



## Features

- Long maintenance-free life
- Direct upgrade equivalent replacements for carbon arresters
- Extremely fast and repeatable response to transients
- Equal performance on both positive and negative surges
- “Back-up” air gap and fail short mechanism
- Listed per UL 497

## 2022 Series – Well-Type Gas Tube Protectors

Bourns 2022-60-A and 2022-84-A Gas Tube Protectors provide high reliability protection against overvoltage transients. Both models provide a built-in “back-up” air gap in the unlikely event the gas tube vents or loses its hermetic seal. Both units are direct replacements for carbon-type arresters.

The 2022-60-A 1/2" design is a completely contained protector assembly compatible with ATT, Reliable Electric, Northern Telecom (Cook Electric) and protected terminal blocks.

The 2022-84-A 7/16" design is a completely contained protector assembly compatible with Western Electric/ATT building entrance and OSP terminal protected terminal blocks.

### Characteristics

Test Methods per IEEE C62.31, UL 497, RUS PE80, Telcordia GR-1361.

DC Breakdown @ 100 V/sec .....	300-500V
Impulse Breakdown	
100 V/μsec .....	600V
10 kV/μsec .....	850V
100 V/μsec, vented .....	1000V
Insulation Resistance @ 100 V .....	>10 <sup>9</sup> Ω
Capacitance @ 1 kHz .....	<15 pF
DC Extinguishing @ 52 V, 135 V, 150 V .....	<150 msec
Impulse Life Characteristics	
3000x 10 A .....	10/1000 μsec
300x 100 A .....	10/1000 μsec
100x 300 A .....	10/1000 μsec
400x 500 A .....	10/1000 μsec
25x 2 kA .....	10/250 μsec
20 kA .....	8/20 μsec
AC Life Characteristics	
20x 10 A .....	1 sec
60x 1 A .....	1 sec
65 A .....	11 cycles

### Product Dimensions

