



CR 600 Chattering Relay

for DO-160 Section 19.3.5 Testing

Features

- Coil Voltage: 24 VDC
- Coil Current: 84 mA
- Contact Rating: 30A
- Typical Pulse Voltage: >700 Vpp
- Includes oscilloscope connection points for voltage monitoring

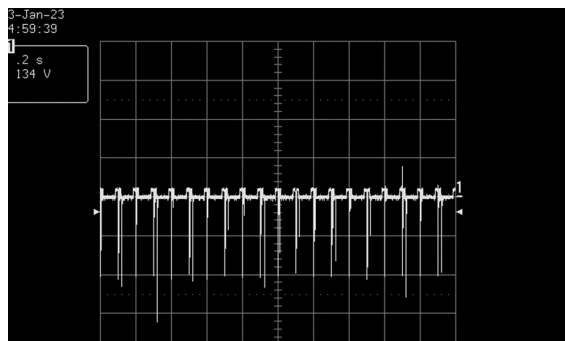


Figure 1 – Example of output from the CR 600 when adjusted to yield a pulse repetition rate of eight to ten pulses per second

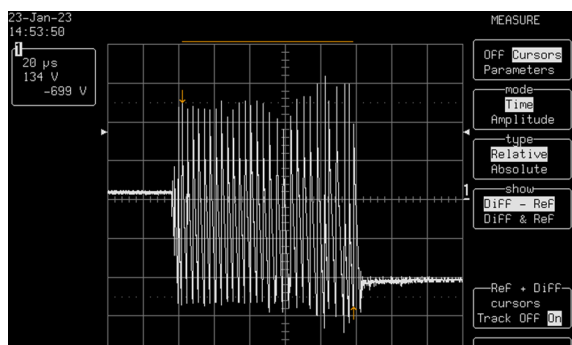


Figure 2 – Example of output from the CR 600 when adjusted for a pulse sequence with an amplitude greater than or equal to 600 Vpp, and a total duration of 50 to 1000 microseconds

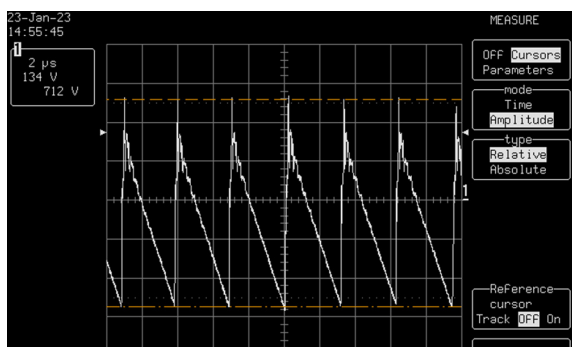


Figure 3 – Example of output from the CR 600 when adjusted for a repetition period of 0.2 to 10 microseconds

The AE Techron **CR 600 Chattering Relay** is a cost-effective, rugged yet elegant solution to the DO 160 Section 19.3.5 “Spikes Induced into Interconnecting Cables” test requirement.

Internally built around a 50A high-current relay with two independent sets of contacts, the CR 600 was engineered for double the life before refurbishment.

The CR 600 uses quick-connect, touch-proof connectors to ensure efficient setup and a safe test environment. It also includes quick-clip test points for oscilloscope monitoring of tests in progress.

When driven from an intermittent voltage source like the AE Techron DSR 100-25 and utilizing test waveform, “Section 19.3.5 CR 600”, the CR 600 output meets the voltage (600V), duration (50 – 1000 μ s) and repetition-period (0.2 to 10 μ s) requirements specified by the DO-160 standard.

For testing to these Specifications:

- DO 160 Section 19.3.5

Product Specifications

Performance

Coil Voltage: 24 VDC

Coil Current: 84 mA

Contact Rating: 30A

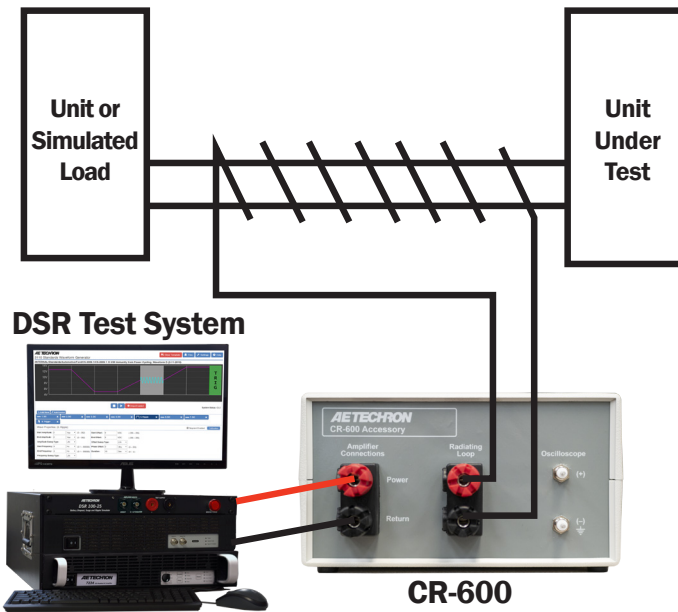


Figure 2 – Sample Application: Test Setup for RTCA DO160 Section 19.3.5 using the CR 600

Typical Pulse Voltage: >700 Vpp

Controls and Connectors

Amplifier Connections:

Dual binding posts

Radiating Loop:

Dual binding posts

Oscilloscope:

Dual turret connectors

Physical Characteristics

Case:

Injection-molded plastic

Operating Conditions,

Temperature: 10°C to 40°C (50°F to 104°F)

Humidity: 70% or less, non-condensing

Recommended Ambient Temperature:

25°C (77°F)

Cooling:

Natural air convection

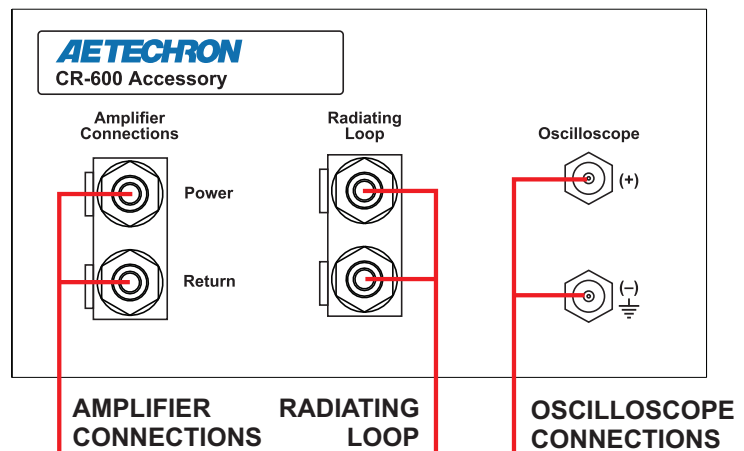


Figure 3 – CR 600 Connectors

Weight:

1.5 lbs. (0.68 kg)

Dimensions (HxWxD):

3.25 in. x 6.25 in. x 7.25 in. (8.3 cm x 15.9 cm x 18.4 cm)

AE Techron Sales Representative