

IEC Inlet Filters F.MH-F.MK-F.ML-F.MM-F.MP-F.MQ-F.MR-F.MS series

With fuse holder, bipolar switch and voltage selector

This series gives a high level of suppression within a compact enclosure. The IEC 60320 inlet power entry module combines 1 or 2 fuse holders for US and IEC fuses, with a bipolar rocker switch, earth choke and input voltage selector.

Designed for use in business, consumer, test and medical equipment for international markets.

- Current ratings from 1A to 6A
- Comprehensive range of filter performance options
- Integral single or twin fuse holder
- Optional voltage selector
- Optional earth line choke
- Horizontal or vertical mounting
- Medical versions available

Mechanical Specifications

Manufacture: metal case with built-in power line connector according to IEC 60320,
fuse holder for 1 fuse (F.MH. - F.ML. - F.MP. - F.MR)
or 2 fuses (F.MK. - F.MM. - F.MQ. - F.MS)
5 x 20mm (IEC) or 6.3 x 32mm (US),
bipolar rocker switch,
voltage selector 110/220Vac (F.MH - F.MK - F.ML
- F.MM only); internal components sealed with
self-extinguishing resin.

Connections: IEC 60320 - Standard plug (INPUT);
faston 6.3 x 0.8mm (OUTPUT);
ground terminal connected to case.

Mounting: F.MH, F.MK, FML, FMM versions now available in
vertical mounting version - (F.**.**.**.**.010) with
no approvals.

Electrical Specifications

Rated voltage (V_R): max 250V, 50/60Hz

Rated current (I_R): referred to room temperature = 40°C

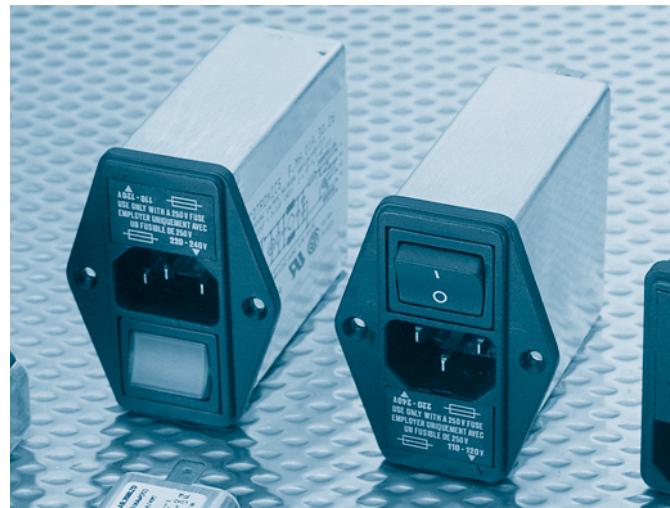
Leakage current (I_L): at 220V, 50Hz, max value

Voltage test (2s.): line to ground 3000Vdc or 1800Vac
line to line 1700Vdc

Climatic category: HPF (25/085/21);
Temperature range: -25°C to +85°C

Bipolar rocker switches:
10(4)A / 250Vac (Rated current),
50000 on-off operations;
values in () relate to the inductive current;
inrush current test according to UL 1054 (35A).

Voltage selector: 110-220Vac (F.MH - F.MK - F.ML - F.MM only).



Filter Range

(example pt no. - F.MH.01A.20.25)

