

Dual-Stage High Performance AC/DC EMI/EMC FILTER

Feature and Benefits

- EN 2080 Dual-stage filters are designed for easy and fast chassis mounting.
- The EN 2080 filters are also available as B versions with no Y-capacitors for medical applications as well as A versions with low capacitance for safety critical applications with a requirement for low leakage currents.
- All filters provide a high conducted attenuation, performance, based on chokes with high saturation resistance and excellent thermal behaviour
- EN 2080 filters are also available as dual stage filters(EN 2070)
- Various terminal options allow you to select the desired connection style
- Rated current from 1 to 16 A
- High deferential & Common mode performance
- Optional medical version (Type B)
- Optional safety version (Type A)

Technical specifications

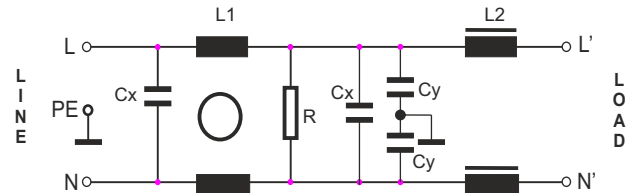
Maximum continuous operating voltage	250VAC, 50/60Hz
Operating Frequency	DC to 400Hz
Rated Currents	1 to 16A @40°C
High Potential Test voltage	L-GND 2550 VDC for 2 sec L-GND 3500 VDC for 2 sec (B types) L - N 1100 VDC for 2 sec
Temperature range (operation and storage)	-25°C to +100°C (25/100/21)
Certified to	UL 1283,EC/EN60939 (Applies to AC and DC Applications)
Flammability Corresponding to	UL 94V-2 better

Typical Application

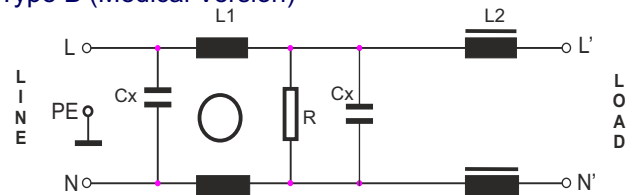
- Electrical and electronic equipment
- Consumer goods
- Household equipment
- Medical equipment
- Electronic data processing equipment
- Office automation and datacom equipment



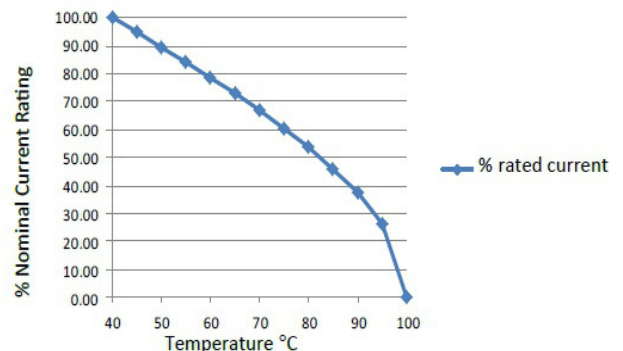
ELECTRICAL SCHEMATIC






Type B (Medical Version)



Temperature Derating Curve for EMC Filters Rated at 40°C Ambient and 100°C Maximum



FILTER SELECTION TABLE

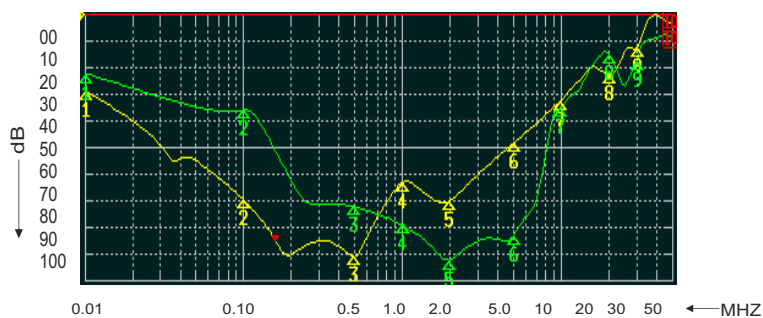
Filters**	Rated current @40°C A	Leakage current @250V/50Hz mA	Inductance (L-L) ΣL mH	Capacitance (L-N) ΣCx μF	Capacitance (L-G) ΣCy nF	Resistance (L-N) ΣR KΩ	Connetion type			Weight gram (g)
										
