

# Service Entrance Suppressor(P), 40 kA



The nVent ERICO SES40P Series of Surge Protective Devices (SPD) provide economical protection against damaging transients and surge events. These Type 1 devices are UL® Listed to UL 1449 Edition 4 and CSA 22.2 No. 269.1-17. This allows installations on the line or load side (Type 1 or Type 2) of the service panel in accordance with NEC® or CSA 22.2 No. 269.1-17 without the requirement for additional circuit breakers or fuses.

Primary applications are service entrance, branch, commercial, industrial, and residential. Other applications include OEM panels, solar combiner boxes, UL 96A lightning protection installations and light pole applications. The housing is constructed of UV-stabilized thermoplastic and meets the UL 50 Type 4x rating, making it ideal for both indoor and outdoor applications. All of the models have a 20kA nominal discharge current rating, the highest level recognized under the UL 1449 Edition 4 standard.

## FEATURES

Compact design can be directly mounted to panel or installed in a small space

Front-facing design eases installation and performance monitoring

40 kA 8/20  $\mu$ s maximum surge rating per mode

UL® 50 Type 4X

Optional Flush Mounting Plate



## SPECIFICATIONS

Table 1/2

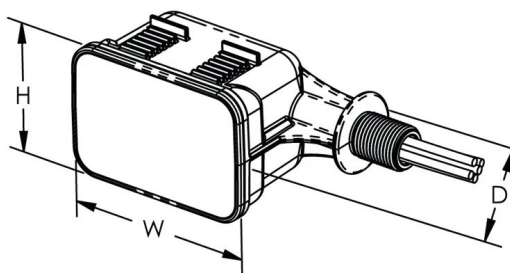
| Catalog Number              | SES40P2401P | SES40P1201P | SES40P4801P | SES40P120240 SP | SES40P4803P | SES40P2083P |
|-----------------------------|-------------|-------------|-------------|-----------------|-------------|-------------|
| Nominal System Voltage (Un) | 240 VAC     | 120 VAC     | 480 VAC     | 120/240 VAC     | 277/480 VAC | 120/208 VAC |

| CatalogNumber                            | SES40P2401P                 | SES40P1201P                 | SES40P4801P                 | SES40P120240<br>SP          | SES40P4803P                 | SES40P2083P                 |
|------------------------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| Distribution System                      | 1Ph 2W+G                    | 1Ph 2W+G                    | 1Ph 2W+G                    | 1Ph 2W+G                    | 3Ph 4W+G<br>3PhΔ 3W+G       | 3Ph 4W+G<br>3PhΔ 3W+G       |
| Max Continuous Operating Voltage (Uc)    | 300 VAC                     | 150 VAC                     | 590 VAC                     | 150/300 VAC                 | 340/590 VAC                 | 150/300 VAC                 |
| Frequency                                | 0 - 100 Hz                  | 0 - 100 Hz                  | 0 - 100 Hz                  | 0 - 100 Hz                  | 0 - 100 Hz                  | 0 - 100 Hz                  |
| Short Circuit Current Rating (SCCR)      | 200kA                       | 200kA                       | 200kA                       | 200kA                       | 200kA                       | 200kA                       |
| Nominal Discharge Current (In), Per Mode | 20kA 8/20 μs                | 20kA 8/20 μs                | 10kA 8/20 μs                | 20kA 8/20 μs                | 20kA 8/20 μs                | 20kA 8/20 μs                |
| Max Discharge Current (Imax), Per Mode   | 40kA 8/20 μs                | 40kA 8/20 μs                | 40kA 8/20 μs                | 40kA 8/20 μs                | 40kA 8/20 μs                | 40kA 8/20 μs                |
| Voltage Protection Rating (VPR), L-L     |                             |                             | 4000V                       | 1800V                       | 2500V                       | 1800V                       |
| Voltage Protection Rating (VPR), L-N     | 2500V                       | 1800V                       |                             | 900V                        | 1500V                       | 800V                        |
| Voltage Protection Rating (VPR), L-PE    | 1500V                       | 900V                        | 2000V                       |                             | 2500V                       | 1800V                       |
| Voltage Protection Rating (VPR), N-PE    | 1200V                       | 900V                        |                             |                             | 1500V                       | 800V                        |
| Status Indication                        | Blue LED                    | Blue LED                    | Blue LED                    | Blue LED                    | Blue LED                    | Blue LED                    |
| Technology                               | MOV with thermal disconnect | MOV with thermal disconnect | MOV with thermal disconnect | MOV with thermal disconnect | MOV with thermal disconnect | MOV with thermal disconnect |
| Lead Length                              | 914mm                       | 914mm                       | 914mm                       | 914mm                       | 914mm                       | 914mm                       |
| Lead Size                                | 3.31 mm <sup>2</sup>        | 3.31 mm <sup>2</sup>        | 3.31 mm <sup>2</sup>        | 3.31 mm <sup>2</sup>        | 3.31 mm <sup>2</sup>        | 3.31 mm <sup>2</sup>        |
| Temperature                              | -40 to 80 °C                | -40 to 80 °C                | -40 to 80 °C                | -40 to 80 °C                | -40 to 80 °C                | -40 to 80 °C                |
| Enclosure Material                       | UL® 94V-0 Thermoplastic     | UL® 94V-0 Thermoplastic     | UL® 94V-0 Thermoplastic     | UL® 94V-0 Thermoplastic     | UL® 94V-0 Thermoplastic     | UL® 94V-0 Thermoplastic     |

