

DESCRIPTION

PRODUCT COVERED:

USR, CNR - Component, Appliance Filters family "FMAC ECO", Models FMAC-091C-1610, FMAC-091C-2510, FMAC-091D-3610, FMAC-091D-5010, FMAC-091D-5510, FMAC-091E-6410, **FMAC-3FSF-6410**, FMAC-091T-8010, FMAC-091G-H110 FMAC-091G-H210 followed by two digit number.

USR, CNR - Component, Appliance Filters, **FMAC-09kk-16w0.xx, FMAC-09kk-25w0.xx, FMAC-09kk-36w0.xx, FMAC-09kk-50w0.xx, FMAC-09kk-55w0.xx, FMAC-09kk-64w0.xx, FMAC-3Fkk-64w0.xx, FMAC-09kk-80w0.xx, FMAC-09kk-H1w0.xx, FMAC-09kk-H2w0.xx**, where kk - represents 1C, 1D, 1E, 1G, or 1T; where w - represents 1,2,3, 4, or 6; j - represents 0, xx - represents two digit alpha numeric.

GENERAL:

These devices are Electromagnetic Interference (EMI) Filters intended to be factory-installed as a component part of end-use appliances or equipment connected to (supplied by) the branch circuits of a building wiring system. They are provided with metal housing and terminals for factory wiring. The current detailed below is the maximum rated at a maximum ambient temperature rating.

ELECTRICAL RATINGS:

MODEL NO.	CODE	VOLTAGE, Vac	CURRENT, A	PHASES	FREQUENCY (Hz)	COLD-MAXIMUM AMBIENT TEMPERATURE (°C)
FMAC-091C-1610.XX	FMAC-09kk-16w0.xx	480/277	16	3	50/60	-25 - 40
FMAC-091C-2510.XX	FMAC-09kk-25w0.xx	480/277	25	3	50/60	-25 - 40
FMAC-091D-3610.XX	FMAC-09kk-36w0.xx	480/277	36	3	50/60	-25 - 40
FMAC-091D-5010.XX	FMAC-09kk-50w0.xx	480/277	50	3	50/60	-25 - 40
FMAC-091D-5510.XX	FMAC-09kk-55w0.xx	480/277	55	3	50/60	-25 - 40
FMAC-091E-6410.XX	FMAC-09kk-64w0.xx	480/277	64	3	50/60	-25 - 40
FMAC-3FSF-6410.XX	FMAC-3Fkk-64w0.xx	480/277	64	3	50/60	-25 - 40
FMAC-091T-8010.XX	FMAC-09kk-80w0.xx	480/277	80	3	50/60	-25 - 40
FMAC-091G-H110.XX	FMAC-09kk-H1w0.xx	480/277	110	3	50/60	-25 - 40
FMAC-091G-H210.XX	FMAC-09kk-H2w0.xx	480/277	150	3	50/60	-25 - 40

NOMENCLATURE BREAKDOWN:

Example of Series FMAC ECO:

P/N	FMAC-09	kk	zz	w	j	.	xx
No.	1	2	3	4	5		6

No.	Mark	Description
1	FMAC-09 FMAC-3F	Basic designation
2	kk	Type of case (alphanumeric digit): 1C, 1D, 1E, 1T, 1G, SF (see construction details)
3	zz	Current Rating: 16, 25, 36, 50, 55, 64, 80, 110 (H1), 150 (H2)
4	w	Type of terminal connection: 1 = Screw Terminal 2 = Wire 3 = Bolts 4 = Faston 6 = Mix
5	j	Rated Voltage: 0 = ≤480V
6	xx	Two digit number that indicates minor mechanical differences, reduced inductivity, customer versions, etc.

ENGINEERING CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE'S USE):

USR indicates investigation to the requirements the Standard for Electromagnetic Interference Filters, UL 1283, Sixth Edition.

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

CONDITIONS OF ACCEPTABILITY:

Use - The components covered by this Report are Component Appliance Electromagnetic Interference 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.

Conditions of Acceptability - The following items should be considered to determine acceptability when evaluating the end-use product.

1. The filters shall be provided with an overall enclosure suitable for the applicable end product requirements. Mounting means should be considered in the end-use application.
2. The filter shall be installed in compliance with the spacing and segregation requirements of the end use application.
3. The terminals have not been evaluated for field wiring. The acceptability of the grounding terminal should be determined in the end use application.
4. Appliance filters inherently have considerable leakage current to the grounding conductor. These filter Models have leakage current measurements exceeding 0.5 mA. The leakage current is to be measured in the end product to determine compliance with the end use requirements.
5. The suitability of the grounding means in conjunction with the filter shall be evaluated in the end-use application.
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 Abnormal Operation Test has been performed on these filters and they are capable of withstanding limited short-circuit conditions up to those stated in the table below, with the correlating fuses that were used. Evaluation for Abnormal Operation test currents higher than those stated in the table, or fused higher than what is stated, shall be determined in the end-use product in which these filters are installed.

Model	Represented Models	Available Short circuit Current Rating (Amps, rms)	Fuse Rating, A
FMAC-091C-1610	FMAC-091C-1610	5000	20
FMAC-091D-3610	FMAC-091D-3610, FMAC-091C-2510	5000	50
*FMAC-091E-6410	FMAC-091D-5510, FMAC-091D-5010, FMAC-3FSF-6410.XX	5000	80
FMAC-091G-H210	FMAC-091G-H210, FMAC-091G-H110, FMAC-091T-8010	See note below	-

Note: Model FMAC-091G-H210 was tested using a short circuit current of 5000 Amps for 60 ms without a fuse. Suitability and need for additional testing shall be considered in the end-use application.