

DESCRIPTION

PRODUCT COVERED:

USR, CNR - Component - Electromagnetic Interference Filter - Appliance - Cat. Nos. FMAB-MRYB-1010, FMAB-MRYB-2010, FMBB-MRYB-0110, FMBB-MRYB-0210, FMBB-MRYB-0310, FMBB-MRYB-0410, FMBB-MRYB-0610, FMBB-MRYB-0311, FMBB-MRYB-0611, FMBB-MRYB-1010, FMAC-3RYB-0310, FMAC-3RYB-0610, FMAC-3RYB-1010, FMAC-3RYB-2010, FMAD-MRYB-0310, FMAD-MRYB-0610, FMAD-MRYB-1010, FMAD-MRYB-2010.

GENERAL:

These devices are DIN rail mounted EMI filters intended for incorporation in end use equipment. They are housed in a metal housing and incorporate terminals for factory wiring.

ELECTRICAL RATINGS:

MODEL NO.	VOLTS	PHASES	CURRENT	FREQUENCY (HZ)	POWER (VA)	MINIMUM - MAXIMUM AMBIENT TEMPERATURE (°C)
FMAB-MRYB-1010	250	1	10	50/60	2500	0 - 40
FMAB-MRYB-2010	250	1	20	50/60	5000	0 - 40
FMBB-MRYB-0110	250	1	1	50/60	250	0 - 40
FMBB-MRYB-0210	250	1	2	50/60	500	0 - 40
FMBB-MRYB-0310	250	1	3	50/60	750	0 - 40
FMBB-MRYB-0410	250	1	4	50/60	1000	0 - 40
FMBB-MRYB-0610	250	1	6	50/60	1500	0 - 40
FMBB-MRYB-0311	250	1	3	50/60	750	0 - 40
FMBB-MRYB-0611	250	1	6	50/60	1500	0 - 40
FMBB-MRYB-1010	250	1	10	50/60	2500	0 - 40
FMAC-3RYB-0310	480/277	3	3	50/60	1440	0 - 40
FMAC-3RYB-0610	480/277	3	6	50/60	2880	0 - 40
FMAC-3RYB-1010	480/277	3	10	50/60	4800	0 - 40
FMAC-3RYB-2010	480/277	3	20	50/60	9600	0 - 40
FMAD-MRYB-0310	480Y/277	3	3	50/60	831	0 - 40
FMAD-MRYB-0610	480Y/277	3	6	50/60	1662	0 - 40
FMAD-MRYB-1010	480Y/277	3	10	50/60	2770	0 - 40
FMAD-MRYB-2010	480Y/277	3	20		5540	40

NOMENCLATURE BREAKDOWN:

Example:

FMAB-MRYB	-XX
I	II

I - Basic designation:

FMAB-MRYB (1-phase, 250V)
FMBB-MRYB (1-phase, 250V)
FMAC-3RYB (3-phases, 480V)
FMAD-MRYB (3-phases, 480Y/277)

II - Four digit current indicators:

-0110 (1 amp)
-0210 (2 amp)
-0310 (3 amp)
-0311 (3 amp for basic designation FMBB-MRYB only)
-0410 (4 amp)
-0610 (6 amp)
-0611 (6 amp for basic designation FMBB-MRYB only)
-1010 (10 amp)
-2010 (20 amp)

ENGINEERING CONSIDERATIONS (NOT FOR UL FIELD REPRESENTATIVE USE)

USR indicates the filters have been evaluated to the Standard for Electromagnetic Interference Filters, UL 1283, Sixth Edition.

CNR indicates investigation to the requirements of the Canadian Standard for Electromagnetic Interference (EMI) Filters, CSA C22.2 No. 8-13, Fifth Edition.

CONDITIONS OF ACCEPTABILITY:

General - The components covered by this Report are Component Appliance Filters intended to be used in the end-use product where the acceptability of the combination with the end-use product has been determined by UL LLC.

The following items should be considered in the end use product engineering evaluation.

