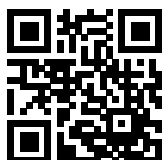


General Purpose AC/DC EMI Filter with High Attenuation Performance



- Rated currents from 1 to 30 A
- High performance filter attenuation
- High differential-mode attenuation
- Optional medical versions (B type)
- Optional safety versions (A type)
- Optional enhanced performance versions
- Optional overvoltage protection (Z type)

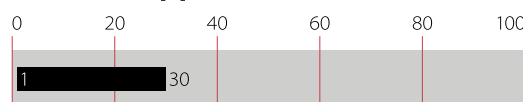


Performance indicators

Attenuation performance



Rated current [A]



Approvals & Compliances



Features and Benefits

- FN 2030 filters are designed for easy and fast chassis mounting
- FN 2030 B versions without capacitors to earth comply to 1MOP for ME (medical equipment) acc. IEC 60601-1
- FN 2030 A versions with low capacitance to earth for safety critical applications with a requirement for low leakage currents
- FN 2030 filters offer an optimized filter range for high performance AC and DC applications, in same compact size (M, N1 types)
- All filters provide an exceptional conducted attenuation performance, based on chokes with high permeable core material and excellent thermal behavior
- The higher inductivity versus amperage offers increased attenuation performance with same form factor compared to FN 2010 and FN 2020 filter series
- All FN 2030 filters can be delivered with optional surge pulse protection (Z type).
- Various terminal options allow you to select the desired connection style

Family Technical Specifications

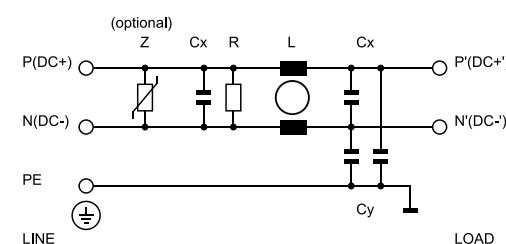
Maximum continuous operating voltage	250 VAC, 50/60 Hz 250 VDC
Nominal operating voltage	230 VAC
High potential test voltage	P → N 1100 VDC for 2 sec P → PE 2000 VAC for 2 sec (equiv. cap <88 nF) P → PE 2550 VDC for 2 sec (equiv. cap >88 nF) P → PE 2500 VAC for 2 sec (B types)
Rated currents	1 to 30 A @ 40°C
Overvoltage category	II acc. IEC 60664-1
Pollution degree	2 acc. IEC 60664-1
Surge pulse protection (Z type)	Helps compliance to IEC61000-4-5 (Differential Mode only)
Temperature range (operation and storage)	-25°C to +100°C (25/100/21)**
Altitude	2000m (above derating applies)**
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
Certified to	UL 1283, CSA 22.2 No. 8 1986, IEC/EN 60939 (applies to AC and DC applications)
MTBF (Mil-HB-217F)	≤10 A: >2,200,000 h @ 40°C/230 V ≥12 A: >1,200,000 h @ 40°C/230 V
Operating frequency	DC to 400 Hz

* 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























































Typical Applications

- Electrical and electronic equipment
- Consumer goods
- Household equipment
- Medical equipment
- Electronic data processing equipment
- Office automation and datacom equipment
- Various noisy applications requiring high filter performance












































































