

**SCHAFFNER**

energy efficiency and reliability

## **FN 9280 & FN9290 Series IEC Power Entry Modules**



**Schaffner Group**

## FN9280 & FN9290 Series: Features

### Approvals



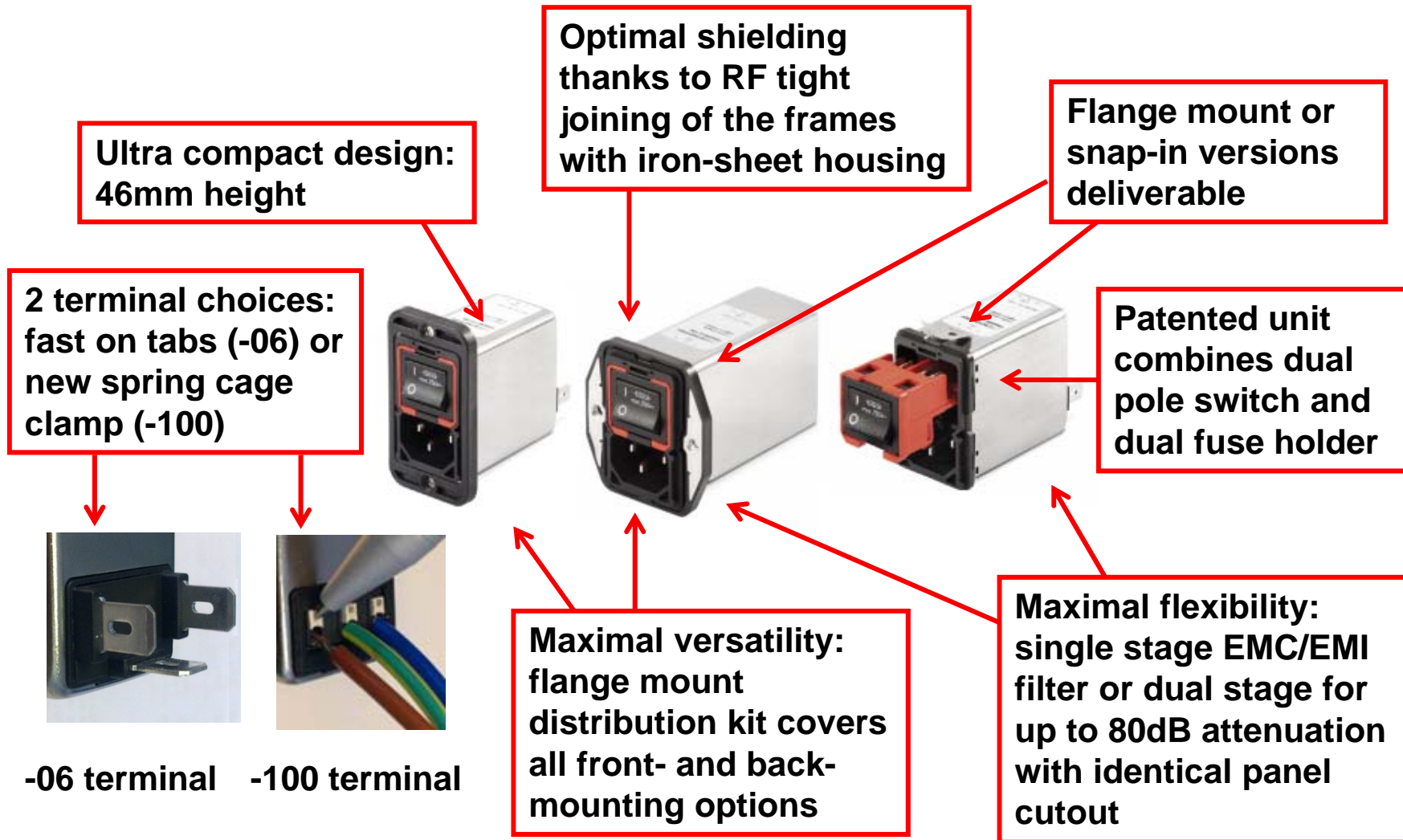
(CQC approval pending)

