TECHNICAL PARAMETERS  Vibration exciter S 59412/AIT-480

- Rated peak force Sine\textsubscript{pk}/Random\textsubscript{pk}/Shock\textsubscript{pk} = 125000/110000/375000 N
- Frequency range = 5 - 2500 Hz
- Main resonance frequency = > 2100 Hz
- Max. displacement Sine/Random/Shock (Pk-Pk)\textsuperscript{3} = 63.5/63.5/76.2 mm
- Max. velocity Sine/Random/Shock = 2.0/2.0/4.0 m/s
- Max. acceleration Sine/Random/Shock = 100/90/300 g
- Suspension stiffness = 250 N/mm
- Effective moving mass = 76 kg
- Max. payload = 910 kg
- Total mass = 4500 kg
- Magnetic stray field\textsuperscript{4} = < 1.5 mT
- Armature diameter = 480 mm
- Required compressed air supply = Min. 600 kPa
- Interlocks: Temperature, displacement, water flow rate, differential pressure, overcurrent, compressed air, conductance

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

Scope of delivery:
- Vibration exciter T 25 kN
- Trunnion mount with integrated vibration isolation (AIT)
- Power amplifier 150 kVA
- 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)

Options:
- 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)
- ASM-Mode (Auto-Shutdown-Manager)
- Cable/Hose extension
- Factory acceptance test

Features:
- Vibration isolation < 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
- Integrated field power supply
- Energy-saving-mode
- 4 Sigma peak current
- Made in Germany
- Servicehotline

subject to modifications

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TECHNICAL PARAMETERS

Power Amplifier A 5 40 11 315

Output power, max. 150000 VA
Frequency range DC - 5 kHz
Voltage, max. ±212 V
Current, max. 1500 A
Signal input voltage 10 V
Total Harmonic Distortion (at 70A, 200 Hz) < 0.2 %
Signal to noise ratio > 80 dB
Field voltage 155 V
Field current 260 A
Total mass 2400 kg
Dimensions (WxHxD) 2840 x 2200 x 1050 mm
Power supply (Standard) 3~/N/PE 400 V±5% 50 Hz
Recommended fuse protection (Standard) 250 A slow
Max. power consumption at 400 V (incl. cooling unit) 167 kVA

Features:
- Field supply integrated
- Mains switch and integrated line filter
- Lo-Field/Hi-Field (Energy-saving mode)
- 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)
- 4 Sigma peak current
- Color-Touchscreen

Interlocks:
- Overload, Temperature, Displacement, Compressed air, Phase monitoring, Emergency stop,
- Differential pressure, Water flow rate, Conductance

Features:
- Field supply integrated
- Mains switch and integrated line filter
- Lo-Field/Hi-Field (Energy-saving mode)
- 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)
- 4 Sigma peak current
- Color-Touchscreen

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) < 1.4 mmol/l / < 0.9 mmol/l
- Total mass 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
- 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 data, warnings and error messages at the PC

TIRA GmbH
Eisfelder Str. 23/25, 96528 Schalkau, Germany • Tel.: +49 36766 280-0 • Fax: +49 36766 280-99 • Internet: www.tira-gmbh.de • Email: st@tira-gmbh.de

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