Typical electrical schematic














































































Articles

	Article	Rated Current @ambient (A)	Leakage current IEC60939 (A)	Power Loss (W)	Inductance L1	Capacitance		Resistance (kΩ)	Input/Output connections (Nm)		Dist. stock	Read More
						Cx1 (μF)	Cy1 (μF)		Input terminal	Output terminal		
	FN2030-30-08	30	1.41	6	2	1	10	330	08 - M4 screw terminal	08 - M4 screw terminal		
	FN2030-3-06	3	0.46	2.2	14	0.33	3.3	1000	06 - faston 6.3x0.8/sold lug	06 - faston 6.3x0.8/sold lug		
	FN2030-3-07	3	0.46	2.2	14	0.33	3.3	1000	07 - wire	07 - wire		
	FN2030-4-06	4	0.46	2.9	14	0.33	3.3	1000	06 - faston 6.3x0.8/sold lug	06 - faston 6.3x0.8/sold lug		
	FN2030-4-07	4	0.46	2.9	14	0.33	3.3	1000	07 - wire	07 - wire		
	FN2030-6-06	6	0.66	3.2	8	0.47	4.7	680	06 - faston 6.3x0.8/sold lug	06 - faston 6.3x0.8/sold lug		
	FN2030-6-07	6	0.66	3.2	8	0.47	4.7	680	07 - wire	07 - wire		
	FN2030-8-06	8	0.66	3.1	8	0.47	4.7	680	06 - faston 6.3x0.8/sold lug	06 - faston 6.3x0.8/sold lug		
	FN2030-8-07	8	0.66	3.1	8	0.47	4.7	680	07 - wire	07 - wire		
	FN2030A-10-06	10	0.07	5.3	8	0.47	4.7	680	06 - faston 6.3x0.8/sold lug	06 - faston 6.3x0.8/sold lug		
	FN2030A-1-06	1	0.07	0.9	20	0.22	0.47	1000	06 - faston 6.3x0.8/sold lug	06 - faston 6.3x0.8/sold lug		
	FN2030A-12-06	12	0.07	7.6	4	1	0.47	330	06 - faston 6.3x0.8/sold lug	06 - faston 6.3x0.8/sold lug		
	FN2030A-16-06	16	0.07	6.1	4	1	0.47	330	06 - faston 6.3x0.8/sold lug	06 - faston 6.3x0.8/sold lug		
	FN2030A-20-06	20	0.07	4.6	4	1	0.47	330	06 - faston 6.3x0.8/sold lug	06 - faston 6.3x0.8/sold lug		
	FN2030A-20-08	20	0.07	4.6	4	1	0.47	330	08 - M4 screw terminal	08 - M4 screw terminal		
	FN2030A-30-08	30	0.07	6	2	1	0.47	330	08 - M4 screw terminal	08 - M4 screw terminal		
	FN2030A-3-06	3	0.07	2.2	14	0.33	0.47	1000	06 - faston 6.3x0.8/sold lug	06 - faston 6.3x0.8/sold lug		
	FN2030A-4-06	4	0.07	2.9	14	0.33	0.47	1000	06 - faston 6.3x0.8/sold lug	06 - faston 6.3x0.8/sold lug		
	FN2030A-4-07	4	0.66	2.9	14	0.33	0.47	1000	07 - wire	07 - wire		
	FN2030A-6-06	6	0.07	3.2	8	0.47	0.47	680	06 - faston 6.3x0.8/sold lug	06 - faston 6.3x0.8/sold lug		
	FN2030A-8-06	8	0.07	3.1	8	0.47	0.47	680	06 - faston 6.3x0.8/sold lug	06 - faston 6.3x0.8/sold lug		
	FN2030AZ-16-08	16		6.1	4	1	10	330	08 - M4 screw terminal	08 - M4 screw terminal		
	FN2030B-10-06	10	0	5.3	8.45	0.47		680	06 - faston 6.3x0.8/sold lug	06 - faston 6.3x0.8/sold lug		
	FN2030B-10-07	10	0	5.3	8.45	0.47		680	07 - wire	07 - wire		
	FN2030B-1-06	1	0	0.9	20	0.22		1000	06 - faston 6.3x0.8/sold lug	06 - faston 6.3x0.8/sold lug		



















