

Service Entrance Suppressor(DF), 480 kA

Data Solutions



The nVent ERICO SES480 DF Series of Surge Protective Devices (SPD) is an enhanced version of our nVent ERICO SES480 DB Series. The robust SES480 DF Surge-Filter features a 480 kA per phase surge rating, increasing both survivability and overall life cycle. With the addition of a filter, bothersome high frequency transients on the power distribution system are attenuated, ultimately protecting sensitive equipment. The DF Series is a cUL 1449 Listed SPD for Type 2 locations. Typical applications for the nVent ERICO SES480 DF Series service entrances, distribution, branch panels, MCC, lighting panels, HVAC, A/V systems, IT equipment and more.

CERTIFICATIONS



FEATURES

Front-facing design eases installation and performance monitoring

480 kA 8/20 μ s maximum surge rating per phase

Up to 64 dB attenuation (10 kHz to 100 MHz)

Advanced monitoring includes Surge and TOV Counters with time and date stamping

Rotatable, full color graphics-based LCD utilizing a PIC Micro Controller

Repetitive impulse tested to 10,000 strikes per mode

Rotary Disconnect included, standard for safe servicing

10-year limited warranty

SPECIFICATIONS

Table 1/5

| Catalog Number | Nominal System Voltage (Un) | Max Continuous Operating Voltage (Uc) | Distribution System | Filtering | Frequency | Short Circuit Current Rating (SCCR) |
|------------------|-----------------------------|---------------------------------------|---------------------|-------------------------------|-----------|-------------------------------------|
| SES480DF2404 80S | 240/480 V | 320/550 V | 1Ph 3W+G | -64 dB from 10 kHz to 100 MHz | 0 – 600Hz | 200kA |
| SES480DF208Y | 120/208 V | 150/300 V | 3Ph Y 4W+G | -64 dB from 10 kHz to 100 MHz | 0 – 600Hz | 200kA |
| SES480DF2404 80D | 240/480 V | 350/550 V | 3PhΔ 4W+G | -64 dB from 10 kHz to 100 MHz | 0 – 600Hz | 200kA |
| SES480DF480D | 480 V | 550 V | 3PhΔ 3W+G | -64 dB from 10 kHz to 100 MHz | 0 – 600Hz | 200kA |
| SES480DF480Y | 277/480 V | 320/700 V | 3Ph Y 4W+G | -64 dB from 10 kHz to 100 MHz | 0 – 600Hz | 200kA |
| SES480DF600D | 600 V | 680 V | 3PhΔ 3W+G | -64 dB from 10 kHz to 100 MHz | 0 – 600Hz | 200kA |
| SES480DF600Y | 347/600 V | 420/880 V | 3Ph Y 4W+G | -64 dB from 10 kHz to 100 MHz | 0 – 600Hz | 200kA |

Table 2/5

| Catalog Number | Voltage Protection Rating (VPR), L-G | Voltage Protection Rating (VPR), L-L | Voltage Protection Rating (VPR), L-N | Voltage Protection Rating (VPR), N-G | Nominal Discharge Current (In), Per Mode | Max Discharge Current (Imax), Per Phase |
|------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--|---|
| SES480DF2404 80S | 1200V | 2000V | 1200V | 1200V | 20kA 8/20 μs | 480kA 8/20 μs |
| SES480DF208Y | 800V | 1000V | 800V | 800V | 20kA 8/20 μs | 480kA 8/20 μs |
| SES480DF2404 80D | 1800V, 1800V | 2000V, 2500V | 1200V, 1800V | 1200V | 20kA 8/20 μs | 480kA 8/20 μs |
| SES480DF480D | 1800V | 1800V | | | 20kA 8/20 μs | 480kA 8/20 μs |
| SES480DF480Y | 1200V | 2000V | 1200V | 1200V | 20kA 8/20 μs | 480kA 8/20 μs |

| CatalogNumber | Voltage Protection Rating (VPR),L-G | Voltage Protection Rating (VPR),L-L | Voltage Protection Rating (VPR),L-N | Voltage Protection Rating (VPR),N-G | Nominal Discharge Current (In),Per Mode | Max Discharge Current (Imax), Per Phase |
|---------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|---|---|
| SES480DF600D | 2000V | 2000V | | | 20kA 8/20 μs | 480kA 8/20 μs |
| SES480DF600Y | 1500V | 2500V | 1500V | 1500V | 20kA 8/20 μs | 480kA 8/20 μs |

