Gas Safety Devices & Accessories

Gas Interlocks (GIS units) are required in most commercial kitchens, these systems require a number of components to comply with UK legislation.

CaterGuard™ “Advanced” M-G06R Gas Interlocks save time on installations and can reduce the amount of accessories you need to purchase.

Helpful, simple operation instructions are provided on the fascia of the unit.

Choose from a variety of models to find the model best for your application.

Solenoids, gas proving systems, fan power sensors and other accessories are also part of the range.

Dedicated Helpline

Dedicated technical helpline service. Helpful, simple operation instructions provided on the fascia of the unit.

Full Range of Accessories

Solenoids, gas proving systems, fan power sensors and other accessories are also part of the range.

CaterGuard “Advanced” Gas Interlocks

CaterGuard “Advanced” Gas Interlocks save time on installations and can reduce the amount of accessories you need to purchase.
GIS UNITS WITH INTEGRAL COMPONENTS

One compact unit saves time on installation

- Built-In Emergency Cut-Off Switch
- Built-In Fan Power Sensors

FEATURES

Single box, including:
- 2x on/off fans
- Gas Interlock Panel
- Emergency cut-off switch
- Audible alarm for when gas has been shut off
Complete and simple instructions on the fascia
All pre-wired internally
Audible alarm
Built in emergency stop feature button
Connections for optional Remote Emergency Stop and Fire alarm panel
Anti-back pressure feature (ignores back draughts in ducting - avoiding accidental shut offs)
Finished with LED lamps and high quality components
Made in the UK, CE marked
Guaranteed against manufacturing defects for 12 months (parts only)

BENEFITS

Easy to install & operate
A more financially competitive solution than buying separate components
Save installation time as - no need to wire individual components
Flexible - can operate one or two fans
Modern, compact design compatible with new kitchen designs
Technical helpline service
Simple for end-users to operate – one button
Multiple GIS solutions can be wired together to operate more than two cooking suites/islands.

13A 230V Power Supply

Fan

1 Core

Fire Alarm Panel (optional)

Fan Extract

Remote Emergency Stop (optional)

2 Core

Gas Solenoid

M-G06R

3 Core
THE PURPOSE OF A GIS
By monitoring airflow or fan motor running current, proper functioning of a kitchen’s extraction system can be determined by the GIS, allowing gas to then be supplied to installed appliances. Monitoring is effected by air pressure differential sensors mounted in the extraction and/or air supply ductwork or via fan power sensors looking at fan motor current. In the event of fan failure or a significant air flow reduction (as calibrated by the installation engineer), the sensors will actuate the Mechline GIS which in turn closes the gas supply solenoid and thus cuts off gas supply to the kitchen appliances.

WHEN IS A GAS INTERLOCK SYSTEM A MANDATORY REQUIREMENT?
Gas safety interlock systems are required in all commercial kitchens. Gas Safe regulations and BS6173 both require a gas interlock system to be fitted. This ensures that the commercial kitchen ventilation system is working before the gas is turned on. This prevents a build-up of potentially poisonous gas combustion fumes in the kitchen which would be harmful to the health of kitchen staff and others within the premises. If any gas appliances do not have Flame Failure Devices (FFD’s) fitted, then a gas proving system must also be fitted to comply with regulations.

When to fit a GIS?
• On installation of a completely new extraction/ventilation canopy
• On installation of a completely new gas pipework run
• On installation of a completely new cook line or layout

ADVANTAGES OF MECHLINE’S CATERGUARD GIS

Smart and Compact design - Complies with new CAIS 23 [revised]

Easy to Install
• Clear and simple instructions with diagrams
• Larger enclosure allows for easy installation
• Neat & compact and easy access for wiring

Easy to Operate
• One button operation - all features explained fully on the fascia plate. Clear indicators
• LED lamps & high-quality components

Key Safety Features
• All models have an anti-back pressure feature – ignores brief back draughts in the duct and allows gas to flow.
• Back pressure sensitive with 10-second activation
• Option of ‘fail safe’ double sensor warning model [M-GO3] provides the operator with ‘peace of mind’ and a means of avoiding system actuation through a faulty or failed sensor. Provides clear warning that a single sensor has failed. The system only shuts off the gas supply when both sets of sensors actuate. (Please note in this instance that four sensors are required).
• Option of built-in emergency stop is available on units with model numbers ending in ‘R’
• Compliant with BS6173(2009) and Regulation 27(4) of the Gas Safety (Installation and Use) Regulations 1998
• Each GIS can handle one or two fans
• Multiple GIS units can be wired together to operate more than two fans - Single or Double Sensor warning available
• Easy to clean and protected to IP54
• Technical help is at hand from Mechline or from an independent Technical Adviser on 01324 829922
GAS SAFETY DEVICES

