

DT13xx
Intrinsically Safe NAMUR / Contact
Isolators

User Manual

for the types
DT1361, DT1362, DT1363, DT1364, DT1371,
DT1372, DT1373, DT1381, DT1382, DT1384, DT1393

Revision 2
11.07.2014



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1. Function and Scope of Application

The contact- and proximity-detector isolator family belongs to the group of associated apparatus in terms of intrinsic safety. These devices are classified as Ⓜ II (1)G [Ex ia Ga] IIC/IIB (-20 °C ≤ Ta ≤ 50 °C) and Ⓜ II (1)D [Ex ia Da] IIIC (-20 °C ≤ Ta ≤ 50 °C) device.

The members of this device-family detect the logical status (near-remote, or open-closed) of the proximity sensors („NAMUR”), or of the contacts working in explosive area, through a connection cable of practically any length.

The devices are made in 1-, 2-, and 4-channel versions.

The output of the isolators is either a semi-conductor, or a relay of switching-contact or closing-contact type. In the case of semi-conductor output the maximum signal transmission frequency is 5 kHz, which makes it suitable for an application as a fast interface.

The high-capacity contact of the devices with relay output (loadability: 5 A and 250 Veff) is suitable for directly controlling the parts of automatic systems.

With the DIL switches mounted inside the device it is possible to check if the detector cables are short or broken. If such failure is found, the output is set automatically to open (broken) status. The logical status of the output may be switched to Direct or to Reverse connection with the output.

The supply voltage range of the contact- and proximity-detector isolators is 19-29 V, allowing the usage of non-stabilized power supply units too.

2. Accessories of the device

User Manual
CE Declaration of Conformity
Quality certificate

3. Technical specifications

Safety parameters:

Marking of intrinsic safety:	Ⓜ II (1)G [Ex ia Ga] IIC/IIB Ⓜ II (1)D [Ex ia Da] IIIC (-20 °C ≤ Ta ≤ 50 °C)
Uo:	8.61 V
Io:	11.6 mA
Um:	250 VAC
Ci IIC / IIB:	2 μF / 20 μF
Li IIC / IIB:	100 mH / 200 mH

Input parameters:

Input signal:	In accordance with the standard MSZ EN 60947-5-6 (NAMUR), and it can be operated also as a contact switch.
Idle voltage:	8.2 V ±5%
Short-circuit current:	8.2 mA ±6%
Input resistance:	1000 Ω
Levels defining the logical status of the input:	
switch on	> 2.1 mA
switch off	< 1.2 mA
Detection of cable break:	< 0.15 mA
Detection of cable short:	> 6.0mA

Output parameters:

Devices with relay output
 Loadability of relay contacts: 250 VAC, 5 A or 30 VDC, 5 A
 Relay contact types: closing or switch-over (morse)
 Maximum switching frequency: 12 Hz

Devices with electronic output .
 Operating mode of the switched output: passive
 (works with external supply voltage)
 Max. voltage in OFF status: 30 VDC
 Max. leakage current: 10 µA
 Max. current in ON status: 40 mA
 Max. residual voltage (at 8 mA): < 1.8 V
 (at 40 mA): < 2.5 V
 Max. operating frequency: 5 kHz

General parameters:

Power supply: 19-29 VDC
 Operating temperature range: -20 °C - +50 °C
 Indicators (supply voltage) green LED
 (output ON): yellow LED
 (fault of the line to the detector): red LED

Shock protection: extra-low voltage (SELV)

EMC compatibility: in accordance with MSZ EN 61326-1:2013

Box dimensions: 114 x 99 mm
 (the width varies with the types)
 (TS-35 is mountable on busbars)

Ambient conditions for storing:

Temperature: -40 °C – +70 °C
 Relative air humidity: max. 80%, non-condensing

4. Information for placing the order

4.1. Type selection range:

Type designation	No. of channels	Output type	Fault signal output	Power consumption (W)	Box width (mm)
DT1361	1	Relay switching contact	-	0.6	17.5
DT1363	1	Relay closing contact	1 opening contact	1.0	17.5
DT1371	1	Relay closing contact	-	0.6	12.5
DT1381	1	Electronic passive	-	0.6	12.5
DT1362	2	Relay switching contact	-	1.0	22.5
DT1372	2	Relay closing contact	-	1.0	17.5
DT1373 N	2	Relay closing contact *	-	1.0	12.5
DT1373 P	2	Relay closing contact *	-	1.0	12.5
DT1382	2	Electronic passive	-	1.0	17.5
DT1393 N	2	Electronic passive *	-	1.0	12.5
DT1393 P	2	Electronic passive *	-	1.0	12.5
DT1364	4	Relay closing contact **	-	2.0	22.5
DT1384 N	4	Electronic passive ***	-	1.6	22.5
DT1384 P	4	Electronic passive ***	-	1.6	22.5

* For each channel, one of the output pins with either 0 V or +24 V supply voltage

** One of the output pins are commoned in each 2-2 channels

*** One of the output pins are commoned in each 2-2 channels or the negative or positive points

4.2. Inputs with 0,5 mA current

Inputs with 0.5 mA current are available optionally to satisfy specific customer needs.

Input parameters:

Short-circuit current:	< 0.5 mA \pm 6%
Input resistance:	18 k Ω

5. Operating principle

The operation of the device is shown in the block diagram of Figure 1.

