

Report Number: J210907001-1R1

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



TESTING OF Controlled Door Closing Devices

A report to:

Guangdong JIN LIANAN
Technology Co., Ltd

Issue Date:	2021/12/1
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TEST CONCLUSIONS

Product: Door closer
Manufactured by: Guangdong JIN LIANAN Technology Co., Ltd
Model: J-061

have been tested in accordance with:
EN 1154:1996/A1:2002/AC:2006 Building Hardware-Controlled door closing devices
by KAS Quality Service (Guangzhou) Co., Ltd. which is an IAS accredited Testing
Laboratory (NO. TL-827).
At Chenziwei, Xinsha Village Committee, Muzhou Town, Xinhui District, Jiangmen,
Guangdong 529143, China.

Summary of Test Result

Clause	Description	Compliance
5.1	Product information	Pass
5.2	Performance	Pass
5.2.1	General	Pass
5.2.2	Durability	Pass
5.2.3	Closing moment	Pass
5.2.4	Opening moment	Pass
5.2.5	Efficiency	Pass
5.2.6	Closing time	Pass
5.2.7	Angles of operation	Pass
5.2.8	Overload performance	Pass
5.2.9	Temperature dependence	Pass
5.2.10	Fluid leakage	Pass
5.2.11	Damage	Pass
5.2.12	Latch control (optional)	Pass
5.2.13	Backcheck (optional)	NA
5.2.14	Delayed closing	NA
5.2.15	Adjustable closing force (optional)	NA
5.2.16	Zero position (for double action door closers only)	NA
5.2.17	Corrosion resistance	Pass
5.2.18	Fire/smoke door suitability	Pass
8	Marking	Pass

No inferences can be made regarding performance against other requirements of this standard.

NOTES.

These tests are covered by the Laboratory IAS accreditation schedule.
Tests marked "NA" were not applicable to the type of device under test.
Tests marked "NT" were not applied to the device under test.

TEST CONCLUSIONS

Product: Door closer
Manufactured by: Guangdong JIN LIANAN Technology Co., Ltd
Model: J-061

Classification achieved

Category of use	Durability	Door Closer power size	Fire resistance	Safety	Corrosion resistance
3	8	3	1	1	2

Detail 'Classification' information listed as following:

First digit (Category of use): Grade 3 – For closing doors from at least 105° open;

Second digit (Durability): Grade 8 – 500,000 test cycles;

Third digit (Door Closer power size): Power size 3 ;

Fourth digit (Suitability for use on fire doors): Grade 1 - Suitable for use on 60 minutes integrity and insulated timber composite doorset;

Fifth digit (Safety): Grade 1 – All door closers are required to satisfy the Essential Requirement of safety in use.

Sixth digit (Corrosion resistance and temperature): Grade 2 – Moderate corrosion resistance: 48h.

SIGNATURES

Tests performed by:

Frank Feng

Name: Frank Feng
Date: 24-Feb-22
Title: Project Engineer
KAS Quality Service

Report authorised by:

Credy Chen

Name: Credy Chen
Date: 24-Feb-22
Title: Technical Manager
KAS Quality Service

TEST DETAILS

Applicant Information

Applicant Name: Guangdong JIN LIANAN Technology Co., Ltd

Applicant Address: New Center, Jinli Town, Gaoyao District, Zhaoqing Guangdong

Sample Information

Product: Door closer

Trade Mark: KXM[®]
凯旋门

Model and/or type reference: J-061

Manufacturer: Guangdong JIN LIANAN Technology Co., Ltd

Manufacturer Address: New Center, Jinli Town, Gaoyao District, Zhaoqing Guangdong

Sample ID: S210907001-01~04

Date of receipt of test item: 2021/8/31

Situation of receipt samples: Good

Testing Information

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

Non-standard method or requirement: /

Rating(s):

3	8	3	1	1	2
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Testing Laboratory name: KAS Quality Service (Guangzhou) Co., Ltd.

