

EXPLOSION PROTECTION CERTIFICATE OF CONFORMITY

Cert NO.GYJ12.1041X

This is to certify that the product

Variable area flow meter and indicator unit

manufactured by KROHNE Messtechnik GmbH

(Address:Ludwig - Krohne Strasse 5, Duisburg, Germany)

which model is H250 Series

Ex marking Ex ia II C T1~T6 Gb

product standard /

drawing number APPR GD 821012-08

has been inspected and certified by NEPSI, and that it conforms to GB 3836.1-2010,GB 3836.4-2010

This Approval shall remain in force until 2017.05.12

Remarks 1. Conditions for safe use are specified in the attachment to this certificate.

2. Symbol "X" placed after the certification number denotes specific conditions of use:

3. Model designation is speicfied in the attachment to this certificate.

Director Alana

National Supervision and Inspection Centre for Explosion Protection and Safety of Instrumentation

Issued Date

2012.05.13

This Certificate is valid for products compatible with the documents and samples approved by NEPSI.

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国家级仪器仪表防爆安全监督检验站

National Supervision and Inspection Centre for Explosion Protection and Safety of Instrumentation

(GYJ12.1041X)

(Attachment I)

Attachment I to GYJ12.1041X

[Variation I]

H250 Series Variable area flow meter and indicator unit, manufactured by Krohne Messtechnik GmbH has been certified National Supervision and Inspection Center for Explosion Protection and Safety of Instrumentation (NEPSI).

Variable area flow meter and indicator unit accords with following standards:

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"

Variable area flow meter and indicator unit has the Ex-marking Ex ia II C T1~T6 Gb.

Following products are covered by this certificate.

H250 abcdefg-Ex-h

- a: Blank, H, U
- b: RR, C, HC, Hi, F
- c: Blank, B
- d: M40, M40S, M40R, M40T
- e: Blank, HT
- f: ESK
- g: K1, K2, R1, R2
- h: SE, SK

1. Special condition for safe use

Symbol "X" denotes special condition for safe use: potential electrostatic charging hazard-see instructions; The earth connection shall be connected to the equipotential bonding system.

2. Condition for safe use

- 2.1 The ambient temperature of variable area flow meter and indicator unit is (-40∼+65) °C ∘
- 2.2 The maximum temperature of process medium of variable area flow meter and indicator unit is (-40∼+300)°C ∘
- 2.3 The relation among temperature class, ambient temperature and maximum temperature of process medium is listed in the instruction manual MA H250/M40-Ex-II2G-AD R01 en 08/2011.



2.4 Intrinsic safety parameters:

Туре	Terminals		Safe parameters
H250□□□□□ESK□-Ex-□	11, 12	$U_i = 30V$	$I_i=130\text{mA}$ $P_i=1\text{W}$ $L_i=10 \mu\text{H}$ $C_i\approx 0$
	1, 2, 3 4, 5, 6 7, 8	U _i =30V	$I_i = 130 \text{mA}$ $P_i = 1 \text{W}$ $L_i \approx 0$ $C_i = 10 \text{nF}$
	D, D⊥	$U_i=24V$	I_i =380mA P_i =5.32W L_i \approx 0 C_i \approx 0
H250	1, 2	U _i =16V 150nF	$I_i = 25 \text{mA}$ $P_i = 64 \text{mW}$ $L_i = 150 \mu$ H $C_i =$
H250□□□□□□K□-Ex-□ (I7S23.5-N)	1, 2	U _i =16V 150nF	$I_i = 52 \text{mA}$ $P_i = 169 \text{mW}$ $L_i = 150 \mu \text{H}$ $C_i =$
H250□□□□□□K□-Ex-□ (SJ3.5-SN)	1, 2	U _i =16V 100nF	$I_i = 25 \text{mA}$ $P_i = 64 \text{mW}$ $L_i = 30 \mu \text{ H}$ $C_i =$
H250	1, 2	U _i =16V 100nF	$I_i = 52 \text{mA}$ $P_i = 169 \text{mW}$ $L_i = 30 \mu \text{ H}$ $C_i =$

- 2.5 During installation, cable gland or blanking element shall guarantee the degree of protection is not less than IP20.
- 2.6 End users is not permitted to change any components insides.
- 2.7When installation, use and maintenance of variable area flow meter and indicator unit, observe following standards.
- GB3836.13-1997 Electrical apparatus for explosive gas atmospheres Part 13:Repair and overhaul for apparatus used in explosive gas atmospheres
- GB3836.15-2000 Electrical apparatus for explosive gas atmospheres Part 15:Electrical installations in hazardous area (other than mines)
- GB 3836.16-2006 Electrical apparatus for explosive gas atmospheres Part 16: Inspection and maintenance of electrical installation in hazardous areas (other than mines)
- GB 50257:1996 Code for construction and acceptance of electric device for explosion atmospheres and fire hazard electrical equipment installation engineering

3. Manufacturer's Responsibility

- 3.1 Special condition for safe use specified above should be included in the instruction manual.
- 3.2 Manufacturing should be done according to the documentation approved by NEPSI.
- 3.3 Any modification with influence on the type of protection should be submitted to NEPSI before application.
- 3.4Following items should be added to the nameplate
 - a) NEPSI log Ex
 - b) Ex marking
 - c) Number of certificate
 - d) Ambient temperature range
 - e) Safe parameters

National Supervision and Inspection Center for Explosion Protection and Safety of Instrumentation

May 13th, 2012

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