KAL 9531

RIV (NEMA and CISPR) Calibrator

Datasheet

HAEFELY

Current and voltage – our passion

General Description

Radio Influence Voltage (RIV) calibrator KAL 9531 is a successor to the popular Tettex 9220a. However, KAL 9531 exceed functions of its predecessor and present competition and became a proud market unique device combining two RIV measurement standards – NEMA and CISPR – into a single device.

It is compact, easy to use and has the solid long battery operation capability. KAL 9531 offers a unique possibility to conduct backward compatible measurements with former valid and broadly used NEMA 107-1987 standard (Stoddart RIV meter) but also to follow currently valid CISPR 18-2 standard used for Electromagnetic Compatibility (EMC) measurements.

Its unique high-end design ensures high quality output sinus signal within a wide frequency range providing coverage of requirements for Factory Acceptance Test (FAT) measurements.

The RIV calibrator is easily controlled by two large buttons. Voltage and frequency values are displayed on a large display together with battery status and test standard selection.

Features	Advantages
▪ Compliance with NEMA 107 and CISPR 18-2	☑ All in one: One single device allows calibration according the latest CISPR 18-2 as well as backwards compatible with NEMA (Stoddart).
▪ Selectable and broad voltage and frequency output	☑ Optimized for routine tests and FAT/SAT
▪ Large screen ▪ Hand held	☑ Ease of use: Large display provides complete overview about the selected settings (applied standard, voltage and frequency). No need to scroll thru any complicated menu.
▪ Robust and modern design ▪ Battery operated	☑ Robustness and compactness: Light weight, solid casing and decent battery operation

Applications

- Power and Distribution Transformers
- Instrument Transformers
- Switchgears (MV/HV/GIS)
- Surge arresters
- Bushings
- Cable accessories
- Power capacitors
- Components testing

Scope of Supply

- KAL 9531 RIV calibrator
- Banana connection cables with clamps
- Plastic case
- Operating Manual

Technical Data

Electrical		
	NEMA	CISPR
Voltage range (Logarithmic scale)	10 µV – 10 mV	10 µV – 10 mV @ 300 Ω
Frequency range	100 kHz – 2’000 kHz 50 kHz steps in the complete range except 25 kHz steps in 450 kHz - 550 kHz and 850 kHz – 1150 kHz ranges	
Output Impedance	< 1.5 Ω	20 kΩ
Voltage amplitude tolerance	± 2 % (± 0.2 dB)	
Frequency tolerance	< 0.01 %	

Environmental	
Operating temperature	0 °C … +50 °C
Storage temperature	-20 °C … +70 °C
Humidity	5 ... 90 % r.h., non-condensing

Mechanical	
Weight	0.5 kg (1.1 lb) – calibrator itself 2.5 kg (5.5 lb) – calibrator including a case and accessories
Dimensions (W x D x H)	84 x 190 x 35 mm (3.3 x 7.5 x 1.4 in)
Battery	AA lithium 1.5 V battery non-rechargeable Typical operation time ≥ 200 hours @ 10 mV
Protection class	IP 50

Applicable Standards	
General	NEMA 107-1987, ANSI C63.2, NEMA 107-2016, CISPR TR 18-2
Application	IEC 61869-1, IEC 60437, IEC 60099-4, IEC 62271-203, IEEE C57.12.90 and other referring to CISPR (resp. NEMA) standard
CE conformity	EMC Directive 2014/30/EU and RoHS Directive 2011/65/EU

precision. swiss made.

Designed by Tettex INSTRUMENTS

Global Presence

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