

**Surge Protective Devices** 

Installation & Operation Manual



Model 184

#### **Safety Information**

#### **Important Information**

Read these instructions carefully and look at the equipment to become familiar with the device before trying to install, operate, service or maintain it. The following special messages may appear throughout this bulletin or on the equipment to warn of potential hazards or to call attention to information that clarifies or simplifies a procedure.



The addition of either symbol to a "Danger" or "Warning" safety label indicates that an electrical hazard exists which will result in personal injury if the instructions are not followed.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

## DANGER

**DANGER** indicates a hazardous situation which, if not avoided, will result in death or serious injury.

## **WARNING**

**WARNING** indicates a hazardous situation which, if not avoided, **could result in** death or serious injury.

## **A CAUTION**

**CAUTION** indicates a hazardous situation which, if not avoided, **could result in** minor or moderate injury.

## **NOTICE**

NOTICE is used to address practices not related to physical injury. The safety alert symbol shall not be used with this signal word.

#### **Please Note**

Electrical equipment should be installed, operated, serviced, and maintained only by qualified personnel. No responsibility is assumed by ASCO Power Technologies for any consequences arising out of the use of this material.

A qualified person is one who has skills and knowledge related to the construction, installation, and operation of electrical equipment and has received safety training to recognize and avoid the hazards involved.

#### Introduction

The **ASCO Model 184** is designed to work on Category 5 Power-Over-Ethernet transmission lines as well as Category 6 applications.

The Model 184 limits surges and transients at computers and video equipment.

#### A DANGER

#### HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

- Apply appropriate personal protective equipment (PPE) and follow safe electrical work practices. See NFPA 70E, NOM-029-STPS or CSA Z462.
- This equipment must only be installed and serviced by qualified electrical personnel.
- Turn off all power supplying this equipment before working on or inside equipment.
- · Always use a properly rated voltage sensing device to confirm power is off.
- Replace all devices, doors and covers before turning on power to this equipment.
- This equipment must be effectively grounded per all applicable codes.
  Use an equipment-grounding conductor to connect this equipment to the power system ground.
- Confirm that the Surge Protective Device voltage rating on the module or nameplate label is not less than the operating voltage.
- Do not place this product in service on any line capable of supplying more than 350 mA continuously.

Failure to follow these instructions will result in death or serious injury.



**WARNING:** This product can expose you to chemicals including DINP, which is known to the State of California to cause cancer, and DIDP which is known to the State of California to cause birth defects or other reproductive harm. For more information go to: www. P65Warnings.ca.gov.

## NOTICE

#### LOSS OF SURGE SUPPRESSION

 Make certain that Surge Protective Device is disconnected from the circuit it is protecting before conducting high potential insulation testing.

Failure to follow these instructions can result in equipment damage.

### Installation

- Turn off all power supplying this equipment before working on or inside equipment.
- 2. Mount the SPD as close as possible to the equipment.
- Connect the Model 184 supply cable (with RJ-45 connector) to the INPUT side of the SPD.
- Connect the Model 184 supply cable (with RJ-45 connector) to the output side of the SPD.
- 5. Replace the barrier, cover/door and/or trim to the equipment.
- 6. Equipment may be re-energized after all the above steps are complete.

Figure 1: Dimensions (in. / mm.)

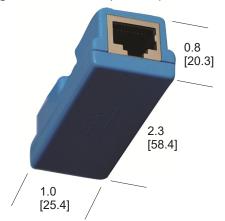
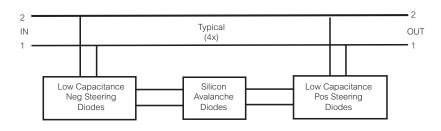


Figure 2: Circuit Diagram



# General Technical Specifications

Operating Voltage	up to 57 VDC
Clamping Voltage	68 VDC
Operating Current	350 mA
Peak Surge Current	60 A (10 x 1000 μs)
Frequency Range	0 to 250 MHz
Insertion Loss	< 0.1 dB at 20 MHz
SPD Technology	Silicon Avalanche Diode (SAD)
Connection Type	Female-Female RJ-45 Jacks
Operating Temperature	-40°C to +85°C
Dimensions (in. / mm.)	0.8 x 1.0 x 2.3 in. [20.3 x 25.4 x 58.4 mm.]
Weight (oz. / kg.)	1 oz. [0.02 kg.]
Limited warranty	5 year

## **Model Cross Reference**

MODEL Former Model Name	APPLICATION
<b>184D065S060SRJN0</b> Edco CAT6-5POE-FF	RJ-45 (female-to-female)
184D065S060SRMN0 Edco CAT6-5POE-MF	RJ-45 (male-to-female)

