

Number **E 3070**



GASTEC Certification B.V., hereby declares
that the **Automatic burner control systems** serie

EC 78xx

made by **Honeywell**

in **Golden Valley, USA**

comply with the essential requirements of the
Gas Appliances Directive (90/396/EEC).

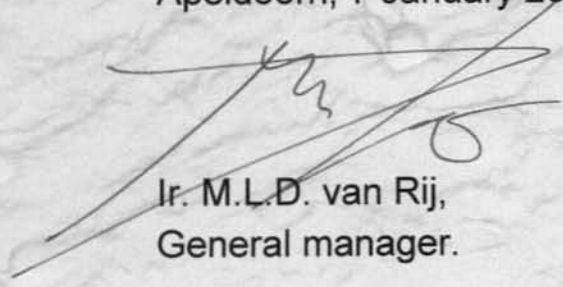
The compliance is based on examination to:
EN298 (1993)

PIN : 0063AP3070/1
Report number : see appendix to certificate

The products have been approved for all EU and EFTA
countries.

A description of the specific types is given in the appendices
to this certificate.

Apeldoorn, 7 January 2002


Ir. M.L.D. van Rij,
General manager.



GASTEC Certification B.V.
P.O. Box 137
7300 AC Apeldoorn
The Netherlands
Wilmsdorf 50
7327 AC Apeldoorn



CERTIFICATE

Gas Appliances Directive - Advisory Committee
Comité Consultatif de la Directive Appareils a Gaz

FOR ACTION

CONCERNING:

Item: Ad-hoc GA-DAC 05 May 2006: Conclusions of the Ad Hoc group on the transition of EN298 version 1993 to version 2003 per September 2006

Revision of EN298

View of Ad-hoc GAD-AC working group

Issue

EN298:1993 has been amended by EN298:2003 which was introduced with a transitional period of 3 years. For existing products industry has questioned how to handle the two versions of the standard with regard to compliance with the Essential Requirements of the Gas Appliances Directive (GAD).

Background

CEN agreed to defer the date of withdrawal of EN 298:1993 for a transition period of 3 years as the revision of EN 298 was due to implementation of other technologies, not due to shortcomings of EN 298:1993

Discussion

The requirement is to comply with the Essential Requirements of the GAD. This requires that full account is taken of the state of the generally accepted technical knowledge and the ability of technology to provide technical solutions at the time the product is put on the market.

Note:

For brevity 'the state of the generally accepted technical knowledge and the ability of technology to provide technical solutions at the time the product is put on the market' is subsequently referred to as '*technical knowledge*'.

The manufacturers, with their Notified Bodies, are free to use whatever means they wish to demonstrate compliance with the requirement of GAD. The easiest means is likely to be by the use of Harmonized Standards which provide a presumption of conformity to the Essential Requirements of the GAD. However the use of a standard is not mandatory.

As a type has been assessed to conform with the Essential Requirements of the GAD, products conforming to this type can be put on the market as long as they continue to meet the Essential Requirements, based upon *technical knowledge*.

Under these conditions the following examples apply:

- Burner controls approved to EN298:1993 before September 30th 2006 can continue to be supplied after that date as long as they continue to meet the relevant essential requirements of the GAD based on *technical knowledge*
- Appliances with EC type approval for controls referencing an undated version of EN298 can continue to be supplied provided that the appliance with the control used continue to meet the essential requirements of the GAD based on *technical knowledge*.

- Appliances assessed against GAD after September 2006 may use controls to EN298 of any date provided the appliance continues to comply with the Essential Requirements of the GAD based on *technical knowledge* – it would be logical (but not mandatory) to use EN298:2003

Presumption of conformity:

It is correct that after 30th September 2006 only EN298:2003 provides presumption of conformity to the Essential Requirements of the GAD, BUT that does not prevent controls conforming to EN298:1993 continuing to be used provided that the control continues to meet the Essential Requirements of the GAD based upon *technical knowledge*.

Conclusion

- 1) It is the manufacturer's responsibility to regularly review the design of their products to ensure they continue to meet the Essential Requirements of the GAD based on *technical knowledge*.
- 2) It is the responsibility of the NB performing the CE surveillance to verify that the process as mentioned under 1) is in place and effective.

Based upon the above no special action is required.

