

Phase control thyristors

| Type       | $V_{DRM}$<br>$V_{RRM}$<br>$V_{DSM} = V_{DRM}$<br>$V_{RSM} = V_{RRM} + 100 V$<br>V | $I_{TRMSM}$<br>A | $I_{TSM}$<br>10 ms,<br>$t_{vj\ max}$<br>kA | $\int i^2 dt$<br>10 ms,<br>$t_{vj\ max}$<br>A <sup>2</sup> s | $I_{TAVM}/t_C$<br>180°el<br>sin.<br>A/°C | $V_{(TO)}$<br>$t_{vj} =$<br>$t_{vj\ max}$<br>V | $r_T$<br>$t_{vj} =$<br>$t_{vj\ max}$<br>mΩ | $(di/dt)_{cr}$<br>DIN<br>IEC 747-6<br>A/μs | $t_q$<br>typ.<br>μs | $(dv/dt)_{cr}$<br>DIN<br>IEC 747-6<br>V/μs | $V_{GT}$<br>$t_{vj} =$<br>25°C<br>V | $I_{GT}$<br>$t_{vj} =$<br>25°C<br>mA | $R_{thJC}$<br>180°el<br>sinus<br>°C/W | $t_{vj\ max}$<br>°C | Outline  |
|------------|---|------------------|--|--|--|--|--|--|---------------------|--|-------------------------------------|--------------------------------------|---------------------------------------|---------------------|----------|
| T 388 N    | 600 800 1000<br>1200 1400 1600<br>1800*   | 730              | 6,4  | 205000   | 465/72<br>388/85                         | 0,9  | 0,75                                       | 120  | 220                 | F = 1000                                   | 2                                   | 200                                  | 0,068                                 | 125                 | 12       |
| T 398 N    | 200 400 600   | 800              | 5,5  | 151000   | 510/63<br>398/85                         | 1  | 0,4  | 200  | 200                 | F = 1000                                   | 1,4                                 | 150                                  | 0,1                                   | 140                 | 11       |
| ▲ T 458 N  | 2000 2200 2400  | 1000             | 6,75                                       | 228000   | 635/58<br>459/85                         | 1  | 0,84                                       | 120  | 300                 | C = 500<br>F = 1000                        | 1,5                                 | 250                                  | 0,0455                                | 125                 | 13       |
| T 459 N    | 2600  |                  |  |  |  |  |  |  |                     |  |                                     |                                      |                                       | 14                  |          |
| T 508 N    | 600 800 1000<br>1200 1400 1600<br>1800*   | 800              | 6,9  | 238000   | 510/85                                   | 0,8  | 0,6  | 120  | 250                 | F = 1000                                   | 2                                   | 200                                  | 0,053                                 | 125                 | 12<br>14 |
| T 509 N    |   |                  |  |  |  |  |  |  |                     |  |                                     |                                      |                                       |                     |          |
| T 588 N    | 600 800 1000<br>1200 1400 1600<br>1800*   | 1250             | 8  | 320000   | 795/61<br>588/85                         | 0,8  | 0,5  | 200  | 250                 | F = 1000                                   | 2,2                                 | 250                                  | 0,045                                 | 125                 | 12<br>14 |
| T 589 N    |   |                  |  |  |  |  |  |  |                     |  |                                     |                                      |                                       |                     |          |
| T 649 N    | 600 800 1000<br>1200 1400 1600  | 1300             | 11   | 605000   | 828/69<br>649/85                         | 1  | 0,38                                       | 120  | 250                 | F = 1000                                   | 1,5                                 | 250                                  | 0,038                                 | 125                 | 14       |
| T 709 N    | 2000 2200 2400<br>2600  | 1500             | 13   | 845000   | 960/61<br>700/85                         | 1,05   | 0,53                                       | 50   | 300                 | C = 500<br>F = 1000                        | 1,5                                 | 300                                  | 0,029                                 | 125                 | 15       |
| T 718 N    | 600 800 1000<br>1200 1400 1600*   | 1500             | 12,5                                       | 781000   | 955/64<br>718/85                         | 0,85   | 0,35                                       | 120  | 250                 | F = 1000                                   | 1,5                                 | 250                                  | 0,038                                 | 125                 | 13<br>14 |
| T 719 N    |   |                  |  |  |  |  |  |  |                     |  |                                     |                                      |                                       |                     |          |
| T 731 N    | 3600 3800 4000<br>4200  | 1750             | 15   | 1,125 · 10 <sup>6</sup>                                      | 1100/55<br>730/85                        | 1,15   | 0,59                                       | 50   | 450                 | F = 1000                                   | 2,5                                 | 300                                  | 0,0215                                | 120                 | 20       |
| T 828 N    | 200 400 600   | 1500             | 12   | 720000   | 955/74<br>828/85                         | 1  | 0,23                                       | 300  | 150                 | F = 1000                                   | 2                                   | 200                                  | 0,045                                 | 140                 | 12       |
