TIRA Schwingtechnik
Vibration Test Systems

Digital Amplifier A 6 00 11 147

TECHNICAL PARAMETERS Amplifier A 6 00 11 147

Max. ouput power$_{RMS}$	90000 VA
Frequency range	DC - 5000 Hz
Voltage$_{RMS}$, max.	212 V
Current$_{RMS}$, max.	700 A
Signal input voltage$_{PK}$	±10 V
Total Harmonic Distortion (at 70A$_{RMS}$, 200 Hz)	< 0.2 %
Signal to noise ratio	> 85 dB
Power supply - Amplifier	3~ / N / PE 400 V±5% 50 Hz, Direct connection
Power supply - Field power supply unit	3~ / N / PE 400 V±5% 50 Hz, Direct connection
Max. power consumption at 400 V - Amplifier	48 kVA (at operation with vibration test system TV 59355)
Max. power consumption at 400 V - Field power supply	40 kVA
Recommended fuse protection - Amplifier	225 A slow (for full extension)
Recommended fuse protection - Field power supply	125 A slow
Dimensions (WxHxD) - Amplifier	1800 x 2200 x 900 mm
Dimensions (WxHxD) - Field power supply	600 x 1740 x 850 mm
Total mass - Amplifier	1200 kg
Total mass - Field power supply	500 kg
Interlocks:	Overload, temperature, displacement, compressed air, phase monitoring, water flow rate, conductance, emergency stop

<u>Features:</u>

- TIRA Digital amplifiers can be adapted to almost all shakers existing on the market
- Flexible in output power due to modular design
- Low distortion factor of up to < 0.2 %
- High clock frequency power modules of 102 kHz ±5%
- Multifunctional LC-touch screen display
- Error indication and system parameters are shown in plain text
- Safety management monitors interlocks of the vibration test system
- Inputs for additional safety functions from external sources
- Adjustable current limit
- Adjustable output voltage offset
- Integrated mains switch and line filter
- Field voltage/current variable according to customer specification
- 4 Sigma peak current
- Multiple field switching (Energy-saving mode)



Amplifier (illustration similar)



Field power supply

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Subject to modifications