Table 3/5

| Catalog Number | Status Indication | Remote Contact Switching Capacity | Remote Contacts | Lead Size imperial | Temperature | Enclosure Material |
|-----------------|--|-----------------------------------|-----------------|--------------------|--------------|--------------------|
| SES480DF240480S | 2 Tri Color LEDs per phase, Audible alarm with silence switch, Graphics-based LCD with Resettable Surge and TOV Counter with Time / Date Stamp | 5.0 A @ 240 V | Yes | #10 - #4 | -31 to 167°F | Metal |
| SES480DF208Y | 2 Tri Color LEDs per phase, Audible alarm with silence switch, Graphics-based LCD with Resettable Surge and TOV Counter with Time / Date Stamp | 5.0 A @ 240 V | Yes | #10 - #4 | -31 to 167°F | Metal |

| CatalogNumber | Status Indication | RemoteContact Switching Capacity | Remote Contacts | Lead Size imperial | Temperature | Enclosure Material |
|-----------------|--|----------------------------------|-----------------|--------------------|--------------|--------------------|
| SES480DF240480D | 2 Tri Color LEDs per phase, Audible alarm with silence switch, Graphics-based LCD with Resettable Surge and TOV Counter with Time / Date Stamp | 5.0 A @ 240 V | Yes | #10 - #4 | -31 to 167°F | Metal |
| SES480DF480D | 2 Tri Color LEDs per phase, Audible alarm with silence switch, Graphics-based LCD with Resettable Surge and TOV Counter with Time / Date Stamp | 5.0 A @ 240 V | Yes | #10 - #4 | -31 to 167°F | Metal |
| SES480DF480Y | 2 Tri Color LEDs per phase, Audible alarm with silence switch, Graphics-based LCD with Resettable Surge and TOV Counter with Time / Date Stamp | 5.0 A @ 240 V | Yes | #10 - #4 | -31 to 167°F | Metal |
| SES480DF600D | 2 Tri Color LEDs per phase, Audible alarm with silence switch, Graphics-based LCD with Resettable Surge and TOV Counter with Time / Date Stamp | 5.0 A @ 240 V | Yes | #10 - #4 | -31 to 167°F | Metal |

| CatalogNumber | Status Indication | RemoteContact Switching Capacity | Remote Contacts | Lead Size imperial | Temperature | Enclosure Material |
|---------------|--|----------------------------------|-----------------|--------------------|--------------|--------------------|
| SES480DF600Y | 2 Tri Color LEDs per phase, Audible alarm with silence switch, Graphics-based LCD with Resettable Surge and TOV Counter with Time / Date Stamp | 5.0 A @ 240 V | Yes | #10 - #4 | -31 to 167°F | Metal |

Table 4/5

| Catalog Number | Enclosure Rating | Mounting | Certification Details | Complies With | Depth | Height |
|---------------------|----------------------------|--------------|--|--|---------|---------|
| SES480DF2404 80S | NEMA®-4, UL® 50E Type 4 | Flange Mount | CSA C22.2 No. 269.1, UL® 1449 Edition 5 Type 2, 20 kA Mode, UL® 1283 Edition 7 | ANSI®/IEEE® C62.41.2-2002 Cat A, Cat B, Cat C, ANSI®/IEEE® C62.41.1-2002 Cat A, Cat B, Cat C, ANSI®/IEEE® C62.45-2002 Cat A, Cat B, Cat C, UL® 96A and NEC® Article 285 | 13.19in | 16.79in |
| SES480DF208Y | NEMA®-4, UL® 50E Type 4 | Flange Mount | CSA C22.2 No. 269.1, UL® 1449 Edition 5 Type 2, 20 kA Mode, UL® 1283 Edition 7 | ANSI®/IEEE® C62.41.2-2002 Cat A, Cat B, Cat C, ANSI®/IEEE® C62.41.1-2002 Cat A, Cat B, Cat C, ANSI®/IEEE® C62.45-2002 Cat A, Cat B, Cat C, UL® 96A and NEC® Article 285 | 13.19in | 16.79in |

