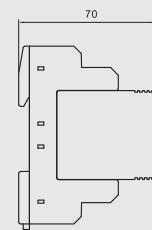
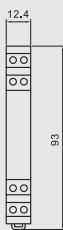
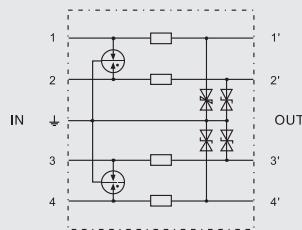


SPDs for general information(plug-in)

BR BE 4L

High degree of protection for four single lines

For installation in conformity with the lightning
protection zone concept at the boundaries
from 0B-2 and higher



| | | BR BE 4L-6 | BR BE 4L-12 | BR BE 4L-24 | BR BE 4L-48 | BR BE 4L-60 | BR BE 4L-180 |
|--|----|------------------|---------------|---------------|---------------|---------------|---------------|
| Test standards | | IEC 61643-21 | IEC 61643-21 | IEC 61643-21 | IEC 61643-21 | IEC 61643-21 | IEC 61643-21 |
| SPD class | | TYPE2 P1 | TYPE2 P1 | TYPE2 P1 | TYPE2 P1 | TYPE2 P1 | TYPE2 P1 |
| Nominal voltage | Un | 5V | 12V | 24V | 48V | 60V | 180V |
| Max. continuous operating d.c. voltage | Uc | 6.0V | 15V | 33V | 54V | 70V | 180V |
| Max. continuous operating a.c. voltage | Uc | 4.2V | 10.6V | 23.3V | 38.1V | 49.5V | 127V |
| Nominal current at 45°C | IL | 1A | 0.75A | 0.75A | 0.75A | 1A | 1A |
| C2 Total nominal discharge current (8/20μs) | In | 20kA | 20kA | 20kA | 20kA | 20kA | 20kA |
| C2 Nominal discharge current (8/20μs) per line | In | 10kA | 10kA | 10kA | 10kA | 10kA | 10kA |
| Voltage protection level line-line for In C2 | Up | ≤40V | ≤55V | ≤105V | ≤170V | ≤220V | ≤550V |
| Voltage protection level line-PG for In C2 | Up | ≤60V | ≤60V | ≤85V | ≤115V | ≤155V | ≤300V |
| Voltage protection level line-line at 1 kV/μs C3 | Up | ≤18V | ≤38V | ≤90V | ≤140V | ≤180V | ≤500V |
| Voltage protection level line-PG at 1 kV/μs C3 | Up | ≤9V | ≤19V | ≤45V | ≤70V | ≤90V | ≤250V |
| Series impedance per line | | 1 Ohm | 1.8 Ohm | 1.8 Ohm | 1.8 Ohm | 1 Ohm | 1 Ohm |
| Cut-off frequency line-PG | fG | 1.0 MHz | 2.7 MHz | 6.8 MHz | 8.7 MHz | 9.0 MHz | 25.0 MHz |
| Capacitance line-line | C | ≤2.7 nF | ≤1.0 nF | ≤0.5 nF | ≤0.35 nF | ≤250 pF | ≤120 pF |
| capacitance line-PG | C | ≤5.4 nF | ≤2.0nF | ≤1.0nF | ≤0.7nF | ≤500 pF | ≤240 pF |
| Operating temperature range | Tu | -40°C...+80°C | -40°C...+80°C | -40°C...+80°C | -40°C...+80°C | -40°C...+80°C | -40°C...+80°C |
| Enclosure material | | polyamide PA 6.6 | | | | | |
| Degree of protection (plugged-in) | | IP 20 | IP 20 | IP 20 | IP 20 | IP 20 | IP 20 |
| Order Code | | D9116 | D9117 | D9118 | D9119 | D9120 | D9121 |