

## FN2070A-1-06

SAP Code: 811081



- Chassis mount
- 1 A EMC filter with fast-ons
- General
- 1 Phase

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### **Family Technical Specifications**

Rated voltage*  250 VAC, 50/60 Hz 250 VDC  Description frequency  High potential test voltage  P -> PE 2000 VAC for 2 sec P -> PE 2500 VAC for 2 sec (B types) P -> N 1100 VDC for 2 sec  Temperature range (operation and storage)  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 94V-0  UL 1283, CSA 22.2 No. 8 1986, IEC/EN 60939  Il acc. IEC 60664-1  Pollution degree  Altitude  Rated currents  1		
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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 94V-0  UL 1283, CSA 22.2 No. 8 1986, IEC/EN 60939  Overvoltage category  Pollution degree  2 acc. IEC 60664-1  Altitude  2000m (above derating applies)**	High potential test voltage	P -> PE 2500 VAC for 2 sec (B types)
AC and DC applications)  Laces for -07 version: UL 94 VW-1 Terminal plastic for -06/-08 version: UL 94 V-0 Grommet for -07 version: UL 94V-0  UL 1283, CSA 22.2 No. 8 1986, IEC/EN 60939  Overvoltage category  Pollution degree  Altitude  Altitude  AC and DC applications)  Laces for -07 version: UL 94 VW-1  Terminal plastic for -06/-08 version: UL 94 V-0  Grommet for -07 version: UL 94 VW-1  It acc. IEC 60664-1  2 acc. IEC 60664-1  2000m (above derating applies)**	Temperature range (operation and storage)	-25°C to +100°C (25/100/21)**
Terminal plastic for -06/-08 version: UL 94 V-0 Grommet for -07 version: UL 94V-0  UL 1283, CSA 22.2 No. 8 1986, IEC/EN 60939  Overvoltage category  Pollution degree  Altitude  Terminal plastic for -06/-08 version: UL 94 V-0 Grommet for -07 version: UL 94 V-0 UL 1283, CSA 22.2 No. 8 1986, IEC/EN 60939  UL 1283, CSA 22.2 No. 8 1986, IEC/EN 60939  Il acc. IEC 60664-1 2 acc. IEC 60664-1 2000m (above derating applies)**	Certified to	
Overvoltage category  Pollution degree  Altitude  Il acc. IEC 60664-1  2 acc. IEC 60664-1  2000m (above derating applies)**	Flammability corresponding to	Terminal plastic for -06/-08 version: UL 94 V-0
Pollution degree 2 acc. IEC 60664-1 Altitude 2000m (above derating applies)**	Design corresponding to	UL 1283, CSA 22.2 No. 8 1986, IEC/EN 60939
Altitude 2000m (above derating applies)**	Overvoltage category	II acc. IEC 60664-1
3 11 1	Pollution degree	2 acc. IEC 60664-1
Rated currents 1	Altitude	2000m (above derating applies)**
	Rated currents	1

<sup>\*</sup> maximum RMS operating voltage at rated frequency or the maximum DC operating voltage \*\* for dedicated requests exceeding this specification (e.g. -40  $^{\circ}$ C or higher altitude) please contact your local Schaffner Sales office

### Approvals & Compliances











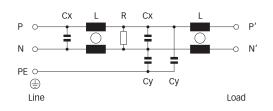
#### **Features and Benefits**

- FN2070 two-stage filters are designed for easy and fast chassis mounting
- FN2070 B versions without capacitors to earth comply to 1MOP for ME (medical equipment) acc. IEC 60601-1
- FN2070 A version with low capacitance to earth for safety critical applications with necessity for low leakage currents
- All filters provide a high conducted attenuation performance, based on chokes with high saturation resistance and excellent thermal behavior
- FN2070 two-stage filters are designed for high frequency attenuation
- FN2070 filters are also available as single- stage filters (FN2030 series)
- FN2070 filters are also available with differential mode choke (FN2080 series)
- Various terminal options allow you to select the desired connection style

## **Typical Applications**

- Electrical and electronic equipment
- Consumer goods
- Household equipment
- Building automation
- Industrial applications
- Machinery
- Medical equipment
- Electronic data processing equipment
- Office automation and datacom equipment
- Various noisy applications requiering good filter performance
- Single Phase Motor Drives

#### Typical electrical schematic



# **General Specification**

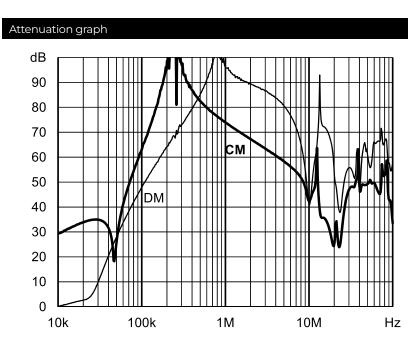
Voltage AC	250 (Volt)
Nominal Frequency	50
Rated Current @ambient	1
Ambient temperature [°C]	40

# **Electric Specification**

Leakage current (IEC60939) [mA]	0.07
Leakage current (Schaffner) [mA]	0.14
Input terminal	06 - faston 6.3x0.8/sold lug
Output terminal	06 - faston 6.3x0.8/sold lug
Resistance	1000 (Kiloohm)

# **Attenuation Specification**

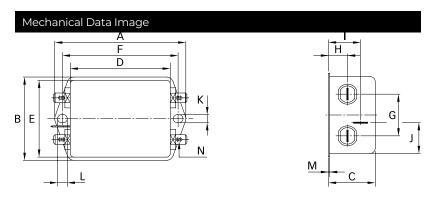
CM attenuation @ 150kHz [dB]	26 (Decibels)
DM attenuation @ 150kHz [dB]	74 (Decibels)
Inductance L1 [µH]	22 (Millihenry)
Capacitance Cx1 [µF]	0.33 (Microfarad)
Capacitance Cyl [nF]	0.47 (Nanofarad)



# **Mechanic Specification**

Length [mm]	64.8
Width [mm]	49.8
Height [mm]	30.3
Volume [cm3]	98 (Cubic Centimeter)
NetWeight [g]	160 (Gram)
Power Loss [W]	2.4 (Watt)

### Schaffner schemes



# **Dimensions**

A [mm]	85
B [mm]	54
C [mm]	30.3
D [mm]	64.8
E [mm]	49.8
F [mm]	75
G [mm]	27
H [mm]	12.3
I [mm]	20.8
J [mm]	19.9
K [mm]	5.3
L [mm]	6.3
M [mm]	0.7
N [mm]	6.3 × 0.8
O [mm]	8.3
P [mm]	14.9