# **Analog Input**

## 1/3:GS8247-EX.AR

Isolated barrier, with single channel analog input and multi-functional output, provide isolated power supply for transmitters in hazardous area and transfer 4~20mA current signal generated by the transmitter or the current source from hazardous area to safe area. It has alarm setting function, which can be output by relay according to set parameters. Power supply can be connected with rail or terminals.

# **Specification**

Supply Voltage:20~35V DC Current Consumption:≤95mA Safe-area Relay Output:

Current Output:

Output Signal:4~20mA Load Resistance:RL≤300Ω Response Time(0~90%):≤0.5s Temperature Drift:0.1%F.S./10°C

Relay output:

Number of Channels:2

Contact Loading:250V AC,2A or 30V DC,2A

Load Type:Resistive load Response Time:≤0.5s

User can set alarm parameters and relay logic through software Transmission Accuracy:0.1%F.S.(Typical:0.05%F.S.)

### Hazardous-area Input:

Input Signal:4~20mA,d.c.

Distribution:

Open-circuit Voltage:≤28V Voltage at 20mA:≥15.5V

Rated Current:≤25mA

Line break error:≤0.2mA

Line shorted error:≥22mA

Power Supply Protection: Power supply reverse protection

EMC:According to IEC 61326-1(GB/T 18268)

Ambient Temperature:-20°C~+60°C

Dielectric Strength:

Between non-intrinsically safe part and intrinsically safe part  $\geqslant$  2500V AC Between power supply part and output part  $\geqslant$  500V AC

## Insulation Resistance:

Between non-intrinsically safe part and intrinsically safe part  $\geqslant$  100M $\Omega$ Between power supply part and output part  $\geqslant$  100M $\Omega$ 

Weight:Approx.150g

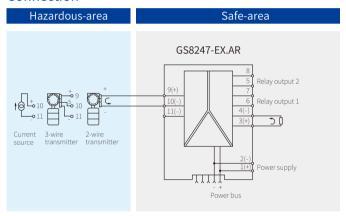
**Suitable Location**: Mounting in safe area, and connected to the IS apparatus in hazardous area up to zone 0 IIC and zone 20 IIIC

Suitable Field Apparatus: 2-wire or 3-wire transmitter, current source



Dimensions:118.9mm $\times$ 106.0mm $\times$ 17.5mm

### Connection



Note:Bus terminal is optional.

# **Explosion-proof Certificate**

Certifying Authority: NEPSI (China)

Ex Marking:[Ex ia Ga] II C

[Ex iaD]

Maximum Voltage:Um=250V

Intrinsic Safety Parameters:Terminals(9、10、11)

$$\begin{split} & \text{U}_{\text{o}} = 28 \text{V,I}_{\text{o}} = 93 \text{mA,P}_{\text{o}} = 651 \text{mW} \\ & \text{IIC:C}_{\text{o}} = 0.083 \mu\text{F}, \quad \text{L}_{\text{o}} = 4.2 \text{mH} \\ & \star \text{IIB:C}_{\text{o}} = 0.65 \mu\text{F}, \quad \text{L}_{\text{o}} = 12.6 \text{mH} \end{split}$$

IIA: $C_0 = 2.15 \mu F$ ,  $L_0 = 33.6 mH$ 

\* IIB Intrinsic Safety Parameters are also suitable for dust explosion protection[Ex iaD]

## **Description of Indicator Light and Output Current**

### Example(Default setting):

1 1			
Instrument Status	LED L	LED H	Output Current
Normal	OFF	OFF	4~20mA
Underrange	Flashing(slow)	OFF	3.8~4mA
Overrange	OFF	Flashing(slow)	20~20.8mA
Output below the lower limit	Flashing(fast)	OFF	3.8mA
Output exceeds the upper limit	OFF	Flashing(fast)	20.8mA
Line break error	ON	OFF	3mA
Line shorted error	OFF	ON	21mA