国家防爆

Electrical Apparatus for Explosive Atmospheres

CERTIFICATE OF CONFORMITY

Cert. No.: CNEx19.1345

Manufacturer	IDEC Corporation 6-64 Nishimiyahara 2-chome, Yodogawa-ku, Osaka, 532-0004, Japan
Name of Product	Relay Barrier
Type of Product	Type EB3C-N, EB3L-N and EB3S-N
Marking	[Ex ia Ga] IIC
Standard	——
Drawing No.	A39837, A39764, A39798

The drawings, technical documents and the samples are verified and certified according to standard(s) for safety as below:

GB 3836.1-2010	Explosive atmospheres - Part 1: Equipment - General requirements
GB 3836.4-2010	Explosive atmospheres - Part 4: Equipment protection by intrinsic safety "i"

Note See Annex(3 pages)

Valid Date From January 10, 2019 to January 9, 2024

Issue Date January 10, 2019

Director

Ex CQST NAN YANG

CHINA NATIONAL QUALITY SUPERVISION AND TEST CENTRE FOR EXPLOSION PROTECTED ELECTRICAL PRODUCTS

Address: No.20 North Zhongjing Rd, Nanyang, Henan(473008), P.R.China

Tel: 0377-63258564 Fax: 0377-63208175 Http://www.china-ex.com

Note:This certificate is only valid for the products which identify with the sample(s) tested and verified. Holder(s) of this certificate have the responsibility to ensure the products complying with relavant standard(s).

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1. This product has been certified, under certificate number IECEx PTB 10.0015, Issue 3, dated 2014-06-10.

2. **Description of equipment**

The Relay Barrier will be supplemented with three new variations. These new variations will be entitled Relay Barrier of type EB3C-N and EB3L-N and EB3S-N.

The Relay Barrier of type EB3C-N and EB3L-N and EB3S-N are intrinsically safe associated apparatus intended for connection to passive intrinsically safe circuits. The Relay Barrier is provided with intrinsically safe I/O-circuits, which can differ in the number from 1 channel up to a maximum of 16 channels. The intrinsically safe circuits are electrically isolated by opto coupler from the non-intrinsically safe circuits with means of relay contacts or transistor switches.

The maximum permissible ambient temperature is: +60°C.

3. Electrical data

Power input	24V (DC) rated voltage
(Terminal + , -)	Um = 250V
Power input	100 to 240V (AC) rated voltage
(Terminal N , L)	Um = 250V

Barrier type EB3C-N

Signal output, potentialfree contacts	250V (AC/DC) , 3A
(Terminal An, Cn)	Um = 250V
Signal output, open collector	24V (DC) , 0.1A
(Terminal An, Cn)	Um = 250V
Signal output, open collector	220V (AC/DC) , 80mA
(Terminal An, Cn)	Um = 250V
Signal output, connector	30V (DC) , 1A
(Connector An, Cn)	Um = 250V

Barrier type EB3L-N

Signal input	24V (DC) , 10mA
(Terminal Sn, Cn)	Um = 250V
Signal input, connector	24V (DC) , 10mA
(Connector Sn, Cn)	Um = 250V

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Barrier type EB3S-N

Signal output, potentialfree contacts	250V (AC/DC) , 3A
(Terminal An, Cn)	Um = 250V
Signal output, open collector	24V (DC) , 0.1A
(Terminal An, Cn)	Um = 250V
Signal output, open collector	220V (AC/DC) , 80mA
(Terminal An, Cn)	Um = 250V

Barrier type EB3S-N

Signal outputs type A	in type of protection Intrinsic Safety Ex ia IIC;
(Terminal Pn, Sn, Nn)	maximum values for each output:
	Uo = 8.7 V, Io = 123 mA, Po = 406 mW
	Trapezoidal characteristic
	Ci negligibly small
	Li negligibly small
Signal outputs type B	in type of protection Intrinsic Safety Ex ia IIC;
(Terminal Pn, Sn, Nn)	maximum values for each output:
	Uo = 13.2V, Io = 56 mA, Po = 185 mW
	Linear characteristic
	Ci negligibly small
	Li negligibly small

The signal outputs of the barrier type EB3S-N are to be connected individually and shall be not interconnected. The respective maximum external capacitances Co and inductances Lo are shown in the manual.

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Barrier type EB3C-N, EB3L-N

Signal outputs (Terminal Pn, Nn)	in type of protection Intrinsic Safety Ex ia IIC; maximum values for each output: Uo = 13.2 V, Io = 14.2 mA, Po = 46.9 mW Linear characteristic Ci negligibly small Li negligibly small
Common line (Terminals Nn)	in type of protection Intrinsic Safety Ex ia IIC; Ground

The intrinsically safe circuits of one or several Relay Barriers type EB3C-N and EB3L-N may be interconnected and fed back via a common conductor and/or individual conductor. When several Relay Barriers are interconnected the intrinsically safe ground terminals (N) shall be interconnected as well. In each case the rules for the interconnection of intrinsically safe circuits have to be complied with. The respective maximum external capacitances Co and inductances Lo are shown in the manual.

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