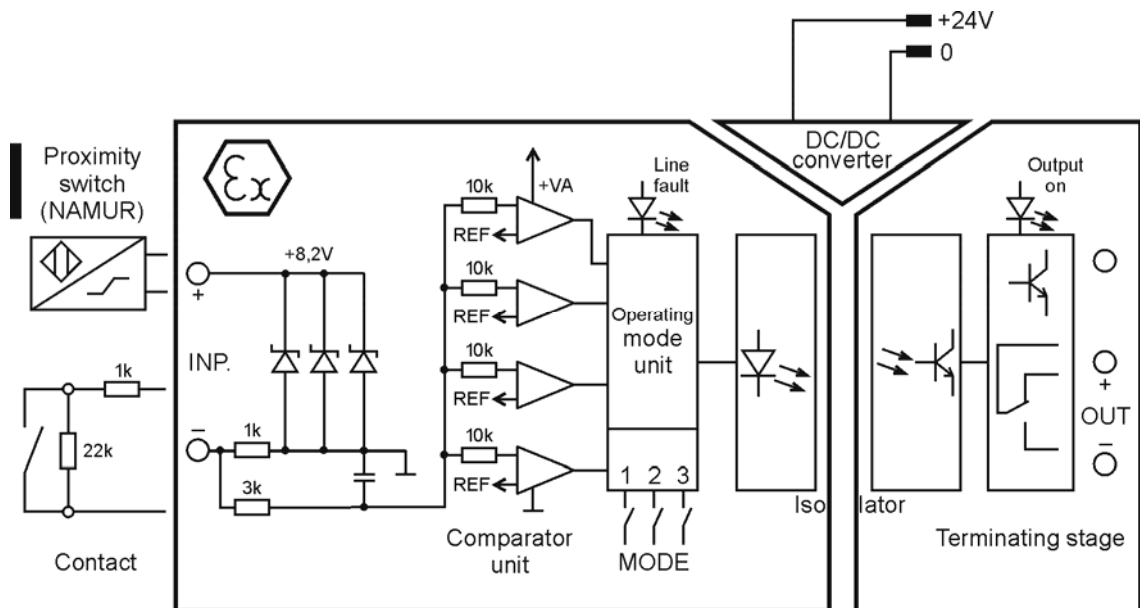


Figure 1. The theoretical build-up of the device

The comparator unit detects the current flowing over the 1 k Ω resistor connected serially with the +8.2 V voltage generator. The threshold values in accordance with the NAMUR standard are as follows:

Direct switch position:	> 2.1 mA
Reverse switch position:	< 1.2 mA
Sensor line broken:	< 0.15 mA
Sensor line short:	> 6.0 mA

The following settings can be realized with the operating mode switch mounted inside the device (triple DIL-switch):

- S1, Direct – Reverse
- S2, Detecting if the line is broken
- S3, Detecting if the line is short

The function of detecting if the line is broken or short is applicable only when a NAMUR input detector is used! In the case of operation with contact switch, the network in accordance with Figure 2 must be used for establishing the connection to the contact switch (S2 and S3 in ON position).

Detectable line fault	None	Only broken	Only short	Both broken, and short
MODE S2 S3	OFF OFF	ON OFF	OFF ON	ON ON



S1 ON: REVERSE
S2 ON: BROKEN
S3 ON: SHORT

Figure 2. Switch-positions of the device

The switching unit forwards the output signal of the comparators, depending on the setting of the operation mode switch, to the isolator stage. In the case of relay-type output stage, it is the pulling coil of the relay, while in the case of electronic output, it is the diode of an optical coupler. The isolated output is either the contact of the relay or, in the case of electronic output stage, it is a PNP open collector transistor, which gets its supply voltage from an external power supply unit. A yellow LED indicates the ON status of the outputs. In the case of a line fault (broken or short) the red LED gives light, and the output will be switched off.

The power supply for the two-stage (logical) intrinsically safe isolator is ensured by the DC/DC converter using the 24 VDC, whose supply voltage may vary in a wide voltage range: 19-29 V. The supply voltage input is protected against overvoltage.

6. Preliminary Instructions

The contact- and proximity-detector isolators and the User Manual are delivered in a packing that provide appropriate protection. Special instructions for unpacking are not necessary. Study the User Manual attentively before you put the device into operation, paying special attention to the prescriptions ensuring an intrinsically safe operation, and to the safety measures.

7. Putting the device into operation; Operating Instructions.

7.1. Safety measures

In order to ensure the security of property and the safety of health and life of people, the following rules must be met:

- Only properly qualified persons may put the device into operation.
- For making the connection of the screw-fixed type terminals, a cable with at least 0.5-2.5 mm² cross section area must be used, whose insulation in radial direction is at least 0.2 mm
- The detector, or the contact, installed in the explosive area must be used concerning the cable that connects the input of the isolators, it must be taken into consideration that intrinsical safety is ensured in that case only,

when the serial inductance and capacitance of the whole input circuit is not more than the values defined by the Technical Specifications.

7.2. Addition to the contacts installed in the explosive area

If we want to apply a detection of the lines, the resistors necessary for the checking of the broken or short status must be mounted to the switching contacts, and the DIL-switches mounted in the printed wiring within the device must be set to the appropriate position.

7.3. Connecting the device

The various types should be connected in accordance with the following instructions:

The types DT1361, DT1362, DT1371, DT1372, DT1381, and DT1382 have closing- and switching contacts, with one or two channels. When these types are connected, the instructions under Clause 7.1 and Clause 7.2 must be observed.

