

MDXi

Multi point detection unit

Continuous Monitoring
Exclusive Double Check Function
Remote Control, Modbus Output

The MDXi detection unit is a safety device, without common mode. It enables continuously monitoring and maintaining the essential safety functions: alarm, fault and measures in case of failure.

Adaptability

The MDXi unit fits all configurations of gas and flame detection. It can be used as a stand-alone detection unit to monitor production units or storage plants. It can also be integrated in a F&G cabinet to be the core detection system.

- Monitoring of up to 100 independent measurement channels
- Modular design with a measurement card for each detector and extension rack
- Standard analogue inputs compatible with all detectors (gas, flame, measures, emergency stop....)
- ModBus / JBUS and RS485 communication interface (optional)

Safety

MDXi is a high reliability detection unit with a modular design, without common mode. It meets all the safety requirements of gas detection systems. Auto-tests ensure optimum operation.

MDXi offers redundancy of power supply (230 V AC or 24 V DC) to enable a fail-safe operation in case of main power supply shut down.

Features

Safety operation of channel cards without common mode

System double check in case of scale overruns

Continuous monitoring of unit, wiring and detector integrity

Configurable from 1 to 100 measurement channels

4-20mA output per each channel

Digital RS485 ModBus output

Individual management of power supply and alarms by the channel module

Benefits

High safety level

UEL risk consideration

Fault detection

High adaptability level

Safe connection to PLC's

PLC's data transmission

High safety operation



Technical data

GENERAL

Mounting Rackable (19", 3U)
Inputs 4-20mA

PERFORMANCES

Capacity from 1 to 100 channels

- Main rack case Capacity 10 channels
- Extension rackcase Capacity 20 channels

Display Digital

- Number of channels
- Measures
- Units
- Alarm, fault, test

LED display Alarms and faults

Measurement range % LEL, ppm, % Vol.

Alarm thresholds 2 per measurement channel with increasing or decreasing values

OUTPUT SIGNALS

Analogue 4-20 mA per channel

Relay outputs 2 alarm relays and one default per channel

Digital RS485/422 ModBus or RS232

Function remote acknowledgement

ELECTRICAL

Power supply 115 or 230V AC (50/60Hz) and/or 24V DC
Other power supplies on request

ENVIRONMENTAL

Temperatures

- Storage -20°C to +50°C
- Operation 0°C to +40°C
- Humidity 90% RH (non-condensing)

APPROVALS

Conformities

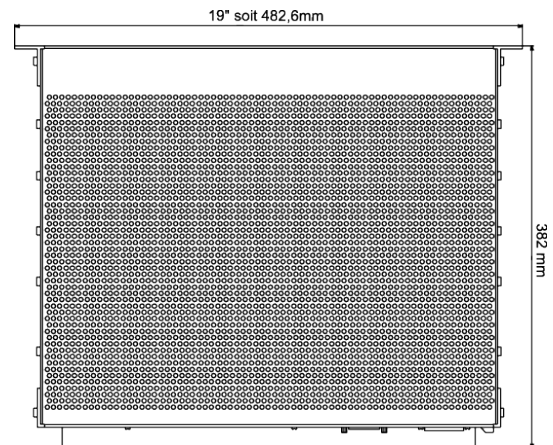
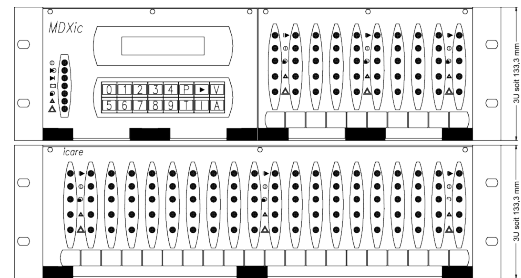
LOW TENSION 73/23 CEE, 93/68 CEE and ATEX directive
EN 61779-1:2000, EN 61779-4:2000, EN 61779-5:2000,
CEI EN 60065 (Ex CEI 1213), CEI EN 60335-1

ELECTROMAGNETIC COMPATIBILITY 89/336CEE
EN 50081-1, EN 50082-1

Approvals RINA, LLOYD'S, ABS, DNV, BV

HOUSING

Material Metallic
Weight 7.6 kg
Dimensions 19 inches, 3 U : 482,6 x 133,3 x 382 mm (l,w,d)



OPTIONS

Inputs 1-2mA
Outputs RS 485 ModBus

REFERENCES

MDXi Main rack case
MDXXT Extension rack case
PIE3540-00 4-20mA input card
PIE3540-01 1-2mA input card
PIE3540-02 1/2 Wheatstone bridge,
150mA input card
PIE3105 RS485 ModBus output card