

Number **E0625**



CERTIFICATE

GASTEC NV hereby declares that the
Burner control units, types

MICROFLAT series ..FR, ..PR

made by **BRAHMA S.p.A.,**

in **Legnago, Italy,**

meet the essential requirements as described in the
**Directive on appliances burning gaseous fuels
(90/396/EEC).**

The compliance is based on examination to:
EN 298 (October 1993)

PIN : 0063AT1990
Report number : 119990

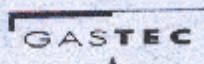
Mentioned products have been approved for

AT	BE	DE
DK	ES	FI
FR	GB	GR
IE	IT	LU
NL	NO	PT
SE		

Apeldoorn, **19. October 1999**

dr. L. Noordzij,
president.

Centre of Gas technology



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EC TYPE-EXAMINATION CERTIFICATE: E 0625

Appendix no.: 1
Dated: 19.10.1999
P.I.N.: 0063AT1990
Examination reports:
119990 dated May 1999

MICROFLAT series
..FR, ..PR

Scope

Automatic burner control systems for use on gas fired appliances (non-permanent operation).

The Brahma burner control units series MICROFLAT ..FR and ..PR are intended for installation within an appliance enclosure.

List of all available types

MICROFLAT ..FR series:

CE 11FR	CE 31FR	ME11 FR	SM11 FR
CM11FR	CM12FR	CM31FR	CM32FR
MM11FR	MM12FR	MM31FR	MM32FR

MICROFLAT ..PR series:

CM32PR
CE32PR

Specifications:

Electrical supply	: 220-240Vac, 50/60 Hz.
Ambient temperature	: -20°C/+60°C.
IP protection degree	: IP 00
Flame detector device	: Ionisation
Applied technology	: electronics

Outputs (if applicable):

Fan	: max. 1.0 A / $\cos \alpha \geq 0.4$
Alarm	: max. 1.0 A / $\cos \alpha = 1$
Gas valve VG1	: max. 0.5 A / $\cos \alpha \geq 0.4$
Gas valve VG2	: max. 0.5 A / $\cos \alpha \geq 0.4$
Auxiliary contact (FR series)	: max. 0.5 A / $\cos \alpha \geq 0.4$
Remote ignition (FR series)	: Brahma Ignition device, type TR1
External ignition (PR series)	: max. 1.0 A / $\cos \alpha \geq 0.4$

	<u>Times</u>	
MICROFLAT . FR CM11FR, CM12FR CE11FR,	Waiting time	: 1.5.. 40 s (depending on model)
	Safety time	: 3..120 s (depending on model)
CM31FR CM32FR, CE31FR	Pre-purge time	: 1.5 ..40 s (depending on model)
	Safety time	: 3..120 s (depending on model)
MM11FR, MM12FR ME11FR	Waiting time	: 1.5 ..40 s (depending on model)
	Safety time	: 3..120 s (depending on model)
MM31FR MM32FR,	Pre-purge time	: 1.5 .. 40 s (depending on model)
	Safety time	: 3..120 s (depending on model)
SM11FR	Waiting time	: 1.5 ..40 s (depending on model)
	Safety time	: 3..120 s (depending on model)

	<u>Times</u>	
MICROFLAT .. PR CM32PR, CE32PR	Pre-purge time	: 1.5 ..40 s (depending on model)
	Safety time	: 3..120 s (depending on model)

Behaviour after flame failure:

MICROFLAT, types CM...FR, MM...FR, SM...FR, CM...PR
Flame failure during safety time causes spark restoration,
followed by non volatile lockout.

Flame failure during normal operation causes recycling (1x),
followed by non volatile lockout.

MICROFLAT, types CE...FR, ME...FR, CE...PR
Flame failure during safety time causes spark restoration,
followed by volatile lockout.

Flame failure during normal operation causes recycling (1x),
followed by volatile lockout.

Special conditions:

The MICROFLAT CE...FR, CE...PR controls do not contain an independent manual reset function. As a result, a reset of the volatile lockout condition can be accomplished by an interruption of the mains supply and its subsequent restoration or by means of the heat demand to the control.

