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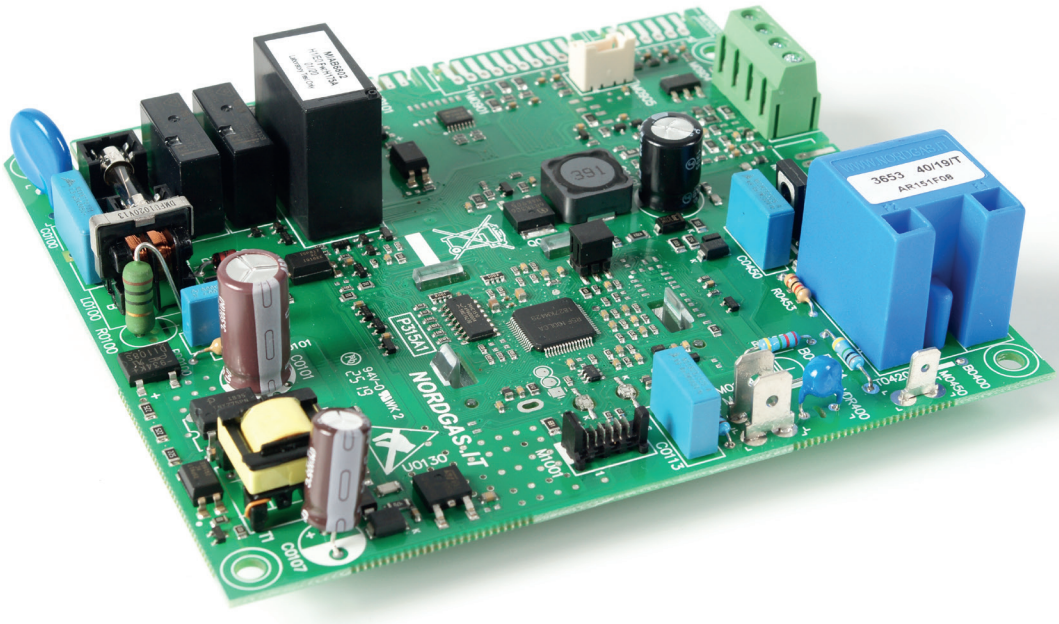
BURNER CONTROL

MIAB-CON-ST

LOW END BURNER CONTROL CONDENSING

High safety standards (CE approved)
UNI EN 298:2012 / CEI EN 60730
ErP 2005/32/CE / (UE) 2016/426 (GAR)



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APPLICATIONS

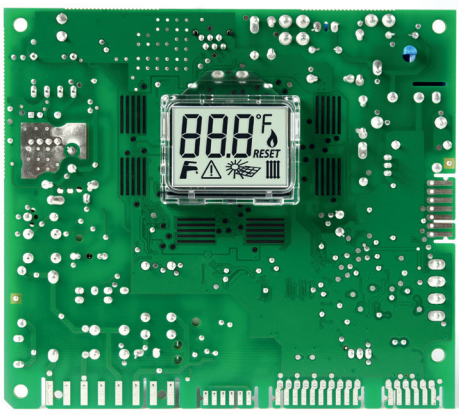
The electronic boards of **MIAB-CON/ST** burner control's family are designed to manage gas appliances equipped with pneumatic premix burners and condensing heat exchanger.

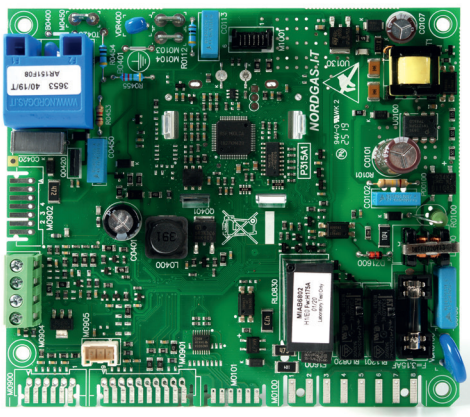
They integrate all the features to manage LOW RANGE wall hung boilers.

If some extra functionalities are required, through a communication bus the functions can be improved using other external boards to manage External User Interfaces, Additional Input/ Output etc...

The **MIAB** burner controls platform is a wide range of products that share the same mechanical features and which differ for the implemented functions: in this way it is possible to create different technical products while maintaining the same aesthetic.

