 82 mm
Weight: 0.58 kg
- Acoustic enclosure TB 0310-AE (Noise reduction 15 - 23 dB(A))
Dimensions (WxHxD): 795 x 841 x 836 mm
Weight: 55 kg
Hose length according to customers request (up to 10 m)



Cooling blower TB 0310



Silencer TB 0310-SI
(optional)



Acoustic enclosure TB 0310-AE
(optional)