DALI ELECTRONICS

Copper Aluminum Bimetal consists of Copper (sheet metal) claded on pure Aluminum (Base metal) both metals being diffused together to form an inseparable whole by roll bonding process. Copper Aluminum Bimetal is therefore not an alloy and copper alloys are not electro plating but are rather. Mechanically welded to Aluminum sheets. It is know that when Aluminum terminals are directly connected to Copper Terminals. To carry current at a high voltage ,a bimetallic galvanic corrosion occurs, resulting in a high resistance at the joint. The heated joints are oxidized & looses contacts resulting in spark ,voltage dropout power losses and failure, damages machinery. When COPAL Bimetal is placed between Al-Terminal & Cu-Terminal at the joint (with Cu facing Cu & Al facing Al) bimetallic galvanic corrosion is averted due to vacuum in Copper Aluminum Bimetal. Copper Aluminum Bimetal is hence used at dissimilar metal joints of Al & Cu to make similar metal contact.

Applications:

- Substation accessories like Bimetallic clamp & connector
- Cable Clamp & End Connector
- Distribution & Panel Boards
- Flexible Connector
- Busducts & Busbar Connections
- Isolators & Switchgears
- Circuit Breakers
- Overhead connectors

Technical Specifications:

Property	Aluminum	Copper
Purity(min)	99.5%	99.9%
Composition		
By Volume	80%	20%
By Weight	55%	45%
Property	Units	COPAL
Density at 20º C	Gms/cm^3	3.95
Max.Electrical Resistivity at 20º C	μ/cm	2.6
Max.Electrical conductivity at 20º C	% IACS	65