



Certificate of Compliance

Certificate: 1090716 (113206)

Master Contract: 189893

Project: 1691037

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

Class 2922-82 Room Heaters (GAS) Unvented

Natural Gas

RCE-606A-N, RCE-606TRA(II)-N, RCE-590A-US-N

Liquefied Petroleum Gases

RCE-606A-P, RCE-606TRA(II)-P, RCE-590A-US-P

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.



CSA INTERNATIONAL

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Project: 1691037

Date Issued: 2005/07/12

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 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: 1090716

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
1691037	2005/07/12	Update to Z21.11.2b-2004 Standard. Front pages of manuals updated - 77A7 (RCE-606TRAIL), 157A (RCE-606A), 290A (RCE-590A). Rating plate stampings are also being updated - 075A6 for RCE-606TRAIL, 146 for RCE-606A & 291 for RCE-590A.
1599964	2004/11/03	Update to ANSI Z21.11a-2003
1547876	2004/06/22	Alternate Filter, NO2 testing

History

1547876 06/11/04 Added new models RCE-590A-US-(N,P).

1329679 01/24/03 Dropped RCE-606TRA models and updated RCE-606A and RCE-606TRAIL models to ANSI Z21.11.2-2000 standard per mfr. letter dated April 30, 2002. Updated to ANSI Z21.11.2a-2001 and Z21.11.2b-2002 addenda per mfr. letter dated October 17, 2002. Print Nos. 155-158.

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.

1134118 11/1/00 Reformat Report, replaced pages 0075A6 (Revised Print No. RC-606-45) and page no. 077A6R (Revised Print No. RC-606-48X04(00)).

1090716 May 16, 2000 Original Certification, Formerly Report No. C2740011; Extension of Module EI-184 to Model No. RCE-606TRA-II.



Descriptive and Test Report

MASTER CONTRACT: 189893

REPORT: 1090716

PROJECT: 1691037

- Edition 1:** May 16, 2000 ; Project 1090716 - Cleveland
Issued by Gregory A. Prosser ; Reviewed by: Rick Fort
- Edition 2:** 11/1/00 ; Project 1134118 - Cleveland
Issued by Gregory A. Prosser ; Reviewed by Rick Fort
- Edition 3:** October 25, 2001 ; Project 1245439 - Cleveland
Issued by Robert Loria
- Edition 4:** 2003/01/24 ; Project 1329679 - Cleveland
Issued by: Michael Sharkey; Reviewed by: Rick Fort
- Edition 5:** 2004/06/11 ; Project 1547876 - Cleveland
Issued by: James BeHarry; Reviewed by: Rick Fort
- Edition 6:** 2004/11/15 ; Project 1599964 - Cleveland
Issued by: James BeHarry; Reviewed by: Rick Fort
- Edition 7:** 2005/07/12; Project 1691037 - Cleveland
Issued by: Michael Sharkey; Reviewed by: Richard Fort

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Supplement to Certificate of Compliance - Page 1
Description and Tests - Pages 1 to 15
Drawings - Markings - Instructions – Pages 001 through 292

PRODUCTS

2922-82 ROOM HEATERS (GAS) Unvented

RCE-606 SERIES, RCE-590A Series

Model Number	Maximum Input Rating	Minimum Input Rating
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For Use With Natural Gas

Trade Name: Silent Servant

RCE-606A-N	24,000	5,000
RCE-606TRA(II)-N	24,000	5,000
RCE-590A-N	20,000	5,000

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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

Model Number Maximum Input Rating Minimum Input Rating
For Use With Liquefied Petroleum Gases

Trade Name: Silent Servant

RCE-606A-P	21,000	5,500
RCE-606TRA(II)-P	21,000	5,500
RCE-590A-P	19,000	6,000

MARKINGS

All markings 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

Factory tests to be in accordance with the Manufacturing and Production Tests of the applicable requirement detailed in the Certificate of compliance.

TEST

See main archive for details of testing.

DESCRIPTION

MODEL NUMBER BREAKDOWN

REC-606TRA	-	Basic Model
REC-606TRAI-		This model is similar in construction to the model REC-606TRA but with the testing switches reduced from 3 to 1. The functions provided by the eliminated switches are performed by the processor.
RCE-606A-		Similar to Model No. RCE-606TRAI with the exception of a new Fan Convectur Heater.
RCE-590A		Similar to Model No. RCE-606TRAI with the exception of a new ionic filter.
Suffix:		
N		- Natural gas
P		- Liquefied petroleum gases

STANDARDS

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

CLEARANCES/INSTALLATIONS

For installation on combustible flooring with the following minimum clearances to combustible construction:

Right side	- 2.0 inches
Left side	- 2.0 inches
Rear	- 2.0 inches from rear of unit (0 inches from manual valve)
Ceiling	- 2.0 inches

ELECTRICAL RATING

120 Volts; Less than 3 Amps; 60 Hertz; 1 Phase

GAS PRESSURES

Manifold pressures:

RCE-606TRA Natural gas - 4.2 inches w.c.
RCE-606TRAI LP gases- 9.1 inches w.c.

