



## ND(M/E).. NDT(M/E).. Types Gas burner controls

### MAIN FEATURES

- Program versions for forced draft gas burners and atmospheric
- Versions available with post-purge function available
- Indications of operating status and fault status messages
- Controlled intermittent mode after 24 hours of continuous operation
- Versions available with limitation function of the number of repetitions
- External reset facility
- Safety thermostat connections
- Connection of accessories
- Versions suitable for EN676 and EN746 applications
- Approval based on latest European Directive EN298:2012

**NDM burner controls** ensure reliable operation and supervision of 1 or 2-stage gas burners. The products have a high level of safety while offering ease of operation.

Burner controls of the NDM 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 or FD... sensor is used for flame supervision.

### Technical data (extract)

For further information see data sheets 26295.

Mains voltage:	220÷240V~ +10% / -15% @ 50/60Hz
On request:	110÷120V~ +10% / -15% @ 50/60Hz
Operating temperature range:	-20°C ÷ +85°C
Ambient humidity:	95% max @ 40°C
Protection degree (with connecting socket):	IP 00
Maximum cables length:	
- Thermostat (T) and external reset (RE):	20 m
- external components:	1 m

## Standards and certificates (extract)

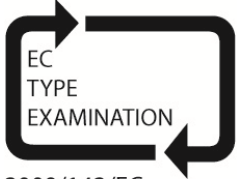


Conformity to EC directives

- Electromagnetic compatibility EMC (immunity) 2014/30/EU
- Gas appliances directive 2009/142/EC
- Low-voltage directive 2014/35/EU
- EC - type certification (CE PIN 0476CQ0671)

**kiwa**  
Approved

EC Directive



2009/142/EC

G A S T E C



## Types reference (extract)

The type reference applies to the NDM burner control without flame detector. The operating cycle and timers are set on request, further information see data sheets 26295.

Type reference	Mains	Valve stages	Repetition	Remote Reset	Non-volatile Lockout	On board Ignitor	tw max	TP min	TS max	Tj min	Tdk max	Tdq min	Tdw min
<b>Devices for forced draft burners up to 120kW capacity</b>													
NDM31 opt. Y3R0 K Q16 W8	V 1	3x	✓	(1) (2) (3)	✓	2 s	30 s	3 s	3 s	1 s	16 s	8 s	
<b>Devices for forced draft burners with 2-stage</b>													
NDM32 opt. J3 V K Q16 W8	V 2	---	✓	(1) (2) (3) (4)	✓	2 s	5 s	3 s	3 s	1 s	16 s	8 s	
NDTM32(*) opt. M1 S3 Y4 U1 T2	V 2	4x	✓	(1) (2)	✓	2 s	20 s	5 s	0 s	---	---	0 s	
NDM32PR opt. A K W3	V 2	---	✓	(1) (2) (3)	---	2 s	15 s	3 s	0 s	1 s	---	3 s	
<b>Devices for atmospheric burners</b>													
NDM11 opt. UR1 M21	VCM01	---	✓	(1)	✓	2 s	0 s	5 s	0 s	---	---	---	
NDM11PR opt. J1 Y2 I5	V 1	2x	✓	(1)	---	2 s	1 s	5 s	1 s	---	---	---	
NDE31PR <sup>(a)</sup> opt. U1	V 1	---	---	(1)	---	2 s	0 s	7 s	0 s	---	---	---	

(\*) Connection safety thermostat

<sup>(a)</sup> Volatile lockout

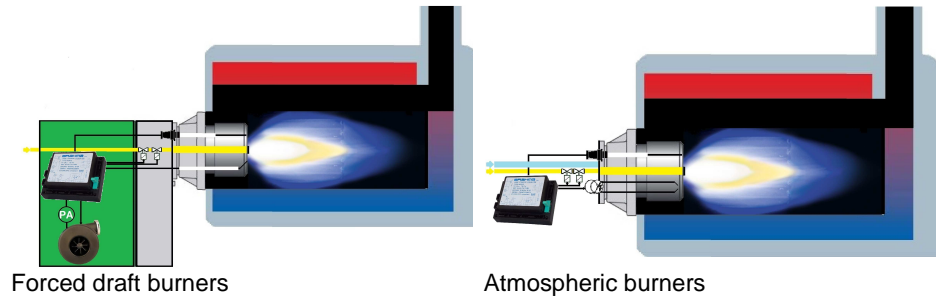
(1) No establishment of flame at the end of TS.

