Surge Arrestor Module (SAM)

Protecting Railway Infrastructure - *Reliable. Robust. Resilient.*

Introduction

The Surge Arrestor Module (SAM) is a cutting-edge plug-in protection system designed to safeguard critical railway signaling and trackside equipment against electrical surges, lightning strikes, and voltage transients. With proven performance in global railway networks, SAM ensures reliability, minimizes downtime, and reduces maintenance costs, making it the ultimate solution for resilient infrastructure.
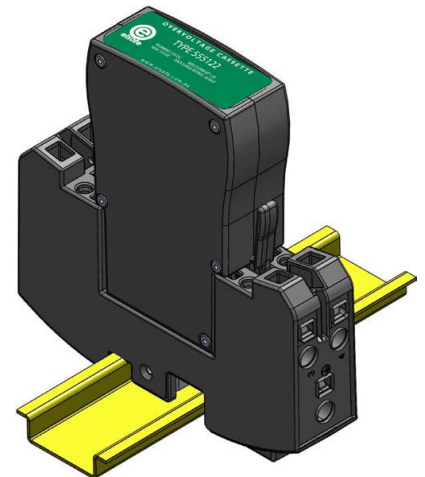
Key Features

- Plug-in, replaceable design for quick maintenance.
- Handles surges caused by lightning strikes and voltage transients.
- Vibration-proof cage clamp technology.
- Temperature range: -20°C to +75°C, IP2X rated for safety.
- Visible end-of-life indicator for proactive replacement.
- Test points for live system monitoring.

Applications

- Signal Protection: SSI, AWS systems, and track circuits.
- Trackside Infrastructure: AC/DC circuits, relays, and communication systems.
- Operational Facilities: Energy systems, displays, and ticketing machines.
- New Expansions: Reliable protection for upgrades and tram-train transitions.

Technical Specifications

- Continuous Current: Up to 30 Amps.
- Voltage Ratings: Customizable. (40+ different models)
- Mounting: Dual DIN and G rail compatibility.
- Environmental Protection: Fire-rated 94 V0, IP2X.

Get in touch!

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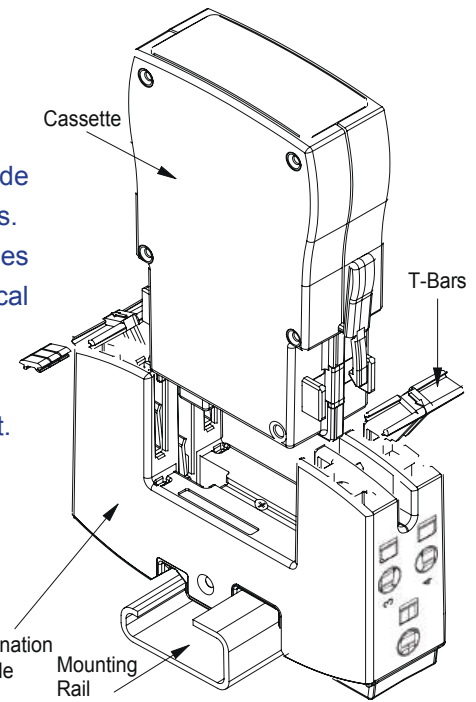
Rowe Hankins Ltd.

Overview

The Elsafe *Technical Housing & Termination System* is a simple, cost-effective system for protecting railway electrical and signalling systems from interference and transients. The system consists of two main components:

- Termination Modules – These DIN-Rail and G-Rail compatible modules provide a convenient and reliable means of terminating incoming and outgoing cables.
- Protection Cassettes – Available for a wide range of applications, these modules plug into a termination module, protecting its circuit from noise and electrical transients.

Award Winning Features

- Termination modules simplify cabinet wiring and layout.
- Colour-coded modules help prevent wiring errors.
- Test points for non-disruptive live system monitoring.
- Easily-visible mechanical flags indicate end-of-life.
- Plug-In topology guarantees ease of service & testing.
- IP2X Rated for Safety.
- Queensland Rail,Railcorp,ARTC,MTM Approvals.
- Designed & Manufactured in Australia.

Cassette

T-Bars

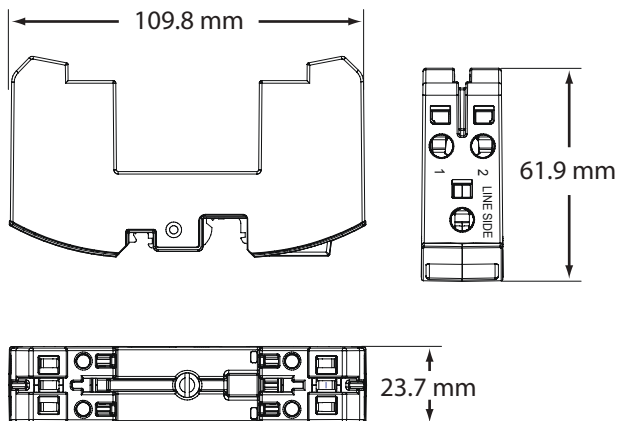Termination Module

Mounting Rail

Termination Modules

Termination modules are specially designed to provide a convenient point to terminate both incoming and outgoing cables, as well as accepting a variety of plug-in Protection Cassettes. The modules are designed to attach to either a standard 35 mm top hat DIN or a 32 mm G rail.

Modules feature test sockets for incoming and outgoing cables, which accept standard 4 mm diameter Banana Test plugs.

Termination modules are designed to accept two colour coded T-bars, which are colour-coded to match the coloured front panel of a Protection Cassette, in order to ease identification when the cassette is removed for testing or service.
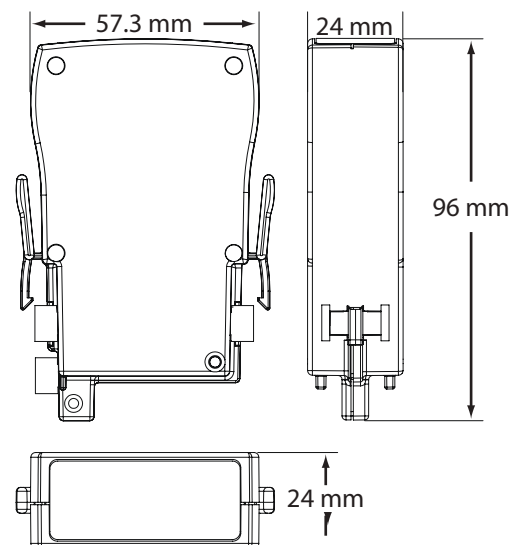
109.8 mm

61.9 mm

23.7 mm

Protection Cassettes

Elsafe's Protection Cassettes can be divided into three broad categories--

- Transient Protection Cassettes – Suppress transient over-voltages caused by, for example, lightning strikes.
- Filter & Transient Protection Cassettes – Provide both transient suppression and noise filtering.
- Speciality Protection Cassettes.

Cassettes are available with a wide range of voltage and current ratings, and have been designed primarily for use in railway signalling systems.

57.3 mm

24 mm

96 mm

24 mm