| CatalogNumber | Enclosure Rating | Mounting | Certification Details | Complies With | Depth | Height |
|---------------------|----------------------------|--------------|---|--|---------|---------|
| SES480DF2404 80D | NEMA®-4, UL® 50E Type 4 | Flange Mount | CSA C22.2 No. 269.1, UL® 1449 Edition 5 Type 2, 20 kA Mode, UL® 1283 Edition 7 | ANSI®/IEEE® C62.41.2-2002 Cat A, Cat B, Cat C, ANSI®/IEEE® C62.41.1-2002 Cat A, Cat B, Cat C, ANSI®/IEEE® C62.45-2002 Cat A, Cat B, Cat C, UL® 96A and NEC® Article 285 | 13.19in | 16.79in |
| SES480DF480D | NEMA®-4, UL® 50E Type 4 | Flange Mount | CSA C22.2 No. 269.1, UL® 1449 Edition 5 Type 2, 20 kA Mode, UL® 1283 Edition 7 | ANSI®/IEEE® C62.41.2-2002 Cat A, Cat B, Cat C, ANSI®/IEEE® C62.41.1-2002 Cat A, Cat B, Cat C, ANSI®/IEEE® C62.45-2002 Cat A, Cat B, Cat C, UL® 96A and NEC® Article 285 | 13.19in | 16.79in |
| SES480DF480Y | NEMA®-4, UL® 50E Type 4 | Flange Mount | CSA C22.2 No. 269.1, UL® 1449 Edition 5 Type 2, 20 kA Mode, UL® 1283 Edition 7 | ANSI®/IEEE® C62.41.2-2002 Cat A, Cat B, Cat C, ANSI®/IEEE® C62.41.1-2002 Cat A, Cat B, Cat C, ANSI®/IEEE® C62.45-2002 Cat A, Cat B, Cat C, UL® 96A and NEC® Article 285 | 13.19in | 16.79in |

| CatalogNumber | Enclosure Rating | Mounting | Certification Details | Complies With | Depth | Height |
|---------------|----------------------------|--------------|---|--|---------|---------|
| SES480DF600D | NEMA®-4, UL® 50E Type 4 | Flange Mount | CSA C22.2 No. 269.1, UL® 1449 Edition 5 Type 2, 20 kA Mode, UL® 1283 Edition 7 | ANSI®/IEEE® C62.41.2-2002 Cat A, Cat B, Cat C, ANSI®/IEEE® C62.41.1-2002 Cat A, Cat B, Cat C, ANSI®/IEEE® C62.45-2002 Cat A, Cat B, Cat C, UL® 96A and NEC® Article 285 | 13.19in | 16.79in |
| SES480DF600Y | NEMA®-4, UL® 50E Type 4 | Flange Mount | CSA C22.2 No. 269.1, UL® 1449 Edition 5 Type 2, 20 kA Mode, UL® 1283 Edition 7 | ANSI®/IEEE® C62.41.2-2002 Cat A, Cat B, Cat C, ANSI®/IEEE® C62.41.1-2002 Cat A, Cat B, Cat C, ANSI®/IEEE® C62.45-2002 Cat A, Cat B, Cat C, UL® 96A and NEC® Article 285 | 13.19in | 16.79in |

Table 5/5

| Catalog Number | Width | Unit Weight | Impulse Life |
|-----------------|--------|-------------|-------------------------------------|
| SES480DF240480S | 7.23in | 18.2lb | 10,000 Impulses at 10 kA 8/20 µs |
| SES480DF208Y | 7.23in | 18.2lb | 10,000 Impulses at 10 kA 8/20 µs |
| SES480DF240480D | 7.23in | 18.2lb | 10,000 Impulses at 10 kA 8/20 µs |
| SES480DF480D | 7.23in | 18.2lb | 10,000 Impulses at 10 kA 8/20 µs |
| SES480DF480Y | 7.23in | 18.2lb | 10,000 Impulses at 10 kA 8/20 µs |
| SES480DF600D | 7.23in | 18.2lb | 10,000 Impulses at 10 kA 8/20 µs |

| Catalog Number | Width | Unit Weight | Impulse Life |
|----------------|--------|-------------|--|
| SES480DF600Y | 7.23in | 18.2lb | 10,000 Impulses at 10 kA 8/20 μ s |

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 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.



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