

# **CDS Series – Cable Fault Locator**

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



Model CDS-3616U

# HIGH YOUTAGE HIGH YOUTAGE

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 18 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 radar unit. The TDR 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 6 10 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

Also available: VLF Thumper Model VT30, the complete URD cable care tool



HIGH VOLTAGE, INC.

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# **CDS Series – Unipolar Cable Fault Locator**

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

Technical Data			
	CDS-2010U	CDS-3616U	CDS-3632U
Input	120 V, 60Hz, 20 A 230 V, 50/60Hz, 10 A	120 V, 60Hz, 25 A 230 V, 50/60Hz, 15 A	
Output/ Burn Current	0-5/10/20 kVdc 400/200/100 mAdc	0-9/18/36 kVdc 280/140/70 mAdc	
Capacitor Discharge Energy	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
Duty	Continuous	Continuous	
Repetition Rate	6-10 Seconds	6-10 Seconds	
Voltmeter	3.5 inch, scaled 0-20 kVdc	3.5 inch, scaled 0-40 kVdc	
Current Meter	3.5 inch, scaled 0-400 mAdc	3.5 inch, scaled 0-400 mAdc	
Cable Lengths	Input: 10 ft. Output Cable: 50 ft, 12 ft. with reel Ground Lead: 25 ft.	Input: 10 ft. Output Cable: 100 ft, 12 ft. with cable reel Ground Lead: 50 ft.	
Dimensions	27″ w x 27″ d x 48″ h 686 mm w x 686 mm d x 1219 mm h	25'' w x $29''$ d x $44.5''$ h 635 mm w x 737 mm d x 1130 mm h Width increases to $30.25''/768$ mm with cable rack	
Weight	260 lbs/118 kgs	375 lbs/170 kgs	450 lbs/204 kgs

Note: For 230 volt line input, an F is suffixed to the model number.



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 3616U and 3632U are designed for permanent van or substation mounting. The standard configuration for the CDS-2010U includes 50 ft. output/return cable, while the CDS 3616U and 3632U include 100 ft. When either thumper is ordered with an optional cable reel, the output cable length is reduced to 12 ft. and terminated with an MC connector. Custom cable lengths are also available.

### **Optional Accessories**

- TDR Fault locating radar
- CRR -100T Cable reel with 100 ft. of output and ground leads.
- · DAD Dual Channel Directional Acoustic Detector



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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.