# 9010/9020 SIL Control Unit **Quick Start Guide**



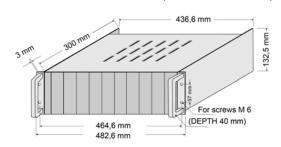
# **WARNING**

The quick start guide does not replace the operating manual. It is imperative that the operating manual be read and observed when using the device. In particular, the safety instructions, as well as the information for use, operation and maintenance of the device, must be carefully read and observed.

### 19 inch Rack Version - Mechanical installation



For screws M 6 (DEPTH 40 mm)

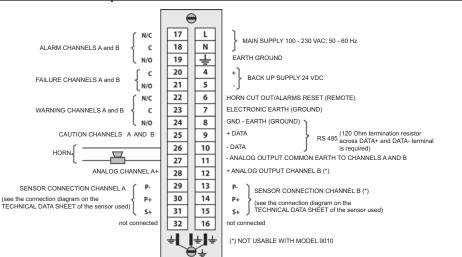


Rack for 5 modules (Panel cut out 246 x 133 mm)

279.5 mm

Rack for 10 modules (Panel cut out 448 x 133 mm)

### 19 inch rack - Module Backplane Terminal Connection



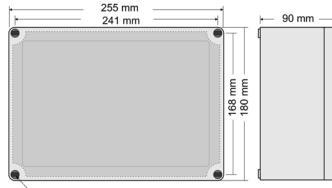
# Wall Mount version - Mechanical Installation

MSA

MSA

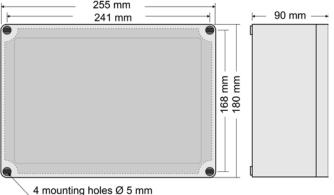
#### Wall mounted unit installation instruction:

- Drill the holes as shown below for the four fixing screws.
- (2) Remove the housing lid carefully. Watch the display cable being connected to the
- Fix the unit to the wall, by appropriate screws (M5 screws or 5 mm SPAX).
- Close the lid with existing screws.

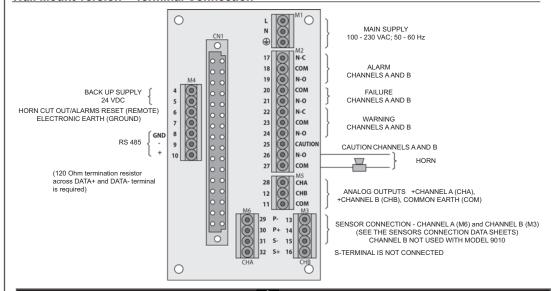


Wall mount, 9020 SIL

Wall mount, 9010 SIL



### Wall Mount version - Terminal Connection

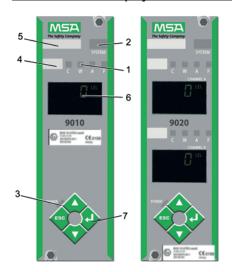


# **WARNING**

When opening the control unit housing, there is a risk of high voltage danger from relay contacts and main power supply. Only authorised persons should open the control unit when it is switched off and secured against unintentional switch-on. Before opening the housing, it must be confirmed that power is off for all poles.



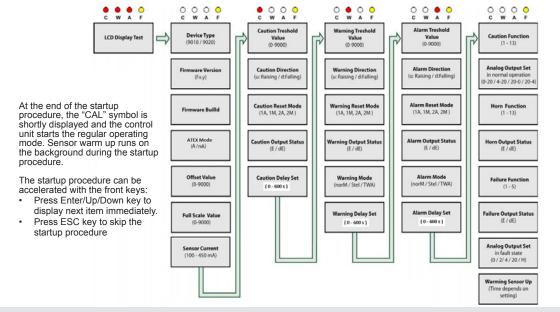
# **Front Panel and Display Information**





- 1 Status LEDs (red/yellow)
- 2 System Failure LED (yellow)
- 3 POWER LED(green)
- 4 Gas Information Tag
- 5 Site Information Tag
- 6 Display
- 7 Keypad
- 8 Measured value
- 9 Measuring units
- 10 Control Unit Status

# **Startup**



# **Failure Identification Codes**

Code Description

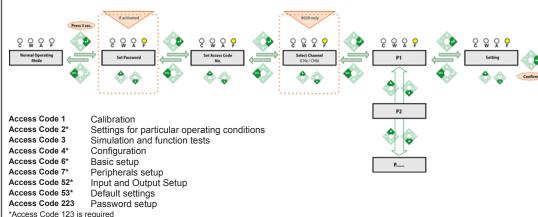
F1.1*	Detector supply current is too high	F6.2	External watchdog failure			
F1.2*	Detector supply voltage is too high	F7.1*	Digital output failure			
F1.3	Possible shortcut on detector side	F7.2	Digital output failure			
F1.4*	Default configuration has been loaded	F7.3	Digital output failure			
F1.5*	Transmitter does not provide a constant current	F8.1	Selftest failure			
F1.6*	Transmitter cosumes less current than it is set in Menu 4/P2.	F8.2	Selftest RAM 1 failure			
F1.7	Sensor current is turned off	F8.3	Selftest RAM 2 failure			
F1.8	Possible shortcut on detector side	F8.4	Selftest Flash failure			
F5.1	ADC convertor failure	F8.5	Selftest configuration failure			
F5.2	ADC Backup convertor failure	F8.6	Selftest CPU failure			
F5.3	ADC convertor failure	F8.7	Selftest clock failure			
F5.4	Sensor current cannot be set	F9.1	Settings were changed due ATEX mode			
F5.5	Testing voltage is too low	F9.2	Factory default values were loaded			
F5.6	Testing voltage is too high	F9.3	User default values were loaded			
F5.7	Transmitter supply voltage too high	F9.4	Factory/User default values cannot be loaded			
F5.8	Transmitter supply voltage too low	F9.5	User default values not saved			
F6.1	External watchdog was triggered	F9.6	Password not accepted			
*Failure message must be acknowledged by operator pressing UP or ENTER key on the front panel						

Code Description

# **Error Codes**

I	Code	Description	Code	Description
١	E1	Sensor sensitivity is too low	-d1	Input signal is below limit
١	E2	Sensor sensitivity is too high	EEEE	Input signal is over measuring range
١	E3	Sensor sensitivity is reduced (soon replacement must be expected)	LOU1*	External 24 VDC is too low
I	E4	Detector signal is out of optimal range (>300 mV)	LOU2*	Internal 24 VDC is too low
I	E10	Same value for ZERO and SPAN has been set	LOU3*	Controller supply is too high
١			LOU4*	Internal temperature is too low
١			LOU5*	Internal temperature is too high

#### Menu Access



Refer to the manual for detailed Access Code functions description.

NOTE: Please contact your local MSA representative if you have a problem with the unit setup or testing.