

Surge Protective Devices ◀

Installation & Operation Manual



Model 149

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 149** is a 15 pin surge suppressor that helps to protect all devices on Port 1 Synchronous Data Link Control (SDLC).

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.
- Do not supply more than 1.5A continuous current.
- Confirm that the Surge Protective Device voltage rating on the module or nameplate label is not less than the operating voltage.

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.
- Confirm that the unit has the same voltage rating and configuration as the power system voltage and power system voltage to which it will be connected.
- Install the unit and cables as close as possible to the protected equipment and secure.
- 4. Connect the supply cable to the input side of the SPD.
- 5. Complete the circuit by connecting cable from the output of the SPD to the protected equipment.
- Check that all connections are secure. Remove all tools and discarded hardware from the unit.
- 7. Replace the barrier, cover/door and/or trim to the equipment.
- 8. Equipment may be re-energized after all the above steps are complete.

General Technical Specifications

Operating Voltage	5 VDC
Clamping Voltage	8 VDC
Operating Current	1.5A
Peak Surge Current	47A (10 x1000µs)
Frequency Range	0 to 20 MHz
Insertion Loss	< 0.1 dB @ 20 MHz
SPD Technology	Silicon Avalanche Diode (SAD)
Connection Type	DB-15
Operating Temperature	- 40°C to + 85°C
Dimensions (in / mm)	1.5" H x 0.625" W x 2.25" L [50.8 x 25.4 x 63.5 mm]
Weight (oz / kg)	1.25 oz [0.03 kg]
Warranty	5 years
	·

Model Cross Reference

MODEL Former Model Name	APPLICATION
149D008S047SDBN0 Edco SRS-BIU-15	5 VDC

Figure 1: Model 149 Additional Parts



Table 1: Pin Out

PIN	FUNCTION
1	Rx Data +
2	Logic Ground
3	Rx Clock +
4	Logic Ground
5	Tx Data +
6	Logic Ground
7	Tx Clock +
8	Logic Ground
9	Rx Data -
10	Port 1 Disable (0 VDC = disable)
11	Rx Clock -
12	Earth Ground
13	Tx Data -
14	Reserved
15	Tx Clock -