GAS INTERLOCK SYSTEMS

SYSTEM REQUIREMENTS
• GIS Unit – choose from M-G01N, M-G02, M-G02R, M-G03R or M-G06R
• Remote or Built-in Emergency Shut-Off Switch - or both
• Air Differential Switch or Fan Power Sensor - unless already built-in
• Electrically operated, normally closed gas safety shut-off Solenoid Valve

Model Description
M-G01N GIS with NO override (stainless steel panel)
M-G02 Standard GIS System with back pressure feature & additional connection for Remote Emergency Cut-Off Switch. Large box for easier wiring. IP55
M-G02R Same as M-G02 but with Interlock panel + built-in Emergency Knock-Off Switch
M-G03R* With a built-in Emergency Knock Off Switch (requires 4 sensors, sold separately)
M-G06R Advanced GIS system includes Interlock panel, Emergency Cut-Off Switch & Fan Power Sensors (no fan speed controllers)

It is the Customer’s responsibility to determine the suitability of the GIS system for the application.

*IMPORTANT NOTE: The M-G03R model will need 4 sensors to operate correctly on two fan systems. Choose between M-ADS20 or M-FPS sensors - sold separately. If you have any questions, please contact Mechline’s Technical Department or contact 01324 829922, an independent Technical Help Line for Mechline’s GIS units.
**ACCESSORIES**

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>M-ADS20</td>
<td>20-200 Air Pressure Differential Switch</td>
</tr>
<tr>
<td>M-ADSEXT</td>
<td>Extension Kit inc. 2m additional piping and 2 connectors</td>
</tr>
<tr>
<td>M-FPS-X</td>
<td>Fan Power Sensor (FPS) for fans 100W to 3000W</td>
</tr>
<tr>
<td>M-RECS</td>
<td>Remote Emergency Cut-Off Switch</td>
</tr>
<tr>
<td>M-FRECS</td>
<td>Flat Remote Emergency Cut-Off Switch</td>
</tr>
</tbody>
</table>

**GIS MODEL FEATURE GUIDE**

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>M-G01N</td>
<td>Gas Interlock Panel Operates 2 Fans Built-in Emergency Stop Built-in Fan (On &amp; Off) Built-in Fan Current or Power Sensors Connections for ADS &amp; FPS units Connections to Emergency Stop Connections to Fire Alarm Panel Anti-Back Pressure Feature Audible Alarm</td>
</tr>
<tr>
<td>M-G02</td>
<td>✔</td>
</tr>
<tr>
<td>M-G02R</td>
<td>✔</td>
</tr>
<tr>
<td>M-G03R</td>
<td>✔</td>
</tr>
<tr>
<td>M-G06R</td>
<td>✔</td>
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</tbody>
</table>

**IMPORTANT INFORMATION**

The Mechline GIS module is one key component in a safety system, interfaced with a number of other control mechanisms. The Gas Interlock System will ensure safety in the event of a failure of any of these other interconnected elements and a shutdown of the gas supply to the kitchen may result, requiring immediate engineer attendance.

To minimise disruption to kitchen operations, it is highly recommended that you have or provide your client with an emergency contact number for your service/installation engineer. Alternatively, advise your client in advance of other back-up procedures in the event of product activation or operational difficulties. If on-site emergency call-out cover is required, it is not the responsibility of Mechline Developments Ltd. to provide this.

The warranty on the Mechline GIS is for 12 months from the date of invoice. The warranty is for parts only, against manufacturing defect or workmanship. No inclusion is made for labour or site attendance, and no such warranty is offered or implied. Mechline Developments Ltd accepts no responsibility for consequential loss caused or suffered as a result of the lack of provision of on-site emergency cover.

It is the customer's responsibility to determine the suitability of the GIS system for the application.

For Mechline’s Standard Warranty and Returns Policy see the back of this catalogue.

Important documents / notes for your consideration and reference:
- TB 123 Gas Safe Register
- Gas Safety (Installation and Use) Regulations 1998 GSIUR 27/4 - ACOP L56 Rev 14 08/13
- HSE CAIS 23 (Revision 2, 07/13. Gas Safety in Catering & Hospitality)
- HSE CAIS 10 (Revision 2, 07/12. Ventilation in Catering Kitchens)
- HVCA Guidance - DW 172 Standard for Kitchen Ventilation Systems
- IGEM/UP/19 Design and application of interlock devices

Visit www.mechline.com for more information.