

IEC inlet filters FN 380

Versatile filtered power entry module

勝 特 力 材 料 886-3-5753170 胜特力电子(上海) 86-21-54151736 胜特力电子(深圳) 86-755-83298787 Http://www.100y.com.tw



energy efficiency and reliability



- Rated currents up to 6A
- Single or dual-fuse holder
- Fuses Ø6.3 x 32mm or Ø5 x 20mm
- 2-pole rocker switch
- General purpose application
- Optional medical versions (B type)

Approvals







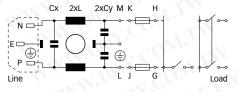


Technical specifications

Maximum continuous operating voltage:	250VAC, 50/60Hz				
Operating frequency:	50 to 400Hz				
Rated currents:	2 to 6A @ 40°C max.				
High potential test voltage:	P -> E 2000VAC for 2 sec (standard types)				
	P -> E 2500VAC for 2 sec (B types) P -> N 760VAC for 2 sec				
100					
Protection category:	IP40 according to IEC 60529				
Temperature range (operation and storage):	-25°C to +85°C (25/85/21)				
Design corresponding to:	UL 1283, CSA 22.2 No. 8 1986, IEC/EN 60939				
Flammability corresponding to:	UL 94V-2 or better				
MTBF @ 40°C/230V (Mil-HB-217F):	550,000 hours				
Rocker switch description:	MM 1005. CMT.				
Function:	2-pole, dark not illuminated				
	Marking I - 0				
Electrical specifications:	Inrush current 51A				
100 - 000	6,000 on-off operations according to UL 1054, TV 5				
	10,000 on-off operations according to ENEC				
Mechanical life:	50,000 cycles				
Switch ratings:					
USA (UL):	6A, 125VAC; 4A, 250VAC; 1/10HP				
Canada (CSA):	6A, 125VAC; 4A, 250VAC; 1/10HP				
Europe (ENEC):	6A (4A), 250VAC*				

Value in () relates to the inductive current charge: $\cos \gamma = 0.65$

Typical electrical schematic



IEC inlet, a mains filter with a single or dualfuse holder and a 2-pole rocker switch. Choosing FN 380 product line brings you the rapid availability of a standard filter associated with the necessary safety acceptances.

The FN 380 power entry module combines an

Standard IEC connector filters are a practical solution helping you to pass EMI system approval in a short time. A wide selection on amperage ratings, fuse options, mounting possibilities and filters for medical applications are designed to offer you the desired solution.

Features and benefits

- Good conducted attenuation performance, based on chokes with high saturation resistance and excellent thermal behavior.
- Rear/front or snap-in mounting.
- Single or dual-fuse holder.
- USA Ø6.3 x 32mm or EU Ø5 x 20mm fuses.
- 2-pole rocker switch.
- Voltage selector 110-120V / 220-240V.
- Custom-specific versions are available on request.

Typical applications

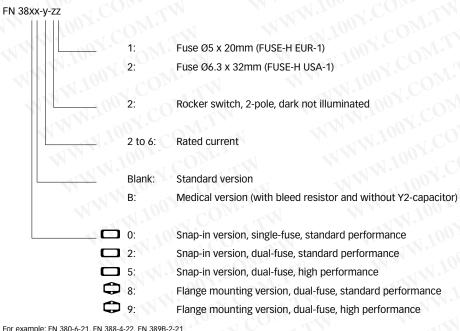
- Portable electrical and electronic equipment
- **■** Consumer goods
- EDP and office equipment
- Single-phase power supplies, switch-mode power supplies
- Test and measurement equipment
- Medical equipment

