



JULY 2021

# **Hi-Tech Valiant™ fuse for fire mitigation**

Customer presentation



---

# Agenda

- Protect what matters most
- Because there's so much worth protecting
- Features and benefits
- Delivering value
- Fire potential outlook
- Benefits of all Hi-Tech® fuses
- Why use current-limiting fuses
- Next steps



---

# Hi-Tech Valiant™ fuse for fire mitigation

Protect what matters most.



---

# Hi-Tech Valiant™ fuse

## Because there's so much protecting.

Each year, devastating wildfires in the U.S and Canada burn millions of acres, causing billions of dollars in property damage as well as injury and loss of life. No one wants to be the cause of a wildfire.



---

# Hi-Tech Valiant™ fuse

## Features and benefits

- Hermetically sealed design to contain explosive showers during operation
- Meets the exemption requirements listed in the California Code of Regulations, Title 14, Section 1255 (10)
- Designed and 100% leak tested in the USA
- Fits into an industry-standard cutout fuse mounting bracket
- Meets the IEEE C37.41-2016 standard



---

# Hi-Tech Valiant™ fuse

## Special advantages

- Hi-Tech damage sensor included as standard — helps protect against undetected damage to the fuse that could compromise equipment protection
- Unique, patent-pending engagement pin for easy vertical and rotational alignment during installation
- Actuating pin remains external to the fuse after operation — eliminating the possibility of reclosure
- Multi-seal design seal to prevent water intrusion
- Soldered/welded electrical connections
- Uses a mechanical spring for operation — contains no black powder or other explosive material
- High fault interrupting capability up to 50 kA symmetrical



---

# Hi-Tech Valiant™ fuse

## Delivering value.

### Safety

- CAL FIRE exempt
- Non-expulsion
- Provides visible indication after fuse operation

### Reliability

- Incorporates over 20 years of field-tested Hi-Tech full-range fuse technology
- 100% leak tested in the USA to ensure hermetic sealing
- Multi-seal design to prevent water intrusion
- Soldered/welded electrical connections
- Engagement pin for consistent alignment
- Assembled, tested and shipped from North Carolina, USA

### Flexibility

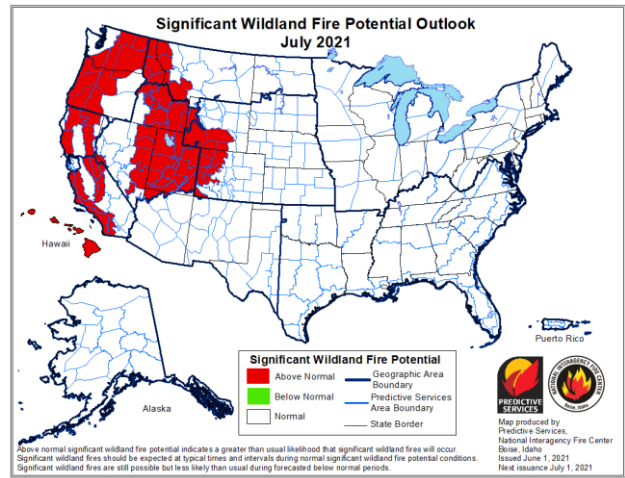
- Full range of current ratings available
- Fits into an industry-standard cutout fuse mounting bracket
- Easily hot-stick installed using standard field installation procedures



