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Vishay

CERTIFICATE OF COMPLIANCE

Certificate Number 20121116-E354331

Report Reference E354331-20120420

Issue Date 2012-NOVEMBER-16

Issued to: VISHAY CAPACITORS BELGIUM N V

KWADESTRAAT 151 A

BOX 12

8800 ROESELARE BELGIUM

This is to certify that representative samples of

COMPONENT - ACROSS-THE-LINE CAPACITORS, ANTENNA-COUPLING COMPONENTS, LINE-BYPASS COMPONENTS AND FIXED CAPACITORS FOR USE IN

ELECTRONIC EQUIPMENT

Component – Class X2 Wound Film Type Capacitors, 339, 338 2, 336 2 and 1778 Series with capacitance from 1nF to 4700nF with tolerance suffix code J or K or M. Refer to CONSTRUCTION

DETAILS for Model designation and rated capacitance.

Have been investigated by UL in accordance with the

Standard(s) indicated on this Certificate.

Standard(s) for Safety: See addendum page .

Additional Information: See the UL Online Certifications Directory at

www.ul.com/database for additional information

Only those products bearing the UL Recognized Component Marks for the U.S. and Canada should be considered as being covered by UL's Recognition and Follow-Up Service and meeting the appropriate U.S. and Canadian requirements.

The UL Recognized Component Mark for the U.S. 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: \P 1, 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. The UL Recognized Component Mark for Canada consists of the UL Recognized Mark for Canada: \P 1 and 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.

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

William R. Carney, Director, North American Certification Programs

UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at www.ul.com/contactus

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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 Recognized Component Mark on the product.

This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements.

UL 60384-14, Fixed Capacitors for Use in Electronic Equipment – Part 14: Sectional Specification: Fixed Capacitors for Electromagnetic Interference Suppression and Connection to the Supply Mains.

CSA E60384-1:03, Fixed Capacitors for Use in Electronic Equipment - Part 1: Generic Specification.

CSA E60384-14:09, Fixed Capacitors for Use in Electronic Equipment – Part 14: Sectional Specification: Fixed Capacitors for Electromagnetic Interference Suppression and Connection to the Supply Mains

William R. Carney, Director, North American Certification Program

UL LLC

contact a local UL Customer Service Representative at www.ul.com/contactus

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Certificate UL 60384-14, CSA E60384-14



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File E354331 Vol. 1 Sec. 1 Page 1 Issued: 2012-04-20 Vol. 2 Sec. 1 Revised: 2012-11-13 and Report

DESCRIPTION

PRODUCT COVERED:

USR, ${\bf CNR}$ - Component - Class X2 Wound Film Type Capacitors, 339, 338 2, 336 2 and 1778 Series with capacitance from 1nF to 4700nF with tolerance suffix code J or K or M. Refer to CONSTRUCTION DETAILS for Model designation and rated capacitance.

GENERAL:

Series 339, 338 2, 336 2 and 1778 are identical to each other, except for series designation.

RATINGS:

			Lower	Upper			
		Voltage	Category	Category	Capacitance		Passive
	Clas	Rating	Temp.	Temp.	Tolerance	Climatic	Flammability
Series	s	(ac)	(°C)	(°C)	(왕)	Category	Category
339,	X2	310	-55	110	+/-20%#	56	B or C++
338 2,							
336 2,							
1778							

[#] - The suffix code for tolerance associated with capacitance may be J(±5%), K(±10%), or M(±20%).

++ - If Series 339, 338 2, 336 2 and 1778 that volume smaller than 1750 mm³ apply passive flammability category of C according test result.

ABBREVIATIONS:

USR - Recognized, indicates investigation to UL 60384-14, First Edition, with revisions up to and including March 31, 2010.

CNR - Recognized, indicates investigation to CSA E60384-1:03, Second Edition, dated February, 2003 and CSA E60384-14:09, Second Edition, with revisions up to and including March 2009.