Supplementary note:

Examples of *technical knowledge* to be found in the revision of EN 298 are the following:

- EN298:2003 - 6.1.2 (independent switching element)
- EN298:2003 - 9.1.6.1 (one fault in lock-out or safety shutdown)
- EN298:2003 - 9.1.6.2 (second fault in lock-out or safety shutdown)
- EN298:2003 - Annex A (fault modes for relays)

5th May 2006



Honeywell Inc.
Attn. Mr J. Bartels
1985 Douglas Drive North
MN55422-3992, Golden Valley
United States of America

Gastec Certification B.V.

Wilmersdorf 50
Postbus 137
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Tel. +31 55 539 33 55
Fax +31 55 539 33 90
www.kiwa.nl

Project number 124043.010
Subject Declaration of conformity
Phone ing. D. Kok, + 31 55 - 5 393 341
E-mail Dik.Kok@kiwa.nl
Date 20 August 2008
Our reference Kk/Zanteth/Wld-080820-398

Dear Mr. Bartels,

This is to inform you that the conformity of the modified products with the clauses and standards stated in your application has been assessed based on the enclosed modification test report No. 115679/4. The conformity assessment showed that the modified products meet the requirements.

Enclosed you will find the modification test report concerned.
You can add the pages to the report you already have.

We thank you for putting your trust in us and are looking forward to the opportunity of being of service to you again in the future.

Yours sincerely,
Gastec Certification B.V.



ing. D. Kok
Manager Controls

CC: Cert.
Adm.
PM.

Enclosures:
Modification test report

August 2008

European Modification Report

Automatic burner control systems

Series EC 78xx

Honeywell Inc.

Golden Valley

United States of America

Report number: 115679/4

CERTIFICATION



File Issue: 001	REPORT HISTORY SHEETS	GASTEC
Report Number: 115679/4	Automatic burner control systems	Page: RHS 1/00


Report history:

This Report History Sheet has been included as a result of a modification and/or extension to the preceding report(s) and is inserted as a first page when opening this report. This sheet details the modification and/or extension applicable to the preceding report(s) and clearly states where these details can be found. A copy of this sheet has also been provided to the applicant/manufacture, in order to keep the reports identical.

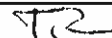
Date:	Description:	Report No:	Job Ref:
July 1993	Initial report (New)	115679	115679
May 198	Extension Report EC7830, EC7850	115679/119 692	119692
April 2002	2 new models for the European market are introduced. Based on already approved EC7800 Series burner controls. EC 7890A and EC7890B	115679/1	119692
Oct. 2004	Modification / Extension: The display module is redesigned.	115679/2	122649
31-01-2006	Extension: The series EC 78xx has been extended with 4 types. The new type EC7850A1148 is similar to the already approved EC7850A1072 but with early spark termination. The new type RM7850L1035 is similar to the already approved RM7850A1001 but with early spark termination. The new type EC7890A1037 is similar to the already approved EC7890A1011 but with early spark termination. The new type RM7890A1064 is similar to the already approved EC7890A1029 but with early spark termination.	115679/3	123512
August 2008	Extension / Modification: The series EC 78xx has been extended with one new type: RM 7838C. This new type is almost similar to the already approved EC7850 but uses some additional functional inputs to control (hold or release) the burner control sequence. Furthermore since the series is not yet approved to EN 298:2003, some tests and modifications were carried out by the manufacturer regarding the complete EC 78xx series, in order to continue to comply with the Gas Appliances Directive (GAD) based on technical knowledge as described in GAD-AC document: 'GAD-AC N 316E'. Further details can be found under TAB 10 of report no: 115679/1	115679/4	124043

Signed by Test Engineer:

Name: Ing. R.T. van Zanten



Date: August 2008

Job Reference: 124043	Initials:  14-8-08
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File Issue: 001	HEADING SHEETS	GASTEC
Report Number: 115679/4	Automatic burner control systems	Page: HS 1/00

Report contents:

Sheet

	<u>Code</u>	<u># Pages</u>
Heading Sheets	HS	2
Summary Sheets	SS	1
Identification Sheets	IS	3
Declaration Sheets	DS	1
Modification/Extension Sheets	MES	1
Test Sheets EN 298	TS	NA
Test Sheets EN 60730 (EN 298, clause 6.3)	TL	NA
Result Sheets Internal Faults (EN 298, clause 9 and 10)	RIF	NA
Drawing and Technical Description Sheets	DR	1
Correspondence Sheets	CS	1
GASTEC Certification BV Files	GF	1
(if applicable, included in GASTEC Certification BV report only)		

Note: The revision number of each page of this report is identified in the right heading of the page by means of the last 2 digits in the page number (e.g. HS 1/00, Heading Sheet page 1, revision 00).