EN2080-1-X	1(1.15)	0.66	22.49	0.66	9.4	1000	F	W		210
EN2080-3-X	3(3.45)	0.66	9.96	0.94	9.4	470	F	W		270
EN2080-6-X	6(6.90)	0.66	7.91	2	9.4	220	F	W		450
EN2080-10-X	10(11.5)	0.66	4.66	2	9.4	220	F	W		750
EN2080-12-X	12(13.8)	0.66	3.75	2	9.4	220	F	W	S	750
EN2080-16-X	16(18.4)	0.66	2.483	2	9.4	220	F	W	S	1000
Low Leakage Version										
EN2080A-1-X	1(1.15)	0.07	22.49	0.66	0.94	1000	F	W		210
EN2080A-3-X	3(3.45)	0.07	9.96	0.94	0.94	470	F	W		270
EN2080A-6-X	6(6.90)	0.07	7.91	2	0.94	220	F	W		450
EN2080A-10-X	10(11.5)	0.07	4.66	2	0.94	220	F	W		750
EN2080A-12-X	12(13.8)	0.07	3.75	2	0.94	220	F	W	S	750
EN2080A-16-X	16(18.4)	0.07	2.483	2	0.94	220	F	W	S	1000
Medical Version Without Y cap										
EN2080B-1-X	1(1.15)	0.00	22.49	0.66		1000	F	W		210
EN2080B-3-X	3(3.45)	0.00	9.96	0.94		470	F	W		270
EN2080B-6-X	6(6.90)	0.00	7.91	2		220	F	W		450
EN2080B-10-X	10(11.5)	0.00	4.66	2		220	F	W		750
EN2080B-12-x	13(00.0)	0.00	3.75	2		220	F	W	S	750
EN2080B-16-X	16(18.4)	0.00	2.483	2		220	F	W	S	1000

To compile a complete part number, please replace the -.. with the required I/O connection style (e.g. EN 2080-16-S, EN 2080B-10-F). The different letters code the
 ** Maximum leakage under usual AC operating conditions (acc. IEC 60939-3). Note: if the neutral line is interrupted, worst case leakage could reach twice this level.

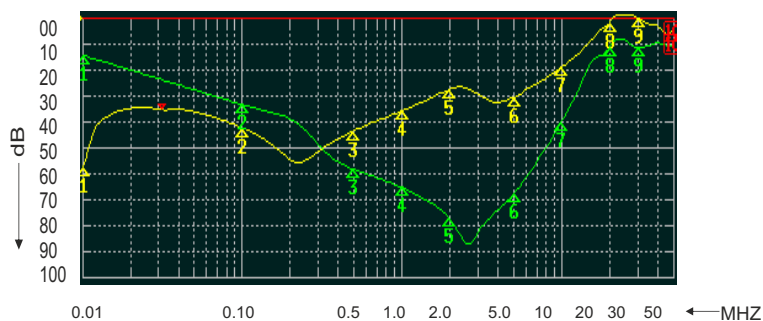
TYPICAL INSERTION LOSS, dB (50/50 Ohm)

