

CERTIFICATE OF COMPLIANCE

Certificate Number 20161012-E151252
Report Reference E151252-A130
Issue Date 2016-OCTOBER-12

Issued to: MURATA POWER SOLUTIONS INC
11 CABOT BLVD
MANSFIELD MA 02048-1137
UNITED STATES


This is to certify that representative samples of Component-Power Supplies for Information Technology Equipment Including Electrical Business Equipment
See addendum page

Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.

Standard(s) for Safety: UL 60950-1 and CAN/CSA C22.2 No. 60950-1-07, Information Technology Equipment - Safety - Part 1: General Requirements.

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: , 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

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 <http://ul.com/aboutul/locations/>




CERTIFICATE OF COMPLIANCE

Certificate Number 20161012-E151252
Report Reference E151252-A130
Issue Date 2016-OCTOBER-12

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

DC-DC Converters, Models NMEaabby or CMEaabby or CRE1Saabby

where aa = Input Voltage; bb = Output Voltage and y = is any combination of alphanumeric characters, -, or blank representing non-safety related options.



Bruce Mahrenholz, Director North American Certification Program

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 <http://ul.com/aboutul/locations/>



CERTIFICATE OF COMPLIANCE

Certificate Number 20161026- E151252
Report Reference E151252-A82-UL
Issue Date 2016-OCTOBER-26

Issued to: MURATA POWER SOLUTIONS INC
11 CABOT BLVD, MANSFIELD MA 02048-1137


This is to certify that representative samples of COMPONENT - POWER SUPPLIES, INFORMATION TECHNOLOGY EQUIPMENT INCLUDING ELECTRICAL BUSINESS EQUIPMENT
"See Addendum page"

Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.

Standard(s) for Safety: UL 60950-1 and CAN/CSA C22.2 No. 60950-1-07 - Information Technology Equipment - Safety - Part 1: General Requirements.

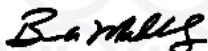
Additional Information: See the UL Online Certifications Directory at www.ul.com/database for additional information

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: , 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

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 <http://ul.com/aboutul/locations/>



CERTIFICATE OF COMPLIANCE

Certificate Number 20161026- E151252
Report Reference E151252-A82-UL
Issue Date 2016-OCTOBER-26

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

Models/Product:

DC-DC Converter

NKEaabbgy or CRE1Saabbgy or CMEaabbgy, where:

aa=Input Voltage (03=3.3Vdc, 05=5.0Vdc, 12Vdc)

bb=Output Voltage (03=3.3V, 05=5.0V, 09=9.0V, 12=12.0V, 15=15.0V)

gg=2 to 4 letters indicating package style

y=is any combination of alphanumeric characters, - or blank representing non-safety related options



Bruce Mahrenholz, Director North American Certification Program

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 <http://ul.com/aboutul/locations/>



CERTIFICATE OF COMPLIANCE

Certificate Number 20160923-E151252
Report Reference E151252-A131-UL
Issue Date 2016-SEPTEMBER-23

Issued to: MURATA POWER SOLUTIONS INC
11 CABOT BLVD
MANSFIELD MA 02048-1137

**This is to certify that
representative samples of**

COMPONENT - POWER SUPPLIES, INFORMATION
TECHNOLOGY EQUIPMENT INCLUDING ELECTRICAL
BUSINESS EQUIPMENT


See Addendum Page.

Have been investigated by UL in accordance with the
Standard(s) indicated on this Certificate.

Standard(s) for Safety: UL 60950-1 & CAN/CSA C22.2 No. 60950-1-07,
Information Technology Equipment - Safety - Part 1:
General Requirements


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:
, 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

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 <http://ul.com/aboutul/locations/>



CERTIFICATE OF COMPLIANCE

Certificate Number 20160923-E151252
Report Reference E151252-A131-UL
Issue Date 2016-SEPTEMBER-23

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

DC-DC Converters, Model(s): NMLaabby or CRL2Saabby or CME2Saabby
Where aa = Input Voltage; bb = Output Voltage and y = is any combination of alphanumeric characters,
- or blank representing non-safety related options.



Bruce Mahrenholz, Director North American Certification Program

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 <http://ul.com/aboutul/locations/>

