Effective March 2025 Supersedes September 2019

# Bussmann series 22 x 58 mm FWP ferrule fuses



## **Product description**

Eaton's Bussmann<sup>\*</sup> series FWP ferrule fuse links are specifically designed for the protection of DC common bus, DC drives, power converters/ rectifiers and reduced voltage starters. They are available with or without strikers.

### Feature and benefits

- Excellent cycling capability and DC performance
- Low arc voltage and low energy let-through
- Low watts loss in a compact size
- Used with finger-safe holders/blocks

### **Typical applications**

- DC common bus
- DC drives
- Power converters/rectifiers
- Reduced voltage starters



### **Catalogue symbol**

- With striker: FWP-(amps)A22F
- Without striker: FWP-(amps)A22FI

## **Technical data**

- Rated voltage: 700 V a.c./V d.c. UL
- Rated current: 20 to 100 A
- Operating class; aR
- Breaking capacity:
  - 200 kA RMS Sym.
  - 50 kA at 700 V d.c., t/c 5ms

## Standards/Approvals

- CE
- UL Recognised
- CSA Component acceptance for versions without striker only

## Packaging

• 10 in a pack

# Technical data

Catalogue number	Fuse type	Rated voltage (V a.c./V d.c.)	Rated current (Amps)	Pre-arcing l <sup>2</sup> t	Total I²t @ 700 V a.c.	Power loss at I <sub>n</sub> (W)
FWP-20A22F	Without striker	700	20	23	330	5
FWP-25A22F	Without striker	700	25	37	530	6
FWP-32A22F	Without striker	700	32	55	780	8
FWP-40A22F	Without striker	700	40	68	960	12
FWP-50A22F	Without striker	700	50	155	2200	12.5
FWP-63A22F	Without striker	700	63	280	4000	15
FWP-80A22F	Without striker	700	80	550	7800	15
FWP-100A2FF	Without striker	700	100	1100	15600	16.5
FWP-20A22FI	With striker	700	20	23	330	5
FWP-25A22FI	With striker	700	25	37	530	6
FWP-32A22FI	With striker	700	32	55	780	8
FWP-40A22FI	With striker	700	40	68	960	12
FWP-50A22FI	With striker	700	50	155	2200	12.5
FWP-63A22FI	With striker	700	63	280	4000	15
FWP-80A22FI	With striker	700	80	550	7800	15
FWP-100A2FFI	With striker	700	100	1100	15600	16.5

# **Bussmann series** 22 x 58 mm FWP ferrule fuses



#### Without striker



With striker

# Arc voltage curve



This curve gives the peak arc voltage, U, , which mayappearacrossthefuseduringitsoperationas afunctionoftheappliedworkingvoltage, E<sub>n</sub>, (RMS) at a power factor of 15%.

**Power losses curve** 



Wattslossatratedcurrentisgivenintheelectrical characteristics. The curveal lows the calculation of the power losses at load currents lower than the  $rated current. The correction factor, K_{\rm p}, is given as$ a function of the RMS load current, I, , in % of the rated current .

**Total clearing curve** 



Thetotalclearingl<sup>2</sup>tatratedvoltageandatpower factorof15% are given in the electrical characteristics.Forothervoltages,the clearing I<sup>2</sup>tis found by multiplying by correction factor, K, given as a function of applied working voltage,  $E_{a'}$  (RMS). Technical Data 720026 Effective March 2025

#### **Time-current curve**



The only controlled copy of this data sheet is the electronic read-only version located on the Eaton network drive. All other copies of this document are by definition uncontrolled. This bulletin is intended to clearly present comprehensive product data and provide technical information that will help the end user with design applications. Eaton reserves the right, without notice, to change design or construction of any products and to discontinue or limit distribution of any products. Eaton also reserves the right to change or update, without notice, any technical information contained in this bulletin. Once a product has been selected, it should be tested by the user in all possible applications.

**Eaton** EMEA Headquarters Route de la Longeraie 7 1110 Morges, Switzerland

Electrical Sector Eaton Electrical Products Limited Melton Road, Burton-on-the-Wolds LE12 5TH, UK Eaton.eu

FAT-N Powering Business Worldwide © 2019 Eaton All Rights Reserved PDF Only Publication No. 720026 March 2025 Changes to the products, to the information contained in this document, and to prices are reserved; so are errors and omissions. Only order confirmations and technical documentation by Eaton is binding. Photos and pictures also do not warrant a specific layout or functionality. Their use in whatever form is subject to prior approval by Eaton. The same applies to Trademarks (especially Eaton, Moeller, and Cuttler-Hammer). The Terms and Conditions of Eaton apply, as referenced on Eaton Internet pages and Eaton order confirmations.

Eaton is a registered trademark.

All other trademarks are property of their respective owners.