Code	I_R (A)	L_1 (mH)	L_2 (mH)	C_{x1} (μ F)	C_{x2} (μ F)	C_y (pF)	I_L (mA)	R (M Ω)
■ F.MH. ■ F.MK. ■ F.MQ. ▲ F.MS.	20.-	2 x 10				2 x 4700	2 x 0.43	
	24.-	1	2 x 10	0.22	0.1		2 x 0.003	0.33
	30.-		2 x 22			2 x 4700	2 x 0.43	
	34.-		2 x 22				2 x 0.003	
	21.-		2 x 2			2 x 4700	2 x 0.43	
	25.-	2.5	2 x 2	0.22	0.1		2 x 0.003	0.33
	31.-		2 x 8			2 x 4700	2 x 0.43	
	35.-		2 x 8				2 x 0.003	
	22.-		2 x 1			2 x 4700	2 x 0.43	
	04A	4	2 x 1	0.22	0.1		2 x 0.003	0.33
■ F.ML. ■ F.MM. ■ F.MP. ▲ F.MR.	26.-		2 x 8			2 x 4700	2 x 0.43	
	32.-		2 x 8				2 x 0.003	
	36.-		2 x 8				2 x 0.003	
	23.-		2 x 1			2 x 4700	2 x 0.43	
	06A	6	2 x 1	0.22	0.1		2 x 0.003	0.33
	27.-		2 x 2.5			2 x 4700	2 x 0.43	
	33.-		2 x 2.5				2 x 0.003	
	37.-		2 x 2.5				2 x 0.003	
	20.-		2 x 10	●		2 x 4700	2 x 0.43	
	01A	1	2 x 10	0.65	0.22	0.1	2 x 0.003	0.33
■ F.ML. ■ F.MM. ■ F.MP. ▲ F.MR.	24.-		2 x 22			2 x 4700	2 x 0.43	
	30.-		2 x 22				2 x 0.003	
	34.-		2 x 22				2 x 0.003	
	21.-		2 x 2	●		2 x 4700	2 x 0.43	
	25.-	2.5	2 x 2	0.65	0.22	0.1	2 x 0.003	0.33
	31.-		2 x 8			2 x 4700	2 x 0.43	
	35.-		2 x 8				2 x 0.003	
	22.-		2 x 1	●		2 x 4700	2 x 0.43	
	04A	4	2 x 1	0.65	0.22	0.1	2 x 0.003	0.33
	26.-		2 x 8			2 x 4700	2 x 0.43	
■ F.ML. ■ F.MM. ■ F.MP. ▲ F.MR.	32.-		2 x 8				2 x 0.003	
	36.-		2 x 8				2 x 0.003	
	23.-		2 x 1	●		2 x 4700	2 x 0.43	
	06A	6	2 x 1	0.65	0.22	0.1	2 x 0.003	0.33
	27.-		2 x 2.5			2 x 4700	2 x 0.43	
	33.-		2 x 2.5				2 x 0.003	
	37.-		2 x 2.5				2 x 0.003	

- No approvals, Circuit Diagram D
 - ▲ No approvals, Circuit Diagram C
 - Not applicable to FMP,FMR
 - .010 = Vertical mounting option (addition to standard pt no.)
 - 25 = Rocker switch
 - 26 = Illuminated rocker switch
- Circuit Diagram:
- H = 1 fuse
 - K = 2 fuses
 - L = 1 fuse + earth choke
 - M = 2 fuses + earth choke
 - P = 1 fuse, single pole switch (no voltage selector)
 - Q = 2 fuses, single pole switch (no voltage selector)
 - R = 1 fuse, double pole switch (no voltage selector)
 - S = 2 fuses, double pole switch (no voltage selector)

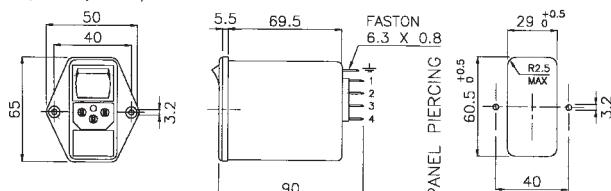
Approvals



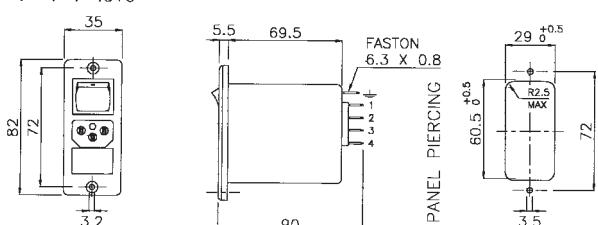
IEC Inlet Filters F.MH-F.MK-F.ML-F.MM-F.MP-F.MQ-F.MR-F.MS series

Dimensions (mm) and connections

F.MH, F.MK, F.ML, F.MM



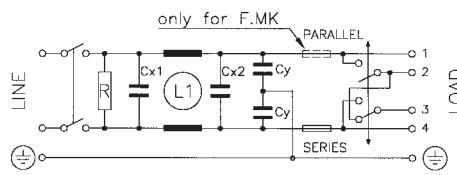
F.**.***.**.**.010



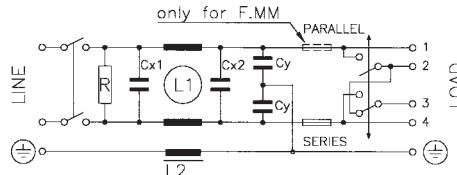
F.MP, F.MQ, F.MR, F.MS

Circuit diagram

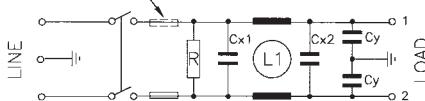
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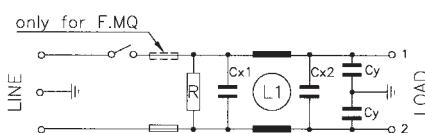
B



C



D



Insertion loss (typical): — Asymmetrical (line to ground) with Cy - - - Asymmetrical (with earth inductor) - - - Symmetrical (line to line)

