

**GASTEC**

**EC TYPE-EXAMINATION CERTIFICATE**

Number **E 0625**

GASTEC NV, notified body **0063** hereby declares that

the **Burner control units**

series **EUROBOX, EUROFLAT,  
MINIFLAT, MICROFLAT**

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

**Legnago, Italy,**

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

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

The products have been approved for:


Austria	Belgium	Germany
Denmark	Spain	Finland
France	United Kingdom	Greece
Ireland	Italy	Luxemburg
The Netherlands	Norway	Portugal
Sweden		

Report no. : 115833/1, 115833/2, 115833/3

PIN : 63AQ0625

A description of the specific types, valid reports and  
identification numbers is given in the appendices to this  
certificate.

Apeldoorn, **1 November 1995**

  
dr. L. Noordzij,  
president.

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EC TYPE-EXAMINATION CERTIFICATE: E 0625

Appendix no.: 1  
 Dated: 15 January 1997  
 P.I.N.: 0063AQ0625  
 Examination reports:  
 115833/1 dated Oct. 1995  
 115833/2 dated Oct. 1995  
 115833/3 dated Oct. 1996

This appendix replaces appendix no.: 1 dated 1 November 1996.

**EUROBOX**

Scope

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

The Brahma burner control units series EUROBOX are intended for installation within an appliance enclosure.

Specifications:

Electrical supply : 110/120V or 230 Vac, 50/60 Hz.  
 Ambient temperature : -20°C/+60°C.  
 IP protection degree : IP 40 or IP 00  
 Flame detector device : ionisation  
 Applied technology : electronics

Contact rating:

Fan : 230 Vac/max. 1.0 A /  $\cos \Phi = 0.4$   
 Alarm : 230 Vac/max. 0.5 A /  $\cos \Phi = 1$   
 Gas valve EV1 : 230 Vac/max. 0.5 A /  $\cos \Phi = 0.4$   
 Gas valve EV2 : 230 Vac/max. 0.5 A /  $\cos \Phi = 0.4$   
 Gas valve EVG : 230 Vac/max. 0.5 A /  $\cos \Phi = 0.4$   
 Auxiliary contact : 230 Vac/max. 0.5 A /  $\cos \Phi = 0.4$   
 External ignition : 230 Vac/max. 1.5 A /  $\cos \Phi = 0.2$

Times:

CM 191, SM 191, SM 192	Waiting time	: 1..60 s (depending on model)
SM 152, SM 592, MM 191, MM 192	Safety time	: 1..60 s (depending on model)
CE 191, SE 191, SE 192	Waiting time	: 1..60 s (depending on model)
SE 152, SE 592, ME 191, ME 192	Safety time	: 1..60 s (depending on model)
CM 381, CM 391, CE 391	Pre-purge time	: 1..60 s (depending on model)
	Safety time	: 1..60 s (depending on model)

Behaviour after flame failure:

EUROBOX, types CM... SM... MM...

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.

EUROBOX, types CE... SE... ME...

Flame failure during safety time causes spark restoration, followed by volatile lockout.

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

**EUROFLAT**

Scope

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

The Brahma burner control units series EUROFLAT are intended for installation within an appliance enclosure.

Specifications:

Electrical supply	: 110/120V or 230 Vac, 50/60 Hz.
Ambient temperature	: -20°C/+60°C.
IP protection degree	: IP 00
Flame detector device	: ionisation
Applied technology	: electronics

Contact rating:

HSI	: 230 Vac/max. 3.0 A
Alarm	: 230 Vac/max. 0.5 A / $\cos \Phi = 1$
Fan	: 230 Vac/max. 1.0 A / $\cos \Phi = 0.4$
Gas valve VG1	: 230 Vac/max. 0.5 A / $\cos \Phi = 0.4$
Gas valve VG2	: 230 Vac/max. 0.5 A / $\cos \Phi = 0.4$
Gas valve VGP	: 230 Vdc/max. 1.0 A
Auxiliary contact	: 230 Vac/max. 0.5 A / $\cos \Phi = 0.4$
External ignition	: 230 Vac/max. 1.5 A / $\cos \Phi = 0.2$

Times:

CM 11, SM 11	Waiting time	: 1..60 s (depending on model)
CE 11, SE 11	Safety time	: 1..60 s (depending on model)
CM 31, CM 32	Pre-purge time	: 1..60 s (depending on model)
CE 31, CE 32	Safety time	: 1..60 s (depending on model)
CM 32 CSP AR	Pre-purge time	: 1..60 s (depending on model)
	Safety time	: 1..60 s (depending on model)

CM 11/O, CE 11/O	Waiting time	: 1..60 s (depending on model)
	Safety time	: 1..60 s (depending on model)

CM 31/O, CE 31/O	Pre-purge time	: 1..60 s (depending on model)
	Safety time	: 1..60 s (depending on model)

HS 11, HS 31 HS 11, HE 31	Warm-up time HSI	: 1..60 s (depending on model)
	Safety time	: 1..60 s (depending on model)

Behaviour after flame failure:

EUROFLAT, types CM... SM...

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.

EUROFLAT, types CE... SE...

Flame failure during safety time causes spark restoration, followed by volatile lockout.

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

EUROFLAT, types HS...

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

EUROFLAT, types HE...

