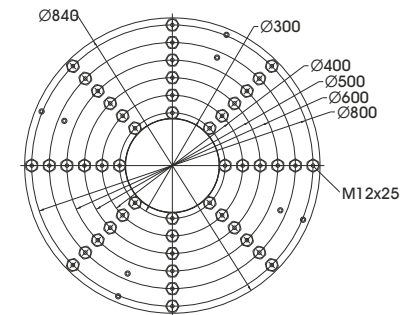
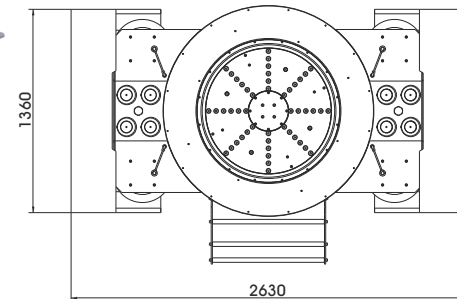
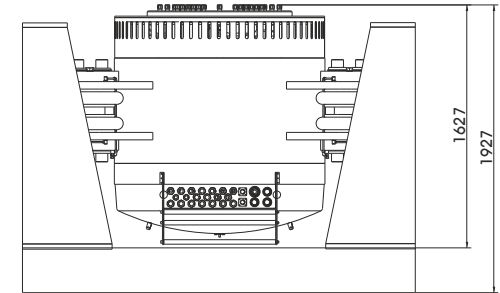


## TECHNICAL PARAMETERS

Rated peak force Sine <sub>pk</sub> /Random <sup>1</sup> <sub>RMS</sub> /Shock <sub>pk</sub> <sup>2</sup>	300000/270000/900000 N
Frequency range	5 - 2000 Hz
Main resonance frequency	1500 Hz
Max. displacement Sine/Random/Shock (Pk-Pk) <sup>3</sup>	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	70/70/250 g
Suspension stiffness	450 N/mm
Effective moving mass	275 kg
Max. payload	2500 kg
Magnetic stray field <sup>4</sup>	< 5 mT
Armature diameter	840 mm
Required compressed air supply	Min. 700 kPa
Total mass	18500 kg
Interlocks	Temperature, displacement, water flow rate, overcurrent, compressed air, conductance



Armature 840 (Standard)

1) Random force according to ISO 5344  
2) Theoretical maximum shock value. Depends on payload, amplifier, shock and shock width  
3) Impact by moving to static mass and frequency is possible  
4) 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.

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

<p><b>Scope of delivery:</b>                  Vibration exciter S 59430                  Trunnion mount                  with integrated vibration isolation (AIT)                  Power amplifier                  Field power unit                  Cooling unit with integrated hydraulic unit                  Connection cables (each 10 m)                  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)</p>	<p><b>Options:</b>  <b>TIRA EMS</b> Energy Management System                  Energy-saving option                  with continuously variable field power                    Different hole pattern of armature (different                  pitch diameter and/or thread inserts)                  at customers request                  Thermo barrier (-40°C to +140°C)                  Chamber leadthrough                  Climatic chamber support kit                  Remote display                  ASM-Mode (Auto-Shutdown-Manager)                  Cable/Hose extension                  Factory acceptance test</p>	<p><b>Features:</b>                  Vibration isolation &lt; 3 Hz (AIT)                  Fully automatic pneumatic load compensation                  Low-friction 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                  Energy-saving-mode (Field switchover)                  4 Sigma peak current                  Made in Germany                  Servicehotline</p>
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## TECHNICAL PARAMETERS Power Amplifier A 6 00 11 483 + Field power supply

Output power <sub>RMS</sub>	240000 VA	Interlocks: Overload, Temperature, Displacement, Compressed air, Phase monitoring, Emergency stop, Water flow rate, Conductance
Frequency range	DC - 5 kHz	
Voltage <sub>RMS</sub> , max.	212 V	<b>Features:</b> Multi-level field switching (energy saving mode) Mains switch and integrated line filter Field voltage/Field current variable according to customer spec. 4 Sigma peak current Color-Touchscreen
Current <sub>RMS</sub> , max.	2300 A	
Signal input voltage <sub>pk</sub>	±10 V	
Total Harmonic Distortion (at 70A <sub>RMS</sub> , 200 Hz)	< 0.2 %	
Signal to noise ratio	> 80 dB	
Power supply - Amplifier (Standard)	3~ / N / PE 400 V±5% 50 Hz Direct connection (Terminal block)	
Power supply - Field power supply (Standard)	3~ / N / PE 400 V±5% 50 Hz Direct connection (Terminal block)	
Max. power consumption at 400 V		
Amplifier (incl. cooling unit)	370 kVA	
Field power supply	110 kVA	
Recommended fuse protection Amplifier (Standard)	450 A slow	
Recommended fuse protection FPS (Standard)	200 A slow	
Dimensions - Amplifier (WxHxD)	3200 x 2200 x 900 mm	
Dimensions - Field power supply (WxHxD)	1200 x 1740 x 850 mm	
Total mass - Amplifier	2700 kg	
Total mass - Field power supply	1135 kg	



Amplifier (Illustration similar)



Field power supply

## TECHNICAL PARAMETERS Cooling unit C 59430

<b>Environmental conditions:</b>		<b>Features:</b> 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 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)
Temperature	5 - 30 °C	
Relative humidity	10 - 80 %	
Energy transfer	max. 3 kW	
<b>Process water:</b>		
Temperature	5 - 15 °C	
Volume flow at max. supply temperature	15 m³/h	
Working pressure: supply - static	≤ 8 bar (≤ 800 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)	< 1.4 mmol/l / < 0.9 mmol/l	
Dimensions (WxHxD)	800 x 2200 x 1100 mm	
Total mass	~500 kg	

