Description

CO_2 High Range Alarm is an Alarmbox for monitoring and alarming at leakage in CO_2-cooled cooling and cold stores.

The alarmbox is set with 2 alarm setpoints, so it will alarm in case of leakage and incipient problematic CO_2 level and another at high CO_2 concentration associated with danger. Furthermore a 12V backup supply can be connected to the alarm box and hereby ensure CO_2 monitoring and alarm in case of main supply outage. The alarmbox is also equipped with 2 potential free relays, which are drawn at to separate setpoints for alarm. You may connect e.g. external alarm lamps, rotating lights or external sounding devices to these relays if required.

We recommend using this alarmbox in combination with our CO2 Sensor High Range (49125).

For a detailed manual of alarm and complete alarm system with CO_2 sensor, please scan QR-code at the bottom of this product sheet.
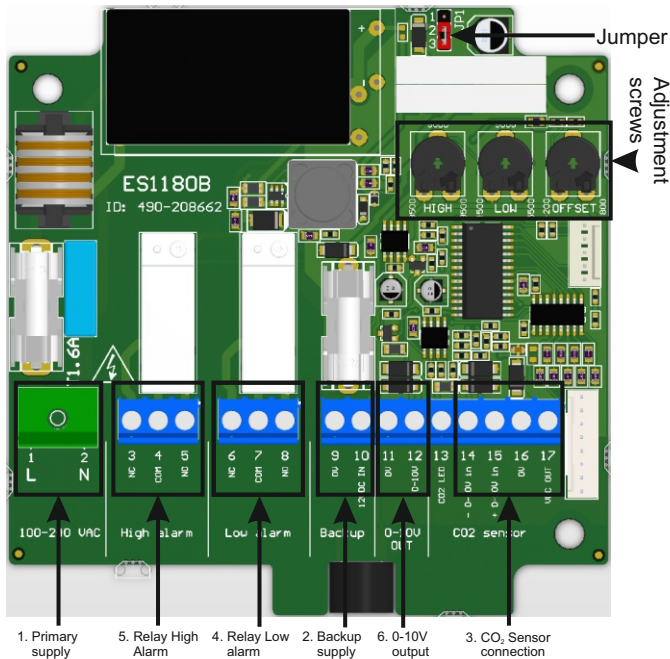
Warning

ESD-Sensitive when the lid is removed. Make sure to be ESD discharged before installation.

Contact hazard.
Beware of live parts (230V AC) in the device during installation and setting

Mounting

Must be mounted on a non-vibrating surface in a non-condensing environment. Do not place in direct sunlight. Note CO₂ High Range Alarm is IP 53.

Terminal Connections

1. Primary supply
5. Relay High Alarm
4. Relay Low alarm
2. Backup supply
6. 0-10V output
3. CO₂ Sensor connection

Connection Description

1. Primary supply. Phase conductor (L), Neutral conductor (N)
2. Backup supply0V (GND) 12VDC IN (11-15V DC)
3. Connection to CO_2 Sensor. -0-10V in (minus conductor), +0-10V in (positive conductor), 0V (GND), VDC OUT (12/13V DC out)
4. Potential free Relay draws at alarm LOW
5. Potential free Relay draws at alarm HIGH
6. 0-10V output. 0V (GND) 0-10V (positive conductor; 0V=0ppm, 10V=10.000ppm).

Jumper
Pos. 1-2: OFF. CO_2 sensor is not supplied by backup supply in case of failure on primary supply.
Pos. 2-3: ON. CO_2 sensor is supplied by backup supply in case of failure on primary supply.
Manufacturer setting is ON (pos. 2-3)

Adjustment Screws
On the PCB you find 3 adjustment screws.
HIGH: Setting the CO_2 ppm setpoint for triggering high alarm. Setpoint may be set between 8500 and 9500ppm.

LOW: Setting of the CO_2 ppm setpoint for triggering low alarm. Setpoint may be set between 4500 and 5500ppm.

OFFSET: Possibility to adjust the calibration CO_2 to take an unusual high or low CO_2 concentration for room into account when automatic calibration of CO_2 sensor is performed.

Alarm Overview

Supply/ Alarm mode	Alarm light	RunLED	Sound	Low Alarm	High Alarm
Primary supply OK, No CO_2 sensor connected	Failure	On	Off	NC	NC
Primary supply OK Setpoint LOW exceeded	Alarm	On	Off	NO	NC
Primary supply OK Setpoint HIGH exceeded	Alarm	On	On mute No	NO	NO
Primary supply not OK Backup supply for CO_2 OFF	Failure	Off	On Mute Yes	NO	NO
Primary supply not OK Backup supply for CO_2 ON Setpoint LOW exceeded	Alarm	Off	Off	NO	NC
Primary supply not OK Backup supply for CO_2 ON Setpoint HIGH exceeded	Alarm	Off	On mute No	NO	NO

Technical Specifications

Primary Supply:	100 - 240V AC 50-60Hz
Backup Supply:	12V DC min 500mA
Enclosure:	IP53
Dimensions (HxWxD):	120x122x55mm
Humidity:	0-80%RH non-condensating
Operating Temperature:	0ºC til +50ºC condension free
Sound Level:	>85 dBA @ 10cm
Relay:	8A Ac1 (min 10V, Max 250V AC)
Output Voltage for Sensor:	13V DC

CE

QR-kode for download of manual