

# 8-channel Discrete Input

24 V dc, isolated, sinking

## 8109-DI-DC

- 8 discrete isolated inputs
- 24 V dc field voltage sources
- User definable input threshold
- Pulse counting option

### MODULE SPECIFICATION

See also System Specification

### INPUTS

**Number of channels**

- 8

**OFF voltage**

- < 3.2 V dc

**ON voltage**

- > 11 V dc

**Wetting current**

- 6.3 mA (nom.) @ 24 V dc

**Minimum pulse width detected**

- 3 ms

**Maximum switching frequency (no-filtering)**

- 200 Hz

**Maximum voltage**

- Input – 30 V dc
- Reverse input – -25 V dc

### CONFIGURABLE PARAMETERS

**Selectable input filter**

- Fast, slow or user defined

(User defined permits 0 to 512 ms values in 2ms steps)

**Latch inputs**

- Enable / Disable

**Latch polarity**

- Latch on high / Latch on low

**Pulse counting**

- Enable / Disable

### RESPONSE TIME

**I/O response time**

- Field event to new data available on Railbus – 3 ms (max.)

### SAFETY

**FM non-incendive field wiring parameters (each channel)**

- $V_{max} = 30\text{ V}$ ;  $I_{max} = 100\text{ mA}$ ;  $C_1 = 0\ \mu\text{F}$ ;  $L_1 = 0\text{ mH}$

### POWER SUPPLIES

**Railbus (12V) current**

- 35 mA (typ.)
- 55 mA (max.)

**Bussed Field Power**

- Not required

### MECHANICAL

**Module Key Code**

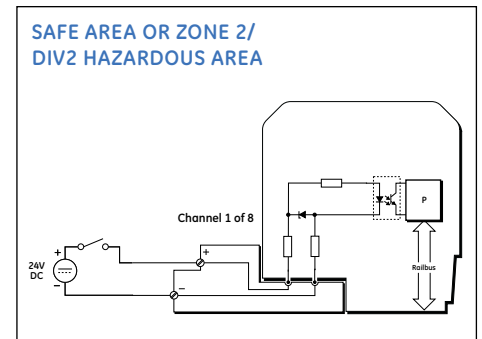
- B2

**Module width**

- 42 mm

**Weight**

- 170 g



### FIELD TERMINALS

Field Wiring	Recommended Field Terminal	Compatible Field Terminal
General purpose	8602-FT-ST Standard†	8604-FT-FU Fused
Class 1, Div 2 or Zone 2 hazardous area	8610-FT-NA Non-arcing†	8611-FT-FU Non-arcing Fused

† External fusing of the Field Power supply is recommended in order to protect the field wiring.