The Enerdoor surge arrester BG (G) 50 series provides advanced surge protection. This device is designed for maximum discharge of L-N 100 kA and N-PE 200 kA, meets the UL 1449 3rd edition and IEC61643-11:2011 Standards, and includes a visual and remote contact indicator.

## GENERAL CHARACTERISTICS

CE

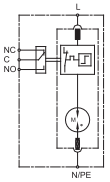
| | | |
|---|---|---|
| Class category IEC/VDE | | I + II / B+C |
| Operating temperature range | | -40°C + 80°C |
| Operating humidity range | | 0 ~ 90% |
| Response time L-N (N-PE) | | ≤100 ns |
| Backup fuse (only required if not in the main) | | 500 Amps gL/gG |
| Flow current | L-N<br>N-PE | If ≥10 kARms @ 255 Vac<br>If 100 Arms @ 255 Vac |
| Enclosure material | | Thermoplastic, UL94 V-0 |
| Mounting | | 35mm DIN rail according to the EN50022/DIN46277-3 Standard |
| Max size of connecting wire | | Single-strand 35mm² (or # 2AWG)<br>Multi-strand 25mm² (or # 4AWG) |
| Remote alarm contact type | | Isolated form C |
| Switching capability Un/In | | AC: 250V/0.5A<br>DC: 250V/0.1A |
| Max size of connecting wire | | Max 1.5mm² (or #16AWG) |

| BG (G) 50 | Nominal Voltage Vac L-L (L-N) | Max Continuous Operation Voltage NPE - Vac | Nominal Discharge (In, KA) 8/20 | | Max Discharge Current (Imax, KA) | | Voltage Protection Rated (kV) | | Electrical Diagram | Case |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | L-N | N-PE | L-N | N-PE | LN@In | NPE (1.2/50) | | |
| **BG.150-1P50** | 150 | - | 50 | - | 150 | - | <1.2 | - | 1 | 1 |
| **BG.275-1P50** | 275 | - | 50 | - | 150 | - | <1.5 | - | 1 | 1 |
| **BG.320-1P50** | 320 | - | 25 | - | 150 | - | <1.6 | - | 1 | 1 |
| **BG.385-1P50** | 385 | - | 50 | - | 150 | - | <1.8 | - | 1 | 1 |
| **BG.420-1P50** | 420 | - | 50 | - | 150 | - | <2.0 | - | 1 | 1 |
| **BG.150-2P50** | 150 | - | 50 | - | 150 | - | <1.2 | - | 2 | 2 |
| **BG.275-2P50** | 275 | - | 50 | - | 150 | - | <1.5 | - | 2 | 2 |
| **BG.320-2P50** | 320 | - | 50 | - | 150 | - | <1.6 | - | 2 | 2 |
| **BG.385-2P50** | 385 | - | 50 | - | 150 | - | <1.8 | - | 2 | 2 |
| **BG.420-2P50** | 420 | - | 50 | - | 150 | - | <2.0 | - | 2 | 2 |
| **BG.150-3P50** | 150 | - | 50 | - | 150 | - | <1.2 | - | 3 | 3 |
| **BG.275-3P50** | 275 | - | 50 | - | 150 | - | <1.5 | - | 3 | 3 |
| **BG.320-3P50** | 320 | - | 50 | - | 150 | - | <1.6 | - | 3 | 3 |
| **BG.385-3P50** | 385 | - | 50 | - | 150 | - | <1.8 | - | 3 | 3 |
| **BG.420-3P50** | 420 | - | 50 | - | 150 | - | <2.0 | - | 3 | 3 |
| **BG.150-4P50** | 150 | - | 50 | - | 150 | - | <1.2 | - | 4 | 4 |
| **BG.275-4P50** | 275 | - | 50 | - | 150 | - | <1.5 | - | 4 | 4 |
| **BG.320-4P50** | 320 | - | 50 | - | 150 | - | <1.6 | - | 4 | 4 |
| **BG.385-4P50** | 385 | - | 50 | - | 150 | - | <1.8 | - | 4 | 4 |
| **BG.420-4P50** | 420 | - | 50 | - | 150 | - | <2.0 | - | 4 | 4 |
| **BGG.150-2P50-N50** | 208 (150) | 150 | 50 | 50 | 150 | 150 | <1.2 | <0.8 | 5 | 2 |
| **BGG.150-2P50-N100** | 208 (150) | 150 | 50 | 100 | 150 | 200 | <1.2 | <0.8 | 5 | 2 |
| **BGG.275-2P50-N50** | 320 (275) | 255 | 50 | 50 | 150 | 150 | <1.5 | <1.5 | 5 | 2 |
| **BGG.275-2P50-N100** | 320 (275) | 255 | 50 | 100 | 150 | 200 | <1.5 | <1.5 | 5 | 2 |

