



AAAC - ALLOY BARE ALUMINUM

APPLICATION: Used as bare overhead conductor for primary and secondary distribution. Designed utilizing a high-strength aluminum alloy to achieve a high strength-to-weight ratio; affords better sag characteristics. Aluminum alloy gives AAAC higher resistance to corrosion than ACSR.

PRODUCT FEATURES: Standard 6201-T81 high strength aluminum conductors, conforming to ASTM Specification B-399, are concentric-lay-stranded, similar in construction and appearance to 1350 grade aluminum conductors. Standard 6201 alloy conductors are similar to other alloy conductors commercially known as Ardival, Aldrey or Almelec. They were developed to fill the need for an economical conductor for overhead applications requiring higher strength than that obtainable by 1350 grade aluminum conductors, but without a steel core. The DC resistance at 20°C of the 6201-T81 conductors and the standard ACSRs of the same diameter are approximately the same. Conductors of the 6201-T81 alloy are harder and, therefore, have greater resistance to abrasion than conductors of 1350-H19 grade aluminum.

SPECIFICATIONS: AAAC bare conductor meets or exceeds the following ASTM specifications:

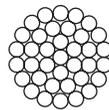
- **B-398** Aluminum Alloy 6201-T81 Wire for Electrical Purposes
- **B-399** Concentric-Lay-Stranded 6201-T81 Aluminum Alloy Conductors



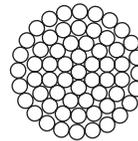
7 Strand



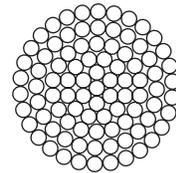
19 Strand



37 Strand



61 Strand



91 Strand

KINGWIRE AAAC - Alloy Bare Aluminum

| Code Word | Size (KCM) | Strand | ACSR Cond with Equivalent Resistance | Equivalent AL/ST Stranding | Diameter | | Cross Sectional Area (sq. in.) | Weight per 1000 ft (Lbs) | Rated Strength (Lbs) | Resistance OHMS/1000 ft | | Rating (AMPS) |
|-----------|------------|--------|--------------------------------------|----------------------------|-------------|-------------------|--------------------------------|--------------------------|----------------------|-------------------------|-----------|---------------|
| | | | | | Indiv. Wire | Complete Cable OD | | | | DC @ 20°C | AC @ 75°C | |
| Akron | 30.58 | 7/w | 6 | 6/1 | .0661 | .198 | .0240 | 28.7 | 1,110 | .659 | .785 | 107 |
| Alton | 48.69 | 7/w | 4 | 6/1 | .0834 | .250 | .0382 | 45.7 | 1,760 | .414 | .493 | 143 |
| Ames | 77.47 | 7/w | 2 | 6/1 | .1052 | .316 | .0608 | 72.7 | 2,800 | .260 | .310 | 191 |
| Azusa | 123.3 | 7/w | 1/0 | 6/1 | .1327 | .398 | .0968 | 115.7 | 4,460 | .163 | .195 | 256 |
| Anaheim | 155.4 | 7/w | 2/0 | 6/1 | .1490 | .447 | .1221 | 145.9 | 5,390 | .130 | .154 | 296 |
| Amherst | 195.7 | 7/w | 3/0 | 6/1 | .1672 | .502 | .1537 | 183.7 | 6,790 | .103 | .123 | 342 |
| Alliance | 246.9 | 7/w | 4/0 | 6/1 | .1878 | .563 | .1939 | 231.8 | 8,560 | .0816 | .0973 | 395 |
| Butte | 312.8 | 19/w | 266.8 | 26/7 | .1283 | .642 | .2456 | 293.6 | 11,000 | .0644 | .0769 | 460 |
| Canton | 394.5 | 19/w | 336.4 | 26/7 | .1441 | .721 | .3098 | 370.3 | 13,300 | .0511 | .0610 | 532 |
| Cairo | 465.4 | 19/w | 397.5 | 26/7 | .1565 | .783 | .3655 | 436.9 | 15,600 | .0433 | .0518 | 590 |
| Darien | 559.5 | 19/w | 477.0 | 26/7 | .1716 | .858 | .4394 | 521.7 | 18,800 | .0360 | .0420 | 663 |
| Elgin | 652.4 | 19/w | 556.5 | 26/7 | .1853 | .927 | .5124 | 612.4 | 21,900 | .0309 | .0371 | 729 |
| Flint | 740.8 | 19/w | 636.0 | 26/7 | .1415 | .991 | .5818 | 695.5 | 24,400 | .0272 | .0327 | 790 |
| Greeley | 927.2 | 19/w | 795.0 | 26/7 | .1583 | 1.108 | .7282 | 870.4 | 30,500 | .0217 | .0263 | 908 |

1. Resistance is calculated using ASTM standard increments of stranding, and metal conductivity of 52.5% IACS AC resistance at 60 Hz.
2. Current ratings are based on 75°C conductor temperature, 25°C ambient, 2ft/s wind, 96/watts/sq. foot sun, 0.5 coefficients of emissivity and absorption.