### RoHS



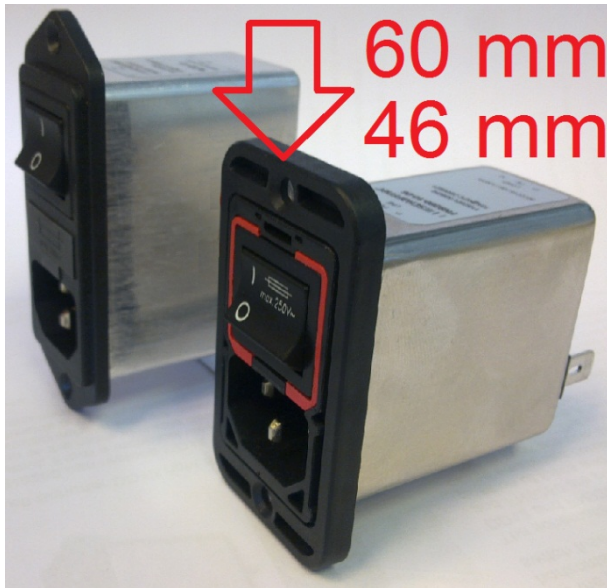
- **UL, CSA, ENEC and CQC approvals for worldwide application**
- **FN 9280 with single stage filter**
- **FN9290 with dual stage filter**
- **Ultra compact design**
- **Rated currents from 1A to 10A**
- **Dual fuse holder**
- **2-pole rocker switch**
- **Good attenuation performance**
- **Faston or spring cage terminals**

## FN9280 & FN9290 Series: The New IEC Power Module Families

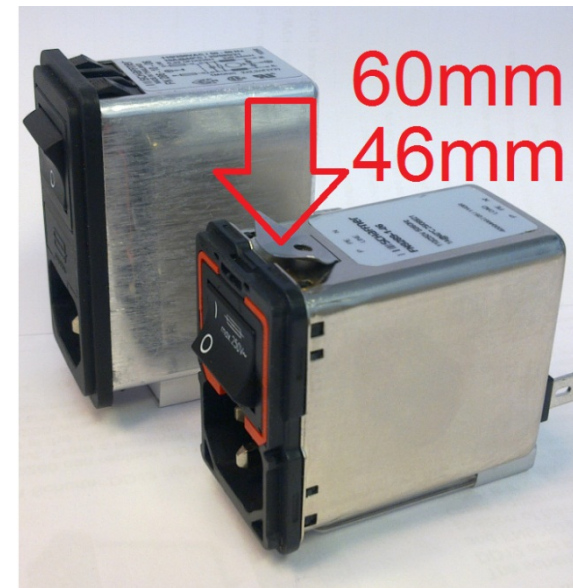


## FN9280 & FN9289 Series: Ultra Compact Design

- Best in class design with only 46mm height
- Excellent shielding with sheet-metal-enclosed housing
- Improved filter performance
- Flange mount (FN9280) or snap-in (FN9289) versions

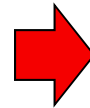


comparison FN9282 vs. FN282



comparison FN9289 vs. FN286

## FN9280 & FN9290 Series: New Patented Mounting Flanges



### Flange Mount Distribution Kit

#### Scope of delivery:

- 1 filter, 2 frames, 2 self tapping screws and 2 washers for rear mounting cover
- 4 flange mount versions:
  - Front mounting
  - Rear mounting
  - Mounting holes top/bottom
  - Mounting holes left/right



# FN9280 & FN9290 Series: New Patented Plug-In Unit

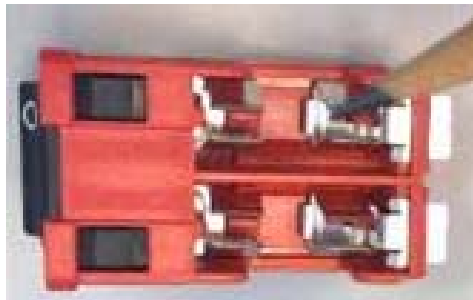


**Removable with simple tools**

**High quality dual pole switch and dual fuse holder combined in one unit**



**Extra safe dual fuse holder**

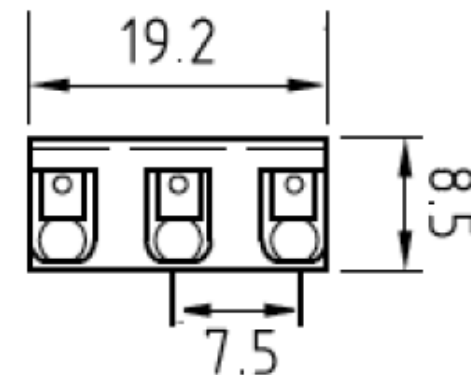


**spare fuse holder**



## FN9280 & FN9290 Series: New Spring Cage Clamp Terminal (-100)

- Schaffner introduces with the spring cage clamp a new terminal for IEC power entry modules
- Clamping range 0.20 – 1.6 mm<sup>2</sup> (AWG24 - AWG16) for solid or flexible wire
- Complies with protection level IP20



