Installation Instruction

0476 SMB and safety valve



ENGLISH

Safety mode box with safety valve for CO2 Safety System.

Important!

Retain this instruction manual for future reference: Please read these instructions carefully prior to start-up and use. Failure to follow any of these instructions could void product warranties. LogiCO2 assumes no responsibility for claims arising out of improper or careless use or handling of their products.

Technical specifications for SMB

Power supply:	Via CO2 Sensor
Relays:	1A/24V AC/DC
Material:	PC/ABS
Operating pressure:	0,15 to 30 bar / 2,2 to 435 Psi
Bursting pressure:	>150 bar / 2 175 Psi
Treaded connection:	1/4" -18NPT
Dimensions (WxHxD):	78x78x37 mm / 3"x3"x1.5"
Ingress protection:	IP55
Power Consumption:	196 mA

Function

Safety mode box (SMB) with safety valve is an accessory for the Mk9 and Mk90 CO2 Safety System that shuts off the CO2 gas distribution in case of a leakage. It consists of a magnetic valve, electronics box and cabling. The Safety valve is designed for usage of CO2 with a pressure of 0,15 to 30 bar or 2,2 to 435 Psi.

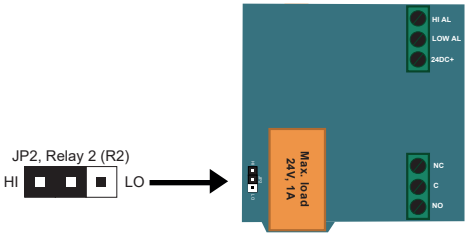
SMB has a 1 meter Cat5 cable from the electronics box, with a blue RJ45 connector that is plugged in to the blue alarm signalling output cable side from either the Mk9 or Mk90 CO2 sensors. When the CO2 sensor indicates a high CO2 concentration, the magnetic valve will shut off the CO2 gas distribution. The valve is fail-safe (shuts off at power loss).

The magnetic valve should be installed as early as possible in the CO2 gas distribution chain (close to the CO2 tank) in order to avoid possible CO2 leakage before the safety valve.

Install the electronics box in a suitable place where it is mechanically protected. Remove the cover by turning it counterclockwise 1/8 turn to access the mounting screw holes.

Factory alarm settings

The SMB is set to close the distribution of CO2 in case of a High Alarm. The jumper settings can be changed to close the distribution of CO2 in case of a Low alarm/ Pre alarm.

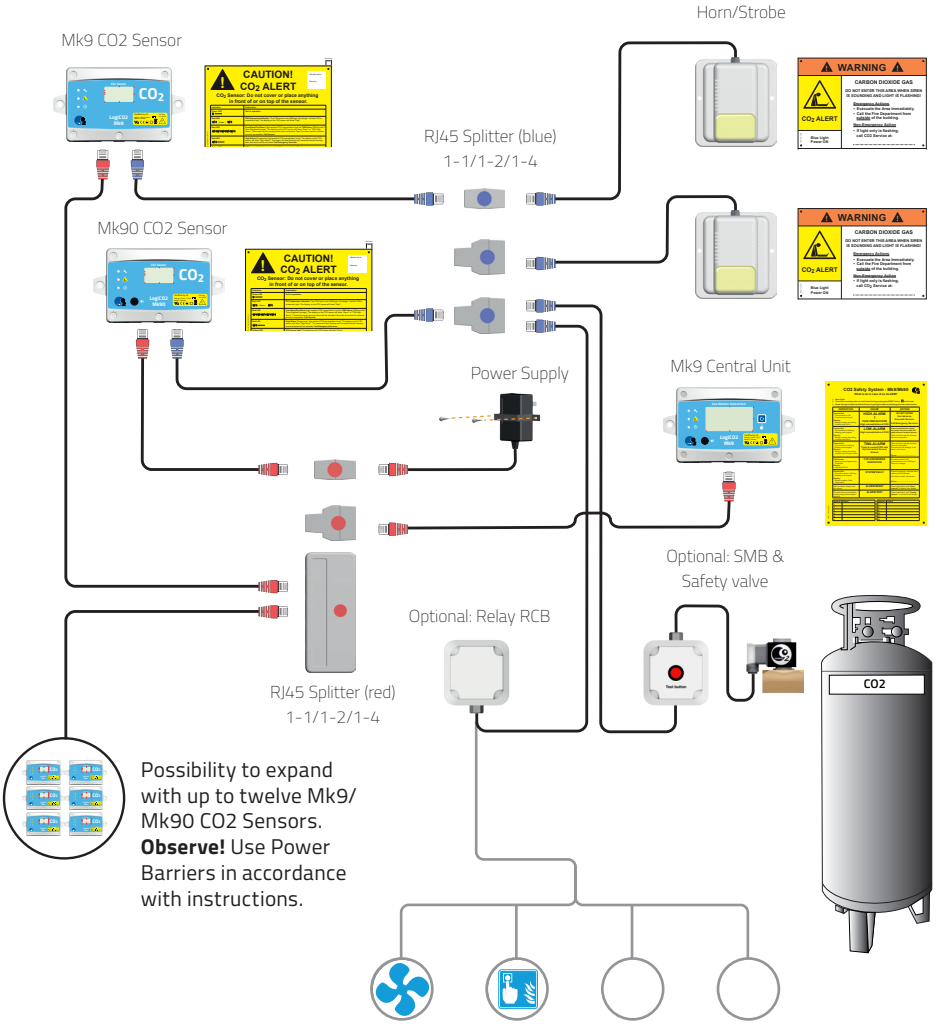


Hi alarm/Low alarm connectors Factory settings:

JP2 High alarm

Installation

The connection diagram below shows an example of how the SMB with safety valve can be installed to a CO2 Safety System (Mk9 and Mk90).



Annual function control of the safety valve

To test the safety valve, make sure that the indication light on the valve is ON, indicating that the valve is powered on and open.

Test the opening and closing of the valve by pressing the test button on the SMB connection box. The indication light on the valve should turn OFF and you should hear a clear clicking sound.



Annual function and installation check of the SMB and safety valve

Checklist SMB and safety valve	YES	NO
Is the SMB safety valve installed on the downside from the emergency safety valve?		
Is the indication light on the safety valve ON?		
Does the indication light on the safety valve turn ON and OFF when the test button is pressed?		
Does the valve make a clicking sound when the test button is pressed?		

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