

Intrinsically Safe NAMUR / CONTACT Isolators

Product features

- NAMUR / contact inputs
- Relay contact / transistor outputs
- 1 / 2 / 4 channel versions
- Line fault detection
- Switch selectable mode of operation
- 3 kHz transmission frequency (transistor output)
- 19-29 VDC supply voltage
- 12.5-22.5 mm széles, TS-35 sínre pattintható kivitelek
- 11 different types



Type Designation

Type	Number of Channels	Output Type	Fault Signal Output	Consumption [W]	Dimension [mm] W x H. x D (mm).
DT1361	1	SPDT contact		0.6	17.5 x 99 x 115
DT1362	2	SPDT contact		1.0	22.5 x 99 x 115
DT1363	1	SPDT contact	1 NC contact	1.0	17.5 x 99 x 115
DT1364	4	SPDT contact ● ●		2.0	22.5 x 99 x 115
DT1371	1	SPDT contact		0.6	12.5 x 99 x 115
DT1372	2	SPDT contact		1.0	17.5 x 99 x 115
DT1373	2	SPDT contact ●		1.0	12.5 x 99 x 115
DT1381	1	passive transistor		0.5	12.5 x 99 x 115
DT1382	2	passive transistor		0.8	17.5 x 99 x 115
DT1384 N	4	passive transistor (common negative point) ● ●		1.6	22.5 x 99 x 115
DT1384 P	4	passive transistor (common positive point) ● ●		1.6	22.5 x 99 x 115
DT1393	2	passive transistor ●		0.8	12.5 x 99 x 115

● One of the output relay contacts is common with either 0 V or Us connection of power supply (user defined option)
 ●● One of the output relay contacts is common per 2-2 channels

The **DT13xx Intrinsically Safe NAMUR / Contact Isolators** enable a safe area load to be controlled by a proximity detector or switch located in a potentially explosive area of zone 0 or zone 1. The units galvanically isolate the input, the output and the power supply. The safe output may be relay contact or transistor. In the case of a transistor output the maximum signal transmission frequency is 3 kHz.

The devices are made in 1-, 2-, 4-channel versions. In all units a built-in phase-reverse control switch allows an alarm condition (output open) to be signalled for either state of the sensor. A line-fault detection opens the output in the event of short or open-circuit lines: intended for use primarily with proximity detectors. It can also be used with switches made to resemble them electrically by adding two resistors, or disabling by a switch if not required.

A version with an input current < 0.5 mA is also available for isolation of the output contact of gas-consumption meters.

The supply voltage range is 19-29 VDC, thus the isolators are insensitive to the supply voltage change.

Intrinsic safety data:

Certification: BKI 04 ATEX 124 X

Protection marking:  II (1) GD [EEx ia] IIC/IIB (-20 °C < Ta < +50 °C)

Safety data:

Type	Uo [V]	Io [mA]	Po [mW]	IIC		IIB	
				Co [uF]	Lo [mH]	Co [uF]	Lo [mH]
DT13xx	8.61	11.6	24.96	2	100	20	200

Um: 250 Veff

Input parameters:

In compliance with the standard EN 60947-5-6 (NAMUR)

No load voltage: 8.2 V

Short circuit current: 8.2 mA

Input resistance: 1000 ohm

Low-current input version, upon request:

No load voltage: 8.2 V

Short circuit current: 0.5 mA (max.)

Input resistance: 18 kohm

Output parameters:

Contacts: SPST or SPDT contact, see the table on the previous page

Contact rating: 250 VAC, 5 AAC / 30 VDC, 5 ADC

Transistor output: galvanically isolated passive switching transistor

Voltage: 30 VDC (max.)

Current: 40 mA (max.)

Frequency range: 0-3 kHz (transistor output)

Galvanic isolation:

Operating isolation voltage: 250 Veff (between the input, the output, and the supply voltage terminals)

Test voltage: 2500 VDC

Power supply:

Supply voltage: 19-29 VDC

Consumption: see the table on the previous page

Ambient conditions:

Operating temperature range: -20°C-50°C

Relative humidity: 90% (max., non-condensing)

Place of installation: safe area, cabinet

Electromagnetic compatibility (EMC)

accordance with the standard EN 61326:2000:

Immunity: -A- criterion

Noise emission: -A- class

General data:

Housing: terminal assembly box, rail mounting on TS-35 rail, material: polyamide PA6.6

Connection: plug-in screw terminal

Connection cable: 0.25-2.5 mm²

Dimensions / weight: see the table on the previous page

0.1-0.2 kg (depending on the type)

Protection: IP 20

Detailed information see in operating instructions. The Manufacturer maintains the right to change the technical data!