

CE INSTALLATION INSTRUCTIONS

Publication No. 1831 / UPDATE 01.22 / Mat-No. 3001880



DEHNconnect DCO SD2 MD EX 24

IECEx DEK 12.0076X
Ex ia [ia Ga] IIC T4/T5/T6 Gb
DEKRA 12A TEX0261 X
II 2(1) G Ex ia [ia Ga] IIC T4/T5/T6 Gb

Standards for ATEX:
EN 60079-0: 2012
EN 60079-11: 2012
EN 60079-26: 2007

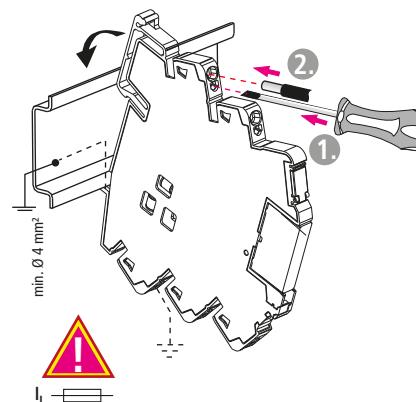
for IECEx:
IEC 60079-0: 2011
IEC 60079-11: 2011
IEC 60079-26: 2006

Connection to intrinsically safe circuits with:
 $U_i = 30$ V,
 $I_i = 500$ mA
 C_i negligibly small
 L_i negligibly small

Ambient temperature range:
-40°C ... +30°C for temperature class T6
-40°C ... +80°C for temperature class T5
-40°C ... +80°C for temperature class T4

1 Mounting / Montage

DEHNconnect DCO SD2 MD EX 24



Pre-fuse the signal circuit, if required!
The rated current is equal to the nominal current in the signal circuit, max. I_L tripping characteristic: medium time lag (M)

ggf. Signalkreis vorsichern!
Bemessungsstrom entspricht Nennstrom im Signalkreis, max. I_L Auslösecharakteristik: Mittelträge (M)

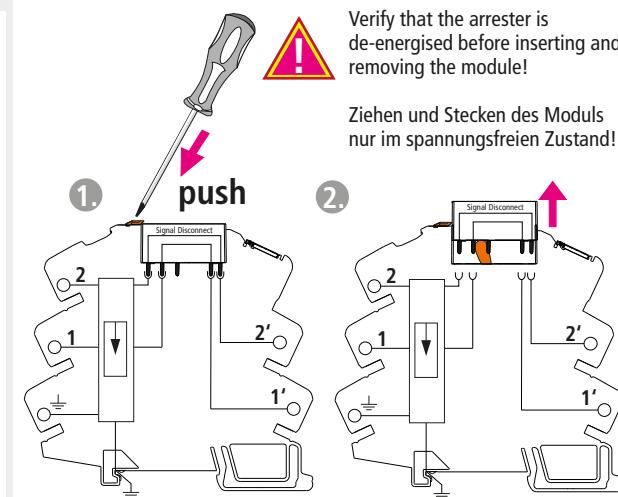
2 Technical Data / Technische Daten

9°C	$-40^{\circ}\text{C} \dots +80^{\circ}\text{C}$				
IP-Code	00				
	9-10 mm / 0.35-0.39 in				
2, 2', 1, 1'	<table border="1"> <tr> <td>min.</td> <td>0,34 mm² (AWG 22)</td> </tr> <tr> <td>max.</td> <td>2,5 mm² (AWG 14)</td> </tr> </table>	min.	0,34 mm ² (AWG 22)	max.	2,5 mm ² (AWG 14)
min.	0,34 mm ² (AWG 22)				
max.	2,5 mm ² (AWG 14)				

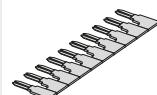
3 Signal Disconnection / Signaltrennung

Verify that the arrester is de-energised before inserting and removing the module!

Ziehen und Stecken des Moduls nur im spannungsfreien Zustand!