Insertion Loss: Common mode - —
 Differential mode- —

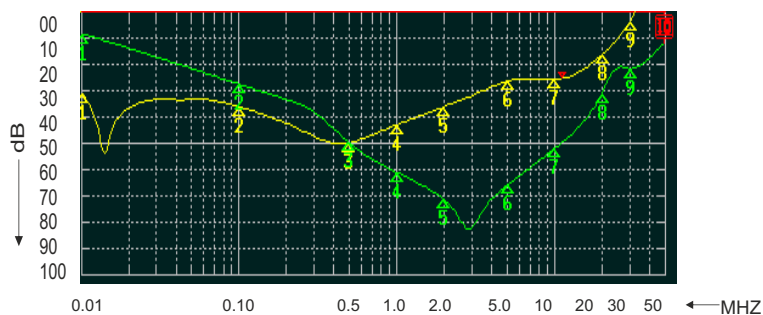
1 to 3 A



6 to 10 A

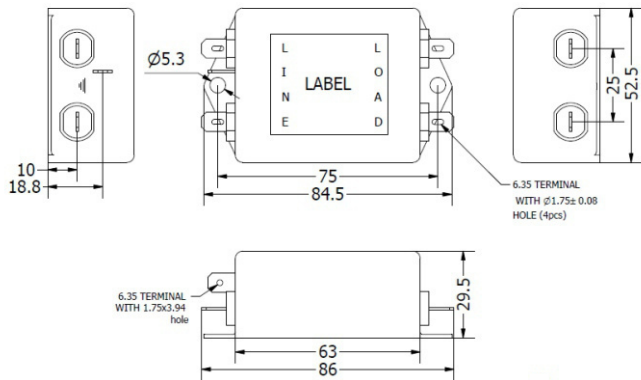


12 to 16 A

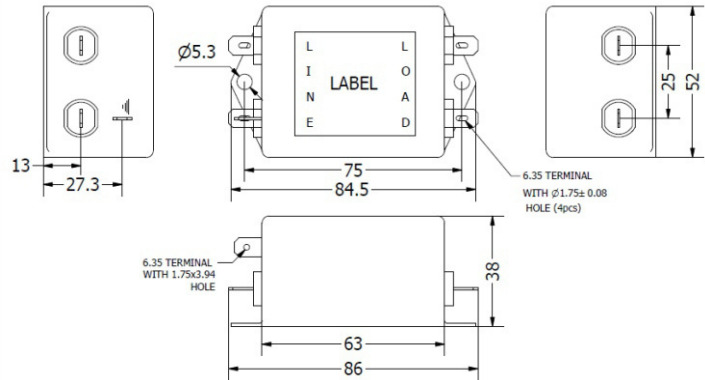


MECHANICAL DETAILS

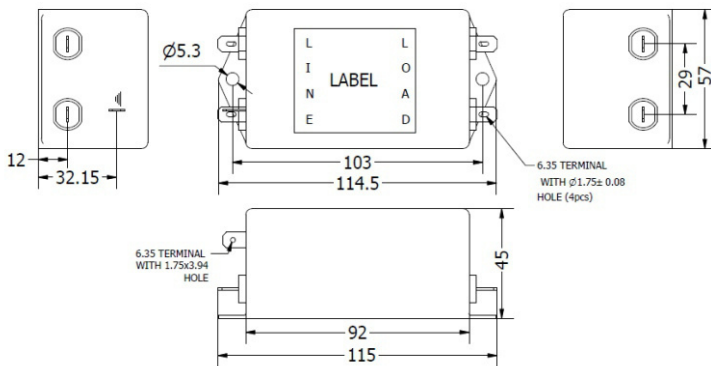
1Amp Faston Terminal



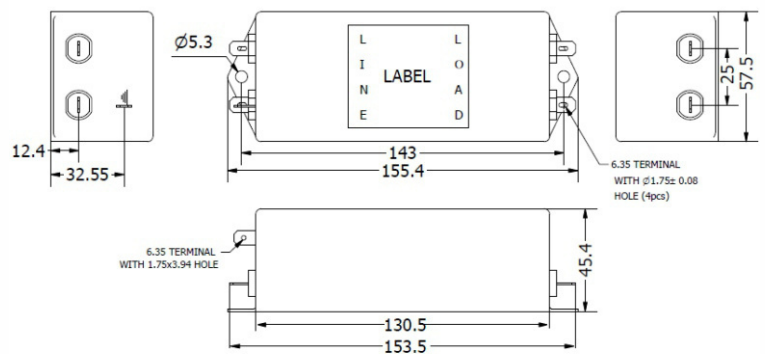
3Amp Faston Terminal



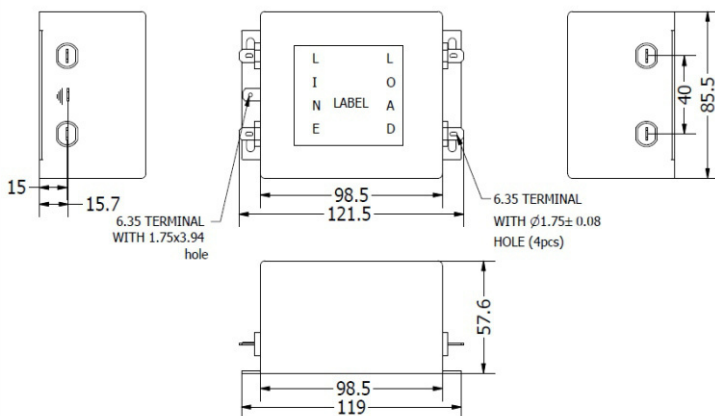
6 Amp Faston Terminal



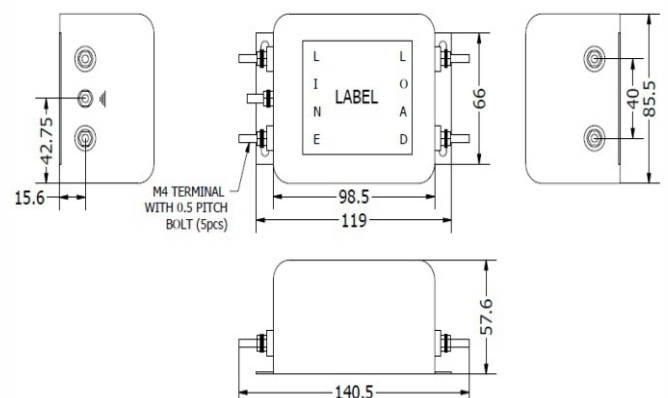
10 & 12Amp Faston Terminal



16 Amp Faston Terminal



16Amp Screw Terminal (M4)



**All Dimension are in mm



FILTERS RECOMMENDATIONS

Contact Us: 0044 (0) 1704-516 501 enquiries@united-automation.com www.united-automation.com



APPLICATION AND BASIC DIFFERENCE OF ALL EN20XX SERIES

Sn	Series	Type	Rated Current (A)	Stage	Performance	Circuit details	Application	Medical Version	Low Leakage	Surge Protection
1	EN2010	Single Phase	1, 3, 6, 10, 12, 13, 16, 20, 30	Single	General Attenuation		General Purpose Application, Household equipment, medical equipment office automation & Electrical and Electronics equipment	Available	Available	
2	EN2020	Single Phase	1,3, 6, 10, 12,16, 20, 30	Single	High differential Mode Attenuation		General Purpose Application, Household equipment, medical Equipment office automation, datacom application & Electrical and Electronics equipment	Available	Available	
3	EN2030	Single Phase	1, 3, 4, 6, 8, 10, 12, 16, 20, 30	Single	High differential Mode Attenuation		General Purpose Applications, Household equipment, medical Equipment office automation & Electrical and Electronics equipment, high noise application	Available	Available	**Available, 2KV IEC 61000-4-5
