



CSA INTERNATIONAL

Certificate of Compliance

Certificate: 1256502 (113206)

Master Contract: 189893

Project: 1691035

Date Issued: 2005/07/12

Issued to: Rinnai America Corporation

103 International Dr
Peachtree City, GA 30269
USA
Attention: Donald Emen

The products listed below are eligible to bear the CSA Mark shown with adjacent indicator 'US'



Issued by: Michael Sharkey

Authorized by: Richard Fort, Manager of Certification Services

PRODUCTS

CLASS 2922 82 - ROOM HEATERS (GAS) - Unvented-Certified to U.S. Standards

2922-82

RCE-(229,329,429)A

APPLICABLE REQUIREMENTS

ANSI Z21.11.2-2002, ANSI Z21.11.2a-2003, ANSI Z21.11.2b-2004 Gas-Fired Room Heaters, Volume II, Unvented Room Heaters

The 'US' indicator adjacent to the CSA Mark signifies that the product has been evaluated to the applicable ANSI/UL Standards, for use in the U.S.. This 'US' indicator includes products eligible to bear the 'NRTL' indicator. NRTL, i.e. National Recognized Testing Laboratory, is a designation granted by the U.S. Occupational Safety and Health Administration (OSHA) to laboratories which have been recognized to perform certification to U.S. Standards.



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MARKINGS

All markings and printed instructions are in compliance with the above mentioned requirements. Samples are contained in the main certification report.



Supplement to Certificate of Compliance

Certificate: 1256502

Master Contract: 189893

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
1691035	2005/07/12	Update to Z21.11.2b-2004 Standard. Front pages of manuals updated - 129C (RCE-229A), 72B (RCE-329A), 70F (RCE-429A). Rating plate stampings are also being updated - 70A for RCE-229A, 70 for RCE-329A, 70B for RCE-429A.
1599396	2004/11/03	Update to ANSI Z21.11.2a-2003

History

1416396	March 7, 2003	Updated to ANSI Z21.11.2b-2002.
1310015	May 14, 2002	Added new Model No. RCE-429A. Updated to ANSI Z21.11.2-2000.
1245439	October 25, 2001	Changed Rinnai America Corp. address from 1662 Lukken Industrial Drive, West, LaGrange, Georgia 30240 to 103 International Drive, Peachtree City, Georgia 30269 per mfr.'s 9/7/01 letter.
1256502	October 24, 2001	Supercedes 113206-0000-000018.
113206-0000-000018	May 14, 1999	Original Certification.



Descriptive and Test Report

MASTER CONTRACT: 189893

REPORT: 1256502

PROJECT: 1691035

- Edition 1:** May 14, 1999; Application No 113206-0000-000018 - Cleveland
Issued by Matthew Medlen; Reviewed by Ms. Susan McCarthy
- Edition 2:** October 24, 2001 ; Project 1256502 - Cleveland
Issued by Robert Loria
- Edition 3:** October 25, 2001 ; Project 1245439 - Cleveland
Issued by Robert Loria
- Edition 4:** May 17, 2002 ; Project 1310015 - Cleveland
Issued by James BeHarry
- Edition 5:** March 7, 2003 ; Project 1416396 - Cleveland
Issued by James BeHarry
- Edition 6:** 2004-10-29; Project 1599396 - Cleveland
Issued by James BeHarry
- Edition 7:** 2007-07-12; Project 1691035 - Cleveland
Issued by: Michael Sharkey; Reviewed by: Richard Fort

Contents: Certificate of Compliance – Pages 1 to 2
Supplement to Certificate of Compliance – Page 1
Description and Tests – Page 1 to 9
Drawings-Markings-Instructions – Pages 000001 to 000129B

PRODUCTS

2922-82 Room Heaters (Gas) – Unvented

For Use With Natural Gas

Model Number

**Maximum
Input Rating** **Minimum
Input Rating**

Trade Name: SILENT SERVANT

RCE-229A	6,000	2,000
RCE-329A	10,000	3,000
RCE-429A	14,000	4,000

The test report shall not be reproduced, except in full, without the approval of CSA International.

8501 E. Pleasant Valley Road, Cleveland, OH, U.S.A. 44131-5575

Telephone: 216.524.4990 1.800.463.6727 Fax: 216.642.3463 www.csa-international.org

For Use With Liquefied Petroleum Gases

RCE-229A	6,000	2,500
RCE-329A	10,000	3,400
RCE-429A	14,000	5,200

The RCE-229A may be installed in bedrooms or bathrooms when installed with special wall mounting kit.

