

**MAXIMUM PERMISSIBLE CURRENT  
IN PERMANENT MODE**

**SILICOU<sup>®</sup> 6.6 KV • FT 10103a**

| Ambient<br>temperature<br>(°C) | 2.5<br>mm <sup>2</sup> | 4<br>mm <sup>2</sup> | 6<br>mm <sup>2</sup> | 10<br>mm <sup>2</sup> | 16<br>mm <sup>2</sup> | 25<br>mm <sup>2</sup> | 35<br>mm <sup>2</sup> | 50<br>mm <sup>2</sup> | 70<br>mm <sup>2</sup> | 95<br>mm <sup>2</sup> | 120<br>mm <sup>2</sup> | 150<br>mm <sup>2</sup> | 185<br>mm <sup>2</sup> | 240<br>mm <sup>2</sup> | 300<br>mm <sup>2</sup> | 400<br>mm <sup>2</sup> |
|--------------------------------|------------------------|----------------------|----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| 0                              | 71                     | 94                   | 120                  | 169                   | 223                   | 295                   | 364                   | 457                   | 572                   | 682                   | 799                    | 915                    | 1053                   | 1255                   | 1455                   | 1727                   |
| 10                             | 68                     | 91                   | 116                  | 163                   | 216                   | 286                   | 352                   | 442                   | 554                   | 660                   | 773                    | 885                    | 1019                   | 1214                   | 1408                   | 1671                   |
| 20                             | 66                     | 88                   | 112                  | 158                   | 208                   | 276                   | 340                   | 427                   | 535                   | 637                   | 746                    | 855                    | 984                    | 1173                   | 1360                   | 1614                   |
| 30                             | 64                     | 85                   | 108                  | 152                   | 201                   | 266                   | 328                   | 411                   | 515                   | 614                   | 719                    | 824                    | 948                    | 1130                   | 1310                   | 1555                   |
| 40                             | 61                     | 81                   | 104                  | 146                   | 193                   | 255                   | 315                   | 395                   | 495                   | 590                   | 691                    | 791                    | 910                    | 1086                   | 1258                   | 1494                   |
| 50                             | 59                     | 78                   | 99                   | 140                   | 185                   | 245                   | 301                   | 379                   | 474                   | 565                   | 662                    | 758                    | 872                    | 1040                   | 1205                   | 1432                   |
| 60                             | 56                     | 74                   | 95                   | 134                   | 176                   | 234                   | 288                   | 361                   | 452                   | 539                   | 632                    | 724                    | 832                    | 993                    | 1151                   | 1367                   |
| 70                             | 53                     | 71                   | 90                   | 127                   | 168                   | 222                   | 274                   | 344                   | 430                   | 513                   | 601                    | 688                    | 791                    | 944                    | 1094                   | 1300                   |
| 80                             | 51                     | 67                   | 85                   | 120                   | 159                   | 210                   | 259                   | 325                   | 407                   | 485                   | 568                    | 651                    | 749                    | 894                    | 1035                   | 1230                   |
| 90                             | 48                     | 63                   | 80                   | 113                   | 149                   | 198                   | 243                   | 306                   | 382                   | 456                   | 534                    | 613                    | 704                    | 841                    | 974                    | 1157                   |
| 100                            | 45                     | 59                   | 75                   | 106                   | 139                   | 184                   | 227                   | 286                   | 357                   | 426                   | 499                    | 572                    | 657                    | 785                    | 909                    | 1080                   |
| 110                            | 41                     | 55                   | 70                   | 98                    | 129                   | 171                   | 210                   | 264                   | 330                   | 394                   | 462                    | 530                    | 608                    | 726                    | 841                    | 999                    |
| 120                            | 38                     | 50                   | 64                   | 89                    | 118                   | 156                   | 192                   | 241                   | 302                   | 360                   | 422                    | 484                    | 556                    | 664                    | 768                    | 913                    |
| 130                            | 34                     | 45                   | 57                   | 80                    | 106                   | 140                   | 173                   | 217                   | 271                   | 324                   | 379                    | 435                    | 499                    | 597                    | 691                    | 821                    |
| 140                            | 30                     | 39                   | 50                   | 71                    | 93                    | 123                   | 151                   | 190                   | 238                   | 284                   | 333                    | 382                    | 438                    | 524                    | 606                    | 721                    |
| 150                            | 25                     | 33                   | 43                   | 60                    | 78                    | 104                   | 128                   | 161                   | 201                   | 240                   | 281                    | 323                    | 370                    | 442                    | 511                    | 609                    |
| 160                            | 20                     | 26                   | 34                   | 47                    | 62                    | 82                    | 101                   | 127                   | 158                   | 189                   | 221                    | 254                    | 291                    | 349                    | 403                    | 479                    |
| 170                            | 13                     | 18                   | 22                   | 31                    | 41                    | 54                    | 67                    | 84                    | 104                   | 125                   | 147                    | 169                    | 193                    | 231                    | 267                    | 318                    |