4	EN2060	Single Phase	1, 3, 6, 10,12, 16, 20, 30	Dual	High differential & Common Mode attenuation		Industrial Applications, Building Automation, Household equipment, medical equipment office automation, Electronics data processing equipment & Various Noisy applications, Motor drives and applications.	Available	Available	
5	EN2070	Single Phase	1, 3, 6, 10, 12, 16, 25, 36	Dual	High differential & Common Mode attenuation		Industrial Applications, Building Automation, Household equipment, Medical Equipment office automation, Electronics data processing equipment & Various Noisy applications, Motor drives and applications.	Available	Available	
6	EN2080	Single Phase	1, 3, 6, 10, 12, 16	Dual	High differential & Common Mode attenuation		Industrial Applications, Building Automation, Household equipment, medical equipment, office automation, Electronics data processing equipment & Various Noisy applications, Motor drives and applications.	Available	Available	
7	EN2090	Single Phase	1, 3, 4, 6, 8, 10, 12, 16, 20, 30	Dual	Very high differential & Common Mode attenuation		Industrial applications, Building Automation, Household equipment, Medical Equipment, office automation, Electronics data processing equipment & Various Noisy applications, Motor drives and applications.	Available	Available	**Available, 2KV IEC 61000-4-5

Note: ** Surge protection Filter is only CE and ROHS Approved



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