

TECHNICAL PARAMETERS Vibration exciter S 59335/*-340

Rated peak force Sine _{pk} /Random _{RMS} ¹ /Shock _{pk} ²	35000/32000/105000 N
Frequency range	5 - 3000 Hz
Main resonance frequency	> 2400 Hz
Max. displacement Peak-Peak	50.8 mm
Max. velocity Sine/Random/Shock	2.0/1.8/3.0 m/s
Max. acceleration Sine/Random/Shock	100/88/220 g
Suspension stiffness	150 N/mm
Effective moving mass	29.0 kg
Max. payload	610 kg
Total mass with trunnion RIT/AIT/LB*	2350/2700/2250 kg
Magn. stray field std./low degaussing ³	< 1.5/< 0.8 mT
Armature diameter	340 mm
Required compressed air supply (load-dependent)	600-1000 kPa
Interlocks	Temperature, displacement, cooling air, overcurrent, compressed air

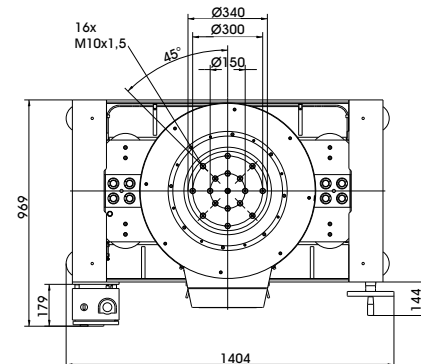
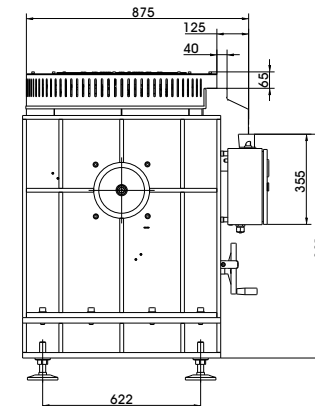
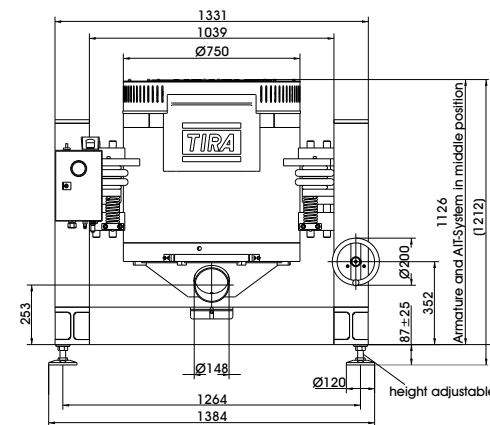
1) Random force according to ISO 5344:2004

2) Theoretical maximum shock value. Depends on payload, amplifier, shock and shock width

3) measured at 150 mm above armature inserts

For long-term tests, the load must be reduced to 80 %. Continuous operation at maximum load can cause damage.

* RIT, AIT or LB (explanation see TIRA selection guide page 7)



SCOPE OF DELIVERY, OPTIONS AND FEATURES OF THE SYSTEM

Scope of delivery:
 Vibration exciter 35 kN
 Trunnion mount (AIT, RIT or LB)
 Power amplifier 37.5 kVA
 Cooling blower with frequency converter
 Connection cables (each 10 m)
 Power cables (each 10 m)
 for amplifier (CEE 63 connector) and
 cooling blower (CEE 32 connector)
 Blower hose Ø150 mm (5 m)
 Compressed-air hose NW 7,2 (Standard) (5 m)

Options:
 Different hole pattern of armature
 (different pitch diameter and/or thread inserts)
 at customers request
 AIT-trunnion mount
 with integrated vibration isolation
 RIT-trunnion mount
 LB-frame

Options:
 Low degaussing kit to further reduce stray magnetic field
 Low Pressure unit for operation
 with vacuum chambers
 Squeak&Rattle (Silent operation without blower)
 Wheels&Rails (incl. 3m rails)
 Airglide-option (Shaker movable on air cushions)
 Thermobarrier (-40°C to +140°C)
 Chamber leadthrough
 Climatic chamber support kit
 Remote control (Software)
 ASM-Mode (Auto Shutdown Manager)
 Silencer
 for cooling blower (Noise reduction 9 - 15 dB(A))
 Acoustic enclosure
 for cooling blower (Noise reduction 5 - 23 dB(A))
 Water-cooled acoustic enclosure
 for cooling blower (Noise reduction 30 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 < 3 Hz (AIT)
 < 6 Hz (RIT;LB)
 Coarse filter unit
 Fully automatic pneumatic load compensation
 AIT fixable
 Automatic centering of the AIT-System and
 the armature
 Degauss kit to reduce stray magnetic field
 Made in Germany
 Servicehotline

TECHNICAL PARAMETERS Amplifier A 3 08 11 063

Output power _{RMS}	37500 VA
Frequency range	DC - 5 kHz
Voltage _{RMS} max.	±212 V
Current _{RMS} max.	300 A
Signal input voltage	10 V
Total Harmonic Distortion (at 70A _{RMS} , 200 Hz)	< 0.2 %
Signal to noise ratio	> 80 dB
Field voltage	105 V
Field current	75 A
Total mass	640 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	32 kVA
Interlocks:	Overload, Temperature, Displacement, Cooling air, Compressed air, Phase monitoring, Emergency stop

Features:

- Field supply integrated
- Mains switch and integrated line filter
- Lo-Field/Hi-Field (Energy-saving mode)
- Field voltage/Field current variable according to customer spec.
- 4 Sigma peak current
- Color Touch Screen

TECHNICAL PARAMETERS Cooling blower TB 7/FUK/11

Max. volume flow rate	1920 m³/h
Max. total pressure difference	16 kPa
Motor output	11 kW
Max. frequency	105 Hz
Hose diameter	150 mm
Hose length (Std.)	5 m
Total mass	113 kg
Dimensions (WxHxD)	625 x 775 x 602 mm
Max. sound pressure level	102 dB(A)
Switch box (fixation to wall):	
Mass	10 kg
Dimensions (WxHxD)	300 x 300 x 250 mm
Power supply (variable)	3~ / PE 400 V±5% 50 Hz, CEE 32
Recommended fuse protection (Standard)	32 A slow
Max. current consumption at 400 V	25 A

Options:

- Silencer TB 7/FUK-SI (Noise reduction 9 - 15 dB(A))
 - Dimensions (LxD): 1120 x 280 mm
 - Mass: 9.2 kg
- Acoustic enclosure TB 7/FUK-AE (Noise reduction 5 - 23 dB(A))
 - Dimensions (WxHxD): 1250 x 1393 x 1470 mm
 - Mass: 103 kg
- Water-cooled acoustic enclosure WWT (Noise reduction 30 dB(A))
 - Dimensions (WxHxD): 1500 x 2080 x 1200 mm
 - Mass: 800 kg
- Hose length according to customers request (up to 10 m)



Frequency converter (enclosure)



Cooling blower TB 7/FUK/11



Silencer TB 7/FUK-SI (optional)



Acoustic enclosure TB 7/FUK-AE (optional)