Accessories / Zubehör



jumper bar
KB 10 DCO RK
No. 919 880

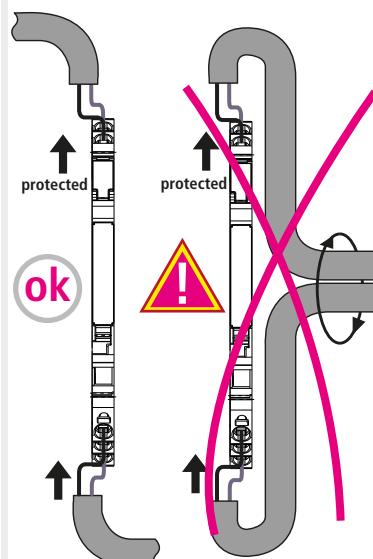


Labelling system
LS 1 50 H DCO
No. 917 977

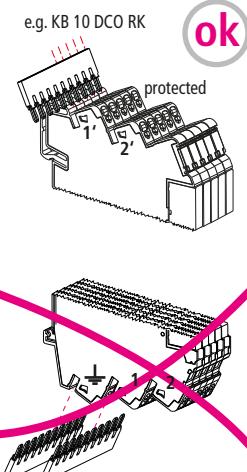


Labelling system
LS 1 50 V DCO
No. 917 976

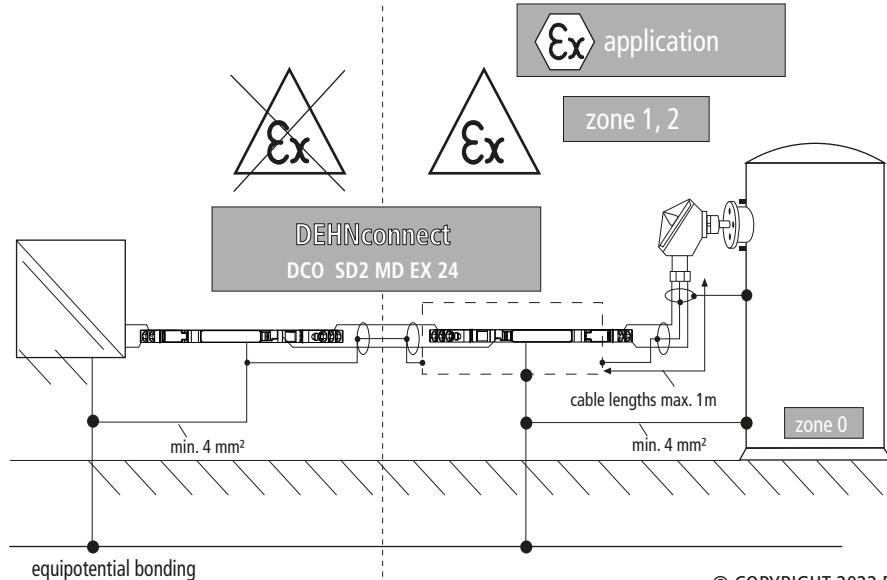
4 Cable Routing / Leitungsführung



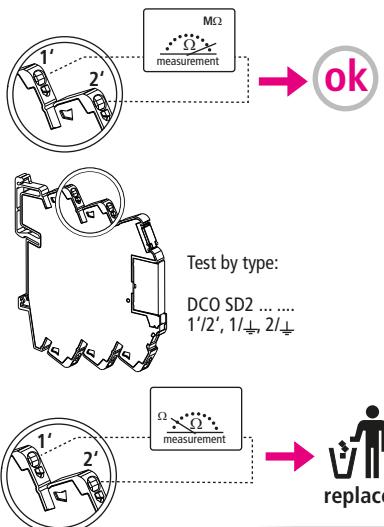
5 Wire link by means of jumper bar / Drahtverbindung mit Kammbrücke



6 Ex-zone / Ex Zone



7 Testing / Test



Wskazówki
bezpieczeństwa

PL

Do połączenia i montażu upoważnieni są wyłącznie fachowcy elektrycy. Obowiązkiem jest przestrzeganie przepisów krajowych i bezpieczeństwa pracy. Przed przystąpieniem do montażu należy urządzenie skontrolować pod względem ewentualnych uszkodzeń zewnętrznych lub innych usterek. Eksplatacja urządzenia dozwolona jest wyłącznie z uwzględnieniem podanych i opisanych warunków zawartych w instrukcji montażu. Obejmuje przekraczające wartości podane w instrukcji mogą spowodować uszkodzenie samego urządzenia jak i podłączonych układów elektrycznych. Manipulacja i zmiany przeprowadzane na urządzeniu grożą wygaszeniem prawa gwarancji. Moduł rozdzielający wolno wyciągać i wciskać tylko, jeśli odgromnik nie znajduje się pod napięciem.