(2) Air pressure stuck during start-up, lost air pressure during operation.

(3) Simulation of flame on burner startup.

(4) Lost flame during operation.

## Overview of the standard systems with NDM controls



## Diagnostic possibilities of the NDM burner controls

* Table of error code messages (lockout diagnostic enabled by reset button)	
Red Blinking Codes	Description of possible cause
2 switch off every 2 seconds • • • • •	No establishment of flame at the end of TS
3 switch off every 2 seconds • • • • •	Air pressure switch faulty (only versions with Qnn option)
4 switch off every 2 seconds • • • • •	Air pressure switch stuck to working position (only versions with Qnn option)
5 switch off every 2 seconds • • • • •	Extraneous light or simulation of flame on burner startup (only versions with Knn option)
6 switch off every 2 seconds • • • • •	Failure of air pressure switch with burner in working position (only versions with Knn option)
7 switch off every 2 seconds • • • • •	too many losses of flame during operation (only versions with Vnn option)
17-20 switch off every 2 seconds	Wiring error or internal error, miscellaneous errors

## Overview of the kits with NDM controls and accessories

### ACCESSORIES LEGEND

SF2: Air Flow Sensor

IR: Infrared Receive

MA: Motor Adapter

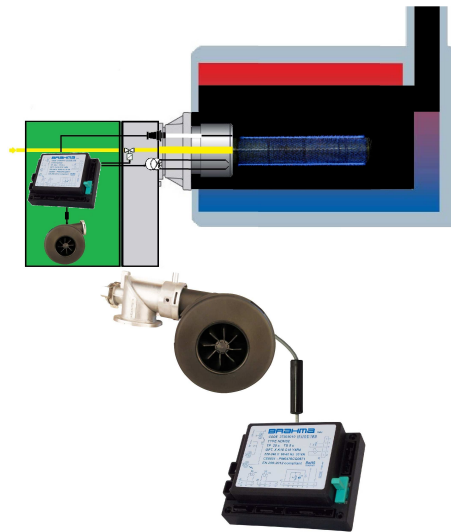
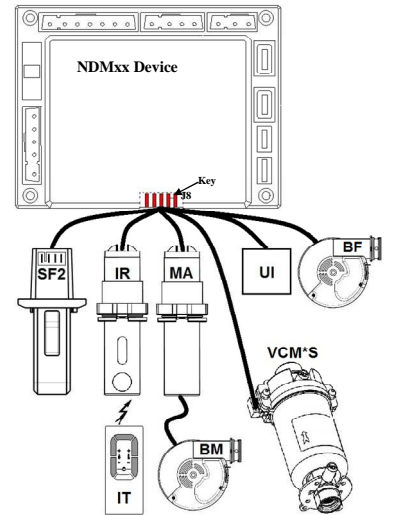
UI: User Interface

IT: Infrared Transmitter

BM: Brushless Motor

BF: Brahma Brushless Motor with RS232

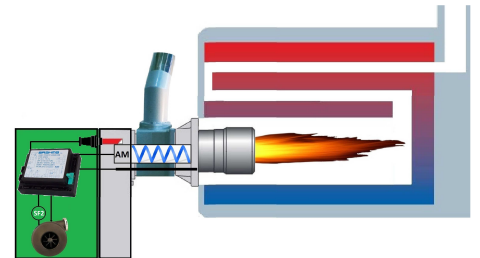
VCM\*S: Electrovalve with Pressure Sensor



Premix(NDM31PR+MA)



Radiant tubes(NDVM11+VCM01+IR)



**BRAHMA S.p.A.**  
Via del Pontiere, 31  
37045 Legnago (VR) - Italy  
Phone +39 0442 635211 – Fax +39 0442 25683

<http://www.brahma.it>  
E-mail: [brahma@brahma.it](mailto:brahma@brahma.it)

Fan-assisted convector heater(NDM31+UI) Biomass Burners(NDM31O+SF2+FT11)