Address: Chenziwei, Xinsha Village Committee, Muzhou Town, Xinhui District, Jiangmen, Guangdong 529143, China.

Date (s) of performance of tests: 2021/9/17 ~ 2021/10/30

Other reports to be used in conjunction with this report: J210907001-2 dated Dec 24, 2021

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TEST SAMPLE DESCRIPTION

General product information:

Door closer, Model: J-061, with aluminum alloy main body and steel arm, full mechanical test based on regular mounting according to manufacturer's instruction.

Model No.	Body Material	Body Size	Speed Valve	Latch control	Back Check	Delay Action	Double action	Hold open	Power size
J-061	Aluminum Alloy	140 x 63 x 39 mm	Yes	Yes	No	No	No	No	Size 3

TEST RESULTS

Test procedure: Sample A - Operation at Test sample No.:

S	2	1	0	9	0	7	0	0	1	-	0	1
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extremes of temperature Model: J-061 Power Size: 3

Req. Clause	Test Clause	Requirement Details	Result	P = PASS F = FAIL
5.1	7.2.1	Product information A door closer manufactured to this standard shall be supplied with clear, detailed instructions for its installation, regulation and maintenance, which shall include any limitations of opening angle. Where a door closer is recommended for fitting in other than a standard application, these instructions shall clearly define the door closer power size for each application of fitting position stated.	limitations of opening angle: 150° Refer to installation instruction	P
8	7.2.1	Marking		
8.1	7.2.1	Each door closer and separately supplied accessory manufactured to this standard shall be marked with the following: a) the manufacturer's name or trademark, or other means of identification; b) product model identification; c) the classification according to Clause 4; d) the number of this European Standard; e) the year and week of manufacture. In the case of concealed door closers, the above information shall be readily visible after removal of the cover plate. For accessories (where there may be insufficient space to provide the information given in the clause), only item a) is mandatory. Accessories claiming compliance with Annex A, shall be marked with the information a) to e) above. In preferential order the information shall be placed: 1) on the product itself; or 2) on a label attached to it; or 3) on the installation instructions; or 4) on its packaging.	Refer to marking template provided by the manufacturer.	P
5.2.9	7.2.2	Temperature dependence A set closing time of 5 seconds at an ambient temperature of 20°C, shall not increase to more than 25 seconds or decrease to less than 3 seconds when tested at -15°C and 40°C :	Grade 3, Door mass: 60 kg Closing time: At 20 °C: 4"90 At -15 °C: 9"39 At 40 °C: 4"23	P

TEST RESULTS

Test procedure: Sample A - Operation at extremes of temperature Test sample No.:

S	2	1	0	9	0	7	0	0	1	-	0	1
---	---	---	---	---	---	---	---	---	---	---	---	---

 Model: J-061 Power Size: 3

Req. Clause	Test Clause	Requirement Details	Result	P = PASS F = FAIL
5.2.16	7.2.3	Zero position (for double action door closers only) The amount of free play at the zero position of a new door closer shall not exceed 3 mm, and after 500,000 test cycles shall not exceed 6 mm :	The specimen was not double action door closer	NA

TEST RESULTS

Test procedure: Sample B - Mechanical performance and durability Test sample No.: S 2 1 0 9 0 7 0 0 1 - 0 2
Model: J-061 Power Size: 3