Specjalne warunki

W celu ochrony przed elektrostatycznym naładowaniem należy powierzchnie zewnętrzne wyczyścić wilgotną szmatką. Przy montażu urządzenia należy przestrzegać zachowania 50 mm odstępu (dalmierz nitkowy) od zacisków zabezpieczających. Niniejsze urządzenie robocze wg wskazań producenta może być stosowane tak w 1 strefie jak i w 2 strefie 2. Do strefy 0 można dotrzeć obwód czujnikowy. Jest to odpowiednikiem oznakowania II 2(1)G.

Ochronę przepięciową montować w metalowej obudowie. Przy zastosowaniu w obszarach z palnym pyłem należy wybrać rodzaj obudowy z ochroną typu IP6X.

Przewody / kable w burze metalowej należy układać otoczone piaszczem metalowym, izolacyjnym lub umieszczone w burze metalowej.

Wszystkie części metalowe w obszarze z zagrożeniem eksplozji połączyć z przewodem kompensacji napięcia. Połączenie pomiędzy ochroną przepięciową i miejscowym uziemieniem musi wykazywać średnicę co najmniej 4 mm. Wszystkie połączenia z uziemieniem muszą być zabezpieczone.

Urządzenie zabezpieczające można stosować w systemów Profibus-PA analogicznie jak w modelu-FISCO w przypadku utrzymywania wartości: U (subscript: 0) = 015 V i (subscript: 0) = 128 mA.

Wskazówki bezpieczeństwa dla zastosowania jako ochrona przepięciowa w strefie 0 (najlepsze informacje należy przestrzegać w przypadkach gdy przewód uktadany jest w strefie 0 (kategoria 1):

- długość przewodu pomiędzy ochroną przepięciową i strefą E0 nie może przekraczać 1 m.
- przewód może być układany w strefie 0.
- przewód pomiędzy ochroną przepięciową i strefą 0 należy układać z uwzględnieniem ochrony przed wyładowaniami atmosferycznymi.

W obwodzie prądowym można zastosować elementy przeznaczone dla rodzaju ochrony zapłonowej - Ex ia.

DEHNconnect DCO SD2 MD EX 24

Przyłączenie do wewnętrznie zabezpieczonego obwodu prądowego z:

$$\begin{aligned}U_i &= 30 \text{ V} \\I_i &= 500 \text{ mA} \\C_i \text{ znikomo mała} &< 5\text{nF} \\L_i \text{ znikomo mała} &< 10 \mu\text{H}\end{aligned}$$

Informazioni di
sicurezza

IT

L'aggiacciamiento ed il montaggio dell'apparecchiatura possono essere effettuati solo da personale qualificato. Sono da osservare le prescrizioni e le disposizioni di sicurezza nazionali.

Prima del montaggio, controllare che l'apparecchiatura non presenti danneggiamenti all'esterno. Nel caso in cui dovesse essere constatato un danneggiamento o un altro difetto, non montare l'apparecchiatura.

L'utilizzo dell'apparecchiatura è consentito esclusivamente in presenza delle condizioni menzionate ed indicate in queste istruzioni sul montaggio. In caso di carico superiore ai valori dimostrati, l'apparecchiatura e l'impianto elettrico collegativi possono subire gravi danneggiamenti. Interventi o modifiche all'apparecchiatura comportano la perdita del diritto di garanzia. Il modulo di sezionamento può essere inserito e disinserito solo se lo scaricatore non è sotto tensione.

Condizioni particolari

Per evitare cariche elettrostatiche, le superfici devono essere pulite con un panno umido. Durante il montaggio dell'apparecchio, mantenere una distanza di 50 mm (misura del filo) dai morsetti a sicurezza intrinseca. In base ai dati del produttore, questo mezzo di produzione può essere impiegato nella Zona 1 e nella Zona 2. Il circuito elettrico del sensore può essere introdotto nella Zona 0, conformemente all'indicazione II 2(1)G.

La protezione dalla sovratensione va installata in una cassa metallica o in una cassa certificata per l'utilizzo dell'apparecchio. In caso d'utilizzo in zone con polvere infiammabile, utilizzare il tipo di protezione della cassa IP6X.

Fili / cavi devono essere posati con rivestimenti di metallo, schermatura o in tubi di rivestimento.

Tutte le parti metalliche in zona soggetta a pericolo d'esplosione devono essere collegate con il filo di compensazione di potenziale.

Il collegamento tra la protezione da sovratensione e la massa locale deve presentare una sezione minima di 4 mm². Tutti i collegamenti a massa devono essere protetti. L'apparecchio di protezione può essere usato per i sistemi Profibus-PA conformemente il modello FISCO se sono rispettati U (subscript: 0) = 15 V e I (subscript: 0) = 128 mA.

