

# CO2 Mk90 Detector Base Set (2099)

## LogiCO2 Mk90 Safety System with amber Horn/Strobe



### TECHNICAL DATA

<b>Power supply:</b>	12-24V DC
<b>Number of sensors:</b>	1-12
<b>Communication:</b>	RS485 Modbus
<b>Automatic calibration:</b>	Several times a year

For further data see separate data sheets for the specific components.

### ORDERING EXAMPLE

Item code	Description
2099	CO2 Mk90 Detector Base Set

### CO2 Mk90 Base SET consists of:

- CO2 Central Unit Mk9
- Protection Cover with 6 screws
- Cable red 5m
- CO2 Sensor Mk90
- Cable red 10m
- Cable blue 5m
- Horn/Strobe LED amber with 1m cable
- RJ45 1-1 split
- RJ45 1-2 split
- Transformer 1A
- Plug-UL for transformer
- Plug-CE for transformer
- Plug-AU for transformer
- Plug-UK for transformer
- Plug-lock
- Bag with 6 screws and plug
- Sign CO2 Safety System Mk9
- Sign Horn/strobe Mk9/10
- Installation manual Mk9
- Quick-guide Mk9
- Protection Cover

### FUNCTION

The Carbon Dioxide (CO2) Safety System is designed to measure CO2 concentration in a confined space environment. It provides an alarm in the event that a CO2 level considered unhealthy/dangerous in accordance with existing safety codes, in the area being monitored.

The basic CO2 Safety System is a precision instrument comprising one central unit (with a digital display), one (up to twelve) sensor unit, one horn/strobe. A separate electronic transformer supplies power to the system. The sensor unit uses infrared analysis for detecting CO2. The System monitors STEL as well as TWA levels of CO2. The System also provides visible indication of CO2 levels and temperature in the area where the remote sensor is located. It is displayed on a screen of the Central Unit in most languages. Explaining what to do in different Alarm situations. The CO2 Safety System performs a self-calibration at regular intervals insuring calibration under normal circumstances. This eliminates the need of manual service calibration in a normal environment.

When installed properly, the CO2 Safety System will continuously monitor the CO2 concentration and temperature wherever a sensor unit is located. A green light emitting diode (LED) on the central unit indicates normal safe conditions.

If ambient conditions at the CO2 Sensor reach a CO2 concentration level of 1.5% (preset Low/Pre-alarm), the central unit will emit an intermittent audible tone and the « Low/Pre-alarm » red LED will blink. A remote Horn/Strobe will flash. This will also happen if the TWA for 8 hours also surpasses 5,000 ppm. The difference can be acknowledged on the display.