Table 2/2

| Catalog Number        | SES40P2401P                                                       | SES40P1201P                                                       | SES40P4801P                                                       | SES40P120240 SP                                                   | SES40P4803P                                                       | SES40P2083P                                                       |
|-----------------------|-------------------------------------------------------------------|-------------------------------------------------------------------|-------------------------------------------------------------------|-------------------------------------------------------------------|-------------------------------------------------------------------|-------------------------------------------------------------------|
| Enclosure Rating      | NEMA®-4X IP 65                                                    | NEMA®-4X IP 65                                                    | NEMA®-4X IP 65                                                    | NEMA®-4X IP 65                                                    | NEMA®-4X IP 65                                                    | NEMA®-4X IP 65                                                    |
| Mounting              | 1/2" straight nipple                                              | 1/2" straight nipple                                              | 1/2" straight nipple                                              | 1/2" straight nipple                                              | 1/2" straight nipple                                              | 1/2" straight nipple                                              |
| Unit Weight           | 0.25 kg                                                           | 0.25 kg                                                           | 0.25 kg                                                           | 0.25 kg                                                           | 0.39 kg                                                           | 0.39 kg                                                           |
| Certification Details | UL® 1449 Edition 5 Type 1/2, 20 kA Mode<br>CSA C22.2 No. 269.1-17 | UL® 1449 Edition 5 Type 1/2, 20 kA Mode<br>CSA C22.2 No. 269.1-17 | UL® 1449 Edition 5 Type 1/2, 20 kA Mode<br>CSA C22.2 No. 269.1-17 | UL® 1449 Edition 5 Type 1/2, 20 kA Mode<br>CSA C22.2 No. 269.1-17 | UL® 1449 Edition 5 Type 1/2, 20 kA Mode<br>CSA C22.2 No. 269.1-17 | UL® 1449 Edition 5 Type 1/2, 20 kA Mode<br>CSA C22.2 No. 269.1-17 |
| Complies With         | ANSI®/IEEE® C62.41.2-2002 Cat A, Cat B, Cat C                     | ANSI®/IEEE® C62.41.2-2002 Cat A, Cat B, Cat C                     | ANSI®/IEEE® C62.41.2-2002 Cat A, Cat B, Cat C                     | ANSI®/IEEE® C62.41.2-2002 Cat A, Cat B, Cat C                     | ANSI®/IEEE® C62.41.2-2002 Cat A, Cat B, Cat C                     | ANSI®/IEEE® C62.41.2-2002 Cat A, Cat B, Cat C                     |
| Depth (D)             | 76.2mm                                                            | 76.2mm                                                            | 76.2mm                                                            | 76.2mm                                                            | 76.2mm                                                            | 76.2mm                                                            |
| Height (H)            | 69.85 mm                                                          | 69.85 mm                                                          | 69.85 mm                                                          | 69.85 mm                                                          | 69.85 mm                                                          | 69.85 mm                                                          |
| Width (W)             | 120.65 mm                                                         | 120.65 mm                                                         | 120.65 mm                                                         | 120.65 mm                                                         | 120.65 mm                                                         | 120.65 mm                                                         |

## DIAGRAMS



## WARNING

nVent products shall be installed and used only as indicated in nVent's product instruction sheets and training materials. Instruction sheets are available at [www.nvent.com](http://www.nvent.com) and from your nVent customer service representative. Improper installation, misuse, misapplication or other failure to completely follow nVent's instructions and warnings may cause product malfunction, property damage, serious bodily injury and death and/or void your warranty.

#### North America

+1.800.753.9221

Option 1 – Customer Care

Option 2 – Technical

Support

#### Europe

Netherlands:

+31 800-0200135

France:

+33 800 901 793

#### Europe

Germany:

800 1890272

Other Countries:

+31 13 5835404

#### APAC

Shanghai:

+ 86 21 2412 1618/19

Sydney:

+61 2 9751 8500



Our powerful portfolio of brands:

**CADDY**

**ERICO**

**HOFFMAN**

**ILSCO**

**SCHROFF**

**TRACHTE**