Model: J-061 Power Size: 3

Req. Clause	Test Clause	Requirement Details	Result	P = PASS F = FAIL			
5.2.15	7.1.2	Adjustable closing force (optional) If provided with an adjustable closing function, the door closer shall comply with the performance at both the minimum and maximum power settings claimed by manufacture :	Power size 3	NA			
5.2	Performance						
	Table 1						
	Door closer Power size	Closing moment			Opening moment 0° to 60°	Door closer efficiency 0° to 4°	
		0° to 4°		88° to 92°			Any other angle
		Nm min.	Nm max	Nm min.	Nm min.	Nm max.	% min.
	1	9	< 13	3	2	26	50
	2	13	<18	4	3	36	50
	3	18	<26	6	4	47	55
	4	26	< 37	9	6	62	60
	5	37	< 54	12	8	83	65
6	54	< 87	18	11	134	65	
7	87	< 140	29	18	215	65	
N/A	7.3.1 7.3.3	Pre-cycle Conduct a total of 5 000 pre-cycles.	Followed	P			
5.2.3	7.3.4.1	Closing moment After 5 000 pre-cycles the measured closing moments shall be not less than the value stated in Table 1 :	Grade 3, Door mass: 60 kg After 5 000 pre-cycles, closing moment: 0° to 4°: 25.64 Nm 88° to 92°: 11.18 Nm Any other angle: 9.94 Nm	P			
5.2.4	7.3.4.1	Opening moment After 5 000 pre-cycles the maximum measured opening moment shall be not more than the value stated in Table 1 for the particular power size of closer being tested:	Grade 3, After 5 000 pre-cycles, opening moment: 0° to 60°: 46.08 Nm	P			
5.2.5	7.3.4.2	Efficiency After 5000 pre-cycles the measured efficiency shall be not less than value stated in Table 1:	Grade 3, After 5 000 pre-cycles, opening moment: 0° to 4°: 45.76 Nm efficiency= 57.11%	P			
5.2.6	7.3.4.3	Closing time After 5000 pre-cycles, the closing time, from a door opening angle of 90 degree, shall be capable of adjustment to 3 seconds or less, and 20 seconds or more.	After 5 000 test cycles, the adjusted time: from 1"58 to 1'59"76	P			

TEST RESULTS

Test procedure: Sample B - Mechanical performance and durability

Test sample No.:

S	2	1	0	9	0	7	0	0	1	-	0	2
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Model: J-061 Power Size: 3

Req. Clause	Test Clause	Requirement Details	Result	P = PASS F = FAIL
5.2.7	N/A	Angles of operation The door closer shall permit the test door to open according to its grade, and on closing, shall control the door from a minimum angle of 70 degree :	Maximum opening angle: 150° Control angle: 135°	P
5.2.8	7.3.4.4	Overload performance The door closer shall be capable of withstanding the closing overload tests :	Applied 21 kg overload weight 10 times, no damage or deformation or fluid leakage, function normal after 5 000 pre-cycles.	P
5.2.12	N/A	Latch control (optional) Accelerated closing shall be effective over a maximum range of 15 degree from the closed position, and shall be adjustable :	Have a latch control valve, latch control could be adjustable to enable accelerated closing control angle from 0 to 15°.	P
5.2.14	7.3.4.5	Delay closing (optional) The delay time shall not be less than 20 seconds. The delay zone shall not extend below the 65 degree open position. The moment required to override manually the delay action shall not exceed 150 Nm. The delay time at the conclusion of 500 test cycles shall be between 10 seconds to 30 seconds :	No delayed closing function	NA
5.2.13	7.3.5.2	Backcheck (optional) The door closer shall be capable of arresting the test door before 90 degree position :	No backcheck function	NA
5.2.2	7.3.1	Durability The door closer shall be able to close a test door conforming to 6.1.1 and 6.2 from an opening angle of 90°, for a minimum of 500, 000 test cycles :	Initial setting close time from 90 ° to 0°: 4"66	—
5.2.6	7.3.6.1 7.3.6.3	Closing time After 500,000 test cycles, the closing time, from a door opening angle of 90 degree, shall be capable of adjustment to 3 seconds or less, and 20 seconds or more. After 500,000 test cycles, the closing time set at 5000 test cycles shall not have increased by more than 100%, or decreased by more than 30 % :	After 500,000 test cycles: The closing time: 4"27 The adjusted time: from 1'33"25 to 2'03"	P

TEST RESULTS

Test procedure: Sample B - Mechanical performance and durability

Test sample No.:

S	2	1	0	9	0	7	0	0	1	-	0	2
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 Model: J-061 Power Size: 3