## FN9280 Series: Filter Versions

### Standard Version: FN9280 series

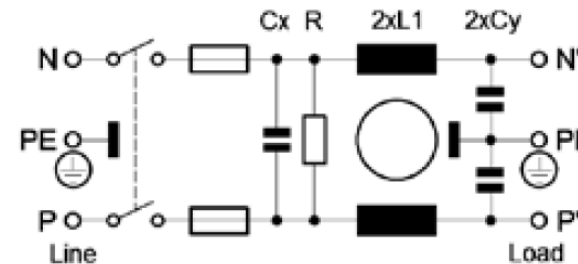
- Proven single stage EMC/EMI filter with good attenuation performance
- Integrated bleed resistor to cover all safety standards
- High quality dual pole line switch
- X- and Y- caps designed to comply with all safety standards
- Medical Version (B) without Y- caps

### Optional Version: FN9280E series

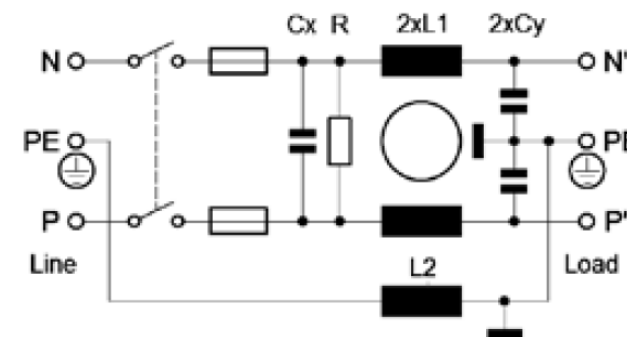
- Integrated earth line choke to suppress earth ground loops and asymmetric noise

### Typical electrical schematic

FN 9280 Standard types (B types without Cy)



FN 9280 E types (B types without Cy)

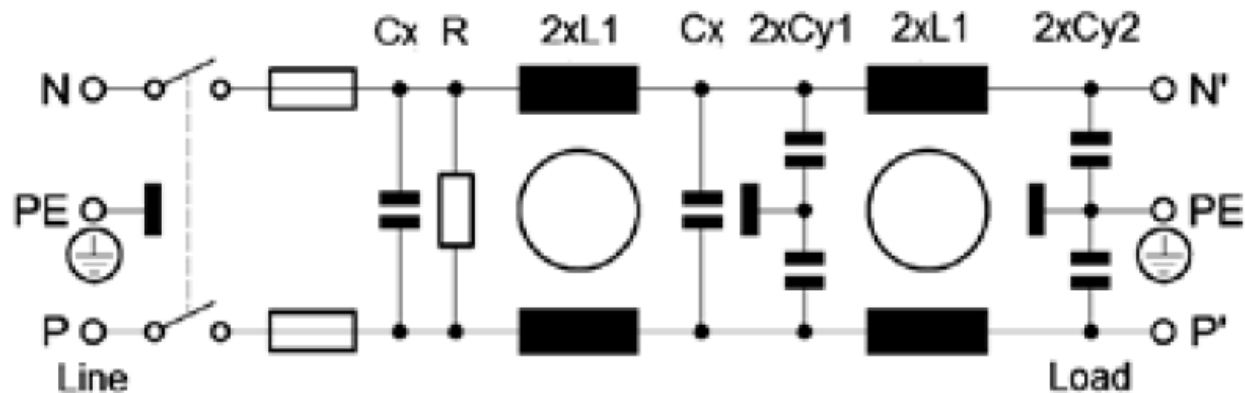




## FN9290 Series: High Performance EMC/EMI Filters

- Dual stage EMC EMI filter with up to 80dB attenuation
- Safety and low leakage current design identical with FN9280 series
- Medical Version (B) without Y- caps

FN 9290 Standard types (B types without Cy)



## FN9280 & FN9290 Series: Maximal Flexibility

- ✓ All series with identical cutout
  - ✓ All series with identical mounting possibilities
  - ✓ All series with identical terminal choice
- = Large variety enables fast EMC system approval with standard filter program