RCE-590A Natural gas – 5.1 inches w.c.
RCE-590A LP gases- 6.9 inches w.c.

Minimum inlet supply pressures:

RCE-606TRA & Natural gas - 5.3 inches w.c.
RCE-606TRAI LP gases- 9.5 inches w.c.

RCE-590A Natural gas – 5.9 inches w.c.
RCE-590A LP gases- 7.9 inches w.c.

GAS CONTROL ASSEMBLIES

Read columns vertically
for complete assemblies

Used on Models: All Models

TYPE OF CONTROL	MFR. OF CONTROL	MFR. MODEL NUMBER	<u>SIZE OF CONTROL</u>	
			NATURAL	PROPANE/LP
Combination Control	Rinnai	PC-110	½ x flange	½ x flange
Automatic Control	Tiamugiken	C36L-1	X	X
Ignition System	Rinnai R.B Controls	ED-193 EI-184	X X	X X
Manual Valve	Jomar	T-204	½ x ½	½ x ½
Gas Filter	Mimasu	RCK-6808	X	X

GAS CONTROL ASSEMBLIES

Read columns vertically
for complete assemblies

Used on Models: RCE-606A

TYPE OF CONTROL	MFR. OF CONTROL	MFR. MODEL NUMBER	<u>SIZE OF CONTROL</u>	
			NATURAL	PROPANE/LP
Combination Control Seiki	Rinnai	C36D-3-6-S	½ x flange	½ x flange
Ignitor	Nippon	RC-223-55	X	X
Ignition Module	R.B. Controls	EI-184	X	X
Flame Valve	Hayakawa	RC-511-66-2	X	X

GAS CONTROL ASSEMBLIES

Read columns vertically
for complete assemblies

Used on Models: RCE-590A

TYPE OF CONTROL	MFR. OF CONTROL	MFR. MODEL NUMBER	SIZE OF CONTROL	
			NATURAL	PROPANE/LP
Combination Control	Rinnai	PC-117	½ x flange	½ x flange
Ignitor	Fuji	RC-328-32-2	X	
	Fuji	RC-460-190		X
Ignition Module	R.B. Controls	EI-184	X	X
Flame Sensor	Hayakawa	RC-511-166-3	X	X
PC Board	RB	ED-359	X	X

ELECTRICAL EQUIPMENT

BLOWER MOTOR:

Manufacturer:	Model Number:	Ratings:
Shinano Kenshi Co.	RC-506-1021	100v/60hz, 3.33hp,1155rpm
Shinano Kenshi Co.	RC-606-82	100v/60hz, 3.33hp,1090rpm

MOTOR CAPACITOR:

Manufacturer:	Model Number:	Ratings:
Shizuki Denki		10amps @ 220v

TRANSFORMER:

Manufacturer:	Model Number:	Ratings:
NMB (Used on RCE-506A)	ET-183	120v/60hz/1ph, 100v @ .3amp, 10v @ 35mA, 25v @ 200mA, 12.5vdc @ 200mA
NMB (Used on RCE-606TRA)	ET-200	120v/60hz/1ph
Tamura (used on RCE-606A)	ET-257	120v/60hz/1ph

FAN/LIMIT CONTROL:

Manufacturer:	Model Number:	Ratings:
Nishinbou Co., Ltd.	RC-501-67-2	100v/60hz

SWITCHES & RELAYS:

Manufacturer:	Model Number:	Ratings:
Asahi Keiki Co., Ltd. Omuron	ES-01169 G5N-1A	5v/.5mA/60hz 12vDC

WIRING:

Manufacturer:	Type:
Furukawa Denkai	PVC, 22AWG,300volts,105°C
Hanshin Densen	PVC, 22AWG,300volts,105°C
Hitachi Densen	PVC, 22AWG,300volts,105°C
Yukita Densen	PVC, 22AWG,300volts,105°C

AUTOMATIC VALVE:

Manufacturer:	Model Number:	Ratings:
Taimugiken	C36L-1	90vdc/60hz

BUSHINGS, SPLICING DEVICES, CONNECTORS

Manufacturer:	Model Number:
Nichiatsu Morex	EL,XL,SM,SH,XH Nylon 5199 Nylon

SUPPLY CORD:

Manufacturer:	Ratings:
Korea KDK	PVC,18AWG,10Amps @ 125v,50mm
Ta An Electric (Taiwan)	SJT,18AWG,10Amps @ 125V,1800mm 105°C

BLOWER WHEEL:

Manufacturer:	Size:
Nishinbou Co., Ltd.	RC-501-68; RC-501-67-2 housing 334.6mm x 110mm, 44 blades
Nishinbou Co., Ltd.	RC-501-68 wheel 13.0 x 4.3, housing 13.0 x 6.3 x 5.7, 44 Blades.

GROUNDING:

Grounded inside of unit at chassis bottom.