

## CDS Series – Unipolar Cable Fault Locator

### Controlled Energy Capacitor Discharge and Fault Burners, 0-20kV and 0-36kV



Model CDS-3616U



Model CDS-2010U

#### Description

The CDS series of **Controlled Energy** fault locators are self contained, semi-portable combination test sets for testing and fault locating in primary cable systems. They are designed to provide constant energy at each of three different switch selectable output voltages. The controlled energy feature provides full energy at each output voltage tap, allowing the user to thump at a lower voltage with a higher energy while minimizing further cable damage.

**Why Controlled Energy?** Thumpers with high energy (Joule) ratings that are not “controlled or constant energy” only provide high energy at the maximum output voltage. A thumper with 3200 J rating at 36 kV only supplies 800 J at 16 kV. A controlled energy thumper provides the maximum available energy at the high end of each voltage tap.

For simplified fault locating, all CDS thumpers can be combined with our TDR-20 radar unit. The TDR-20 drastically reduces fault locating times and stresses imposed on the cable during thumping. The internal Arc Reflection Filter is compatible with other radar units on the market and allows for future upgrades.

#### Features

- Combination Hipot, Burner and Fault Locator
- Constant energy at each output voltage setting
- Adjustable thump (impulse) repetition rate, from 3 to 9 seconds
- Motorized output voltage tap switch
- Internal Arc Reflection Filter, standard on all units
- Simplified Controls for minimal operator training
- Zero Start high voltage interlock
- Highest burning capability, compared to other units of same size
- Single pulse or continuous discharge modes
- Side mounted storage reel to hold cables and accessories
- Output vise clamps for assured contact to test cable and ground
- Single piece construction
- Operation from either line, generator or inverter
- Manually operated internal heater to minimize excessive moisture buildup
- Ruggedized transient protected meters



#### HIGH VOLTAGE, INC.

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High Voltage, Inc. designs and manufactures high voltage test equipment for utility and industrial applications. Also available are Very Low Frequency (VLF) high voltage AC test sets, DC power packs, AC and DC instrumented test sets, cable fault locators and other products.

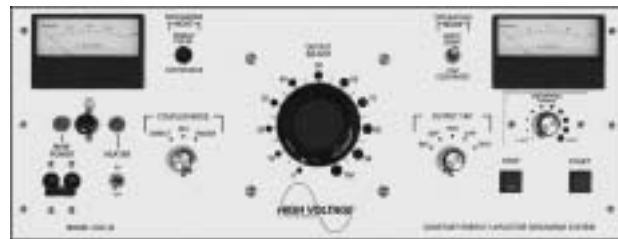
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Technical Data			
	CDS-2010U	CDS-3616U	CDS-3632U
<b>Input</b>	120 V, 50/60Hz, 20 A 230 V, 50/60Hz, 10 A (F Suffix)	120 V, 50/60Hz, 25 A 230 V, 50/60Hz, 15 A (F Suffix)	
<b>Output/ Burn Current</b>	0-5/10/20 kVdc 400/200/100 mAdc	0-9/18/36 kVdc 280/140/70 mAdc	
<b>Capacitor Discharge Energy</b>	1 kJ at all taps at full output voltage	1.6 kJ at all taps at full output voltage	3.2 kJ at all taps at full output voltage
<b>Duty</b>	Continuous		
<b>Repetition Rate</b>	3-9 Seconds		
<b>Voltmeter</b>	0-20 kVdc		
<b>Current Meter</b>	0-400 mAdc		
<b>Cable Lengths</b>	Input: 10 ft. Output Cable: 50 ft, 6 ft. with reel Ground Lead: 25 ft.	Input: 10 ft. Output Cable: 100 ft, 6 ft. with cable reel Ground Lead: 50 ft.	
<b>Size</b>	27" w x 27" d x 48" h 686 mm w x 686 mm d x 1219 mm h	24" w x 26" d x 44" h 610 mm w x 660 mm d x 1120 mm h Width increases to 30"/762 mm with cable rack	
<b>Weight</b>	260 lbs/118 kg	375 lbs/170 kgs	450 lbs/204 kgs



CDS-2010U Control Panel



CDS-3616U Control Panel

### Configuration

The CDS-2010U can be configured for either van mount or portable operation while the CDS 36 series is designed for permanent van or substation mounting. The standard configuration for the CDS-2010U includes 50 ft. output/return cable, while the CDS 36 series includes 100 ft. When either thumper is ordered with an optional cable reel, the output cable length is reduced to 6 ft. and terminated with an MC connector. Custom cable lengths are also available.

#### Optional Accessories

- TDR-20 - Fault locating radar
- CRR-125 - Cable reel with 125 ft. of output and ground leads.
- DAD - Dual Channel Directional Acoustic Detector

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