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FN2090LL-10-08

SAP Code: 821031



- Chassis mount
- 10 A EMC filter with screw terminals
- General
- 1 Phase

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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	10
High potential test voltage	P –> N 1100 VDC for 2 sec P –> PE 2000 VAC for 2 sec (equiv. cap <88 nF) P –> PE 2550 VDC for 2 sec (equiv. cap >88 nF) P –> PE 2500 VAC for 2 sec (B 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
Surge pulse protection (Z type)	Helps compliance to IEC61000-4-5 (Differential Mode only)
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

Approvals & Compliances

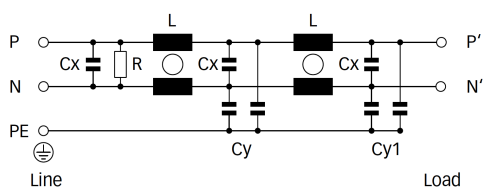
Features and Benefits

- FN 2090 two-stage filters are designed for easy and fast chassis mounting.
- FN 2090 B versions without capacitors to earth comply to 1MOP for ME (medical equipment) acc. IEC 60601-1
- FN 2090 A versions with low capacitance to earth for safety critical applications with a requirement for low leakage currents.
- FN 2090 filters offers an optimized filter range for enhanced performance AC and DC applications , in same compact size (KK, LL, NN types)
- All filters provide an exceptional conducted attenuation performance, based on chokes with high permeable core material.
- FN 2090 two-stage filters are designed for noisy applications requiring excellent filter performance.
- The higher inductivity offers increased attenuation performance with the same form factor as FN 2060 and FN 2080 series.
- All FN 2090 filters can be delivered with optional surge pulse protection (Z type).
- FN 2090 filters are also available as singlestage filters (FN 2030 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 requiring high filter performance

Typical electrical schematic



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General Specification

Voltage AC	250 (Volt)
Nominal Frequency	60
Rated Current @ambient	10
Ambient temperature [°C]	40

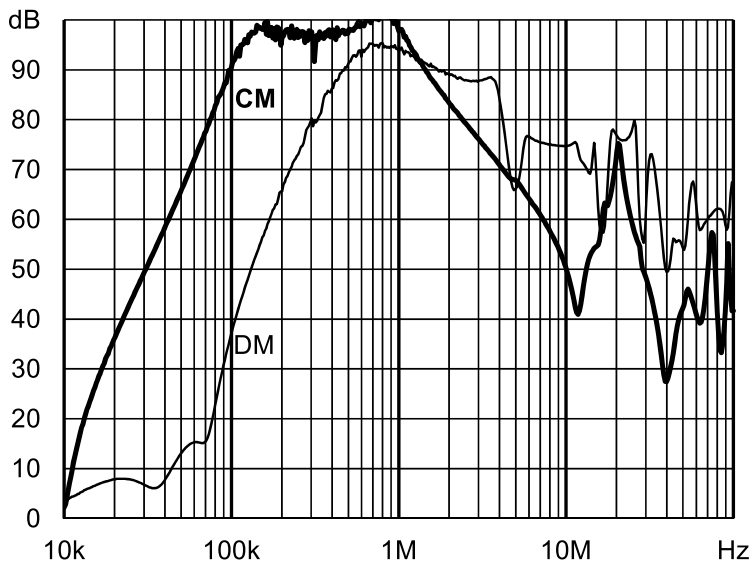
Electric Specification

Leakage current (IEC60939) [mA]	4.77
Leakage current (Schaffner) [mA]	9.6
Input terminal	08 - M4 screw terminal
Output terminal	08 - M4 screw terminal
Resistance	330 (Kiloohm)

Attenuation Specification

CM attenuation @ 150kHz [dB]	109 (Decibels)
DM attenuation @ 150kHz [dB]	63 (Decibels)
Inductance L1 [µH]	8 (Millihenry)
Capacitance Cx1 [µF]	0.47 (Microfarad)
Capacitance Cy1 [nF]	33 (Nanofarad)
Capacitance Cy2 [nF]	33 (Nanofarad)

Attenuation graph



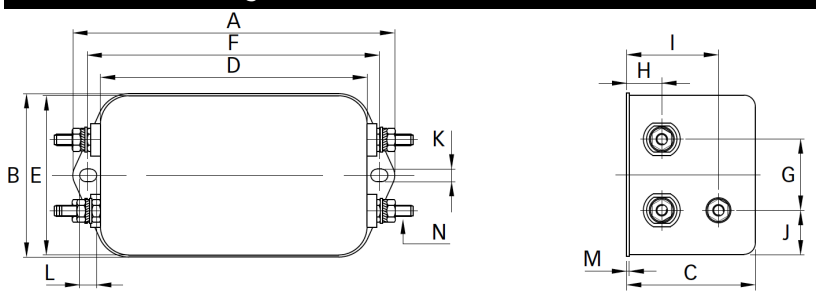
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Mechanic Specification

Length [mm]	113.5
Width [mm]	57.5
Height [mm]	45.5
Volume [cm3]	297 (Cubic Centimeter)
NetWeight [g]	505 (Gram)
Power Loss [W]	8.4 (Watt)

Schaffner schemes

Mechanical Data Image



Dimensions

A [mm]	113.5
B [mm]	57.5
C [mm]	45.4
D [mm]	94
E [mm]	56
F [mm]	103
G [mm]	25
H [mm]	12.4
I [mm]	32.4
J [mm]	15.5
K [mm]	4.4
L [mm]	6
M [mm]	1
N [mm]	M4
O [mm]	8.4
P [mm]	18

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