

TECHNICAL PARAMETERS Vibration exciter S 59335/*-640

Rated peak force Sine _{pk} /Random _{RMS} ¹ /Shock _{pk} ²	35000/32000/105000 N
Frequency range	5 - 2000 Hz
Main resonance frequency	2000 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	70/63/160 g
Suspension stiffness	150 N/mm
Effective moving mass	40.5 kg
Max. payload	610 kg
Total mass with trunnion RIT/AIT/LB*	2350/2700/2250 kg
Magn. stray field std./low degaussing ³	<2/<1 mT
Armature diameter	640 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
- 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

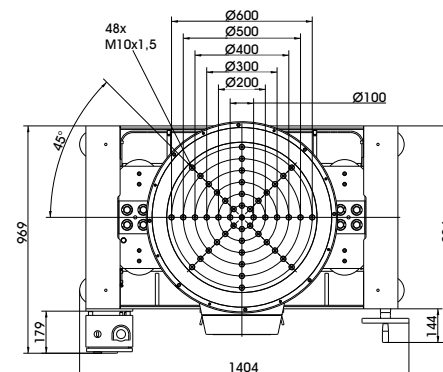
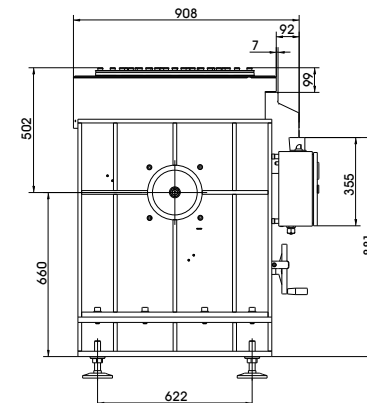
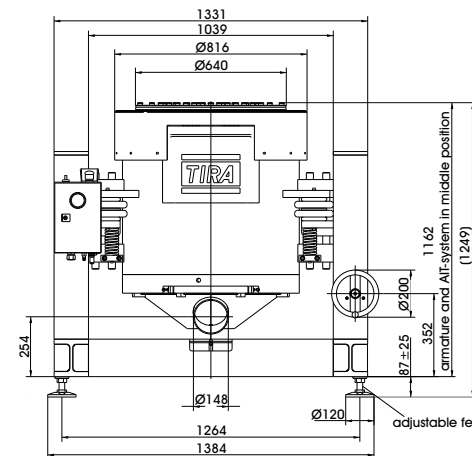
Options:

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 (Standard)	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)