



3B1E & 4B1E

5 PIN - Heavy Duty Gas Tube - Surge Protection Module

Product Specifications

UL 497 Primary Protector for Communication Circuits

The 3B1E is a premium 5 pin, 3-element gas tube protector module that is designed to provide excellent transient and power fault protection for most standard telephone line applications.

The 3-element gas tube provides superior balanced protection. An overvoltage condition on either side of the circuit will result in the triggering of the gas tube. The ionized gas in the common chamber provides a low impedance path to ground for both sides of the circuit.

The 4 - Series features PTC (positive temperature coefficient) technology. These optional self-resetting current limiters provide effective protection from 'sneak current' faults. The PTC is vastly superior to the heat coil solution, which requires that the module be replaced after each 'sneak current' event.

Heavy Duty Surge Handling Capability

Superior Common Chamber Design

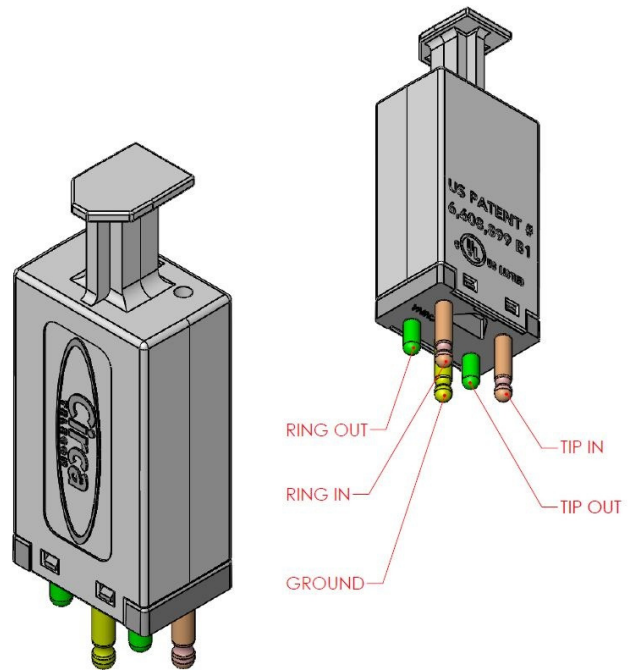
Balanced Operation

UL Listed and RUS Approved

Design to meet Telcordia Standards

Integrated Test Points

ISO 9001 Certified Manufacturer



Ordering Information

Model Number	Stock Code	Application	Color	Clamping Voltage
3B1E	770200	Life Safety and Central Office Environments	Black	350V
4B1E	770202	Life Safety and Central Office Environments w/PTC Current Limiter	Black	350V
3B3E	770201	Life Safety and Central Office Environments	Red	350V

RUS Approved Material - 2011 Edition RUS Publication 344-2 - Section 4.1.3 and 4.2.1

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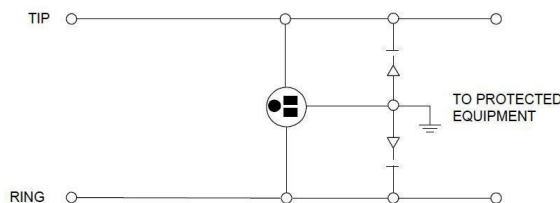
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	3B1E	4B1E
DC Breakdown Voltage ¹⁾ @2000V/s	350 V ± 25%	350 V ± 25%
Impulse Breakdown Voltage @100V/μs	<750V	<750V
Impulse Life 10A @10x1000μs	1500	1500
100A @10x1000μs	100	100
Max Impulse ²⁾ 10kA @ 8x20μs	2	2
AC Life @ 10 A _{RMS} 1 sec	5	5
@ 1 A _{RMS} 1 sec	60	60
Capacitance ¹⁾	< 1.5pF	< 1.5pF
Insulation Resistance	> 100 MΩ	> 100 MΩ
Fail-Safe Operation ³⁾ @ 60 A _{RMS}	< 3 sec	< 3 sec
@ 120 A _{RMS}	< 0.5 sec	< 0.5 sec
@ 350 A _{RMS}	< 0.1 sec	< 0.1 sec
Overcurrent Protection Hold Current @ 20°C	Resettable N/A	Resettable 180mA
Max Interrupting Current	N/A	3 A
Line Series Resistance	N/A	< 3 Ω

- 1) Tip or ring electrode to center electrode
- 2) Current value through tip respectively ring electrode
- 3) When installed in Circa's BETs

3B1E - Symmetrical



4B1E - Symmetrical

