Vibration system 20 kN

- Long-time operation
- Minimum maintenance effort
- High cross-axial stiffness
- Supported by rugged frame with vibration isolators
- Automatic centering of the AIT-System and the armature
- Fully automatic pneumatic load compensation for heavy test loads
- AIT-System fixable to use the full displacement also at low frequencies and heavy loads
- Coarse filter unit
- Available as RIT, AIT or LB trunnion system
- 50.8 mm (2 inch) displacement
- Power save function (Field power reduction)
- Wheels&Rails Option (Shaker is displaceable on rails)

Shaker S 59320/RIT-340

System		TV 59320/*-340	TV 59320/*-440	TV 59320/*-640
Shaker		S 59320/*-340	S 59320/*-440	S 59320/*-640
Amplifier		A 3 07 3 034	A 3 07 3 034	A 3 07 3 034
Blower		TB 8	TB 8	TB 8
Rated peak force (N)	$Sine_{pk}$ / $Random_{RMS}$ / $Shock_{pk}$ [1]	20000/18000/60000	20000/18000/60000	20000/18000/60000
Frequency range(Hz)		5 - 3000	5 - 3000	5 - 2000
Max. displacement (mm)	Pk - Pk	50.8	50.8	50.8
Max. velocity (m/s)	Sine/Random/Shock	2.0/1.8/2.5	2.0/1.8/2.5	2.0/1.8/2.5
Max. acceleration(g)	Sine/Random/Shock[1]	82/65/163	73/58/146	50/46/101
Suspension stiffness (N/mm)		150	150	150
Effective moving mass (kg)		25.0	28.0	35.0
Max. weight tested (kg)		410	410	410
Main resonance frequency (Hz)		>2400	>2400	>1900
Weight with trunnion (kg)	RIT / AIT / LB	1650/1850/1550	1850/2100/1750	2000/2250/1900
Stray magnetic field (mT)	Std./Low degaussing	<1.5/<0.8	<1.5/<0.8	<2.5/<1
Armature (ø/mm)		340	440	640
Max. power consumption at 400 V (kVA) incl. Blower		30	30	30
Interlocks		Temperature, overtravel, airflow, overcurrent, compressed air	Temperature, overtravel, airflow, overcurrent, compressed air	Temperature, overtravel, airflow, overcurrent, compressed air

* RIT, AIT or LB

[1] Theoretical maximum shock value. Depends on payload, amplifier, shock and shock width

Vibration transfer to the floor can be reduced with a swivel-frame („RIT“=Rigid Isolated Trunnion) which has vibration isolators as a standard feature.

TIRA's AIT system („AIT“=Air Isolated Trunnion) - built into the frame - provides integrated compressed air vibration isolation for vertical and horizontal body operation. The AIT system ensures optimal vibration isolation at low frequencies and precisely guides the generator body in the direction of excitation.

Low Base “LB” generators for vertical test operation are available with vibration dampers or rail systems for better mobility.
TIRA vibration generators, amplifiers and vibration control systems form a complete test system to document product quality in conformity with international standards (such as DIN, ISO, BS, MIL, IEC, ASTM).

Subject to change without notice. Errors and omissions excepted.