

ECM113 and ECE113 Types
Gas burner controls

MAIN FEATURES

- Program versions for hobs, ovens and grills with atmospheric gas burners
- Controlled intermittent mode after 24 hours of continuous operation
- 3 selectors for controlling up to 3 flames with a single valve
- EC… versions available with limitation function of the number of repetitions
- Remote reset facility
- Indications of operating status, fault status messages and residual heat
- EC… versions suitable for EN 30-1-4 applications
- Approval based on **G**as **A**ppliances **R**egulation EU 2016/426 European Standard EN298:2012

burner controls ensure reliable operation and supervision of direct ignition burners. The products have an high level of safety while offering ease of operation.

Burner controls of the EC… line feature are equipped with a single-channel microprocessor system with periodic self-check and 2 independent shutdown paths for safety-related functions. An ionization probe is used for flame supervision.

Technical data (extract)

For further information see data sheets 14801.

Mains voltage:	100÷240V~ +10% / -15% @ 50/60Hz
Operating temperature range:	-20℃ ÷ +85℃
Ambient humidity:	95% max @ 40℃
Protection degree (with connecting socket):	IP 00
Maximum cables length:	
- Reset – remote lockout signal:	10 m
- Gas Valve	2m
- Ignition device	2m
- External components:	1 m

Standards and certificates (extract)

CE YY 0051

YY = year of production

ISO 9001:2008

Conformity to EC directives

- Electromagnetic compatibility EMC (immunity) 2014/30/EU
- Low-voltage directive 2014/35/EU
- Gas appliances directive 2009/142/EC until 20 April 2018)
- Gas appliances regulation (EU) 2016/426 (from 21 April 2018)
- EC - type certification (CE PIN 0051BT3727)

IMQ

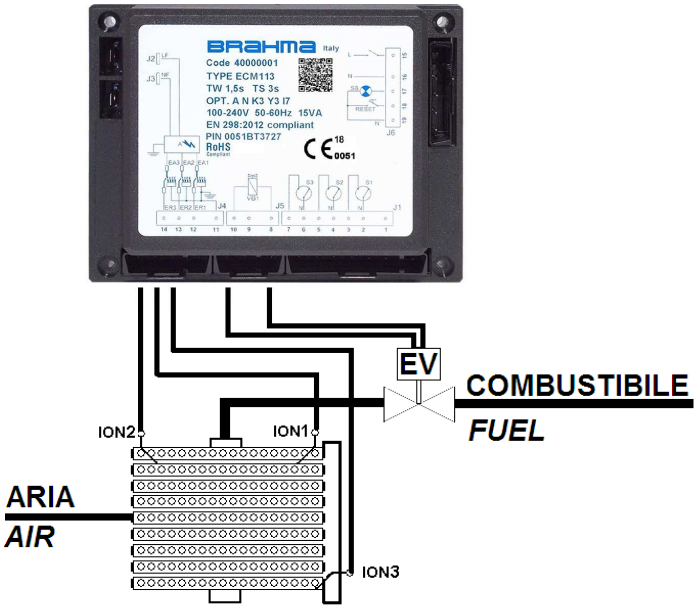
Types reference (extract)

The type reference applies to the EC… burner control without flame detector. The operating cycle and timers are set on request, further information see data sheets 14801.

Type reference Mains	Polarized	Repetition	Remote Reset	volatile Lockout	Non-volatile Lockout	tw max	TP min	TS max	Ti min	Tsp min	Tdk max
ECM113 opt. A N K3 Y3 I7	---	3x	✓	---	(1) (2)	2 s	1,5 s	3 s	7 s	Ts	3 s
ECE113 opt. Y1 I15	✓	1x	---	(1)	---	2 s	0,5 s	5 s	15 s	Ts-1s	---

(1) No establishment of flame at the end of TS.
(2) Extraneous light or simulation of flame on burner startup (K option with Tdk timer).
(3) Lost flame during operation (Vn option with n repetitions).

Overview of the systems with EC… burner control



Diagnostic possibilities of the EC… burner controls

Table of codes of led output

STATE	Led Output	Description
Pre-purge	1 flash every 2 seconds	Burner 1 with flame simulation.
	2 flashes every 2 seconds	Burner 2 with flame simulation.
	3 flashes every 2 seconds	Burner 3 with flame simulation.
	Always off	No flame simulation.
Ignition	Always on	Flame on burners activated with the selectors.
	Always off	No flame on one or more burners activated with the selectors.
Combustion	Always on	Flame on burners activated with the selectors.

Table of error code messages (lockout diagnostic enabled by reset button)

Blinking Codes	Description of possible cause
1-3 switch off every 2 seconds	
● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ...	Flame simulation on burner startup of fire 1
● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ...	Flame simulation on burner startup of fire 2
● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ...	Flame simulation on burner startup of fire 3
4-6 switch off every 2 seconds	
● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ...	No establishment of flame at the end of TS of fire 1
● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ...	No establishment of flame at the end of TS of fire 2
● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ...	No establishment of flame at the end of TS of fire 3
7-9 switch off every 2 seconds	
● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ...	too many losses of flame during operation of fire 1
● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ...	too many losses of flame during operation of fire 2
● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ...	too many losses of flame during operation of fire 3
11-13 switch off every 2 seconds	Wiring error or internal error, miscellaneous errors

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