



kiwa



Partner for progress

Product Conformity Certificate

Numero / Number 1.5500

Sostituisce / Replaces -

Emesso / Issued 05/03/2007

Scopo / Scope

Directive 90/396/CEE

Allegato / Annex

3 pagine / pages

Rapporto / Report: 300669

Pag. 1 di 2

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 della **EN 298** (settembre 2003)

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

Kiwa Gastec Italia Spa.

[Signature]

Daniel Vangheluwe

Vice Presidente

E' permessa la pubblicazione del certificato.
Publication of the certificate is allowed.

Kiwa Gastec Italia Spa.

Via Treviso, 32/34

31020 San Vendemiano (TV)

Tel. 0438 411755 Fax 0438 22428

GASTEC

Notified Body

0694



**kiwa**

Partner for progress

Product Conformity Certificate

Numero / Number	15500	Sostituisce / Replaces	-
Emessa / Issued	05/03/2007	Scopo / Scope	Directive 90/396/CEE
		Allegato / Annex	3 pagine / pages

Rapporto / Report : 300669

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

Marchia / trade mark: **Brahma**
 Serie/ series: **MICROFLAT suffix F**
 Modelli/ models: **CM...#..., MM...#..., SM...#..., TM...#...**

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

costruiti da /
made by **Brahma S.p.A.**
di / in 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,
 LT, 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

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 Page 1 of 3

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

Brahma S.p.A. automatic burner control system(s), series MICROFLAT suffix F, models CM...#..., MM...#..., SM...#..., TM...#...

Scope:

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

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

List of available models:¹

series MICROFLAT suffix F:

CM...	MM...	SM...	TM
CM11F #	MM11F #	SM11F #	TM11F #
CM12F #	MM12F #	SM31F #	TM12F #
CM31F #	MM31F #		TM31F #
CM32F #	MM32F #		TM32F #
	MM51F #		

BCU model		Lock-out	atm / fan	Flame detection
CM1...F #		non-volatile	atm	dedicated probe for ionisation
CM3...F #		non-volatile	fan	dedicated probe for ionisation
MM1...F #	MM5...F #	non-volatile	atm	single electrode for ignition and ionisation
MM3...F #		non-volatile	fan	single electrode for ignition and ionisation
SM1...F #		non-volatile	atm	dedicated probe for ionisation
SM3...F #		non-volatile	fan	dedicated probe for ionisation
TM1...F #		non-volatile	atm	dedicated probe for ionisation
TM3...F #		non-volatile	fan	dedicated probe for ionisation

ALLEGATO - ANNEX

EC type-examination certificate I5500 – Annex 1

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

Model				Suffix	Options								
(1)	(2)	(3)	(4)	F	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)

List and Description of the approved configurations

Model:

(1) Installations

- C : dedicated for wall hung boilers
- M : mono-electrode
- S : general use
- T : with safety thermostat

(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)
- 5 : special types

(4) Gas valves

- 1 : single flame
- 2 : dual flame

(5) Compliance

- # : according to EN 298:03

(6) Kind of connectors

- no letter : stocko-stelvio connectors
- X : molex connectors

(7) Internal fuse

- no letter : non-accessible internal fuse
- F : accessible internal fuse

(8) Resistor in series with VG2

- no letter : not present
- W : resistor in series to VG2

(9) Resistor in series with VG1

- no letter : not present
- V : resistor in series to VG1

(10) Protection against inversion between lock-out signal and reset connections

- no letter : not present
- R : protection present

(11) Protection against air pressure-switch reversal connection (fanned version)

- no letter : not present
- P : protection present

(12) Ignition voltage

- no letter : 15 kV (standard)
- H : 18 kV
- L : 12 kV

(13) Spark repetition rate

- no letter : 25 Hz (standard)
- nn : nn represents the discharge frequency

ALLEGATO - ANNEX

EC type-examination certificate I5500 – Annex 1

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Page 3 of 3

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
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	1.5 ... 40 s
Safety time:	TS	3 ... 120 s
Reaction time:		≤ 1 s

Behaviour after flame failure:

series MICROFLAT suffix F model CM...#..., MM...#..., SM...#..., IM... #...

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

flame failure 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.

ALLEGATO - ANNEX



Numero / Number | 5500 Sostituisce / Replaces -
Emesso / Issued | 21/09/2006 Scopo / Scope Directive 90/396/CEE
Allegato / Annex 4 pagine / pages

Rapporto / Report : 300669

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Product Conformity Certificate

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 della **EN 298** (ottobre 1993)

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

Kiwa Gastec Italia Spa.

Daniel Vangheluwe
Vice Presidente

*E' permesso la pubblicazione del certificato.
Publication of the certificate is allowed.*

Kiwa Gastec Italia Spa.
Via Treviso, 32/34
31020 San Vendemiano (TV)
Tel. 0438 411755 Fax 0438 22428

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Product Conformity Certificate

Numero / Number	1.5500	Sostituisce / Replaces	-
Emesso / Issued	21/09/2006	Scopo / Scope	Directive 90/396/CEE
		Allegato / Annex	4 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 suffix F**

Modelli/ models: **CE..., CM..., ME..., MM..., SE..., SM..., TE..., TM...**

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

costruiti 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,
LT, LU, LV, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR e/and EFTA paesi/countries

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EC type-examination certificate I5500 – Annex 1

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 Page 1 of 4

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.: 0894/I5500/980000 dated: 21-09-2006

Brahma S.p.A. automatic burner control system(s),
 series MICROFLAT suffix F, models CE..., CM..., ME..., MM..., SE..., SM..., TE..., TM....

