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# EXPLOSION PROTECTION

## CERTIFICATE OF CONFORMITY

Cert NO.GYJ17.1145X

This is to certify that the product

Variable area flow meter and indicator unit

manufactured by Chengde Rehe-Krohne Meters Co., Ltd.

(Address: High-tech Development Zone, Chengde, Hebei Province )

which model is H250 Series

Ex marking Ex ia IIC 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 2022.05.09

**Remarks**

1. Conditions for safe use are specified in the attachment(s) to this certificate.
2. Symbol "X" placed after the certification number denotes specific conditions of use:
3. Model designation is specified in the attachment(s) to this certificate.
4. Intrinsic safety parameters specified in the attachment(s) to this certificate.
5. This certificate also covers the H250 Series Variable area flow meter and indicator unit with the same type manufactured by KROHNE Messtechnik GmbH (Address: Ludwig - Krohne Strasse 5, Duisburg, Germany ).

Director



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

Issued Date 2017.05.10

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



# 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

(GYJ17.1145X)

(Attachment I)

### Attachment I to GYJ17.1145X

H250 Series Variable area flow meter and indicator unit, manufactured by Chengde Rehe-Krohne Meters Co., Ltd. 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 *a b c d e f g* -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  $(-40 \sim +65) ^\circ\text{C}$ .

2.2 The maximum temperature of process medium of variable area flow meter and indicator unit is  $(-40 \sim +300) ^\circ\text{C}$ .

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:

Type	Terminals	Safe parameters					
H250□□□□□ESK□-Ex-□	11, 12	$U_i=30V$	$I_i=130mA$	$P_i=1W$	$L_i=10\mu H$	$C_i\approx 0$	
	1, 2, 3						
	4, 5, 6	$U_i=30V$	$I_i=130mA$	$P_i=1W$	$L_i\approx 0$	$C_i=10nF$	
	7, 8						
	D, D $\perp$	$U_i=24V$	$I_i=380mA$	$P_i=5.32W$	$L_i\approx 0$	$C_i\approx 0$	
H250□□□□□K□-Ex-□ (SC3.5-NO-Y)	1, 2	$U_i=16V$	$I_i=25mA$	$P_i=64mW$	$L_i=150\mu H$	$C_i=150nF$	
H250□□□□□K□-Ex-□ (I7S23.5-N)	1, 2	$U_i=16V$	$I_i=52mA$	$P_i=169mW$	$L_i=150\mu H$	$C_i=150nF$	
H250□□□□□K□-Ex-□ (SJ3.5-SN)	1, 2	$U_i=16V$	$I_i=25mA$	$P_i=64mW$	$L_i=30\mu H$	$C_i=100nF$	
H250□□□□□K□-Ex-□ (SJ3.5-S1N)	1, 2	$U_i=16V$	$I_i=52mA$	$P_i=169mW$	$L_i=30\mu H$	$C_i=100nF$	

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.

2.7 When 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 3836.18-2006 Explosive atmospheres – Part 18: Intrinsically safe system

GB 50257:2014 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.

3.4 Following items should be added to the nameplate

- NEPSI log 
- Ex marking
- Number of certificate
- Ambient temperature range
- Safe parameters

National Supervision and Inspection Center  
for Explosion Protection and Safety of Instrumentation  
May 10th, 2017