Istruzioni di sicurezza per l'utilizzo come protezione da sovratensione nella zona 0 (queste indicazioni devono essere osservate solo se il filo viene condotto nella zona 0 (categoria 1):

- Il filo tra la protezione da sovratensione e la zona 0 può avere una lunghezza massima di 1 m.
- Il filo può essere introdotto nella zona 0.
- Il filo tra la protezione da sovratensione e la zona 0 deve essere protetto da induzioni di fulmini.

Nel circuito elettrico possono essere utilizzati solo componenti determinati per il tipo di protezione di accensione Ex ia.

DEHNconnect DCO SD2 MD EX 24

Allacciamento a circuiti elettrici con sicurezza intrinseca con:

$$\begin{aligned}U_i &= 30 \text{ V} \\I_i &= 500 \text{ mA} \\C_i \text{ trascurabile} &< 5\text{nF} \\L_i \text{ trascurabile} &< 10 \mu\text{H}\end{aligned}$$

Informations de
sécurité

FR

Montage et branchement de l'appareil à faire effectuer exclusivement par un électricien qualifié. Respecter les normes et les prescriptions de sécurité en vigueur localement.

Avant montage, procéder à un contrôle visuel extérieur de l'appareil. Ne pas monter celui-ci en cas de dommage manifeste ou si tout autre défaut est présent.

La mise en œuvre de l'appareil n'est autorisée que pour la destination et aux conditions présentées et explicitées dans les présentes instructions de service. Des charges non comprises dans les plages de valeurs indiquées pourront abîmer l'appareil ainsi que les matériaux électriques qui lui sont raccordés.

Toute revendication en garantie sera exclue dans le cas d'une intervention sur l'appareil ou d'une transformation de celui-ci.

Le module de séparation ne peut être (dé)branché que si le parasurtenseur est hors tension.

Conditions particulières

Pour éviter une décharge électrostatique, procéder au nettoyage de surface avec un chiffon humide.

Lors du montage de l'appareil, respecter un intervalle de 50 mm (cote du brin) aux bornes à sécurité intrinsèque. Cet appareil peut être monté en zone 1 ou en zone 2 conformément aux indications du fabricant. Le circuit électrique du senseur peut être entré en zone 0. Cela correspond à la caractéristique II 2(1)G.

La protection contre la surtension va être installée dans une boîte métallique ou une boîte certifiée comme adaptée à l'utilisation de l'appareil. Appliquer le type de protection IP6X pour la boîtier en cas d'utilisation dans un local à poussières inflammables.

Toutes les pièces métalliques situées dans les zones à risque de déflagration sont à raccorder à la ligne de compensation de potentiel.

Section minimale du câble de raccordement entre parasurtension et masse locale = 4 mm². Tous les raccordements à la masse doivent être protégés.

Le protecteur pourra être monté sur des systèmes bus professionnels PA conformes au modèle FISCO, si U (subscript: 0) = 15 V et I (subscript: 0) = 128 mA sont respectés.

Consignes de sécurité pour l'utilisation en tant que protection contre les surtensions en zone 0 (ne tenir compte de ces indications que si la ligne est posée en zone 0 - catégorie 1):

- le filo tra la protezione da sovratensione e la zona 0 può avere una lunghezza massima di 1 m.
- il filo può essere introdotto nella zona 0.
- il filo tra la protezione da sovratensione e la zona 0 deve essere protetto da induzioni di fulmini.

Nel circuito elettrico possono essere utilizzati solo componenti determinati per il tipo di protezione di accensione Ex ia.

DEHNconnect DCO SD2 MD EX 24

Branchement sur un circuit électrique à sécurité intrinsèque présentant les caractéristiques suivantes :

$$\begin{aligned}U_i &= 30 \text{ V} \\I_i &= 500 \text{ mA} \\C_i \text{ négligeable} &< 5\text{nF} \\L_i \text{ négligeable} &< 10 \mu\text{H}\end{aligned}$$

Consignes de sécurité

FR

The device may only be connected and installed by an electrically skilled person. National standards and safety regulations must be observed.

The device must be checked for external damage prior to installation. If any damage or other deficiencies are found, the device must not be installed.

Its use is only admissible within the conditions shown and stated in the present installation instructions. The device and the equipment connected to can be destroyed by loads exceeding the values stated. Opening or tampering of the device invalidates the warranty.