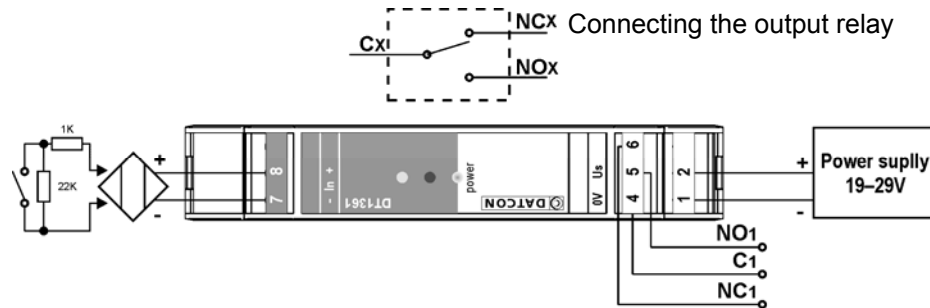


Figure 3a. Connection of DT1361

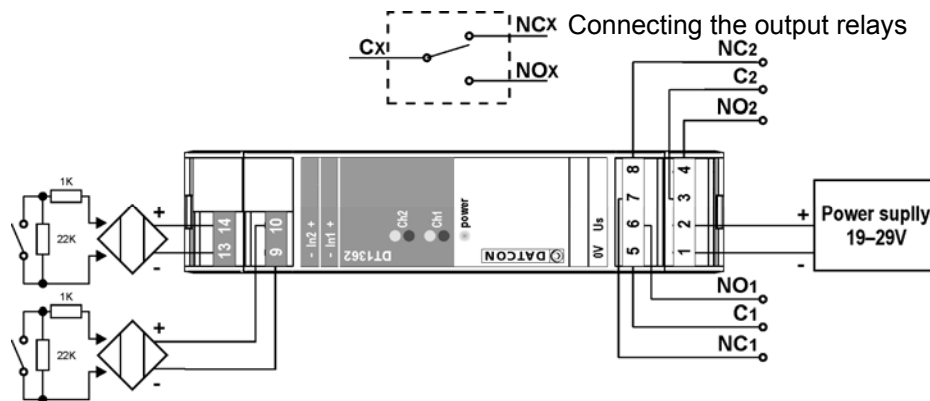


Figure 3b. Connection of DT1362

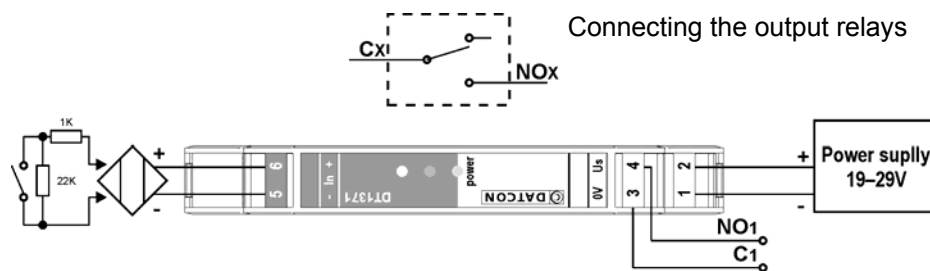


Figure 3c. Connection of DT1371

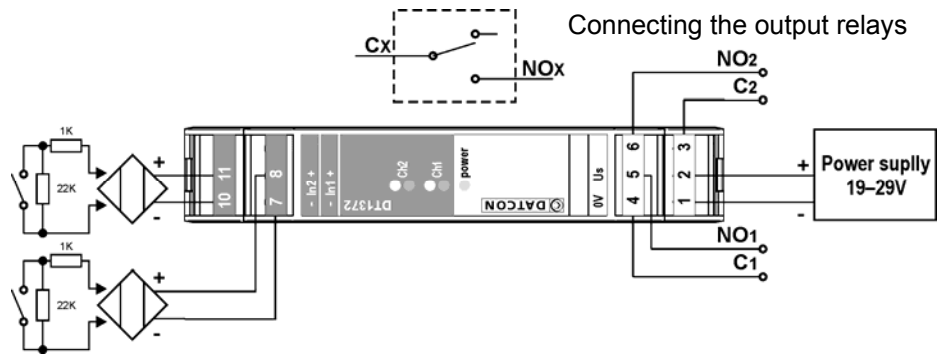


Figure 3d. Connection of DT1372

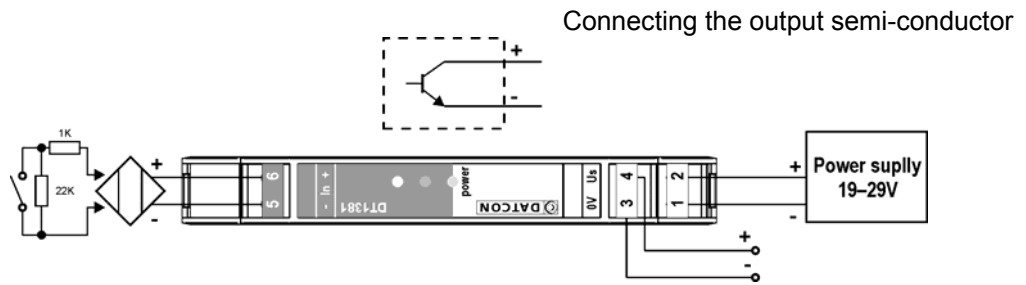


Figure 3e. Connection of DT1381

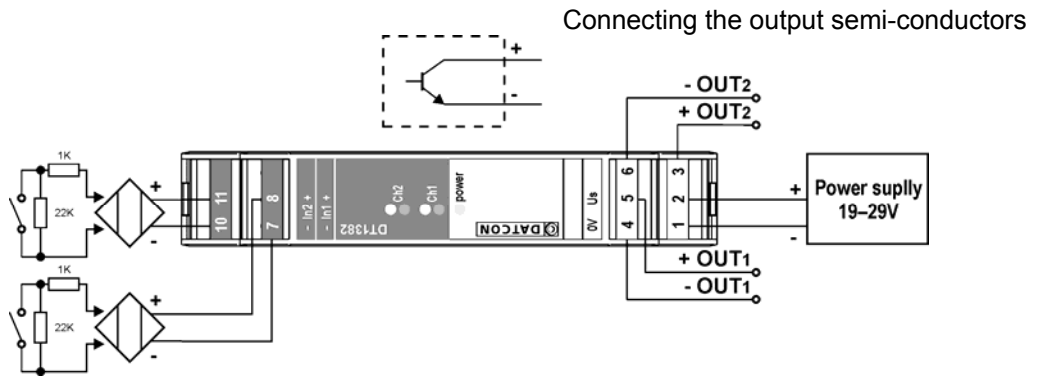


Figure 3f. Connection of DT1382

The type DT1363 is a single-channel device with closing contact, and with an additional fault-signal control channel. At the output of the fault signal, a relay is found (whose type is identical with the one at the output of the device). In the case of faultless operation its contact is in closed position. If some fault occurs (broken or short line, no power supply), the fault signal relay will open the closing contact. In order to ensure the proper operation of the fault signal relay, the fault signal detector switch, found inside the device (S2 and S3) must be kept in ON status.