The application of these types of controls is therefore restricted to only those appliances where resetting by switching of the heat demand is allowed by European appliance standards.



kiwa



Partner for progress

Product Conformity Certificate

Numero / Number: 15500

Sostituisce / Replaces: -

Emissione / Issued: 30/03/2007

Scopo / Scope: Directive 90/396/CEE

Allegato / Annex: 3 pagine / pages

Rapporto / Report: 300669

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Kiwa Gastec Italia certifica che

Kiwa Gastec Italia hereby declares that

i prodotti riportati nelle pagine seguenti, costruiti da

the products mentioned in the following pages, made by

Brahma S.p.A.

di / in **Legnago (VR), Italia**

soddisfano i requisiti riportati nella

meet the essential requirements as described in the

Direttiva Apparecchi a Gas (90/396/CEE)

Directive on appliances burning gaseous fuels (90/396/CEE)

La conformità è basata sull'esame del a **EN 298** (settembre 2003)

*The compliance is based on examination to **EN 298** (September 2003)*

Kiwa Gastec Italia Spa.

Daniele Vangeluwe

Vice Presidente

E' permesso la pubblicazione del certificato

Publication of the certificate is allowed.

Kiwa Gastec Italia Spa.

Via Inverbo 32/34

31020 San Vendemiano (TV)

Tel. 0428 411755 Fax 0428 22428

GASTEC

Notified Body

0694





kiwa



Partner for progress

Product Conformity Certificate

Numero / Number | 5500

Sostituisce / Replaces -

Emesso / issued | 30/03/2007

Scopo / Scope | Directive 90/396/CEE

Allagato / Annex | 3 pagine / pages

Rapporto / Report : 300669

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sistemi di controllo fiamma automatico, tipo
automatic burner control system, type

Marchio / trade mark: **Brahma**

Serie/ series: **MICROFLAT**

Modelli/ models: **CM...FR #..., CM32PR #..., MM...FR #..., SM11FR #...**

Fare riferimento alle pagine allegare per la lista completa dei modelli
Refer to next pages for complete models list

costruit da /

made by
di / in

Brahma S.p.A.
Legnago (VR), Italia

NIP/ PIN : 0694BP0669
Rapporto / report : 300669

I suddetti prodotti sono stati approvati per
Mentioned products have been approved for

AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT,
LI, LU, LV, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR e/and EFTA paesi/countries

Kiwa Gastec Italia Spa.
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GASTEC

Notified Body

0694





EC type-examination certificate I5500 – Annex 1

Information on the EC type-examination certificate, issued by
Kiwa Gastec Italia Spa., Via Treviso 32/34, I-31020 San Vendemiano (TV), Italy

File no.:	0694/I5500/300669	dated:	30-10-2004
Updated:	0694/I5500/980000	dated:	21-09-2006
Updated:	0694/I5500/301328	dated:	20-02-2007
Updated:	0694/I5500/301440	dated:	30-03-2007

Brahma S.p.A. automatic burner control system(s), series MICROFLAT, models CM...FR #..., CM32PR #..., MM...FR #..., SM11FR #...

Scope:

The Brahma S.p.A. automatic burner control system(s), series MICROFLAT, models CM...FR #..., CM32PR #..., MM...FR #..., SM11FR #..., are intended for use on gas fired appliances and non-permanent operation, as stated in clause 9 of EN 298 (September 2003).

The burner controls units, make Brahma series MICROFLAT, models CM...FR #..., MM...FR #..., SM11FR #..., are intended for use with the remote ignition device make Brahma type TR2, whereas models CM32PR #... is intended for use with an external ignition transformer.

The automatic burner control systems series MICROFLAT models with option "dual flame", shall be verified in order to demonstrate that EV1 and EV2 valves operating simultaneously presents no damage or hazard.

All the above mentioned control(s) are provided with an enclosure and are intended for installation within an appliance enclosure.