Verify that the arrester is de-energised before inserting and removing the module.

Special Conditions

The surface of the unit should be cleaned with a humid cloth in order to prevent electrostatic charging. When installing the unit, a spacing of at least 50 mm to the intrinsically safe terminals must be left. According to the indications of the manufacturer, this device can be used within zone 1 or zone 2. The sensor circuit can be led into zone 0. It corresponds to II 2(1)G.

The surge protective device has to be installed into a metal housing or into a housing, which is certified for being used for the devices involved. If it is used in areas with flammable dust, IP6X housings have to be used. Leads or cables have to be laid with metal coating, shielded or within a metal conduit.

All metal parts within the explosive area have to be connected with the equipotential bonding conductor.

The connection between the surge protective device and local ground must have a min. cross section of 4 mm². All connections with the ground must be backed up.

The protective device can be used in Profibus-PA systems in accordance with the FISCO model, if the values of U₀ = 15 V and I₀ = 128 mA are observed.

Safety instructions for use as a surge protective device in zone 0 (these instructions must only be observed, if the conductor is led into zone 0 (category 1):

- The conductor between surge protective device and zone 0 may have a max. length of 1m.
- The conductor can be led into zone 0.
- The conductor between surge protective device and zone 0 must be installed to be protected against interferences deriving from lightning.

The only components which can be used in the circuit are those designed for Ex ia.

DEHNconnect DCO SD2 MD EX 24

Connection to intrinsically safe circuits with:

$$\begin{aligned}U_i &= 30 \text{ V} \\I_i &= 500 \text{ mA} \\C_i \text{ negligibly small} &< 5\text{nF} \\L_i \text{ negligibly small} &< 10 \mu\text{H}\end{aligned}$$

Safety Instructions

GB

Sicherheitshinweise

DE

Der Anchluss und die Montage des Gerätes darf nur durch eine Elektrofachkraft erfolgen. Die nationalen Vorschriften und Sicherheitsbestimmungen sind zu beachten. Vor der Montage ist das Gerät auf äußere Beschädigung zu kontrollieren. Sollte eine Beschädigung oder ein sonstiger Mangel festgestellt werden, darf das Gerät nicht montiert werden. Der Einsatz des Gerätes ist nur im Rahmen der in dieser Einbauanleitung genannten und gezeigten Bedingungen zulässig. Bei Belastungen, die über den ausgewiesenen Werten liegen, können das Gerät sowie die daran angeschlossenen elektrischen Betriebsmittel zerstört werden. Eingriffe und Veränderungen am Gerät führen zum Erlöschen des Gewährleistungsanspruches. Das Ziehen und Stecken des Trennmoduls darf nur im spannungsfreien Zustand des Ableiters erfolgen.

Besondere Bedingungen

Zur Vermeidung von elektrostatischen Aufladungen sind die Oberflächen mit einem feuchten Tuch zu reinigen. Beim Einbau des Gerätes ist darauf zu achten, dass zu den eigensicheren Klemmen ein Abstand von 50 mm (Fadenmaß) eingehalten wird. Dieses Betriebsmittel kann nach Herstellerangaben in der Zone 1 bzw. Zone 2 eingesetzt werden. Der Sensorstromkreis darf in die Zone 0 eingeführt werden. Entspricht der Bezeichnung II 2(1)G.

Der Überspannungsschutz ist in einem metallischen Gehäuse oder in einem für den Geräteeinsatz entsprechend zertifizierten Gehäuse zu installieren. Bei der Verwendung in Bereichen mit brennbaren Staub ist die Gehäuseschutzart IP6X zu wählen. Leitungen / Kabel sind mit Metallmantel, Schirmung oder in Metallrohr zu verlegen.

Alle metallischen Teile im explosionsgefährdeten Bereich sind mit der Potentialausgleichleitung zu verbinden. Die Verbindung zwischen Überspannungsschutz und der örtlichen Masse muss einen Mindestquerschnitt von 4 mm² aufweisen. Alle Masseverbindungen müssen gesichert sein.

Das Schutzgerät kann in Profibus-PA-Systemen entsprechend dem FISCO-Modell eingeschalten werden, wenn U₀ = 15 V und I₀ = 128 mA eingehalten werden.

