



Certificate of Compliance

Certificate: 80226059

Master Contract: 607441

Project: 80226059

Date Issued: 2024-09-09

Issued To: Mean Well Enterprises Co., Ltd.
No 28 Wuquan 3rd Rd
Wugu Dist, New Taipei City 24891
Taiwan
Attention: Frank Lin

The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US or with adjacent indicator 'US' for US only or without either indicator for Canada only.



Issued by: *Warren Wu*
Warren Wu

PRODUCTS

CLASS 5311 09 - POWER SUPPLIES - Distributed Generation Power Systems Equipment

CLASS 5311 89 - POWER SUPPLIES - Distributed Generation Power Systems Equipment - Certified to U.S. Standards

DC-DC Converter

Models: DDRH-15-XXYZZZ, DDRH-30-XXYZZZ, DDRH-45-XXYZZZ, Internal permanently connected, filled with potting compound, models' rating as follows:

Model(s)	INPUT RATINGS:			OUTPUT RATINGS:			
	Maximum input voltage (Vdc)	Range of input operating voltage (Vdc)	Max. input current (A)	Nominal output voltage (Vdc)	Maximum continuous output current (A)	Maximum continuous output power (W)	Normal operation temperature range (°C)
DDRH-15-05YZZZ	1500Vdc	150-1500Vdc	0.15A	5Vdc	2.0A	10 W	-40 ~ +50°C



Certificate: 80226059
Project: 80226059

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DDRH-15-12YZZZ	1500Vdc	150-1500Vdc	0.15A	12Vdc	1.25A	15W	-40 ~ +50°C
DDRH-15-15YZZZ	1500Vdc	150-1500Vdc	0.15A	15Vdc	1.0A	15W	-40 ~ +50°C
DDRH-15-24YZZZ	1500Vdc	150-1500Vdc	0.15A	24Vdc	0.625A	15W	-40 ~ +50°C
DDRH-30-12YZZZ	1500Vdc	150-1500Vdc	0.3A	12Vdc	2.5A	30W	-40 ~ +50°C
DDRH-30-15YZZZ	1500Vdc	150-1500Vdc	0.3A	15Vdc	2.0A	30W	-40 ~ +50°C
DDRH-30-24YZZZ	1500Vdc	150-1500Vdc	0.3A	24Vdc	1.25A	30W	-40 ~ +50°C
DDRH-30-48YZZZ	1500Vdc	150-1500Vdc	0.3A	48Vdc	0.625A	30W	-40 ~ +50°C
DDRH-45-12YZZZ	1500Vdc	150-1500Vdc	0.4A	12Vdc	3.75A	45W	-40 ~ +50°C
DDRH-45-15YZZZ	1500Vdc	150-1500Vdc	0.4A	15Vdc	3.0A	45W	-40 ~ +50°C
DDRH-45-24YZZZ	1500Vdc	150-1500Vdc	0.4A	24Vdc	1.87A	45W	-40 ~ +50°C
DDRH-45-48YZZZ	1500Vdc	150-1500Vdc	0.4A	48Vdc	0.938A	45W	-40 ~ +50°C

Note:

XX=05, 12, 15, 24. (FOR DDRH-15);12, 15, 24, 48. (FOR DDRH-30/45)

Y=P, ST, DR

ZZZ=000-999, AAA-ZZZ or blank for commercial demand.

Conditions of Acceptability:

1. External fuses or circuit breaker rated not more than 4A shall be provided for each ungrounded DC input conductors +Vin&-Vin, preferred model WJ30H (UL E484758).
2. The unit shall only be connected to branch circuit and integrated into another end-product type; There is no field-wiring installation scenario by users on-site.



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APPLICABLE REQUIREMENTS

Standards Used	Description
CSA C22.2 No. 107.1-16	Power conversion equipment (Fourth Edition) (R2021)
UL Std No. 1741	Inverters, Converters, Controllers and Interconnection System Equipment for Use With Distributed Energy Resources (Third Edition, Revision Dated May 19, 2023.)



Certificate: 80226059
Project: 80226059

Master Contract: 607441
Date Issued: 2024-09-09

MARKINGS

The manufacturer is required to apply the following markings:

- Products shall be marked with the markings specified by the particular product standard.
- Products certified for Canada shall have all Caution and Warning markings in both English and French.

Additional bilingual markings not covered by the product standard(s) may be required by the Authorities Having Jurisdiction. It is the responsibility of the manufacturer to provide and apply these additional markings, where applicable, in accordance with the requirements of those authorities.

The products listed are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US (indicating that products have been manufactured to the requirements of both Canadian and U.S. Standards) or with adjacent indicator 'US' for US only or without either indicator for Canada only.