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

**MINIFLAT/  
MICROFLAT**

Scope

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

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

Specifications:

Electrical supply : 110/120V or 230 Vac, 50/60 Hz.  
 Ambient temperature : -20°C/+60°C.  
 IP protection degree : IP 00  
 Flame detector device : ionisation  
 Applied technology : electronics

Contact rating:

Fan : 230 Vac/max. 1.0 A /  $\cos \phi = 0.4$   
 Alarm : 230 Vac/max. 0.5 A /  $\cos \phi = 1$   
 Gas valve VG1 : 230 Vac/max. 0.5 A /  $\cos \phi = 0.4$   
 Gas valve VG2 : 230 Vac/max. 0.5 A /  $\cos \phi = 0.4$   
 Auxiliary contact : 230 Vac/max. 0.5 A /  $\cos \phi = 0.4$   
 External ignition : 230 Vac/max. 1.5 A /  $\cos \phi = 0.2$

Times:

MINIFLAT  
 FM 11, FM 12, SM 12  
 FE 11, FE 12, SE 12

Waiting time : 1..60 s (depending on model)  
 Safety time : 1..60 s (depending on model)

FM 31, FE 31

Pre-purge time : 1..60 s (depending on model)  
 Safety time : 1..60 s (depending on model)

MICROFLAT  
 CM 11 U, CM 12 U  
 CE 11 U, CE 12 U

Waiting time : 1..60 s (depending on model)  
 Safety time : 1..60 s (depending on model)

TM 11, TM 12  
 TE 11, TE 12

Waiting time : 1..60 s (depending on model)  
 Safety time : 1..60 s (depending on model)

XM 11, XM 12  
 XE 11, XE 12

Waiting time : 1..60 s (depending on model)  
 Safety time : 1..60 s (depending on model)

CM 31 U, TM 31,  
 XM 31  
 CE 31 U, TE 31,  
 XE 31

Pre-purge time : 1..60 s (depending on model)  
 Safety time : 1..60 s (depending on model)

Behaviour after flame failure:

MINIFLAT, types FM.. SM...

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.

MINIFLAT, types FE... SE...

Flame failure during safety time causes spark restoration, followed by volatile lockout.

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

Behaviour after flame failure:

MICROFLAT, types CM..U TM... XM...

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..U TE... XE...

Flame failure during safety time causes spark restoration, followed by volatile lockout.

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

**MICROFLAT**  
 suffix F / suffix FP /  
 suffix F/O

Scope

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

The Brahma burner control units series MICROFLAT suffix F, suffix FP and Suffix F/O are intended for installation within an appliance enclosure.

The Brahma burner control units series MICROFLAT suffix F, suffix FP and Suffix F/O are provided with a built-in E.M.I. filter in the ignition circuit.

Specifications:

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

Contact rating:

Fan	: 220/240 Vac/max. 1.0 A / cos $\phi$ = 0.4
Alarm	: 220/240 Vac/max. 1.0 A / cos $\phi$ = 1
Gas valve VG1	: 220/240 Vac/max. 0.5 A / cos $\phi$ = 0.4
Gas valve VG2	: 220/240 Vac/max. 0.5 A / cos $\phi$ = 0.4
Auxiliary contact	: 220/240 Vac/max. 0.5 A / cos $\phi$ = 0.4

Times:

**MICROFLAT** suffix F  
 CM 11F, SM 11F  
 CE 11F, SE 11F

Waiting time	: 1.. 60 s (depending on model)
Safety time	: 1.. 120 s (depending on model)

TM 11F, MM 11F  
 TE 11F, ME 11F

Waiting time	: 1.. 60 s (depending on model)
Safety time	: 1.. 120 s (depending on model)

CM 12F, MM 51F  
 CE 12F, ME 51F

Waiting time	: 1.. 60 s (depending on model)
Safety time	: 1.. 120 s (depending on model)

TM 12F, MM 12F  
 TE 12F, ME 12F

Waiting time	: 1.. 60 s (depending on model)
Safety time	: 1.. 120 s (depending on model)

CM 31F, SM 31F  
 CE 31F, SE 31F

Pre-purge time	: 1..60 s (depending on model)
Safety time	: 1.. 120 s (depending on model)

MM 31F, TM 31F  
 ME 31F, TE 31F

Pre-purge time	: 1..60 s (depending on model)
Safety time	: 1.. 120 s (depending on model)

CM 32F, MM 32F,  
 TM32F  
 CE 32F, ME 32F  
 TE 32F

Pre-purge time	: 1..60 s (depending on model)
Safety time	: 1.. 120 s (depending on model)

MICROFLAT suffix FP CM 31FP, SM 31FP CE 31FP, SE 31FP	Pre-purge time : 1..60 s (depending on model) Safety time : 1.. 120 s (depending on model)
MM 31FP, TM 31FP ME 31FP, TE 31FP	Pre-purge time : 1..60 s (depending on model) Safety time : 1.. 120 s (depending on model)
CM 32FP, MM 32FP, TM 32FP CE 32FP, ME 32FP, TE 32FP	Pre-purge time : 1..60 s (depending on model) Safety time : 1.. 120 s (depending on model)
MICROFLAT suffix F/O CM11F/O CE11F/O	Waiting time : 1..60 s (depending on model) Safety time : 1.. 120 s (depending on model)
CM 31F/O CE 31F/O	Pre-purge time : 1..60 s (depending on model) Safety time : 1.. 120 s (depending on model)

Behaviour after flame failure:

MICROFLAT, types

CM..F; SM..F, MM..F, TM..F, CM..FP, SM..FP, MM..FP,  
TM..FP, CM..F/O.

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..F, SE..F, ME..F, TE..F, CE..FP, SE..FP, ME..FP, TE..FP.  
CE..F/O.

Flame failure during safety time causes spark restoration,  
followed by volatile lockout.

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