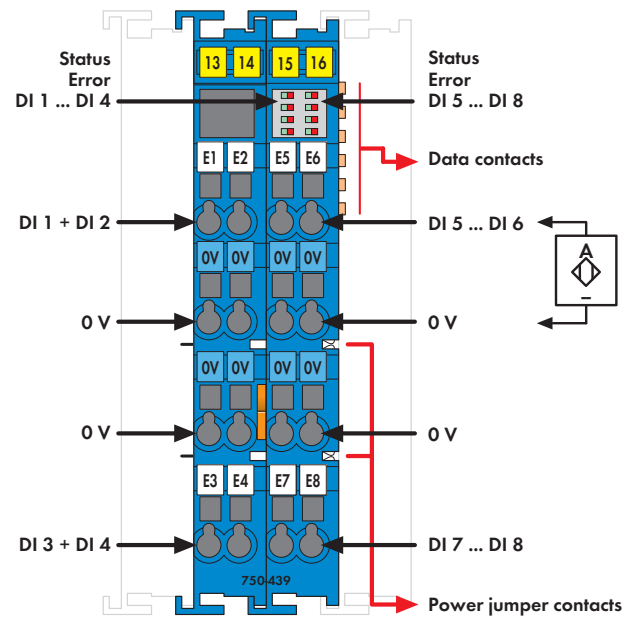




The 750-439 Digital Input Module records binary signals from sensors operating in hazardous environments of Zones 0 and 1, permitting channel-by-channel short-circuit and wire-break diagnostics. NAMUR sensors, optocouplers, mechanical contacts (LED diagnostics can be turned off via control byte) or other actuating elements can be connected via intrinsically safe devices.

The WAGO-I/O-SYSTEM 750 must be installed either in Zone 2 or in a non-hazardous area. Each sensor is supplied with a short-circuit-protected voltage of 8.2V.

Field and system levels are electrically isolated.

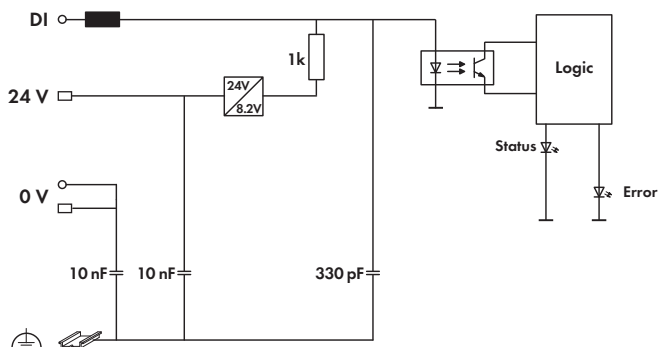
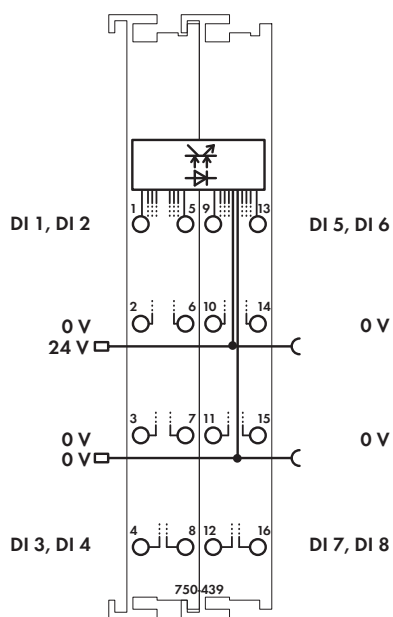
LED displays:

- Green LED (signal ON)
- Red LED (short-circuit)
- Red flashing LED (wire-break)

**Note:** The digital input module must only be operated via Ex i 24VDC power supply!

General information (e.g., installation regulations) on explosion protection is available in the WAGO-I/O-SYSTEM 750 manuals!

[illegible][illegible]



## Technical Data

|                                           |                                      |
|-------------------------------------------|--------------------------------------|
| Wire connection                           | CAGE CLAMP®                          |
| Cross sections                            | 0.08 mm² ... 2.5 mm² / AWG 28 ... 14 |
| Strip lengths                             | 8 ... 9 mm / 0.33 in                 |
| Width                                     | 24mm                                 |
| Weight                                    | 92 g                                 |
| EMC: <b>CE</b> - immunity to interference | acc. to EN 61000-6-2 (2005)          |
| EMC: <b>CE</b> - emission of interference | acc. to EN 61000-6-4 (2007)          |

## Explosion Protection

|                                        |                                                                                                                                                                                                                    |
|----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ex directive 94 / 9 / EG               | EN 60079-0:2012, EN 60079-11:2012                                                                                                                                                                                  |
|                                        | EN 60079-15:2010, EN 60079-31:2009                                                                                                                                                                                 |
| Electric circuit, safety-relevant data | $V_0 = 11.76 \text{ V}$ ; $I_0 = 12.4 \text{ mA}$ ;<br>$P_0 = 36.67 \text{ mW}$ ; Characteristic: Linear                                                                                                           |
| Reactances Ex ia IIC                   | $L_0 = 100 \text{ mH}$ ; $C_0 = 1 \text{ }\mu\text{F}$                                                                                                                                                             |
| Reactances Ex ia IIB                   | $L_0 = 100 \text{ mH}$ ; $C_0 = 9.9 \text{ }\mu\text{F}$                                                                                                                                                           |
| Reactances Ex ia I                     | $L_0 = 100 \text{ mH}$ ; $C_0 = 30 \text{ }\mu\text{F}$                                                                                                                                                            |
| Reactances                             | (The above-listed ratings do not account for the coincidental occurrence of capacitances and inductances. For ratings taking the coincidental occurrence of capacitances and inductances into account, see manual) |

## Standards, Guidelines and Approvals

|                                                                                                          |                                                                                                                 |
|----------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| EC EMC guideline                                                                                         | 2004/108/EC                                                                                                     |
| Conformity marking                                                                                       | <b>CE</b>                                                                                                       |
| Shipbuilding                                                                                             | GL                                                                                                              |
| UL 508                                                                                                   | pending                                                                                                         |
| ANSI/ISA 12.12.01                                                                                        | pending                                                                                                         |
| TÜV 12 ATEX 106032 X                                                                                     | I M2 (M1) Ex d [ia Ma] I Mb,<br>II 3 (1) G Ex nA [ia Ga] IIC T4 Gc,<br>II 3 (1) D Ex tc [ia Da] IIIC T135 °C Dc |
| Permissible ambient temperature: $0 \text{ }^{\circ}\text{C} \leq T_A \leq +60 \text{ }^{\circ}\text{C}$ |                                                                                                                 |
| IECEx TUN 12.0039 X                                                                                      | Ex d [ia Ma] I Mb,<br>Ex nA [ia Ga] IIC T4 Gc,<br>Ex tc [ia Da] IIIC T135 °C Dc                                 |
| Permissible ambient temperature: $0 \text{ }^{\circ}\text{C} \leq T_A \leq +60 \text{ }^{\circ}\text{C}$ |                                                                                                                 |