

MODEL HF-15AC/AR

Digital High Frequency Sine Wave Spark Tester

- >> 3 kHz high frequency spark testing
- >> Versatile control configurations & communication options
- >> Test voltages 500v to 15KV rms
- >> Digital voltage and fault count displays
- >> Wide range of electrode styles
- >> CE approved

HF-15AC/BD-12
Shown with X3A Horn/Light Tower



The HF-15AC/AR, Clinton's new versatile Digital High Frequency Sine Wave Spark Tester, will fit almost anywhere on the wire line. It combines all the power of the Clinton 3kHz design with digital circuitry that simplifies setup, use, and calibration.

The HF-15AC/AR can work either as a standalone spark tester or as part of a fully process-controlled quality system. It is available as a compact All-in-One system, or it may be configured in two pieces: a separate 19" display and a remote spark tester located as far as 200 feet away.

Equipped with a 2" long bead chain electrode, the spark tester meets UL and CSA spark test standards for a wide variety of small products moving as fast as 3333 FPM; other electrode designs are available for a wide range of product sizes and shapes.

Digital test voltage and fault count displays are vivid and easy to read. For operator protection, a safety interlock switch removes high voltage when the electrode cover is lifted. Wiring and setup are done externally - there is no need to open up the unit. Mem-

brane switches on the display panel allow the operator to configure the spark tester for respooling or extrusion modes or to set the length of time that process control relay contacts are energized after a fault occurs. The form C relay contacts are accessible on a rear panel connector for easy wiring to external alarms, lights or machinery that are to be controlled by the spark tester.

The HF-15AC

The spark tester is an All-in-One configuration-- display panel and spark tester-- with an RS-485 serial interface that can receive and respond to digital commands. Spark tester voltage can be set or verified, the fault count and interlock status can be monitored, and many other tasks can be performed by computer or PLC.

The HF-15AR

This configuration is a remote spark tester (without a display) with an RS-485 serial interface that can receive and respond to digital commands from a computer or PLC. Spark tester voltage can be set or verified, the fault count and interlock status can be monitored, and many other tasks can be performed through the interface.

The HF-15AR with ARC Remote Display

This arrangement allows the ARC Remote Display to be rack mounted or panel mounted as far as 200 feet from the spark tester. A standard RS-485 serial interface enables the unit to receive and respond to digital commands from a computer or PLC.



HF-15AR/BRIA



HF-15AC/BD-22S



HF-15AR/BD-14
with ARC

(Computer shown in photos not included nor offered by CIC.)

Clinton
INSTRUMENT COMPANY

HF-15AC/AR SPECIFICATIONS

Voltage Test Range approx. 500 volts to 15KV rms.
 Min. test voltage varies on electrode design.

Voltage Display red 3-digit 14.2mm high LED display, accuracy 2% of reading.

Test Frequency..... 1000 to 3500 Hz, depending on load capacitance.

Output Power 4 ma. resistive, 40 ma. capacitive.

Fault Indication red 3-digit 14.2mm high LED display; amber indicating light.

Fault Resolution variable with electrode length to comply with UL fault resolution requirements, which specify detection of faults no farther than 24 inches apart at any wire line speed.

Detection Sensitivity..... Mode 1 per British Standard BS EN 50356
 Mode 2 per NEMA Standard WC 56

Operating Modes Continuous HV/Remove Voltage on Fault, Momentary Process Control/Latch until Reset.

Process Control Relay form "C" contacts rated 1 amp max @ 240VAC, 2 amps max @ 120VAC, for both NO and NC circuits. Front panel or external reset. In non-latch modes, closure time is adjustable in 10 millisecond increments from 50 milliseconds to 2-1/2 seconds.

Power Requirements 100 or 120VAC, 2 amps, 200 or 240VAC 1 amp (selectable), 49-61 Hz.

Communications..... Analog (optional)
 Profibus (optional)
 Ethernet (optional)

HF-15AC/AR ELECTRODES

Bead Chain Assemblies:

BD-12 Bead Chain Assembly 1" Product Diameter, 2" along wire line.
 BD-13 Bead Chain Assembly 1" Product Diameter, 3" along wire line.
 BD-14 Bead Chain Assembly 1" Product Diameter, 4" along wire line.
 BD-15 Bead Chain Assembly 1" Product Diameter, 5" along wire line.
 BD-22S Bead Chain Assembly 2" Product Diameter, 2" along wire line.

