

Associated Research 6554SA Quadchek 4-in-1 Automated Electrical Safety Analyzer

The QUADCHEK Electrical Safety Compliance Analyzer is another step in the evolution of electrical safety testing instrumentation. The QUADCHEK provides in a single instrument for the three most common high voltage tests (AC Hipot, DC Hipot, Insulation Resistance) together with a high current Ground Bond Tester. The 4-in-1 capabilities of QUADCHEK make it versatile enough to test to UL, CSA, VDE, IEC, TUV, and other agency requirements. The built-in IEEE interface makes QUADCHEK an ideal choice for automation applications.

Functional Specifications

DIELECTRIC WITHSTAND TEST MODE	
INPUT	115 VAC ($\pm 15\%$), 47-63 Hz, Single Phase 230 VAC ($\pm 15\%$), 47-63 Hz, Single Phase User Selectable
OUTPUT RATING	5kV @ 40mA, (AC & DC)
OUTPUT ADJUSTMENT	0 - 5kV @ 40 mA (AC & DC), 10 volt/step 0 - 40.0 mA (AC & DC), 0.1 mA/step
HIGH TRIP RANGE	0.1 - 40.0 mA, (AC & DC) Accuracy $\pm ((2\% \text{ of setting} + 0.02 \text{ mA}))$
LOW TRIP RANGE	0.0 - 39.9 mA, (AC & DC) Accuracy $\pm ((2\% \text{ of setting} + 0.02 \text{ mA}))$
FAILURE DETECTOR	Audible & Visual
VOLTAGE DISPLAY	0.00 to 5.00 kV Full Scale, LED Display Accuracy - Reading $\pm ((2\% \text{ of reading} + 1 \text{ count}))$ Setting $\pm ((2\% \text{ of setting} + 5 \text{ volts}))$
CURRENT DISPLAY	0.05 to 9.99 mA, 10.0 to 40.0 mA, LED Display Accuracy - Reading $\pm ((2\% \text{ of reading} + 0.02 \text{ mA}))$
DC OUTPUT RIPPLE	$\leq 4\%$ RMS (5 kVDC, 40 mA)
AC OUTPUT WAVE FORM	Sine wave, Distortion: $\leq 1\%$
AC OUTPUT FREQUENCY	50 or 60 Hz ± 100 PPM, User Selectable
OUTPUT REGULATION	1% of setting from no load to full load
DWELL TIMER	1 - 999 seconds in 1 second increments or continuous, accuracy ± 0.1 seconds.
RAMP TIMER	0 - 99 seconds in 1 second increments accuracy ± 0.1 seconds.

INSULATION RESISTANCE TEST MODE	
OUTPUT VOLTAGE RANGE	200 - 1000 Volts, 1 volt/step
VOLTAGE METERING	3 Digits, 0.00 - 1.00 kV Accuracy $\pm ((2\% \text{ of reading} + 1 \text{ count}))$
RESISTANCE METERING	3 Digits, 9.99 G Ω Full Scale Accuracy $\pm ((2\% \text{ of reading} + 1 \text{ count}))$
LIMIT RANGES	HI - Limit range - 0 - 9999 M Ω LO - Limit range - 0 - 9999 M Ω
DWELL TIMER	1 - 999 seconds in 1 second increments Accuracy ± 0.1 seconds

GROUND BOND TEST MODE	
OUTPUT VOLTAGE	Adjustable (5.0 to 12.0 volts AC, 0.1 volt/step) Setting Accuracy - $\pm (2\% \text{ of setting} + 0.1 \text{ volt})$
OUTPUT FREQUENCY	50 or 60 Hz, User Selectable

OUTPUT CURRENT	Adjustable (10.0 to 30.0 amps, 0.1 amp/step)
CURRENT DISPLAY	3 digits, 30.0 amps full scale, LED Display Accuracy \pm (2% of reading + 1 count)
TRIP RANGE	1 to 600 m Ω
DWELL TIMER	1 - 999 seconds in 1 second increments or continuous. Accuracy \pm 0.1 seconds.