

## Instruction Manual LDX2



### Apparatus



The isolation/supply unit LDX2 is an auxiliary electrical apparatus to which only approved intrinsically safe Höntzsch VA and FA sensors may be connected. The safety-related peak values of these sensors must comply with the technical data for the LDX2.



### 1. Safety precautions

Please read this Instruction Manual carefully before initial operation!  
Non-compliance can cause an explosion!

Operation of the LDX2 is permissible outside the explosive atmosphere only and at an ambient temperature of max. +60 °C. The permissible supply voltage can be found on the type plate.

### 2. Technical Data

EC type examination certificate: **IBExU 03 ATEX 1149**

Marking



Explosion protection: **[Ex ia] IIC/IIB**

#### 2.1 Electrical Data

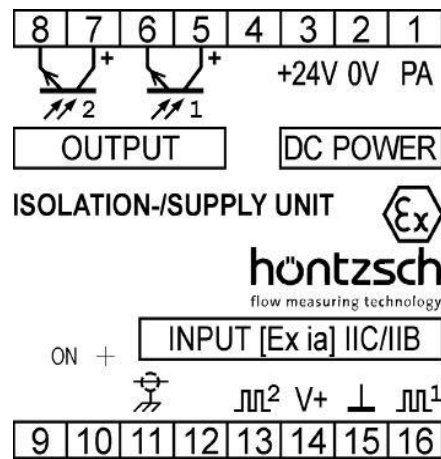
Nominal voltage:	$U_N = 24 \text{ VDC} \pm 20 \%$
Rated voltage:	$U_m = 265 \text{ V}$
Supply current circuit:	$U_0 \leq 10.6 \text{ V}$ , $I_0 \leq 38 \text{ mA}$ , $P_0 \leq 220 \text{ mW}$ , $R_i = 646 \Omega$ trapezoid characteristic $C_i = 0$ $L_i = 0$
Signal circuit:	$U_0 \leq 10.6 \text{ V}$ , $I_0 \leq 1.2 \text{ mA}$ , $P_0 \leq 3.2 \text{ mW}$ , $R_i = 9 \text{ k}\Omega$ linear characteristic $C_i = 0$ $L_i = 0$

## Maximum permissible values for the external capacitance and inductance:

Category		ia	
Gas group		IIB	IIC
Supply current circuit + signal circuit	C <sub>0</sub>	16.2 µF	2.32 µF
	L <sub>0</sub>	0 mH	0 mH
Supply current circuit + signal circuit	C <sub>0</sub>		1.5 µF
	L <sub>0</sub>		0.15 mH
Supply current circuit + signal circuit	C <sub>0</sub>	4 µF	0.5 µF
	L <sub>0</sub>	1 mH	1 mH

## Terminal connections:

PA/PE connection	PA	= 1
Power supply	0 V	= 2
	24 V	= 3
Output 1	Optocoupler +	= 5
	Optocoupler -	= 6
Output 2	Optocoupler +	= 7
	Optocoupler -	= 8



## Terminal connections:

sensor screen	⚡	= 11
sensor signal 2	⚡ <sup>2</sup>	= 13
sensor power supply	V+	= 14
reference potential	⊥	= 15
sensor signal 1	⚡ <sup>1</sup>	= 16

not assigned, free: 4, 9, 10, 12



## 3. Installation

The current European Specifications for Assembly, the recognised standards of good practice, User Information FA/VA and this Instruction Manual apply.

Connect the designated terminals for PA/PE connection to the mains PA/PE!



## 4. Maintenance

Any maintenance or repair work to the equipment is to be carried out solely by Höntzsch GmbH & Co. KG.

**Declaration of conformity, Declaration of Incorporation**

**We,** Höntzsch GmbH & Co. KG  
Gottlieb-Daimler-Str. 37  
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**bearing sole responsibility, hereby declare that the product**

**Isolation-/Supply Unit Type**

**LDX2**

**with EC-Type-Examination certificate IBExU 03 ATEX 1149**

**referred to by this declaration is in conformity with the following standards or normative documents:**

<b>Provisions of the directive</b>	<b>No. and date of issue of the standards</b>
<b>2014/34/EU:</b> Equipment and protective systems for use in potentially explosive atmospheres	EN 60079-0: 2018 EN 60079-11: 2012 EN 60079-26: 2015
<b>2014/30/EU:</b> Electromagnetic compatibility	EN 61000-6-4: 2007 + A1: 2011 EN 61000-6-2: 2006 + Ber1: 2011

**One or more of the standards referred to in the EC type examination certificate have been replaced by new versions. We declare that we are also in agreement with these new versions.**



Waiblingen, 25.06.2021

Jürgen Lempp / Managing Director

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Subject to alteration