

1/3:GS8247-EX.MR

Isolated barrier, with single channel analog input and multi-functional output, provide isolated power supply for transmitters in hazardous area. It also provides one channel RS-485 output based on MODBUS-RTU protocol and two channels relay output. The RS485 interface and power supply can be connected with rail or terminals.

Specification

Supply Voltage:20~35V DC

Current Consumption:≤85mA

Safe-area Relay Output:

RS485 Output:

Communication Protocol:MODBUS-RTU

Communication Distance:≤1000m

Number of Slaves:≤32

Response Time:≤0.5s

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

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≥2500V AC

Between power supply part and output part ≥500V AC

Insulation Resistance:

Between non-intrinsically safe part and intrinsically safe part≥100MΩ

Between power supply part and output part ≥100MΩ

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

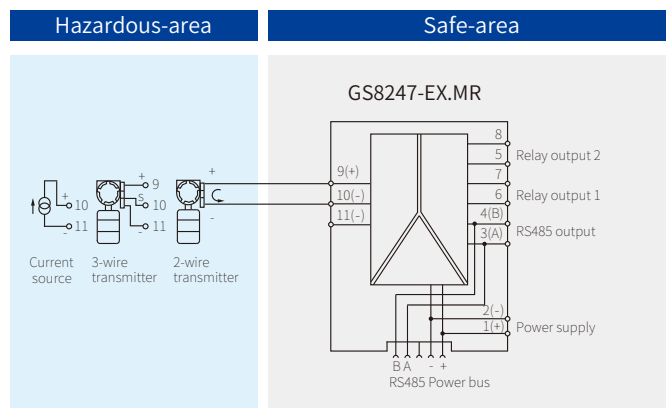
Suitable Field Apparatus:2-wire or 3-wire transmitter,current source



Dimensions:118.9mm×106.0mm×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)

$U_o=28V, I_o=93mA, P_o=651mW$

$IIC:C_o=0.083\mu F, L_o=4.2mH$

* IIB: $C_o=0.65\mu F, L_o=12.6mH$

IIA: $C_o=2.15\mu F, L_o=33.6mH$

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

Description of Indicator Light and Output Current

Example(Default setting):

Instrument Status	LED L	LED H
Normal	OFF	OFF
Underrange	Flashing(slow)	OFF
Overrange	OFF	Flashing(slow)
Output below the lower limit	Flashing(fast)	OFF
Output exceeds the upper limit	OFF	Flashing(fast)
Line break error	ON	OFF
Line shorted error	OFF	ON