1. The device shall be mounted in an overall enclosure suitable for the end product application.
2. The device shall be installed in compliance with the mounting, terminal, spacing and segregation of the ultimate application.
3. The terminals have not been evaluated for field wiring. The acceptability of the grounding terminal should be determined in the end-product.
4. Leakage current measurements have been provided for reference only and exceeded 0.5 mA for filters FMAB-MRYB-2010, FMBB-MRYB-0110, FMBB-MRYB-0610, FMBB-MRYB-1010, FMAC-3RYB-2010 and did not exceed 0.5 mA for filter FMAC-3RYB-0310, FMAD-MRYB-0310, FMAD-MRYB-2010. The need to determine leakage current in the end application shall be considered.
5. Capacitor Discharge voltage measurements have been provided for reference for filters FMBB-MRYB-0110, FMBB-MRYB-0610 and FMBB-MRYB-1010 only. For filters FMAB-MRYB-1010, FMAB-MRYB-2010, FMBB-MRYB-0210, FMBB-MRYB-0310, FMBB-MRYB-0410, FMBB-MRYB-0311, FMBB-MRYB-0611, FMAC-3RYB-0310, FMAC-3RYB-0610, FMAC-3RYB-1010, FMAC-3RYB-2010, FMAD-MRYB-0310, FMAD-MRYB-0610, FMAD-MRYB-1010, FMAD-MRYB-2010 was not performed. The need to determine capacitor discharge voltages in the end application shall be considered.
6. The components were submitted and evaluated at a maximum manufacturer's recommended ambient as indicated in the Electrical Ratings Table. The need for additional testing if these devices are used above this rating shall be considered in the end-use application.

CONDITIONS OF ACCEPTABILITY (cont'd):

7. The 1-phase filters FMAB-MRYB-1010, FMAB-MRYB-2010, FMBB-MRYB-0110, FMBB-MRYB-0210, FMBB-MRYB-0310, FMBB-MRYB-0410, FMBB-MRYB-0610, FMBB-MRYB-0311, FMBB-MRYB-0611, FMBB-MRYB-1010 have been evaluated for use in voltage systems where the phase to neutral voltage does not exceed 250V.

The 3-phases filters FMAC-3RYB-0310, FMAC-3RYB-0610, FMAC-3RYB-1010, FMAC-3RYB-2010 have been evaluated for use in voltage systems where the phase to phase voltage does not exceed 480V.

The 3-phases filters FMAD-MRYB-0310, FMAD-MRYB-0610, FMAD-MRYB-1010, FMAD-MRYB-2010 have been evaluated for use in voltage systems where the phase to phase voltage does not exceed 480V and phase to neutral voltage does not exceed 277V.

8. The Abnormal Operation/Limited Short Circuit Test (UL 1283, Cl. 32; CSA C22.2 No. 8, Cl. 6.14) was performed on the following models using a short circuit current and fuse rating as indicated below. The devices are suitable for use on a circuit capable of delivering not more than the specified rms symmetrical amperes when used with the fuse ratings indicated.

Model	Represented Models	Test current (A)	Fuse rating (A)
FMAB-MRYB-2010	FMAB-MRYB-1010, FMAB-MRYB-2010	3500	25
FMBB-MRYB-0110	FMBB-MRYB-0110	200	15
FMBB-MRYB-0610	FMBB-MRYB-0210, FMBB-MRYB-0310, FMBB-MRYB-0410, FMBB-MRYB-0610	1000	15
FMBB-MRYB-1010	FMBB-MRYB-1010	2000	15
FMAC-3RYB-0310	FMAC-3RYB-0310	1000	15
FMAC-3RYB-2010	FMAD-MRYB-0610, FMAD-MRYB-1010, FMAD-MRYB-2010	3500	25

9. These filters have not been evaluated for use in telephone equipment or telephone equipment power supplies.
10. These filters have not been evaluated for use in Information Technology Equipment.
11. These filters have not been evaluated for use in Medical Equipment.