The RCE-329A, RCE-429A may be installed in bedrooms when installed with special wall mounting kit.
Alternate Trade Name: RINNAI

APPLICABLE REQUIREMENTS

ANSI Z21.11.2-2002, ANSI Z21.11.2a-2003, ANSI Z21.11.2b-2004 Gas-Fired Room Heaters, Volume II, Unvented Room Heaters

MARKINGS

All marking and printed instructions are in compliance with the above mentioned requirements. Samples are contained in the main certification report.

ALTERATIONS

No alterations were required.

FACTORY TESTS

The submitter shall ensure that the following factory tests are conducted at the frequency specified and the results are documented and made available for review by CSA field services representatives.

<u>Test</u>	<u>Frequency</u>
Test Fire Burner, Manifold & Control Assy. – Proper Operation	100%
Manifold and Control Assembly – Gas Tightness	100%
Test Electrical Components – Proper Operation	100%
Dielectric Withstand Test	100%
Burner Operating Characteristics	1 per month/production
Ignition Systems	1 per month/production
Combustion	1 per month/production
Discharge Air Temperature	1 per month/production
Surface Temperatures	1 per month/production
Oxygen Depletion System	1 per month/production

DESCRIPTION

See main archive for details of testing.

TEST REPORT

Refer to main report.

DESCRIPTION

MODEL NUMBER BREAKDOWN

RCE-(229,329,429)A(N,P)

Basic Model:

RCE - RINNAI Convector Export

Suffix:

First Suffix: (size)

229 - 200 represents 2000 kcal and 29 is the series of the unit

329 - 300 represents 3000 kcal and 29 is the series of the unit

429 - 400 represents 4000 kcal and 29 is the series of the unit

Second Suffix:

A - America

Third Suffix: (Gas)

N - Natural Gas

P - Liquefied Petroleum Gases

STANDARDS

ANSI Z21.11.2-2002, Z21.11.2a-2003, ANSI Z211.2b-2004 Gas-Fired Room Heaters, Volume II Unvented Room Heaters

ELECTRICAL RATINGS

120 Volts; Less than 12 Amps; 60 Hz; 1-Phase

GAS PRESSURES

Manifold pressures:

Natural gas - 7.0 inches w.c.

3.5 in. (max) to .6 in. (min) for RCE-229A

3.9 in. (max) to .5 in. (min) for RCE-329A

3.9 in. (max) to .4 in. (min) for RCE-429A

LP gases - 11.0 inches w.c.

4.4 in. (max) to 1.0 in. (min) for RCE-229A

5.2 in. (max) to .75 in. (min) for RCE-329A

7.6 in. (max) to 1.1 in. (min) for RCE-429A

Minimum inlet supply pressures:

Natural gas - 5.3 inches w.c.

LP gases - 10.0 inches w.c.

CLEARANCES/INSTALLATION

For installation on combustible flooring with the following clearances:

Right side	-	2 inches
Left side	-	2 inches
Top	-	2 inches
Rear	-	2 inches
Front	-	30 inches
Floor	-	0 inches

GAS CONTROL ASSEMBLIES

Read columns vertically for complete assemblies.

Used on Models: *RCE-(229,329,429)A*

	Manufacturer of Control	Manufacturer's Model Number	Size of Control	
			Natural	Propane
Combination Control	Rinnai Seiki	C36D-3-6-S	3/8X3/8	3/8X3/8
Ignition Module	R.B. Controls	EI-181-1	x	x
Igniter	Fuji Industries	RC-328-32	x	x
Flame Sensor	Hayakawa Densen Industries	RC-511-66-1	x	x
Manual Valve	Jomar	T204	x	x

ELECTRICAL EQUIPMENT

BLOWER MOTORS:

Manufacturer:	Model Number:	Ratings:
Shinano Kensi Corp.	RC-229-524	1055 RPM,100V/60Hz/.33A

BLOWER WHELL:

Manufacturer:	Model Number:	Size:
Nissinbou Seki Corp.	RC-329-18-2	9.8 X 3.9 46 blades

TRANSFORMER:

Manufacturer:	Type:	Rating:
Tamura	ET-250	120 Volts

THERMISTOR:

Manufacturer:	Model Number:	Rating:
Mitsui Kinzoku	MLT-82TKROO3	167 and 140

CONSTRUCTIONAL VARIATIONS

- 1.) The wall mounting kit model number RC-229-550 is used for the model number RCE-229A heater and wall mounting kit model number RC-329-550 is used for the model number RCE-329A heater.
- 2.) An 8mm diameter screw head is used to affix the instruction hang tag chain to the unit.