Articles

Image	Article	Rated Current @ambient (A)	Leakage current IEC60939 (A)	Power Loss (W)	Inductance L1	Capacitance		Resistance (kΩ)	Input/Output connections (Nm)		Dist. stock	Read More
						Cx1 (μF)	Cy1 (μF)		Input terminal	Output terminal		
	FN2030B-12-06	12	0	7.6	4	1		330	06 - faston 6.3x0.8/sold lug	06 - faston 6.3x0.8/sold lug		
	FN2030B-16-06	16		6.1	4	1		330	06 - faston 6.3x0.8/sold lug	06 - faston 6.3x0.8/sold lug		
	FN2030B-16-07	16	0	6.1	4	1		330	07 - wire	07 - wire		
	FN2030B-20-06	20	0	4.6	4	1		330	06 - faston 6.3x0.8/sold lug	06 - faston 6.3x0.8/sold lug		
	FN2030B-20-08	20	0	4.6	4	1		330	08 - M4 screw terminal	08 - M4 screw terminal		
	FN2030B-30-08	30	0	6	2	1		330	08 - M4 screw terminal	08 - M4 screw terminal		
	FN2030B-3-06	3	0	2.2	14	0.33		1000	06 - faston 6.3x0.8/sold lug	06 - faston 6.3x0.8/sold lug		
	FN2030B-4-06	4	0	2.9	14	0.33		1000	06 - faston 6.3x0.8/sold lug	06 - faston 6.3x0.8/sold lug		
	FN2030B-4-07	4	0	2.9	14	0.33		1000	07 - wire	07 - wire		
	FN2030B-6-06	6	0	3.2	8	0.47		680	06 - faston 6.3x0.8/sold lug	06 - faston 6.3x0.8/sold lug		
	FN2030B-8-06	8	0	3.1	8	0.47		680	06 - faston 6.3x0.8/sold lug	06 - faston 6.3x0.8/sold lug		
	FN2030B-8-07	8	0	3.1	8	0.47		680	07 - wire	07 - wire		
	FN2030BZ-10-06	10	0	5.3	8.45	0.47		680	06 - faston 6.3x0.8/sold lug	06 - faston 6.3x0.8/sold lug		
	FN2030BZ-1-06	1	0	0.9	20	0.22		1000	06 - faston 6.3x0.8/sold lug	06 - faston 6.3x0.8/sold lug		
	FN2030BZ-12-06	12	0	7.6	4	1		330	06 - faston 6.3x0.8/sold lug	06 - faston 6.3x0.8/sold lug		
	FN2030BZ-16-06	16	0	6.1	4	1		330	06 - faston 6.3x0.8/sold lug	06 - faston 6.3x0.8/sold lug		
	FN2030BZ-20-06	20	0	4.6	4	1		330	06 - faston 6.3x0.8/sold lug	06 - faston 6.3x0.8/sold lug		
	FN2030BZ-20-08	20	0	4.6	4	1		330	08 - M4 screw terminal	08 - M4 screw terminal		
	FN2030BZ-30-08	30	0	6	2	1		330	08 - M4 screw terminal	08 - M4 screw terminal		
	FN2030BZ-3-06	3	0	2.2	14	0.33		1000	06 - faston 6.3x0.8/sold lug	06 - faston 6.3x0.8/sold lug		
	FN2030BZ-4-06	4	0	2.9	14	0.33		1000	06 - faston 6.3x0.8/sold lug	06 - faston 6.3x0.8/sold lug		
	FN2030BZ-6-06	6	0	3.3	8	0.47		680	06 - faston 6.3x0.8/sold lug	06 - faston 6.3x0.8/sold lug		
	FN2030BZ-8-06	8	0	3.1	8	0.47		680	06 - faston 6.3x0.8/sold lug	06 - faston 6.3x0.8/sold lug		
	FN2030F-16-06	16	0.47		8			680	06 - faston 6.3x0.8/sold lug	06 - faston 6.3x0.8/sold lug		
	FN2030G-16-06	16	0.71						06 - faston 6.3x0.8/sold lug	06 - faston 6.3x0.8/sold lug		

