ASCO®

SERIES 100
Model 140 (Edco SRA6LC Series)
Vehicle Loop Detection

Surge Protective Device

Technical Documentation

The ***ASCO Model 140*** SPDs are three terminal devices, two of which are connected across the signal inputs of the detector for differential mode protection, and the third is grounded to protect against common mode damage.

This unit addresses over-voltage transients on both Common and Differential modes with state-of-the-art silicon breakover devices. The Model 140 SPDs are intended for all popular makes of loop detectors presently on the market.

General Technical Specifications	
Operating Voltage	75 VDC
Clamping Voltage	130 VDC
Operating Current	NA (Parallel)
Peak Surge Current	250 A
SPD Technology	Silicon Avalanche Diode (SAD)
Operating Temperature	-40°C to +85°C
Dimensions (in / mm)	140D130S250SG2N0 = 1.2″ [30.5 mm] Square cube 140D130S250SW3N0 = 1.2″ [30.5 mm] Square cube
Weight (oz / kg)	3 oz [0.09 kg]
Mounting (in / mm)	140D130S250ST7N0 = 7/16″ [11.11 mm] Terminal Strip Spacing 140D130S250ST9N0 = 9/16″ [14.29 mm] Terminal Strip Spacing 140D130S250ST2N0 = 9/16″ [14.29 mm] Terminal Strip Spacing 140D130S250ST3N0 = 9/16″ [14.29 mm] Terminal Strip Spacing

⚠ 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 systéme. Des précautions de sécurité en électricité doivent être suivis lors de l'installation ou de la maintenance de cet equipement. Pour eviter tout risque de choc électrique, débranchez et verouiller toutes les sources d'alimentation de cet equipement avant de.

Key Specs

- **Voltage:** 0-75 VDC
- **Connection:** Wire Leads or Spaded Terminals
- **Mounting:** Ground stud or wiring terminal screws

**See Ordering Information for model number selection*

Features

- Differential and common mode protection
- Fast response time
- Compatible with digital detectors
- Epoxy encapsulated
- Easy installation
- 5 year warranty

Installation Instructions

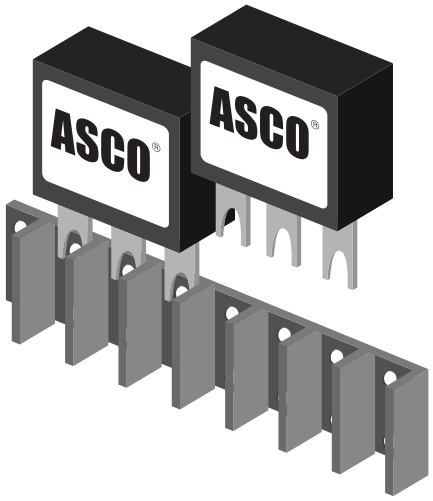
General: Units are installed as close as practical to the point where the detector loop wires enter the controller cabinet. Connect one of the leads to each loop. The common (either the bolt, green wire or center clip) connection must be connected to earth ground. Best performance is obtained by shortening the leads as much as possible, and providing the lowest impedance to ground. One 140D130S250SG2N0/140D130S250SW3N0 is used on each loop detector circuit to be protected.

The 140D130S250ST7N0/140D130S250ST9N0 slips under the equipment-side screws of the terminal strip. (See Drawing A) The protector ground is the center spade of the 3 spade terminations. The terminal strip must jumper this corresponding position to ground. Protectors can be mounted consecutively along the terminal strip.

The 140D130S250ST2N0/140D130S250ST3N0/140D130S250ST4N0 slips under the equipment-side screws of the terminal strip. The protector ground wire must be bonded in a short, direct manner to the cabinet power ground. Protectors can be mounted consecutively along the terminal strip.

The 140D130S250SG2N0 has mounting brackets available for installing multiple units in the controller cabinet. The brackets are capable of mounting four or eight devices in-line.

Drawing A



Ordering Information

MODEL *Former Model Name*	APPLICATION
140D130S250SG2N0 *Edco SRA6LC*	Cube, 2 leads + stud
140D130S250SW3N0 *Edco SRA6LC-WL*	Cube, 3 leads (no stud)
140D130S250ST7N0 *Edco SRA6LCA716*	3 Spaded Terminal 7/16″ [11.11 mm] Spacing
140D130S250ST9N0 *Edco SRA6LCA916*	3 Spaded Terminal 9/16″ [14.29 mm] Spacing
140D130S250ST2N0 *Edco SRA6LCB*	2 Spaded Terminal with 3.5″ [88.9 mm] Ground Wire
140D130S250ST3N0 *Edco SRA6LCBLL*	2 Spaded Terminal with 11″ [279.4 mm] Ground Wire
140D130S250ST4N0 *Edco SRA6LCC*	2 Spaded Terminal (7/16” spacing) with 3.5” [88.9 mm] Ground Wire

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