# Bussmann series NH Battery storage fuse links

Effective June 2020

Supersedes April 2020



**Bolted fuses** 



**Bladed fuses** 

#### **Product description**

Eaton's Bussmann® series NH battery storagefuses are specifically designed to protect and isolate battery array combiners and disconnects. These fuse links are capable of interrupting low overcurrents associated with faulted battery storage systems (reverse current, multi-array fault).

#### Standard features

- Compact design
- Low power loss
- Global accreditations
- Dual indicator feature
- Variation of fixing options
- Compatible with Bussmann series NH bases (see data sheet 720136)



## Catalogue symbol

- · Knife blade fuse link:BSF-(amps)G-NH(NH body size)10
- · Bolted blade fuse link:BSF-(amps)G-NH(NH body size)10-B

For example catalogue number **BSF-200G-NH110** represents a **B**attery **S**torage **F**use, rated at **200** A, **G** operating class gBat, **NH** fuse type, NH fuse body size **1**, rated at **10**00 V d.c., Knife blade

#### **Technical data**

Rated voltage: 1000 V d.c.
Rated current: 63 to 400 A
Fuse body size: 1, 2 or 3

 Operating class: gBat proposed for full range fuse links for protection of battery storage systems

Breaking capacity: 100 kA

Time constant: 4.5 ms at 100 kAROHS and Reach compliant

# Standards/Approvals

 IEC 60269-7 for battery storage fuse links is under preparation (expected publication in 2020)

# Microswitches (ordered separately, only for use with bladed version)

- · 170H0236
- · 170H0238

# Fuse holders (ordered separately, only for use with bladed version)

- · SD1-D-PV
- · SD2-D-PV
- · SD3-D-PV

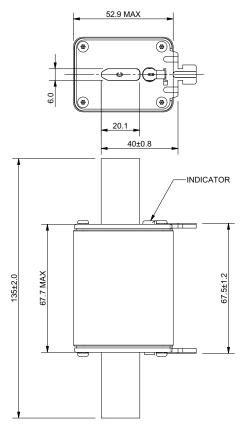
#### **Packaging**

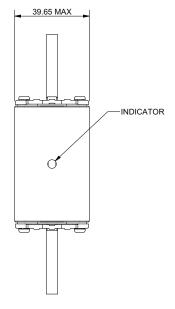
· 3 in a pack

#### **Technical data**

| Catalogue number<br>with knife blade | Catalogue number<br>with bolted blade | Fuse body<br>size | Rated<br>current<br>(Amps) | Rated<br>voltage<br>(V d.c.) | Pre-arcing I²t | Total I²t @<br>1000 V d.c. | Power loss<br>at 0.7 x I <sub>n</sub> (W) | Power loss at I <sub>n</sub> (W) |
|--------------------------------------|---------------------------------------|-------------------|----------------------------|------------------------------|----------------|----------------------------|---|----------------------------------|
| BSF-063G-NH110                       | BSF-063G-NH110-B                      | 1                 | 63                         | 1000                         | 470            | 4300                       | 5   | 12                               |
| BSF-080G-NH110                       | BSF-080G-NH110-B                      | 1                 | 80                         | 1000                         | 640            | 5760                       | 6   | 15.5                             |
| BSF-100G-NH110                       | BSF-100G-NH110-B                      | 1                 | 100                        | 1000                         | 1300           | 11,700                     | 7   | 16.5                             |
| BSF-125G-NH110                       | BSF-125G-NH110-B                      | 1                 | 125                        | 1000                         | 2600           | 23,400                     | 7   | 17.5                             |
| BSF-160G-NH110                       | BSF-160G-NH110-B                      | 1                 | 160                        | 1000                         | 5200           | 46,800                     | 11  | 27.5                             |
| BSF-160G-NH210                       | BSF-160G-NH210-B                      | 2                 | 160                        | 1000                         | 4600           | 37,000                     | 11  | 28                               |
| BSF-200G-NH210                       | BSF-200G-NH210-B                      | 2                 | 200                        | 1000                         | 9500           | 76,000                     | 13  | 32                               |
| BSF-250G-NH210                       | BSF-250G-NH210-B                      | 2                 | 250                        | 1000                         | 17,000         | 136,000                    | 15  | 38                               |
| BSF-315G-NH310                       | BSF-315G-NH310-B                      | 3                 | 315                        | 1000                         | 32,000         | 260,000                    | 18  | 44                               |
| BSF-355G-NH310                       | BSF-355G-NH310-B                      | 3                 | 355                        | 1000                         | 44,500         | 370,000                    | 18  | 46                               |
| BSF-400G-NH310                       | BSF-400G-NH310-B                      | 3                 | 400                        | 1000                         | 67,500         | 550,000                    | 21  | 52                               |

