

PROTEC B2S(R) Series



- Category IEC / EN / VDE: Class I, II / Type 1, 2 / B, C
- Location of use: Main distribution boards
- Network systems: TN-S, TN-C, IT
- Protection modes: L/N - PE, L-PEN
- Protective element: High energy MOV
- Surge discharge rating: $I_{imp} = 12.5kA$
- MOV max. withstand capability 1 x 8/20: 100kA per pole
- Housing: Modular design
- Complies with: IEC/EN 61643-11



Technical data

| Type | | 150 | 275 | 320 | 385 | 440 |
|---|------------|--|----------|----------|----------|----------|
| | | PROTEC B2S(R) yy/xxx (2+0), (3+0), (4+0) | | | | |
| | | | | | | |
| Electrical characteristics | | | | | | |
| Max. continuous operating voltage (AC/DC) | U_c | 150/200V | 275/350V | 320/420V | 385/500V | 440/580V |
| Nominal discharge current (8/20) | I_n | 25kA per pole | | | | |
| Max. discharge current (8/20) | I_{max} | 60kA per pole | | | | |
| Impulse current (10/350) | I_{imp} | 12.5kA per pole | | | | |
| Specific energy | W/R | 39kJ/Ω | | | | |
| Charge | Q | 6.25As | | | | |
| Protection level | U_p | < 1.0kV | < 1.4kV | < 1.5kV | < 1.7kV | < 2.0kV |
| Residual voltage at I_{imp} | U_{res} | < 0.7kV | < 1.0kV | < 1.1kV | < 1.4kV | < 1.5kV |
| Residual voltage at 5kA (8/20) | U_{res} | < 0.6kV | < 0.9kV | < 1.0kV | < 1.3kV | < 1.4kV |
| Follow current | I_{fi} | NO | | | | |
| Response time | t_A | < 25ns | | | | |
| Thermal protection | | YES | | | | |
| Back-up fuse (if mains > 160A) | | 160A gL | | | | |
| Short-circuit withstand current | I_{SCCR} | 25kA/50Hz | | | | |
| Mechanical characteristics | | | | | | |
| Temperature range | | - 40°C+ 80°C | | | | |
| Terminal screw torque | | max. 3.0Nm | | | | |
| Terminal cross section | | 35mm ² (solid)/25mm ² (stranded) | | | | |
| Mounting | | 35mm DIN rail, EN 60715 | | | | |
| Degree of protection | | IP 20 | | | | |
| Housing material | | Thermoplastic; extinguishing degree UL 94 V-0 | | | | |
| Indication of disconnector operation | | red flag | | | | |
| Remote contacts (RC) | | YES | | | | |
| Contact ratings | | AC: 250V/0.5A; 125V/3A | | | | |
| Terminal cross section | | max. 1.5mm ² | | | | |
| Remote terminal torque | | 0.25Nm | | | | |

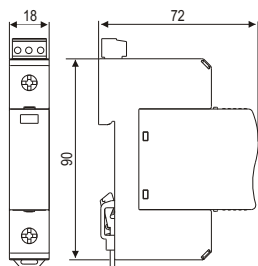
Ordering information

| U_c | 150 | 275 | 320 | 385 | 440 |
|---|---------|---------|---------|---------|---------|
| Ordering code PROTEC B2S 25/xxx (2+0) | 506.027 | 506.028 | 506.029 | 506.030 | 506.031 |
| Ordering code PROTEC B2SR 25/xxx (2+0) (with remote contacts) | 506.032 | 506.033 | 506.034 | 506.035 | 506.036 |
| Ordering code PROTEC B2S 37.5/xxx (3+0) | 506.047 | 506.048 | 506.049 | 506.050 | 506.051 |
| Ordering code PROTEC B2SR 37.5/xxx (3+0) (with remote contacts) | 506.052 | 506.053 | 506.054 | 506.055 | 506.056 |
| Ordering code PROTEC B2S 50/xxx (4+0) | 506.057 | 506.058 | 506.059 | 506.060 | 506.061 |
| Ordering code PROTEC B2SR 50/xxx (4+0) (with remote contacts) | 506.062 | 506.063 | 506.064 | 506.065 | 506.066 |
| Ordering code Module PROTEC B2S(R) 12.5/xxx | 506.001 | 506.002 | 506.003 | 506.004 | 506.005 |