Req. Clause	Test Clause	Requirement Details	Result	P = PASS F = FAIL
5.2.3	7.3.6.2	Closing moment After 500,000 test cycles the measured closing moments shall be not less than the value stated in Table 1:	After 500,000 test cycles, closing moment: 0° to 4°: 24.34 Nm 88° to 92°: 10.58 Nm Any other angle: 10.21 Nm	P
5.2.5	7.3.6.2	Efficiency After 500,000 test cycles the measured efficiency shall be not less than value stated in Table 1:	After 500,000 test cycles, opening moment: 0° to 4°: 42.88 Nm efficiency= 56.77%	P
5.2.8	7.3.6.4	Overload performance The door closer shall be capable of withstanding the closing overload tests :	Applied 21 kg overload weight 10 times, no damage or deformation or fluid leakage, function normal after 500,000 cycles.	P
5.2.14	7.3.5.2	Delay closing (optional) After 500 000 cycles, the delay time shall not be less than 20 seconds.	No delayed closing function	NA
5.2.10	N/A	Fluid leakage Throughout the test programme there shall be no leakage of fluid from the door closer:	No leakage	P
5.2.11	N/A	Damage Throughout the test programme there shall be no damage to the door closer or its arms that would adversely affect its performance to this standard:	No damage	P
5.2.16	7.3.6.6	Zero position (for double action door closers only) The amount of free play at the zero position of door closer after subject 500,000 test cycles shall not exceed 6 mm:	The specimen was not double action door closer	NA

TEST RESULTS

Test procedure: Sample C - Corrosion Resistance

Test sample No.:

S	2	1	0	9	0	7	0	0	1	-	0	3
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Model: J-061

Req. Clause	Test Clause	Requirement Details	Result	P = PASS F = FAIL
5.2.17	7.4.2	Corrosion resistance Measure closing moment prior to the test.	0° to 4°: 25.76 Nm 88° to 92°: 11.17 Nm Any other angle: 10.03 Nm	P
	7.4.3	The requirement shall be according to EN 1670. The acceptance conditions of EN 1670 shall be met for all surfaces of the door closer which are visible:	Grade 2: After 48h corrosion test, No visible corrosion occurs to all surfaces of the door closer	
	7.4.4	The closing moment of the door closer shall be not less than 80% of the closing moment measured prior to the test.	Grade 2: After 48h corrosion test, ratio of the closing moment to the closing moment measured prior to the test: 0° to 4°: 21.14 Nm 88° to 92°: 10.42 Nm Any other angle: 9.61 Nm	

