



제2022-004795-01-1호

안전인증서

Emerson Process Management Flow Technologies Co., Ltd.

111, Xing Min South Road, Jiangning District, Nanjing, Jiangsu Province, 211100, China

위 사업장에서 제조하는 아래의 품목이 「산업안전보건법」 제84조 및 같은 법 시행규칙 제110조제1항에 따른 안전인증 심사 결과 안전·보건기준에 적합하므로 안전인증표시의 사용을 인증합니다.

품 목

Vortex Flowmeter

형식·모델(용량·등급) / 인증번호

8600DN****V5 (Ex db [ia] IIC T6...T2 Ga/Gb) / 16-KA4BO-0233X

인증기준

고용노동부고시 제2021-22호

인증조건

1. 제조공장

·본 인증서는 '111, Xing Min South Road, Jiangning District, Nanjing, Jiangsu Province, 211100, China'에서 생산하는 제품에 한함.

2. 제품개요

·제품개요: 0종/1종 경계지역에 설치되는 와류식 유량계(integral transmitter)임.

·제품정격: Max. 42 Vdc(4-20 mA HART analog and pulse outputs, MODBUS), $U_m = 250 V$

Max. 32 Vdc(Fieldbus, digital output), $U_m = 250 V$

·사용주위온도: $-50 \text{ }^\circ\text{C} \leq T_a \leq +70 \text{ }^\circ\text{C}$

·트랜스미터의 온도등급: T6

·공정온도에 따른 센서의 온도등급: $-50 \text{ }^\circ\text{C} \leq T_p \leq +75 \text{ }^\circ\text{C}(T6)$, $+95 \text{ }^\circ\text{C}(T5)$, $+130 \text{ }^\circ\text{C}(T4)$, $+195 \text{ }^\circ\text{C}(T3)$, $+250 \text{ }^\circ\text{C}(T2)$

3. 인증범위: 본 인증서는 아래의 형식번호에 한하여 유효함.

·8600DN(a)(b)(cc)V5

(a): 1, 2, 6, 7	(b): D, P, F, M	(cc): M5, (blank)
-----------------	-----------------	-------------------

4. 안전한 사용을 위한 조건

·관련 IECEx 인증서(IECEx DEK 11.0022X issue No.11) 3 페이지 SPECIFIC CONDITIONS OF USE 참조

5. 인증(변경)사항

·1차 변경(2022.05.16.): 기존 제2016-003209-01호에서 기재사항 변경, 온도등급 변경, 정격추가 및 신규격평가 반영으로 인하여 재발행함.

6. 그 밖의 사항

·안전인증품의 품질관리, 확인심사 수검, 변경사항 신고 등 인증 받은 자의 의무 준수

·본 안전인증서는 반드시 관련 IECEx 인증서(IECEx DEK 11.0022X issue No.11)와 함께 사용

2016년 3월 25일

한국산업기술시험원장





No. 2022-004795-01-1

안전인증서

Certificate of Safety

Emerson Process Management Flow Technologies Co., Ltd.

111, Xing Min South Road, Jiangning District, Nanjing, Jiangsu Province, 211100, China

The following product manufactured by the above company has been authorized for the use of safety certification mark as the product has satisfied the safety and health requirements under Article 84 of OCCUPATIONAL SAFETY AND HEALTH ACT and paragraph 1 of Article 110 of ENFORCEMENT ORDINANCE OF the same ACT.

Electrical Equipment

Vortex Flowmeter

Model (Marking) / Certificate No.

8600DN****V5 (Ex db [ia] IIC T6...T2 Ga/Gb) / 16-KA4BO-0233X

Applied standards

Announcement No. 2021-22 of Ministry of Employment and Labor

Conditions of Certification

1. Manufacturing location(s)

·This certificate is valid only for the specified products produced at '111, Xing Min South Road, Jiangning District, Nanjing, Jiangsu Province, 211100, China'.

2. Description of equipment

·The Model 8600D Vortex Flowmeter consists of a electronics housing in type of protection flameproof enclosures and an integral mounted stainless-steel meter body/sensor assembly.

