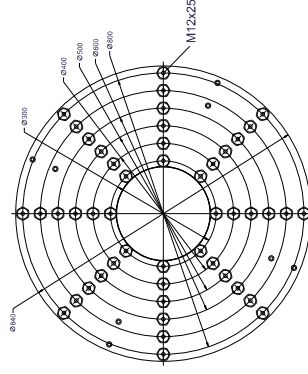
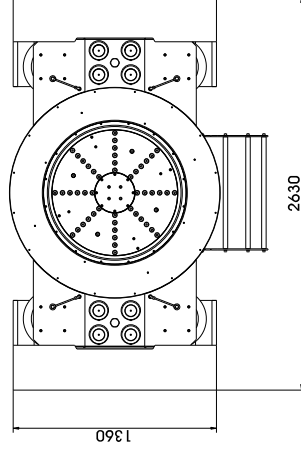
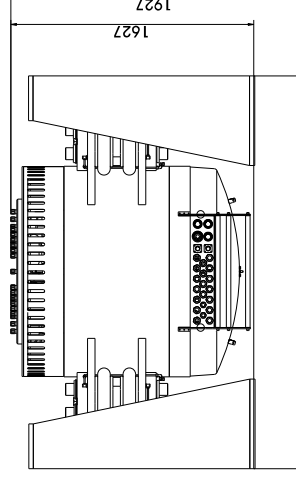


## TECHNICAL PARAMETERS Vibration exciter S 59430/AIT-840

Rated peak force $Sine_{pk}/Random_{RMS}/Shock_{pk}$ <sup>1</sup>	300000/270000/900000 N
Frequency range	5 - 1 800 Hz
Main resonance frequency	1500 Hz
Max. displacement Peak-Peak <sup>2</sup>	50.8 mm
Max. velocity Sine/Random/Shock	2.0/2.0/3.0 m/s
Max. acceleration Sine/Random/Shock <sup>1</sup>	70/70/250 g
Suspension stiffness	450 N/mm
Effective moving mass	275 kg
Max. weight tested	2500 kg
Weight	18500 kg
Magnetic stray field	1.5 mT
Armature diameter	840 mm
Required compressed air supply	Min. 600 kPa
Interlocks	Temperature, displacement, water flow rate, differential pressure, overcurrent, compressed air, conductance

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



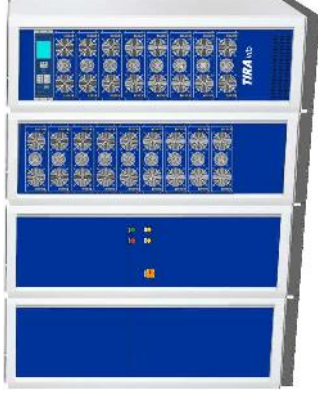
## SCOPE OF DELIVERY, OPTIONS AND FEATURES OF THE SYSTEM

<b>Scope of delivery:</b>	<b>Options:</b>	<b>Features:</b>
Vibration exciter 300 kN	3 inch (76.2 mm) displacement	Vibration isolation < 3 Hz (AIT)
Swivel frame with integrated vibration isolation (AIT)	Different hole pattern of armature (different pitch diameter and/or thread inserts) at customers request	Fully automatic pneumatic load compensation
Power amplifier 360 kVA	Thermobarrier (-40°C to +140°C)	Frictionless hydrostatic bearing (Dual Bearing)
Field power supply	Chamber leadthrough	AIT fixable the armature
Cooling unit with integrated hydraulic unit	Climatic chamber support kit	Automatic centering of the AIT-System and the armature
Connection cables (each 10 m)	Remote control (Software)	Degauss kit to reduce stray magnetic field
Power cables (each 10 m)	Cable/Hose extension	Shaker-water circuit with overpressure
for amplifier (Direct connection)	Factory acceptance test	Automatic permanent monitoring of conductance
Water hoses with self-sealing couplings (each 10 m)		Integrated mains switch and line filter
Hydraulic hoses with self-sealing couplings (each 10 m)		Noise-button
Compressed-air hose NW 7.2 (Standard) (10 m)		Energy-saving-mode
		Input voltage analyzer
		Voltage clipping limiter to avoid clipping
		3 Sigma peak current
		Made in Germany
		Servicehotline (Monday-Friday)

Armature 840 (Standard)

## TECHNICAL PARAMETERS Power Amplifier A 5 00 3 360 + external field power supply

Output power <sub>RMS</sub>	360000 VA	Features:	High Signal to noise ratio of > 90 dB
Frequency range	DC-4 kHz	Mains switch	Lo-Field/Hi-Field buffon (Energy-saving mode)
Voltage <sub>RMS</sub> max.	150 V	Integrated line filter	ESD-monitoring (Protection of the system against damage)
Current <sub>RMS</sub> max.	2400 A	Noise-buffon	Input voltage analyzer
Load resistance, opt.	1 Ohm	Voltage clipping limiter to avoid clipping	3 Sigma peak current
signal input voltage <sub>RMS</sub> (switchable)	2.5/5/10 V	Field voltage/Field current variable according to customer spec.	
Distortion	< 0.7 %		
Signal to noise ratio	> 90 dB		
Field voltage, max.	360 V		
Field current, max.	300 A		
Weight Amplifier	2200 kg		
Weight Field Power Supply	960 kg		
Dimensions Amplifier (WxHxD)	2840 x 2320 x 1050 mm		
Dimensions FPS (WxHxD)	1200 x 1800 x 800 mm		
Power supply (Standard)	3~ / N / PE 400 V ±5% 50 Hz		
Recommended fuse protection Amplifier (Standard)	Direct connection (terminal block)		
Recommended fuse protection FPS (Standard)	450 A slow		
Max. power consumption at 400 V incl. cooling unit	200 A slow		
Interlocks:	360 kVA (FPS: 140 kVA)		
	Overload, temperature, clipping and more		



Amplifier



Field power supply

## TECHNICAL PARAMETERS Cooling unit C 59430

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	24 m³/h
Working pressure: supply - static	≤ 10 bar (≤ 1000 kPa)
Working pressure: dynamic differential pressure	≥ 3 bar (≥ 300 kPa)
Dissipated heat flow	max. 220 kW
Nominal width of supply pipes	R 1 1/2 IT (40 mm)
pH value	7 ± 1
Dimensions of dirt particles	< 25 µm
Water hardness (total/carbonate)	< 8 °dH / < 5 °dH
Weight	620 kg
Dimensions (WxHxD)	800 x 2140 x 1000 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