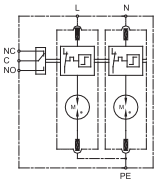
| BG (G) 50 | Nominal Voltage Vac L-L (L-N) | Max Continuous Operation Voltage NPE - Vac | Nominal Discharge (In, KA) 8/20 | | Max Discharge Current (Imax, KA) | | Voltage Protection Rated (kV) | | Electrical Diagram | Case |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | L-N | N-PE | L-N | N-PE | LN@In | NPE (1.2/50) | | |
| **BGG.320-2P50-N50** | 400 (320) | 255 | 50 | 50 | 150 | 150 | <1.6 | <1.5 | 5 | 2 |
| **BGG.320-2P50-N100** | 400 (320) | 255 | 50 | 100 | 150 | 200 | <1.6 | <1.5 | 5 | 2 |
| **BGG.385-2P50-N50** | 480 (385) | 255 | 50 | 50 | 150 | 150 | <1.8 | <1.5 | 5 | 2 |
| **BGG.385-2P50-N100** | 480 (385) | 255 | 50 | 100 | 150 | 200 | <1.8 | <1.5 | 5 | 2 |
| **BGG.420-2P50-N50** | 600 (420) | 255 | 50 | 50 | 150 | 150 | <2.0 | <1.5 | 5 | 2 |
| **BGG.420-2P50-N100** | 600 (420) | 255 | 50 | 100 | 150 | 200 | <2.0 | <1.5 | 5 | 2 |
| **BGG.150-3P50-N50** | 208 (150) | 255 | 50 | 50 | 150 | 150 | <1.2 | <0.8 | 6 | 4 |
| **BGG.150-3P50-N100** | 208 (150) | 255 | 50 | 100 | 150 | 200 | <1.2 | <0.8 | 6 | 4 |
| **BGG.275-3P50-N50** | 320 (275) | 255 | 50 | 50 | 150 | 150 | <1.5 | <1.5 | 6 | 4 |
| **BGG.275-3P50-N100** | 320 (275) | 255 | 50 | 100 | 150 | 200 | <1.5 | <1.5 | 6 | 4 |
| **BGG.320-3P50-N50** | 400 (320) | 255 | 50 | 50 | 150 | 150 | <1.6 | <1.5 | 6 | 4 |
| **BGG.320-3P50-N100** | 400 (320) | 255 | 50 | 100 | 150 | 200 | <1.6 | <1.5 | 6 | 4 |
| **BGG.385-3P50-N50** | 480 (385) | 255 | 50 | 50 | 150 | 150 | <1.8 | <1.5 | 6 | 4 |
| **BGG.385-3P50-N100** | 480 (385) | 255 | 50 | 100 | 150 | 200 | <1.8 | <1.5 | 6 | 4 |
| **BGG.420-3P50-N50** | 600 (420) | 255 | 50 | 50 | 150 | 150 | <2.0 | <1.5 | 6 | 4 |
| **BGG.420-3P50-N100** | 600 (420) | 255 | 50 | 100 | 150 | 200 | <2.0 | <1.5 | 6 | 4 |

## ELECTRICAL DIAGRAM

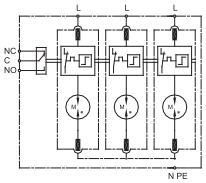
### SCHEMATIC 1



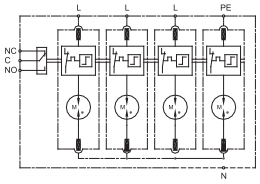

### SCHEMATIC 2



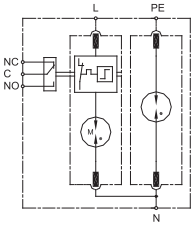

### SCHEMATIC 3



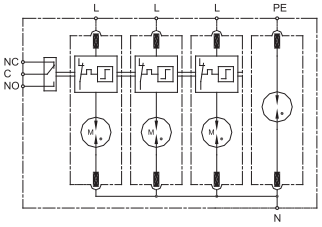

### SCHEMATIC 4




### SCHEMATIC 5

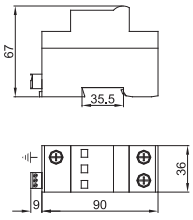



### SCHEMATIC 6

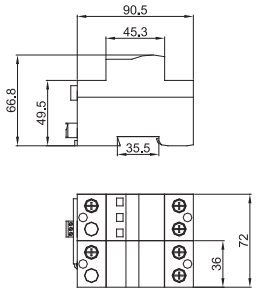



## MECHANICAL DIMENSIONS (mm)

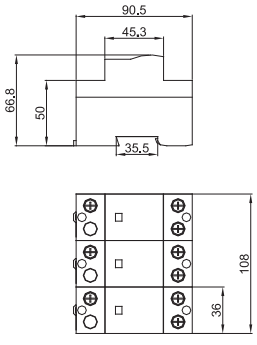
### CASE 1




### CASE 2




### CASE 3




### CASE 4