For series MICROFLAT (type FR/PR):

CM...	MM...	SM...
CM11FR #	MM11FR #	SM11FR #
CM12FR #	MM12FR #	
CM31FR #	MM31FR #	
CM32FR #	MM32FR #	
CM32PR #		

BCU model		Lock-out	atm / fan	Flame detection
CM1...FR #		non-volatile	atm	dedicated probe for ionisation
CM3...FR #	CM32PR #	non-volatile	fan	dedicated probe for ionisation
MM1...FR #		non-volatile	atm	single electrode for ignition and ionisation
MM3...FR #		non-volatile	fan	single electrode for ignition and ionisation
SM11FR #		non-volatile	atm	dedicated probe for ionisation

ALLEGATO - ANNEX



EC type-examination certificate I5500 – Annex 1

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The BRAHMA automatic burner control system denominations are generated by the below listed parts:

Model					Options						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)

List and Description of the approved configurations
Model:

- (1) **Installations**
 - C : dedicated for wall hung boilers
 - M : mono-electrode (for types FR only)
 - S : general use (for types FR only)
- (2) **Reset**
 - M : non-volatile lock-out
- (3) **Type of burner**
 - 1 : without fan (for open chamber appliances)
 - 3 : with fan (for sealed chamber appliances)
- (4) ***Gas valves**
 - 1 : single flame
 - 2 : dual flame
- (5) **Ignition transformer**
 - FR : arranged for remote ignition transformer make Brahma, model TR2
 - PR : arranged for remote ignition transformer to be supplied with line voltage

Options:

- (6) **Compliance**
 - # : according to EN 298:03
- (7) **Kind of connectors**
 - no : stocko-stelvio connectors
 - letter X : molax connectors
- (8) **Resistor in series with VG2**
 - no : not present
 - letter W : resistor in series to VG2
- (9) **Resistor in series with VG1**
 - no : not present
 - letter V : resistor in series to VG1
- (10) **Protection against inversion between lock-out signal and reset connections**
 - no : not present
 - letter R : protection present
- (11) **Ignition voltage**
 - no : 15 kV (standard)
 - letter H : 18 kV
 - L : 12 kV
- (12) **Spark repetition rate**
 - no : 25 Hz (standard)
 - letter nn : nn represents the discharge frequency

ALLEGATO - ANNEX



EC type-examination certificate I5500 – Annex 1

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Specifications:

Electrical supply: 220-240 V - 50/60 Hz
110-120 V - 50/60 Hz (on request)

Ambient temperature: -20°C to + 60°C

Protection degree: IP 00

Flame detection: Ionisation

Applied technology: Analogical electronics

Outputs:

Room thermostat:	220-240 Vac	max 4 A	cosφ ≥ 0.4
Gas valve output VG1:	220-240 Vac	max 0.5 A	cosφ ≥ 0.4
Gas valve output VG2:	220-240 Vac	max 0.5 A	cosφ ≥ 0.4
Fan output:	220-240 Vac	max 1 A	cosφ ≥ 0.4
Ign. transformer output (type PR):	220-240 Vac	max 1 A	cosφ ≥ 0.4
Alarm:	220-240 Vac	max 1 A	cosφ = 1
Auxiliary contact:	220-240 Vac	max 0.5 A	cosφ ≥ 0.4

Times:

Waiting or Pre-purge time:	TW/TP	1,5 ... 40 s
Safety time:	TS	3 ... 120 s
Reaction time:		≤ 1 s

Behaviour after flame failure:

series MICROFLAT model CM...FR #..., CM32PR #..., MM...FR #..., SM11FR #...

flame loss during safety time causes spark restoration followed by non-volatile lock-out

flame loss during normal operation causes recycling (1x) followed by non-volatile lock-out

Special conditions:

During appliance approval it shall be verified that the re-ignition attempts do not overrule the safety thermostat and/or the limit thermostat operation.

During the appliance approval testing it shall be verified that EV1 and EV2 valves operating simultaneously presents no damage or hazard (only for models with option "dual flame").

ALLEGATO - ANNEX