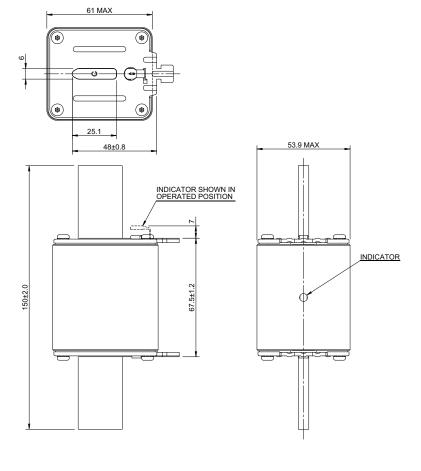
# **Dimensions mm - NH1 Bladed fuse links**





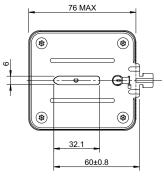


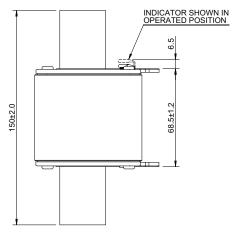
**Dimensions mm - NH2 Bladed fuse links** 

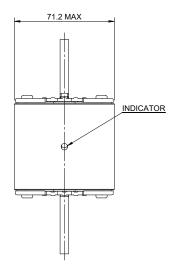




### **Dimensions mm - NH3 Bladed fuse links**

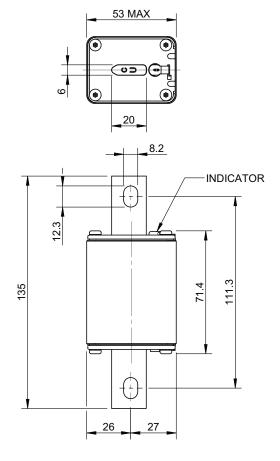


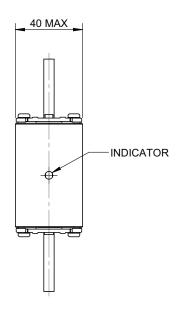


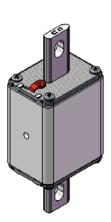




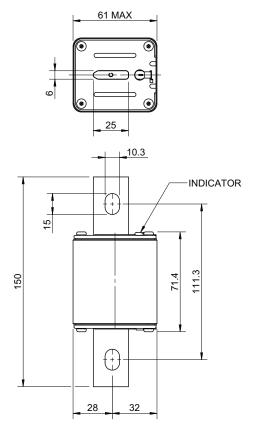
**Dimensions mm - NH1 Bolted fuse links** 

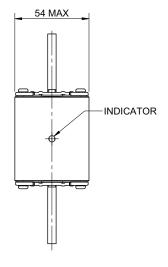






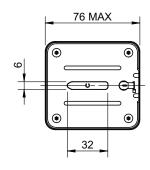
# **Dimensions mm - NH2 Bolted fuse links**