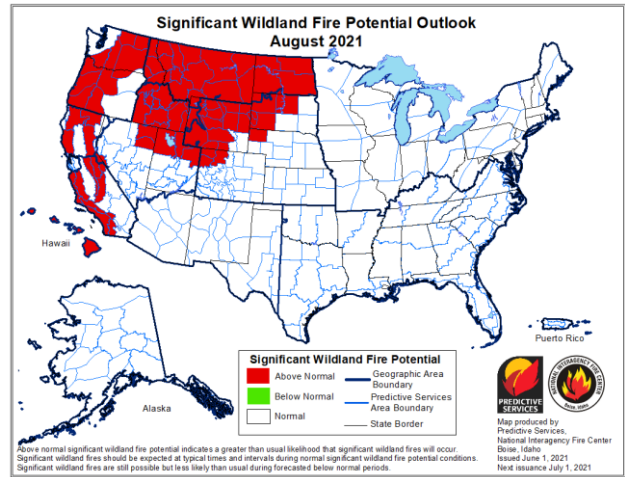


# Hi-Tech Valiant™ fuse

## Fire potential outlook



Significant Wildfire Fire  
Potential Outlook  
July 2021



Significant Wildfire Fire  
Potential Outlook  
August 2021

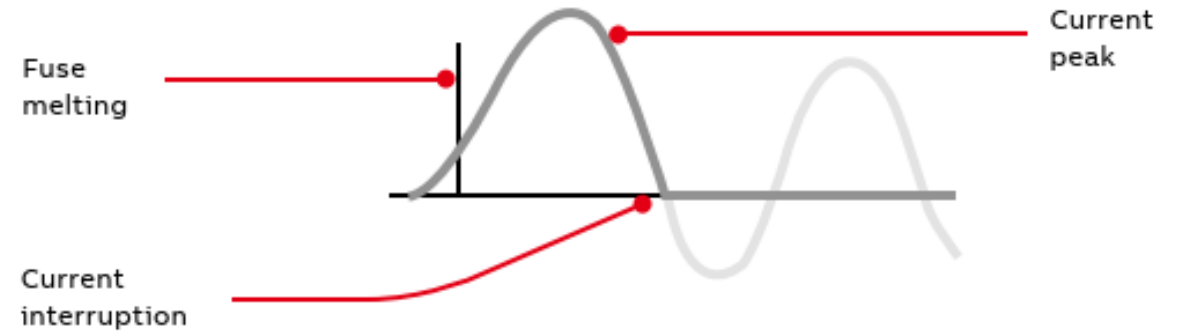


# Hi-Tech Valiant™ fuse

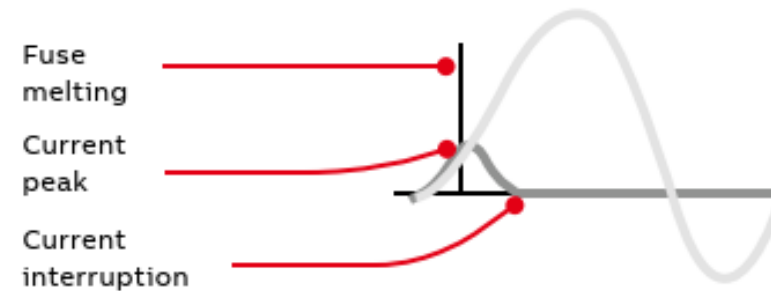
## Why use current-limiting fuses?

- To minimize the risk of eventful/catastrophic failure
- To interrupt high fault currents (up to 50kA)
- To improve system safety
- To improve power quality

Expulsion fuse operation



Current-limiting fuse operation

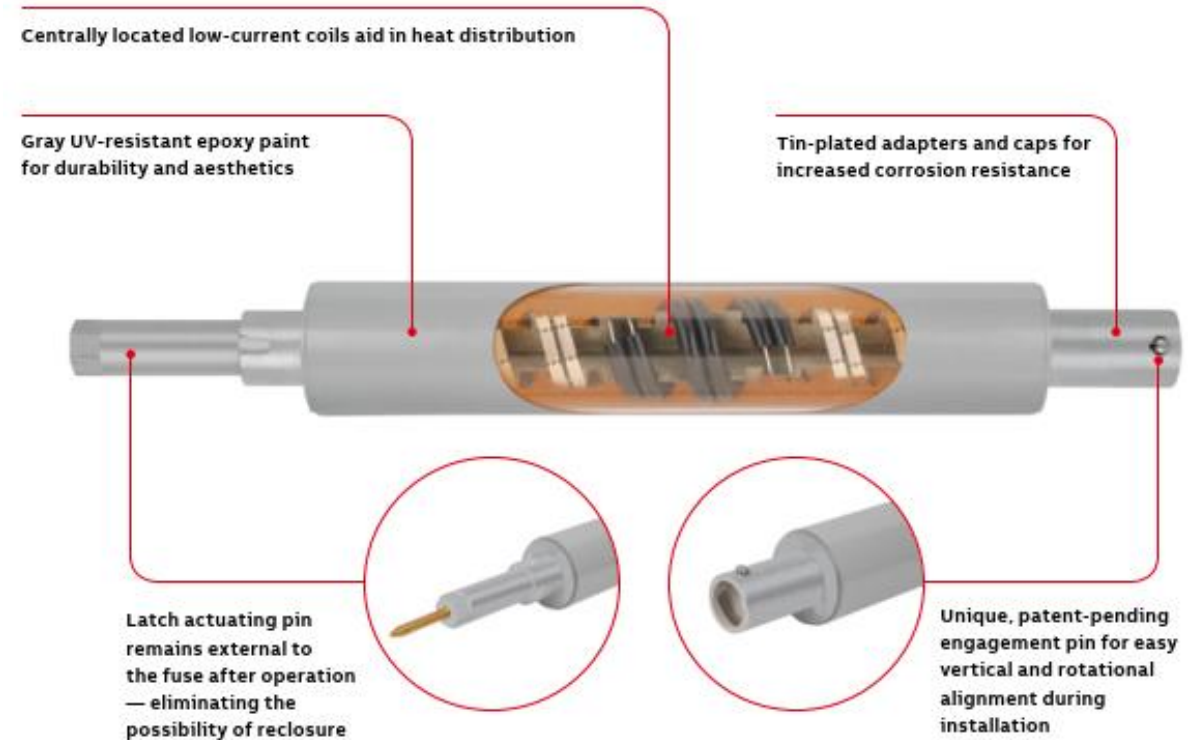


— Prospective fault current  
— Fuse current

# Hi-Tech Valiant™ fuse

## Benefits of all Hi-Tech current-limiting fuses

- Superior performance
- High fault interrupting capability
- Current-limiting action
- Hermetically sealed
- Minimal equipment damage



---

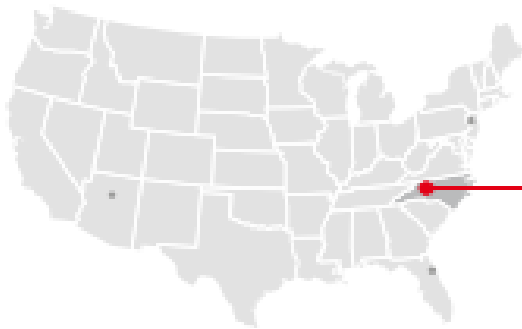
# Hi-Tech Valiant™ fuse

## Next steps

For more information, contact your ABB sales representative.

[Electrification.us.abb.com](http://Electrification.us.abb.com)

1-800-326-5282



Hi-Tech® fuses are assembled,  
tested and shipped from Hickory,  
North Carolina.

**ABB**