MODEL AC-30A

Digital Mains Frequency Spark Tester

- Separate components for versatile installation
- Rugged electrode with visual/audible alarms
- Automatic bead chain placement
- Flexible communication options for computer controlled lines

AC-30A/BD-A418 shown
with an ARC remote display & the X3A Horn/Light Tower

The AC-30A, Clinton's new Digital 30KV Mains Frequency Spark Tester for large wire, can be installed almost anywhere on the wire line. The system is comprised of 3 separate components:

- rugged electrode with visual/audible alarms, simple string-up, and automatic bead chain placement for full coverage of large products
- digital control unit that can be located up to 200 feet away
- adjustable height electrode stand

The control unit features digital test voltage and fault count displays that are vivid and easy to read. Wiring and setup are done externally--there is no need to open up the unit. The digital display allows the operator to configure the spark tester for extrusion or rewind mode, or to set the length of time that process control relay contacts energize after a fault occurs.

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. Additionally, the AC-30A may be integrated into computer-controlled lines with a standard RS-485 interface or through optional analog, Profibus, and Ethernet communication modules.

For operator protection, a safety interlock switch removes high voltage when the electrode cover is lifted.

BD-A418 Split Electrode Design

Clinton
INSTRUMENT COMPANY

AC-30A SPECIFICATIONS

Voltage Test Range .....Approx. 1Kv to 30kV rms, depending on electrode type and product under test.

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

Test Frequency.....Mains frequency 50 or 60Hz.

Output Current.....6ma resistive current.

Fault Indication .....Red 3-digit 14.2mm high LED non-volatile display; amber indicating front panel light; audible alarm; flashing amber stack light (X3A).

Fault Resolution .....2 to 200 milliseconds, adjustable.

Detection Sensitivity.....Less than 600 μa. at 3kV.

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

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

Communication .....RS-485 Serial Interface; Analog (optional); Profibus (optional); Ethernet (optional).

Line Speed .....UL and CSA formula...(9 cycles)
Line Speed = 5/9 x frequency x electrode length in inches.
BS EN50356 formula...
Line Speed = 1.2 meters per minute for each millimeter of electrode length.

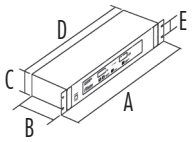
Input Power Requirements...120 or 240VAC, 2 amps, 49-61Hz (automatically internally switched)
Optional 100 or 200 VAC, 2amps, 49-61Hz.

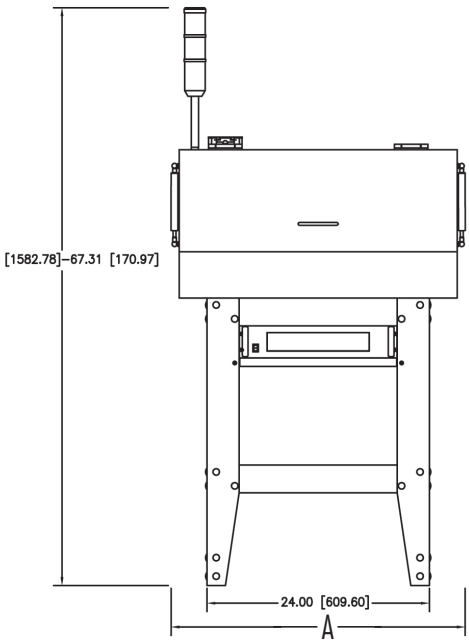
Safety .....IEC 1010-1

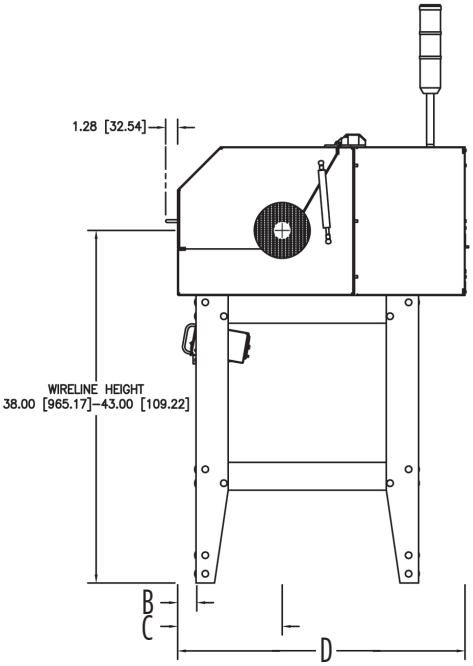
Please consult factory for help in choosing equipment for specific applications.

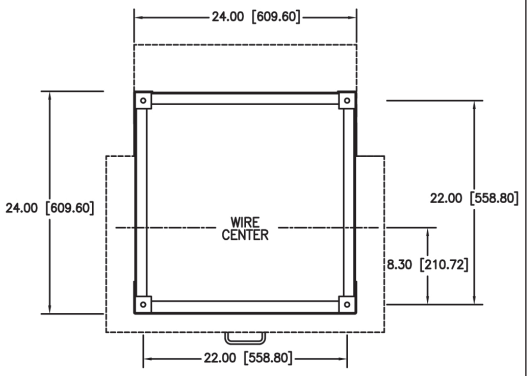
A	19.00" [482.6]
B	5.75" [146.05]
C	3.50" [88.9]
D	17.00" [431.8]
E	1.75" [44.45]

ARC display dimensions.









INCHES [MILLIMETERS]

Measurements:

Product size: Max 2" diameter

Model:	A	B	C	D	Electrode Length	UL 60Hz	UL 50Hz	BS EN50356
BD-A224	49.73[1263.04]	N/A	9.30 [236.14]	29.02 [737.03]	24 [609.6]	800fpm,245mpm	667fpm,204mpm	2400fpm,736mpm
BD-A230	49.73[1263.04]	N/A	9.30 [236.14]	29.02 [737.03]	30 [762]	1000fpm,305mpm	833fpm,254mpm	3000fpm,914mpm
BD-A236	49.73[1263.04]	N/A	9.30 [236.14]	29.02 [737.03]	36 [914.4]	1200fpm,368mpm	1000fpm.,306mpm	3600fpm,1104mpm

Product size: Max 4" diameter

BD-A406	31.73 [805.84]	2.06 [52.40]	11.28 [286.54]	31.00 [787.43]	6 [152.4]	200fpm,61mpm	167fpm,51mpm	600fpm,184mpm
BD-A412	31.73 [805.84]	2.06 [52.40]	11.28 [286.54]	31.00 [787.43]	12 [304.8]	400fpm,122mpm	333fpm,102mpm	1200fpm,368mpm
BD-A418	31.73 [805.84]	2.06 [52.40]	11.28 [286.54]	31.00 [787.43]	18 [457.2]	600fpm,183mpm	500fpm,153mpm	1800fpm,552mpm

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