ZITHA TECH SPECIALTY CABLES (Pty) Ltd

Electrical arcing in the distribution box



Overview

A hissing sound emanating from inside the distribution cabinet often indicates that a connection point is experiencing ionization breakdown. This discharge phenomenon, known as arcing, is rooted in the contact failure of terminal terminal lugs. Electrical arcing occurs when electrical current jumps through air between conductors or to ground, releasing extreme heat, intense light, and localized mechanical force. Unlike a brief spark, an arc sustains itself once air becomes ionized, allowing continuous current flow that erodes metal. Electrical arcing describes the powerful and often destructive event that occurs when electricity jumps across an insulating gap, representing a failure of the system's integrity. It's like a mini lightning bolt, powerful enough to melt metal or ignite nearby combustibles.

Article Content

Arcing Hazards In Cable Terminals: The Physical Process From

A hissing sound emanating from inside the distribution cabinet often indicates that a connection point is experiencing ionization breakdown. This discharge phenomenon, known as

© 2026 ZITHA TECH SPECIALTY CABLES (Pty) Ltd - All rights reserved

Contact Us

Continue your research online:

Website: https://zithatech.co.za
Technical inquiry: https://zithatech.co.za/contact.html

This document is for preliminary research. Verify specifications against current standards, product documentation and project requirements.

© 2026 ZITHA TECH SPECIALTY CABLES (Pty) Ltd - All rights reserved