DURTEX

Detectors for explosive gases using catalytic technology

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FS82426

DURTEX HC

Detector using catalytic technology for the detection of methane-natural gas, butane-propane and hydrogen. For small installations.

DURTEX HC PRO

Detector for explosive gases using catalytic technology. Available for a extensive list of gases

DURTEX X-HC PRO

Detector for explosive gases using catalytic technology with flameproof housing for use in explosive gas atmospheres and offering a high level of protection.

There is a version of the detector, also ATEX certified, offering a high level of protection and destined to be used, also, in explosive dust atmospheres.

LOM08ATEX2059X

CE 0163

⟨Ex⟩ II 2 G Ex db IIC T6 Gb

⟨Ex⟩ II 2 G   Ex db IIC T6 Gb
     II 2 D   Ex tb IIIC T85ºC Db

**Calibrated at factory with target gas.
Do not need to be recalibrated during initial
Startup of the installation**

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I-DURTEX-v08

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Characteristics

IP65 -polycarbonate-

**Flameproof housing
LOM08ATEX2059X**

2 housing formats:

> **IP65** –polycarbonate box- DURTEX HC & DURTEX HC PRO
> **Flameproof.** DURTEX X-HC PRO

2 communication formats:

> **RS485C addressable**, 4 wire connection, compatible with EUROSONDELCO and DURGAS control units. Up to 16 detectors can be installed in parallel in the same loop.
> **4-20mA**, 3 wire connection, compatible with any system provided with these inputs.

Detection range from 0 to 100% L.E.L.

Optical indicators for loop and sensor fault.

> Internal LED for DURTEX X-HC PRO (Flameproof housing)
> External LED for DURTEX HC & HC PRO

Selection of the gas to detect with a jumper (RS485C only). It incorporates a microprocessor for:

> Reprogramming the detector on the spot for detecting of other gases –no need to use gas-.

> Selecting among a large number of gases, allowing the user to keep stocks of calibrated detectors for different gases.

For 4-20mA detectors, the gas to detect must be previously indicated.

Characteristics

IP65
-polycarbonate-

Optional programmable alarm relay module (4-20mA).

Optional relay output (RS485C).

Sensor and compensator in different encapsulates, assuring a higher linearity and stability.

Low consumption (38mA at 24V), which allows the installation to have more detectors and a higher loop length. To ensure correct tension the use of supplementary power sources is advisable.

Wider voltage range (10V to 30V DC).

Detector with sintered filter (DURTEX HC PRO & DURTEX X-HC PRO).

Reusable adaptor, which makes maintenance costs considerably lower (DURTEX X-HC PRO).

Protection grade: IP65

Regulation code for explosive Atmosphere (gas/dust): Ex db IIC T6 Gb / Ex tb IIIC T85ºC Db

Flameproof housing LOM08ATEX2059X

Calibrated at factory with target gas. Do not need to be recalibrated during initial Startup of the installation.

Easy verifying and maintenance operations which can be done just by one operator.

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Installation

IP65
-polycarbonate-

Cabling:

RS485C: 4 wires. 2 x 1,5mm 2 x 0,25mm ø
4-20mA: 3 wires. Shield cable, 3 x 1,5mm ø

Cable diameter: 10,1-13mm^2

Maximum distance:

RS485C: 700m approx.
4-20mA: 400m approx.

Coverage area: 16m^2 approx.

Installation height: depends on the gas to detect (please consult).

Do not use these detectors -pellistors- in environments where there might be presence of hydrogen, fluorine, methyl chloride, trichloroethylene, sulphur dioxide, silicon vapors or sulphidric acid. The existence of these gases can damage the detector or inhibit its response.

LOM08ATEX2059X

CE 0163

⟨Ex⟩ II 2 G Ex db IIC T6 Gb

⟨Ex⟩ II 2 G   Ex db IIC T6 Gb
       II 2 D   Ex tb IIIC T85ºC Db

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Verifying and maintenance

DURTEX HC
DURTEX HC PRO

DURTEX X-HC PRO
LOM08ATEX2059X

Useful life at normal working conditions: 4 years

Make test once installed, using suitable gas testing bottles.

Calibrated at factory with target gas. Do not need to be recalibrated during initial Startup of the installation.

Zero output verifying. Make zero verifying once a year, and following the instructions from the installation & user manual.

Remember that DURTEX X-HC PRO – Flameproof housing – cannot be opened with tension and it is not allowed to make calibration adjustments at installation. According to the certification, calibration can only be done by the manufacturer, to whom detectors must be sent necessarily for calibration purposes.

Optional module and relay output

IP65
-polycarbonate-

DURTEX HC y DURTEX HC PRO

4-20mA: programmable relay module by the user.
It must be required <u>when placing the order</u>.

RS485: relay output with parameters programmed at factory.
It must be required <u>when placing the order</u>.

LOM08ATEX2059X

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⟨Ex⟩ II 2 G Ex db IIC T6 Gb

⟨Ex⟩ II 2 G   Ex db IIC T6 Gb
    II 2 D   Ex tb IIIC T85ºC Db
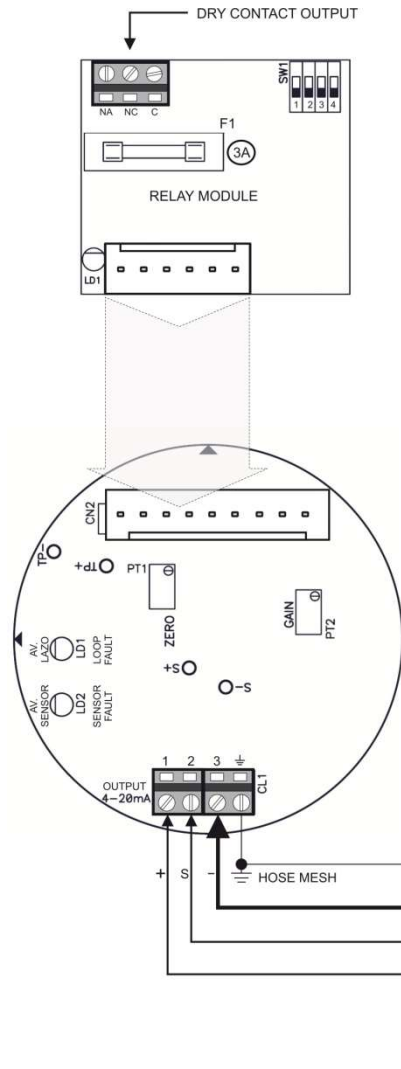
DURTEX X-HC PRO

4-20mA: relay module programmable by the user.
It must be required <u>when placing the order or afterwards.</u>

RS485: relay output with parameters programmed at factory.
It must be required <u>when placing the order</u>.

Relay module and relay output: PARAMETERS

DURTEX X-HC PRO
LOM08ATEX2059X

DEFAULT PARAMETERS

Activated, instantaneous – no retard -
Alarm at 20% L.E.L.

4-20mA format: RELAY MODULE

PROGRAMMABLE PARAMETERS

Initial idle status: activated relay without an alarm or deactivated relay.

Relay disconnection type. Instantaneous or retarded relay disconnection.

Relay disconnection retard. Selection of retard or instantaneous disconnection.

Alarm level for relay activation. It allows to choose between 2 actuation levels: 20% or 50% L.E.L.

RS485C format: RELAY OUTPUT

Programmed at factory with default parameters.

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