

0359-CPR-00009

Intertek

Product(s): **Controlled door closing devices**
(refer to attached appendix for details and conditions)

Produced by or for: **Samhwa Precision Co., Ltd.,** Siwha Industrial Complex 2-NA-601, 1262 Jeongwang Dong, Siheung Shi, Kyunggi Do, KOREA. 429-450.

Produced in the manufacturing plant(s): **Samhwa Precision Co., Ltd.,** Siwha Industrial Complex 2-NA-601, 1262 Jeongwang Dong, Siheung Shi, Kyunggi Do, KOREA, 429-450.

Intended use: **On fire and smoke compartmentation doors** (to fulfil the self-closing requirement of such doors)

This certificate attests that all provisions concerning the assessment and verification of constancy of performance described in Annex ZA of the standard(s):

EN 1154:1996/A1:2002/AC:2006

Building hardware - Controlled door closing devices - Requirements and test methods

Under system 1 are applied and that the product(s) fulfils all the prescribed requirements set out above.

This certificate was originally issued under CPD (89/106/EEC) on 10th March 2010 and has been re-issued on 2nd June 2015 under CPR (305/2011) and will remain valid as long as the test methods and/or factory production control requirements included in the harmonised standard, used to assess the performance of the declared characteristics, do not change, and the product, and the manufacturing conditions in the plant are not modified significantly, unless suspended or withdrawn by the product certification body.



The issued document and statement(s) herein makes reference only to a presumption of conformity in accordance with the CPR Regulations EU 305/2011 (as amended). However, it is the manufacturer's or their authorised representative's sole responsibility to affix the CE logo and, by doing so, confirms full compliance and conformity to all other European mandatory directives and regulations that may also apply.

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Date 02 Jun 2015
Issue 2

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Certificate of Constancy of Performance

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Appendix to Certificate of Constancy of Performance 0359-CPR-00009

Model Ref: **Samhwa 33 Series** (NSK830.BC, K-633, K633.BC, NSK-633, NSK633.BC, K-733, K733.BC, K-833, K833.BC, NSK-833, NSK833.BC)

Table A1. Product Description for door closers from Samhwa Precision Co., Ltd.,

Model Number	Latch control	Backcheck	Delayed Closing	Maximum opening angle	Zero Position
K-633	Yes	No	No	180°	Not Applicable
K633.BC	Yes	Yes	No	180°	Not Applicable
NSK-633	Yes	No	No	180°	Not Applicable
NSK633.BC	Yes	Yes	No	180°	Not Applicable
K-733	Yes	No	No	180°	Not Applicable
K733.BC	Yes	Yes	No	180°	Not Applicable
NSK830.BC	Yes	Yes	No	180°	Not Applicable
K-833	Yes	No	No	180°	Not Applicable
K833.BC	Yes	Yes	No	180°	Not Applicable
NSK-833	Yes	No	No	180°	Not Applicable
NSK833.BC	Yes	Yes	No	180°	Not Applicable
Notes. 1. Installation – Standard 2. Fixed power size 3					

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Supporting test reports for this certificate are as follows:

Table A2. Mechanical test reports & product classification door closer^{a,c}

Test Report	Model tested	Product Classification					
GZ09110561-1	Samhwa K-33 Series (NSK830.BC)	4	8	3	1 ^b	1	4
Model numbers assessed as having same performance as Model NSK830.BC:		K-633, K633.BC, NSK-633, NSK633.BC, K-733, K733.BC, K-833, K833.BC, NSK-833, NSK833.BC					

Table A3. Fire test reports for door closer^{a,c}

Test Report	Model tested	Test Method	Fire resistance (minutes)	
			E - Integrity	I - Insulation
AU090104034-1	Samhwa 33 Series (NSK830.BC)	EN 1634-1:2008	60 minutes	60 minutes
Model numbers assessed as having same performance as Model NSK830.BC:		K-633, K633.BC, NSK-633, NSK633.BC, K-733, K733.BC, K-833, K833.BC, NSK-833, NSK833.BC		

Notes.

- The door closer shall be installed in accordance with the installation instructions for the product(s).
- Digit 4 grade "1" was based on the test result from fire resistance test (refer to Table A3).
- This certificate of constancy of performance, refers to the requirements for the product(s) described under the CPR. There may be other European Directives, where requirements need to be declared before CE marking can be affixed by the manufacturer or their authorised representative.

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Table A4. EN 1154 Annex ZA Related Information for K-33 Samhwa series

Product:	Controlled door closing devices, as covered by the scope of this standard	
Intended use:	On fire and smoke compartmentation doors (to fulfil the self-closing requirements of such doors) – Standard installation	
Requirement/ characteristic	Standard clause	Result Summary
Self-closing	General (5.2.1)	Grade 4 (closing doors from at least 180° open)
	Closing moment (5.2.3)	Power size 3
	Opening moment (5.2.4)	Power size 3
	Efficiency (5.2.5)	More than 55% (Power size 3)
	Closing time (5.2.6)	Pass
	Angles of operation (5.2.7)	Grade 4, 180°
	Overload performance (5.2.8)	Pass
	Temperature dependence (5.2.9)	Pass (-15°C to +40°C)
	Fluid leakage (5.2.10)	Pass
	Damage (5.2.11)	Pass
	Latch control (5.2.12)	Pass
	Backcheck (5.2.13)	Pass
	Delayed closing (5.2.14)	NPD (No Performance Determined)
	Adjustable closing force (5.2.15)	NPD
	Zero position (5.2.16)	NPD
	Fire/smoke door suitability (5.2.18), Annex A	Grade 1, Suitable for use on fire/smoke doors (refer to Table A3)
Durability of self-closing	Durability (5.2.2)	500,000 test cycles
	Corrosion resistance (5.2.2 5.2.17.1, 5.2.17.2)	Grade 4, Neutral Salt Spray (NSS) for 240 hours
Dangerous substances	See Clause ZA.3	No dangerous substances declared for this product/intended use

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