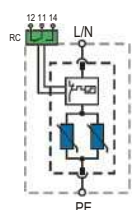
Dimensions, Internal configuration, Weight and Packaging

PROTEC B2S(R) 12.5

Dimensions



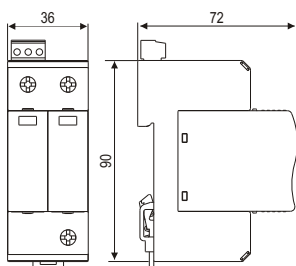
Internal configuration



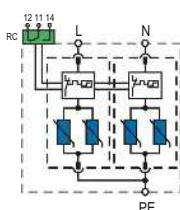
| PROTEC B2S 12.5/xxx | 150 | 275 | 320 | 385 | 440 |
|------------------------------------|-----------------|------|------|------|------|
| Dimensions DIN 43880 | 1TE | | | | |
| Weight per unit | 124g | 150g | 150g | 143g | 146g |
| PROTEC B2SR 12.5/xxx | 150 | 275 | 320 | 385 | 440 |
| Dimensions DIN 43880 | 1TE | | | | |
| Weight per unit | 129g | 155g | 155g | 148g | 151g |
| Packaging dimensions (single unit) | 108 x 74 x 24mm | | | | |
| Min. packaging quantity | 12 pcs. | | | | |

PROTEC B2S(R) 25/xxx (2+0)

Dimensions



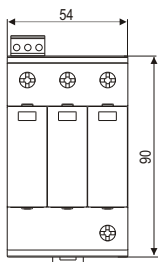
Internal configuration



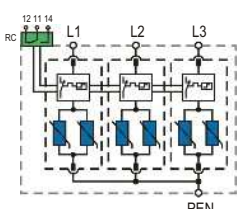
| PROTEC B2S 25/xxx (2+0) | 150 | 275 | 320 | 385 | 440 |
|------------------------------------|---------------------|------|------|------|------|
| Dimensions DIN 43880 | 2TE | | | | |
| Weight per unit | 198g | 251g | 251g | 267g | 283g |
| PROTEC B2SR 25/xxx (2+0) | 150 | 275 | 320 | 385 | 440 |
| Dimensions DIN 43880 | 2TE | | | | |
| Weight per unit | 203g | 256g | 256g | 272g | 288g |
| Packaging dimensions (single unit) | 109 x 76.5 x 41.5mm | | | | |
| Min. packaging quantity | 7 pcs. | | | | |

PROTEC B2S(R) 37.5/xxx (3+0)

Dimensions



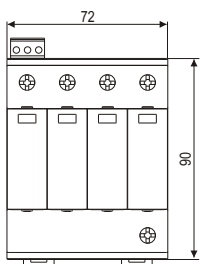
Internal configuration



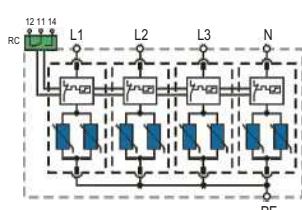
| PROTEC B2S 37.5/xxx (3+0) | 150 | 275 | 320 | 385 | 440 |
|------------------------------------|-------------------|------|------|------|------|
| Dimensions DIN 43880 | 3TE | | | | |
| Weight per unit | 300g | 382g | 382g | 394g | 432g |
| PROTEC B2SR 37.5/xxx (3+0) | 150 | 275 | 320 | 385 | 440 |
| Dimensions DIN 43880 | 3TE | | | | |
| Weight per unit | 305g | 387g | 387g | 399g | 437g |
| Packaging dimensions (single unit) | 109 x 76.5 x 60mm | | | | |
| Min. packaging quantity | 5 pcs. | | | | |

PROTEC B2S(R) 50/xxx (4+0)

Dimensions



Internal configuration



| PROTEC B2S 50/xxx (4+0) | 150 | 275 | 320 | 385 | 440 |
|------------------------------------|-------------------|------|------|------|------|
| Dimensions DIN 43880 | 4TE | | | | |
| Weight per unit | 366g | 462g | 462g | 494g | 526g |
| PROTEC B2SR 50/xxx (4+0) | 150 | 275 | 320 | 385 | 440 |
| Dimensions DIN 43880 | 4TE | | | | |
| Weight per unit | 371g | 467g | 467g | 499g | 531g |
| Packaging dimensions (single unit) | 109 x 76.5 x 78mm | | | | |
| Min. packaging quantity | 3 pcs. | | | | |