CERTIFICATE OF COMPLIANCE

Certificate Number	20181031-E48570
Report Reference	E48570-20180821
Issue Date	2018-October-31
Issued to:	TYCO Electronics Corp 2901 Fulling Mill Rd Middletown PA 17057
This is to certify that representative samples of	COMPONENT - ELECTROMAGNETIC INTERFERENCE FILTERS TE FBL Aeries, Models 1FBL3, 3FBL3, 5FBL3 and 10FBL3. Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.
Standard(s) for Safety:	UL 1283 & CAN/CSA C22.2 No. 8-13, Electromagnetic Interference Filters
Additional Information:	See the UL Online Certifications Directory at www.ul.com/database for additional information

Only those products bearing the UL Certification Mark should be considered as being covered by UL's Certification and Follow-Up Service.

The UL Recognized Component Mark generally consists of the manufacturer's identification and catalog number, model number or other product designation as specified under "Marking" for the particular Recognition as published in the appropriate UL Directory. As a supplementary means of identifying products that have been produced under UL's Component Recognition Program, UL's Recognized Component Mark: 𝕽𝕷, may be used in conjunction with the required Recognized Marks. The Recognized Component Mark is required when specified in the UL Directory preceding the recognitions or under "Markings" for the individual recognitions.

Recognized components are incomplete in certain constructional features or restricted in performance capabilities and are intended for use as components of complete equipment submitted for investigation rather than for direct separate installation in the field. The final acceptance of the component is dependent upon its installation and use in complete equipment submitted to UL LLC.

Look for the UL Certification Mark on the product.

Bruce Mahrenholz, Director North American Certification Program

UL LLC

DESCRIPTION

PRODUCT COVERED:

USR, CNR – Component – Electromagnetic Interference Appliance Filters, **TE FBL Aeries**, Models 1FBL3, 3FBL3, 5FBL3 and 10FBL3.

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.	Alternate Model No.	Maximum Voltage, Vac	Frequency, Hz	Phases	Maximum Current, ac	Cold to Maximum Ambient Temperature, °C
1FBL3	F8540	300	50/60	1	1	**-10 to** 50
*3FBL3	F8541	300	50/60	1	3	**-10 to 50**
*5FBL3	F8542	300	50/60	1	5	**-10 to 50**
*10FBL3	F8543	300	50/60	1	10	**-10 to 50**

ENGINEERING CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE'S 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.

NOMENCLATURE:

Type Code and Description for FBL Series Filters

Example:

P/N	1	FBL	3
No.	I	II	III

No.	Mark	Description
I	1	Current Rating, as applicable: 1 = 1 A 3 = 3 A 5 = 5 A 10 = 10 A
2	FBL	Model Series Designation: FBL
3	3	Indicates line-load terminations: 3 = Leads

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 terminal spacing and segregation requirements of the end use application.

3. The terminals have not been evaluated for field wiring.

4. Appliance filters inherently have high leakage currents. Leakage current measurements in the end use application should be considered for compliance with the end use application requirements.

5. 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.

6. The suitability of the grounding means in conjunction with the filter shall be evaluated in the end-use application.

7. The Abnormal Operation/Limited Short Circuit Test (UL 1283, Cl. 32; CSA C22.2 No. 8, Cl. 6.14) was 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.

Tested Model	Represented Models	Available Short circuit Current Rating (Amps, rms)	Fuse Rating, A
1FBL3	-	1000	15 A, 600 V, Class RK5, Non-Time Delay
10FBL3	3FBL3, 5FBL3	5000	