·Electrical Rating : Max. 42 Vdc(4-20 mA HART analog and pulse outputs, MODBUS), $U_m = 250 V$
Max. 32 Vdc(Fieldbus, digital output), $U_m = 250 V$

·Ambient temperature: $-50 \text{ }^\circ\text{C} \leq T_a \leq +70 \text{ }^\circ\text{C}$

·Temperature class transmitter: T6

·Temperature class sensor: $-50 \text{ }^\circ\text{C} \leq T_p \leq +75 \text{ }^\circ\text{C}(T6)$, $+95 \text{ }^\circ\text{C}(T5)$, $+130 \text{ }^\circ\text{C}(T4)$, $+195 \text{ }^\circ\text{C}(T3)$, $+250 \text{ }^\circ\text{C}(T2)$

3. Scope of certification: This certificate is valid only for the models as above.

·8600DN(a)(b)(cc)V5

(a): 1, 2, 6, 7	(b): D, P, F, M	(cc): M5, (blank)
-----------------	-----------------	-------------------

4. Special conditions for safe use

·See specific conditions of use on IECEx certificate(IECEx DEK 11.0022X issue No.11) for the details

5. Details of certificate change

·1st Revision(2022.04.27.): This certification is reissued to include the change of description, T-grade, electrical rating and the assessment in accordance with the latest editions of the standards from No.2016-003209-01-1.

6. Details of others

·Manufacturer shall take the responsibility including maintaining quality requirements for the certified products, receiving factory surveillance and informing any changes to the certified products.

·This certificate shall be used with the related IECEx certificate(IECEx DEK 11.0022X issue No.11)

Date of Issue: 2016-03-25

한국산업기술시험원장
KOREA TESTING LABORATORY





제2022-004796-01-1호

안전인증서

Emerson Process Management Flow Technologies Co., Ltd.

111, Xing Min South Road, Jiangning District, Nanjing, Jiangsu Province, 211100, China

위 사업장에서 제조하는 아래의 품목이 「산업안전보건법」 제84조 및 같은 법 시행규칙 제110조제1항에 따른 안전인증 심사 결과 안전·보건기준에 적합하므로 안전인증표시의 사용을 인증합니다.

품 목

Vortex Flowmeter

형식·모델(용량·등급) / 인증번호

8600DN*****V5 (Ex db [ia Ga] IIC T6 Gb) / 16-KA4BO-0306X

인증기준

고용노동부고시 제2021-22호

인증조건

1. 제조공장

·본 인증서는 '111, Xing Min South Road, Jiangning District, Nanjing, Jiangsu Province, 211100, China'에서 생산하는 제품에 한함.

2. 제품개요

- 제품개요: 당 기기는 1종지역에 설치되는 와류식 유량계(Remote transmitter)임.
- 제품정격: Max. 42 Vdc(4-20 mA HART analog and pulse outputs, MODBUS), $U_m = 250 V$
Max. 32 Vdc(Fieldbus, digital output), $U_m = 250 V$
- 사용주위온도: $-50 \text{ }^\circ\text{C} \leq T_a \leq +70 \text{ }^\circ\text{C}$

3. 인증범위: 본 인증서는 아래의 형식번호에 한하여 유효함.

·8600DN(a)(b)(cc)(ddd)V5

(a): 1, 2, 6, 7	(b): D, P, F, M	(cc): M5, (blank)
(ddd): R10, R20, R30, R33, R50, R75, R**, A10, A20, A33, A50, A75		

4. 안전한 사용을 위한 조건

·관련 IECEx 인증서(IECEx DEK 11.0022X issue No.11) 3 페이지 SPECIFIC CONDITIONS OF USE 참조

5. 인증(변경)사항

·1차 변경(2022.05.16.): 기존 제2016-020201-01호에서 기재사항 변경, 정격추가 및 신규격평가 반영으로 인하여 재발행함.

