VC-35

Vacuum Checker Vacuum interrupter tester DC Hipot tester







Continuous adjustable High voltage source 1...37,5kVDC
Designed to be used in Industrial and Power substations environment
Multi purpose testing of Vacuum Circuit breakers, cable insulation etc...
True ammeter reading (guard screened test leads)
Single scale voltmeter
Overload protected
Acoustic and visual signalisation when operated
Line variations independent
Built-in rechargable Sealed Gel Lead Acid Dry battery, 12V, 2Ah
Detachable high voltage cable with internal cable storage space
Rugged, portable and reliable, simple tu use



OVERVIEW

Vacuum circuit breakers do not last forever.

Air is leaking inside vacuum chamber, dirt on the poles and on the exterior surface of the interrupter can reduce insulation, the mechanics of the breaker can become misaligned and the distance between the poles is no longer adequate.

Any of this will change flashover point of Vacuum Circuit Breaker.

VC-35 is portable High voltage DC source for generation of negative voltages from 0...37,5kVDC.

It is designed for shop an on-site testing of Vacuum Circuit Breakers, cable insulation etc...

High Voltage is generated by high voltage transformer and a full wave capacitive voltage multiplier with silicon rectifiers. Accurate voltage measurements are made directly at the output and current measurements are taken in the return leg. Test leads are compensated for leakage currents with cable guard screen for **true ammeter reading**.

Safe discharging of both the test object and the high voltage transformer occur whenever the high voltage is turned off. **VC-35** can be used powered from it's own battery power supply, approx. 15 minutes with full battery charge.

VC-35 is built in a handy carrying case with internal cable storage space and well suited for field applications.

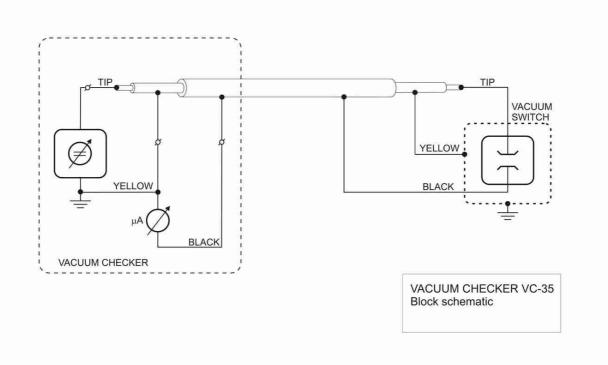


Figure 1: VC-35 Measuring principle with triaxial guard screened test leads

TECHNICAL SPECIFICATIONS

The specifications are valid at nominal input voltage, ambient temperature between 0...+50°C and relative humidity less then 90%.

Personal safety: Maximum transient current through the external load is 10 mA.

Maximum discharge time for internal high-voltage circuit is 0,5 sec.

 Output voltages:
 Model VC-35:
 0...37,5 kVDC, load > 100 Mohm, Ripple 3% max.

 Model VC-50:
 0...50kVDC, load > 100 Mohm, Ripple 3% max.

Output current: 0,5 mA max, limited

Voltmeter range: 0...50kV

Ammeter range: x1 0...5 uA x10 0...50 uA x100 0...500 uA

Signalisation: RED lamp: Overload (>0,5mA)
YELLOW lamp: High Voltage "ON"

Working temperature range:
Sound signal: High Voltage "ON "
0...+50°C (32°F...+122°F)
Storage temperature range:
-40...+70°C (-40°F...+158°F)

Storage temperature range: -40...+70°C (-40°F...+158°F)

Operating relative humidity: less then 90%RH, non condensing

Mains voltage: 100...240V, 50/60Hz, 70VA, Fuse 3,15AT max.

Built-in battery: Sealed Gel Lead Acid Rechargable 12V, 2Ah
Sonnenschein A512/2S or equivalent

Battery charger: Constant voltage, 14 hours full charge. **Dimensions:** Alu-case, 210 x 335 x 460 mm

Weight: cca 8kg (without battery) cca 9 kg (with battery)

High voltage triax cable lenght: 3 m

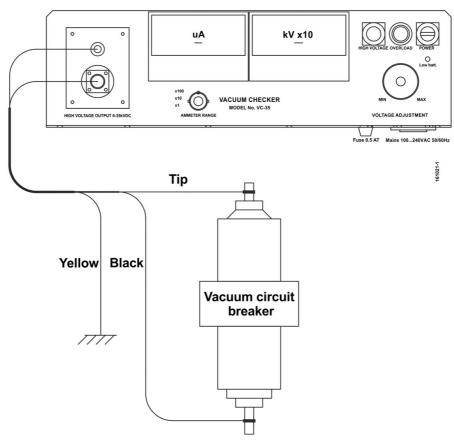


Figure 2: VC-35 Connection diagram



Figure 3: Battery compartment (VC-35B only)

ORDERING INFORMATION

When ordering please use the following part numbers:

Vacuum Checker 0...37,5kV, without battery: P/N: VC-35A VC-35B Vacuum Checker 0...37,5kV, with battery: P/N: Vacuum Checker 0...50kV, without battery: P/N: VC-50A Vacuum Checker 0...50kV, with battery: P/N: VC-50B

Application information

Applications that are described herein for any of these products are for illustrative purposes only. Koncar-EASN make no representation or warranty that such applications will be suitable for the specified use without further testing or modification.

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