

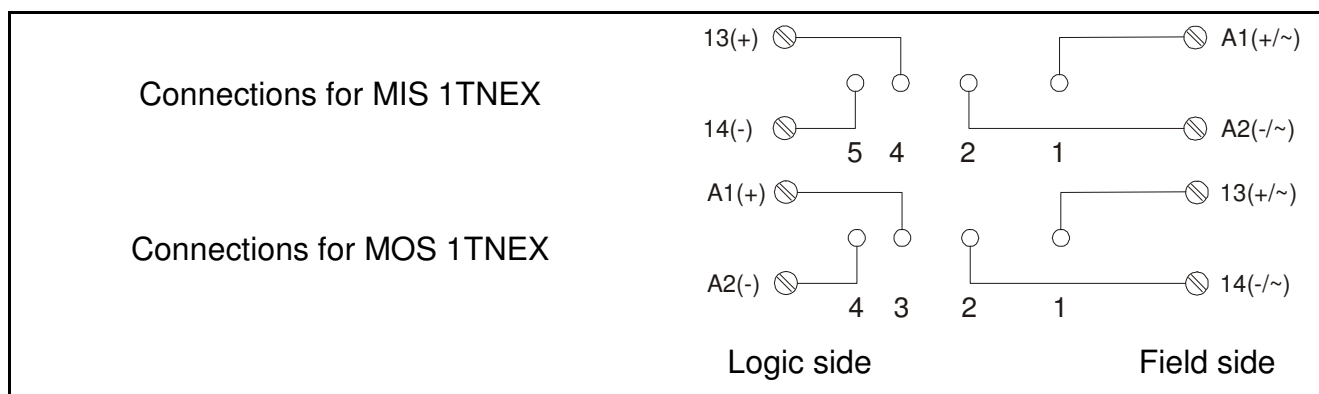
## MIS 1TNEX, MOS 1TNEX

Mounting sockets for Delcon Ex-relays in hazardous locations

### Main features

- Mounting sockets for hazardous locations with screw terminals and testing points
- MIS 1TNEX for EXI-relays (input)
- MOS 1TNEX for EXO-relays (output)
- cULus Listed HazLoc, ATEX, IECEx, CE (LVD)

### Connection diagrams



### Specifications

Breakdown voltage I/O	minimum	4600	VAC rms
Air/creepage distances I/O	minimum	8	mm
Voltage, input and output	nominal	250	VAC/DC
Screw terminals: Testing points			
Torque	range	0,5...0,6 Nm	3,5 in/lb.
Solid wire	maximum	4 mm <sup>2</sup> (AWG 12) (range 12...22 AWG)	
Stranded	maximum	2,5 mm <sup>2</sup> (AWG 14) (range 14...22 AWG)	
Contacts:			
Current	maximum	6,3	A rms
Materials:			
Relay base	PBT	UL 94V-0 (Sabic Innovative Plastics, Valox 420SEO)	
DIN-rail socket	ABS/PC	UL 94V-0 (Bayer, Bayblend KU2-1514)	
Weight	typical	22	g
Temperature range:			
Storage	range	-40...+70	°C
Operation	range	-25...+70	°C