6. 그 밖의 사항

- 안전인증품의 품질관리, 확인심사 수검, 변경사항 신고 등 인증 받은 자의 의무 준수
- 본 안전인증서는 반드시 관련 IECEx 인증서(IECEx DEK 11.0022X issue No.11)와 함께 사용

2016년 5월 20일

한국산업기술시험원장





No. 2022-004796-01-1

안전인증서

Certificate of Safety

Emerson Process Management Flow Technologies Co., Ltd.

111, Xing Min South Road, Jiangning District, Nanjing, Jiangsu Province, 211100, China

The following product manufactured by the above company has been authorized for the use of safety certification mark as the product has satisfied the safety and health requirements under Article 84 of OCCUPATIONAL SAFETY AND HEALTH ACT and paragraph 1 of Article 110 of ENFORCEMENT ORDINANCE OF the same ACT.

Electrical Equipment

Vortex Flowmeter

Model (Marking) / Certificate No.

8600DN*****V5 (Ex db [ia Ga] IIC T6 Gb) / 16-KA4BO-0306X

Applied standards

Announcement No. 2021-22 of Ministry of Employment and Labor

Conditions of Certification

1. Manufacturing location(s)

·This certificate is valid only for the specified products produced at '111, Xing Min South Road, Jiangning District, Nanjing, Jiangsu Province, 211100, China'.

2. Description of equipment

·The Model 8600D Vortex Flowmeter consists of a electronics housing in type of protection flameproof enclosures and an remote mounted stainless-steel meter body/sensor assembly.

·Electrical Rating : Max. 42 Vdc(4-20 mA HART analog and pulse outputs, MODBUS), $U_m = 250 V$
Max. 32 Vdc(Fieldbus, digital output), $U_m = 250 V$

·Ambient temperature: $-50 \text{ }^\circ\text{C} \leq T_a \leq +70 \text{ }^\circ\text{C}$

3. Scope of certification: This certificate is valid only for the models as above.

·8600DN(a)(b)(cc)(ddd)V5

(a): 1, 2, 6, 7	(b): D, P, F, M	(cc): M5, (blank)
(ddd): R10, R20, R30, R33, R50, R75, R**, A10, A20, A33, A50, A75		

4. Special conditions for safe use

·See specific conditions of use on IECEx certificate(IECEx DEK 11.0022X issue No.11) for the details

5. Details of certificate change

·1st Revision(2022.05.16.): This certification is reissued to include the change of description, electrical rating and the assessment in accordance with the latest editions of the standards from No.2016-020201-01-1.

6. Details of others

·Manufacturer shall take the responsibility including maintaining quality requirements for the certified products, receiving factory surveillance and informing any changes to the certified products.

·This certificate shall be used with the related IECEx certificate(IECEx DEK 11.0022X issue No.11)

Date of Issue: 2016-05-20

한국산업기술시험원장
KOREA TESTING LABORATORY





제2022-031136-01-1호

안전인증서

Emerson Process Management Flow Technologies Co., Ltd.

111, Xing Min South Road, Jiangning District, Nanjing, Jiangsu Province, 211100, China

위 사업장에서 제조하는 아래의 품목이 「산업안전보건법」 제84조 및 같은 법 시행규칙 제110조제1항에 따른 안전인증 심사 결과 안전·보건기준에 적합하므로 안전인증표시의 사용을 인증합니다.

품 목

Vortex Flowmeter-Remote sensor

형식·모델(용량·등급) / 인증번호

8600DN(Ex ia IIC T6...T2 Ga) / 22-KA4BO-0399X

인증기준

고용노동부고시 제2021-22호

인증조건

1. 제조공장

·본 인증서는 '111, Xing Min South Road, Jiangning District, Nanjing, Jiangsu Province, 211100, China'에서 생산하는 제품에 한함.

