

Surge arrester 3EB5

Electrical characteristics

| Nominal system voltage | Rated voltage | Continuous operating voltage | Arrester type | Maximum travel speed | Arrester designation | Nominal discharge current | Charge transfer rating | Thermal energy rating | Maximum values of the residual voltages at discharge currents of the following impulses | | | | | | |
|------------------------|---------------|------------------------------|---------------------------|----------------------|----------------------|---------------------------|------------------------|-----------------------|---|-----------------------------|-----------------------------|----------------------------|-----------------------------|-----------------------------|--|
| | | | | | | | | | 30/60 μ s 0.5 kA kV | 30/60 μ s 1 kA kV | 30/60 μ s 2 kA kV | 8/20 μ s 5 kA kV | 8/20 μ s 10 kA kV | 8/20 μ s 20 kA kV | |
| U_n kV | U_r kV | U_c kV | | km/h | | I_n kA | Q_n C | W_m kJ | | | | | | | |
| AC | | | | | | | | | | | | | | | |
| 15 | 23 | 18 | 3EB5 230 - 6 A E 3 0 - OD | 320 | SM | 10 | 2.0 | 161 | 43.2 | 44.3 | 46.5 | 50.8 | 54.1 | 60.0 | |
| | 23 | 18 | 3EB5 230 - 7 A E 3 0 - OD | 320 | SH | 20 | 2.8 | 230 | 43.0 | 44.3 | 45.5 | 48.9 | 51.8 | 56.4 | |
| | 23 | 18 | 3EB5 230 - 8 A E 3 0 - OD | 320 | SH | 20 | 3.6 | 322 | 43.0 | 44.3 | 45.5 | 48.9 | 51.8 | 56.4 | |
| 25 | 37 | 30 | 3EB5 370 - 6 A G 3 0 - OD | 320 | SM | 10 | 2.0 | 259 | 69.6 | 71.3 | 74.8 | 81.7 | 87.0 | 96.5 | |
| | 37 | 30 | 3EB5 370 - 7 A G 3 0 - OD | 320 | SH | 20 | 2.8 | 370 | 69.1 | 71.2 | 73.3 | 78.7 | 83.3 | 90.8 | |
| | 37 | 30 | 3EB5 370 - 8 A H 3 0 - OD | 320 | SH | 20 | 3.6 | 518 | 69.1 | 71.2 | 73.3 | 78.7 | 83.3 | 90.8 | |
| | 42 | 34 | 3EB5 420 - 6 A G 3 0 - OD | 320 | SM | 10 | 2.0 | 294 | 79.0 | 80.9 | 84.9 | 92.8 | 98.7 | 110 | |
| | 42 | 34 | 3EB5 420 - 7 A H 3 0 - OD | 320 | SH | 20 | 2.8 | 420 | 78.5 | 80.8 | 83.2 | 89.3 | 94.5 | 103 | |
| | 42 | 34 | 3EB5 420 - 8 A J 3 0 - OD | 320 | SH | 20 | 3.6 | 588 | 78.5 | 80.8 | 83.2 | 89.3 | 94.5 | 103 | |
| | 45 | 36 | 3EB5 450 - 6 A H 3 0 - OD | 320 | SM | 10 | 2.0 | 315 | 84.6 | 86.7 | 90.9 | 99.4 | 106 | 117 | |
| | 45 | 36 | 3EB5 450 - 7 A J 3 0 - OD | 320 | SH | 20 | 2.8 | 450 | 84.1 | 86.6 | 89.1 | 95.7 | 101 | 110 | |
| | 45 | 36 | 3EB5 450 - 8 A J 3 0 - OD | 320 | SH | 20 | 3.6 | 630 | 84.1 | 86.6 | 89.1 | 95.7 | 101 | 110 | |
| DC | | | | | | | | | | | | | | | |
| 0.75 | 1.0 | 1.0 | 3EB5 010 - 8 D B 3 0 - OD | 320 | DC-B | 20 | 3.6 | 14 | 1.9 | 1.9 | 2.0 | 2.1 | 2.3 | 2.5 | |
| | 1.5 | 1.5 | 3EB5 015 - 8 D B 3 0 - OD | 320 | DC-B | 20 | 3.6 | 21 | 2.8 | 2.9 | 3.0 | 3.2 | 3.4 | 3.7 | |
| 1.5 | 2.0 | 2.0 | 3EB5 020 - 8 D B 3 0 - OD | 320 | DC-B | 20 | 3.6 | 28 | 3.7 | 3.8 | 4.0 | 4.3 | 4.5 | 4.9 | |
| | 3.0 | 3.0 | 3EB5 030 - 8 D B 3 0 - OD | 320 | DC-B | 20 | 3.6 | 42 | 5.6 | 5.8 | 5.9 | 6.4 | 6.8 | 7.4 | |
| 3.0 | 4.5 | 4.5 | 3EB5 045 - 8 D B 3 0 - OD | 320 | DC-B | 20 | 3.6 | 63 | 8.4 | 8.7 | 8.9 | 9.6 | 10.1 | 11.0 | |
| | 4.8 | 4.8 | 3EB5 048 - 8 D B 3 0 - OD | 320 | DC-B | 20 | 3.6 | 67 | 9.0 | 9.2 | 9.5 | 10.2 | 10.8 | 11.8 | |