The following markings appear on the enclosure by silk-screening, permanent ink stamping, on adhesive labels that appear on the CSA List of Accepted Adhesive Nameplates, or by other permanent method:

1. Submitter's name and/or CSA Master Contract number " 607441".
2. Model designation.
3. Date code or date-traceable serial number.
4. The products listed are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US, or with adjacent indicator 'US' for US only, or without either indicator for Canada only, and optionally marked with "UL 1741" and/or "CSA C22.2 No 107.1-16".
5. The electrical ratings as specified in the following table:
Max input voltage (Vdc)
Range of input operating voltage (Vdc)
Max input current(A)
Nominal output voltage (Vdc)
Maximum continuous output current(A)
6. Each unit that may be produced or assembled at more than one factory is provided with a distinctive marking - which is able to be in code - to identify the product of a particular factory. Where only one factory is present in any given country, the country of origin label is sufficient to identify the factory.
7. Field-wiring terminals for both DC Input and DC Output shall be marked:
Inputs: "Use No. 90°C Copper Wire only".
Outputs: "Use No. 90°C Copper Wire only".
8. A unit employing pressure terminal connectors for field wiring connections shall be provided with a marking making reference to the instruction manual for the tightening torque to be applied to the wiring terminals.
9. CAUTIONARY MARKINGS: A cautionary marking shall be prefixed by the word "CAUTION", "WARNING", or "DANGER" in letters not less than 3.2 mm (1/8 in.) high. The remaining letters shall not be less than 1.6 mm (1/16 in.) high. A cautionary marking shall be:
 - a) Located on a part that cannot be removed without impairing the operation of the unit, (such as the product front cover); and



Certificate: 80226059

Project: 80226059

Master Contract: 607441

Date Issued: 2024-09-09

- b) Visible and legible to the operator during the normal operation of the unit Exception: Cautionary markings pertaining to internal parts that are applicable only to service personnel are to be located internally in an appropriate location with respect to the parts of concern.

Notes:

- I. The unit shall be marked with the following warning or equivalent, "CAUTION - Risk of Electric Shock, Do Not Remove Cover. No User Serviceable Parts Inside. Refer Servicing To Qualified Service Personnel."
 - II. The unit shall be marked with the word "CAUTION" and the following words, "Risk Of Electric Shock" - and the following or the equivalent. The marking shall be either located on the outside of the unit or shall be prominently visible with any cover or panel opened or removed:
 - a) "Both dc voltage sources are terminated inside this equipment. Each circuit must be individually disconnected before servicing", and
 - III. A removable panel covering a capacitor shall be marked "CAUTION - Risk of electric shock from energy stored in capacitor. Do not remove cover until 5 minutes after disconnecting all sources of supply."
10. **IMPORTANT SAFETY INSTRUCTIONS:** The important safety instructions shall include Items A - E. The statement "IMPORTANT SAFETY INSTRUCTIONS" and the statement "SAVE THESE INSTRUCTIONS" shall precede the list. The word "CAUTION" shall be entirely in upper case letters.

The information described in Items A - E, as appropriate, shall be provided. The information contained in Items B - E may be marked on the unit or in the instruction manual.

- a. **SAVE THESE INSTRUCTIONS** - This manual contains important instructions for Models (model as indicated in front of Report) that shall be followed during installation and maintenance of the unit.
Exception: When the instructions are exactly the same for all models, specific model numbers are not required.
- b. When a symbol is used for compliance with marking requirements the instruction manual shall identify the symbol.
- c. The instruction manual for the unit shall indicate the maximum ambient temperature rating.
- d. The instruction manual for a unit shall include the word "CAUTION" and the following or the equivalent: "To reduce the risk of fire, connect only to a circuit provided with branch circuit overcurrent protection in accordance with the National Electrical Code, ANSI/NFPA 70".
- e. The unit shall be connected only to a dedicated branch circuit.



Certificate: 80226059

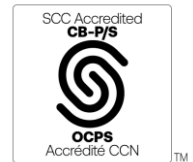
Project: 80226059

Master Contract: 607441

Date Issued: 2024-09-09

Notes:

Products certified under Class C531109 have been certified under CSA's ISO/IEC 17065 accreditation with the Standards Council of Canada (SCC). www.scc.ca





Supplement to Certificate of Compliance

Certificate: 80226059

Master Contract: 607441

The products listed, including the latest revision described below, are eligible to be marked in accordance with the referenced Certificate.

Product Certification History

Project	Date	Description
80226059	2024-09-09	Apply Multiple Listee to 607441 Mean Well from Senao report 80219931, 80219932.

Multiple Listing Project No	Listee Models	Submittor Models	Certification Report No.
80226059	DDRH-15-05YZZZ	DH15W10-800S05YZZZ	80219931
	DDRH-15-12YZZZ	DH15W10-800S12YZZZ	
	DDRH-15-15YZZZ	DH15W10-800S15YZZZ	
	DDRH-15-24YZZZ	DH15W10-800S24YZZZ	
	DDRH-30-12YZZZ	DH30W10-800S12YZZZ	80219932
	DDRH-30-15YZZZ	DH30W10-800S15YZZZ	
	DDRH-30-24YZZZ	DH30W10-800S24YZZZ	
	DDRH-30-48YZZZ	DH30W10-800S48YZZZ	
	DDRH-45-12YZZZ	DH45W10-800S12YZZZ	
	DDRH-45-15YZZZ	DH45W10-800S15YZZZ	
	DDRH-45-24YZZZ	DH45W10-800S24YZZZ	
	DDRH-45-48YZZZ	DH45W10-800S48YZZZ	