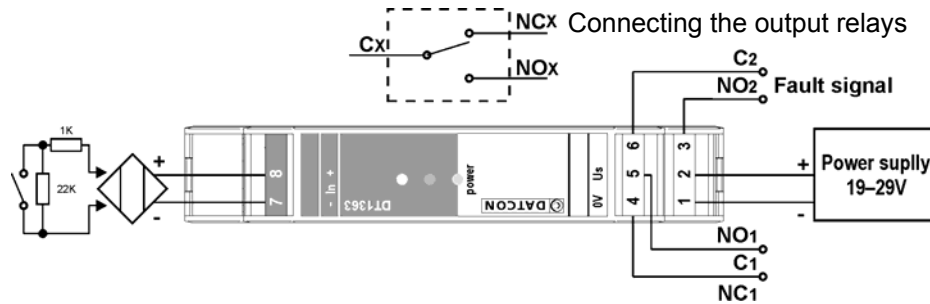


Figure 3g. Connection of DT1363

The four-channel devices DT1364 and DT1384 include four independent channels. One of the terminations of the outputs is commoned in each 2-2 channels.

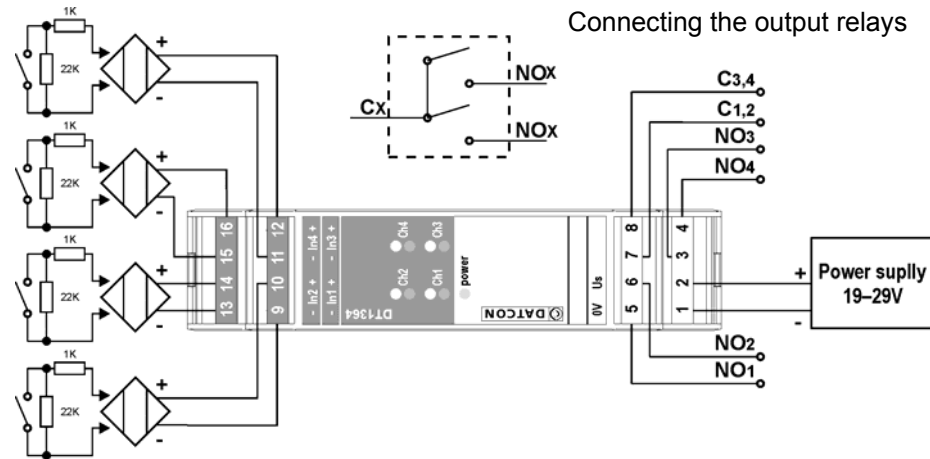


Figure 3h. Connection of DT1364

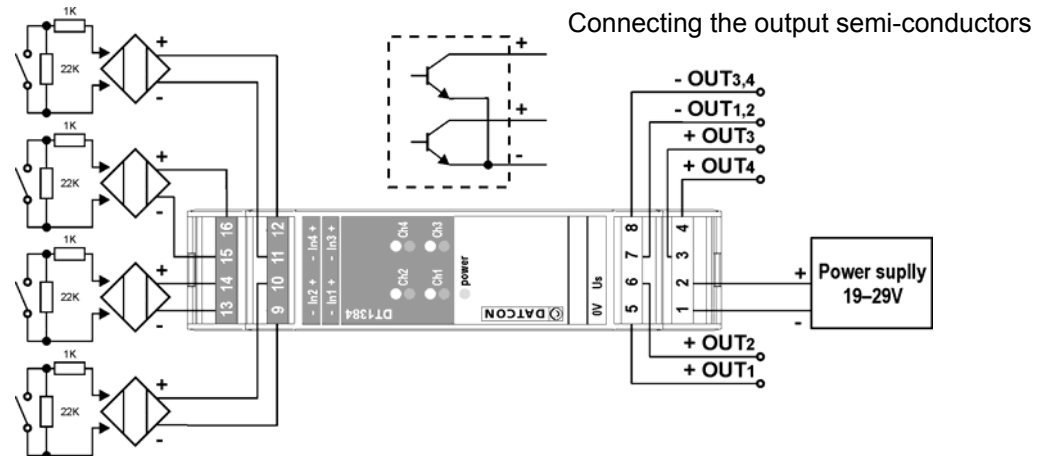


Figure 3i. Connection of DT1384

The types DT1373 and DT1393 are two-channel devices with relay closing contact or with semi-conductor outputs. One of the terminals of the outputs are commoned with each-other and with one of the power supply terminals (0 V or +24 V). In the lack of needs to the contrary, the devices as delivered by the Manufacturer are commoned with the 0 V.