## Hazardous area installation

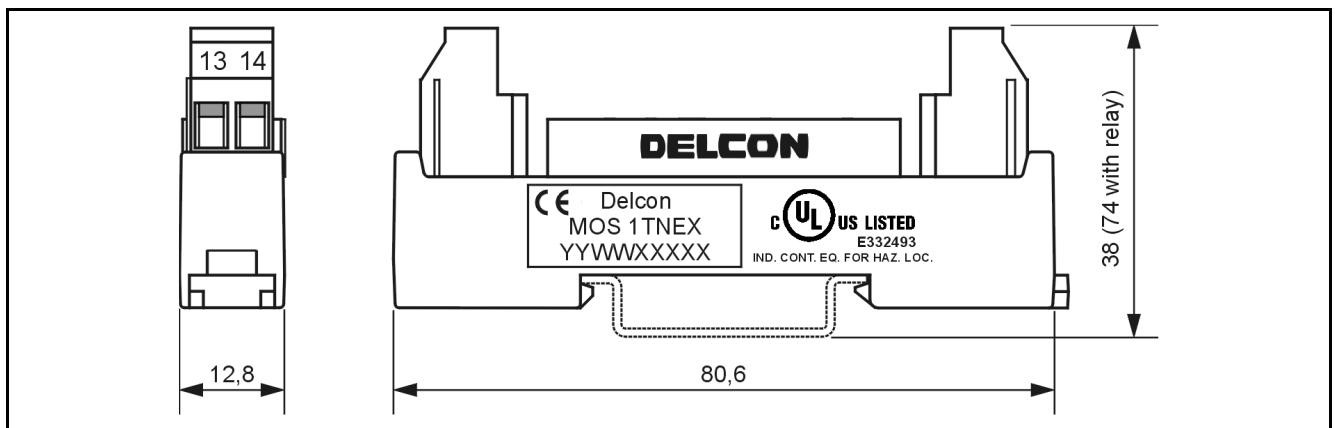
The mounting sockets shall be installed in accordance with the ATEX directive 94/9/EC and this specification. The sockets shall be installed within a suitable Ex-certified enclosure providing protection from impact, light, solid foreign objects and water ingress to a level of at least IP54. The relay/socket combinations shall be derated in accordance with the specifications. The sockets can be assembled to standard 35 mm DIN-rail. Use proper tool size to tighten the screws. Over-torqueing may cause screw terminal breakage. Use 60/75 °C copper wire only.

For ambient temperatures below -10 °C and above +60 °C use field wiring suitable for both minimum and maximum ambient temperature.

Use only Delcon EXI/EXO -series relays. The relays can be fixed using the captive screw. Do not make connections or disconnections while circuit is live unless area is known to be non-hazardous.

Assembly limitations and loading of the relays depend on the relay types and ambient conditions. The recommended installation is to the horizontal rail for better cooling of the relays.

## Mechanical dimensions



Illustrated is MOS 1TNEX (dimensions in mm, nominal). Markings can be located differently by product type and production lot. Production lot number is marked to each socket (YY = year, WW = week, XXXXX = lot number).

## Approvals

	Class I, Division 2, Groups A, B, C, D Class I, Zone 2, IIC (with Ex-approved Delcon EXI/EXO -series relays) Certificate: E332493
<b>ATEX</b>	II 3 G Ex nA IIC Gc (with Ex-approved Delcon EXI/EXO -series relays) Certificate: DEMKO 13 ATEX 1041005U
<b>IECEX</b>	<b>Ex nA IIC Gc</b> (with Ex-approved Delcon EXI/EXO -series relays) Certificate: IECEX ULD 13.0006U
	Fulfils requirements of the low voltage directive (LVD) 2006/95/EC.

## Standards for Ex-approvals:

IEC 60079-0 - ELECTRICAL APPARATUS FOR EXPLOSIVE GAS ATMOSPHERES. PART 0: GENERAL REQUIREMENTS - Edition 5 - Revision Date 2010/12/01

IEC 60079-15 - 2010-01 Edition: 4. Electrical apparatus for explosive gas atmospheres. Part 15: Construction, test and Marking of Type of Protection "n" electrical apparatus

CENELEC EN 60079-0 2009.08.01 Explosive atmospheres - Part 0: Equipment - General requirements

CENELEC EN 60079-15 2010.05.01 Explosive atmospheres - Part 15: Equipment protection by type of protection "n"

CSA C22.2 NO. 213 - NON-INCENDIVE ELECTRICAL EQUIPMENT FOR USE IN CLASS I, DIVISION 2 HAZARDOUS LOCATIONS (1987 EDITION) - Edition 1 - Issue Date 1987/03/01

ISA 12.12.01 - NONINCENDIVE ELECTRICAL EQUIPMENT FOR USE IN CLASS I AND II, DIVISION 2, AND CLASS III, DIVISIONS 1 AND 2 HAZARDOUS (CLASSIFIED) LOCATIONS – Issue date 2011-08-08

## Guarantee

These Ex-mounting sockets made by Delcon Oy are guaranteed free from design and manufacturing defects for a period of 10 years from the manufacturing date. The guarantee liability is limited to replacement of defective material and related shipping charges. Defective products must be returned to the manufacturer for evaluation. This guarantee does not cover damage due to incorrect use or electrical overload.