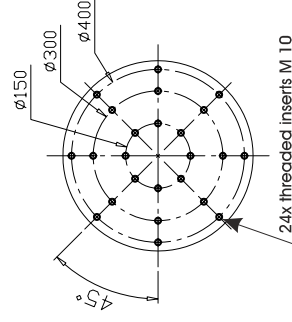
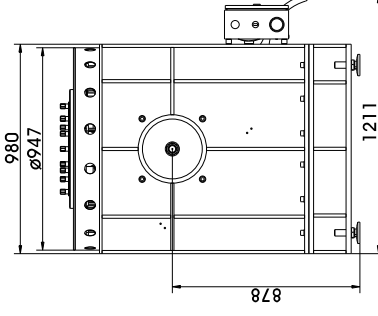
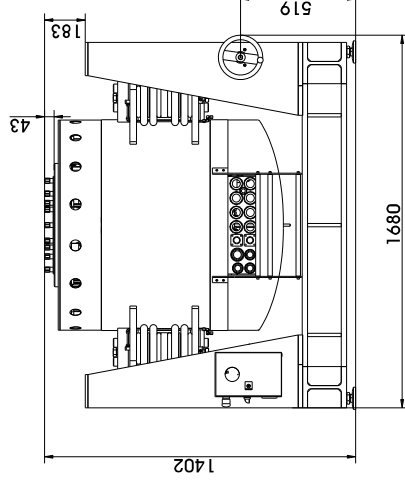


TECHNICAL PARAMETERS Vibration exciter S 59410/AIT-440

Rated peak force $Sine_{pk}/Random_{RMS}/Shock_{pk}$ ¹	100000/890000/3000000 N
Frequency range	5 - 2400 Hz
Main resonance frequency	2100 Hz
Max. displacement Peak-Peak ²	50.8 mm
Max. velocity Sine/Random/Shock	2.0/2.0/3.0 m/s
Max. acceleration Sine/Random/Shock ¹	100/90/250 g
Suspension stiffness	175 N/mm
Effective moving mass	58 kg
Max. weight tested	910 kg
Weight	4500 kg
Magnetic stray field	1.5 mT
Armature diameter	440 mm
Required compressed air supply	Min. 600 kPa
Interlocks	Temperature, displacement, water flow rate, differential pressure, overcurrent, compressed air, conductance

¹) theoretical maximum shock value. Depends on payload, amplifier, shock and shock width
²) optionally displacement of 76.2 mm (3 inch); impact by moving to static mass and frequency is possible



SCOPE OF DELIVERY, OPTIONS AND FEATURES OF THE SYSTEM

Scope of delivery:	Options:	Features:
Vibration exciter 100 kN	3 inch (76.2 mm) displacement	Vibration isolation < 3 Hz (AIT)
Trunnion mount	Different hole pattern of armature (different pitch diameter and/or thread inserts) at customers request	Fully automatic pneumatic load compensation
Power amplifier 225 kVA	Thermobarrier (-40°C to +140°C)	Frictionless hydrostatic bearing (Dual Bearing)
Cooling unit with integrated vibration isolation (AIT)	Chamber leadthrough	AIT fixable
Connection cables (each 10 m)	Climatic chamber support kit	Automatic centering of the AIT-System and the armature
Power cables (each 10 m)	Remote control (Software)	Degauss kit to reduce stray magnetic field
Water hoses with self-sealing couplings (each 10 m)	Cable/Hose extension	Shaker-water circuit with overpressure
Hydraulic hoses with self-sealing couplings (each 10 m)	Factory acceptance test	Automatic permanent monitoring of conductance
Compressed-air hose NW 7.2 (Standard) (10 m)		Integrated mains switch and line filter
		Noise-button
		Energy-saving-mode
		Input voltage analyzer
		Voltage clipping limiter to avoid clipping
		3 Sigma peak current
		Made in Germany
		Servicehotline (Monday-Friday)

Armature 440 (Standard)

TECHNICAL PARAMETERS Power Amplifier A 5 40 3 225

Output power _{RMS}	225000 VA	Features:	High Signal to noise ratio of > 90 dB
Frequency range	DC - 4 kHz	Mains switch	Lo-Field/Hi-Field button (Energy-saving mode)
Voltage _{RMS} max.	150 V	Integrated field supply	ESD-monitoring (Protection of the system against damage)
Current _{RMS} max.	1500 A	Integrated line filter	Noise-button
Load resistance, opt.	1 Ohm	Input voltage analyzer	Voltage clipping limiter to avoid clipping
Signal input voltage _{RMS} (switchable)	2.5/5/10 V	3 Sigma peak current	Field voltage/field current variable according to customer spec.
Distortion	< 0.7 %		
Signal to noise ratio	> 90 dB		
Field voltage, max.	155 V		
Field current, max.	260 A		
Weight	2400 kg		
Dimensions (WxHxD)	2840 x 2320 x 1050 mm		
Power supply (Standard)	3~ / N / PE 400 V ± 5% 50 Hz		
Recommended fuse protection (Standard)	Direct connection (terminal block)		
Max. power consumption at 400 V (incl. cooling unit)	250 A slow		
Interlocks:	1.67 kVA		
	Overload, temperature, clipping and more		



TECHNICAL PARAMETERS Cooling unit C 59410

Environmental conditions:	
Temperature	5 - 30 °C
Relative humidity	10 - 80 %
Energy transfer	max. 3 kW
Process water:	
Temperature	5 - 15 °C
Volume flow at max. supply temperature	10 m³/h
Working pressure: supply - static	≤ 8 bar (≤ 800 kPa)
Working pressure: dynamic differential pressure	≥ 3 bar (≥ 300 kPa)
Dissipated heat flow	max. 110 kW
Nominal width of supply pipes	R 1 1/4 IT (32 mm)
pH value	7 ± 1
Dimensions of dirt particles	< 25 µm
Water hardness (total/carbonate)	< 8 °dH / < 5 °dH
Weight	550 kg
Dimensions (WxHxD)	600 x 2140 x 970 mm

Features:
 Closed system → No pollution and no water loss by evaporation
 The system works with a higher pressure → No cavitation interferences at the measuring signal
 Manometers and flow meters at several places within the circuits
 Integrated conductance monitoring and demineralisation
 Fine filter with pollution monitoring
 Reduction of water consumption at part load by controlling of the process water flow
 Self-sealing couplings (free from leakage)
 Optional: Hose length according to customer specs (up to 20 m)
 Optional: Monitoring of all data, warnings and error messages at the PC