Sicherheitshinweise für den Einsatz als Überspannungsschutz in Zone 0 (Diese Angaben sind nur zu beachten, wenn die Leitung in die Zone 0 (Kategorie 1) geführt wird):

- Die Leitung zwischen Überspannungsschutz und Zone 0 darf maximal 1 m lang sein.
- Die Leitung darf in Zone 0 eingeführt werden.
- Die Leitung zwischen Überspannungsschutz und Zone 0 muss so errichtet werden, damit sie gegen Blitzbeeinflussung geschützt ist.

Im Stromkreis dürfen nur Komponenten verwendet werden, die für die Zündschutzart Ex ia bestimmt sind.

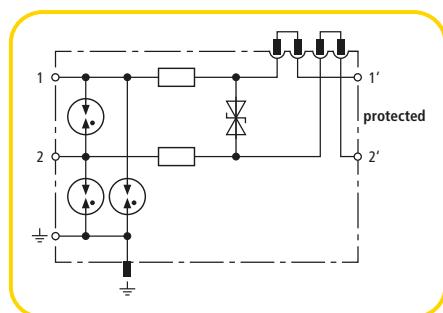
DEHNconnect DCO SD2 MD EX 24

Anchluss an eigensicheren Stromkreis mit:

$$\begin{aligned}U_i &= 30 \text{ V} \\I_i &= 500 \text{ mA} \\C_i \text{ vernachlässigbar klein} &< 5\text{nF} \\L_i \text{ vernachlässigbar klein} &< 10 \mu\text{H}\end{aligned}$$

CE INSTALLATION INSTRUCTIONS

DCO SD2 MD EX 24 Part No. 917 960

Basic circuit diagrams / Prinzipschaltbilder**UL requirements**

1. These protectors are intended for ordinary indoor use on communication loop circuits that are isolated from the Public Switched Telephone Network.
2. The DEHNconnect protectors shall be secured to a compatible Din Rail ground bar using the methods described in this instruction.
3. Proper grounding continuity shall be determined.
4. Please install the protectors in accordance with modules with the applicable requirements of the National Electrical Code, Article 800 or other applicable local codes if installed in the U.S.

Tabulation Strike voltage in accordance with UL 497 B (Protectors for Data Communication and Fire Alarm Circuits)

		Voltage breakdown 100 Volts / sec		Impulse voltage 100 Volts / μ sec	
Type	Part No.	Line to Line		Line to Ground	
DCO SD2 MD EX 24	917 960	min. 37 V	max. 52 V	min. --	max. --

< 1000

ATEX certificate



DEKRA



CERTIFICATE

EC-Type Examination

- (1) Equipment and protective systems intended for use in potentially explosive atmospheres - Directive 94/9/EC
- (2) EC-Type Examination Certificate Number: DEKRA 12ATEX0261 X Issue Number: 1

- (3) Equipment: Surge suppression device DEHNconnect Type DCO SD2 MD EX 24
- (4) Manufacturer: DEHN + SÖHNE GmbH + Co. KG.

- (5) Address: Hans-Dehn-Straße 1, D-92318 Neumarkt / Opf., Germany

(6) This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(7) DEKRA Certification B.V., notified body number 0344 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the directive.

The examination and test results are recorded in confidential test report number NL/DEK/ExTR12.0076/xx.

Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0 : 2012

EN 60079-11 : 2012

EN 60079-25 : 2007

If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.

This EC-Type Examination Certificate relates only to the design, examination and tests of the specified equipment according to the Directive 94/9/EC. Further requirements of the directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate.

The marking of the equipment shall include the following:



II 2(1) G Ex ia [ia Ga] IIC T4,T5,T6 Gb

This certificate is issued on 7 January 2013 and, as far as applicable, shall be revised before the date of cessation of presumption of conformity of (one of) the standards mentioned above as communicated in the Official Journal of the European Union.

DEKRA Certification B.V.

C.G. van Es
Certification Manager

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DEKRA Certification B.V. Utrechtseweg 310, 6812 AR Arnhem P.O. Box 5185, 6802 ED Arnhem The Netherlands
T +31 26 3 56 20 00 F +31 26 3 52 58 00 www.dekra-certification.com Registered Arnhem 09085396

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(13) **SCHEDULE**

- (14) to EC-Type Examination Certificate DEKRA 12ATEX0261 X

Issue No. 1

(15) **Description**

The surge suppression device DEHNconnect Type DCO SD2 MD EX 24 serves as transient suppressor in the lines of intrinsically safe circuits.

