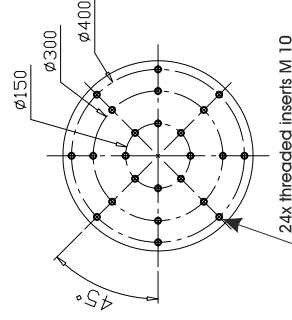
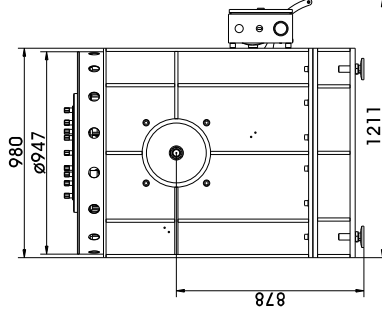
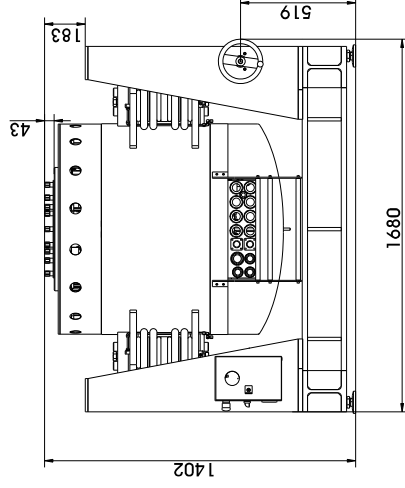


TECHNICAL PARAMETERS Vibration exciter S 59374/AIT-440

Rated peak force $Sine_{pk}/Random_{RMS}/Shock_{pk}$ ¹	74000/74000/222000 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: Vibration exciter 74 kN Trunnion mount with integrated vibration isolation (AIT) Power amplifier 180 kVA Cooling unit with integrated hydraulic unit Connection cables (each 10 m) Power cables (each 10 m) for amplifier (Direct connection) Water hoses with self-sealing couplings (each 10 m) Hydraulic hoses with self-sealing couplings (each 10 m) Compressed-air hose NW 7.2 (Standard) (10 m)	Options: 3 inch (76.2 mm) displacement Different hole pattern of armature (different pitch diameter and/or thread inserts) at customers request Thermobarrier (-40°C to +140°C) Chamber leadthrough Climatic chamber support kit Remote control (Software) Cable/Hose extension Factory acceptance test	Features: Vibration isolation < 3 Hz (AIT) Fully automatic pneumatic load compensation Frictionless hydrostatic bearing (Dual Bearing) AIT fixable Automatic centering of the AIT-System and the armature Degauss kit to reduce stray magnetic field Shaker-water circuit with overpressure Automatic permanent monitoring of conductance 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)
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Armature 440 (Standard)

TECHNICAL PARAMETERS Power Amplifier A 5 40 3 180

Output power _{RMS}	180000 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.	1200 A	1 Ohm	Noise-button
Load resistance, opt.	2.5/5/10 V	Signal input voltage _{RMS} (switchable)	Input voltage analyzer
Distortion	< 0.7 %	> 90 dB	Voltage clipping limiter to avoid clipping
Signal to noise ratio	155 V	260 A	3 Sigma peak current
Field voltage, max.	2250 kg	2840 x 2320 x 1050 mm	Field voltage/field current variable according to customer spec.
Field current, max.	3 ~ / N / PE 400 V ± 5% 50 Hz	Dimensions (WxHxD)	
Weight	Direct connection (terminal block)	Power supply (Standard)	
Dimensions (WxHxD)	224 A slow	Recommended fuse protection (Standard)	
Power supply (Standard)	120 kVA	Max. power consumption at 400 V (incl. cooling unit)	
Recommended fuse protection (Standard)	Overload, temperature, clipping and more	Interlocks:	
Max. power consumption at 400 V (incl. cooling unit)			
Interlocks:			



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

