

Surge Protective Device

Technical Documentation



The **ASCO Model 163** is a primary protector kit for coaxial communication lines. It includes two F to BNC connectors for BNC applications and coaxial Gas Discharge Tube (GDT) technology. Model 163 protects personnel and equipment from lightning and power induced overvoltage surges.

Key Specs

- **Voltage:** 100 VDC
- **Current:** 300 mA
- **Connection:** Female F Connectors

**See Ordering Information for model number selection*

General Technical Specifications

Operating Voltage	100 VDC
Clamping Voltage	150 VDC
Operating Current	300 mA
Peak Surge Current	5 kA
Analog Frequency Range	DC-1GHz
Insertion Loss	0.2 dB typical
Response Time	<25ns
Mode of Protection	Pin-Grounded Shield
Relative Humidity Range	0-95% non-condensing
SPD Technology	Gas Discharge Tube (GDT)
Connection Type	Female F Connectors (Two (2) F-BNC connectors included)
Enclosure	Metallic Case (Intended for use within a weather-resistant enclosure)
Operating Temperature	-40°C (-40°C) to +176°F (+80°C)
Dimensions (in / mm)	3.0" L [76 mm]
Weight (oz / g)	0.2lbs [56g] (excluding BNC conn.)

Features

- Primary Protector Kit for Coaxial Communication Lines
- Includes two F to BNC connectors for BNC applications
- Coaxial Gas Discharge Tube (GDT) Technology
- Integral Fail-Short Mechanism
- Suitable for use in UL 96A Master Label Lightning Protection System
- 5 year warranty

DANGER!

Only qualified personnel should install or service this system. Electrical safety pre-cautions must be followed when installing or servicing this equipment. To prevent risk of electrical shock, turn off and lock out all power sources to the unit before making electrical connections or servicing.

Seulement le personnel qualifié doit installer ou maintenir ce système. Des précautions de sécurité en électricité doivent être suivies lors de l'installation ou de la maintenance de cet équipement. Pour éviter tout risque de choc électrique, débranchez et verrouillez toutes les sources d'alimentation de cet équipement avant de.

Certifications

- UL 497C Listed (QVKC.E303380)
- IEEE C62.43-2005
- IEEE C62.64-2009
- IEEE C62.41.1, C62.41.2 & C62.45
- IEC 61643-21

Installation Instructions

Grounding

- Requires reliable ground
- SPD may be grounded via its legs with screw connections, or via screw terminal that accepts up to 8 AWG (wire and attachment screws not included)

Installation

1. Model 163 is bidirectional; not direction-sensitive. Industry 'Best Practices' recommend SPDs at both ends of cabling and/or cascade protection.
2. Model 163 must be connected to a reliable ground via screw-down connection or ground wire (or both). Locate SPD such that ground lead is as short and straight as possible. Inches matter! Connect to a reliable ground, which should be the same ground reference for power and Pan-Tilt-Zoom (if equipped).
3. Model 163 redirects damaging energy to ground. If equipment/SPD are atop tall pole, the long path to earth ground adds inductive impedance and may affect performance.
4. Model 163 intentionally short-circuit the line when failed. Remove SPD, and test system. If system operates normally, replace Model 163.
5. If signal quality decreases when Model 163 is installed, most likely cause is a ground loop. Disconnect ground lead, and test system.

Ordering Information

MODEL

Former Model Name

APPLICATION

163D150S05KGCXNO

BNCB5kA

Analog Video, BNC Input/Output