BOURNS®

Features

- Standard 5-pin configuration
- Fail-short design
- Low capacitance
- c UL us Listed
- Meets Telcordia 1361 & RUS PE-80 requirements

Model C-303™ is obsolete and not recommended for new designs. The 2420 Series is preferred.

Model C-303™ 5-Pin Gas Tube Protector Modules

Bourns® Model C-303™ 5-Pin Protector Modules provide overvoltage protection in the industry-standard 5-pin configuration for use in central and remote office connector blocks as well as building entrance terminals.

The protector housing is made of self-extinguishing thermoplastic in black (standard service) or red (special service) colors. Modules are available with either tin-alloy or gold-plated outside plant and central office pins. The ground pin is always tin-alloy plated. The pin plating can be be matched with the receptacle plating of the connector block or building entrance terminal.

The protectors incorporate a fail-short design to ensure safe operation and protect people and equipment from prolonged electrical surges.

Characteristics

Test Methods per UL 497, CSA C22.2, Telcordia GR 974, 1361 and SBC SR 5165.

DC Breakdown Voltage Range @ 2000 V/second	280-420 V
AC Breakdown @ 60 Hz	280-420 V
Impulse Breakdown	
100 V/μs	625 V
1000 V/μs	875 V
Insulation Resistance @ 100 Vdc	> 1 GΩ
Insertion Loss @ 100 MHz	Exceeds Category 5
Return Loss @ 100 MHz	Exceeds Category 5
Capacitance Tip to Ring @ 1 MHz	< 1.25 pF typical
Capacitance Tip or Ring to Ground @ 1 MHz	< 2.50 pF typical
Impulse Reset [1]	
52 V, 260 mA	< 10 ms
135 V, 200 mA	< 10 ms
150 V, 200 mA	< 150 ms
Impulse Life Characteristics (Tip and Ring to Ground Simultaneously)	
10 A, 10/1000 μs	> 3000 operations
100 A, 10/1000 μs	> 300 operations
300 A, 10/1000 μs	> 100 operations
500 A, 10/1000 μs	> 400 operations [2]
2,000 A, 10/250 μs	> 25 operations
5,000 A, 20/100 μs	> 2 operations
20,000 A, 8/20 μs	> 1 operation
AC Life Characteristics (Tip and Ring to Ground Simultaneously)	
0.5 A rms continuous	> 30 seconds
1 A rms, 1 second, 600 ft. cable	> 60 operations
1 A rms, 1 second, 1 mile cable	> 60 operations
10 A rms, 1 second	> 5 operations
65 A rms, 11 cycles	> 1 operation [2]
120 A rms, 0.1 second	1 operation
High Current Capability and Thermal Operation (Tip and Ring to Ground)	> 30 A rms, 15 min.
Storage and Operating Temperature	-55 to +85 °C
Safety	
60 A, 3 sec.	Fail-short
120 A, 0.6 sec.	Does not cause a fire hazard
350 A, 0.04 sec.	Does not cause a fire hazard
30 A, 15 min.	Fail-short, does not cause a fire hazard
Safety Standards Listing	UL Listed to United States and Canadian safety standards

Notes:

[1] Network applied.

[2] Per RUS PE-80.

Model C-303™ 5-Pin Gas Tube Protector Modules

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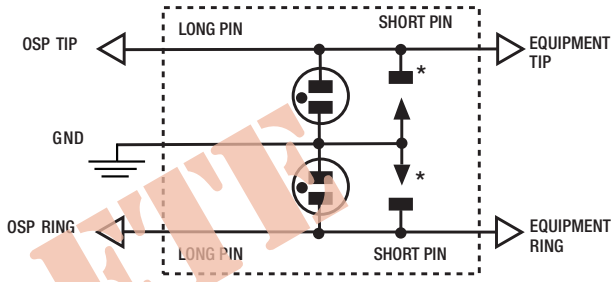
Packaging Specifications

Standard Package	100 modules
Dimensions (H x W x D)	76.2 x 152.4 x 203.2 mm (3 x 6 x 8 in.)
Weight	2.0 kg (4.4 lbs.)

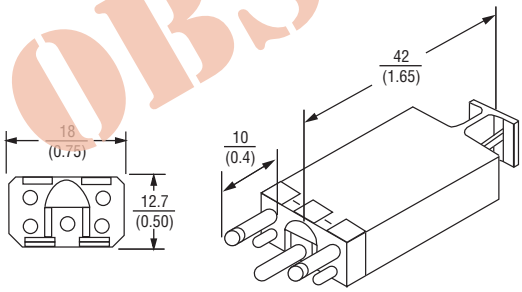
7-Type Gas Tube Protector Modules

Voltage protection is provided with dual 350 Vdc gas tubes with fail-short mechanism that shunt transient voltages to ground and return to their normal state, providing protection that withstands thousands of operations.



*Metallic shunts close circuit on power faults (fusible pellets melt). Gas tubes fail-short on high current power fault.

Product Dimensions



DIMENSIONS: MM / (INCHES)

How to Order

Product Code	Part Number	Description	Case Color	Front Test	Application
Tin-Alloy Plated Pins					
303-0755	**A0328090**	5-Pin Gas Tube Protector, 350 V	Black	No	Standard Circuit
303-0775	**A0312973**	5-Pin Gas Tube Protector, 350 V	Red	No	Special Circuit
Gold-Plated Pins					
303M-07S1G0	**A0338076**	5-Pin Gas Tube Protector, 350 V	Black	No	Standard Circuit
303M-07S3G0	**A0338078**	5-Pin Gas Tube Protector, 350 V	Red	No	Special Circuit

Note: Order by Part Number.