Brush Assemblies:

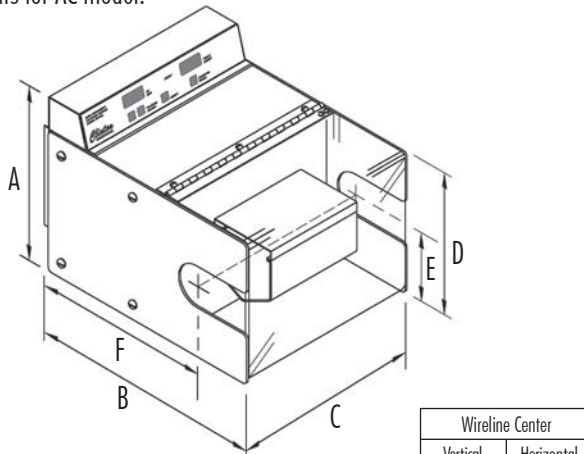
BR-1A Brush Assembly Phosphor Bronze 1" Product Diameter.
 BR-1ALZ Brush Assembly Phosphor Bronze 1" Product Diameter, 10KV max.
 BR-3A Brush Assembly Phosphor Bronze 3" Product Diameter.
 BR-3ALZ Brush Assembly Phosphor Bronze 3" Product Diameter, 10KV max.
 BRTC-6LZ Brush Assembly Tape Cable 6", 10KV max.
 BRTC-12LZ Brush Assembly Tape Cable 12", 10KV max.
 FB-12 Fiberlite Brush Assembly.

Roller Assemblies:

R-46 Roller Assembly. .25" (6mm) max. Product Thickness,
 6" (150mm) Product Width.

Please consult factory for help in choosing equipment for specific applications.

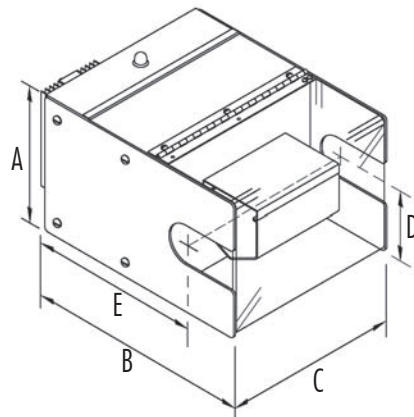
Measurements for AC model.



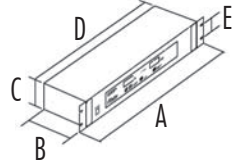
Wireline Center	
Vertical	Horizontal

	A	B	C	D	E	F
BD-12, 13, 14, BR-1A, BR-1ALZ, FB-12	7.50" [190.4mm]	13.91" [353.38mm]	11.52" [292.6mm]	7.50" [190.4mm]	3.75" [95.3mm]	10.00" [254.0mm]
BD-22, BDR-22	8.52" [216.4mm]	15.41" [292.2mm]	11.59" [294.3mm]	8.52" [216.3mm]	4.28" [108.7mm]	11.00" [279.4mm]
BD-15	9.44" [239.7mm]	16.31" [414.2mm]	12.53" [318.3mm]	9.44" [239.6mm]	4.72" [119.9mm]	11.45" [290.4mm]
BR-3A, BR-3ALZ	9.44" [239.7mm]	17.81" [452.3mm]	12.53" [318.3mm]	9.44" [239.6mm]	Call Factory for Details	
BRTC-6	9.62" [244.2mm]	19.08" [484.5mm]	12.53" [318.3mm]	9.62" [244.2mm]	Call Factory for Details	

Measurements for models AR with optional ARC.



ARC display dimensions.



A	19.00"
B	5.75"
C	3.50"
D	17.00"
E	1.75"

Wireline Center	
Vertical	Horizontal

	A	B	C	D	E
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Specifications subject to change without notice. 2/09 EN