

**EN 298:2012
Certified**



IGNITION CONTROL FOR GAS BURNER SYSTEMS

FCE60 Ignition Box

IGNITION CONTROL

TF Technologies A/S is a world leader in ignition control for gas burners. With more than 50.000 Ignition Boxes sold worldwide throughout the past 15 years, the ignition control systems from TF-Technologies have a proven quality and an incredible track record, which has made us known worldwide as experts on the subject.

The ignition control for gas burner systems from TF-Technologies provides automatic control of the ignition of a gas burner and secures a continued safe operation.

The FCE60 Ignition Box controls the gas supply and ignites the gas, and monitors the flame throughout operation. Any accidental blow-out of the flame is immediately detected by the Ignition Box and will trigger re-ignition. In case of re-ignition failure, the FCE60 will shut off the gas supply to prevent accidents caused by gas seepage, and send out an error signal.

The Ignition Box has been certified as a safety component to the EN 298:2012 to comply with gas safety requirements in the EU Gas Appliances Directive 2009/142/EC.

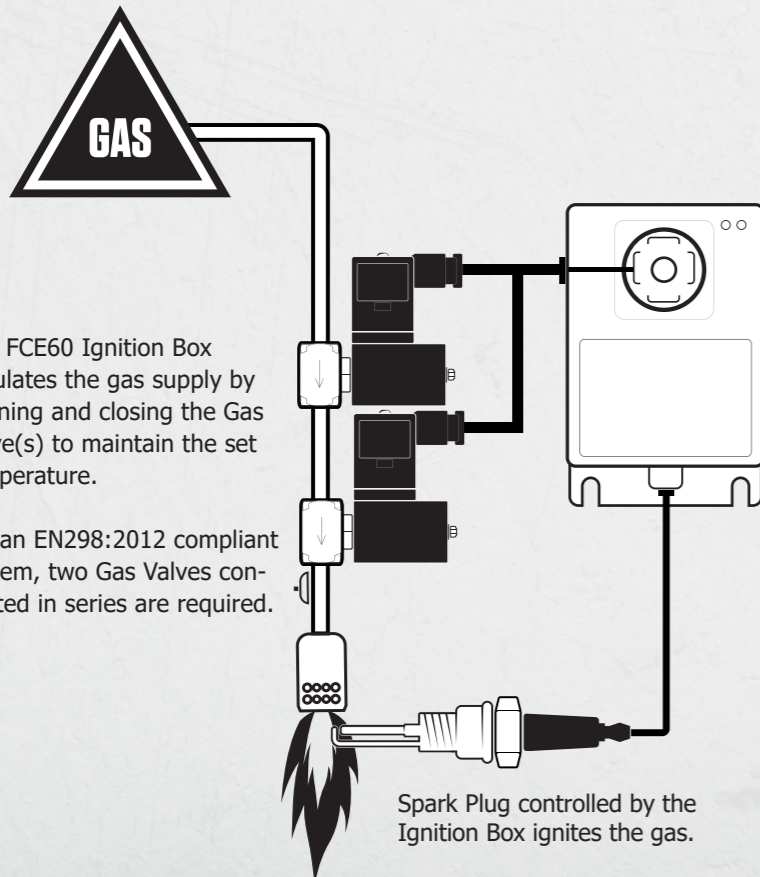
Advantages

- Automatic control of the gas ignition
- Safe operation
- Simple, intuitive design
- Durable technology designed specifically for use in rough environmental conditions
- Certified to EN 298 and EN 13309, for full compliance to Gas Appliances Directive, Machinery Directive and EMC Directive
- CE marked



IGNITION CONTROL SYSTEM

How it works



The FCE60 Ignition Box controls ignition of the flame and monitors it. Upon ignition failure, it closes the gas valve as a safety measure to prevent accidents caused by gas seepage and presents an error code.

FCE60 IGNITION BOX



EN 298:2012 Certified

The FCE60 Ignition Box is a cornerstone of the Ignition Control System from TF-Technologies. With an FCE60 Ignition Box you have both ignition and flame control, all in one box using only one electrode.

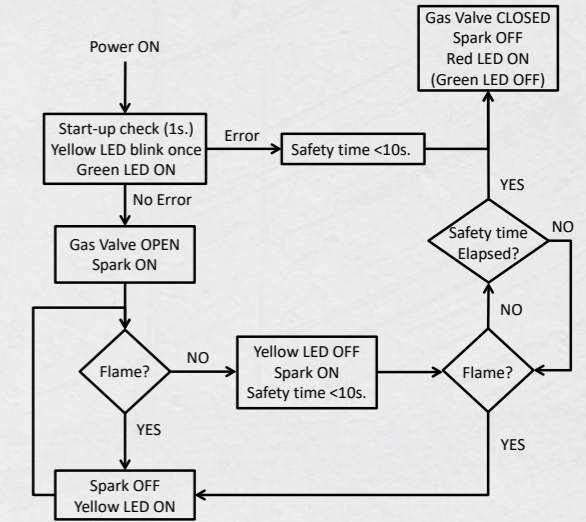
The FCE60 Ignition Box is compact in size, and very easy to install. As a simple, plug'n'play solution, it has no settings or required software setup. It is extremely robust, designed for use in the roughest environmental conditions, and tested to EN 13309:2010 for full compliance to the EMC Directive 2014/30/EU.

Now, the Ignition Box is also certified as a safety component under EN 298:2012 for full compliance to EU Gas Appliances Directive 2009/142/EC.

The new FCE60 Ignition Box is backwards compatible with the former non-certified FCE24 Ignition Box.

