# Caledonian 

Aluminium Conductor Cables
www.caledonian-cables.com marketing@caledonian-cables.com

## All Aluminum Alloy Conductor (AAAC) Cables

## DIN 48201-6 95sqmm



## APPLICATIONS

AAAC is mainly used as bare overhead transmission cable and as primary and secondary distribution cable. It is also suitable for laying across basins, rivers and valleys where special geographical teatures exist.

## STANDARDS

DIN 48201-6

## CABLE CONSTRUCTION

AAAC cable bvconsists of aluminum alloy wires. The aluminum alloy wires are concentrically stranded.This section deals with heat-treatable magnesium silicon type aluminium alloys to the applicable International Standard, the electrical and mechanical properties of which all fall within the values suggested by relevant standard. Conductors to all other recognized specifications can also be supplied. The alloys referred to have higher strength but lower conductivity than pure aluminium. Being lighter, alloy conductors can sometimes be used to advantage in place of the more conventional ACSR; Having lower breaking loads than the later, their use becomes particularly favourable when ice and wind loadings are low.

## PHYSICAL AND THERMAL PROPERTIES

Ambient Temperature: $-5^{\circ} \mathrm{C}-50^{\circ} \mathrm{C}$
Isokeraunic level: 10-18
Relative Humidity: 5-100\%

## Electrical Properties

Density@20 ${ }^{\circ} \mathrm{C}: 2.7 \mathrm{~kg} / \mathrm{dm}$
Temperature Coefficient@20 ${ }^{\circ} \mathrm{C}: 0.0036\left({ }^{\circ} \mathrm{C}\right)$
Resistivity@20 ${ }^{\circ} \mathrm{C}: 0.0326$ Ohms $\mathrm{mm}^{2} / \mathrm{m}$
Linear Expansivity: $23 \times 10-6\left({ }^{\circ} \mathrm{C}\right)$
Rated Strength: 26.05KN
Electrical Resistance: $0.3551 \Omega / \mathrm{Km}$
Current Rating: 234A

## MECHANICAL PROPERTIES

Wind Pressure: $80-130 \mathrm{~kg} / \mathrm{m}^{2}$

## Caledonian

Aluminium Conductor Cables
www.caledonian-cables.com marketing@caledonian-cables.com

Seismic Acceleration: 0.12-0.05g
DIMENSION AND PARAMETERS

| Nominal Area | Nominal <br> Area Teorical | No./Nominal <br> Diameter of Strands | Conductor Diameter | Cable Weight |
| :---: | :---: | :---: | :---: | :---: |
| $\mathrm{mm}^{2}$ | $\mathrm{~mm}^{2}$ | $\mathrm{no} . / \mathrm{mm}$ | mm | $\mathrm{kg} / \mathrm{km}$ |
| 95 | 93.27 | $19 / 2.5$ | 12.5 | 256 |