Signed by Test Engineer:

Name: Ing. R.T. van Zanten

Date: August 2008



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Job Reference: 124043	Initials: <i>T-Z</i>	14-8-08
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File Issue: 001	HEADING SHEETS	GASTEC
Report Number: 115679/4	Automatic burner control systems	Page: HS 2/00

Responsible Test House: GASTEC Certification BV
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 7327 AC Apeldoorn
 P.O. Box 137
 7300 AC Apeldoorn
 The Netherlands
 Telephone: + 31 555 393 393
 Facsimile: + 31 555 393 390/676

Name of the Applicant: Honeywell Inc.
 Address: 1985 Douglas Drive North
 MN55422-3992, Golden Valley
 United States of America

Name of the Manufacturer: Honeywell Inc.
 Address: 1985 Douglas Drive North
 MN55422-3992, Golden Valley
 United States of America


Test report of the examination of the modification and or extension to the:

Automatic burner control systems
Series EC 78xx

Tested and examined to:

EN 298 Automatic gas burner control systems for gas burners and gas burning appliances with or without fans (October 1993).

GAD Advisory committee document GAD-AC N 316E (May 2006)

File Issue: 001	SUMMARY SHEETS	
Report Number: 115679/4	Automatic burner control systems	Page: SS 1/00

This test report describes the examination of the modification to/extension of the Honeywell Inc. automatic burner control system(s), Series EC 78xx. The EC 78xx has been modified/extended as described in the Modification/Extension Sheets in this report.

The registered modifications/extensions to the EC 78xx, meet(s) the requirements of:

EN 298 Automatic gas burner control systems for gas burners and gas burning appliances with or without fans (October 1993).

GAD Advisory committee document GAD-AC N 316E (May 2006)

This report should be used in conjunction with report(s) no: 115679, 115679/1, 115679/2, 115679/3.

The Honeywell Inc. automatic burner control system(s), Series EC 78xx, are intended for use on gas fired appliances, both permanent and non-permanent operation, as stated in clause 9 of EN 298. The control(s) are provided with an enclosure yet they are intended for installation within an appliance enclosure.

There are no further special conditions/remarks applicable.

See the Identification Sheets for all available types.

Signed in Acceptance:

Ing. D. Kok


Date: 20-08-05

Manager Controls
GASTEC Certification BV

Notes:

The described test results are only valid for the tested materials and objects.

Job Reference: 124043		Initials: T12	15-6-08
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File Issue: 001	IDENTIFICATION SHEETS	
Report Number: 115679/4	Automatic burner control systems	Page: IS 1/00

Information for all Notified Bodies

Information on the EC type-examination certificate, issued by
GASTEC Certification BV, P.O. Box 137, 7300 AC Apeldoorn, The Netherlands

File no.: 0063/E3070/115679/4 dated: August 2008

PIN: 0063AP3070/1

Type of product: Automatic burner control system
Name of the Manufacturer: Honeywell Inc.
Address: 1985 Douglas Drive North
MN55422-3992, Golden Valley
United States of America


Marketed by:

Commercial designation: EC 78xx

Base of type-examination: EN 298 (1993)
GAD Advisory committee document GAD-AC N 316E (May 2006)

Countries in which the product will be marketed: All EU and EFTA countries

Comments:

File Issue: 001	IDENTIFICATION SHEETS	
Report Number: 115679/4	Automatic burner control systems	Page: IS 2/00

Information for all Notified Bodies

Information on the EC type-examination certificate, issued by
GASTEC Certification BV, P.O. Box 137, 7300 AC Apeldoorn, The Netherlands

File no.: 0063/E3070/115679/4

dated: August 2008

Honeywell Inc., Automatic burner control system(s), Series EC 78xx.

Scope:

The Honeywell Inc. automatic burner control system(s), Series EC 78xx, are intended for use on gas fired appliances and non-permanent operation, as stated in clause 9 of EN 298. The control(s) are provided with an enclosure yet they are intended for installation within an appliance enclosure.