| ■ T 869 N  | 3000 3200 3400<br>3600  | 2000             | 17   | 1,445 · 10 <sup>6</sup>                                      | 1275/53<br>860/85                        | 1,08   | 0,5  | 80   | 400                 | C = 500<br>F = 1000                        | 2                                   | 250                                  | 0,021                                 | 125                 | 15       |
| T 901 N    | 2800 3200 3400<br>3500 3600*  | 2000             | 17   | 1,445 · 10 <sup>6</sup>                                      | 1275/56<br>900/85                        | 1,055  | 0,46                                       | 80   | 350                 | F = 1000                                   | 2,5                                 | 300                                  | 0,0215                                | 125                 | 20       |
| ■ T 949 N  | 600 800 1000<br>1200 1400 1600  | 2050             | 17,5                                       | 1,53 · 10 <sup>6</sup>                                       | 1300/63<br>950/85                        | 1  | 0,25                                       | 200  | 180                 | F = 1000                                   | 2                                   | 250                                  | 0,026                                 | 125                 | 15       |
| T 1059 N   | 2000 2200 2400  | 2200             | 19   | 1,8 · 10 <sup>6</sup>  | 1400/64<br>1050/85                       | 1,05   | 0,3  | 150  | 300                 | C = 500<br>F = 1000                        | 2                                   | 250                                  | 0,021                                 | 125                 | 15<br>17 |
| T 1050 N   | 2600 2800*  |                  |  |  |  |  |  |  |                     |  |                                     |                                      |                                       |                     |          |
| T 1078 N   | 200 400 600   | 2000             | 14,5                                       | 1,05 · 10 <sup>6</sup>                                       | 1275/71<br>1078/85                       | 1,02   | 0,2  | 200  | 150                 | F = 1000                                   | 2                                   | 200                                  | 0,033                                 | 140                 | 12       |
| ■ T 1099 N | 600 800 1000<br>1200 1400 1600  | 2350             | 20   | 2 · 10 <sup>6</sup>  | 1500/63<br>1100/85                       | 0,84   | 0,195                                      | 250  | 200                 | F = 1000                                   | 2                                   | 250                                  | 0,026                                 | 125                 | 15       |
| ■ T 1181 N | 1200 1400 1600<br>1800*   | 2750             | 21,9                                       | 2,4 · 10 <sup>6</sup>  | 1750/54<br>1180/85                       | 0,97   | 0,213                                      | 100  | 200                 | C = 500<br>F = 1000                        | 2,5                                 | 300                                  | 0,0215                                | 125                 | 20       |
| ▲ T 1189 N | 600 800 1000<br>1200 1400 1600<br>1800  | 2800             | 22,5                                       | 2,53 · 10 <sup>6</sup>                                       | 1800/53<br>1190/85                       | 0,9  | 0,19                                       | 200  | 240                 | F = 1000                                   | 2                                   | 250                                  | 0,023                                 | 125                 | 15<br>17 |
| ▲ T 1190 N |   |                  |  |  |  |  |  |  |                     |  |                                     |                                      |                                       |                     |          |
| ■ T 1209 N | 1200 1400 1600<br>1800  | 2800             | 24   | 2,88 · 10 <sup>6</sup>                                       | 1800/54<br>1200/85                       | 1,05   | 0,185                                      | 200  | 280                 | F = 1000                                   | 2                                   | 250                                  | 0,021                                 | 125                 | 15       |
| T 1258 N   | 200 400 600   | 2500             | 20   | 2 · 10 <sup>6</sup>  | 1590/67<br>1258/85                       | 1  | 0,1  | 120  | 200                 | F = 1000                                   | 1,5                                 | 250                                  | 0,033                                 | 140                 | 13<br>14 |
| T 1259 N   |   |                  |  |  |  |  |  |  |                     |  |                                     |                                      |                                       |                     |          |
| T 1321 N   | 4800 5000 5200  | 2800             | 26   | 3,38 · 10 <sup>6</sup>                                       | 1800/63<br>1320/85                       | 1,12   | 0,416                                      | 50   | 450                 | H = 2000                                   | 2,5                                 | 300                                  | 0,0107                                | 120                 | 21       |
| ▲ T 1391 N | 3800 4000 4200  | 2800             | 27<br>47<br>(1 ms)                         | 3,65 · 10 <sup>6</sup>                                       | 1390/85                                  | 1,17   | 0,331                                      | 200  | 450                 | H = 2000                                   | 2,5                                 | 300                                  | 0,0107                                | 120                 | 21       |

▲ New type ■ Not for new design \* Delivery for large quantities on request