Ambient temperature range: -40 °C to +80 °C for temperature class T4,

-40 °C to +80 °C for temperature class T5,

-40 °C to +30 °C for temperature class T6.

Electrical data

Module input circuits (terminals X1 and X2):
in type of protection intrinsic safety Ex ia IIC, for connection to a certified intrinsically safe circuit,
with the following maximum values:
 $U_i = 30 \text{ V}$; $I_i = 500 \text{ mA}$; $P_i = \text{any}$; $C_i = 0 \text{ nF}$; $L_i = 0 \text{ mH}$;

or for connection to a certified intrinsically safe circuit or a circuit in accordance with FISCO, with
the following maximum values:
 $U_i = 17,5 \text{ V}$; $I_i = 380 \text{ mA}$; $P_i = 5,32 \text{ W}$; $C_i = 0 \text{ nF}$; $L_i = 0 \mu\text{H}$.

Module output circuits (terminals X1' and X2'):
The values of U_o , I_o and P_o are determined by the parameters of the circuit(s) to which the
DEHNconnect Type DCO SD2 MD EX 24 is connected.

Installation instructions

The instructions provided with the equipment shall be followed in detail to assure safe operation.
No. NL/DEK/ExTR12.0076/xx.

(17) **Special conditions for safe use**

The dielectric strength of at least 500 V of the intrinsically safe circuits of the surge suppression
device DEHNconnect Type DCO SD2 MD EX 24 is limited only by the overvoltage protection.
Because the enclosure is made of plastic, electrostatic charges on the enclosure shall be avoided.

For ambient temperature range, see (15).

(18) **Essential Health and Safety Requirements**

Covered by the standards listed at (9).

(19) **Test documentation**

As listed in Test Report No. NL/DEK/ExTR12.0076/xx.

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Form 100
Version 2 (2011-05)

IECEx Certificate of Conformity

IECEx Certificate of Conformity	
INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres <small>for rules and details of the IECEx Scheme visit www.iecex.com</small>	
Certificate No.:	IECEx DEK 12.0076X
Status:	Current
Date of Issue:	2013-01-07
Applicant:	DEHN + SÖHNE GmbH + Co. KG Hans-Dehn-Straße 1 92318 Neumarkt/Opf Germany
Electrical Apparatus: Optional accessory:	Surge suppression device DEHNconnect Type DCO SD2 MD EX 24
Type of Protection:	Ex i
Marking:	Ex ia [Ga] IIC T4...T6 Gb
Approved for issue on behalf of the IECEx Certification Body:	C.G. van Es
Position:	Certification Manager
Signature: (for printed version)	
Date:	2013-01-07
<p>1. This certificate and schedule may only be reproduced in full. 2. This certificate is not transferable and remains the property of the issuing body. 3. The status and authenticity of this certificate may be verified by visiting the Official IECEx Website.</p>	
Certificate issued by:	
DEKRA Certification B.V. Utrechtseweg 310 6812 AR Arnhem The Netherlands	

IECEx Certificate of Conformity	
INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres <small>for rules and details of the IECEx Scheme visit www.iecex.com</small>	
Certificate No.:	IECEx DEK 12.0076X
Date of Issue:	2013-01-07
Issue No.:	0
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Manufacturer:	DEHN + SÖHNE GmbH + Co. KG Hans-Dehn-Straße 1 92318 Neumarkt/Opf Germany
Additional Manufacturing location(s):	
<p>This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.</p>	
STANDARDS:	The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:
IEC 60079-0 : 2011	Explosive atmospheres - Part 0: General requirements Edition: 6.0
IEC 60079-11 : 2011-06	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i" Edition: 6.0
IEC 60079-26 : 2006	Explosive atmospheres - Part 26: Equipment with equipment protection level (EPL) Ga Edition: 2
<p><i>This Certificate does not indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.</i></p>	
<p>TEST & ASSESSMENT REPORTS: A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in</p>	
Test Report:	NL/DEK/EXTR12.0076/00
Quality Assessment Report:	NL/DEK/QAR12.0084/00