List of all available types:

EC 7810	RM 7810
EC 7820	RM 7820
EC 7830	RM 7830
EC 7850	RM 7838 C
EC 7865	RM 7850
EC 7890	RM 7890

Flame amplifier devices

	<u>Description</u>
R 7847A	Flame amplifier for rectification without dynamic selfcheck
R 7847B	Flame amplifier for rectification with dynamic selfcheck
R 7849A	Flame amplifier for ultra violet without dynamic selfcheck
R 7849B	Flame amplifier for ultra violet with dynamic selfcheck
R 7861A	Flame amplifier for ultra violet with dynamic selfcheck
R 7886A	Flame amplifier for ultra violet with dynamic selfcheck

Flame sensor devices


	<u>Description</u>
C 7008 / C 7009	Rectification Flame rod for use with R7847A
C 7027 / C 7035/C 7044	UV sensor (mini peeper) for use with R7849A/B
C 7061	UV detector with self check for use with R7861 A
C 7012A,C,G	UV detector without self check for use with R7847 A/B
C 7076A	UV detector with adjustable sensitivity for use with R7886 A
C 7076F	UV detector with adjustable sensitivity and ex-housing for use with R7886 A

Optional components

	<u>Description</u>
Q 7800	Panel Mount sub base
ST 7800	Purge card selectable between 2 sec and 30 minutes
S 7800	Keyboard display module
S 7810A	Remote Modbus module
S 7810M	Remote Modbus module. Without reset
S 7820	Remote Reset module.

Specifications:

Electrical Supply:	EC 78xx: 230VAC 50/60Hz RM 78xx: 120VAC 50/60Hz
Ambient Temperature:	-40°C to 60°C.
IP Protection degree	IP00
Flame detection	Ionisation/Ultra Violet
Applied Technology:	Complex Electronics

File Issue: 001	IDENTIFICATION SHEETS	
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Outputs RM 78xx:

EV1 gas valve output: 120 Vac / max. 4.0 A @ Cos Φ = 0,5
EV2 gas valve output: 120 Vac / max. 4.0 A @ Cos Φ = 0,5
Fan output: 120 Vac / max. 4.0 A @ Cos Φ = 0,5
Shutter: 120 Vac / max. 0.5 A
Ignition: 120 Vac / max. 4.0 A @ Cos Φ = 0,5

Outputs EC 78xx:

EV1 gas valve output: 230 Vac / max. 4.0 A @ Cos Φ = 0,5
EV2 gas valve output: 230 Vac / max. 4.0 A @ Cos Φ = 0,5
Fan output: 230 Vac / max. 4.0 A @ Cos Φ = 0,5
Shutter: 230 Vac / max. 0.5 A
Ignition: 230 Vac / max. 4.0 A @ Cos Φ = 0,5

Note: Outputs applicable according type.

Times:

Waiting time: 10 s.
Flame Failure Response time: 1 or 2 sec. selectable.
1st Safety time: 4 or 10 sec. adjustable.
2nd Safety time: 4, 5, 6 or 7 sec.
The second safety time is equal to the main trial time (3 or 5 sec.) plus the flame failure response time (1 or 2 sec.)

Behaviour after flame failure:
Selectable

Safety shut down followed by recycling (1x) or
Immediate non-volatile lock out.

Special conditions:

None

Honeywell Proces Solutions (HPS)
Honeywell Thermal Solutions (HTS)
Attn. Mr. J. Janken
Laarderhoogtweg 18
1101 EA Amsterdam
The Netherlands

Kiwa Nederland B.V.
Wilmersdorf 50
Postbus 137
7300 AC Apeldoorn
The Netherlands

Subject Confirmation of extended phase out period.
Information Marcel Hovens, +31 88998 3376
E-mail marcel.hovens@kiwa.nl
Date 21 July 2017

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Fax +31 55 539 34 94
info@kiwa.nl
www.kiwa.nl

Dear Mr. Janken,

Upon your request I can confirm that we have extended the period that the Honeywell burner control series EC78xx/RM78xx can be used in new products.
Honeywell is developing a replacement for these controls that will fulfil the requirements of the EN298:2012. Since there is time needed to develop, approve and distribute the new control family we have extended the period that the current control may be used until the end of 2018.
This statement is valid for the following products:

- EC7820Axxxx (220..240Vac, atmospheric, fan assisted)
- EC7830Axxxx (220..240Vac, power burner, on/off)
- EC7850Axxxx (220..240Vac, power burner, modulating)
- RM7830Axxxx (110..120Vac, power burner, on/off)
- RM7850Axxxx (110..120Vac, power burner, modulating)
- EC7890B1028 (220..240vac, primary)
- RM7890B1055 (110..120Vac primary)

Should you have any questions left, please do not hesitate to contact me.

Kind Regards,



Marcel Hovens
Kiwa Nederland B.V.