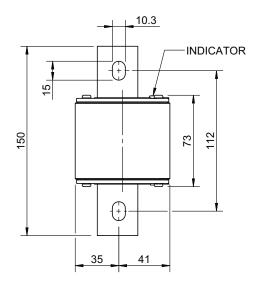


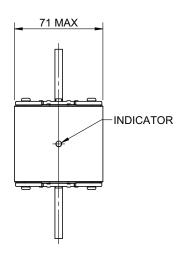


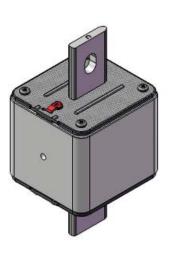


**Dimensions mm - NH3 Bolted fuse links** 

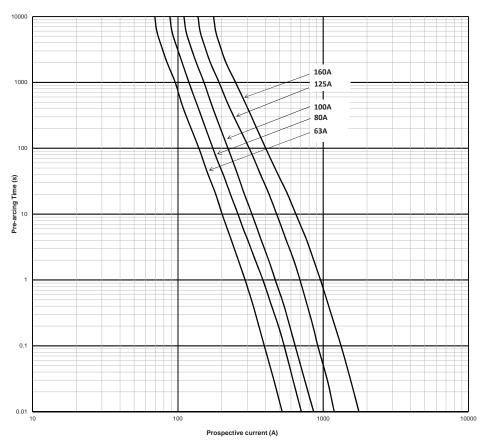




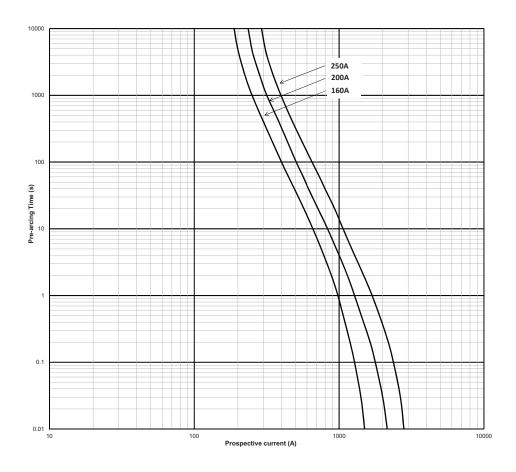




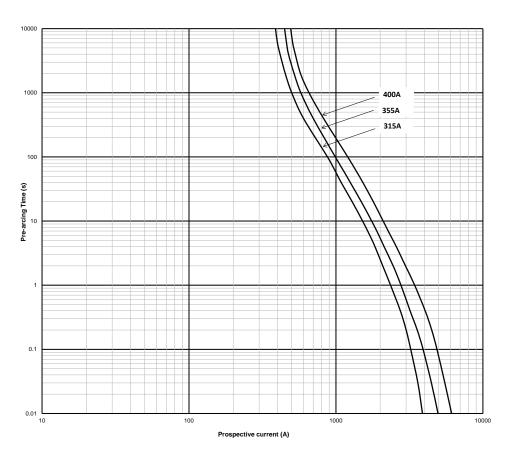
# Time-current curve - NH1 fuse links



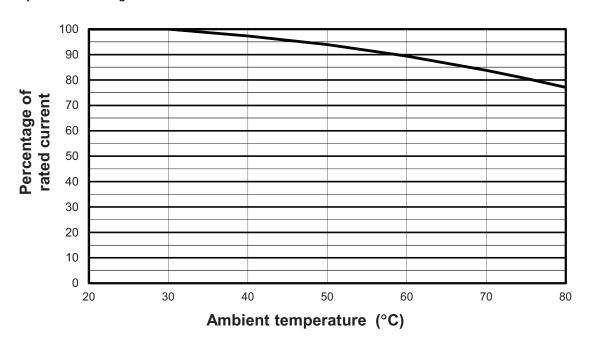
# Time-current curve - NH2 fuse links



# Time-current curve - NH3 fuse links

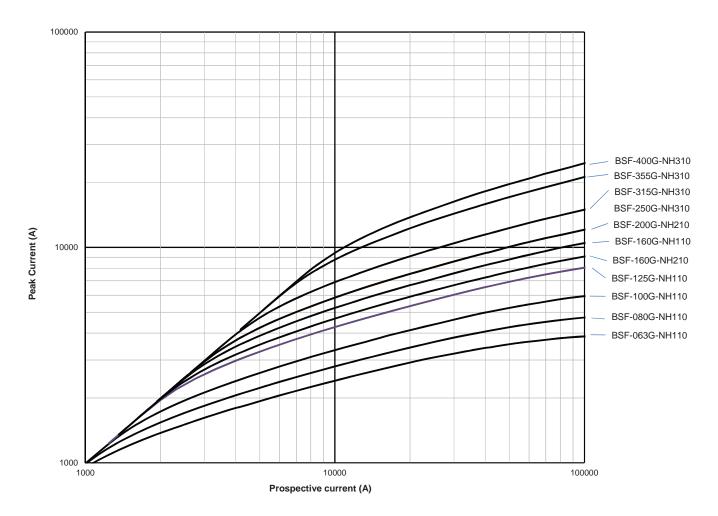


# Temperature derating curve



(The ambient temperature is that local to the fuse link)

### Peak let-through curve



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