**SILICOU<sup>®</sup> 13.8 KV • FT 10104a**

| 0   | 71 | 94 | 120 | 168 | 221 | 292 | 359 | 451 | 561 | 670 | 785 | 896 | 1031 | 1229 | 1421 | 1690 |
|-----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|
| 10  | 69 | 91 | 116 | 163 | 214 | 283 | 348 | 437 | 543 | 649 | 760 | 867 | 998  | 1189 | 1376 | 1636 |
| 20  | 67 | 88 | 112 | 157 | 207 | 273 | 336 | 422 | 524 | 627 | 734 | 838 | 964  | 1149 | 1329 | 1580 |
| 30  | 64 | 85 | 108 | 152 | 199 | 263 | 324 | 406 | 505 | 604 | 707 | 808 | 929  | 1108 | 1281 | 1523 |
| 40  | 62 | 82 | 104 | 146 | 192 | 253 | 311 | 391 | 486 | 581 | 680 | 777 | 893  | 1065 | 1231 | 1464 |
| 50  | 59 | 78 | 100 | 140 | 184 | 243 | 298 | 375 | 466 | 557 | 652 | 744 | 856  | 1021 | 1180 | 1404 |
| 60  | 57 | 75 | 95  | 134 | 176 | 232 | 285 | 358 | 445 | 532 | 623 | 711 | 818  | 975  | 1127 | 1341 |
| 70  | 54 | 71 | 91  | 127 | 167 | 221 | 271 | 340 | 423 | 506 | 592 | 677 | 778  | 928  | 1072 | 1276 |
| 80  | 51 | 68 | 86  | 121 | 158 | 209 | 257 | 322 | 401 | 479 | 561 | 641 | 737  | 879  | 1015 | 1208 |
| 90  | 48 | 64 | 81  | 114 | 149 | 197 | 242 | 303 | 377 | 451 | 528 | 604 | 693  | 827  | 956  | 1137 |
| 100 | 45 | 60 | 76  | 106 | 139 | 184 | 226 | 284 | 353 | 421 | 493 | 564 | 648  | 773  | 893  | 1062 |
| 110 | 42 | 55 | 70  | 98  | 129 | 170 | 209 | 263 | 327 | 390 | 457 | 523 | 600  | 716  | 827  | 984  |
| 120 | 38 | 51 | 64  | 90  | 118 | 156 | 192 | 240 | 299 | 357 | 418 | 478 | 549  | 655  | 757  | 900  |
| 130 | 35 | 46 | 58  | 81  | 106 | 140 | 173 | 216 | 269 | 321 | 376 | 431 | 494  | 590  | 681  | 810  |
| 140 | 30 | 40 | 51  | 71  | 94  | 123 | 152 | 190 | 237 | 282 | 331 | 379 | 434  | 518  | 598  | 712  |
| 150 | 26 | 34 | 43  | 61  | 79  | 104 | 128 | 161 | 200 | 239 | 280 | 320 | 367  | 438  | 506  | 602  |
| 160 | 20 | 27 | 34  | 48  | 63  | 83  | 101 | 127 | 158 | 189 | 221 | 253 | 290  | 346  | 399  | 475  |
| 170 | 14 | 18 | 23  | 32  | 42  | 55  | 68  | 85  | 105 | 126 | 147 | 169 | 193  | 231  | 266  | 317  |

- All values in the tables are expressed in Amperes (A).
- Calculations are based on methods issued from IEC 60287 standard.
- 1 single cable in free air without heat source in it surrounding environment.
- DC supply or AC supply (F ≤ 60 Hz).
- Maximum temperature of core: +180 °C.

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The information provided in this document is indicative. Laying, wiring and electrical conditions and the environment of the cable can not be fully considered in our studies.

In no way OMERIN SAS shall be held responsible for any incidents in the case of inappropriate uses, particularly in the case of wiring conditions that do not respect the good practice and the standards in force.

For an optimum use of our cables, we recommend testing in real conditions. Our sales department is available for a possible provision of samples, and/or for the conditions of a complete study in our laboratories.

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