Articles

	Article	Rated Current @ambient (A)	Leakage current IEC60939 (A)	Power Loss (W)	Inductance L1	Capacitance		Resistance (kΩ)	Input/Output connections (Nm)		Dist. stock	Read More
						Cx1 (μF)	Cy1 (μF)		Input terminal	Output terminal		
	FN2030M-16-06	16	3.4	6.1	4	1	47	330	06 - faston 6.3x0.8/sold lug	06 - faston 6.3x0.8/sold lug		
	FN2030M-16-08	16	3.4	6.1	4	1	47	330	08 - M4 screw terminal	08 - M4 screw terminal		
	FN2030M-20-06	20	3.4	4.6	4	1	47	330	06 - faston 6.3x0.8/sold lug	06 - faston 6.3x0.8/sold lug		
	FN2030M-3-06	3	3.4	2.2	14	0.33	47	1000	06 - faston 6.3x0.8/sold lug	06 - faston 6.3x0.8/sold lug		
	FN2030M-4-06	4	3.4	2.9	14	0.33	47	1000	06 - faston 6.3x0.8/sold lug	06 - faston 6.3x0.8/sold lug		
	FN2030M-6-06	6	3.4	2.2	8	0.47	47	680	06 - faston 6.3x0.8/sold lug	06 - faston 6.3x0.8/sold lug		
	FN2030N1-10-06	10	4.91	5.3	8	0.47	68	680	06 - faston 6.3x0.8/sold lug	06 - faston 6.3x0.8/sold lug		
	FN2030N1-1-06	1	4.91	0.9	20	0.22	68	1000	06 - faston 6.3x0.8/sold lug	06 - faston 6.3x0.8/sold lug		
	FN2030N1-12-06	12	4.91	7.6	4	1	68	330	06 - faston 6.3x0.8/sold lug	06 - faston 6.3x0.8/sold lug		
	FN2030N1-8-06	8	4.91	3.1	8	0.47	68	3680	06 - faston 6.3x0.8/sold lug	06 - faston 6.3x0.8/sold lug		
	FN2030Z-10-06	10	0.66						06 - faston 6.3x0.8/sold lug	06 - faston 6.3x0.8/sold lug		
	FN2030Z-1-06	1	0.31	5.3	8	0.47	4.7	1000	06 - faston 6.3x0.8/sold lug	06 - faston 6.3x0.8/sold lug		
	FN2030Z-12-06	12	1.41	7.6	4	1	10	330	06 - faston 6.3x0.8/sold lug	06 - faston 6.3x0.8/sold lug		
	FN2030Z-16-06	16	1.41	6.1	4	1	10	330	06 - faston 6.3x0.8/sold lug	06 - faston 6.3x0.8/sold lug		
	FN2030Z-16-08	16	1.41	6.1	4	1	10	330	08 - M4 screw terminal	08 - M4 screw terminal		
	FN2030Z-20-06	20	1.41	4.6	4	1	10	330	06 - faston 6.3x0.8/sold lug	06 - faston 6.3x0.8/sold lug		
	FN2030Z-30-08	30	1.41	6	2	1	10	330	08 - M4 screw terminal	08 - M4 screw terminal		
	FN2030Z-3-06	3	0.47	2.2	14	0.33	3.3	1000	06 - faston 6.3x0.8/sold lug	06 - faston 6.3x0.8/sold lug		
	FN2030Z-4-06	4	0.47	2.9	14	0.33	3.3	1000	06 - faston 6.3x0.8/sold lug	06 - faston 6.3x0.8/sold lug		
	FN2030Z-6-06	6	0.66	3.2	8	0.47	4.7	680	06 - faston 6.3x0.8/sold lug	06 - faston 6.3x0.8/sold lug		
	FN2030Z-8-06	8	0.66	3.1	8	0.47	4.7	680	06 - faston 6.3x0.8/sold lug	06 - faston 6.3x0.8/sold lug		
	FN2030-10-06	10	0.66	5.3	8	0.47	4.7	680	06 - faston 6.3x0.8/sold lug	06 - faston 6.3x0.8/sold lug		
	FN2030-10-07	10	0.66	5.3	8	0.47	4.7	680	07 - wire	07 - wire		
	FN2030-1-06	1	0.31	0.9	20	0.22	2.2	1000	06 - faston 6.3x0.8/sold lug	06 - faston 6.3x0.8/sold lug		
	FN2030-1-07	1	0.31	0.9	20	0.22	2.2	1000	07 - wire	07 - wire		

Articles

	Article	Rated Current @ambient (A)	Leakage current IEC60939 (A)	Power Loss (W)	Inductance L1	Capacitance		Resistance (kΩ)	Input/Output connections (Nm)		Dist. stock	Read More
						Cx1 (μF)	Cy1 (μF)		Input terminal	Output terminal		
	FN2030-12-06	12	1.41	7.6	4	1	10	330	06 - faston 6.3x0.8/sold lug	06 - faston 6.3x0.8/sold lug		
	FN2030-16-06	16	1.41	6.1	4	1	10	330	06 - faston 6.3x0.8/sold lug	06 - faston 6.3x0.8/sold lug		
	FN2030-16-07	16	1.41	6.1	4	1	10	330	07 - wire	07 - wire		
	FN2030-16-08	16	1.41	6.1	4	1	10	330	08 - M4 screw terminal	08 - M4 screw terminal		
	FN2030-20-06	20	1.41	4.6	4	1	10	330	06 - faston 6.3x0.8/sold lug	06 - faston 6.3x0.8/sold lug		
	FN2030-20-08	20	1.41	4.6	4	1	10	330	08 - M4 screw terminal	08 - M4 screw terminal		

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