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Filter selection table

Filter*	Rated current @ 40°C (25°C)		Inductance L [mH]	Capacitano Cx C				Fuses***	Weight
				[nF]	[nF]	[kΩ]		[Qty]	[g]
FN 380-2-2.	2 (2.4)	373	0.70	47	2.2		13	1	[g] 55
FN 380-4-2.	4 (4.8)	373	0.30	47	2.2		13	1	55
FN 380-6-2.	6 (7.2)	373	0.18	47	2.2	CO	13	1	55
FN 382-2-2.	2 (2.4)	373	0.70	47	2.2	100	13	2	55
FN 382-4-2.	4 (4.8)	373	0.30	47	2.2		13	2	55
FN 382-6-2.	6 (7.2)	373	0.18	47	2.2	√ CO	13	2	55
FN 385-2-2.	2 (2.4)	373	2.00	47	2.2	001.	13	2	65
FN 385-4-2.	4 (4.8)	373	0.80	47	2.2		13	2	65
FN 385-6-2.	6 (7.2)	373	0.50	47	2.2	100	13	2	65
FN 388-2-2.	2 (2.4)	373	0.70	47	2.2	100	13	2	60
FN 388-4-2.	4 (4.8)	373	0.30	47	2.2		13	2	60
FN 388-6-2.	6 (7.2)	373	0.18	47	2.2	1400	13	2	60
FN 389-2-2.	2 (2.4)	373	2.00	47	2.2	111.	13	2	70
FN 389-4-2.	4 (4.8)	373	0.80	47	2.2	313	13	2	70 70
FN 389-6-2.	6 (7.2)	373	0.50	47	2.2		13	2	70
FN 382B-2-2.	2 (2.4)	2	0.70	47		1000	13	2	55
FN 382B-4-2.	4 (4.8)	2	0.30	47	4	1000	13	2	55
FN 382B-6-2.	6 (7.2)	2	0.18	47		1000	13	2	55
FN 389B-2-2.	2 (2.4)	2	2.00	47		1000	13	2	70
FN 389B-4-2.	4 (4.8)	2	0.80	47		1000	13	2	70
FN 389B-6-2.	6 (7.2)	2	0.50	47		1000	13	2	70

Product selector



For example: FN 380-6-21, FN 388-4-22, FN 389B-2-21

Maximum leakage under normal operating conditions. Note: if the neutral line is interrupted, worst case leakage could reach twice this level

Filters are delivered without fuse

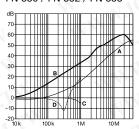
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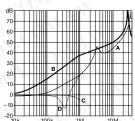
Typical filter attenuation

Per CISPR 17; A = $50\Omega/50\Omega$ sym; B = $50\Omega/50\Omega$ asym; C = $0.1\Omega/100\Omega$ sym; D = $100\Omega/0.1\Omega$ sym

FN 380 / FN 382 / FN 388

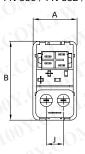


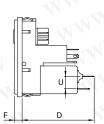
FN 385 / FN 389

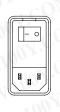


Mechanical data

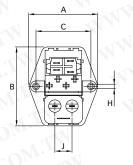
FN 380 / FN 382 / FN 385

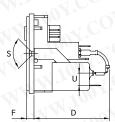






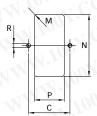
FN 388 / FN 389



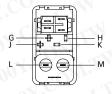




Panel cut out



Connection designation



Dimensions

	FN 380		FN 382	FN 385	FN 388	FN 389	Tolerances	
		TOO Y.C.C.	ON TW	WWW	1.100 X.Co.	W.T.W	MWW.IO	
A		32	32	32	50	50	±0.3	
В		58	58	58	58	58	±0.3	
C		111	CO		40	40	±0.1	
D		51	51	61	51	61		
F		5.5	5.5	5.5	5.5	5.5		
Н					Ø3.3	Ø3.3		
J		12.5	12.5	12.5	12.5	12.5		
М		R ≤ 2	R ≤ 2	R ≤ 2	R ≤ 2	R ≤ 2	±0.1	
N	4	55.9*/56.2**	55.9*/56.2**	55.9*/56.2**	55.9*/56.2**	55.9*/56.2**	+0.2/-0	
P		28.5	28.5	28.5	28.5	28.5	+0.2/-0	
R			(In) - 10//	• 1	M3	M3		
S			- 41		90°	90°		
U		9	9	9	9	9	L° -1 -	

^{*} For a back panel thickness between 0.8 and 2.0mm

All dimensions in mm; 1 inch = 25.4mm

Tolerances according: ISO 2768-m / EN 22768-m

^{**} For a back panel thickness between 2.1 and 3.2mm