

Δ **TABLE 610.14(A)** Ampacities of Insulated Copper Conductors Used with Short-Time Rated Crane and Hoist Motors. Based on Ambient Temperature of 30°C (86°F)

| Maximum Operating Temperature | Up to Four Simultaneously Energized Conductors in Raceway or Cable ¹ | | | | Up to Three ac ² or Four dc ¹ Simultaneously Energized Conductors in Raceway or Cable | | Maximum Operating Temperature |
|-------------------------------|---|--------|--|--------|---|--------|-------------------------------|
| | 75°C (167°F) | | 90°C (194°F) | | 125°C (257°F) | | |
| Size (AWG or kcmil) | Types MTW, RHW, THW, THWN, XHHW, USE, ZW | | Types TA, TBS, SA, SIS, PFA, FEP, FEPB, RHH, THHN, XHHW, Z, ZW | | Types FEP, FEPB, PFA, PFAH, SA, TFE, Z, ZW | | Size (AWG or kcmil) |
| | 60 Min | 30 Min | 60 Min | 30 Min | 60 Min | 30 Min | |
| 16 | 10 | 12 | — | — | — | — | 16 |
| 14 | 25 | 26 | 31 | 32 | 38 | 40 | 14 |
| 12 | 30 | 33 | 36 | 40 | 45 | 50 | 12 |
| 10 | 40 | 43 | 49 | 52 | 60 | 65 | 10 |
| 8 | 55 | 60 | 63 | 69 | 73 | 80 | 8 |
| 6 | 76 | 86 | 83 | 94 | 101 | 119 | 6 |
| 5 | 85 | 95 | 95 | 106 | 115 | 134 | 5 |
| 4 | 100 | 117 | 111 | 130 | 133 | 157 | 4 |
| 3 | 120 | 141 | 131 | 153 | 153 | 183 | 3 |
| 2 | 137 | 160 | 148 | 173 | 178 | 214 | 2 |
| 1 | 143 | 175 | 158 | 192 | 210 | 253 | 1 |
| 1/0 | 190 | 233 | 211 | 259 | 253 | 304 | 1/0 |
| 2/0 | 222 | 267 | 245 | 294 | 303 | 369 | 2/0 |
| 3/0 | 280 | 341 | 305 | 372 | 370 | 452 | 3/0 |
| 4/0 | 300 | 369 | 319 | 399 | 451 | 555 | 4/0 |
| 250 | 364 | 420 | 400 | 461 | 510 | 635 | 250 |
| 300 | 455 | 582 | 497 | 636 | 587 | 737 | 300 |
| 350 | 486 | 646 | 542 | 716 | 663 | 837 | 350 |
| 400 | 538 | 688 | 593 | 760 | 742 | 941 | 400 |
| 450 | 600 | 765 | 660 | 836 | 818 | 1042 | 450 |
| 500 | 660 | 847 | 726 | 914 | 896 | 1143 | 500 |

Δ **AMPACITY CORRECTION FACTORS**

| Ambient Temperature (°C) | For ambient temperatures other than 30°C (86°F), multiply the ampacities shown above by the appropriate factor shown below. | | | | | | Ambient Temperature (°F) |
|--------------------------|---|------|------|------|------|------|--------------------------|
| 21–25 | 1.05 | 1.05 | 1.04 | 1.04 | 1.02 | 1.02 | 70–77 |
| 26–30 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 79–86 |
| 31–35 | 0.94 | 0.94 | 0.96 | 0.96 | 0.97 | 0.97 | 88–95 |
| 36–40 | 0.88 | 0.88 | 0.91 | 0.91 | 0.95 | 0.95 | 97–104 |
| 41–45 | 0.82 | 0.82 | 0.87 | 0.87 | 0.92 | 0.92 | 106–113 |
| 46–50 | 0.75 | 0.75 | 0.82 | 0.82 | 0.89 | 0.89 | 115–122 |
| 51–55 | 0.67 | 0.67 | 0.76 | 0.76 | 0.86 | 0.86 | 124–131 |
| 56–60 | 0.58 | 0.58 | 0.71 | 0.71 | 0.83 | 0.83 | 133–140 |
| 61–70 | 0.33 | 0.33 | 0.58 | 0.58 | 0.76 | 0.76 | 142–158 |
| 71–80 | — | — | 0.41 | 0.41 | 0.69 | 0.69 | 160–176 |
| 81–90 | — | — | — | — | 0.61 | 0.61 | 177–194 |
| 91–100 | — | — | — | — | 0.51 | 0.51 | 195–212 |
| 101–120 | — | — | — | — | 0.40 | 0.40 | 213–248 |

Note: Other insulations shown in Table 310.4(1) and approved for the temperature and location shall be permitted to be substituted for those shown in Table 610.14(A). The allowable ampacities of conductors used with 15-minute motors shall be the 30-minute ratings increased by 12 percent.

¹For 5 to 8 simultaneously energized power conductors in raceway or cable, the ampacity of each power conductor shall be reduced to a value of 80 percent of that shown in this table.

²For 4 to 6 simultaneously energized 125°C (257°F) ac power conductors in raceway or cable, the ampacity of each power conductor shall be reduced to a value of 80 percent of that shown in this table.