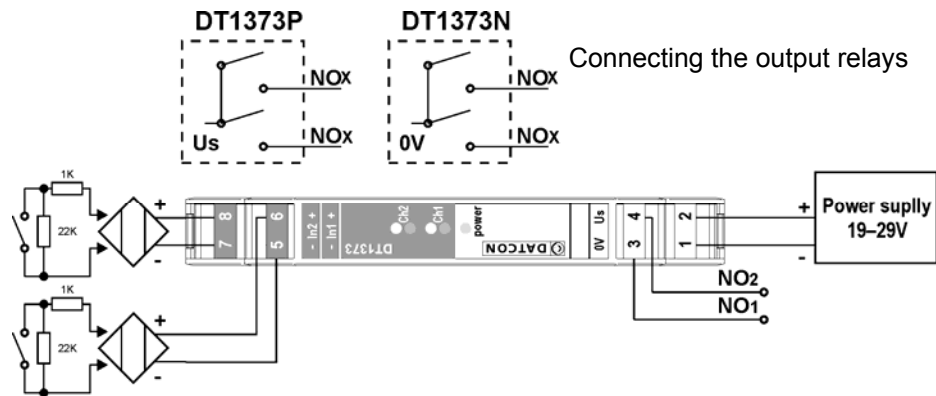


Figure 3j. Connection of DT1373

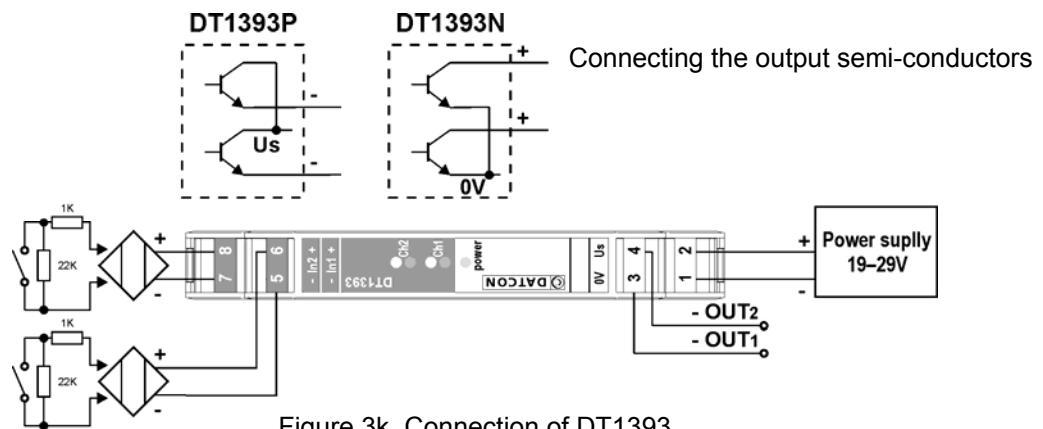


Figure 3k. Connection of DT1393

The types DT1381, DT1382, DT1384 and DT1393 have semi-conductor outputs, and passive operation (open-collector output). By ensuring the right polarity, an external power supply unit should be connected to the output through a resistor. The maximum voltage and current values of the external power supply unit are defined by the Technical Specifications.

7.4. Putting the device into operation; Preliminary settings

After the MODE S1, S2, and S3 switches have been set previously (see Clause 5 and Figure 2), the device should be put onto the busbar, and the connectors should be connected with the cables in accordance with the above description.

8. Design

The isolators are built in a polyamide 6.6 box, that can be pushed on TS-35 type busbars, and ensure IP 20 protection. In terms of dimensions, only the width of the boxes vary, and it is shown under the point „Type selection“. The drawing of the device's housing (box) is presented by Figure 4.

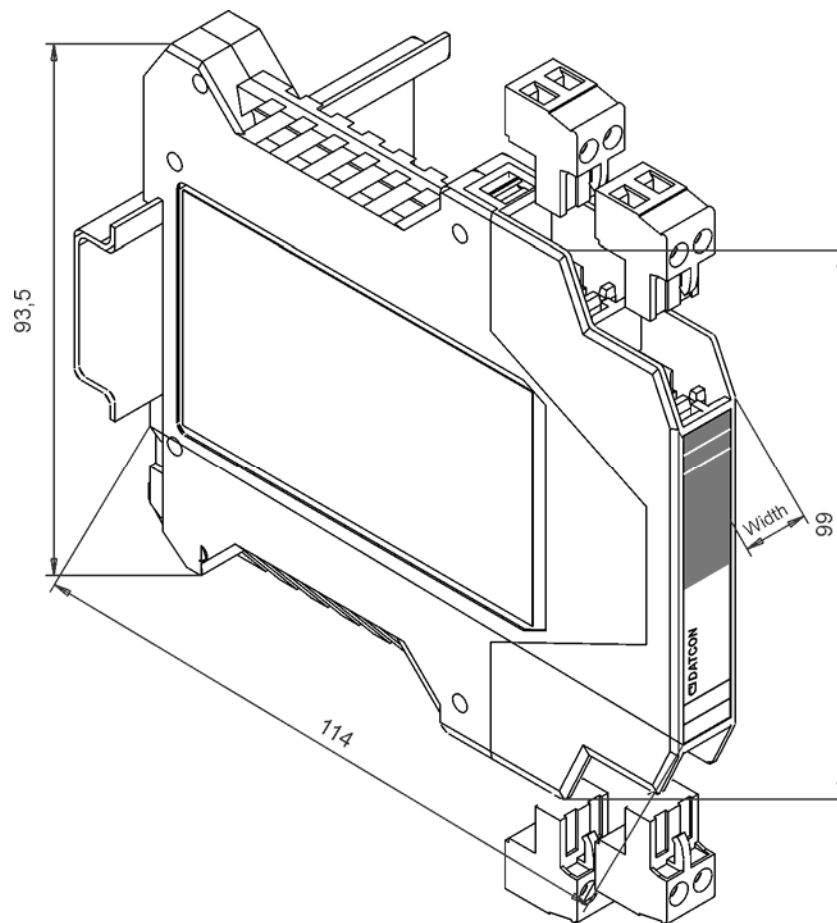


Figure 4. Mounting of the device







9. Maintenance, repair

The isolators do not require maintenance.

Faulty units must be sent to the Manufacturer DATCON Kft for repair.