2. 제품개요

- 제품개요: 당 기기는 유량 트랜스미터와 함께 사용하는 유량 센서임.
- 당 기기는 반드시 안전인증 받은 8600DN Vortex flowmeter(16-KA4BO-0306X) 와 함께 사용할 것.
- 152 m 이하의 연결 케이블을 사용할 것.
- 사용주위온도: $-50\text{ }^{\circ}\text{C} \leq T_a \leq +70\text{ }^{\circ}\text{C}$ (온도등급에 따른 동정온도는 아래 참조)

공정 온도	온도 등급
$-50\text{ }^{\circ}\text{C} \leq T_p \leq +75\text{ }^{\circ}\text{C}$	T6
$-50\text{ }^{\circ}\text{C} \leq T_p \leq +95\text{ }^{\circ}\text{C}$	T5
$-50\text{ }^{\circ}\text{C} \leq T_p \leq +130\text{ }^{\circ}\text{C}$	T4
$-50\text{ }^{\circ}\text{C} \leq T_p \leq +195\text{ }^{\circ}\text{C}$	T3
$-50\text{ }^{\circ}\text{C} \leq T_p \leq +250\text{ }^{\circ}\text{C}$	T2

3. 인증범위: 본 인증서는 위의 형식번호에 한하여 유효함.

4. 안전한 사용을 위한 조건

·관련 IECEx 인증서(IECEx DEK 11.0022X issue No.11) 3 페이지 SPECIFIC CONDITIONS OF USE 참조

5. 인증(변경)사항: 없음

6. 그 밖의 사항

- 안전인증품의 품질관리, 확인심사 수검, 변경사항 신고 등 인증 받은 자의 의무 준수
- 본 안전인증서는 반드시 관련 IECEx 인증서(IECEx DEK 11.0022X issue No.11)와 함께 사용

2022년 06월 13일

한국산업기술시험원장





No. 2022-031136-01-1

안전인증서

Certificate of Safety

Emerson Process Management Flow Technologies Co., Ltd.

111, Xing Min South Road, Jiangning District, Nanjing, Jiangsu Province, 211100, China

The following product manufactured by the above company has been authorized for the use of safety certification mark as the product has satisfied the safety and health requirements under Article 84 of OCCUPATIONAL SAFETY AND HEALTH ACT and paragraph 1 of Article 110 of ENFORCEMENT ORDINANCE OF the same ACT.

Electrical Equipment

Vortex Flowmeter-Remote sensor

Model (Marking) / Certificate No.

8600DN(Ex ia IIC T6...T2 Ga) / 22-KA4BO-0399X

Applied standards

Announcement No. 2021-22 of Ministry of Employment and Labor

Conditions of Certification

1. Manufacturing location(s)

This certificate is valid only for the specified products produced at '111, Xing Min South Road, Jiangning District, Nanjing, Jiangsu Province, 211100, China'.

2. Description of equipment

- This is the Vortex flow sensor to use with 8600D Vortex Flowmeter.
- This sensor is only to be connected to the associated Model 8600D Vortex Flowmeter(16-KA4BO-0306X).
- The maximum allowable length of the interconnecting cable is 152 m.
- Ambient temperature: $-50\text{ }^{\circ}\text{C} \leq T_a \leq +70\text{ }^{\circ}\text{C}$

Process Temperature	Temperature class
$-50\text{ }^{\circ}\text{C} \leq T_p \leq +75\text{ }^{\circ}\text{C}$	T6
$-50\text{ }^{\circ}\text{C} \leq T_p \leq +95\text{ }^{\circ}\text{C}$	T5
$-50\text{ }^{\circ}\text{C} \leq T_p \leq +130\text{ }^{\circ}\text{C}$	T4
$-50\text{ }^{\circ}\text{C} \leq T_p \leq +195\text{ }^{\circ}\text{C}$	T3
$-50\text{ }^{\circ}\text{C} \leq T_p \leq +250\text{ }^{\circ}\text{C}$	T2

3. Scope of certification: This certificate is valid only for the models as above.

4. Special conditions for safe use

See specific conditions of use on IECEx certificate(IECEx DEK 11.0022X issue No.11) for the details

5. Details of certificate change: None

6. Details of others

- Manufacturer shall take the responsibility including maintaining quality requirements for the certified products, receiving factory surveillance and informing any changes to the certified products.
- This certificate shall be used with the related IECEx certificate(IECEx DEK 11.0022X issue No.11)

Date of Issue: 2022-06-13

한국산업기술시험원장
KOREA TESTING LABORATORY

