

# FN 9280 & FN9290 Series IEC Power Entry Modules



**Schaffner Group** 

energy efficiency and reliability

#### 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

Ultra compact design: 46mm height

2 terminal choices: fast on tabs (-06) or new spring cage clamp (-100)



-06 terminal -100 terminal

Optimal shielding thanks to RF tight joining of the frames with iron-sheet housing

Flange mount or snap-in versions deliverable

Patented unit combines dual pole switch and dual fuse holder

Maximal versatility: flange mount distribution kit covers all front- and back-mounting options

Maximal flexibility: single stage EMC/EMI filter or dual stage for up to 80dB attenuation with identical panel cutout

## 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



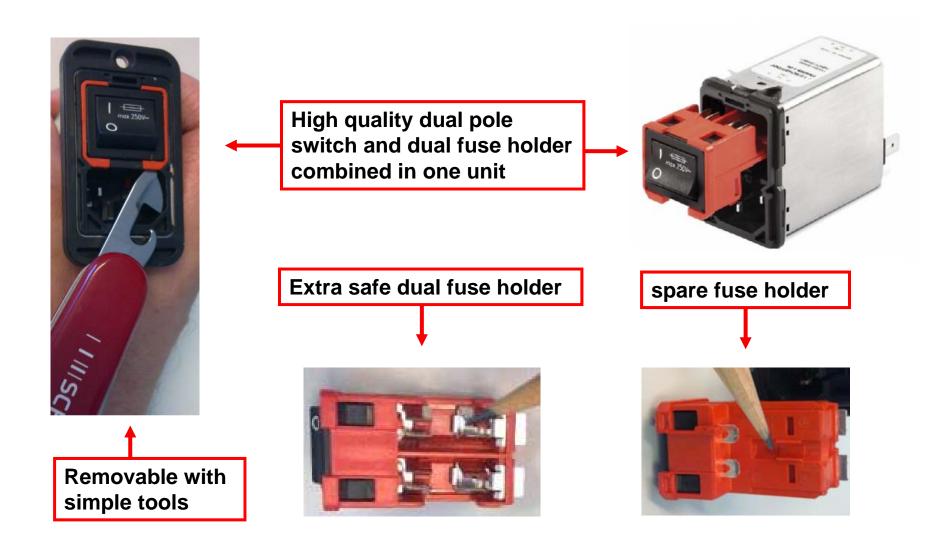








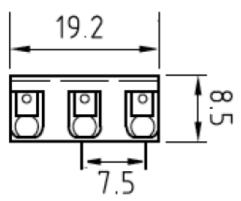
## FN9280 & FN9290 Series: New Patented Plug-In Unit



## 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

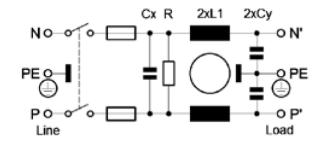
- Proven single stage EMC/EMI filter with good attenuation performance
- Integrated bleed resistor to cover all safety standards
- High quality dual pole line switch
- X- and Y- caps designed to comply with all safety standards
- Medical Version (B) without Y- caps

## **Optional Version: FN9280E series**

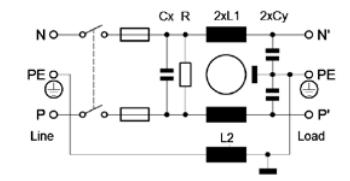
 Integrated earth line choke to suppress earth ground loops and asymmetric noise

#### **Typical electrical schematic**

FN 9280 Standard types (B types without Cy)



FN 9280 E types (B types without Cy)

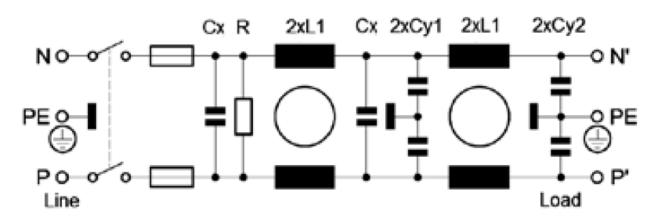




## FN9290 Series: High Performance EMC/EMI Filters

- 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)





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## 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

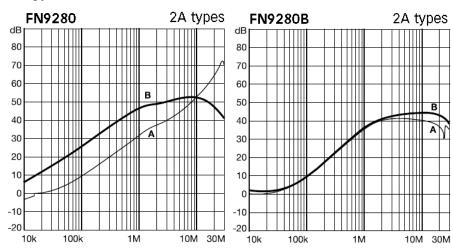
FN9290B

(long version)



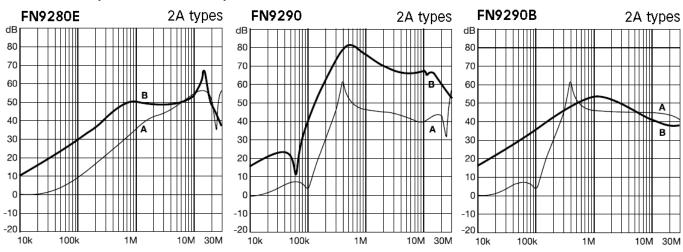
## FN9280 & FN9290 Series: EMC design support

#### Typical filter attenuation



 Datasheet with attenuation curves of all filter types including medical versions

 $A = 50\Omega/50\Omega$  sym;  $B = 50\Omega/50\Omega$  asym



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## 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)



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