Scope:

The Brahma S.p.A. automatic burner control system(s),
 series MICROFLAT suffix F, models CE..., CM..., ME..., MM..., SE..., SM..., TE..., TM...,
 are intended for use on gas fired appliances and non-permanent operation, as stated in
 clause 9 of EN 298 (October 1993).

The automatic burner control system(s), series MICROFLAT suffix F, models CE..., ME...,
 SE..., TE..., do not contain an independent manual reset function. The application of these
 types of controls is therefore restricted to only those appliances where resetting by switching
 off the heat demand is allowed by European appliance standards.

The control(s) even if provided with an enclosure are intended for installation within an
 appliance enclosure.

List of available models:

CM...	MM...	SM...	TM...	CE...	ME...	SE...	TE...
CM11F	MM11F	SM11F	TM11F	CE11F	ME11F	SE11F	TE11F
CM12F	MM12F	SM31F	TM12F	CE12F	ME12F	SE31F	TE12F
CM31F	MM31F	SM31F P	TM31F	CE31F	ME31F	SE31F P	TE31F
CM31F P	MM31F P		TM31F P	CE31F P	ME31F P		TE31F P
CM32F	MM32F		TM32F	CE32F	ME32F		TE32F
CM32F P	MM32F P		TM32F P	CE32F P	ME32F P		TE32F P
	MM51F				ME51F		

ALLEGATO - ANNEX

EC type-examination certificate I5500 – Annex 1

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 For series **MICROFLAT suffix F,**

 models **CM11F, SM11F, CE11F, SE11F, TM11F, MM11F, TE11F, ME11F, CM12F, MM51F, CE12F, ME51F, TM12F, MM12F, TE12F, ME12F, CM31F, SM31F, CE31F, SE31F, MM31F, TM31F, ME31F, TE31F, CM32F, MM32F, TM32F, CE32F, ME32F, TE32F, CM31F P, SM31F P, CE31F P, SE31F P, MM31F P, TM31F P, ME31F P, TE31F P, CM32F P, MM32F P, TM32F P, CE32F P, ME32F P, TE32F P**

BCU model	Lock-out	atm / fan	Flame detection
CM1...F	non-volatile	atm	dedicated probe for ionisation
CM3...F CM3...F P	non-volatile	fan	dedicated probe for ionisation
MM1...F MM5...F	non-volatile	atm	single electrode for ignition and ionisation
MM3...F MM3...F P	non-volatile	fan	single electrode for ignition and ionisation
SM1...F	non-volatile	atm	dedicated probe for ionisation
SM3...F SM3...F P	non-volatile	fan	dedicated probe for ionisation
TM1...F	non-volatile	atm	dedicated probe for ionisation
TM3...F TM3...F P	non-volatile	fan	dedicated probe for ionisation
CE1...F	volatile	atm	dedicated probe for ionisation
CE3...F CE3...F P	volatile	fan	dedicated probe for ionisation
ME1...F ME5...F	volatile	atm	single electrode for ignition and ionisation
ME3...F ME3...F P	volatile	fan	single electrode for ignition and ionisation
SE1...F	volatile	atm	dedicated probe for ionisation
SE3...F SE3...F P	volatile	fan	dedicated probe for ionisation
TE1...F	volatile	atm	dedicated probe for ionisation
TE3...F TE3...F P	volatile	fan	dedicated probe for ionisation

ALLEGATO - ANNEX

EC type-examination certificate I5500 – Annex 1

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

Model				Suffix	Options								
(1)	(2)	(3)	(4)	F	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	

List and Description of the approved configurations

Model:

- (1) C: dedicated for wall hung boilers
M: mono-electrode
S: general use
T: with safety thermostat
- (2) E: volatile lock-out (RESET by supply interruption)
M: non-volatile lock-out
- (3) 1: without fan (for open chamber appliances)
3: with fan (for sealed chamber appliances)
5: special types
- (4) 1: single flame
2: dual flame

Options:

- (6) : stocko-stelvio connectors
X: molex connectors
- (7) F: accessible internal fuse
- (8) W: resistor in series to VG2
- (9) V: resistor in series to VG1
- (10) R: protection against the inversion of the connection of the lock-out signal and the connections of the reset button (volatile lock-out versions only)
- (11) P: protection against air pressure-switch reversal connection (fanned versions only)
- (12) Ignition voltage
: 15 kV (standard)
H: 18 kV
L: 12 kV
- (13) Spark repetition time
: 25 Hz (standard)
nn: shows discharge frequency

ALLEGATO - ANNEX

EC type-examination certificate I5500 – Annex 1

 Pagina 4 di 4
 Page 4 of 4

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
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	1,5 ... 40 s
Safety time:	TS	3 ... 120 s
Reaction time:		≤1 s

Behaviour after flame failure:

series MICROFLAT suffix F model CM..., MM..., SM..., TM...

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

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

series MICROFLAT suffix F model CE..., ME..., SE..., TE...

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

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

Special conditions:

The series MICROFLAT suffix F, models CE..., ME..., SE..., TE..., do not contain an independent manual reset function. The application of these burner control models is therefore restricted to only those appliances where reset by switching off the heat demand is allowed by the specific European standards.

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

ALLEGATO - ANNEX