# FN2020-3-07

SAP Code: 800603



3 A EMC filter with wire leads		
<ul> <li>General</li> </ul>		
■ 1 Phase		



Chassis mount



### **Family Technical Specifications**

Rated voltage*	250 VAC, 50/60 Hz 250 VDC
Operating frequency	DC to 400 Hz
Altitude	2000m (above derating applies)**
Rated currents	3
High potential test voltage	P -> N 1100 VDC for 2 sec (30 and 60 A types) P -> PE 2000 VAC for 2 sec P -> PE 2500 VAC for 2 sec (B types) P -> N 760 VAC for 2 sec (1 to 20 A types)
Temperature range (operation and storage)	-25°C to +100°C (25/100/21)**
Certified to	UL 1283, CSA 22.2 No. 8 1986, IEC/EN 60939 (applies to AC and DC applications)
Flammability corresponding to	Laces for -07 version: UL 94 VW-1 Terminal plastic for -06/-08 version: UL 94 V-0 Grommet for -07 version: UL 94 V-0
Design corresponding to	UL 1283, CSA 22.2 No. 8 1986, IEC/EN 60939
Overvoltage category	II acc. IEC 60664-1
Pollution degree	2 acc. IEC 60664-1

\* maximum RMS operating voltage at rated frequency or the maximum DC operating voltage \*\* for dedicated requests exceeding this specification (e.g. -40 °C or higher altitude) please contact your local Schaffner Sales office



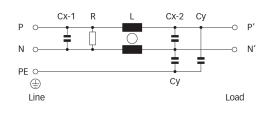
#### **Features and Benefits**

- FN 2020 filters are designed for easy and fast chassis mounting
- FN 2020 B versions without capacitors to earth comply to 1MOP for ME (medical equipment) acc. IEC 60601-1
- FN 2020 A versions with low capacitance to earth for safety critical applications with necessity for low leakage currents
- All filters provide a general purpose conducted attenuation performance, based on chokes with high saturation resistance and excellent thermal behavior
- FN 2020 filters can be used to cover a broad range of usage and they offer a good size/ amperage ratio
- FN 2020 filters are also available as two- stage filters (FN 2060, FN 2070 series) for more noisy environment
- Various terminal options allow you to select the desired connection style

### **Typical Applications**

- Electrical and electronic equipment
- Consumer goods
- Household equipment
- Medical equipment
- Office automation equipment
- Datacom equipment

#### Typical electrical schematic



### **General Specification**

Voltage AC	250 (Volt)
Nominal Frequency	50
Rated Current @ambient	3
Ambient temperature [°C]	40

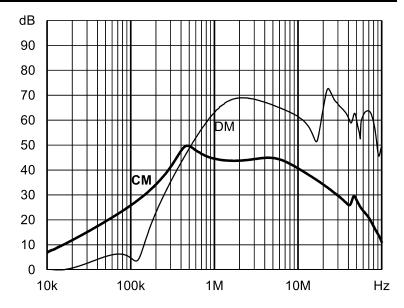
# **Electric Specification**

Leakage current (IEC60939) [mA]	0.66
Leakage current (Schaffner) [mA]	1.33
Input terminal	07 - wire
Output terminal	07 - wire
Resistance	1000 (Kiloohm)

### **Attenuation Specification**

CM attenuation @ 150kHz [dB]	27 (Decibels)
DM attenuation @ 150kHz [dB]	11 (Decibels)
Inductance L1 [µH]	2.5 (Millihenry)
Capacitance Cx1 [µF]	0.15 (Microfarad)
Capacitance Cyl [nF]	4.7 (Nanofarad)

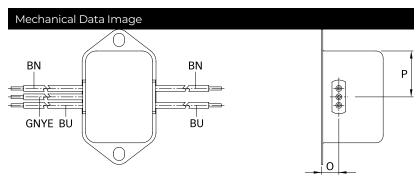
# Attenuation graph



# **Mechanic Specification**

Length [mm]	43.5
Width [mm]	32.5
Height [mm]	29.3
Volume [cm3]	41 (Cubic Centimeter)
NetWeight [kg]	80 (Gram)
Power Loss [W]	1.2 (Watt)

### Schaffner schemes



### Dimensions

A [mm]	64
B [mm]	35
C [mm]	29.3
D [mm]	43.5
E [mm]	32.5
F [mm]	54
G [mm]	21
H [mm]	9.3
l [mm]	15.3
J [mm]	21.8
K [mm]	5.3
L [mm]	6.3
M [mm]	0.7
N [mm]	6.3 × 0.8
0 [mm]	8.3
P [mm]	21.8