MIAB-ATM	Burner Control for Standard Efficiency Boiler – 230Vac Diverted Valve *
MIAB-ATM/ST	Burner Control for Standard Efficiency Boiler– Unipolar Stepper Motor Diverted Valve *
MIAB-CON	Burner Control for Pneumatic Condensing Boiler – 230Vac Diverted Valve *
MIAB-CON/ST	Burner Control for Pneumatic Condensing Boiler – Unipolar Stepper Motor Diverted Valve





* Details reported in the corresponding detailed documentation

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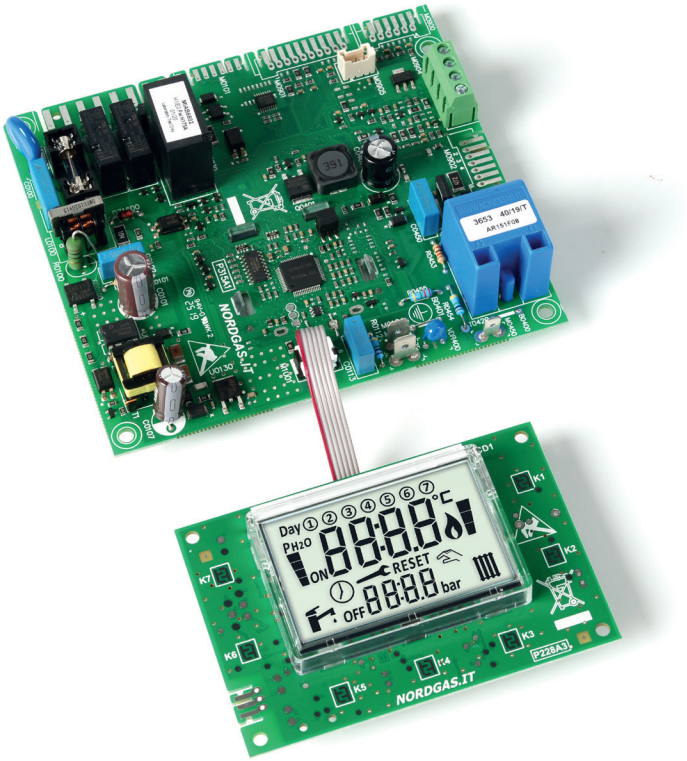
GENERAL FEATURES

- Ignition & Safety control for pneumatic premixed Gas burners
- Heating comfort functions
- Domestic hot water comfort management
- Communication bus to interface with external accessories
- Unipolar Stepper Motor diverted valve management
- Integrated User Interface with backlighted LCD display and 6 push buttons
- North American and Chinese Approval available on request



ACCESSORIES

The **MIAB-CON/ST** family PCBs can be interfaced with the following accessories:

- External User Interfaces: **UI10**, **UI20**, **UI30** & **UI40** platform devices
- Zone managing control Flex
- External I/O expander: **REL10** platform devices
- Remote control: **ROAB** platform devices
- Outside temperature sensors: **EXT10** series devices
- Contact temperature probes: **TEM10** series devices
- Immersion temperature probes: **IMM10** series devices
- Air Pressure switches: **PRBHC** series devices
- Plastic box housing: **BOX10** & **BOX20** series devices
- Rubber push buttons and keypad
- Wirings according to customer specification

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	MAIN FEATURES	MIAB6801	MIAB6802	MIAB6811	MIAB6812	MIAB6901	MIAB6902
Combustion	Standard Efficiency Boiler Management			–			
	Condensing Boiler Management			✔			
	Electronic Combustion Control (ECC)			–			
Igniter	Single Electrode	✔	–	✔	–	✔	–
	Double electrodes (one for ignition & one for flame detection)	–	✔	–	✔	–	✔
	Integrated Spark Igniter			✔			
Outputs	External Spark Igniter Management			–			
	AC Combustion Fan (Fixed Speed)			–			
	Brushless Combustion Fan (PWM)			✔			
	Gas Valve – Modulator Coil (165mA)			–			
	Pneumatic Gas Valve - Safety coil 230Vac			✔			
	Stepper motot Gas Valve - Safety Coil 24Vac			–			
	Stepper motor Gas Valve - Safety Coil 230Vac			–			
	Standard Efficiency Pump (Fixed Speed)			✔			
	High Efficiency Pump (PWM)			✔			
	3 Way Valve – 230Vac			–			
	3 Way Valve – Unipolar Stepper Motor			✔			
	Auxiliary Relay (Configurable)			◇			
Inputs	High Limit Thermostat (Switch)			✔			
	High Limit Temperature Sensors (Safety)			–			
	Flue Device (Thermostat Switch or Air Pressure Switch)			✔			
	Flue Temperature Sensor (No safety)			✔			
	Flue Temperature Sensor (Safety)			–			
	CH Temperature Sensor			✔			
	DHW Temperature Sensor			✔			
	Return Temperature Sensor			✔			
	Outdoor Temperature Sensor			✔			
	Water Pressure Switch			✔			
	Water Pressure Sensor			◇			
	DHW Flow Switch / Flowmeter			✔			
	2nd Room Thermostat input			◇			
Comunications	Opentherm Communication Bus			✔			
	RS485 / Modbus Communication Bus			–			
	LIN Communication Bus			–			
	UART Expansion Communication Bus			✔			
User Interface	DHW / CH Weekly Program (with Time Keeper)			–			
	Integrated User Interface		✔			–	
	External User Interface Management		–			✔	
	Blue Led Lcd Backlight	✔			–		
	White Lcd Backlight	–		✔		–	
	Negative LCD Backlight		○			–	

✔ = included ○ = On request ◇ = On request (specific external PCB required)

Rev. 06/2022 - We reserve the right to make changes without prior notice

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