10. Appendix

10.1. ATEX Certification

  Ex	 
(1)	<i>EK-Típus Vizsgálati Tanúsítvány</i> <i>EC-Type Examination Certificate</i>
(2)	A potenciálisan robbanásveszélyes környezetben történő alkalmazásra szánt berendezések, védelmi rendszerek 94/9/EK Direktiva / Equipment or Protective Systems Intended for use in Potentially explosive atmospheres Directive 94/9/EC.
(3)	EK-Típus Vizsgálati Tanúsítvány száma / EC-Type Examination Certificate Number: BKI14ATEX0012
(4)	A berendezés, vagy védelmi rendszer / Equipment or protective system: Kontaktus és közelségérzékelő (NAMUR) leválasztó család / Contact and proximity detector (NAMUR) isolator family Típusa / Type: DT 13xx
(5)	Megrendelő / Applicant: DATCON Ipari Elektronikai Kft. / DATCON Industrial Electronics Ltd.
(6)	Cím / Address: H-1148 Budapest, Fogarasi út 5., 27. épület / Building 27 Hungary
(7)	A berendezés, vagy védelmi rendszer és annak változatai a jelen tanúsítvány vonatkozó pontjában vannak feltüntetve. / This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
(8)	A ExVÁ Robbanásbiztos Berendezések Vizsgáló Állomása Kft., 1418 sz. kijelölt testület, az 1994. március 23-i 94/9/EK Tanácsi Direktíva 9. cikkelye szerint tanúsítja, hogy a berendezések, vagy védelmi rendszerek megfelelnek az Alapvető Egészségügyi és Biztonsági Követelményeknek a Direktíva II. számú Mellékletében a potenciálisan robbanásveszélyes térben alkalmazásra szánt berendezések és védelmi rendszerek tervezése és gyártása szerint. / ExVÁ Testing Station for Explosion Proof Equipment Company Limited, notified body number 1418 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system 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.
	A vizsgálat eredményeit az alábbi nyilvántartási számú bizalmas vizsgálati dokumentáció tartalmazza: / The examination and test results are recorded in confidential report number: R - 013 - 14
	Ez a tanúsítvány csak a maga egészében és változatlan formában használható fel, mellékleteivel együtt. / This certificate may only be reproduced in its entirety and without any changes, schedule included. Lapszám / Page: 1/5
	

BKI14ATEX0012
EK-Típus Vizsgálati Tanúsítvány/
EC-Type Examination Certificate

- (9) Az alapvető egészségügyi és biztonsági követelményeknek való megfelelést a következők biztosítják: /
Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

MSZ EN 60079-0:2013, MSZ EN 60079-11:2012, MSZ EN 60079-26:2007


- (10) A tanúsítvány száma után álló „X” jel azt mutatja, hogy a berendezés, vagy védelmi rendszer speciális feltételek megtartása mellett felel meg a jelen tanúsítvány vonatkozó pontjában feltüntetett biztonságos alkalmazás feltételeinek. /

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

- (11) Jelen EK-TÍPUS VIZSGÁLATI TANÚSÍTVÁNY csak a megjelölt berendezés vagy védelmi rendszer tervezésére és kivitelezésére vonatkozik. Ha ez alkalmazható, a jelen Direktíva további követelményei érvényesek a berendezés vagy védelmi rendszer gyártására és szállítására. /

This EC-TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified equipment or protective system. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment or protective system.

- (12) A berendezés, vagy védelmi rendszer jele a következő /
The marking of the equipment or protective system shall include the following:

 II (1) G [Ex ia Ga] IIC/IIB (-20°C < T_a < +50°C)

 II (1) D [Ex ia Da] IIIC (-20°C < T_a < +50°C)

**ExVÁ Robbanásbiztos Berendezések
Vizsgáló Állomása Kft.**

**ExVÁ Testing Station for Explosion Proof
Equipment Ltd.**

Hungary, 1037 Budapest, Mikoviny S. u. 2-4.

tel/fax: 36 1 250 1720

e-mail: bkiex@bki.hu



Müllner János

Müllner János

Ügyvezető igazgató / Managing director

Budapest, 2014. augusztus / August 18.



Ez a tanúsítvány csak a maga egészében és változatlan formában használható fel, mellékleteivel együtt. /
This certificate may only be reproduced in its entirety and without any change, schedule included.

Lapszám / Page: 2/5

(13) Melléklet / Schedule**(14) EK-TÍPUSVIZSGÁLATI TANÚSÍTVÁNY szám /
EC-TYPE EXAMINATION CERTIFICATE N^o
BKI14ATEX0012****(15) Berendezés vagy védelmi rendszer leírása /
Description of Equipment or protective system****15.1 Leírás / Description**

A DT13xx típusú kontaktus és közellítésérzékelő leválasztó család a robbanásveszélyes térben működő kontaktus vagy közellítésérzékelő logikai állapotát érzékeli. A készülékek 1, 2 illetve 4 csatornás változatokban készülnek. A kontaktus és közellítésérzékelő leválasztók tápfeszültség-tartománya 19-29 V, amely lehetővé teszi nem stabilizált tápegység használatát is. /

A DT 13xx típusú kontaktus és közellítésérzékelő leválasztó család készülékei csak robbanásveszélyes téren kívül telepíthetők! /

The type DT13xx contact and proximity detector isolator family detect the logical status of the contact or proximity sensors working in explosive area. The devices are made in 1, 2 and 4-channel versions. The supply voltage range of the contact and proximity detector isolators is 19-29 V, allowing the usage of non-stabilized power units too.

Equipment of series DT 13xx must be installed in non-hazardous area!

15.2 Műszaki adatok / Technical parameters

- Tápfeszültség / Power supply : $U_m = 250 V_{eff}$
 $U_T = 19-29 VDC$

- Ex i áramkörök / Ex i circuits :

Maximális értékek / Maximum values

Biztonsági adatok / Safety data						
			IIC		IIB	
P_o [mW]	U_o [V]	I_o [mA]	C_o [μF]	L_o [mH]	C_o [μF]	L_o [mH]
24,96	8,61	11,6	2	100	20	200

- Kimeneti nem gyújtószikramentes áramkörök / Non-intrinsically safe output circuits

- Relé kimenetű készülék / Device with relay outputs
(DT 1361, DT 1363, DT 1371, DT 1362, DT 1372, DT 1373, DT 1364)