FCE60 IGNITION BOX

How it works



When power is applied the Ignition Box opens the gas supply and starts igniting (after a brief start-up check). If the Ignition Box detects a flame, the yellow lamp will turn on and the Ignition Box will cease sparking. After this, the Ignition Box will continue to monitor the flame, and as long as the flame is detected, the yellow lamp stays on.

In case the flame disappears, the Ignition Box will turn off the yellow lamp and initiate sparking. If no flame is detected within a safety time of max 10 seconds, sparking stops, gas supply is turned off, and a red lamp turns on to indicate a fault condition.

EN 298:2012 CERTIFIED

What does it mean?

The Ignition Box is now certified to the standard EN 298:2012. But what does this certification mean?

For the FCE60, it means the highest pre-cautions are taken to ensure safety of the gas burner system, even in the face of several failures. The FCE60 has built-in redundancy e.g. in the form of double relay, an internal fuse and three control circuits that individually control the flame detection performed by the FCE60. This means even with two component failures or a case of overcurrent, it will still leave the burner system completely safe.

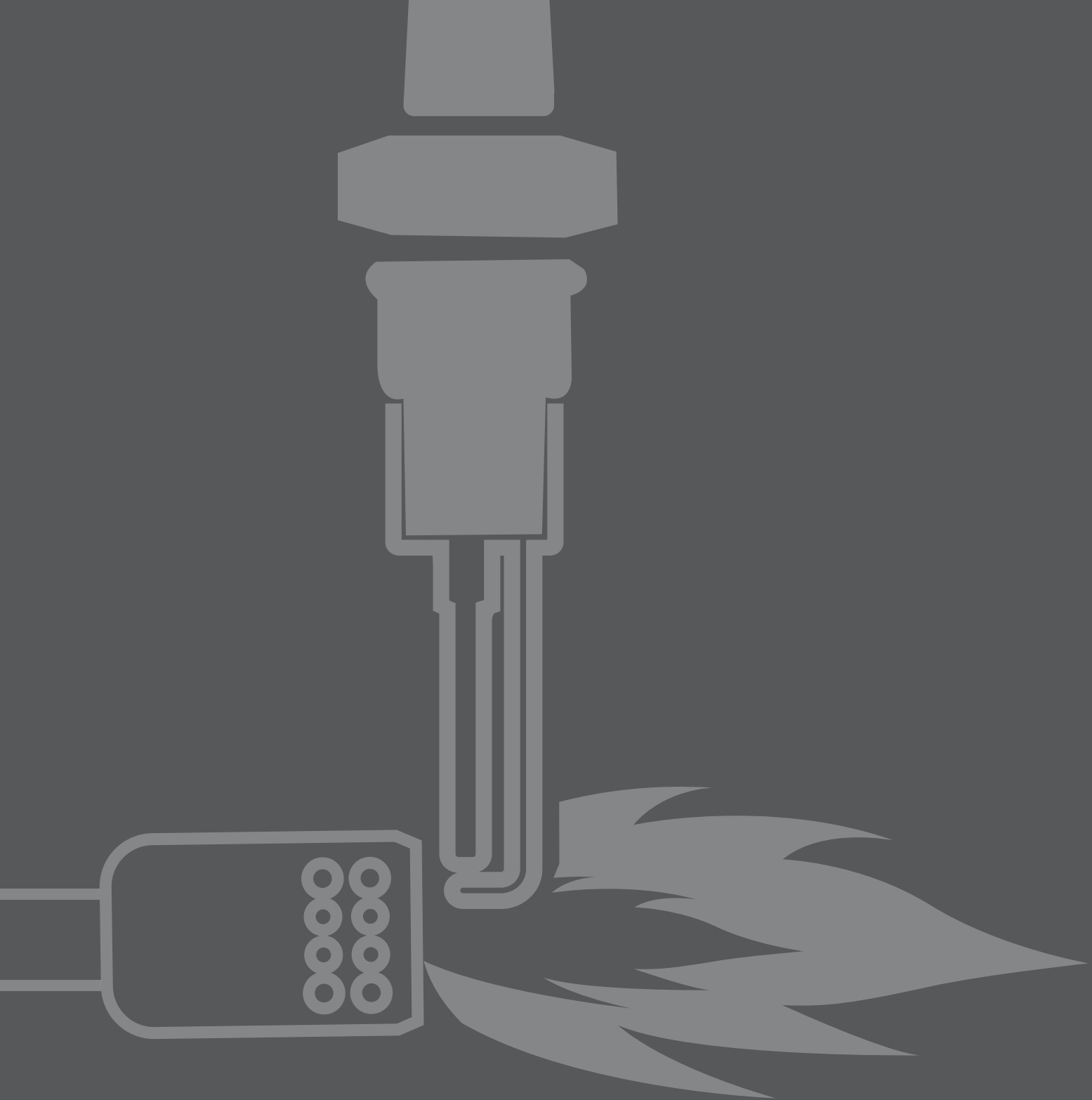
Non-certified ignition boxes do not have this protection, which means failure of a single component or a case of overcurrent can lead to gas seepage and be a safety hazard.

Even ignition boxes certified to the older EN 298:2003 may pose a safety risk, as there are several new safety requirements in the new standard.

- Fully Certified**
Full compliance to EMC, Machinery and Gas Appliances Directives for machine manufacturer
- Indicators**
Red and green lamps indicate whether the burner is ignited or in fault condition
- Electronic Ignition**
Burner ignited electronically with spark plug controlled by the Ignition Box
- Flame Monitoring**
The Ignition Box constantly monitors the flame and shuts off the gas supply upon re-ignition failure

Product Specifications

Power Supply	12/24 Volt DC System
Power Consumption	Typical at 24 VDC 120 mA Max. 400 mA
Operating Temperature	-10°C to 70°C
Flame Failure Response Time	<10 Sec.



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