

CHAPTER: 05

Overhead Service Lines: → CA-05

Components of service lines →

Conductor : → Aluminium conductors of diff types and sizes are used for drawing overhead lines, whether they are HT or LT lines.

AAC - All Aluminium Conductors: →

→ This type of conductor is made up of one or more strands of hard drawn 1350 aluminium alloy.

→ It is used in low & high voltage overhead lines.

→ AAC is used extensively in urban areas where spans are usually short but high conductivity is required.

ACSR - Aluminium conductors steel reinforced

→ It is a type of high-capacity, high-strength stranded conductor typically used in overhead power lines.

→ Its excellent conductivity, low weight and low cost.

AAAC: → All Aluminium Alloy Conductors →

→ These conductors are made up of high strength aluminium magnesium-silicon alloy.

→ These conductors are designed to get better strength to weight ratio and offer improved electrical properties, excellent sag-tension characteristics and superior corrosion resistance when compared with ACSR.

Cables: →

→ Electrical cable and wires are considered as a same thing, in fact they are quite different.

Bearer Wire: →

Bearer wires shall be described either in length or weight stating Cross Sectional area in square millimetres.

→ Metallic bearer wire used for supporting insulated wire of low and medium voltage overhead lines should be efficiently earthed or insulated.

Lacing rod: →

→ Lacing rod to help apply strapping underneath pallets.

→ This tool slides into strap dispensers to easily and quickly feed strapping underneath large loads.

Aerial Fuse: →

→ It is used in every field of construction either a house or pole or any commercial buildings required this fuse.

→ It act as a cut protectors which control the flow of electricity. It's a stabilizers for the electricity consumption of a buildings.

Service support: →

→ The different types of structure used for supporting the overhead lines are wires, such types of structures are called line supports.

→ It also maintained the specified ground clearance. These clearance are decided by the electrical and mechanical considerations.

Energy Meter :->

-> The meter which is used for measuring the energy utilized by the electric load is known as the energy meter.

-> It is used in domestic and industrial AC ckt for measuring the power consumption. The meter is less expensive and accurate.

Energy Meter Box :->

-> For billing purposes, electric utilities use electric meters installed at customers' land to measure electric energy delivered to their customers.

-> Every home or office contains electric meter and the electric meter are usually placed in the meter box.

-> The meter box is usually mounted on the wall of the premises.