A kontaktusok terhelhetősége / Loading of the contact :

$$U_{max} = 250 VAC, I_{max} = 5 A, P_{max} = 500 VA$$

$$U_{max} = 30 VDC, I_{max} = 5 A$$

- Elektronikus passzív kimenetű készülék / Device with passive electronic outputs
(DT 1381, DT 1382, DT 1393, DT 1384)

Maximális névleges feszültség / Maximum nominal voltage : 30 VDC

A gyújtószikramentességet nem hatástalanító maximális U_m feszültség /
Maximal voltage U_m without invalidating intrinsic safety : 250 V_{eff}

Maximális névleges áram / Maximum nominal current : 40 mA DC

BKI14ATEX0012
EK-Típus Vizsgálati Tanúsítvány/
EC-Type Examination Certificate

- 15.4 Védettség / Ingress protection: IP 20
- 15.4 Érintésvédelem / Electric shock protection: törpefeszültség (SELV) /
extra-low voltage (SELV) - IEC 60364-4-41

(16) Vizsgálati dokumentáció / Report N°

16.1 Előzmények / Antecedents

- BKI 04 ATEX 124 X	EK-Típus Vizsgálati Tanúsítvány / EC-Type Examination Certificate	2004.08.03.
- R-061-04	Vizsgálati jegyzőkönyv / Test report	2004.08.02.
- R-061-04/a{014}	Ellenőrző lista / Check list	2004.08.02.
- R-061-04/l{020}	Ellenőrző lista / Check list	2004.08.02.
- R-041-04/{EN50281-1-1}	Ellenőrző lista / Check list	2004.08.17.
- R-041-04/{EN50284}	Ellenőrző lista / Check list	2004.05.17.
- R-041-04/{94/9/EU}	Ellenőrző lista / Check list	2004.05.17.
- R-04061SZ1	Szigetelés ellenőrző vizsgálat / Test for checking of insulation	2004.08.02.
- R-04061SZ2	Szigetelés ellenőrző vizsgálat / Test for checking of insulation	2004.08.02.

16.2 Vizsgálati-tanúsítási dokumentációk

- R-013-14 ATEX Értékelő Jelentés / ATEX Assessment Report 2014.08.18.

Megnevezés / Title	Dokumentáció vagy rajz száma / Document or drawing N°	Rev.	Kiadás kelte / Issue Date
Gyártói CE Megfelelési nyilatkozat / Manufacturer's CE Declaration of Conformity	DT13xx -58		2014.07.11.
Robbanásbiztonsági leírás, villamos kapcsolási rajzzal / Description of explosion safety, with circuit diagram	DT1361-1393-57	rev. 2	2014.07.11.
Alkalmazott alkatrészek, anyagok adatlapjai / Data sheets of used components and materials			
Bemérési utasítás és darabvizsgálati jegyzőkönyv / Routine test instructions and routine test report	DT1361-1393-53	rev. 2	2014.07.11.
Szabványváltozási jelentés (Összehasonlító Kockázat Értékelés) / Report of standard change of device (Comparative Risk Assessment)	DT1361-1393-57R	rev. 1	2014.07.11.
Felhasználói leírás / User Manual	DT1361-1393-62	rev. 2	2014.07.11.

Rajzok /Drawings

DT1361-12	rev. 5	2014.02.17.	DT1372-11	rev. 1	2014.08.07.
DT1361-11	rev. 1	2014.08.07.	DT1372-17	rev. 1	2014.08.07.
DT1361-25	rev. 1	2014.02.17.	DT1372-25	rev. 0	2014.03.23.
DT1361-25 EExK	rev. 2	2013.10.07.	DT1372-25 EExK	rev. 2	2013.10.07.
DT1361-21	rev. 6	2014.08.07.	DT1372-26 1-4	rev. 2	2014.08.04.
DT1361-24 1,2	rev. 1	2014.07.11.	DT1372-AT 0060	rev. 1	2014.07.11.
DT1361-26 1-4	rev. 2	2014.08.04.	DT1373-12	rev. 3	2011.03.30.
DT1361-27	rev. 1	2014.08.07.	DT1373-11	rev. 1	2014.08.07.
DT1361-AT 0053	rev. 1	2014.07.11.	DT1373-25 RMA	rev. 0	2004.03.23.
DT1362-12	rev. 3	2011.03.31.	DT1373-25 EExK	rev. 2	2013.10.08.
DT1362-11	rev. 1	2014.08.07.	DT1373-26 RMA 1-4	rev. 2	2014.08.04.
DT1362-25	rev. 0	2004.03.04.	DT1373-AT 0059	rev. 1	2014.07.11.
DT1362-25 EExK	rev. 2	2013.10.07.	DT1381-12	rev. 4	2014.02.17.
DT1362-21 1,2	rev. 5	2014.08.07.	DT1381-11	rev. 2	2014.08.07.
DT1362-24 1,2	rev. 1	2014.07.11.	DT1381-25	rev. 1	2014.02.17.

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EK-Típus Vizsgálati Tanúsítvány/
EC-Type Examination Certificate