TEST RESULTS

Test procedure: Fire-resistant

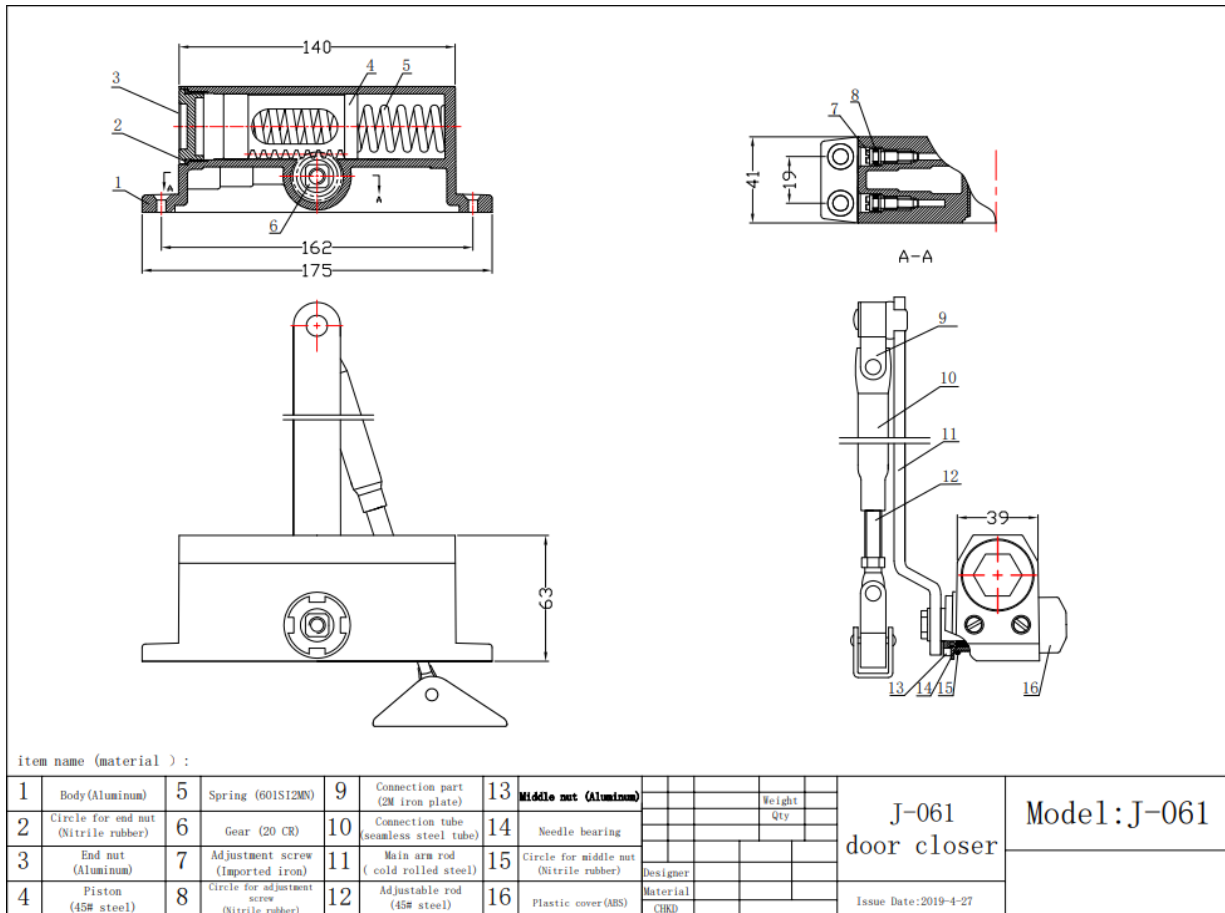
Test sample No.:

S	2	1	0	9	0	7	0	0	1	-	0	4
---	---	---	---	---	---	---	---	---	---	---	---	---

Model: J-061

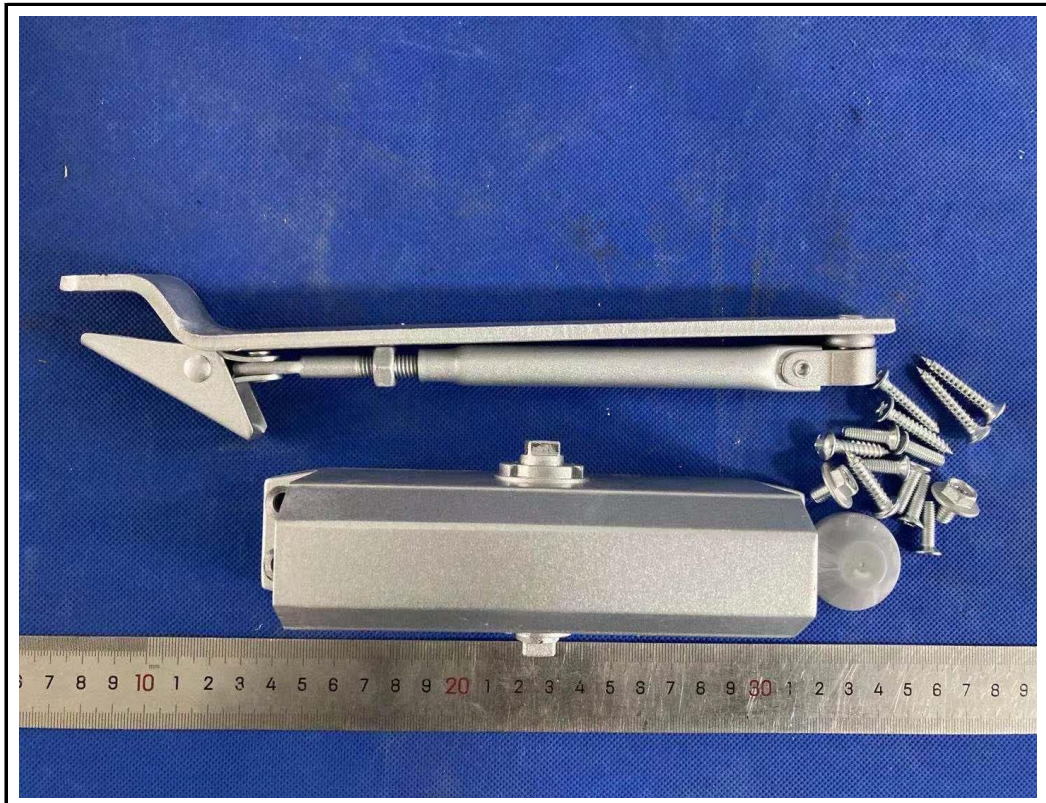
Req. Clause	Requirement Details	Result	P = PASS F = FAIL
5.2.18	Fire/smoke door suitability A door closer for use on a fire/smoke door assembly shall meet the necessary requirements of Annex A :	Grade 1, The test model had been tested for fire-resistant test, refer to test report: J210907001-2 dated Dec 24, 2021. The test model is suitable for use on 60 minutes integrity and insulated timber composite doorset.	P
Annex A	Additional requirements for door closing devices intended for use on fire/smoke door assemblies		
A.1	The door closer, when installed in accordance with the manufacturer's installation instructions, shall be capable of closing the test door from any angle to which it may be opened. Due to their low closing moments door closers size 1 and 2, without adjustable closing force, are NOT considered suitable for use on fire/smoke door assemblies. Door closers with adjustable closing force shall be capable of adjustment at least to power size 3. For such closers the installation instructions shall include precise instructions to the installer to ensure that the door closer power is adjusted on site to size 3 or more, to overcome resistance of any seals or latches fitted.	Power size 3	P
A.2	The door closer shall not include a hold-open device unless it is an electrically powered device in accordance with EN 1155.	No hold-open device	P
A.3	Control regulators shall either be concealed, or operable only by means of a tool.	Control regulators can be operable only by means of a tool.	P
A.4	The design of a door closer shall be such that it is not possible to inhibit its closing action in any way, without the use of a tool.	It was not possible to inhibit the closing action in any way, without the use of a tool.	P
A.5	Any incorporated delayed action function shall be capable of adjustment to less than 25 s, between the door closing angles of 120 ° and the end of the delay zone.	No delayed closing function	NA
A.6	The door closer, representative of its model, shall have been incorporated in a door assembly that has satisfied the appropriate criteria of a fire test. The test shall have been on a full sized assembly in accordance with EN 1634-1 or when relevant, in accordance with EN 1634-3.	Grade 1, The test model had been tested for fire-resistant test, refer to test report: J210907001-2 dated Dec 24, 2021.	P
A.7	Where the door closer is intended for use with other, significantly different arm assemblies (for example slide tracks) which may be supplied separately, that combination shall also be tested according to Clause 7.	Only apply one arm, refer to product photo.	NA

PRODUCT DRAWING(S)

