## CERTIFICATE OF COMPLIANCE

Certificate Number Report Reference Issue Date 20170330-E151252 E151252-A121-UL 2017-MARCH-30

Issued to:

MURATA POWER SOLUTIONS INC 11 CABOT BLVD MANSFIELD MA 02048

This is to certify that representative samples of

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

DC-DC Converters, IRH-a/bb-T110 Series, where a is 5 to 24Vdc, bb is 30A max., may or may not be followed by alphanumeric suffix indicating non-safety related options.

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

Standard(s) for Safety: Additional Information: See addendum page 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: **N**, 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.

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Bruce Mahrenholz, Director North American Certification Program UL LLC



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

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

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Bruce Mahrenholz, Director North American Certification Program



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