DT1362-26 1-4	rev. 2	2014.08.04.	DT1381-25 EExK	rev. 2	2013.10.07.
DT1362-27	rev. 1	2014.08.07.	DT1381-21	rev. 5	2014.08.07.
DT1362-AT 0055	rev. 1	2014.07.11.	DT1381-24 1,2	rev. 1	2014.07.11.
DT1363-12	rev. 3	2014.02.17.	DT1381-26 1-4	rev. 2	2014.08.04.
DT1363-11	rev. 1	2014.08.07.	DT1381-AT0054	rev. 1	2014.07.11.
DT1363-25	rev. 1	2014.02.17.	DT1382-12	rev. 3	2011.03.30.
DT1363-25 EExK	rev. 2	2013.10.07.	DT1382-11	rev. 1	2014.08.07.
DT1363-21	rev. 4	2014.08.07.	DT1382-25	rev. 0	2005.03.04.
DT1363-24 1,2	rev. 1	2014.07.11.	DT1382-25 EExK	rev. 2	2013.10.07.
DT1363-26 1-4	rev. 2	2014.08.04.	DT1382-21	rev. 3	2014.08.07.
DT1363-AT 0058	rev. 1	2014.07.11.	DT1382-24 1,2	rev. 1	2014.07.11.
DT1364-12	rev. 3	2011.03.31.	DT1382-26 1-4	rev. 2	2014.08.04.
DT1364-11	rev. 1	2014.08.07.	DT1382-AT 0061	rev. 1	2014.07.11.
DT1364-17	rev. 1	2014.08.07.	DT1384-12	rev. 3	2011.03.31.
DT1364-25 RMA	rev. 0	2004.03.22.	DT1384-11	rev. 1	2014.08.07.
DT1364-25 RMA EExK	rev. 2	2013.10.07.	DT1384-17	rev. 1	2014.08.07.
DT1364-21 RMA 1,2	rev. 4	2014.08.07.	DT1384-25 RMA	rev. 0	2004.06.22.
DT1364-24 RMA 1,2	rev. 1	2014.07.11.	DT1384-25 RMA EExK	rev. 2	2013.10.07.
DT1364-26 1-5	rev. 2	2014.08.04.	DT1384-21 RMA 1-3	rev. 4	2014.08.07.
DT1364-25 RMB	rev. 0	2004.03.23.	DT1384-24 RMA 1,2	rev. 1	2014.07.11.
DT1364-25 RMB EExK	rev. 2	2013.10.07.	DT1384-26 1-5	rev. 2	2014.08.04.
DT1364-21 RMB	rev. 5	2014.08.07.	DT1384-25 RMB	rev. 0	2004.06.22.
DT1364-24 RMB 1,2	rev. 1	2014.07.11.	DT1384-25 RMB EExK	rev. 2	2013.10.07.
DT1364-27 RMA	rev. 1	2014.08.07.	DT1384-21 RMB	rev. 7	2014.08.07.
DT1364-AT 0056	rev. 1	2014.07.11.	DT1384-24 RMB	rev. 1	2014.07.11.
DT1371-12	rev. 4	2014.02.17.	DT1384-27 RMA	rev. 1	2014.08.07.
DT1371-11	rev. 1	2014.08.07.	DT1384-AT 0062	rev. 1	2014.07.11.
DT1371-17	rev. 1	2014.08.07.	DT1393-12	rev. 3	2013.03.30.
DT1371-25	rev. 1	2014.02.17.	DT1393-11	rev. 1	2014.08.07.
DT1371-25 EExK	rev. 2	2013.10.07.	DT1393-25 RMA	rev. 0	2004.06.22.
DT1371-26 1-4	rev. 2	2014.08.04.	DT1393-25 EExK	rev. 2	2013.10.07.
DT1371-AT0057	rev. 1	2014.07.11.	DT1393-26 1-4	rev. 2	2014.08.04.
DT1372-12	rev. 3	2011.03.30.	DT1393-AT 0063	rev. 1	2014.07.11.

(17) Biztonságos üzemeltetés feltételei / Special conditions for safe use : - - -

(18) Alapvető egészségügyi és biztonsági követelmények /
Essential Health and Safety Requirements

Az alkalmazott szabványok és a gyártmány használati utasítása szerint. /
Covered by the standards fulfilment and the respect of the instructions for use.


Müllner János
Ügyvezető igazgató /
Managing director



ExVÁ Robbanásbiztos
Berendezések
Vizsgáló Állomása Kft.


Molnár Edit
Tanúsító Szervezet Vezető /
Head of Certification Body

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10.2. CE Declaration of Conformity



Manufacturer:

Datcon Ipari Elektronikai Kft.
H-1148 Budapest, Fogarasi út 5., Hungary

Product:

DT13xx Contact and Proximity-Detector (NAMUR) Isolator Family
DT1361, DT1362, DT1363,
DT1364,
DT1371, DT1372, DT1373,
DT1381,
DT1382, DT1384, DT1393

The manufacturer declares on his sole responsibility, that the product conform to following CE Directives and standards:

89 / 336 / EEC EMC Directive	
MSZ EN 61326-1:2013	Electrical equipment for measurement, control and laboratory use. EMC requirement. Part 1: General requirements
MSZ EN 61000-4-2:2009	Section 2. Electrostatic discharge immunity test.
MSZ EN 61000-4-3:2007	Section 3. Radiated, radio-frequency, electromagnetic field immunity test.
MSZ EN 61000-4-4:2012	Section 4. Electrical fast transient / burst immunity test.
MSZ EN 61000-4-5:2008	Section 5. Surge immunity test.
MSZ EN 61000-4-6:2009	Section 6. Immunity to conducted disturbances, induced by radio-frequency field
MSZ EN 61000-4-8:2011	Section 8. Power frequency magnetic field immunity test.
MSZ EN 55011:2010	Industrial, scientific and medical (ISM) radio-frequency equipment. Radio disturbances characteristics. Limit and methods of measurement (CISPR 11:1997. modified).
73 / 23 / EEC Safety Directive amended by 93 / 68 / EC	
MSZ EN 61010-1:2011	Safety requirements for electrical equipment for measurement, control and laboratory use.
ATEX Directive amended by 94 / 9 / EC	
MSZ EN 60079-0:2013	Explosive atmospheres. Part 0: Equipment. General requirements
MSZ EN 60079-11:2012	Explosive atmospheres. Part 11: Equipment protection by intrinsic safe "i"
MSZ EN 60079-26:2007	Explosive atmospheres. Part 26: Equipment with equipment protection level (EPL) Ga


The product were designed, manufactured and tested in accordance with the quality management system ISO 9001:2008.

Designated certification body ExVÁ Kft. 1037 Budapest, Mikoviny u. 2-4.

The ExVÁ Kft. completed test according to the 94/9/EC directive and issued the certificate:

 14 ATEX 0012

Budapest, Friday, 2014. July 11.


.....
Miskovits Péter
Managing director

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