SA-75U(EX-75U) INTRINSICALLY SAFE RELAY EXPLOSION PROOF TYPE OPERATION MANUAL

NEPSI GYB16.1478 [Ex ia Ga] IIC
GB3836.1、GB3836.4、GB3836.20

SA-75U Intrinsic Safe Relay (Explosion Proof Type) is designed by IEC standard and complies with Ex ia CNS3376-11. It could work SA37 (SAX1007B, SAX1027B) series. The output and input of SA-75U employs brake for current limitation and interior explosion. When abnormal occurring, it could isolate on-site equipment and eliminate sparkles to ensure the safety of on-site personnel and equipment.

CAUTION

(1) The EX-75 Intrinsically Connection Terminal are "+", "-", "IN", not Intrinsically Connection Terminal are "0V", "110V", "220V", "NC", "COM", & "NO". Please follow the wire diagram to connect the wire.

(2) The "Intrinsically Safe Relay (Barrier)" Safety Parameter :

Maximum intput Voltage Um(V)	Maximum output voltage Uo(V)	Maximum output current Io(mA)	Maximum output power Po(mW)	Maximum external parameter	
				Co(μF)	Lo(mH)
250	27	98	662	0.09	3.0

(3) The Intrinsically Safe Relay (Barrier) should install in safety area.

(4) The lead wire **"Cross Sectional Area"** >0.5mm^2, and it need connect Ground.

(5) The lead wire isolation must exceed 1500V.

(6) When barrier and intrinsically safe relay form explosion proof system, the cross section area of every cable should be over 0.5mm2 than GND in safe area.For wiring, EMI should be rooted out and the following should be considered:

Uo≤Ui Io≤Ii Po≤Pi Co≥Ci+Cc Lo≥Li+Lc

P.s.: Ui, Ii, Pi, Ci and Li stand for parameters of panel intrinsically input and interiorequivalent:

Cc and Lc stand for respectively the inductance of distribute capacitance on connecting cable.

(7) When install numbers Barrier of SA-75U(EX-75U) Intrinsically Safe Relay, the intrinsically connection terminal must keep the same way, and non-intrinsically connection terminal must keep same way too.

(8) The Barrier of SA-75U(EX-75U) Intrinsically side not allow to connect other lead wire or power.

(9) The Intrinsically lead wire should avoid "Magnetic", "Distribute Capacitance" & "Distribute Inductor" interfere.

(10) The installation, operation and maintenance shall comply with operation manual;

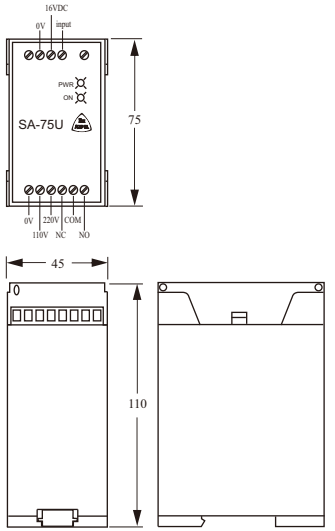
GB3836.13 (IEC 60079-19) "Electrical apparatus for explosive gas atmospheres Part 13:Repair and overhaul for apparatus used in explosive gas atmospheres" ; GB3836.15- (IEC 60079-14) " Electrical apparatus for explosive gas atmospheres--Part 15:Electrical installations in hazardous areas(other than mines)" ; GB50257 " Code for construction and acceptance of electric device for explosion atmospheres and fire hazard electrical equipment installation engineering.

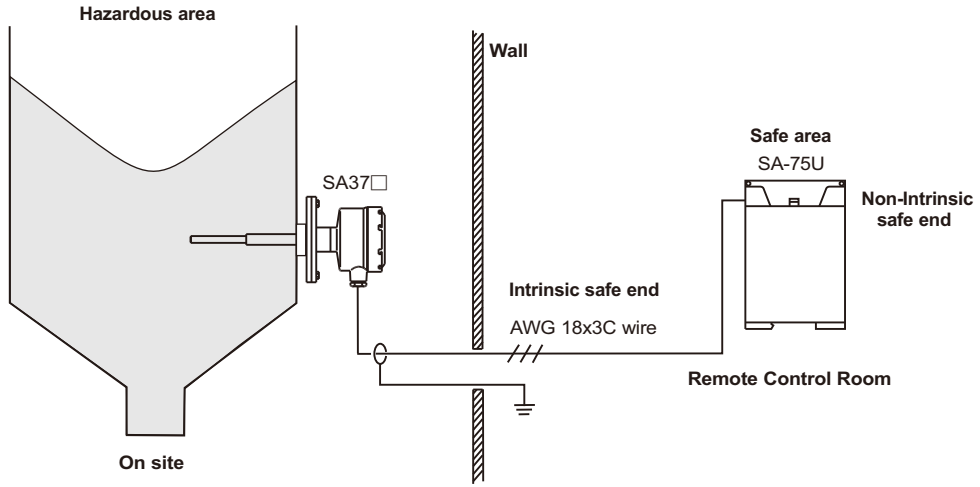
Temp. categories	T1	T2	T3	T4	T5	T6
Max. surface temp.	≦ 440°C	≦ 295°C	≦ 195°C	≦ 130°C	≦ 95°C	≦ 80°C
Medium temp.	≦ 450°C	≦ 300°C	≦ 200°C	≦ 135°C	≦ 100°C	≦ 85°C

The actual high-temp. endurance of the product is subject to the newest brochure released by the company, which is also based on the Ex-proof certification label.

SPECIFICATION

1. Power : 110/220VAC
2. Power consumption : 2W
3. Input sigal : NPN transistor resistanceRi=500Ω
4. Output voltage : 16VDC
5. Short circuit current : 25mA max.
6. Relay output : SPDT 10A/30VDC 10A/220VAC
7. Operating temp : -20~60°C
8. Weight : 0.3kg
9. Enclosure : Ex(ia)IIC T6





FineTek Co.,Ltd.
No.16, Tzuchiang St., Tucheng Industrial Park, New Taipei City 23678, Taiwan.
Tel: 886-2-22696789 Fax: 886-2-22686682
Email: info@fine-tek.com http://www.fine-tek.com

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