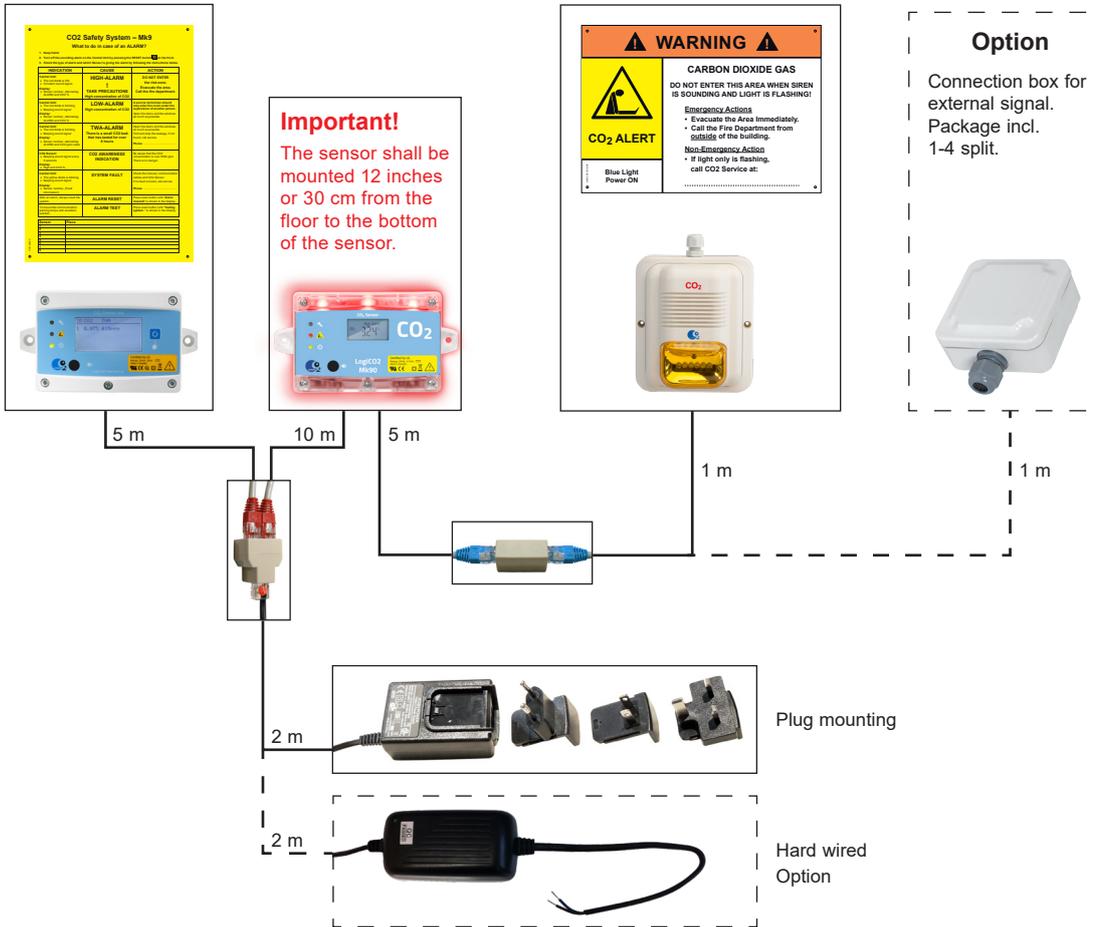
If ambient conditions at the CO2 Sensor reach a CO2 concentration level of 3.0% (preset High/Main-alarm), the central unit will emit a constant audible tone and the « High/Main-alarm » red LED lights. A remote Horn/Strobe will flash and sound.

### APPROVALS

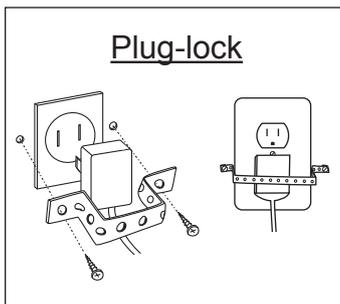
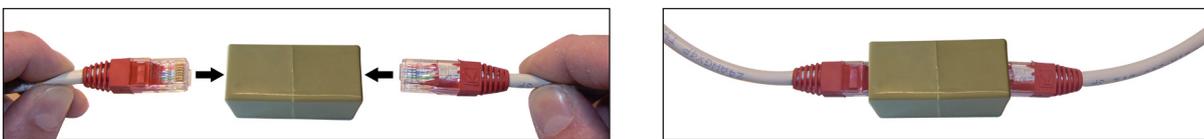
In the United States, the Mk90 system is in compliance with the International Fire Code (IFC) 2024 Edition Chapter 5307, CGA G-6.14 2023, NFPA 55 2023 Edition Chapter 13, and NBIC Part 1 Supplement 3 S 3.4.

In compliance with EU Commission Directive 2006/15/EC of 7 Feb 2006 as well as OSHA – PEL (Permissible Exposure Limit) of TWA for CO2.

**Connection diagram**



**CABLE EXTENSION CONNECTOR**



Cut off the prolongations of the lock-release on the RJ45 connectors to secure unauthorized disconnection of the CO2 Safety System.



Use a small screwdriver to disconnect the RJ45 plugs.