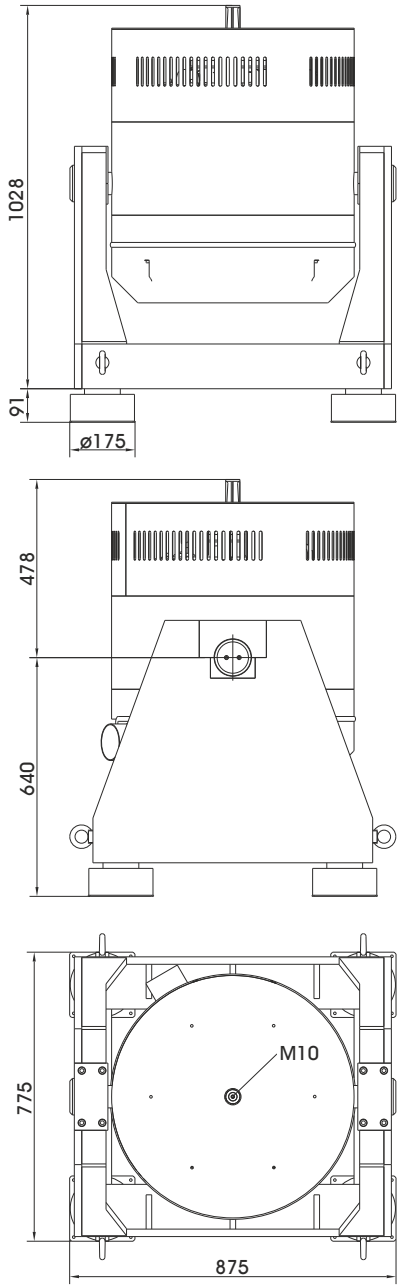
Modal Vibration Test System TV 57315-M/LSS

S 57315-M/LSS (Example drawing) Dimensions in mm

TECHNICAL PARAMETERS Modal exciter S 57315-M/LSS

Rated peak force $Sine_{pk}$/$Random_{RMS}$ [1]	15000/11000 N
Frequency range	1 - 2000 Hz
Main resonance frequency (free-swinging)	>2500 Hz
Max. displacement Peak-Peak [2]	100 mm
Max. velocity	2.0 m/s
Suspension stiffness	electronically adjustable
Effective moving mass (±5%)	18.0 kg
Total mass	1200 kg
Coupling thread	M10
Interlocks	Field coil temperature, displacement, cooling air, overcurrent





1) Random force according to ISO 5344:2004
2) only with foundation mounting
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 15 kN
Trunnion mount
Power amplifier 37.5 kVA
Cooling blower
Connection cables (each 5 m)
Power cables (5 m)
for amplifier (CEE 63 connector)
Blower hose ø140 mm (5 m)

Options:
Wheels&Rails (incl. 3m rails)
Squeak&Rattle (Silent operation without blower)
Remote control (Software)
ASM-Mode (Auto Shutdown Manager)
Silencer
for cooling blower (Noise reduction 3 - 6 dB(A))
Acoustic enclosure
for cooling blower (Noise reduction 5 - 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 pneumatic load compensation
Electronic zero point regulation with adjustable stiffness
Automatic centering of the armature
Made in Germany
Servicehotline

TIRA GmbH Eisfelder Str. 23/25, 96528 Schalkau, Germany • Phone: +49 36766 280-0 • Fax: +49 36766 280-99 • Internet: www.tira-gmbh.de • Email: st@tira-gmbh.de

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Subject to modifications

Modal Vibration Test System TV 57315-M/LSS

TECHNICAL PARAMETERS Amplifier A 3 01 11 063 T

Output power$_{RMS}$	37500 VA
Frequency range	DC - 5 kHz
Voltage$_{RMS}$, max.	212 V
Current$_{RMS}$, max.	300 A
Signal input voltage$_{PK}$	±10 V
Total Harmonic Distortion (at 70A$_{RMS}$, 200 Hz)	< 0.2 %
Signal to noise ratio	> 85 dB
Field voltage	140 V
Field current	8 A
Total mass	520 kg
Dimensions (WxHxD)	600 x 2200 x 800 mm
Power supply (Standard)	3~ / N / PE 400 V±5% 50 Hz, CEE 63
Recommended fuse protection (Standard)	63 A slow
Max. power consumption at 400 V (incl. blower)	31 kVA
Interlocks:	Overload, Temperature, Displacement, Cooling air, Phase monitoring, Emergency stop

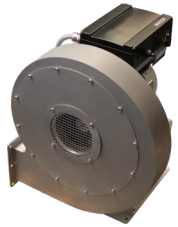
Features:
Field supply integrated
Mains switch and integrated line filter
Field voltage/Field current variable
according to customer spec.
4 Sigma peak current
Electronic zero-point-regulation (TMC)
Color Touch Screen

TECHNICAL PARAMETERS Cooling blower TB 120 FUK

Max. volume flow rate	1500 m³/h
Total pressure difference	10.2 kPa
Motor output	5.5 kW
Max. frequency	100 Hz
Hose diameter	140 mm
Hose length (Std.)	5 m
Total mass	61 kg
Dimensions (WxHxD)	487 x 637 x 487 mm
Max. sound pressure level	102 dB(A)
Power supply (standard)	by amplifier rack
Max. current consumption at 400 V	13 A

Options:
Silencer TB 120-SI (Noise reduction 3 - 6 dB(A))
Dimensions (LxD): 1100 x 160 mm
Mass: 1.2 kg
Acoustic enclosure TB 120-AE (Noise reduction 5 - 23 dB(A))
Dimensions (WxHxD): 1250 x 1393 x 1470 mm
Mass: 103 kg
Hose length according to customers request (up to 10 m)





Cooling blower TB 120 FUK



Silencer TB 120-SI
(optional)



Acoustic enclosure TB 120-AE
(optional)

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