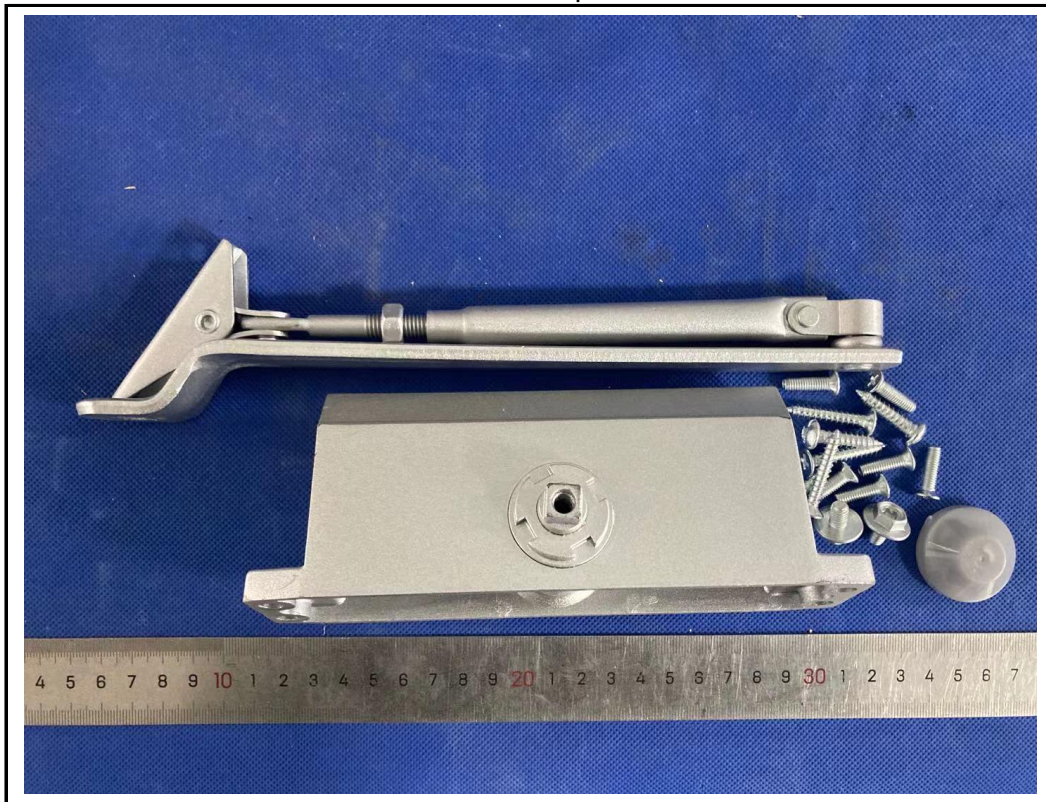


J-061

PRODUCT PHOTO(S)



Front View of Specimen



Side View of Specimen

PRODUCT PHOTO(S)



Speed Adjustive Valve

PRODUCT TECHNICAL DOCUMENT(S) LIST

Model No.	Document Ref.	Document Title	Version	Received Date
J-061	1	CE Application form	30-Nov-21	30-Nov-21
	2	DOP	30-Dec-21	30-Dec-21
	3	Explosure drawing	27-Dec-21	27-Dec-21
	4	Physical dimension drawing	27-Dec-21	27-Dec-21
	5	Certification of main material	03-Jun-21	27-Dec-21
	6	Manual user	27-Dec-21	27-Dec-21
	7	CE Marking	27-Dec-21	27-Dec-21
	8	Packaging list	27-Dec-21	27-Dec-21
	9	Packing drawing	30-Dec-21	30-Dec-21

Notes:

It is a mandatory requirement that KAS is informed of any modifications or changes to the following:

- Product submitted for approval or that has been approved
 - Manufacturing process
 - Manufacturing address
 - Materials
 - Materials supplier
 - Documents recorded within this register
- The documents were packaged and submitted to Notify Body.

REVISION HISTORY

Revision No.	Date	Changes	Author	Reviewer
Original	2021/12/1	First issue	Frank Feng	Credy Chen
Revision 1	2022/2/23	Updated the fire-resistance rating and added Product Technical Document(S) List	Frank Feng	Credy Chen

The End of Report