Mechanical characteristics

| Height [H] | Creepage distance | Rated short circuit current | Lightning impulse withstand voltage 1.2/50 μ s | Power frequency withstand voltage 1 min., wet | Specified short-term load SSL | Specified long-term load SLL | Weight of arrester | Flashover distance | Figure |
|------------|-------------------|-----------------------------|--|---|-------------------------------|------------------------------|--------------------|--------------------|--------|
| mm | mm | I_k kA | kV | kV | N | N | kg | mm | |
| 301 | 920 | 50 | 175 | 80 | 3320 | 2320 | 6.4 | 306 | B |
| 281 | 860 | 65 | 165 | 75 | 5330 | 3730 | 10.1 | 288 | C |
| 281 | 860 | 65 | 165 | 75 | 5330 | 3730 | 10.1 | 288 | C |
| 391 | 1250 | 50 | 225 | 105 | 2550 | 1790 | 8.3 | 394 | B |
| 353 | 1170 | 65 | 210 | 95 | 4240 | 2970 | 13.1 | 360 | C |
| 389 | 1330 | 65 | 230 | 105 | 3850 | 2690 | 14.1 | 395 | C |
| 391 | 1250 | 50 | 225 | 105 | 2550 | 1790 | 8.9 | 394 | B |
| 389 | 1330 | 65 | 230 | 105 | 3850 | 2690 | 14.5 | 395 | C |
| 425 | 1480 | 65 | 250 | 115 | 3520 | 2470 | 15.6 | 430 | C |
| 436 | 1420 | 50 | 250 | 120 | 2290 | 1600 | 9.5 | 438 | B |
| 425 | 1480 | 65 | 250 | 115 | 3520 | 2470 | 15.6 | 430 | C |
| 425 | 1480 | 65 | 250 | 115 | 3520 | 2470 | 16.0 | 430 | C |
| DC | | | | | | | | | |
| 172 | 390 | 65 | 105 | 50 | 8720 | 6100 | 4.9 | 182 | A |
| 172 | 390 | 65 | 105 | 50 | 8720 | 6100 | 5.0 | 182 | A |
| 172 | 390 | 65 | 105 | 50 | 8720 | 6100 | 5.1 | 182 | A |
| 172 | 390 | 65 | 105 | 50 | 8720 | 6100 | 5.2 | 182 | A |
| 172 | 390 | 65 | 105 | 50 | 8720 | 6100 | 5.5 | 182 | A |
| 172 | 390 | 65 | 105 | 50 | 8720 | 6100 | 5.5 | 182 | A |

Dimensions

