

TECHNICAL PARAMETERS Vibration exciter S 59322/*-440

Rated peak force Sine _{pk} /Random _{RMS} ¹ /Shock _{pk} ²	22000/15500/66000 N
Frequency range	5 - 3000 Hz
Main resonance frequency	> 2250 Hz
Max. displacement Peak-Peak	63.5/63.5/76.2 mm
Max. velocity Sine/Random/Shock	2.0/2.0/3.5 m/s
Max. acceleration Sine/Random/Shock	80/55/200 g
Suspension stiffness	150 N/mm
Effective moving mass	28.5 kg
Max. payload	300 kg
Total mass with trunnion RIT/AIT*	1750/2000 kg
Magn. stray field ³	< 1.5 mT
Armature diameter	440 mm
Required compressed air supply	Min. 600 kPa
Interlocks	Temperature, displacement, cooling air, overcurrent, compressed air

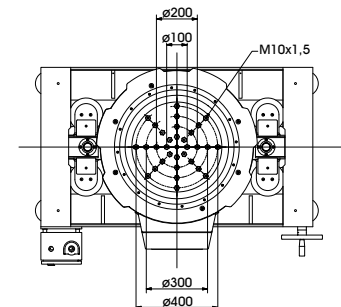
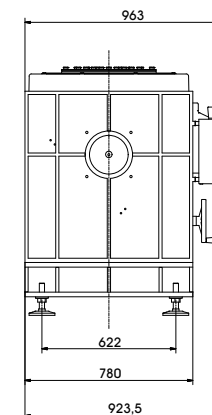
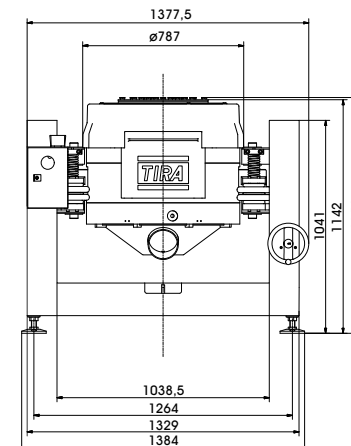
1) Random force according to ISO 5344:2004

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 or AIT (explanation see TIRA selection guide page 7)



SCOPE OF DELIVERY, OPTIONS AND FEATURES OF THE SYSTEM

Scope of delivery:
 Vibration exciter 22 kN
 Trunnion mount (RIT or AIT)
 Power amplifier 22.5 kVA
 Cooling blower
 Connection cables (each 10 m)
 Power cables (each 10 m)
 for amplifier (CEE 63 connector)
 and blower (CEE 32 connector)
 Blower hose ø150 mm (5 m)
 Compressed-air hose NW 7,2 (Standard) (5 m)

Options:
 AIT-trunnion frame (see illustration)
 with integrated vibration isolation
 RIT-trunnion frame

Options:
 Different hole pattern of armature
 (different pitch diameter and/or thread inserts)
 at customers request
 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))
 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 09 11 042

Output power _{RMS}	22500 VA
Frequency range	DC - 5 kHz
Voltage _{RMS} max.	±212 V
Current _{RMS} max.	200 A
Signal input voltage	10 V
Total Harmonic Distortion (at 70A _{RMS} , 200 Hz)	< 0.2 %
Signal to noise ratio	> 80 dB
Field voltage	140 V
Field current	62 A
Total mass	450 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	29 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)



Switch box (blower)



Cooling blower TB 7/FUK/11



Silencer TB 7/FUK-SI (optional)



Acoustic enclosure TB 7/FUK-AE (optional)