IECEx Certificate of Conformity	
INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres <small>for rules and details of the IECEx Scheme visit www.iecex.com</small>	
Certificate No.:	IECEx DEK 12.0076X
Date of Issue:	2013-01-07
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<p>Schedule EQUIPMENT: Equipment and systems covered by this certificate are as follows:</p>	
<p>The surge suppression device DEHNconnect Type DCO SD2 MD EX 24 serves as transient suppressor in the lines of intrinsically safe circuits.</p>	
<p>Electrical data</p> <p>Module input circuits (terminals X1 and X2): In type of protection intrinsic safety Ex ia IIC, for connection to a certified intrinsically safe circuit, with the following maximum values: $U_{op} = 30 \text{ V}$; $I_{op} = 500 \text{ mA}$; $P_{op} = \text{any}$; $C_{op} = 0 \text{ nF}$; $L_{op} = 0 \text{ mH}$;</p> <p>or for connection to a certified intrinsically safe circuit or a circuit in accordance with FISCO, with the following maximum values: $U_{op} = 17.5 \text{ V}$; $I_{op} = 380 \text{ mA}$; $P_{op} = 5.32 \text{ W}$; $C_{op} = 0 \text{ nF}$; $L_{op} = 0 \mu\text{H}$.</p> <p>Module output circuits The values of U_{op}, I_{op} and P_{op} are determined by the parameters of the circuit(s) to which the DEHNconnect Type DCO SD2 MD EX 24 is connected.</p>	
<p>CONDITIONS OF CERTIFICATION: YES as shown below:</p> <p>Ambient temperature range: -40°C to $+30^{\circ}\text{C}$ for T5; -40°C to $+80^{\circ}\text{C}$ for T6; -40°C to $+80^{\circ}\text{C}$ for T4.</p> <p>The dielectric strength of at least 500 V of the intrinsically safe circuits of the surge suppression device DEHNconnect Type DCO SD2 MD EX 24 is limited only by the overvoltage protection.</p> <p>Because the enclosure is made of plastic, electrostatic charges on the enclosure shall be avoided.</p>	

EC Declaration of Conformity

EC/EU Declaration of Conformity
EG/EU KonformitätserklärungDocument:
Dokument:Manufacturer:
Hersteller:

CE-DCO SD2 MD EX 24

DEHN SE + Co KG
Hans-Dehn-Straße 1
92318 Neumarkt, GermanyWe declare that the designated product(s)
Wir erklären, dass das/die folgende(n) Produkt(e)

Product Type Produktbezeichnung	Article No. Artikel-Nr.	Standard Norm	EC/EU-Type Examination Certificate Prüfbescheinigung	Date Datum
DCO SD2 MD EX 24	917960	EN 60079-0:2012 EN 60079-11:2012 EN 60079-26:2007	DEKRA 12ATEX0261 X	07.01.2013

DEKRA Certification B.V., Arnhem, The Netherlands
Notified body number: 0344

conform(s) with the European Directive:
der Europäischen Richtlinie entspricht/entsprechen:2014/34/EU ATEX Directive of 26 February 2014
2014/34/EU ATEX-Richtlinie vom 26. Februar 2014and the designated product(s):
und das/die folgende(n) Produkt(e):

Product Type Produktbezeichnung	Article No. Artikel-Nr.	Standard Norm	Technical Report Prüfbericht	Date Datum
DCO SD2 MD EX 24	917960	EN 61643-21:2001 + A1:2009 + A2:2013	DS-Y-12-12	18.01.2016

EC/EU Declaration of Conformity
EG/EU Konformitätserklärungconform(s) with the European Directive(s):
der/den Europäischen Richtlinie(n) entspricht/entsprechen:

2014/35/EU Low-Voltage Directive of 26 February 2014

2014/35/EU Niederspannungsrichtlinie vom 26. Februar 2014

2011/65/EU RoHS Directive of 08 June 2011

2011/65/EU RoHS-Richtlinie vom 08. Juni 2011

This declaration certifies compliance with the indicated directive(s) but implies no warranty of properties. The safety instructions of the accompanying documentation shall be observed. This declaration of conformity is issued under the sole responsibility of the manufacturer.

Diese Erklärung bescheinigt die Übereinstimmung mit der/den genannten Richtlinie(n), enthält jedoch keine Zusicherung von Eigenschaften. Es gelten die Sicherheitshinweise in der mitgelieferten Produktdokumentation.

Die alleinige Verantwortung für die Ausstellung dieser Konformitätserklärung trägt der Hersteller.

Issuer:
Aussteller:DEHN SE + Co KG
Hans-Dehn-Straße 1, 92318 Neumarkt, GermanyPlace, date:
Ort und Datum:

Neumarkt, 17.10.2019

Legally binding signature:
Rechtskräftige Unterschrift:Dr. Thomas J. Schoepf
Chief Technology OfficerDr. Ralph Brocke
Director R&D