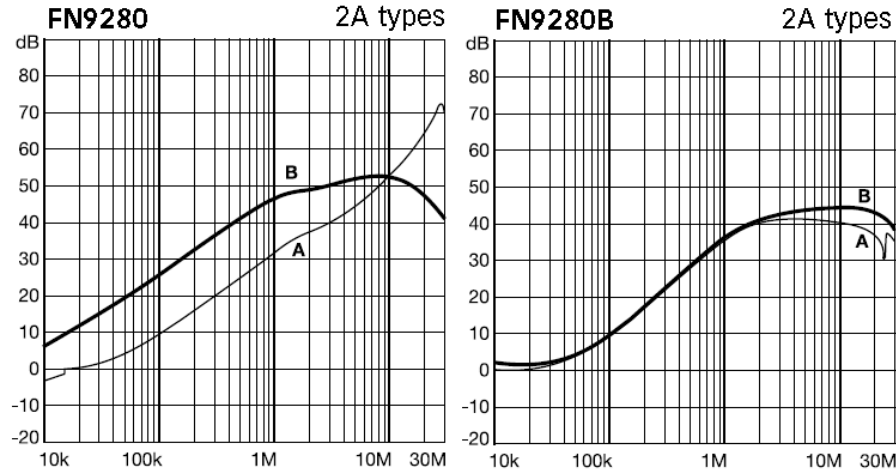
**FN9280**  
**FN9280B**  
(short version)



**FN9280E**  
**FN9280BE**  
**FN9290**  
**FN9290B**  
(long version)

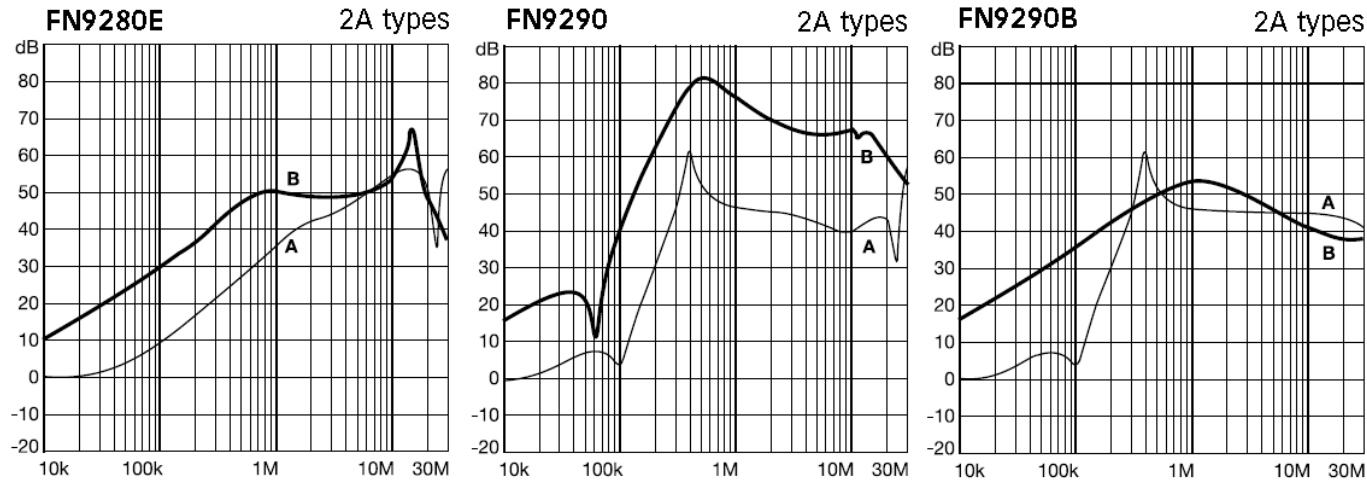
# FN9280 & FN9290 Series: EMC design support

## Typical filter attenuation



A = 50Ω/50Ω sym; B = 50Ω/50Ω asym

- Datasheet with attenuation curves of all filter types including medical versions



## FN9280 & FN9290 series: Typical Applications



- **Portable electrical and electric equipment**
- **High end consumer goods**
- **EDP and office equipment**
- **Single phase power supplies**
- **Switch mode power supplies**
- **Test and measurement equipment**
- **Medical electrical devices (MD)**
- **In-Vitro-Diagnostic devices (IVD)**

50 YEARS  
since 1962



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**Thank you very much for your attention !**

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